Aayushi International Interdisciplinary Research Journal (AIIRJ)

Peer Reviewed And Indexed Journal ISSN 2349-638x

Impact Factor 7.149

Website:-www.aiirjournal.com

Theme of Special Issue

Trends, Challenges and Issues in The Science, Social Science and Languages for Social Welfare

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Aayushi International Interdisciplinary Research Journal ISSN 2349-638x
Special Issue No.86 17 th May 2021
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User Satisfaction And Digital Marketing: A Research Framework

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Abstract:

Digital marketing techniques are becoming more common in our advancing technology currently. Some of popular digital marketing techniques such as search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, content automation, campaign marketing, display advertising, e-books, and optical disks and games. The purpose of this study is to gain the performance of digital marketing regarding to the social media usage in the library environment such as Instagram, YouTube, Facebook and other platforms connectivity and communication related to user satisfaction in library environment. This paper enables librarians and stakeholder of the library to have a better understanding on the social media phenomenon in libraries.

Keywords –Digital Marketing, Social Media, User Satisfaction, Library 2.0

1.0 Introduction

Nowadays, digital marketing is widely use in the world of business by many people around the globe. It is like a booming in marketing environment. To meet the objectives in mutual exchange and fulfilment of promises, relationship marketing need to identify, establish, maintain and enhance the relationship. Besides,if necessary, marketers can discontinue connection with customers and other stakeholders(Gro nroos, 1994). In this new era, global digital revolution has led to the technological developments.

Duckers define "Marketing is management". He articulates the strategy as "identical customer needs, company capabilities and management vision. The objectives of strategy want through a sequence of option with long-run survival and profitability" (Webster, 2009). By using marketing principles and techniques, libraries can be better understand their user needs, justify funding, and communicate more effectively. They must identified the needs of their clients

International Journal of Academic Research in Business and Social Sciences2017, Vol. 7, No. 12ISSN: 2222-6990516www.hrmars.comwith a variety of extraneous audiences and attain greater efficiency and highest results cover delivering products and services(Spalding and Wang, 2006a, 2006b). Every user is able to contribute content through Web 2.0 as a set of technologies that offers in academic libraries (Anderson, 2007). The variety of platforms such as Facebook, Instagram and others can spread the information and awareness that occur beyond various channels. The online users and social networks users can easily create content and publish their opinions, experiences and feelings about many topics and products (Damian Ryan, 2014).

2.0 Literature Review

Social media application had brought a lot of benefits to the library. This phenomenon can be seen in many aspects as such marketing and promoting library services to the users. Therefore, libraries are using latest trends to market their services in the developed countries. In addition, social media tools and Web 2.0 applications are widely use in USA libraries to connect with the users and to make services accessible in the library programs (ALA, 2001). This paper intended to create a conceptual framework to relate user satisfactions in social media and networking that include Facebook, Twitter, Whatsapp, WeChat and Instagram.

2.1 FACEBOOK

Conversation principles could be used to create the number of lover in the Facebook Pages. It is suggested by an examination of university health centre(Waters et al., 2011). The opportunity of using paid

advertising is not mention. In academic library, they discussing about the Facebook involvement. Facebook pages are "hard to publicize without paying for Facebook advertisements", said by (Graham et al., 2009). The paid advertisement is not something that many libraries will consider even though they do not imply their statement. Advertising would be expensive if the result of a belief that such this attitude. Facebook fan raises brand awareness and builds customer relationships at a very low cost. This is writing from the perspective of the benefits small businesses(Harris and Rae, 2009). Facebook enables the precise targeting of consumers on advertising at an absolute minimum by advertisers (Anon., 2011). In October 2006, the profile accounts for a library on Facebook began shutting down(e.g. Rutgers University Libraries). The way that librarians used web sites to market their libraries are influenced by the changing of Facebook operation. (Charnigo and Barnett-Ellis, 2007) claiming that profiles had to perform specific people. Librarians started creating individual profiles instead Group Accounts which are "it may be impractical to think that large numbers of undergraduate students would want to count librarians among their Facebook Friends". Therefore, students have been uncertain from receiving any encroachment in their social lives by librarians(Breeding, 2007). Majority of undergraduate students were hesitant about contacting librarians through Facebook. It is revealed by a conducted survey at the University of Michigan(Chapman et al., 2007).

International Journal of Academic Research in Business and Social Sciences 2017, Vol. 7, No. 12ISSN: 2222-6990517www.hrmars.com

2.2 WECHAT

WeChat is the most popular social media in China. It is launched by TencentTMin January 2011. It offers a free instant messaging application service for smartphones. It also enables voice, text, pictures, videos and location information exchange via mobile phones(Xu et al., 2015). One of the mobile service platforms developed and personalized by a library is WeChat Library. It is basedon the WeChat platform which uses mobile service functions by connecting with the library management system such as OPAC retrieval, digital resource retrieval, personal library and e-books.

2.3 WHATSAPP

The Pew Research Center's report on Mobile Messaging and Social Media2015 found that 36 per cent of smartphone owners in the USA report using messaging apps such as WhatsApp, Kik or iMessage (Duggan,2015). An international digital measurement site,Similar Web, reports that WhatsApp is the world leader on Android as the top messaging app in 109 of the 187examined countries, or 55.6 per cent of the world (Schwartz, 2016).

Libraries can provide wide array of services to interested users on Whatsapp. Current Awareness Services (CAS) services assist the library users in keeping up-to-date with latest document additions in the library. A library can use WhatsApp to deliver CAS on the mobile of the user in real time. Library staff can take pictures of the book or journal along with table of content and send it to the library user. A user will aware about his library collection development without going into the library. Selective Dissemination of Information, SDI is a type of CAS which keeps the users in touch with the latest developments in the field of users' interest. A library can create groups of users of different area of interest to provide them specialized information. A library can scan an article and upload it in the group so that, user can easily download them without losing time. A library can offer reference service through WhatsApp. Users can text to reference librarian before reaching library to ask the location of a document or an information source (Ansari, 2016).

2.4 TWITTER

The social networking platform that grants users to broadcast short messages of no more than 140 characters is a Twitter. This limitation must be informative and on point to the message and need for quick. Twitter allows their users update this platform by mobile phones, e-mail, website and instant messages (Java et al. 2007). Even though, it is launched in 2006 as another tool for friends and family to keep in touch (Aharony, 2010). (Holland and Verploeg, 2009) explored the difficulties that library administrators deal with on a daily basis and named free advertising as the main reason behind why libraries turn to Twitter and SNS.

2.5 INSTAGRAM

Bergstrom and Backman (2013) have founded the Instagram platform in 2010. Users can share their photos and videos to their followers through this mobile application (Dubovik, 2013). Dennis (2014) cited the Instagram started off providing functions on editing and sharing photos and then added in the functions of sharing videos and photo messaging directly to another user. Besides, Instagram let users to snap photo or video anywhere 24/7. Users are able to take 15 seconds video and 13 artistic filters that are available for user to edit their photos (Bevins, 2014).

User Satisfaction In Social Media

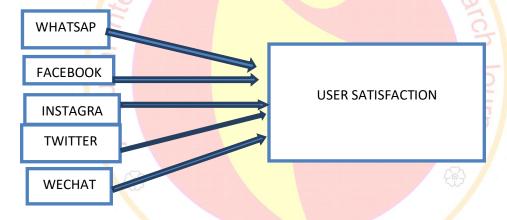
User satisfaction refers to the user's psychological or affective state resulting from a cognitive appraisal of disconfirmation (Bhattacherjee, 2001). Researchers have investigated user satisfaction from different theoretical perspectives. Another stream of literature investigated user satisfaction through the theoretical lens of EDM (Bhattacherjee, 2001; McKinneyet al., 2002), and suggested that the formation of satisfaction includes three processes:perceptual, evaluative, and psychological.User

satisfaction has been extensively studied in different contexts, such as online shopping (Lin and Lekhawipat, 2014; Shih, 2004), mobile services (Koivumäki et al.,2008; San-Martin and López-Catalán, 2013), mobile sites (Zhou, 2013), online games(Huang and Hsieh, 2011), and internet banking (Liébana-Cabanillas et al., 2013). It is recognized as a core factor that determines the continuance use of an information system. For instance, (Sung and Hahn, 2007) found that user satisfaction contributes to the success of a network service. (Assensoh-Kodua and Lekhanya, 2014) showed that satisfaction is one of the salient determinants of continuance intention in the SNSs context. (Shiau and Chau, 2012) also reported that satisfaction influences bloggers continuance intention to use the blog. The presence of social media has deeply changed people's life style, thus may change their attitude and judgment about life.

International Journal of Academic Research in Business and Social Sciences 2017, Vol. 7, No. 12ISSN: 2222-6990521www.hrmars.com3

Conceptual Framework

This section is a conceptual framework that explains the relationship between the digital marketing through social media in library environment. Further more, this framework provides an



Independent Variable (IV) Dependent Variable (DV)
Figure 1: Conceptual Framework of digital marketing in library environment

4.0 Conclusion

In conclusion, this study provides the literature review the most important step is deciding exactly what type of social media and networking is being marketed and to which user group. For example, the marketing of existing and new library services can be carried out directly to existing users via web links. Marketing and technical skills are required to do the digital library services to diverse user groups. The Internet allows LIS professionals to deliver services regardless of time and place. The libraries must keep in mind the users and their information requirement and facilities that available for the production and services. Library must use the latest technology and know library strengths and weaknesses in terms of resources, personnel and expertise. This will help university libraries in providing services/products which are more responsive to the needs of the users. Thus it is on the introduction of the successful marketing mechanism in the libraries Facebook WeChat Whatsapp Twitter Instagram User Satisfaction Social Media and Networking that the survival of libraries depends as non-profit organizations for the supply of services and products at subsidized rates in an era of advancing technology.

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Studies On Zooplankton Diversity In Freshwater Ponds And Their Adaptations

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Abstract

Zooplanktons enjoy Cosmopolitan distribution adapted to a wide Variety of environmental conditions and also show agility which enables them to overcome several natural barriers. Shows limbo biotic adaptations. Zooplanktons are consumers and feed on Variety of formed algal blooms as well as phytoplankton and increases biotic potential rate in Freshwater ponds so as to increase their own population rate They accumulates in diversity groupings as per their own pattern of behaviour and shows potential Natality. for study of population density and research, behaviour, and Culture methods, a litter of freshwater from river, ponds, creek. can be taken as a unit of measurement.

Introduction

Nature and adaptations of lotic Communities are studied Production of zooplankton is developed by batch Culture method so as to observe diversity among them. By using closed aquarium System we prepared the inoculums of copepods, crustacean larvae and rotifers as well as ostracoda and few protozoan forms. locally available feed stuffs that are atrimia echornia, Vallisneria, lotus, lilies, pistia, Ipomea such marginal and emergent plants are also observed for study biodiversity in observed fresh water resources.

Rational of the study

Development in the Area of freshwater zoology and knowledge bridge among life science students so as to elaborate innovation, Extension and research attitude by exclusive knowledge in culture methods of protozoa, zooplankton, Necton, phytoplankton and finally put forth the patent from the same. Researchers, & Research Scholar emphasizes the Progressive experiments on qualitative and quantitative study on zooplankton as well as collection and Culturing of Zooplankton, various adaptation, lentic & littoral zone adaptations, various water resources and identification with abundance diversity amongst the zooplankton.

Objective

Collection & advanced Culture methods are adapted knowing behaviour of dinoflagellates, heliozoans and Copepods, active moving nektons with locomotory devices in them, bottom dwelling planarians and lamellidens with Freshwater Faunal characteristic are to be known with the help of microscopic aids transitional stages of Water reservoirs are to be known. lotic & lentic habitat faunal peculiarities of Freshwater Fauna. with morphological, anatomical studies carried on with Seasonal variations so as to study biodiversity among them.

Hypothesis

Culture methods and media inoculums study is prepared for Environmental status report.

Material & Methods.

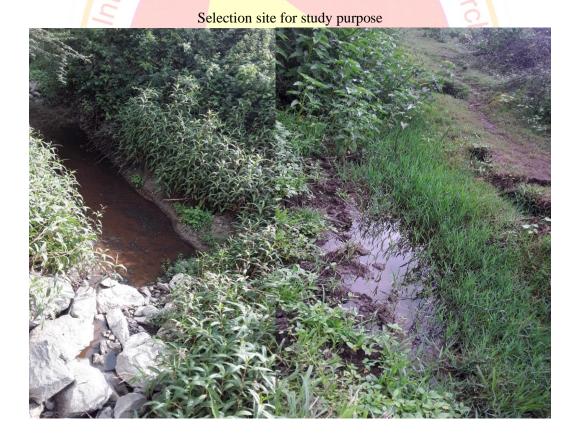
The water Samples were collected Evern freshwater resources that is From Devnadhi & saraswati river, and Saradwadi Dam konambe dam From Sinnar Tahsil area, At First physicochemical analysis of collected water sample was done As per experimental result odour of collected sample is agreeable Colour is Greenish yellow. Temperature is found to be 31.2\^0C,pH is 7.8 D.O 4.6mg/L. Nitrates 0.22mg/L, Totalphosphates 0.02 to 0.06 mg/L Chloride 400.22 mg/L, Salinity 7.95-mg/L Similarly other parameters

are also studied for the sake of obtaining biodiversity result.BOD (28°c 3 days) Site saraswati river 17.9 mg/L, Devnadi river 16.3 mg/L Saradwadidam 20.9 m/h similarly COD from above three sites are 412 mg/L,347 mg/L,52 mg/L Specimen Collection was done with the help of glass & plastic vials, Fish Seed Collection apparatus, smaller size wire mesh plastic wiremesh net specimens identified ostracoda (Cypris SPP.) in abundance, Nematode worm oligochaete worms, notonecta, Rotifers, cladocera, many protozoans, Daphnia species. Species evenness, species diversity, Species richness Calibrated From the month of Feb, March April 2021 post monsoon period shows greater biodiversity Zooplankton Group like Rotifers, Cladocera, Copepoda, Ostracoda, crustacean larval forms, insect eggs. Brachionus caudatus, Ceriodaphnia, daphnia Cyclops, molluscs.

Analysis and Data:

Analysis was made from three selected water resources that are from riverse from Sinnar Tahasil. species observed are copetoda, cypris, species , molluscan species.

Seasonal variation observed in the month of Feb, March, April 2021. Air temperature ,water temperature,pH and salinity of water as well as DO,COD is used for obtaining adaptive behaviour of zooplankton. Diversity indices obtained as per identified zooplankton with month wise diversity report. species wise zooplankton density is noted from selected sites. For example: Insect larvae are in abundance in the month of April. Cypris sp reported in abundance in Feb. Rotifera observed in abundance(200 specimens). Crustaceans larvae obtained (1250 specimens).





By preparing batch culture following specimens are observed That is mayfly, daphnialongistina, etc.



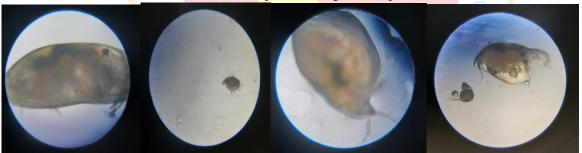
Paramoecium and Water bug culture



Cyprus larval forms



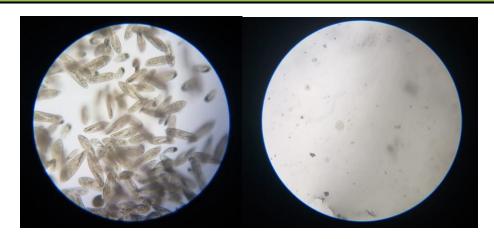
Developmental stages of Daphnia



Para cystoid snails by liver fluke larval stages



Paramecia



Conclusion:

Zooplanktons are extremely sensitive to changes in aquatic ecosystem changes in Biodiversity pattern. Development of zooplankton and other microorganisms are depleted as per Water resources, variety of new species of daphnia are to be noticed and yet it is not identified by the researchers so for obtaining account of Pattern of Zooplankton this topic is selected. in aquatic Ecosystem .Zooplankton biodiversity forms intermediate food chain in the aquatic ecosystem and acts as Food material For aquatic fauna By overall Result and Zooplankton study put forth diversity among Ecosystem Constituents Practical orientations shows following morphological details of various diversified species of zooplankton in freshwater resources. It measures the biological conditions of the water body and brings out changes in nutrient pollution. zooplanktons diversity study is useful for national Rivers and streams assessment.

From observed zooplankton, all daphnia species while feeding filters the suspended food particles. Field of research is ecotoxicology, ecophysiology, phenotypic study and zooplankton. The species observed are:

- 1. Hamilton Sporidium
- 2. Daphnia longispina
- 3. Daphnia Magna
- 4. Cypris larva of Barnacle
- 5. Protozoa culture

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COVID-19 X-Ray Images Classification Based on Enhanced Fractional-Order

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Abstract:

Classification of COVID-19 X-ray images to determine the patient's health condition is a critical issue these days since X-ray images provide more information about the patient's lung status. To determine the COVID-19 case from other normal and abnormal cases, this work proposes an alternative method that extracted the informative features from X-ray images, leveraging on a new feature selection method to determine the relevant features. As such, an enhanced cuckoo search optimization algorithm (CS) is proposed using fractional-order calculus (FO) and four different heavy-tailed distributions in place of the Lévy flight to strengthen the algorithm performance during dealing with COVID-19 multi-class classification optimization task. The classification process includes three classes, called normal patients, COVID-19 infected patients, and pneumonia patients. The distributions used are Mittag-Leffler distribution, Cauchy distribution, Pareto distribution, and Weibull distribution. The proposed FO-CS variants have been validated with eighteen UCI data-sets as the first series of experiments.

Introduction:

The first cases of corona virus disease (COVID-19) were registered in Wuhan, an important city of China, in December 2019. COVID-19 is originated by a virus called SARS-CoV-2, and currently, it is one of the major concerns worldwide. By the middle of April 2020, the affectations of COVID-19 in humans can be summarized in more than 150,000 deaths and almost 1,700,00 confirmed cases worldwide [1]. These amounts are evidence of the fast dissemination in the population. The symptoms of COVID-19 known until now include fever, cough, sore throat, headache, fatigue, muscle pain, among others [2]. The test for detection of COVID-19 commonly used is invasive, and it is called a reverse transcription-polymerase chain reaction (RT-PCR) [3]. COVID-19 is not only affecting the health of the nations but also the consequences of the diseases are important (e.g., economic and psychological [4], [5]). Another important consideration is that prompt detection could be reflected in early treatment. Then COVID-19 is a pandemic whit a large number of challenges to face. Based on the above information, they are required tools that permit the detection of this mortal disease in a timely manner. On the other hand, the use of medical images to diagnose disease has increased in the latest years. Different computer vision and image processing tools can be used to identify the abnormalities produced by the illnesses. One of the main advantages of using this kind of system is that the detection is fast and accurate.

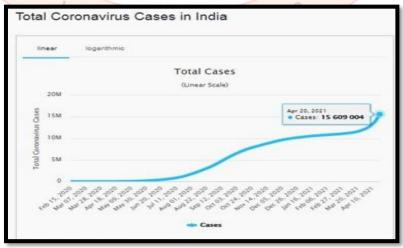


Chart I – Total Corona Virus cases in India

However, the results must be validated by an expert. In this way, medical image processing algorithms can be used as a primary diagnosis that provides a clue about a possible disease. In the case of COVID-19, the use of X-ray images permits to study how the virus is affecting the lungs. Since COVID-19 is a recent virus, only a few data-sets are available, and the number of works related to them is also reduced.



Chart II – Total Active cases in India

A number of studies have been proposed to classify COVID-19 from X-ray scan images using different techniques, such as DenseNet201 [6], MobileNet v2 [7], DarkNet [8], and others [9], [10], [11], [12]. In general, the medical images can be directly analyzed to identify certain elements in the scene that permits the diagnosis. However, it is also common to extract different features from all the images and create a set that contained the information of the objects contained in the images [13]. In this case, not all the features extracted could provide essential information about the disease that is going to be detected; for that reason, it is necessary to use automatic tools that remove the non-desired (irrelevant or duplicated) elements.

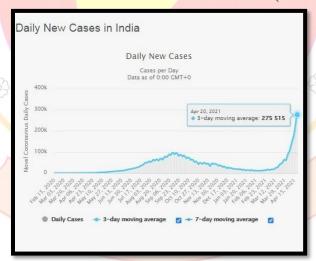


Chart III - Daily New cases in India

Feature Selection (FS) is an important pre-processing tool that helps to extract the information desired from the irrelevant data [14], [15], [16]. FS helps in reducing the dimensionality of the data by selecting only the relevant information in the next steps. With this pre-processing, the machine learning could be applied more efficiently over the data-set by decreasing computational effort [17], [18]. The use of FS has been extended for to different domains, for example in bio-medicine for diagnosis of neuromuscular disorders [19], in signal processing for speech emotion recognition [20], in internet of things specially for medicine with EEG signals [21], human activity recognition [22] and text classification [23], to mention some. The FS works by maximizing the relevance of the features, but also the redundancy could be minimized. In comparison to other methods, FS preserver the data by not applying domain transformations; then, the FS operates by including and excluding the attributes in the data-set without any modification. The

FS has three main advantages, (1) it improves the prediction performance, (2) it permits a better understanding of the processes that fastly generate the data, and (3) it has more effective predictors with lower computational cost [24]. According to Pinheiro et al. [25], they exist two kinds of FS method, namely the wrapper and filter methods. The most popular approaches are the wrapper-based because they provide more accurate results [26]. The wrapper FS method needs an internal classifier to find a better subset of features; this could affect their performance, especially with large data-sets. Moreover, they also have backward and forward strategies to add or remove features that become non-suitable for a larger amount of features. Considering these drawbacks, meta-heuristic algorithms (MA) are used to increase the performance of FS processes.

MA has become more popular in recent years due to their flexibility and adaptability [27]. MA can be used in a wide range of applications, and FS is not an exception. Some classical approaches Genetic Algorithms (GA) [28], Particle Swarm Optimization (PSO) [29] and Differential Evolution (DE) [30] have been successfully used to solve the FS problem. More so, modern MA algorithms also have been applied for FS, such as Grasshopper Optimization Algorithm (GOA) [31], Competitive Swarm Optimizer (CSO) [32], Gravitational Search Algorithm (GSA) [33], and others, since FS can be seen as an optimization problem, there is not MA able to handle all the difficulties in FS. This last fact is defined according to the No-Free-Lunch (NFL) theorem [34]; therefore, it is necessary to continue exploring new alternative MA.

An interesting MA is the Cuckoo Search (CS) algorithm introduced by Yang and Deb [35], [36] as a global optimization method inspired by the breeding behavior of Cuckoo birds (CB). CS is a population-based method that employs three basic rules that mimic the brood parasitism of the Cuckoo bird. In nature, the female CB lays the eggs in the nest of other species. Some CB species can imitate the color of the eggs of the nest where they will be laid. In the CS context, a set of host nest containing eggs (candidate solutions) are randomly initialized, then only one Cuckoo egg is generated in each generation using Lévy Flights. After that, a random host nest is chosen, and its egg is evaluated using a fitness function. The fitness value of the Cuckoo egg and the one selected from a random host nest are compared, the best egg is preserved in the host nest. A fraction of the worst nest is abandoned in each generation, and the best solutions are preserved [35]. The use of CS for several applications has been increased in recent years [37], [38]. The CS is an interesting alternative for solving complex optimization problems. However, the CS has the disadvantage that it can fall into sub-optimal solutions [39]; this is caused due to inappropriate balance between exploration and exploitation phases. To overcome such drawbacks, they have been introduced some modifications of the standard CS

Recently, an interesting approach called fractional-order cuckoo search (FO-CS) is proposed to include the use of fractional calculus to enhance the performance of the CS [40]. The FO-CS possesses better convergence speed than the CS; besides, the balance between exploration and exploitation produced by the fractional calculus permits more accurate solutions to complex optimization problems. Nevertheless, several other approaches can be included with FO-CS for further performance enhancement.

This paper presents the use of heavy-tailed distributions instead of Lévy flights in the FO-CS. This kind of distribution has been used to enhance the mutation operator in evolutionary algorithms and other MA [41], [42]. Using the heavy-tailed distributions, it is possible to escape from non-prominent regions of the search space [41]. The distributions used in to enhance the FO-CS are the Mittag-Leffler distribution (ML) [43], the Pareto distribution (P) [44], the Cauchy distribution (C) [45], and the Weibull distribution (W) [46]. The FO-CS based on heavy-tailed distributions is proposed as an alternative method for solving features selection problems. In this context, the experimental results include different tests considering eighteen data-sets from the UCI repository [47]. The comparisons included different MA from the state-of-the-art, where the proposed approach provides better results in terms of accuracy and convergence. Moreover, the most important contribution of this work is the use of the FO-CS based on heavy-tailed distributions for FS over a COVID-19 data-set. Over this experiment, the results obtained by the proposed method permits to accurately identify three different classes, namely normal patients, COVID-19 infected patients, and Pneumonia patients. Regarding the results of UCI and COVID-19 data-sets, different statistical

and metrics validate the good performance of the FO-CS based on heavy-tailed distributions, especially Weibull distribution. The main contribution of the current study can be summarized as follows:

Provide an alternative COVID-19 X-ray image classification method which aims to detect the COVID-19 patient from normal and abnormal cases.

.Extracting features from X-ray images then using a new feature selection method to select the relevant features.

Develop feature selection method using a modified CS based on the fractional concept and heavy-tailed distributions.

Evaluate the developed method using two data-set for real COVID-19 X-ray images.

Compare the new developed FS method with other recently implemented FS methods.

The rest of the paper is organized as follows. Section 2 presents the related works. Section 3 introduces the basics of heavy-tailed distributions, CS, and FO-CS. Section 4 explains the proposed modified FO-CS, in Section 5 presents the experimental results and comparisons. Finally, in Section 6, the conclusions and future work are discussed.

3.1. Image features extraction techniques

In this study, the image features are extracted using the following techniques, the Fractional Zernike Moments (FrZMs), Wavelet Transform (WT), Gabor Wavelet Transform (GW), and Gray Level Co-Occurrence Matrix (GLCM). Brief descriptions of these techniques are listed below.

3.1.1Fractional Zernike Moments (FrZMs)

The FrZMs are used to extract gray images features as presented by [61]. This process is shown in Eq. (1) [62].

$$FrZM_{\alpha n,m}(f)$$

= $\int_{0}^{1} \int_{0}^{2\pi} FrR_{\alpha n,m}(r) g(r,\theta) e^{-jm\theta} r d\theta dr$ (1)

where denotes the fractional parameter, . is a gray image denotes the real valued radial polynomial as, and it is calculated by Eq. (2). and define the order which and be even, .

$$FrR_{\alpha n,m}(r) = \frac{n+1}{\pi} \left\{ \begin{array}{c} 0 \\ \sqrt{\alpha} \sum_{k=0}^{(n-|m|)/2} \frac{(-1)^k (n-k)!}{k! ((n+|m|)/2-k)! ((n-|m|)/2-k)!} r^{\alpha(n-2k+1)} \end{array} \right.$$
(2)

The calculation of need a linear mapping transformation of image coordinates system to a proper space inside a unit circle because they are determined in polar coordinates () where [63]. This step is calculated by N defines the pixels number in the image.

3.1.2. Wavelet Transform (WT)

The WT is a method used for signal analysis and feature extraction [64]. It breaks up a signal into scaled and shifted versions of the mother wavelet. It is represented by the sum of the signal multiplied by the shifted and scaled versions of the wavelet function (). The continuous WT (CWT) of a signal can be computed as:

$$CWT\left(a,b\right) = \int_{\mathbb{R}} x\left(t\right)\psi_{a,b}\left(t\right)dt$$
 ,
 $\psi_{a,b}\left(t\right) = \frac{1}{\sqrt{a}}\psi\left(\frac{t-b}{a}\right)$

denotes the mother wavelet and represent the shifted and scaled parameters, respectively. is not equal to zero

3.1.3. Gabor Wavelet Transform (GW)

The GW is a popular technique used filters for extracting image features [65]. It is calculated and represents the kernels' orientation and scale denotes the Gabor vector as in equals represents the max frequency represents the spacing factor among kernels in the frequency space equals

3.1.4. Gray Level Co-Occurrence Matrix (GLCM)

The GLCM technique is a statistical technique which applied to extract the texture features from an image [66].

The GLCM uses five equations to perform its task as follow:

- The contrast () equation represents the amount of local variations in an image.
- The correlation () equation represents the relationship among the image pixels.
- The energy equation represents the textural uniformity.
- The entropy equation defines the intensity distribution randomness.
- The homogeneity () equation defines the distribution closeness. It defines the gray levels in the image is the number of transitions.

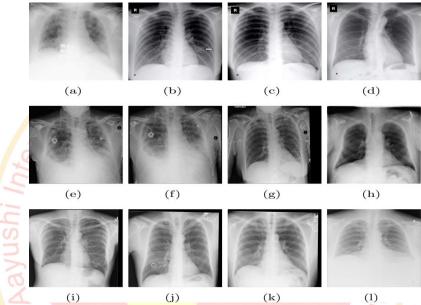


Fig.1. Heavy-tailed distributions for (a) Lévy distribution, (b) Mittag-Leffler, (c) Pareto distribution, (d) Cauchy distribution, and (e) Weibull distribution.

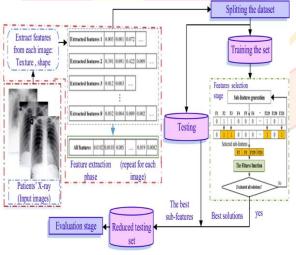


Fig. 2. The structure of FO-CS FS COVID-19 detection/classification approach.

3.2. Heavy-tailed distributions overview

Random walking has an important effect on the efficiency and quality of the MA. The Lévy flight distribution may consider the most popular random walk whereby the jump-lengths have a heavy-tailed probability distribution. That is why the Lévy flight distribution is employed in MA to be a more effective source for the random walk than the Gaussian distribution.

For the heavy-tailed distributions, there are several types of distributions, such as Mittag-Leffler distribution, Cauchy distribution, Pareto distribution, and Weibull distribution can be applied to the MA Simulation and results

To validate the performance of the developed COVID-19 detection method, a set of experimental series is performed. The main aim of the first experimental series is to evaluate the performance of the main core of our COVID-19 detection (i.e., FO-CS based on heavy-tailed distributions), a set of eighteen UCI data-sets is used. Meanwhile, the second experimental series aims to test the applicability of the developed COVID-19 detection method by using two real-world COVID-19 images which have different characteristics.

Conclusions

In this study, we present four variants of the recent fractional-order cuckoo search optimization algorithm (FO-CS) using heavy-tailed distributions instead of Lévy flights to classify the extracted features from COVID-19 x-ray data-sets. The considered heavy-tailed distributions included the Mittag-Leffler distribution, the Pareto distribution, the Cauchy distribution, and the Weibull distribution. The application of these distributions can be used to improve mutation operators of MA, and it can be used to escape from nonprominent regions of the search space. For appraising the performance of the proposed variants before applying to the COVID-19 classification approach, we used eighteen data-sets from the UCI repository, and we compared their results with several well-regarded MA utilizing several statistical measures. At this end, the FO-CS based on heavy-tailed distributions variants have been employed for the COVID-19 classification optimization task to classify the data-sets for normal patients, COVID-19 infected patients, and Pneumonia patients. Two different data-sets have been studied, and the FO-CS novel approaches have been compared with numerous MA to evaluate the proposed approach for classifying such of those important data-sets to introduce a reliable and robust technique that helped in classifying the COVID-19 data-sets efficiently and with high accuracy. The FO-CS based on Weibull distribution showed its superiority compared to the other proposed variants and recent well-regarded MA. In future work, we will try to evaluate the proposed method in different applications, such as parameters estimation and solving various engineering problems.

Credit authorship contribution statement Dalia Yousri: Conceptualization, Data curation, Formal analysis, Methodology, Software, Visualization, Writing - review & editing. Mohamed Abd Elaziz: Data curation, Formal analysis, Methodology, Software, Visualization, Writing - original draft. Laith Abualigah: Formal analysis, Supervision, Writing - review & editing. Diego Oliva: Conceptualization, Validation, Writing - review & editing. Mohammed A.A. Al-qaness: Conceptualization, Investigation, Writing - original draft. Ahmed A. Ewees: Formal analysis, Project administration.

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Enactment of The New Online Gaming Acts – A Game Changer in Socio - Economic and Legal Perspective – A Need of the Hour

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Abstract

The Latin term "Nullum crimen sine lege" which means "no penalty without a law". There is a need of the hour in enacting the New Gaming laws in India. There are gaming laws that treat gambling, poker, horse racing, casinos, lotteries, bingo and betting as gaming laws which primarily focuses on gambling laws. All the gaming/gambling laws were enacted around 1860's before IT Revolution. The usage of mobile phones started in 1990's and usage of smart phones started after the year 2000. There are no such gaming laws that have been enacted after the technological advancement in India, except for North eastern states of Nagaland and Sikkim has enacted Online gaming but the territorial jurisdiction limits to those states. This paved a way for not only dangerous/suicidal games like Blue whale but also tournaments which include IPL, PubG and other games. This paper is a critical analysis about the need for enactment of new gaming laws in India in general and Andhra Pradesh in particular. Emphasizing focus on how these tournaments are enticing a player by showing money and utilizing both "Game of Skill" and "Game of Chance" to earn money, even though it is a crime yet the organizers of tournament are using the legal loop holes in the system and are getting scot-free which needs strong enactments to curb these.

Keywords: New gaming laws, gambling, Technological advancement, Tournaments, legal loop holes

Introduction

"Pasha", an age-old game played with "Dice and Board" that dates back to Dvapara Yuga, that was played between Kavrayas and Pandayas. It was said in the ancient epics of Ramayana and Mahabharata that the Game of Chess which is a game of skill and Pasha or Gambling is a game of chance were played during that time. It is also mentioned about the adverse consequences of playing the game of chance have been clearly illustrated. Then the historical remains found by archeologists in Indus Valley Civilization provides evidences that gambling existed in Ancient India. Then the Britishers introduced the game of Cricket and horse racing to Indians, later the craze for cricket also increased and in 1864 the cricket betting had started in India. The British gambling acts along with *The Public Gambling Act*, 1867 were in effect during that time. After India became Independent the Public Gambling Act, 1867 with few amendments came into existence and different states adopted their own gambling laws. Public use of Internet and mobile phone started in 1995, later use of smart phones started from 2008 in India. Apart from Indoor and outdoor games the evolution of online games and virtual games are the latest trend. In 2020 due to COVID 19 Lockdown the online gaming and betting gained popularity. Though a few states in India made amendments to state laws and have banned the online gambling, as soon as the IPL season started the betting has reached its peak and had advanced to a stage where the Ads in the TV have been telecasted, though betting and gambling are illegal. The question that arises here is how the IPL betting has been organized? How online gaming tournament have been organized for such huge amounts? Why no action has been taken to curb the situation? The precise answer is that there is no such governing law to administer online gaming and gambling.

Analysis

There must be a new online gaming laws where the developers and marketers are bound to disclose the intention behind making of that game. This will help in reducing the offensive games like PubG, destructive and shooting games and majorly suicidal games like Blue Whale. The online games must either be for education or for entertainment purpose, just like the majority of the age-old video games which are strategically played, thought provoking, entertaining and have less violence. In 1990's when a video game was played, parents used to say "Don't play you will spoil your eyes, but now-a-days parents are saying don't play you will spoil your lives". The question is how can games spoil the players' lives. The game is

played for a change or for entertainment, skill games like chess, puzzles and other online games are intended to improve hand-eye coordination. But there are majority of the games like Fire fairy, Blue Whale, Cinnamon challenge, choking game, Mariam's Game, Tide Pod Challenge, Salt and Ice challenge, the cutting challenge are the World's most dangerous Online games.

How online gaming works?

Now a days to get to the next level or to purchase tools in a game, the diamonds or something similar to diamonds are essential. Unless a game is well played one cannot get those diamonds. The easiest possible way is to purchase those diamonds. Even a game played for entertainment has this possibility. There the player is using money, at the heat of the moment the player's only motive is to go to the next level and there by spends money irrationally, which will later become an addiction.

Game of Skill Vs Game of Chance

According to Gaming acts the game of skill like chess can not be considered to be played for money. But the fact is that the tournament organizers entice a player by showing a good prize money or bonus which is illegal. It is important to take a note of a judgement by the Apex court regarding Rummy whether it is a game of skill or game of chance. In 2015, the Supreme Court in *D Krishna Kumar v. State of Andhra Pradesh (2002) and Cinema Cultural Centre, Jubilee Hills v. Commissioner of Police (2002)* pronounced that "rummy as a game of skill, reaffirming the principle laid down decades ago. But clubs can still be prosecuted if they host high-stakes games of rummy. This means that playing rummy is legal in Andhra Pradesh, clubs that host high stakes games face legal action from police if discovered." But websites like Rummy circle and similar websites play for money which do not come under the purview of jurisdiction as there is no law prescribed to prosecute such websites.

How Online Gambling works?

Gambling has now become hi-tech, there is no need of a "House, walls, tables, board, stakes, dice, money or members that gather in one place. Now with a smart phone a player can use Wi-Fi both private or public and data from the players phone and play/gamble anywhere. A player can gamble with his friends or partners virtually. Before the new laws come into force the judicial approach should be "Reading in between the lines" as there is no law that governs online gaming/gambling, unless there is a law, it cannot be considered to be a crime. This has now become a legal loop hole to many tournament organizers to gain money by enticing a player with huge money prize.

How Online Betting happens?

The start of Cricket season is the start of betting season. Dream 11 is the most popular and as of now the online/secondary data shows that there are 32 similar apps where you can choose teams and bet on them. There is a referral bonus starting from Rs 25 to Rs 300. Though Cricket betting had been banned in many states like Andhra Pradesh, Telangana, Tamil Nadu, Kerala etc., still the developers and betting organizers are looking for different ways and means to introduce new betting apps and websites like 5starcric, bet365, Betway, MPL (Mobile Premium League) etc., have been used.

Effects of Online gaming Tournaments and Online Gambling

<u>Psychological impact</u> – Being stressful rather than enjoying the game, preferring solitude, discussing on the ways and means to win the game or betting. "Insula" is a separate lobe of the human brain, its main functions are Desires, cravings, and addiction Neuropsychiatric disorders causing a wide range of psychiatric disorders, such are schizophrenia, mood, panic, post-traumatic stress and obsessive-compulsive disorders.

<u>Economic impact</u> – Spending a lot of money with an urge to gain more, then to gain what they have lost and ultimately losing everything.

<u>Social impact</u> – Solitude, unable to enjoy the game as a game, abusing the partners and showing them their faults in playing the game, always looking at different means of winning, keeping themselves away from family, friends and society.

<u>Legal impact</u> – According to gambling laws not only the organizers, the players are also liable. The amount once put in will be confiscated by the government and can not be recovered. Unlike other cases where a person can recover what he has lots because they believed in a person – that is not applicable in case of gambling.

Brief discussion on The Public Gambling Act, 1867 and Andhra Pradesh of Gaming Act, 1974

- *Common gaming-house* There is no need of a common physical gaming house as everything here is virtual and remote.
- Power to extend Act It is an extendable law in physical limits but not in the cyber space.
- Penalty for owning or keeping, or having charge of a gaming-house, Penalty for being found in gaming-house and Powers to enter and authorize police to enter and search These three conditions must come under the jurisdiction into the Cyber space.
- Finding cards, etc., in suspected houses, to be evidence that such houses are common gaming houses
 Virtually it is important to catch hold of the player and take a screenshot and print out where the necessary modifications must be made in Procedural and substantive laws that govern
- Penalty on persons arrested for giving false names and addresses This can be confirmed by signing in to the player's account and verify the same.
- On conviction for keeping a gaming-house, instruments of gaming to be destroyed According to IT Act 2000 and 65 of Evidence act it is important to retain the device so until it is proved in the court of law the instrument can not be demolished. So there is a need of amendments to be made in line to get the crimes made in virtual world to be prosecuted in the real world.
- Proof of playing for stakes unnecessary "Res Ipsa Loquitur" which means "the thing speaks for itself" the websites and Apps are proofs in this regard.
- Magistrate may require any person, apprehended to be sworn and give evidence There is no need of a person to give evidence, as these are Electronic evidences (65B(1)) can be taken into consideration.
- Witnesses indemnified Out of scope regarding Electronic evidences
- Act not to apply to certain games An old Gambler's quote says "Luck Is When Skill and Opportunity Come Together". There is still a thin line between game of skill and game of chance and that is the most concerning factor that is Res Integra and needs formulation of new laws
- Gaming and setting birds and animals to fight in public streets Out of scope
- Offences by whom triable Jurisdiction applies in the same manner as Cybercrimes are prosecuted
- Penalty for subsequent offence A proverb "In a bet there is a fool and a thief" explains that there is a good possibility of subsequent offence and the same penalty can be applied.
- Portion of fine may be paid to informer There is no need to alter this but a scrutiny body can also be established that can look for online gaming, gambling and betting websites, Apps and tournaments so that they can terminate them immediately.
- Recovery and application of fines This runs as "and such fines shall (subject to the provisions contained in the last preceding section) be applied as the Lieutenant-Governor or Chief Commissioner, as the case may be, shall from time to time direct" rep. by the A. O. 1937. Which needs an amendment

Andhra Pradesh of Gaming Act, 1974 – Amended on 7th January, 2020

Though this act is similar to The Public Gambling Act, 1867, there are minor difference relating to the state. Only the important points that need immediate action has been illustrated here

- 1. Short title extent and commencement. Only physical jurisdiction is taken into consideration technical factors such as cyber space and internet proxy settings and impersonation should be considered.
- 2. Definitions. In this Act, unless the context otherwise requires -
- (1) 'common gaming house', means There is a need to amend the act by inserting the technological aspect
- (2) "gaming" playing a game of mutka or satta are not used online Amendments relating to UPI and Credit/Debit cards to be made
- (3) "Government" means the State Government;
- (4) "instruments of gaming" includes cards, dice, gaming tables, or clothes, boards or any other articles
- It can be Desktop, Laptop, Touch Pad, Smart phones etc.,
- 17. Repeals and Savings. The Andhra Pradesh (Andhra Area) Gaming Act, 1930, and the Andhra Pradesh (Telangana Area) Gambling Act, 1350 F. are hereby repealed But there is a requirement to amend the act by adding online gaming laws in counterpart with cybercrimes

Conclusion

In July 2019, 58 Laws have been repealed by Rajya Sabha and Lok Sabha as they are old but the Gaming/Gambling laws had been ignored. According to Dr. Sheetal Kanwal in his book Law and Social Transformation in India had mentioned that "The law must reflect the ideas and ideologies of the society. As the society changes, law cannot remain immutable". Accordingly, there is a need to amend the Gambling laws or repeal the laws and formulate new online gaming, online gambling and online betting laws.

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Satisfaction Index Analysis of Fort Tourism Centers in Pune District

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Abstract

Tourism has emerged as the fastest growing industry in the world. It accounts for 7% of capital investment and about 20 million people around the globe are employed in this industry. Now it is one of the sectors supporting to national economy. Some countries like Singapore, Hongkong, Switzerland etc have tourism based economy. Therefore it is very important industry. The present study aims at developing a GIS based for all available services and facilities offer of Fort tourist centers in Pune district.

Key: Tourism, Satisfaction Index Analysis, Potential, Global

Introduction

Tourism has been regarded as an economic proposition in India and has a distinct role to play as an industry. Tourism has bright future at local, national and international level as a promising industry. The Government and their agencies as well as private sector units and individuals are taking various measures to promote tourism. Promotion of tourism can contribute immensely to our economy. Many years tourism was neglected at various levels but now a day's concentrated effort are being made to improve the position and standard of tourism and for also the social benefit of the people.

Pune district is highly rich by its scenery, spiritual base and its culture but is economically backward district of the state. Tourism industry will change the future of the district and will improve the social, cultural, economic status of the district; this was the main motive behind selection of this study area.

Study Area

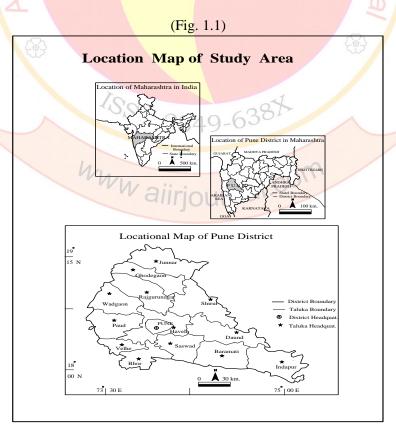


Fig. 1

Objectives

The Major objective of the present study is to make a geographical study of Pune district as tourist center and the following are other objectives of the study

- 1. To analyze the socio-economic background of the fort tourists centre.
- 2. To prepare new fort tourist maps of study area with adequate and updated information with the help of Geographic information System technique.

Methodology and Database

The data collection is based on primary & secondary sources of the data for that following methodology is adopted.

Phase I – Pre-Field work (Data Collection)

- a) Secondary Data It is collected from government and non government agencies, literature, information available at tourist places etc.
- b) Primary Data Questionnaire preparation and survey, Information Inventory preparation and survey.

Phase II - Field Work

1) Visit the fort tourist places. 2) Visit to various institutes, libraries. 3) Questionnaire and inventory survey of the visited tourist places.

Phase III - Post Field work (Laboratory Work)

1) Scanning of maps. 2) Digitization of various layers, i.e. – roads, railways, fort tourist places 3) Attribute data entry with help of GIS software. 4) Data attachment to prepare detailed tourist map by using GIS software. 5) Preparation of various tourist maps, charts, diagrams by using GIS software. 6) Analysis of data by using appropriate statistical methods. 7) Cartographic representation of data.Integrating all above information and maps with help of GIS software, Auto CAD Map- 2000i, ILWIS- 3.2 a, Arc Map and Surfer 7.1 various thematic layers were generated.

Digital Elevation Model: Pune District

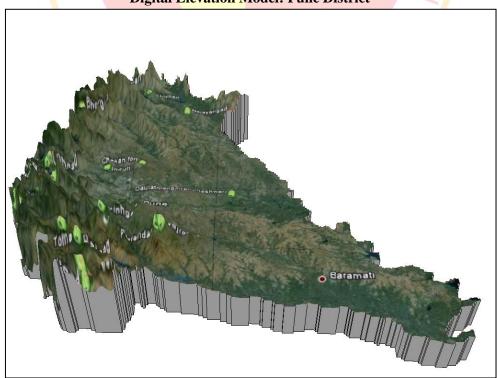


Fig. 2

Result And Analysis:

Fort Tourism Center in Pune District

There are 32 forts in Pune district. Every fort has its own importance and uniqueness. There are 14 thasils in Pune district. The forts are lying in eight thasil of Pune district which includes Maval, Bhor, Khed, Mulshi, Purandar, Junnar, Velhe and Haveli. (Table 1).

Table 1: Classification of forts using elevation controlled sampling

Sr.	Tahasil	Fort	Elevation (m)	Major forts selected for
No				study
1	Maval	Induri	595	Tung, Tikona, Lohgad
		Anghai	612	
		Tung	964	
		Tikona	988	
		Lohgad	1016	
		Visapur	1045	
	_	Morgiri	1052	
2	Bhor	Kavlya	597	Raireshwar
		Rohida	1095	
		Kenjalgad	1267	
		Raireshwar	1357	
3	Khed	Chakan	618	Chakan, Bhorgiri
		Bhorgiri	735	
4	Mulshi	Rajmachi	692	Rajmachi,
		Korigad	929	Ghangad
		Kailasgad	944	
		Ghangad	982	
5	P <mark>u</mark> randar	Daulatmangal	815	Purandar
	10	Sonori	953	
	X	Vajragad	1290	
		Purandar	1320	
6	Junnar	Narayangad	820	Nimgiri, Shivneri
		Jivdhan	898	
		Nimgiri	980	
		Junnar	998	
		Shivneri	998	
		Chavand	1010	
		Sindhola	1043	
		Hadsar	1431	
7	Velhe	Rajgad	1307	Rajgad, Torna
		Torna	1358	
8	Haveli	Sinhgad	1308	Sinhgad
	Total	32		14

Source: Gazetteer Pune District (2011).

Satisfaction Index Method

In the present study satisfaction index method is used to assess the level of satisfaction of the tourists. It was necessary to know the views of tourists about the various facilities, which are provided to them at the fort tourist destinations. Such tourist satisfaction assessment of a certain fort tourist places was essential to modify the tourist programmes and the facilities available at these destinations.

The tourists who are coming from different places to the destination may have different behaviors, ideas, views and expectations, but if required facilities are provided them at reasonable rates, they will be satisfied and it will be helpful to increase the reputation of tourist destination. Present research work is based

on sample survey. The questionnaire was prepared to assess the level of satisfaction of the tourists by taking their views regarding to the various facilities i.e. lodging, boarding, food, transportation, traveling problems and the behavior of local people.

The indicator wise average values are calculated and these are used to compute the satisfaction index. Then the ranks are given to these satisfaction indices. Satisfaction level of tourists is an important and universally accepted tool for measurement. Here, an attempt has been made to assess the level of satisfaction by adopting certain satisfaction methods. This indicator wise distribution of each tourist place is shown in the following Tables. The indicator wise level of satisfaction is calculated and tabulated with the help of following formula.

$$Sli = \underbrace{Mi \ Ni}_{N}$$

Sli = Satisfaction index for i^{th} factor.

Mi = Numerical values for the particular level of satisfaction for the ith factor.

Ni = Number of respondent deriving the particular level of Satisfaction for the ith factor.

N = Total number of respondents for that factor for all Level of satisfaction, final Ranks are given to these satisfaction Indices.

Satisfaction Index Analysis of Tung Fort

The factor wise level of satisfaction is calculated and presented in given Tables, which is based upon tourist survey at Tung.

Table 2: Factor wise Level of Satisfaction Mi (Tung)ExcellentGoodSatisfactoryUnstanting

SN.	Management	Exc	cellent	G	ood	Satisf	actory	Unsati	isfactory	Total
	Factor	No	%	No	%	No	%	No	3 %	%
1	Natural scenery	57	45.6	43	34.4	16	12.8	9	10.24	125
2	Transport	44	35.2	37	29.6	25	20	19	16	125
3	Food & Drinking Water	45	36	42	33.6	23	18.4	15	14.72	125
4	Accommodation	49	39.2	37	29.6	22	17.6	17	14.08	125
5	Tourist Guide	32	25.6	35	28	32	25.6	26	20.48	125
6	Entertainment	37	29.6	33	326.4) -	29	23.2	26	20.8	125

(Source: Data compiled by researcher)

According to tourist survey, transport factor is excellent for 35.2% tourists. 29.6% tourists ranked it as good, while 20% tourists replied as satisfactory and only 16% tourist mentioned it as unsatisfactory for them. As per analysis it can observed that most of tourists are unsatisfied with the present status of entertainment at Tung, but it should be developed according to future demand of the potential tourists.

The other management factors like electricity, petrol pumps, sanitation, medical help etc. are not standard and satisfactory according to tourist requirements.

Table 3: Factor wise Average Of satisfaction Ni (Tung)

SN.	Management	Average Satisfaction (%)							Average Satisfaction (%)				
	factor	Excellent	Good	Satisfactory	Unsatisfactory								
1	Natural scenery	8.55	6.07	4	3								
2	Transport	8.44	6.53	4.62	2.71								
3	Food & Drinking	8.34	6.62	4.4	2.67								

	Water				
4	Accomodation	8.5	6.53	4.62	2.71
5	Tourist Guide	8.43	6.56	4.57	2.63
6	Entertainment	8.78	6.93	4.36	2.64

(Source: Data compiled by researcher)

Table 3, reveals the average values of satisfaction in respect to tourist factors.

Table 4: Factor wise Satisfaction Index with Rank Sli (Tung)

SN.	Management Factor	Satisfaction Index	Rank
1	Natural scenery	6.71	1
2	Transport	6.24	4
3	Food & Drinking Water	6.36	3
4	Accommodation	6.45	2
5	Tourist Guide	5.71	6
6	Entertainment	5.99	5

(Source: Data compiled by researcher)

The Table 4 reveals that the natural scenery is most favorable factor for the tourists at Tung. Accommodation factor is 2nd in the rank. There is scope to improve food standards. Transport facilities ranked by tourist at fourth position. Tourist Guide are less in Tung as well as parking and petrol pump is the major problem at Tung; therefore local authority need to provide open ground for parking as well as petrol pump should be made available by the government Tung. Other management is least favored factor for the tourists. Public amusement park, health centers and sanitations should be in more numbers and should be public oriented. In this regard there is enough scope to improve standard of other management factors.

Table 5: Factor wise Satisfaction Index of Sample forts with Ranks

SN.	Management Factors	Tung
1	Natural scenery	1
~~2	Transport	4
3	Food & Drinking Water	3
4	Accommodation	2
5	Tourist Guide	6
6	Entertainment & other	5
	management	20

(Source: Data compiled by researcher)

As per the table 5, it clear that most of places except Tung have not good facilities for accommodation. Therefore, accommodation facilities like hotels and lodges with good provisions in the rooms should be provided.

Conclusion

A natural scenery facility available at Tung fort is good because this place have index 1. Transport factor for Tung have satisfactory index 4 which shows that tourists are not satisfied with traveling facilities. Therefore, these places must have metaled road with increased in no. of vehicles by Govt. and by private agencies this will provide the employment for the district people. Tourist guide factor for Tung fort have satisfactory index 6 which shows that tourist guide facilities is also not available which creates problems to the tourist. As far as other management factor like electricity, water supply, safety of tourists is concerned are

not satisfied. So, the electricity supply, problem of water supply and protection. Therefore, it is advisable to the local Govt. or State Govt. to provide these basic facilities which will improve the no. of tourists

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Historic Tourist Centers and Development of Tourism in India

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Abstract

The beauty of nature lies in its variety which indeed is endless. So is the timeless desire in the human beings to appreciate the nature from the bottom of their heart. This is why since ancient times explorers, discoverers and travellers undertook adventurous journeys in spite of all difficulties they came across. The underlying idea of visiting new places to appreciate their beauty, in course of time, has given birth to a modern industry called tourism. It is the job of tourism industry to spot such places of beauty and interest and bring people and places physically closer to one another by providing every facility and comfort. Thus natural scenery, favourable weather and climate and cultural heritage are used for area development through promotion of tourism.

The wealth of these resources is found in artificially created landscapes. This component of India's tourist resources is widespread almost in every part of the country. These are associated with some historical, religious or a cultural event. During the course of a very long history of India, different people and different religions have left a mark in the concrete forms. They comprise statues, shrines, tombs, minarets, forts, palaces, ancient monuments or recent buildings created by our people. These are known for their architecture or the plans of cities now lying in ruins. Many sites may not be having any visual appeal today. But these are still significant for some historical or religious events or because of their association with the life history of a great person. Above all, the performing arts (music, drama and dance), traditions and customs, costumes, cuisine, languages, social habits, religious rites and festivals are expression of culture. The industrial and planned cities, scientific installations, river dams and other modern structures created in independent India, are the attractions added to India's heritage. Greater the variety of tourist resources and their easy accessibility by well-connected transport network, more are the chances of the development of tourism resource potential.

Keywords: Tourism, Cultural Impacts etc.

Introduction

The beauty of nature lies in its variety which indeed is endless. So is the timeless desire in the human beings to appreciate the nature from the bottom of their heart. This is why since ancient times explorers, discoverers and travellers undertook adventurous journeys in spite of all difficulties they came across. The underlying idea of visiting new places to appreciate their beauty, in course of time, has given birth to a modern industry called tourism. It is the job of tourism industry to spot such places of beauty and interest and bring people and places physically closer to one another by providing every facility and comfort. Thus natural scenery, favourable weather and climate and cultural heritage are used for area development through promotion of tourism.

Historical Development of Tourism

Before looking at the emergence of tourism industry in India, looking at the history of travel, would be in order, in the history of the world, there has never been a migration of people from one country to another on such a large scale as it taking place today. According to world tourism organization on 1983. The resident of one of the most advanced country of the world usa. Spent more than 300 billion on domestic international travelling which are more than the expenditure to their country on defense. (Bhatia, A.K 1993) Out of much reason for the rapid growth of this industry in the world, a rapid change in automobile industry is important. Fast expansion of aircrafts fleets, improved communication system, world wide availability of rental care and accommodations are a few reasons to home. Although there has been travelers in the past also but people believed that man prefers safety necessary. For example argons left central Asia due to

change in climatic conditions. The travel is directly related to trade because with the invention of money people started trading and for trading they went from one place to other.

Development Of Tourism In India Early Development

The first conscious and organized efforts to promote tourism in India were made in 1945 when a committee was set up by the Government under the Chairmanship of Sir John Sargent, the then Educational Adviser to the Government of India (Krishna, A.G., 1993). Thereafter, the development of tourism was taken up in a planned manner in 1956 coinciding with the Second Five Year Plan. The approach has evolved from isolated planning of single unit facilities in the Second and Third Five Year Plans. The Sixth Plan marked the beginning of a new era when tourism began to be considered a major instrument for social integration and economic development.

Tourist Attractions in India:

India is a country known for its lavish treatment to all visitors, no matter where they come from. Its visitor-friendly traditions, varied life styles and cultural heritage and colourful fairs and festivals held abiding attractions for the tourists. The other attractions include beautiful beaches, forests and wild life and landscapes for eco-tourism; snow, river and mountain peaks for adventure tourism; technological parks and science museums for science tourism; centres of pilgrimage for spiritual tourism; heritage, trains and hotels for heritage tourism. Yoga, ayurveda and natural health resorts and hill stations also attract tourists.

The Indian handicrafts particularly, jewellery, carpets, leather goods, ivory and brass work are the main shopping items of foreign tourists. It is estimated through survey that nearly forty per cent of the tourist expenditure on shopping is spent on such items.

Impact of Tourism in India -

Tourism industry in India has several positive and negative impacts on the economy and society. These impacts are highlighted below.

Positive Impacts -

- 1. Generating Income and Employment: Tourism in India has emerged as an instrument of income and employment generation, poverty alleviation and sustainable human development. It contributes 6.23% to the national GDP and 8.78% of the total employment in India. Almost 20 million people are now working in the India's tourism industry.
- 2. Developing Infrastructure: Tourism tends to encourage the development of multiple-use infrastructure that benefits the host community, including various means of transports, health care facilities, and sports centers, in addition to the hotels and high-end restaurants that cater to foreign visitors. The development of infrastructure has in turn induced the development of other directly productive activities.
- **3. Source of Foreign Exchange Earnings:** Tourism is an important source of foreign exchange earnings in India. This has favourable impact on the balance of payment of the country.
- **4. Preservation of National Heritage and Environment:** Tourism helps preserve several places which are of historical importance by declaring them as heritage sites. For instance, the Taj Mahal, the Qutab Minar, Ajanta and Ellora temples, etc, would have been decayed and destroyed had it not been for the efforts taken by Tourism Department to preserve them. Likewise, tourism also helps in conserving the natural habitats of many endangered species.

• Negative Impacts -

1. Adverse Effects on Environment and Ecology: One of the most important adverse effects of tourism on the environment is increased pressure on the carrying capacity of the ecosystem in each tourist locality. Increased transport and construction activities led to large scale

- deforestation and destabilisation of natural landforms, while increased tourist flow led to increase in solid waste dumping as well as depletion of water and fuel resources.
- 2. Undesirable Social and Cultural Change: Tourism sometimes led to the destruction of the social fabric of a community. The more tourists coming into a place, the more the perceived risk of that place losing its identity. A good example is Goa. From the late 60's to the early 80's when the Hippy culture was at its height, Goa was a haven for such hippies. Here they came in thousands and changed the whole culture of the state leading to a rise in the use of drugs, prostitution and human trafficking. This had a ripple effect on the country.
- 3. Increase Tension and Hostility: Tourism can increase tension, hostility, and suspicion between the tourists and the local communities when there is no respect and understanding for each other's culture and way of life. This may further lead to violence and other crimes committed against the tourists. The recent crime committed against Russian tourist in Goa is a case in point.
- 4. Creating a Sense of Antipathy: Tourism brought little benefit to the local community. In most *all-inclusive package tours* more than 80% of travelers' fees go to the airlines, hotels and other international companies, not to local businessmen and workers. Moreover, large hotel chain restaurants often import food to satisfy foreign visitors and rarely employ local staff for senior management positions, preventing local farmers and workers from reaping the benefit of their presence. This has often created a sense of antipathy towards the tourists and the government.

Conclusion -

Tourism industry in India is growing and it has vast potential for generating employment and earning large amount of foreign exchange besides giving a fillip to the country's overall economic and social development. But much more remains to be done. Eco-tourism needs to be promoted so that tourism in India helps in preserving and sustaining the diversity of the India's natural and cultural environments. Moreover, since tourism is a multi-dimensional activity, and basically a service industry, it would be necessary that all wings of the Central and State governments, private sector and voluntary organisations become active partners in the endeavour to attain sustainable growth in tourism if India is to become a world player in the tourism industry.

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ISSN 2349-6387

Dependency Ratio of Solapur District: A Geographical Analysis

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Abstract:

The actual dependency ratio defined as non-workers depending on workers. According to census of India the person who are below the age of 15 and above 64 are known as dependents population. At the same time people who are inactive, sick person, students, unemployed, voluntary retirements are also considered dependent population. Presently the life span of the human being is increasing and naturally the dependency ratio is rising with it. Old age persons are more prone to sickness, diseases than young peoples. The dependency ratio is an age –population ratio of those typically not in the labour force to typically in the labour force. Dependency ratio it is used for calculated the pressure on workers and it is shown in percentage. Internationally the dependent population usually includes those under age of 16 and above 64. The total dependency includes child dependency ratio and the old age age dependency ratio. The old age dependency ratio is defined as the number of persons in the age group 60 years above per 100 persons in the age group 15 to 59 year.

Keywords: Dependency ratio, Dependents, Non-workers, Workers

Introduction:

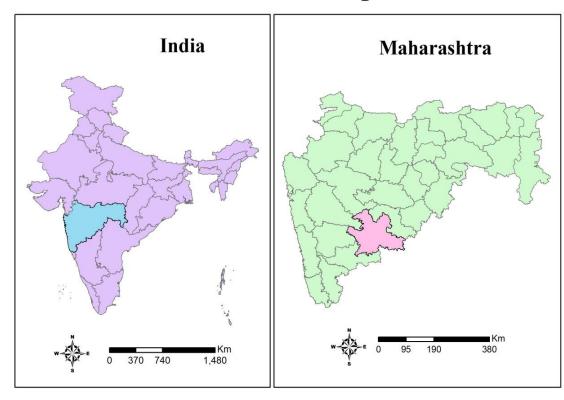
The economic development of any region is totally depending upon the working age group in a region. The working age group of population is essential and beneficial for a region. Recent decade's good quality of education is available for only rich people. Majority of graduates are not well trained and they are unable to compete on global and national level. This is very necessary for any region. At present the developing countries are getting their economy form IT and automobile and heavy machinery. The number of job opportunities in this field is limited and not supporting the young population, well trained employees are less. The unemployment will increase the rate of crime and social unrest. Undoubtedly a large working population and a low dependency ratio could be helpful for region for its economic development.

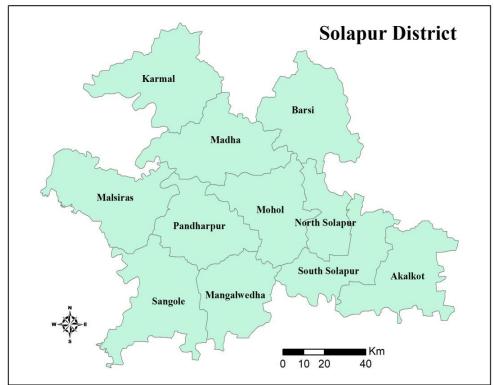
It is very necessary to study the dependency ratio of an area to plan for strengthening its economy. It is very essential to examine the extent of dependency and its nature o the burden of non-workers on the workers who have to support them in all respect. Children below 14 years and population above 60 years, those who are lazy or ill are identified as dependents in the Solapur district.

Location/Study Area:

The present study deals with the geographical perspectives of the dependency ratio in Solapur district. The Solapur district is surrounded by 17°05' North latitudes to 18° 32' North latitudes and 74° 42' East of 76° 15' East longitudes. The total geographical area of Solapur district is 14895² K.m. divided into eleven tahsils. The Population is 43.2 lakhs in eleven tahsils of District.(Censes 2011). It is bounded from the North by Osmanabad district and Ahmednagar district, on the North-East by Satara district and at the South & East it has general boundary of Karanataka state. The rivers like Bhima, Sina, Man, Nira Bhogawati and many other smaller tributaries drain in the district. The soil of the district is origin from volcanic Deccan Trap. It varies from light brown to black in colour and lesser in quality.

Location Map





Objectives:

- 1. To study tahsil wise dependency ratio of Solapur district.
- 2. To compare the dependency ratio among district.

Database and Methodology:

Present study mostly based on the secondary data collected through District statistical Department of Solapur, District socio-economic abstract of Solapur District and censes handbook of Solapur District. For the present investigation, the collected data are analyzed by statistical and cartographic techniques. This is taken from census of India and other various reports. The statistical method are used to examine the dependency ratio in Solapur district

Result and Discussion:

According to 2001 and 2011 census in all the tahsils in Solapur district, non-workers exceeded workers numerically. In 2001, the Malshiras tahsil had a high percent ratio (3.54) of non-workers to total workers followed by Solapur North (1.75) Pandharpur (1.73), Barshi(1.51), Mangalvedhe (1.51), Madha (1.05), Akkalkot (0.99), Solapur South (0.98), Karmala (0.97) and Mohol (0.90) tahsil. (Table. 1)

Table: 01: Dependency Ratio in Solapur District 2001

Sr. No.	Tahsils	Total Workers	Total Non-Workers	Dependency Ratio	Rank
		OLIG			
1	Solapur North	260412	455629	1.75	10
2	Mals <mark>hi</mark> ras	103974	368179	3.54	11
3	Pandharpur	120917	208665	1.73	9
4	Ba <mark>r</mark> shi	116154	175639	1.51	8
5	Madha	149067	155830	1.05	6
6	S <mark>a</mark> ngole	124241	113107	0.91	2
7	Akkalkot	102284	101770	0.99	5
8	Mohol	118053	106180	0.90	1
9	Solapur South	121311	118687	0.98	4
10	Karmala	107994	105251	0.97	3
11	Mangalvedhe	78769	105424	1.51	7

Source: Socio- economic Abstract2001 and Calculated by researcher

In 2011 census, 40.84 percent of District population as main workers, the percentage of main workers is highest in Karmala Tahsil (46.37 percent) and lowest in Solapur North Tahsil (35.03 percent). Among the 11 Tahsils of the District, 9 Tahsils are above the District average. These are Karmala (46.37 percent), Madha (46.00 percent), Barshi (41.90 percent), Pandharpur (40.90 percent), Mohol (46.24 percent), Malshiras (42.00 percent), Sangole (41.58 percent), Mangalvede (43.10 percent) and Solapur South (42.67 percent). In 2 Tahsils the work participation rate is below the District average.

Table: 02: Dependency Ratios in Solapur District 2011

Sr. No.	Tahsils Total Workers		Total Non-Workers	Dependency Ratio	Rank
1	Solapur North	370411	655629	1.77	11
2	Malshiras	203975	268179	1.31	7
3	Pandharpur	180918	248665	1.37	9
4	Barshi	156155	205639	1.32	8
5	Madha	149068	165830	1.11	2
6	Sangole	134242	173107	1.29	6

7	Akkalkot	122285	179770	1.47	10
8	Mohol	128054	143180	1.12	3
9	Solapur South	111312	139687	1.25	5
10	Karmala	117995	129251	1.10	1
11	Mangalvedhe	88760	110424	1.24	4

Source: Socio- economic Abstract2011 and Calculated by researcher

In 2011, the Solapur North tahsil had a high percent ratio (1.77) of non-workers to total workers followed by Akkalkot (1.47), Pandharpur (1.37), Barshi (1.32), Malshiras (1.31), Sangole (1.29) Mangalvedhe (1.24) Mohol (1.12), Madha (1.11) and Karmala (1.10) tahsil. (Table. 2)

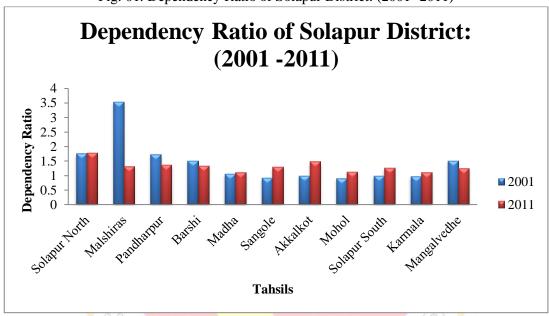


Fig. 01. Dependency Ratio of Solapur District: (2001 -2011)

Source: Compiled by researcher

All these tahsils have urban and rural settlements and urban population with some differences in their size and distribution. The cities offer diverse occupations. These factors have helped the workers to get their good wages. But female population during the years under study was very merger expects in agricultural and some extend of household industries. This contributed a large number of female workers to the category of non-workers.

Change in Dependency Ratio from 2001 to 2011:

On the basis of relative ranks, it is possible to compare the dependency ratio of tahsils. The gain and loss in rank over 2001 to 2011 is studied despite differences in defining workers from table 1 and 2. There is a change in dependency ratio during 2001 to 2011. Mohol, North Solapur, Magalvedha and other tahsils had changed their respective ranks in 2011 (Table 1 and 2).

It is observed that, Karmala maintained the rank 3rd in 2001 and 1st rank in 2011. Pandharpur and Barshi maintained their ranks and there is no change in their dependency ratio during 2001 to 2011. The variables which have been studied so far differences in dependency ratios of all the tahsils are mostly depends upon socio-economic activities of the area which intern are dependent on which the infrastructural facilities which are available at present and are going to be available within the settlements of the Solapur district.

Conclusion:

In the present study, the dependency ratio is coming down from 2001 to 2011. According to 2001 census the Solapur district has 2014361 and in 2011 there are 2419361 non workers. Among the 11 tahsils Karmala occupied 1st rank followed by Madha 2nd rank and Mohal 3rd rank, Mangalvedha 4th rank, Solapur south 5th rank in 2011. This analysis revels that dependency ratio is decreasing gradually from 2001 to 2011.

Suggestions:

- 1. Improvement in education and health care is very much essential in small areas
- 2. The government has to develop system and more important to give training for young people and utilize the man power.
- 3. Agriculture sector technology can be used and irrigation also
- 4. The implement the family planning polices to check the over population growth to reduce the dependency ratios.

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Overview of The Insolvency and Bankruptcy Code, 2016.

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Introduction:

This code throws light on the institutional Framework developed by the state which enables a business organisation to grow which with several freedoms like:

- freedom to start a business
- freedom of doing business or to continue doing business
- freedom to exit or discontinue the business freedoms are generally covered by Indian laws freedom is recognised by "The Insolvency and Bankruptcy Code, 2016 (IBC)".

This code now provides a procedure for distressed businesses to solve their insolvency in a regularised and timely manner.

It brings into notice the market deficiencies and gives the information asymmetries about commercial entities to help them in "freedom to exit" w<mark>ith the help of corporate insolvency resolution and</mark> entrepre<mark>n</mark>eurs.

Key words: The Insolvency and Bankruptcy Code, 2016 (IBC), covid-19 pandemic, Indian Stock Exchanges, Global Stock Exchanges, Resolution a<mark>nd Liquidation, "Debtor-in-Possession", "Creditor in Co</mark>ntrol", NCLT, CIRP.

The main objective of this study:

- "An Act to consolidate and amend the laws relating to reorganisation and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximisation of value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders including alteration in the order of priority of payment of Government dues and to establish an Insolvency and Bankruptcy Board of India, and for matters connected therewith or incidental thereto".
- The spread of coronavirus covid-19 pandemic has brought uncertainty in Indian economy and especially for individuals and businesses. To reduce the effect of the pandemic coronavirus, the President of India promulgated the Insolvency and Bankruptcy Code (Amendment).
- All these steps were taken to ensure that business operations are actually been continued instead of being shut down and they have sufficient liquidity for running their businesses.

Hypothesis

The letter and spirit of "The Insolvency and Bankruptcy Code, 2016 (IBC)" lies in the comparison between Resolution and Liquidation:

This code consists of opportunities and challenges which creates avenues for professionals as well as operational creditors and financial creditors.

As far as companies are concerned, insolvency would be a situation when the company is incapable of repaying its debts or unable to pay its debts, during its ordinary course of business, on the due date of the debt.

Any aggrieved person or creditor can file an application before NCLT against such defaulting company. Bankruptcy contains a concept like voluntary surrender where company approach record voluntarily and declares there are officially that it is incapable of paying its debts.

This new the Insolvency and Bankruptcy Code has replaced the concept of "Debtor-in-Possession" to "Creditor in Control".

Under this new code any financial creditor or operational creditor owed the debt of Rs 1 lakh which is now Rupees 1 crore can present a petition of insolvency under NCLT against the defaulting company.

Review of Literature

Pioneer Urban Land and Infrastructure Limited vs. Union of India (Pioneer Judgment)

The Supreme Court in this case has upheld the constitutionality of the Insolvency and Bankruptcy Code (Second Amendment) Act, 2018 (**Amendment Act**). So, now onwards the 'real estate allottees' (**home buyers**), as defined under Section 2(d) of the Real Estate (Regulation and Development) Act, 2016 (**RERA**), were brought within the ambit of 'financial creditor' under the Insolvency and Bankruptcy Code, 2016 (**IBC**).

A three judges' bench headed by Hon'ble Mr. Justice Rohinton Nariman disposed off a batch of over 150 petitions filed by the real estate developers challenging the constitutional validity of the Amendment Act. The Supreme Court also held that the RERA has to be read harmoniously with the IBC and, in the event of a conflict, the IBC will prevail over the RERA.

In this amendment, the home buyers have been covered under the definition of "Financial Debt" where these home buyers can make a "Corporate Insolvency Resolution Process" against the builders or the developers for their delays in the project.

Before applying to the NCLT the creditor should give a minimum of 10 days demand notice to the corporate debtor. But an extra benefit is given to an operational creditor who can directly apply to the NCLT if the corporate debtor defaults in repaying his outstanding dues, Once this application is accepted by the NCLT, moratorium period will start and then NCLT will initiate the Corporate Insolvency Resolution Process (CIRP).

Research Questions

1. Whether Resolution is the spirit of "The Insolvency and Bankruptcy Code, 2016 (IBC)" or Liquidation?

Whenever any insolvency proceedings initiated against a defaulter company there are two options open for its creditors that is:

- a. Insolvency resolution which means existing business of a defaulter company as a Going Concern would be sold off
- b. Liquidation where the Assets of the defaulter company would be sold off

Hence, "The Insolvency and Bankruptcy Code, 2016 (IBC)" is an umbrella under which the provisions of both the options are covered which are:

- a. Insolvency resolution and
- b. Liquidation

There is one question in the minds of creditors whether they should take the option of insolvency resolution or liquidation. To decide that they should first generalize whether there are any chances of revival of company by considering its future aspects to earn and then pay off all its creditors.

The basic motto is- "Law should provide a reasonable opportunity for rehabilitation of a business before a decision is taken to liquidate it so that it can be restored to productivity and become competitive".

So, finally "The Insolvency and Bankruptcy Code, 2016 (IBC)" was legislated to bring a sustainable balance between Resolution and liquidation.

2. In the very first meeting of Committee of Creditors, whether liquidation decision can be taken?

^{1.} ¹https://ibbi.gov.in//uploads/legalframwork/c1d0cde66b-213275d9cf357b59bab77b.pdf

Before the enactment of "The Insolvency and Bankruptcy Code, 2016 (IBC)" It was observed that many organisations struggled for years for their survival. So in the current scenario, financial distressed companies are on the verge of liquidation and hardly have any chances of their revival.

Committee of Creditors have no other option but to take this company for liquidation, because there are no chance for recovery of their money and liquidation is the only solution for making their recovery.

But, a point of concern here is, can creditors take a straightforward decision to liquidate the defaulting company in its very first meeting of Committee of Creditors?

We can answer this in an affirmative manner by saying that in case of highly distressed businesses when one finds that the company in no situation will be able to achieve resolution in the given period of 180 days or even in the extended period of 270 days. Then the only way out for such company, is liquidation, by which creditors can realise their money which was trapped there.²

Section 33 of "The Insolvency and Bankruptcy Code, 2016 (IBC)" clarifies that any resolution professional at any stage, when the CIRP is going on but definitely before confirmation order of a resolution plan, such resolution professional can submit before the tribunal any such proposal to liquidate the proposed company with the required majority, then tribunal may have no other option but to pass a liquidation order against such company.

Depth of Research:

There are some cases where Tribunal has passed liquidation order at the very initial stage of the case like VIP Finvest Consultancy Private Limited v. Bhupen Electronics, Chivas Trading Private Limited v. Abhayam Trading Limited, C.A. Rajendra K. Bhuta v. Best Deal TV Pvt. Ltd etc., and the reasons cited by the Tribunal for direct liquidation was that the revival chances of these companies were not there and on the top of it creditors were also not interested to spend any more amount in recovering their drowned money.

Generally, company incorporates with the goal or vision of making profits and then getting listed on Indian Stock Exchanges and then on Global Stock Exchanges by spreading their wings all over the world.

But still many companies fail to achieve their goals due to reasons such as conflict of internal management of the company, decision making process, low liquidity, shortage of finance and assets etc.

So ultimately a situation arises where company finds difficult to survive in this competitive world. So finally, the Indian government it has enacted "The Insolvency and Bankruptcy Code, 2016 (IBC)" to solve the Problem of corporate distress.

So, now onwards adjudicating authority permits the withdrawal of application which is admitted under section 7 or section 9 or section 10 of "The Insolvency and Bankruptcy Code, 2016 (IBC)" provided 90% of members give their consent for such withdrawal. This provision is amended only to understand the intention of the Legislature which is always to rehabilitate the corporate debtor.

Resolution plan approval is required from minimum number of voting share:

Earlier the resolution plan used to be approved by minimum 75% of voting share of financial creditor, but now an amendment has been brought in an act of "The Insolvency and Bankruptcy Code, 2016 (IBC)" after considering the NPAs and the revival position of a company and protecting the interest of creditors. Now the minimum percentage is 66% of voting share of financial creditors required for approval of a resolution plan.

Implication of section 29A which contradicts the spirit of legislature in "The Insolvency and Bankruptcy Code, 2016 (IBC)":

Section 29A specifies certain category of persons who are ineligible for filing the resolution application. That may be the category of persons who are responsible for the downfall of the corporate debtor or they are not suitable to run the business of the company, because of their earlier performance.

Now, they are ineligible to bring any resolution plan before the authority or the court. Along with procedural obstacles, now one needs to understand the disqualifications of the resolution applicant as well and in this process, some innocent applicants have also been declared as ineligible because of just some technicalities. This section has made ineligibilities more common which results into liquidation.

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² (2017) 85 taxmann.com 187 (NCLAT)

So, liquidation has become a possibility as well as a probability. Legislature has clarified intention of section 29A by saying that the persons or promoters were responsible for the default of corporate debtor, they should not be given any power to participate in the business of the company or any type of gain or regain in any manner, the control of the corporate debtor.

There are good chances that these fraudulent persons buy back the assets of corporate debtor by putting a higher bid and ultimately taking the charge or control over the assets of the company. We can name some defaulters like Vijay Mallya, Nirav Modi or Satyam case, Kingfisher, Sahara and many more to mention.

Suggestions:

I would suggest that all misappropriation, all failures do not come from misappropriation or diversion of funds or mismanagement. The corporate debtor who himself has to decide about the policy for its revival or rehabilitation of the company because corporate debtor knows well about the profits and losses of the company.

Conclusion:

I have mentioned this with the help of some examples here. We have seen that when mobile phones entered in the Indian market, the main users from the mobile phone market were the businessmen of wrist watches, alarm clock and camera industry and also we can say that many other sectors were adversely affected with this launch of mobile phone and absolutely they were not at fault of the promoter or the director for the closure of business of wrist watch, alarm clock and camera industry.

One more failure we cannot forget is about Nokia, where no case of misappropriation was involved. There also I would mention that there are so many industries which were closed down as per the orders and directions of Supreme Court concerning the environment and other factors. We have also seen that many public sector undertakings like MTNL, BSNL, Air India are still incurring huge losses but definitely not because of any type of misappropriation or diversion of funds by their promoters or directors.

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Online Education and e-learning is Our Next Destination

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Outline

Use of technology and internet has experienced advanced growth. This technology and internet has been applied in each and every aspect of our education system. This internet which has improved the communication network and it has also led to the invention of other facilities.

Improvements in education sector through internet is becoming more advanced. Learning is being made more reliable and convenient through the various research programes that are being conducted .E-learning is a technology which is preferred and accepted by the students, became it has various advantages. It is better than normal physical learning.

Advantage of e-learning

E-learning is simply defined as electronic learning without having travel, a students can acquire knowledge through internet. Physical institution have been for long used as the main means through which knowledge could be transmitted.

In the recent past, technology have taken a tremendous growth which also being transferred into education sector. Teachers and students come to discover how convenient and reliable the internet is, and electronic learning is being much popular is the world of technology.

E-learning were subsequently being made more and more advanced in the field of technology and it ensures to offer the desired services. Industry of education is growing ahead .Physical learning institutions faced challenges. It is a hard task to overcome despite the various efforts employed.

It is very important to the institution that they must realized the need of modern means of learning .E-learning has advantages of acceptability we will hence not again need to convince the people that it is the best (Levy 2006).

Disadvantages of physical institutions are many .Lack of adequate research and learning materials , most institutional librarians are not flexible enough to handle all the study materials of the ever changing syllabus are now coming into consideration .Some students missing their position because they took their admissions late. Poor quality of education made poor students, Frequent school dropouts by students due to lack of fund. Negative influences from the peer group in happened in school. Some students loose the morale and motivation of learning .These challenges can be solved by electronic learning .

Students will enjoy the modern education technology .Education will be made possible to any candidate who has the desire to study ,no matter their location, due to its flexibility ,online learning makes it possible for the student to studying at his or her convenient time , online learning has a great relief not only to students but also the teachers who did not have to be confined to a particular routine to offer or receive knowledge.

Student can do anything at anywhere at any time .Adequate research materials are available online, and students will have a variety to choose from ,and it will improve the quality of education .Through internet facility ,students can interact with different teachers and students which will enhance educational satisfaction.(Chan z,2004).

In some cases admiration can not provide quality learning materials and other types of good learning facilities. It will be minimized as the student will be made responsible for grades that they get.

Electronic learning will ensure that time is adequatly used and no time will be wasted on transportion purpose to go learning institution and also the money as transportion cost, becomes minimized. They used to buy many research books. Drug abuse and illicit relationships are some of the common in physical institutions that impact the students academic and social life.

Racial social and all kinds of discrimination are happened in physical institution. Some students are subjected to unfair treatment, which hinders acquiring the knowledge and skills they need.

Online study is better because students may avail home environment and so they will have better grade electronic learning will offer to all the quality learning. Some students had a desire to take a certain course but could not due to high fees. Electronic learning will help to minimize it.

Online education will help to boost student's confidence because they can visit many website and may compare with the similar one for a particular issue. This will reduce inadequate knowledge of the students.

Online learning compared to physical institutions provides a variety of courses and any discipline can be studied by a student who would otherwise have to travel far.

Students compel to take a certain course because they had no alternatives. E-learning connects students from all corners of the world. They can share and exchange knowledge concerning the various topic.

If E-learning is made acceptable to all desiring students, quality education will be offered only on e-learning institution, but will also face a challenge the physical institutions and they will be under pressure to offer quality education. Market will be competitive.

It will be a continuous trend that every institution will strive to offer the best. Worldwide, quality education be ensure.(Schultz 2002).

Online education will help to apply whatever they are learning through internships, apart from acquiring knowledge they can do it this will help to reduce the burden. Parents be relaxed also.

Many other things can be done along with learning through the internet. Many people had sacrifies between education other commitments life and family. They can attend to their duties at the same time the acquire knowledge that they need (Bourne 1999).

The students who desire to acquire international knowledge, but unable, due to long procedures and have to travel to the respective countries and admissions to those institutions due to many restrictions by some countries.

There is also no limit to the number of students that can be admitted to the online institution. Online has a flexible capacity. A student who wishes to enroll any time can do so without the fear.

There is no stipulated time limit for acquiring skills in a particular field, it all depends on the students speed of learning. Admissions can be taken at any time of the year. Students can complete in a shorter or longer time, depending on how fast the student is.

Online education create and increase responsibility on the part of students. They will aspire to work harder and finish the course in the shortest time possible. The administrative will be relived of the blames of the student's failure to perform well.

Students relations will only be academic through e-learning (Pope,2001). Malpractice and negative influence among the students is usually caused through physical interaction within physical institution . They may engage non-academic activities.

Distance education programmes will be made easier as the study materials and other updates will be easily communicated via the internet E-learning provides a wide variety of librarians. Students do the homework easily using materials from internet.

It is important for this form of learning to be researched further so as to see how much better it can be of benefit to its growing number of users (Rynson,2005).

At the time of admission students be informed admission process, how tests and exams will be made available, students test their process, enough resource materials to ensure that students have a variety to choose from, automatic liming methods, feedback, reports after every lesson to gauge on its quality.

We know that this is the current technological field is being developed fast. It is only through knowledge that further developments can be made in the world.

There will a massive change in the education system. Students will not have to travel far in search of education. At a time, a student avails many courses. There is no age bar .Gaps between lactunes and

students be minimized. There is no problem of motivation among the students. Parents will not have to complain of the negative influences on the students in schools.

Online education and e-learning is being more relevant during lockdown period, when offline teaching was totally pulled up. I think it will be going a reliable platform of education.

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Trends in selected HRM Functions Today

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Abstract:

Pandemic has redefined the organization approach to various HR functions. As companies move forward, recruitment, selection and training policies and strategies need to be redefined to ensure smooth functioning and sustainable growth for everyone. We have to witness, embrace the changes happening in these HR functions. The trends in the selected HRM Functions are discussed. The various articles, publications, recruitment agencies sites are referred.

1.1 Introduction:

Companies try to attract best talent to work with their company, Hence they need to provide various facilities to their employees. Common benefits are remuneration and medical facilities. But trends are changing now with respect to recruitment and selection. There was a time when people made plans about things that actually worked. And then, 2020 happened! This passing year has been one that has made us all believe in and swear by the uncertainties of life and everything around us. It has also changed the meaning of certain things for everyone. The human resources was no exception to this change. The work culture that was prominent until early 2020 is now forced to be altered into something people like calling the "new normal"

This new normal, no matter how different it seems, is the only way to survive the failing economy with the hope for things to fall in place again. Immediately after the outbreak of the Covid-19 pandemic, remote work gained huge popularity. With passing time and the increasing ease with technology, people have started to see the benefits of this. The WFH format has helped save travel time for many people, which is now better utilized elsewhere, by either picking up a hobby or doing something for the family. It is also making it possible for employees to have flexible working hours. The interaction between people from different time zones has also become easier to mediate.

1.2 Trends in Recruitment

The various trends in recruiting are discussed below:

1. Recruiting for jobs to recruiting for assignments

Organizations are more creatively using the opportunities of a more flexible workforce. It helps to think less in terms of jobs and more in terms of assignments. There is an assignment to be done, and how can we quickly find the best possible people on the market who can do the assignment? Intermediaries with good knowledge of the market of self-employed professionals can help here. Also more and more online platforms offer services in this domain.

2. Gamification in recruitment

The use of gamification in recuritment has been going on for some time. Recruitment can be fun, and people want to work for organizations where work and fun are closely connected.

3. Community management as a recruitment tool

The communities are connected to organizations and through the community people can be given a real experience of what it means to be part of an organization. When opportunities occur, candidates from the communities can very organically become part of the organization.

4. Greater reliance on artificial intelligence (AI)

Since video conferences are the only ways to interact with potential employees, the companies are relying highly and heavily on using AI to start playing an active role in the hiring and recruitment process. It balances the recruitment process while also saving time, effort and money. Replying to candidates has become easier too because of artificial chatbots.

Among the many HR technology trends for 2021, this is one that is going to be very prominent. AI makes things virtual and digital. Because of this, there are a lot of financial and non-financial resources that are going to be

saved. It would, additionally, help employers distribute and use their finances in better ways. It also would allow them the liberty to choose the things they want to spend their budgets on.

5. Recruitment marketing strategy

It is the process of fostering and attracting talented employees/professionals/individuals to the organisation using marketing tactics and methods. Companies which adopt this strategy will be able to attract more talent.

6. Rise in freelancing

When speaking of HR technology trends 2021, we cannot possibly skip this one. Since this year has been difficult for all industries, a lot of companies have had to downsize their workforce and, in effect, fire individuals from multiple teams.

Some people are also willingly opting for project-based jobs, which helps them choose the work they do and the hours of work as per their convenience. This trend that started as an alternative to full-time employment has, indeed, turned out to be a bliss for both the employees and the employers.

7. Diversified recruitment

Since remote work has become commonplace today, employees and employers alike are going to have a widespread pool available. This will make it possible for employers to hire candidates from diverse backgrounds that could help company culture and company performance as well. Due to a diverse workforce, the company gets into the habit of not only tolerating different points of views but also respecting them. This also opens the door of opportunities from underprivileged individuals to seek employment at par the more privileged.

8. Inbound Recruiting

It is a strategy where the organisations continuously and proactively attract the eligible individuals with an aim to make them choose this organisation as their next employer.

The objective of this strategy is in attracting, converting and engaging the candidates. Recently, there has been a change to inbound recruiting from outbound recruiting for a long term solution.

9. Corporate talent network

Corporate "talent networks" are online platform for promoting the company brand name. Its main objective is to attract new talent from a variety of sources which includes job candidates, fans, employees, alumni, partners, suppliers and even customers. It is very popular among the big firms and are increasingly being adopted by smaller and medium size firms as well. A talent network serves as an advertising and promotional hub for the company brand name. It is used to communicate job openings, career information, and other company information. The contents are usually tailored and targeted for each specific candidate.

10. Building an end-to-end talent brand

More and more companies today are focusing on building end to end talent brand. A talent brand refers to how the company is being perceived by its current employees, past employees and prospective employees. It is a method for communicating and showcasing the company corporate culture in real time. Companies today are developing strong talent brand strategy to reduce their cost per hire and lower turnover rates. A talent brand is something that is created via the joint efforts of the marketing department and the HR department.

11. Use of applicant tracking software (ATS)

One fast emerging trend is rapid adoption of Applicant Tracking Software (ATS). ATS are software designed specifically to meet the recruitment needs of a company. These software focus on managing the entire recruitment process, monitoring ad campaigns, and creating an excellent candidate experience. ATS can be used to post job openings, screen resumes, and generate interview requests to potential candidates by e-mail. Other features include individual applicant tracking, requisition tracking, automated resume ranking, customised input forms, pre-screening questions and response tracking, and multilingual capabilities.

12. Growing emphasis on using social networks

Over the past few years, social networking sites such as LinkedIn and Facebook have rapidly gained prominence amongst internet users. These sites provide wealth of information on prospective candidates. Sites such as Linkedin, and to an extent Facebook, provide specific recruitment related tools and analytic software to improve the recruitment process. Their aim is to help companies identify and locate the right talent for their company. Not surprisingly many firms have actively started using social networking sites for soliciting and recruiting new talents. The top preferred site is Linkedin followed by Facebook and others.

13. Increased focused on passive candidates

Traditionally recruiters have focused on active candidates-those actively seeking new jobs. However, research has shown that vast majority of prospects (as high as 73%) are passive candidates, that is they are not actively seeking jobs but are open to new opportunities and offers. This was found to be especially true in the case of social networking

sites such as LinkedIn where vast majority of prospects were passive candidates. Hence, firms today are providing more and more emphasis on passive candidates. Indeed, much of the mentioned trends are aimed at attracting passive candidates.

14. Mobile recruitment to grow:

Recruiters need to create job listing and ensure they are mobile friendly. An easy-to-use mobile experience will help candidates to apply and search for jobs. Various things done by the applicants are visiting company career site, uploading resume, downloading company app etc.

1.3 Trends in Selection Function:

1.Gamification in selection

Gamification is now entering selection as well. Candidates are asked to play a game (e.g. The Wasabi Waiter) and the companies behind the games claim they can make a valuable profile of the candidate based on his or her game behavior and results.

2. Selecting on skills to selecting on values and personality

For their core organizations are looking for talent where there is a good fit between the values and the personality of the organization and the values and the personality of the candidates. Also organizations have personalities and what you see emerging is methodologies to make the best fit between people and organizations.

3. Psychometric tests are gaining in popularity

Given the fact that a new hire is now less likely than ever to actually engage a recruiter face to face before on boarding, post-2020 recruitment needs to assess talent effectively from a distance. This may explain the rising demand for psychometric tests as a standard recruitment tool.

As the world of work grows more complex, methods of employer talent assessment have grown in complexity, too. Using scientifically backed, data-driven psychometric testing saves you time and zooms in on ideal candidates faster.

4. An increase in virtual interviews

Conducting online interviews is the new trend in selection. Face to face interview are not possible due to restrictions of social distancing.

1.4 Trends in Training

1. Increase in diversity, equity, and inclusion training

Diversity training is gaining traction across organizations large and small, especially as compliance with social and governance initiatives has become a mandate from the executive board of directors, and investors.

Learning & Devlopment teams, if they haven't already, will need to figure out the best way to deliver this effectively and with up-to-date best practices. Diversity training in 2021 needs to go beyond what is or is not appropriate outward conduct in the workplace and seek to address issues such as unconscious bias as well.

2. AI for talent development, especially for leadership coaching.

AI for training is nothing new: in fact, it was on our list for 2020 trends. This time, however, AI will get even more intelligent: it will actually decide who is ready for leadership training.

3. Making new virtual experiences just as engaging as in-person ILT sessions.

ILT (instructor-led training) has been steadily moving from offline to online over the past several years. Despite many reports to the contrary, however, up until this year there was still a heavy reliance on inperson training across a vast range of industries and organization sizes.

Whether it involved conducting ILT sessions in virtual environments or converting ILT training to eLearning, the speed at which this had to be done in the past year meant that quality may have taken a back seat. So, one of the key learning and development trends in 2021 will involve L&D teams looking back over

their newly converted online training and virtual classroom environments to ensure that learning experiences remain effective and engaging for learners.

4. The upskilling and reskilling revolution to continue.

Upskilling means learning new skills for the same job function, and employees have certainly been asked to do this. This could mean the same job but now remotely using different tools.

In fact, the quick shift to remote work in 2020 has already necessitated the first major round of upskilling for both learners and trainers. From navigating new technologies to facilitate remote learning, working, and collaborating to new social distancing measures, this is an example of another trend that was rapidly accelerated during the ongoing pandemic. For 2021, upskilling and reskilling programs will continue to address these issues while also facilitating upskilling and reskilling that helps organizations remain competitive in increasingly dynamic business conditions.

5. L&D as learning consultants for business partners

Understanding what skills to build or what courses to develop was listed as a top 10 challenge by 22% of learning professionals in 2020.

In 2021, learning and development will capitalize on the brighter spotlight that was cast on them in the previous year by finding ways to act as internal consultants on learning and training needs. By carving out this role more definitively, L&D have the opportunity to cement their role as important strategic influencers.

6. Focus on productivity/making the most of resources

Now that learning and development have the tools and technology to engage learners with ever more sophisticated digital experiences, the focus in 2021 will move towards systems of productivity. The key for L&D to stay on their toes and remain adaptable. If there is one lesson, we can take from the past few months into the year ahead, it's that change is inevitable and often unexpected. It's up to us to embrace that change and find the opportunity within it.

1.5 Suggestions:

Keeping the trends in mind the following things the organisations must do

- 1. Employer branding: Building, leveraging, and promoting the employer brand will be at high priority so that top talent chooses your company over others.
- 2. Revamp the organization culture: culture of compassion, honesty and empathy is important for the employees.
- 3. Social media campaign will help to target individuals with skills, experience and qualifications.
- 4. Create talent pool of candidates who are passionate about the brand and want to work with you.
- 5. Emphasise on online interviews
- 6. Making sure virtual sessions are just as engaging as their in-person counterparts.
- 7. Make training teams more digital, agile, and efficient.

1.6 Conclusions

Recruitment and selection remains one of the most important functions of the Human Resource department, as competition increases between firms, selecting and recruiting the right and qualified talents and providing good training become all the more important. Traditionally companies have largely relied upon prospective candidates to find the firm however today head hunting is an active function of the HR department. Firms not only need to head hunt but also must retain existing employees. The entire recruitment and selection strategy has changed and evolved to a new form where the onus lies on the firms to advertise, attract, and retain top talents. Internet based technologies and various other software and information systems have provided new capabilities like never before.

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Transgender Literature: Emerging and Inclusive Trend in Modern Literature

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Abstract:

Transgender group is an inseparable part of human society. If we treat literature as a reflection of human society then it should include the transgender group also. But this group seems to be neglected in literature. There are many deeply rooted socio-cultural reasons for the rejection of this group. The LGBT Law of 2018 has empowered this group to speak out their minds. Yet they need to be supported by all means so that they may come out with their authentic experiences. The emergence of this group in the mainstream is going to give us enriched literary experiences. If we think in terms of social welfare the inclusion of this group is the need of the time.

Introduction

Literature is defined as the reflection of human society. It is an authentic and intense picture of human life. These are the well accepted and established definitions of the literature. If literature is a picture of human society, it should reflect the society completely and comprehensively. If it represents only one group of the society then it is obvious that this literature is partial and incomplete. In turn the above definitions seem to be incorrect and do not bring out the complete significance of literature. It is seems that one group of the society known as transgender people have been continuously neglected in the literary creation until very recently. It is observed that after 2018 when the LGBT law was passed for them they started coming forward and expressing themselves. They need to be supported by all means for better literary output. They have their own distinct issues, very poignant and can lead to literary masterpieces.

The transgender are the people with diverse gender identity. The word comes from the Latin word 'trans' which means going beyond or across. Thus the community is beyond the normal classification of gender. Their gender identity does not correspond with their biological gender. As a result they seem to be confused about their identity. Their dilemma is called as gender dysphoria or transphobia. Both are the clinical terms that refer to unease or dissatisfaction that occur due to the confused gender identification. They try to reject this biological identity and assume the identity they perceive either as male or female. But the traditional society and patriarchy always prevents them from doing so. There are many cultural bonds too. The transgender are seen almost suffocated under their biological identity. In fact the identity crisis itself is so sensitive and has become central theme of many modern classics. The transgender are seen revolting against the social norms and going away from all family bonds to assume their identity. This only shows the urgency of the need to assume one's identity.

The Different Identities of the Transgender

The transgender are refereed by different names. They are called as eunuchs, intersex or transgender people. In Indian subcontinent they are known as Hijra, Aravani ,Aruvani, Jogappa or Chhakka. This community also prefers to call themselves kinnar or kinner after the name of a mythological being who was the master of the art of singing and dancing. However their life style is very miserable. Being rejected by the family and society they don't have any respect. The only two Gender Options in any official document is the proof that this group has been rejected and seems to be 'nowhere' in human territory. In fact people make fun of their deformities. Due to the deformity they don't have proper school education, job opportunity and any future perspectives. They are seen addicted to drug, begging in the street and abused by all means. Thus the transgender is under- fed, underestimated, marginalized and depressed group of the society.

It is quite surprising that this group, though in minority exists since the ancient times. Sanskrit is treated as the oldest language of the world. This language identifies three genders viz masculine, feminine and *tritiyaprakriti* as against our new languages that identify only two genders. They have been the part of

nature in the same way as the other two recognized genders of the society. They have been the part of human society contributing the total number of the population. The Medical field has been conducting researches to find out the mystery of their birth and reality of their physiology. The field of Psychology and other disciplines like Anthropology and Ethnicity came forward to know more about them. Yet they have never been treated as the protagonist in the literature. They were never considered fit in traditional concept of the hero and heroines of the creative writings. The passing of the LGBT law has been a long process. Even today some of the orthodox institutions raise a question mark of the existence and acceptance of this group.

Literary Transitions through the Centuries: A Review

In fact there has been continuous struggle by the creative writers to expand the boundaries of the literature to include the new experiences and aspirations of the society. Thus, literature in earlier period existed in the oral form and mostly centered on gods and goddesses. Slowly it encompassed the experiences, passions and emotions of the common men and women. The contribution of the critical theories is very significant in the development of the literature. When the theory shifted from the rules and regulation to the society, there emerged a number of reformations in creative writing. Marxist critical theory proved to be a landmark from where we could see literature from difference lens. The Marxist critical theory also paved the way for the Postcolonial critical theory and literature which opened the perspectives of marginalized literature. The Dalit literature, Feminist literature became the emerging voices. These voices sometimes raised the eyebrows and sometimes attracted the attention of the people.

At the international spheres the Marxist criticism made a way for the Third World and the Fourth World literature that included Dalit and aborigines around the world. This was the need of the time that underlined the existence of marginalized and segregated people around the world and the issues and the challenges that they face. However this journey of literature was not very smooth. It is not the natural growth of the literature though it should have been. All the creative writes belonging to the segregated groups had to struggle a lot to establish their identity. In most of the cases they had to begin with the scratch as in the case of African writers. Today Feminist literature, Fourth world literature are the well established branches of literature.

It has taken a long time for the transgender literature to emerge and get the acceptance as a branch of literature. And it seems that there is going to be a long way to get it established. There are many reasons for this, deeply rooted in traditional religion, society, culture and many superstitions and taboo about these people.

Religious Perceptions of the Transgender

All religions around the world have altogether different perceptions and approaches to the transgender. The references of the transgender are seen in the respective religious texts practiced by that religion. It is quite evident that these religions are not friendly with this group of humanity. They seem to be orthodox and rigid in their rules about these people. The reference of this group in the mythologies only suggests the antiquity of these people.

The traditional Hindu religion seems to be tolerant for the transgender and in the great epic *Ramayana* there is reference to the transgender who continued to follow Ram, the great God in the forest when he was banished for fourteen long years. Ram being carried away by the love and devotion of these people bestowed them with the power to bless people on the auspicious occasions. In Hindu *Purana* we have references of the deities changing their gender and manifesting themselves as different beings. This is also referred as *Avatar*. This sex variation is for non-sexual and sacred or miracle purpose. In this way deities reveal their superpower. *Mohini*, an enchantress is only the female form (*Avatar*) of God Vishu. Many a time common human beings also undergo sex-change through the actions of deities as a result of curse or blessings. Some of the deities are the patrons of the transgender community. It seems that Hindu mythology holds transgender individuals in a status equal to other gender. The reference to Transgender is also seen in folk-lore, art and performing art.

The Christian mythology seems to be very hard and fast about the transgender regulations. It strictly adheres to the Genesis story of the creation of man in the Garden of Eden found in the *Holy Bible*. It

believes that God created only two genders at the time origin i.e Adam and Eve and therefore the other gender is out of context. The Christian religion also believes that God created man after His own replica and therefore man should be holy and pious like God. At the time of creation the God even assigned the respective roles to male and female and the transgender was never considered in God's Divine plan. The Christian religion also insists on the sanctification and purification of human body. In this sanctification the transgender are often treated as impure and corrupt. As a part of purification the male female are expected to be in their assigned roles and never to cross the boundaries. Of course any transgression in this respect is a sin and the wages of the sin is death. Thus according to the Christian mythology the human body is a dwelling place of God, a temple and therefore expected to be sanctified. However the *Holy Bible* does not deny the existence of the transgender and suggests the same rules of sanctification for them. The Old Testament of *the Bible* suggests the acceptance of this group in the churches and in the mainstream. For this God, the Father takes the initiative to glorify them if they follow the rules of purification. In the New Testament of *the Bible* there is an instance of the Baptism of a transgender suggesting the inclusion of the transgender in the fulfillment of the Great Commission.

The Quran also though very hard and fast about the gender discrimination suggests respect and acceptance of this group of people in the society. Unlike the females they are allowed entrance in the Mosque but they have fixed cornered position and cannot be in the front line.

The cultural Orientations of the Transgender

It seems that the culture has played a key role in shaping the identity of this group. It is true to some extent that the religion has some impact on the cultures in shaping certain norms. But as suggested by Karl Marx it is the capital that creates the identity. Obviously this identity is generated out of the desire to segregate and dominate. There has been hierarchy of the dominance in the traditional Indian society and eventually this group, little in number and characterized by a sort of deformity, driven on the farthest line where they were almost neglected and the line of acceptance and rejection became blurred.

The second reason of the transgender group being on the boundary line is that they seem to be lost in their personal issues. They are very little in number and more than half of the life they struggle to accept their confused gender identity. There are the issues like sense of belonging, guilt, shame, several complexes, feeling of being incomplete and desperate lack of something that can lead to the satisfaction at physical and spiritual levels. In this way the other side of the coin is full of agonies unknown. All these issues have been so urgent that becoming the part of the mainstream was the need never realized in this group. In this way this group of people never took any initiative to be the part of the mainstream.

The Indian Constitution has made provision for the rights of the transgender. The article 14 and 15 of the Constitution is for the protection of the transgender. But it was never implemented. The legal system followed the British Colonial Law only which was based on the Western mythological references for the transgender. This mythology never allowed the acceptance of transgender. But fortunately in Sept.2018 after prolonged struggle the LGBT movement could pass certain positive laws for transgender. Since then the transgender literature started to flourish.

Thematic scope of the LGBT Literature

Though we get good number of literary output for LGBT literature, yet this literature is at the very basic level. Most of the write up is in the form of autobiography or memoir. The writers are often seen going within and bringing out the inner self, tragic, pathetic and bruised. They have been narrating their own traumatic experiences. *The Truth About Me*(2010) by A.Revathi, *I am Vidya*(2007) by Living Smile Vidhya, *Me Hija, Me Laxmi*(2015) by Laxmi Narayan Tripathi, the very titles of these autobiographies are self explanatory. There is less thematic variation and same themes are being dealt with repeatedly. This is because this is very first generation of the group documenting and sharing their experiences. Their struggle for survival was intense and they are in the process of establishment. Yet in *The Ministry of Utmost Happiness* (2017) by Arundhati Roy we get a revolutionary story of Anjum, a transgender who plays important role in two historical events of modern India. We do expect some very novel themes and distinct type of literature in coming future.

Conclusion

The transgender literature is an emerging branch of literature. It seems to be very promising with the potential of giving us new dimension of human existence. So far it has been neglected due to many reasons. It needs the support and acceptance of the elite group. This will certainly be a step ahead in the social welfare of this community very much part of human society yet cut off from it. With the transgender literature we have the possibility of complete expression of human life and experiences.

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Cost and Return From The Cultivation Of Sugarcane: A Case Study Of Indapur Tahsil (Pune District)

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1. Introduction

Sugarcane is one of the important industry based crop in the world. About 195 countries grow sugarcane crop to produce 1324 million tonnes of sugarcane (more than six times the amount of sugar beet produced). Indian sugar industry has been playing a vital role in the socio economic transformation of the country. India is the second largest sugarcane producer and the highest sugar consumer in the world. Apart from sugar, sugarcane is grown for many other uses like fodder, paper and biofuel. In spite of its growing demand, there are a number of problems which affect the sugarcane producing farmers in their production and increasing their profit.

2. Study Area

Indapur tahsil is situated in Pune district. The northern and eastern border is demarcated by Bhima River in Pune and Solapur districts while southern boundary is confined by Nira River in Pune and Satara and Solapur districts. The west boundary is confined by Baramati and north boundary is delimited by Daund tahsil of Pune district. The region extends between 17° 53′ to 18° 15′ north latitudes and 74° 35′ to 75° 8′ east longitudes. The total geographical area of this tahsil is 1552.93 square kilometres having 3, 83,183 population (2011). This tahsil consists of 142 settlements and three urban settlements.

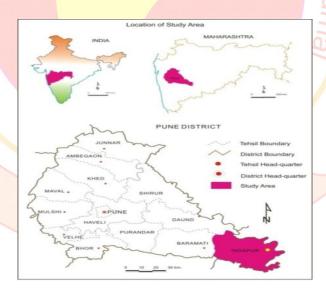


Fig-1: Location of Study Area

Review of Literature

Patil S. R., (2014) Carried out his study on "Cost benefits analysis of sugarcane cultivation of Walva tahsil, dist. - Sangali (MS). The study deals with sugarcane crop as a agricultural model to get money for utilization of natural resources present in the region and also brought outside the region. The study of cost benefit analysis is very important for any crop that can be observed the economic profitability of the farmer.

Singh Gomatee (2013) carried out his study on, 'An empirical study of economics of sugarcane cultivation and processing based farming in Uttar Pradesh'. The main objective of this study was changes in area,

Production, Productivity, and prices of sugarcane as also changes in production prices of sugar and jiggery, domestically and globally.

Giri A.A (2012) Studied on 'Profitability analysis of sugarcane production in Human local government area Adamawastate, Nigeria. 120 farmers were selected for the study. Sugarcane production in the area is profitable as a net farm income of N17, 666.83 was realized in the study area.

Significance of the Study

The importance of agriculture to economic growth in a country depends upon the level of agricultural incomes which in turn depends on the level of the farm efficiency. The main purpose of the present study is to measure and examine cost-return of sugarcane production and also examine the conditions of sugarcane cultivators in Indapur tahsil.

Objectives

- 1. To analyze the socio economic conditions of sugarcane cultivators of the study region.
- 2. To estimate the cost and return structure of sugarcane production.

Methodology

The nature of data used for study is both primary and secondary. Primary data has been collected through personal interview, with the help of preplanned interview schedules. Secondary data like the details collected from various published sources. Indapur tehsil have eight divisions for administrative purpose. Therefore, farmers from eight divisions are randomly selected. Each division has 13 to 22 villages. All physical and social factors are considered for selection of villages. The required primary data is collected from selected farmers through personal interview and group discussion.

Table 1: Age Wise Distribution of the Respondents

Sr.	Div <mark>is</mark> ion	Age Group						
No.	14	20 to 30	30 to 40	40 to 50	Above 50	Total		
1	Bhigwan 🔊	21	29	17	23	80		
2	Indapur	18	28	22	12	80		
3	Loni	10	32	22	16	80		
4	Bawada	12	14	33	21	80		
5	Kati	16	W 23 49	-6327	14	80		
6	Nimgaon K.	12	25	28	15	80		
7	Anthurne	08	34	21	17	80		
8	Sansar	06	13	16	05	40		
Total		103	198	186	113	600		
Perce	ntage	17.16	33.00	31.00	18.84	100		

Source: Computed by Researcher

Table 2: Educational Status

Sr. No.	Name of the Division	Non- Educated	Primary	SSC	Graduate	Professional Education	Total
1	Bhigwan	02	04	41	23	10	80
		(2.5)	(5)	(51.25)	(28.75)	(12.5)	(100)
2	Indapur	01	06	32	28	13	80
		(1.25)	(7.5)	(40)	(35)	(16.25)	(100)
3	Loni	02	05	46	18	09	80

		(2.5)	(6.25)	(57.5)	(22.5)	(11.25)	(100)
4	Bawada	03	12	43	12	10	80
		(3.25)	(15)	(53.75)	(15)	(12.5)	(100)
5	Kati	02	08	38	22	10	80
		(2.25)	(10)	(47.5)	(27.5)	(12.5)	(100)
6	Nimgaon K.	03	08	41	16	12	80
		(3.75)	(10)	(51.25)	(20)	(15)	(100)
7	Anthurne	01	09	36	22	12	80
		(1.25)	(11.25)	(45)	(27.5)	(15)	(100)
8	Sansar	00	05	21	09	05	40
		(0)	(12.5)	(52.5)	(22.5)	(12.5)	(100)
	Total	14	57	298	150	81	600
	Percentage	2. 33	9.5	49.66	25	13.5	100

Source: Computed by Researcher

Table 3: Land Holding of the Respondents

Sr.	Division	Below 1	1 to 2	2 to 3	Above 3	Total
No.	20	hectare	hectare	hectare	hectare	
1	Bhigwan	41 (51.25)	21 (26.25)	13 (16.25)	05 (6.25)	80
2	Indapur	44 (55)	24 (30)	09 (11.25)	03 (3.75)	80
3	Loni	41 (51.25)	19 (23.75)	16 (20)	04 (5)	80
4	Bawada	36 (45)	23 (28.75)	14 (17.5)	07 (8.75)	80
5	Kati	44 (51.25)	20 (25)	09 (11.25)	07 (8.25)	80
6	N <mark>i</mark> mgaon K.	45 (56.25)	17 (21.25)	10 (12.5)	08 (10)	80
7	Anthurne	41 (51.25)	17 (21.25)	16 (20)	06 (7.5)	80
8	Sansar	21 (52.5)	08 (20)	07 (17.5)	04 (10)	40
	Total	313	149	94	44	600
Percent	age	52.16	24.83	15.66	7.33	100.00

Source: Computed by Researcher

Table 4: Experience of Sugarcane production of the Respondents

	Table 4. Experience of Sugarcane production of the Respondents								
Sr. No.	Division	02 Years	05 years	07years	09 years	Total			
1	Bhigwan	18	35	14	13	80			
2	Indapur	26	aii 27	12\.GP	10	80			
3	Loni	16	37	13	14	80			
4	Bawada	20	36	15	09	80			
5	Kati	19	29	20	12	80			
6	Nimgaon K.	26	31	17	06	80			
7	Anthurne	24	35	14	07	80			
8	Sansar	12	16	09	03	40			
	Total	161	246	119	74	600			
	Percentage	26.83	41	19.83	12.34	100			

Source: Computed by Researcher

Cost Mechanism In Rs. Percentage **Human Labour Cost** 8762.00 11.09 **Pre cultivation cost** 5175.00 06.55 **Plantation Cost** 6725.00 08.52 Intercultural Cost 6600.00 08.35 **Transportation Cost** 02.83 2237.00 **Cost on Seeds** 7425.00 09.40 **Cost on Fertilizers** 14300.00 18.10 **Cost on Pesticides** 4000.00 05.06 02.74 **Technical Cost** 2162.00 **Drip Set Cost** 02.72 2150.00 **Irrigation Cost** 11600.00 14.68 **Electricity Cost** 3900.00 04.94 **Interest Cost** 1347.00 01.70 Other Cost 2625.00 03.32 **Total Cost (Per Acre)** 79008.00 100 Average Yield per acre in tones 58 Average Price per ton (in Rs.) 2300.00 **Total Income/ Per Acre (in Rs.)** 54,392.00

Table 5: Cost and Return Structure of Sugarcane Production (Per Acre)

Source: Field Survey by Researcher

Major Findings of the Study

It is identified from the table 1 that 103 (17.16%) of the selected respondents are in the age group of 20 to 30. The 198 (33%) of the respondents are in the age group of 30-40. It is also found that 113 (18.84%) cultivators are more than 50 years old.

It is noticed from the table 2 that 14 (2.33%) of the selected sugarcane growers are non-educated. Among the 600 respondents 355 (59.16%) are having up to primary and secondary education. 150 (25%) sugarcane growers are completed graduation.

It is found from the table 3 that 313 (52.16%) respondents have land less than 1 hectare. 149 (24.83%) respondents have 1 to 2 hectares. 94(15.66%) respondents have 2 to 3 hectares and 44 (7.33%) respondents have more than 3 hectares land.

It is identified from the table 4 that majority of the selected sugarcane growers i.e. 246 (41%) have 5 years' experience of sugarcane production. 161 (26.83%) farmers have 2 years' experience of sugarcane production.

It is found that the average yield of sugarcane per acre is 8 tones. The average price per ton is Rs.23000 and the total income per acre is Rs. 54392.

Suggestions

The Central part of the study area is a plateau. This area is not suitable for sugarcane cultivation. So farmers are suggested to take crops like Jowar, Bajra, Fruits and Dairy farming production.

Over irrigation increases the salinity of the soil and makes the land uncultivable. Farmers are advised to provide organic fertilizers and are suggested to adopt drip irrigation and subsurface irrigation.

Use of fertilizers is not proper; farmers believe that more fertilizers are required for extra production, but in fact more fertilizers affects soil health. So farmers are advised to use fertilizers in proper way. Every farmer should check their soil samples with the help of local sugarcane industries.

Conclusion

It is found from the present study the share of land is the maximum in the sugarcane production. It shows efficiency gain in production in terms of labour under new production technology. The total income

generated in the sugarcane production and employment generation is considerably satisfactory in Indapur Tahsil.

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A Study Contribution of Dr. B. R. Ambedkar in Social Transformation

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Abstract

Dr. b r ambedkar was the global personality with the high constitutional knowledge and knowledge of law. He studied all the progressive constitutions of contemporary life and designed constitution of India, which is the standard constitution of the world. His efforts towards irradiating several social ills, and discrimination on the basis Caste Class color, Gender, race, Language, Geographical location are addressed in his series of speeches and he discover solutions for them through constitutional efforts.

His commitment of social change and development was constant and he was restless in giving justice and dignity to the marginalized sections of the society. Present paper is the effort to understand the role of Dr. B R Ambedkar as a social worker and Scientist in the empowerment of the deprived and marginalized sections of the society. Descriptive research <mark>m</mark>ethodology use<mark>d for this purpose and second</mark>ary sources of data is used.

Keywords: Dr. B. R. Ambedkar and Social Transformation

1. Introduction:

According to B. R. Ambedkar, "Society is always composed of Classes. Their basis may differ. They may be economic or intellectual or social, but an individual in a society is always a member of a class. Therefore society is categories people on the basis of their wealth. Marginalized people are also another face of the same coin. Social work education and profession have greater responsibility in the process of empowerment of the marginalized sections. Hand by hand support of education and field practice can contribute for the welfare of the various sections of the society. Well qualified, practice oriented and committed social workers, engaged in improve the socio-economic status, and quality of life for Marginalized sections. Prior this Dr. B R Ambedkar constitutes the various provisions in constitution of India, and they are implemented in the frame of various policies, programmes and laws for the benefit of these sections.

2. Objectives Of The Study:

- 1. To develop an understanding of Empowerment of Marginalized Sections.
- 2. To explore the role of Dr. B R. Ambedkar in Empowerment of Marginalized Sections.

3. Methodology:

The study was conducted by secondary sources of existing literature through descriptive approach.

Descriptive method was taken in to the consideration to examine relevant literature deeply, for this study purpose. To select adequate literature for the paper, two methods were followed i.e. A. Systematic search of academic literature on Social Work and Marginalized Sections. B. Random search of research articles on Dr. B R. Ambedkar and empowerment of Marginalized Sections

4. Conceptual Framework:

Social work is an organized profession to extend the helping hands to an individual, group and community, for their betterment as well as sustaining them to help themselves by adopting varies professional strategies. Disadvantaged sections of the society like: weaker sections, downtrodden, orphans' labors etc. are considered to be needy of the profession, Social worker can provide psychological counseling, guidance and assistance in the form of helping the people to help themselves.

Social Worker:

A social worker is a professional who works with the people to help themselves, so that people can manage their daily lives with respect and dignity.

Marginalized Sections:

According to the business dictionary, marginalized sections means the process whereby something or someone is pushed to the edge of a group and accorded lesser importance. This is predominantly a social phenomenon by which a minority or sub-group is excluded, and their needs or desires ignored.

Empowerment:

Empowerment is the enhancement of the social status, economic condition and political participation strength of individuals, groups and communities. Empowerment envelops developing and building capacities of individuals, groups and communities to make them part of the main stream of the society.

5. Ambedkar As A Social Worker:

(Kamble & Dhavaleshwar 2014) Babasaheb was the master mind for progressive state, he has developed nationalistic, secular attitude with his sacred soul. His views about caste system, class, practice of untouchablity and discrimination on the basis of race, religion, color, gender, and geographical location are always clears that any country or state should not be dividing on the basis of religions or fundamentalist way. Such portions are absolutely threat for development of the country, in this regard he shared many of his experiences before the Indian society and parliament, especially he proposed for secular state. Social workers may be engaged in a variety of occupations ranging from hospitals, schools, clinics, police departments, and public agencies, court systems to private practices or businesses.

Social work is a vibrant profession; longitude and latitude of the profession are largely widened. Direct roles of social worker begin with the practicing primary methods of social work. Primary methods are the participatory method with the individual, group and community. Secondary methods are both participatory and non-participatory to be used for the benefit of society at large. Therefor role of social worker is widened for the betterment of individual, group and community. As a result of development of marginalized sections in the field of education, health, public service, economic independence and dignified social life are greatest social contribution of Babasaheb. Further he adds that education; economic independence and political power are the master keys of development of down thrown, weaker sections and marginalized sections of the nation.

6. Constitutional Provisions For Empowerment Of Marginalised Sections And Dr.B R Ambedkar:

Dr. B R Ambedkar was the chief Architect of Indian Constitution has given special space and provisions to the empowerment of Marginalized section in Indian Constitution, some observations are as below: Constitutional protection to the Marginalized/Vulnerable groups

Constitution of India: Preamble: Promises to secure" Justice-Social, economic & Political".

- Article.14 declares that the equality before law and the equal protection of laws shall be available to all.
- No discrimination against any citizen on the grounds of sex (Article.15)
- State can make any special provisions for women & children.(Art.15(3))
- Art. 15(4): Compensatory discrimination for the SC/ST
- Aret.16 Equality of opportunity in public employment.
- Art. 16(4): This clause allows the state to reserve vacancies in public service for any backward classes of the state that are not adequately represented in the public services.
- Art. 16 (4A): This allows the state to implement reservation in the matter of promotion for SCs and STs.
 - I. Social and Economic Charter
 - II. Social Security Charter
 - III. Community Welfare Charter
- Right to adequate means of livelihood,39(a)
- Equal pay for equal work both men & women 39(d)
- Protection of health & strength of workers- men, women & children

7. Implications:

There were many social reformers before Dr. B R. Ambedkar but, various presidencies fail to adopt and implement to uniform civil and criminal laws for the welfare of the marginalized sections as system was highly controlled by the British's. Great awareness by the Babasaheb and his restless efforts for empowerment of marginalized sections resulted positively after the few decades of independent India. His social concern and concern of national building took great shape after 70th decade of 20th century. Assertive life style of marginalized sections of the contemporary society was the mission of Babasaheb. Therefore marginalized sections proudly says "We Are because you were". Major implications of thoughts Babasaheb with sociological and social work perspectives are as below:

- Reservation in education and government jobs introduced for marginalized sections.
- Marginalized sections got awareness about their entity and rights.
- Concept of self, self- conscience, and self-dignity, increased for the weaker sections.
- Professionalism adopted by the Institutional and non-institutional services for empowerment of marginalized sections.
- He proposed the patriotic slogan for the unity of all sections of the society that is "I am the first Indian and I am the last Indian", finally slogan resulted in to social transformation and reduce the impact of social stratification.

8. Conclusion:

Very few social reformers fought against the unnatural social practices like untouchability and all other discriminations against marginalized sections. Mahatma Basaveshwar, Jyotirao Phule, Savitribai Phule, Chhatrapati Shahu Maharaj, Shri Narayan Guru, Periyar E. V. Ramaswamy and B. R. Ambedkar were main of them. As an economic organization also, caste is a harmful institution. According to him, the society must be based on reason and not on atrocious traditions of caste system. Social work education and profession have greater responsibility in the process of removal caste system and community development. Hand by hand support of education and field practice can contribute for the welfare of the various sections of the society.

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Upgrading Mathematical Teaching by Overcoming Challenges Faced in Ruler Areas

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Abstract

Today teaching mathematics has been a great challenge for the teachers, especially in ruler areas. The teacher is critical in shaping the lived task and directing students' activities so that students have opportunities to engage meaningfully in mathematics through them. A teacher could turn an open-ended task into a closed one or it closed one into an open one. He or she could treat a task of high cognitive demand as low level one or vice versa. It has been observed that mathematics teachers rarely utilize a wide variety of instructional media. There are several factors that could influence this, for example, the teacher's knowledge of content, knowledge of students' goal for tasks, instructional orientation and beliefs about mathematics. There are many ways to upgrade a ruler education system. Which includes boost free education, focus on internal infrastructure of school, bringing innovative teaching methods, special training for mathematics teacher. Mathematics is such a subject that can be dull and difficult to understand or very creative, entertaining, fun making and interesting if understood. If the subject can be taught in pictorial or with the help of body language or any creative method. This paper shows effective and creative methods adopted to teach mathematics in ruler areas.

Keywords: Students, mathematics, creative, knowledge.

Objective

- Recognize that mathematics permits the world around us.
- Appreciate the usefulness, power and beauty of mathematics.
- Enjoy mathematics and develop patience and persistent when solving problems.

Introduction

The study focuses on utilization of instructional resources in teaching of mathematics. Instructional resources includes our textbooks library books, charts, online CD resources, small videos, funny games related to maths. Mathematics teacher have to use instructional media to provide students with situation near to reality. Education goes beyond what takes place within the four walls of classroom. A student gets the education from his experience outside the school as well as from those with in based on some factors. There are three main types of education viz. 1. formal 2. informal and 3. Nonformal. Knowledge for teaching deals with the knowledge that the teacher need in order to first select and develop task, to promote the students' conceptual understanding of mathematics, support their development of mathematical thinking and capture their interest and curiosity and optimize the learning potential of such a task. The knowledge includes as follows. First one is understanding the nature of worthwhile task, for example, involves significant mathematical content can be solved in multiple ways. Also, use multiple representation and connect to other important mathematical ideas which are required for a student to justify, interpret and conjecture that how high cognitive demand is. Second, ability to identify, select a clear task that are rich in mathematical terms, content radiologically, in terms of affording the learning of mathematics. Meaningfully and with deep understanding, and personality for students in term of their interest and learning needs. Third, knowledge of levels of cognitive methods of task and the relationship of goals for the task in terms of the level of learning. An understanding of mathematics they can promote. Fourth is knowledge of students understanding, interests and experiences and the range of ways that diverse students learn mathematics. Fifth is understanding of how the task teachers select and how they can use them influence the students which makes sense of mathematics on doing calculations an applying mathematics with knowledge with respect to task. Also, it's important to highlight that how to organize the work of the students. What question to ask to challenge those with a varied level of expertise and how to support the students without taking over the process of thinking for them and thus illuminating the challenges. Mathematical task knowledge for teaching them is multi-dimensional and is slightly challenging for a teacher to construct without meaningful intervention to build on our kids illusion series making of

Challenges faced by the teacher

The thing that makes maths difficult for many students is that it takes patience and persistence for many students to grasp. Maths is not something that comes into entity automatically. It takes plenty of efforts for understanding the subject, hard work and practice is very important. Also, the basic ideas of the subject must be clear. A teacher must have a skill and ability to create interest in maths. Poverty and lack of education in a family also impacts on the ruler education. A teacher generally has a heavy workload, he or she teaches many other subjects. Also, no provision of regular payment to a teacher. There is no proper infrastructure in ruler areas for most of the students, mathematics is very boring and difficult subjects. Ruler teachers are not well equipped with the latest technology. They are also not trained to use the technology properly and effectively. 85% of the teacher complain of non-availability of training facilities for them to develop effective model of teaching mathematics in their schools. Efforts must be made by the teacher for upgrading mathematical teaching. A teacher must create small groups of students and distribute a problem to solve so that each student in a group share his or her idea. A teacher must discuss related problems to the real-life situation, when applicable. Also, jumping directly into solving the problems can lead to frustration and confusion. So, work of any practice problem will be bit easier because practice makes perfect. Therefore if you are struggling with particular kind of problem you can improve by working on solving additional problems. A teacher should corelate a real life understanding of why and how math is important and give the motivation. They must try to think of real-world examples where math is applied and apply mass condition to the problems to build confidence. A teacher should help students to remove the anxiety of students by talking with them personally. The teacher in rural school should be provided with the sufficient quality of equipment's to create a creative an encouraging environment for teaching mathematics physically and most effectively. The teacher should be given high technical training to use highly sophisticated tools and equipment's to teach mathematics practically. Also, the school management should accumulate sufficient amount of funds to purchase highly sophisticated tools, equipment's, books, computers and toys and provide them to play, to provide them a teacher for creating a scientific environment in school, to attract the students to attend the school regularly. The teacher should create a challenging environment among the students by forming task groups and alerting tricky mathematical problems to solve. The teacher should also supervise the task groups and help them to get the solution. Motivation is an important factor which can solve many problems of the teacher. The teacher should judiciously as well as politely motivate the students to learn and attempt the problems. www

Conclusion

Students of the primary level showed great amount of enthusiasm in learning mathematics. The teacher in the ruler areas seemed to have lost interest in teaching mathematics. Practically saying it is due to non-availability of funds for infrastructure and technological equipment's for effective teaching methods. Ruler teachers are not well equipped with latest technology and are not trained to use technology properly and effectively. Motivational factors are very poor among the teachers in ruler areas because there is no accountability for the teachers in their performance and academic achievements. Lack of motivation and positive attitude among the teachers has led to poor attendance, regularity, interest and performance among the students, which is leading to poor performance in mathematics.

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Empirical Study of Tourism Potential in Akole Tahsil of Ahmednagar District, Maharashtra

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Abstract

As tourists always get attracted towards the mountain destinations, tourism as a socio-cultural and economic phenomenon can be develop a lot in the mountainous region, if planned properly. In this context, the Akole tahsil of Ahmednagar district has a great potential for tourism development. The western mountainous region of the tahsil offers many tourism products of nature with a wide ecological range and biodiversity. In addition, the socio-cultural dimension of tribes of this region is one of the major tourist attractions. With the help of primary and secondary data the paper focuses on tourism potential of the study area.

Kew Words: Tourism, Potential, Akole, Kalsubai, Bhandardara

Introduction

Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal/professional purposes (UNWTO, 2008). Lickorish and Jenkins (1997) stated that, tourism is a gathering of activities and services which brings a travel experience encompassing transportation, accommodation, eateries, shops, entertainment and hospitality services provided for persons or their groups away from home. It is an activity which cuts across congenital sectors in the economy and requires inputs of an economic, social, cultural and environmental nature. Leisure or recreation is the main purpose of tourism (Davidson, 1993). Being located in the Western Ghats region, the Akole tahsil of Ahmednagar district is characterized by vivid topographical features and scenic beauty; it offers various tourism opportunities to the visitors. The segment of north-south stretching Western Ghats, called Sahyadri in the state, has its highest peak, Kalsubai, in the tahsil. High rainfall, thick forest area with great biodiversity, pleasant climate and water reservoirs has developed various tourist locations in the tahsil. Thus, each of the tourist places in the study area has its own peculiarity. Here, tourists can choose destination according to their purpose of tourism. This fact is motivated to undertake the present study which attempts to know the tourism potential in Akole tahsil of Ahmednagar district of Maharashtra.

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Objectives

- 1. To understand the tourism potential of tourist centers
- 2. To identify the challenges for tourism development.
- 3. To give suggestions for the tourism development in the study area.

Data Source and Methodology

Present study utilizes both, primary and secondary data. Personal discussions with the natives, tourists and officers, questionnaire schedule, field survey and interview techniques were the primary sources of information. The secondary data was obtained from the socio-economic review and district statistical abstract of Ahmednagar district. The obtained information was analyzed and presented.

Study Area

Akole Tahsil is located (Fig.1) at the western margin of Ahmednagar district. Geographically the tahsil is extended between 19°15'12" N and 19°45'06" North latitudes and 73°37'00" E and 74°07'21" East longitudes. In the west, there lies the district of Thane, in the north there is Nashik district while the Pune district lies in the south of it.

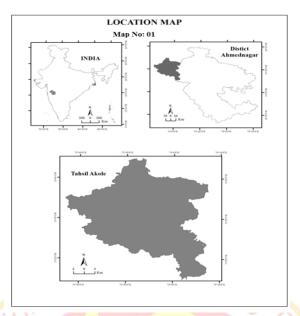


Fig. 1 Location Map of Akole Tahsil

Out of 1,505.08 km² area of the tahsil, in all 65.59 percent area is covered by agriculture and 27.7 % area is under forest while the remaining area is used for other purposes. The north south trenching Western Ghats ranges lies in the western part of the district. Thus, the western part of the study area has become more rugged. The geomorphic characteristics in the western part of the tahsil are very complex. Volcanic eruption is the main cause of rock formation in this area. Thus, the main type of rock found in the region is basalt. The area is also characterized by limestone, red bole, sand stones, shale's, clay and a thin layer of black soils at some places. In the western part the westward slope of the area is steep while in the east, the eastward slope is gentle. Mula and Pravara are the main rivers of the study area. Climate of the tahsil is hot and dry except during the period of south west monsoon. The tahsil is identified as a tribal tahsil of the district. During 2011 the population of the tahsil was 2,91,950 (GoM, 2014).

Potential Tourist Places Amruteshwar Temple

Amruteshwar, an ancient temple of lord Shiva is a major religious attraction of the tahsil. It is located in the base village of Ratangad fort, Ratanwadi. The temple is one of the oldest structures made up of black stone. It has a sanctum where sculptures of god and goddesses are carved out of the stone. Near temple there is a constructed water tank. There are two *sabhamandaps* in the temple. The sanctum (*garbhagriha*) is located between these *sabhamandaps*. The temple of Amruteshwar is not affected by attacks of foreigners and natural hazards. Tourists can reach Amruteshwar by road via Bhandardara.

Wilson Dam and Umbrella Fall

Built in 1910, on river Pravara, the Wilson Dam is one of the brilliant outcomes of excellence in engineering. The main purpose behind construction of this dam was to avail water for irrigation in the downstream area. However, today the dam site has become one of the major tourist attractions in the tahsil. The garden developed at the base of this dam is full of thick vegetation. Boating and fishing facilities at this site attracts the tourists.

Umbrella waterfall is one of the amazingly beautiful attractions at Bhandardara dam site. This water fall do not appears during whole of the year. It appears in rainy season and whenever the dam releases water. Tourists can spend time near this waterfall.

Kalsubai Peak

The Kalsubai Mountain Peak (1,646 mt. above MSL), a major attraction for trekking and popular amongst the devotees of Kalsubai, is the highest peak in the state. It is also known as Everest of

Maharashtra. As this mountain peak is surrounded by a thick forest, wild life enthusiasts are also interested in this tourist attraction. During historical period, this peak has served as a watch tower for the rulers of this region. Celebration of the nine night festival called *Navaratri* is one of the major attractions of this place. Devotees from the nearby area visit this place during *Navaratri* and celebrate the festival.

Randha Fall

Randha fall is one of the magnificent tourist attractions of the study area. It cascade from a height of 170 ft. and makes a beautiful scene during rainy season.

Agasti Rishi Ashram

Agasti Rishi Ashram, one of the popular holy places in the tahsil is located on the left bank of river Pravara near Akole, the tahsil headquarter. It is believed that, Sage Agastya offered an arrow to lord Shri Ram at this place during his visit to the Ashram. There is a Ram Kund lying near this place. The Ashram is about 40 km from Bhandardara and is connected by road. The temple at this place is spacious and clean.

Harichhandra Gad

This is one of the historical tourist destinations and a most challenging trekking location in the study area. An escarpment, called Konkan Kada is the main attraction of this place. It offers a scenic view of Konkan region of Maharashtra. During rainy season, one can enjoy the experience of walking through clouds here.

Ghatghar

Ghatghar, a tiny village located near Western Ghats escarpment, called Konkan Kada, is one of the major places of tourists' interests. This is a tribal village where tourists can observe the tribal culture and have a look at Plains of Konkan lying at the foot of the escarpment. At Ghatghar, tourists can enjoy the scenic beauty of greenery around and can enjoy sunset. During rainy and winter seasons, the area around Ghatghar is covered with clouds. Thus, here tourists can have an experience of walking through clouds.

Ratangad Fort

Surrounded by beautiful natural scenery, the fort of Ratangad is about 400 years old. It was captured by the Maratha king Shri. Chhatrapati Shivaji Maharaj where he used to rest and spends his leisure time. Several trekking sites are located near this fort from where tourists may observe the magnificent view of valleys lying in the Western Ghats. Tow caves located on top of the fort provide places for accommodation. The fort of Ratangad is about 22 km from Bhandardara and is connected by road passing through lush green forest and tribal villages.

Sandhan Valley

Sandhan Valley, called as Valley of Shadow or Valley of Suspense is one of the special geomorphic attractions found near village Samrad. Trekking at this valley gives a combined experience of adventure activities like rock climbing, descending and sliding.

Bhandardara Hill Station

Bhandardara hill station is situated at 19^o 5' north latitudes and 73^o 45'east longitudes. It is characterized by scenic beauty and lush green mountain region. This place is 185 km from Mumbai, 65km from Nashik, 190 km from Pune and 126 km from Shirdi. This hill station is accessible by road. The nearest railway station to Bhandardara is Igatpuri. It is located on Mumbai-Delhi central railway route and Mumbai-Agra national highway.

Major Challenges

As most of the study area is covered by the ranges of Sahyadri, the transportation network in this area is not much developed. The hilly area limits the expansion of settlements thus; the accommodation facilities in the area are rarely developed. There is a shortage of electricity supply. Frequent power cuts disturb the daily routine of life. Though this is the high rainfall receiving area, during summer it suffers from the scarcity of water. There is a poor sanitation arrangement in the hilly area. Environmental pollution, strong competition due to different options for tourists, untrained manpower, acute problem of land use, and stress on infrastructure, transport and services are some of the challenges.

Suggestions

A masterful blend of community, industry and stakeholders should take initiatives to plan the tourist destination, while, the execution of these plans and policies can be done with the help of central and state government. Developing appropriate infrastructure, support system and efficient transportation network, accommodation facilities, new tourist attractions, providing excellent visitor's information services, celebrating festivals and events and encouragement for ecotourism, adventure tourism, and sports tourism, wild life tourism is needed.

Conclusion

The Mountainous area of the tahsil will offer a favorable condition for outdoor recreation and tourism, if explored systematically. It has also been observed that the nearness of mountainous area to the metropolitan cities like Mumbai can attract large number of tourists which helps in economic development of the natives. The variety of options at this destination is one of the major pull factors help in strengthening the tourism activity. The culture of tribal's in the study area is one of the special tourist attractions. However, in present scenario, only few destinations are developed in the Akole tahsil. Now the time has come to recognize those centers. Tourism can play an important role in the socio-economic development of the study area. A sustainable developmental plan of remote destinations can be of some help in the tourism development of the area. All the possible types of tourism are needed to be promoted.

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Temperature and Rainfall Trends in North Western Maharashtra : A Geographical Approach

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Abstract

North western Maharashtra is one of the susceptible sections to climate deviation particularly to temperature and rainfall alteration. Rainfall and temperature are most contributing factor for the climate pattern to the study area because mostly of the agriculture in this region is dependent on Monsoon. The major intend of this study was to explore tendency in temperature and rainfall in the annual, seasonal and monthly time scale. The daily rainfall and temperature data were collected from Indian Meteorological Department, Pune (MS) and Hydrological Data User's Group (HDUG), Nashik (MS). The Statistical methods and estimator were used to assess rainfall and temperature trends. The Statistical methods revealed that anon-significant decreasing rainfall trend was observed during February to March and September at study region. Both maximum and minimum temperature revealed that statistically significant decreasing trends in annual and seasonal time scale. On the other hand, a non-significant warming trend of minimum temperature was observed during annual time scale but a non-significant decreasing trend was experienced during winter season. Increase in temperature and decrease in amount of rainfall may have a negative impact on crop production and soil water balance. Therefore, this study could have an important role in identifying possible present and future production strategies.

Keywords: Rainfall; Temperature; Trend analysis; Nashik; Agriculture

Introduction:

Temperature is a main component of the earth's environment all the environmental variations and the weather phenomenon are affected by the temperature. Mainly temperature is the degree or the intensity of hot and coldness of the environment and earth's substance. Here we are discussed about the mean of the average temperature, average maximum temperature and average minimum temperature with the variation and trend regarding the annual, seasonal and the monthly by the space and time. Spatially all the district with tahsilwise and the temporally for from the year 1980 to the year 2016 total for the 37 years trend was analyzed.

Rainfall is a phenomenon that always determines all the economic related developments of the region. Agriculture is the most fragile phenomenon that most of the time affecting by the rainfall variation mainly cropping pattern, crop combination and the crop diversification and crop yield, production was affected by the high rainfall or the deficit rainfall.

Study Area:

North eastern part (Nashik District) is situated in the Deccan trap of Maharashtra which is partly in the Tapi Basin and partly in the upper Godavari Basin. It lies between 19°35'18" North latitude to 20°53'07" North latitude and 73°16'07" East longitudes to 74°56'22" East longitudes. It is surrounded by Dhule district in the North, Jalgaon and Aurangabad district in the East, Ahmadnagar district in the South, Thane district in the South-West and Gujarat state in the North-West. Nashik district has an area of 15530 sq. km. and population of 6,109,052, as per the 2011census. There are 15 Tahsils and 66 revenue circles are in the Nashik district.

Objectives:

- 1. To the analysis of Spatio-temporal variability of temperature and rainfall in the study area.
- 2. To analyze the trend of temperature and rainfall scenario in the district.

Data Base and Research Methodology:

Climatic data was collected by various sources the data is related to the Rainfall pattern, Temperature, this data was collected for the year 1980 to the year 2016, and for the research data was

analyzed with the help of various statistical methods in the form of average, variation, standard deviation, skewness, kurtosis etc.details of data collected from following sources are mentioned as below.

- 1. Data collected from India Meteorological Department (IMD) Shivajinagar, Pune.
- 2. Data collected from Hydrology Project (HDUG) Nashik.

Results and Discussion:

1. Trend of Temperature (1980-2016)

Temperature tendency was compute intended for the mean temperature, minimum temperature and maximum temperature from the year 1980 to the year 2016.

A) Trend of Average Mean Temperature

Trend of average mean temperature demonstrates the increasing trend for the district for computed period. The trend of the temperature shows (FIGURE NO 1) the ever-increasing still from the beginning, the low average mean temperature was recorded in the year 1980 it was 23.64°_{C} and the high average mean temperature was seen in the year 2013 it was 25.01°_{C} and from the year 1980 to the year 1992 the temperature trend was had around the 23°_{C} and change around the 0.64°_{C} to the 0.99°_{C} .the constant average temperature

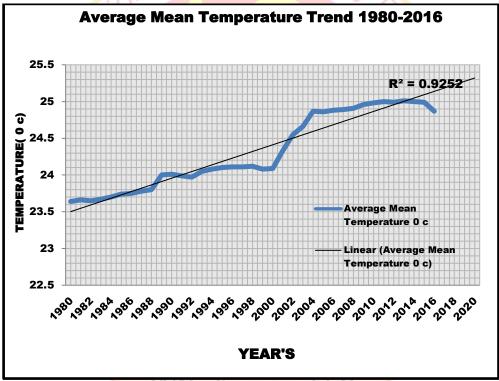


FIGURE NO: 01

seen from the 1993 to the 2010 it was around the 24 0 _C and increasing steadily for every year around the 0.1^{0} _C to the 0.98 0 _C. After 2011 it was reaches to the 25 0 _C. The trend depicted r² value is 0.925 it means the temperature will be trending same direction in the future also, 92% is response variables for that trend. In the FIGURE NO 1 mean temperatures was predicted for up to 2020 and it portrayed the growing trend line.

B) Trend of Average Minimum Temperature

Trend of average minimum temperature demonstrate the increasing trend for the district for the year 1980 to the year 2016.

The trend of the temperature shows (FIGURE NO 2) the ever-increasing still from the beginning, the low average minimum temperature was recorded in the year 1980 it was 18.21 $^{0}_{\text{C}}$ and the high average

minimum temperature was seen in the year 2016 it was 19.9^{0}_{C} and from the year 1980 to the year 2005 the temperature trend was had around the 18^{0}_{C} and change around the 0.21^{0}_{C} to the 0.99^{0}_{C} . the

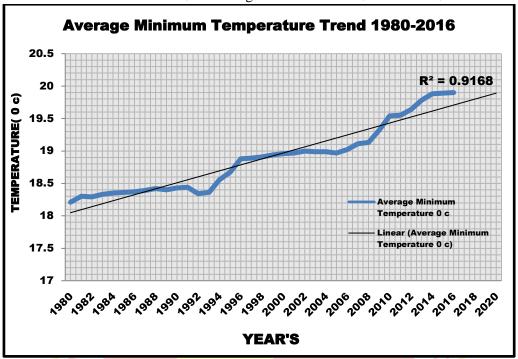


FIGURE NO: 02

The irregular average minimum temperature seen from the 2006 to the 2016 it was around the $19\,^{0}_{C}$ and increasing suddenly for every year around the 0.02^{0}_{C} to the $0.90\,^{0}_{C}$. The trend depicted r^{2} value is 0.916 it means the temperature will be trending same direction in the future also, 91% is response variables are fitted for that trend. In the FIGURE NO 2 minimum temperature was predicted for up to 2020 and it portrayed the growing trend line. The rise in minimum temperature is challenging for the forth coming years, it would be reflected in the agricultural outcomes mainly crop yield and crop production.

C) Trend of Average Maximum Temperature:

Average maximum temperature trend express the escalating trend for the district form the year 1980 to the year 2016.

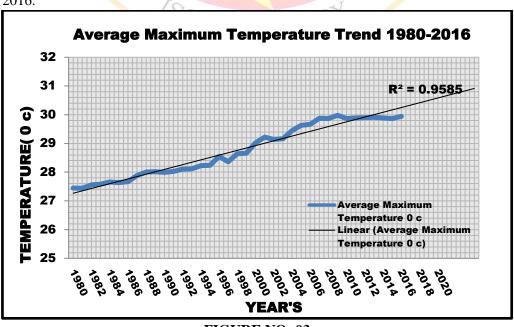


FIGURE NO: 03

The trend of the average maximum temperature shows (FIGURE NO: 3) the ever-increasing still from the beginning, the low average maximum temperature was recorded in the year 1981 it was 27.44°_{C} and the high average maximum temperature was seen in the year 2011 it was 29.98°_{C} and from the year 1980 to the year 1999 the temperature trend was had around the 27°_{C} and change around the 0.44°_{C} to the 0.88°_{C} . the The slow change in average maximum temperature seen from the 1992 to the 1999 it was around the 28°_{C} and increasing gradually for every year around the 0.10°_{C} to the 0.66°_{C} . The trend depicted r^{2} value is 0.958 it means the temperature will be trending same direction in the future also, 95% is response variables are fitted for that trend. In the FIGURE NO: 3 maximum temperature was predicted for up to 2020 and it portrayed the growing trend line. The rise in maximum temperature is also challenging for the forth coming years, it would be reflected in the agricultural outcomes.

2. Trend of Rainfall (1980-2016):

Average rainfall trend express the decreasing trend for the district form the year 1980 to the year 2016.

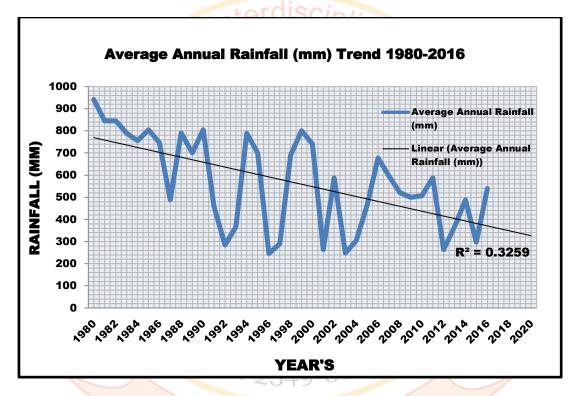


FIGURE NO: 04

The trend of the average rainfall shows (FIGURE NO: 04) the decreasing still from the beginning, the low average rainfall was recorded in the year 1996 it was 245.79mm and the high average rainfall was seen in the year 1980 it was 941.22 mm and from the year 1980 to the year 2016 the rainfall trend was had the uneven trend. Sometimes it shows the drastic rise or some years it shows the drastic fall in the levels of average rainfall .Above 800 mm average annual rainfall was had in the year 1981 it was 845.63 mm, 1982 it was 845.12 mm, 1990 805.22 mm, and in the year 1999 it was 800.25 mm. Below 400 mm average annual rainfall was had by the year 1992 it was 284.55mm,1993 365.99mm,1996 245.79 mm,1998 289.66 mm,2001 263.99mm,2003 247.99mm,2004 304.56mm,2012 263.88mm,2013 366.88mm and in the year 2015 297.8mm was had by above years most of the years are depicted as drought years mainly 1987, 1992, 1996, 1997,2001,2003,2004,2012,2013, and 2015.

The trend depicted r² value is 0.325 it means the rainfall will be trending not predictable direction in the future also, 32% is response variables are fitted for that trend. In the FIGURE NO: 04 average rainfalls was predicted for up to 2020 and it portrayed the decreasing trend line. The fall in average rainfall is

difficult for the forth coming years; it would be reflected in the agricultural outcomes and in the well beings of the farmers as well as it would be reflected in the scarcity of the water.

Conclusion:

Temperature determines the other weather elements of the study area like rainfall, precipitation, radiation, humidity, pressure, evaporation etc. hence all these factors are associated with the agricultural success of the region in this way temperature determines the agricultural practices of the region mainly cropping pattern, crop combination ,crop diversification and the crop yield and crop production of the region. Climate is constantly altering, and dynamic in temperament it is altering because of lot of factors included Physical, Chemical, Human made & Socio-Economic .Climate is a set of all weather elements and represents the summation or performance of these element for long period of time that is more than three decades. Climate transformation is alteration in middling condition of the Weather essentials over a long period of time particularly the change in arithmetical allocation of the weather conditions. Climate alteration substantiations are seen in the study area in the form of change and deviation in the rainfall, intensifying temperature level, repeatedly incidence of famines, dryness or low down intensities of moisture had observed in the region.

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Factors Affecting the English Language Learning Experiences of Tribal Students In Nandurbar District, Maharashtra

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Abstract:

India is a country of villages as well as tribal belts. The major proportion of Indian population resides in villages and at hill station sides. Therefore the primary concern of every Indian should be rural development. The qualitative education is the only measure which can ensure proper growth of students with the all angles. In the age of advance science and technology English language has been indispensable in all sectors. Now a day, one cannot get proper access in higher education without the skills of English language communication. In this paper, a research scholar has tried to highlight the various problems which the teachers and students face while teaching and learning English language in Nandurbar district and also suggest some remedial measures for increasing students' interest, participation and to assure overall improvement in their English language learning.

Keywords: Education, English Language Teaching and learning, Factors Affecting language learning, Teacher's Training.

Introduction:

It is said that Education is the movement from darkness to light hence education has been considered as the most effective tool for human development. The Kothari commission made a demand, 'We want Education for life and Education for all.' It means equal opportunities of learning should be provided to every student, irrespective of their Rural or Urban background. The teaching of English language in Nandurbar District at all three levels i.e. primary, secondary and degree level is still a difficult task. English is taught as a compulsory language and from the very first standard, still the outcome is unsatisfactory. Today in this world of competitive examinations, the knowledge of English is must and the rural as well as students who stay near the hill station places seek admission for the B.A. Course. English is a compulsory subject for them to improve their English but they feel it is so difficult subject. Further, they perceive English as the window through which they can get better jobs. Therefore, the teachers teaching at degree levels are confronted with the students who have a little knowledge of English and they face an uphill task of bracing up the students to face the challenges of the competitive world. This implies that the students be taught both the hard and soft skills as well as the communicative skills of reading, writing, listening and speaking.

Major factors Affecting English Language-Learning of students in Nandurbar District:-

Though there are many issues relating to English language-learning in Nandurbar district research scholar has tried to highlight some of them.

Mother tongue:-

In Nandurbar district, Tribal people communicate with each other in their Adivasi language such as Pawari, Bhil, Bhilori, Mavachi and Kokani Languages. Students also communicate in the same language at school and college campus. Just for the official work students speak in Marathi language. And these all Adivasi languages are spoken with different dialects. In short impact of these languages students are not interested to learn English language.

Cultural Factor:-

There is no such thing as human nature independent of culture; studying a language in a sense, is trying to figure the nature of another people. If we turn to the relationship between culture and language, we

see some remarkable comment from Sapir, "language, race and culture are not necessarily correlated." The role of culture in the learning process has a humanizing and motivating effect on the language learner and the learning process. In district most of the students come from tribal background; they have great love for their local language and they study English language like a burden and only to pass the exam.

Psychological

Most students of Nandurbar district belong to backward class. Their parents are uneducated and poor, which has a great psychological and negative impact on them. They are totally deprived of any positive help from their parents or friends and there is no healthy atmosphere for learning available to nurture and nourish them. Due to this most of the rural students are slow in learning, they develop inferiority complex, their confidence level is very low and there is a feeling of negativity and shyness that hinders their learning. Naturally, a large number of students are first generation learners who lack capacity to use the instruction or the library because of their inadequate knowledge of English.

Economic Factors:-

Many students have poor Economic background. They are earning while learning. They have to work in fields with their parents and the dropout rate among girls is very high and normally girls are more burdened with household chores. Due to poverty of parents students are expected to earn for their family fulfilling both responsibilities of earning and learning. Students mainly focus on the subjects that are easy for them to get degree but they are unable to acquire skills of English language for that one has to spare time to do practice.

Social Media:-

Social Media is major concern at present time to all the schools and colleges students. These tribal students spend most of the time on the Facebook, WhatsApp, Instagram, Twitter and YouTube.

Remedies:-

Language learning whatever way it occurs be it in a naturalistic or in an instructed context, takes time and is a laborious process. Following are the remedies through which we can increase students' interest and participation.

Role of Teacher:-

Teacher is the only source for rural students to learn English language because their parents are uneducated. So a teacher should be dedicated. He\she should rise above caste, religion, ideology etc. and deliver knowledge that uplift the interest of students for learning English language.

News Paper Reading:-

English newspaper is main source of developing English language. There are pictures of events which have happened. So related those pictures words we get and those words are to be fixed in our mind for long time. Teachers should advise students to read newspaper and they should also do this activity in the classroom.

Pronunciation matters:-

Everything teachers speak in front of students' matters. Teachers should be aware of the importance of their own language, grammar, pronunciation, choice of words, levels of formality, idiomatic expression etc. and its influence on their students.

One of the major areas of concern in development is pronunciation. Good pronunciation enhances learning of language. In most of our colleges, 'teacher talk' is the only exposure to English for rural students. Therefore, the more effective a teacher's pronunciation the greater his effectiveness and utility and students imitate the teachers to improve their pronunciation and ultimately it will improve their English.

Teachers' Training & Development:-

In the academic life, it is a teacher's role to mentor a student in every possible way. In Nandurbar even today teacher is the only resource for English language learning, so it is very much essential that a teacher must have good command on language and if he is lacking those qualities then he should be given training for that. Kavayitri Bahinabai Chaudhari North Maharashtra University Jalgaon should come forward and arrange such types of small training courses to train the teachers.

Use of Literature in Language Learning:-

Literature can be a powerful source for learning language. It plays a vital role in developing language skills. Video clippings of dramas can be shown to the students. Some poems that are prescribed in the syllabus of B.A. by (KBCNM University Jalgaon) written by Indian writers are very helpful.

Conclusion:

The Tribal students lack in vocabulary. They try to avoid speaking in complete sentences because they are unfamiliar with the sentence pattern of English. It is a fact that tribal students do not lack in comprehension. They understand whatever is spoken to them but they are unable to respond. This makes them feel less confident. The sensitive one may develop a complex when they see their peers who are well versed in English. Generally these students tend to keep silent when any question is posed to them, or they simply nod. They keep mum due to the fear of either being laughed at or because of the fear of committing mistakes. Hence the student should be taught to construct simple sentences, he should be given training of communication in English but not with an accent or in the manner that Englishmen speak.

These are some of the difficulties that students of Nandurbar face in English Language learning. I have highlighted only some of the areas. There are many more which need to be highlighted.

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Indianness in the Poetry of Nissim Ezekiel

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Abstract:

Nissim Ezekiel position among Indo-Anglian poets of post-Independence era is unique. Nissim Ezekiel"s contribution as a poet in Indian writing in English is very substantial and valuable. He was a Jewish whose forefathers migrated to India and settled in Mumbai. Though a jewish still being born and brought up in India, his poetry contains some aspects of Indianness. Nissim ignore<mark>d the idea of idealism and romanticism of Indian writers who were</mark> influenced by other English writers in <mark>India, instead he analysed Indian situatio</mark>ns with Indian attitude. This paper attempts to find out use of Indian Experiences by Nissim Ezekiel and emerging Indianness in his writings. Nissim Ezekiel"s contribution to Indian poetry is based on his experiences while living in Mumbai and his observation and experiences of Indian life a<mark>nd</mark> society. Hi<mark>s commitment to India flows from h</mark>is earnest and sincere desire to improve conditions of Life in India. He talks <mark>about the depressing, degrading and disgu</mark>sting conditions of life in India. He brings about true pictur<mark>e</mark> of poverty <mark>in India in his poemsNissim Ezekiel(1924-200</mark>4) an Indian Jewish belongs to an Bene-Israel family and his reside<mark>ncy is in Bombay. He completed his under graduate</mark> in Bombay. Later, he started to enhance himself in literature. He calls himself a "good native" and protests that he "cannot leave this island/I was born here and belong". The upshot of this is the final cry of despair: "My backward place is where I am". Ezekiel planned to write an autobiography, "A Thousand Failures" (Rao, 2000, 345). Later he was considered as poet, actor, playwright, editor and +art critic. He was awarded Sahitya Akademi Award in 1983 and Padma Shri award in 1988.

Keywords:

Ezekiel, Indianness, Mothers love, Neighbours love, Superstitions.

Introduction:-

Nissim Ezekiel's works are mostly based on love, Realism, Indian identity and superstition. He exhibits love in his literary works not to the confined area, but to the large circle. For example he asserts the need for love and considers it to be of prime importance in his poem

"In Emptiness", "But this, I am sure, can never be, V 2349-638

hat I should shut the door on gods,

.....

And make no rendezvous with love I would rather suffers when I"

Nissim Ezekiel is one of the greatest poets of Indo-Anglian literature which grew during the last century. Some of the writers, who could with felicity use English as a medium of expression in their creative writings, created a kind of awareness about the Indian social problems. IndoAnglian literature contributed its share in the Indian consciousness. The term Indian consciousness means the awareness that India historically has her cultural identity. By Indianness, we mean a subject that suits the Indian sensibility and most part of the Indo-Anglian literature is concerned with one or the other aspect of Indian-sensibility. The works of Nissim Ezekiel are not an exception to it. His works bring a typical incense of Indian tradition, culture and day-to-day life.

"Indianness" is a term which in itself is quite controversial. It is the sum total of the cultural patterns of India and the deep-seated ideas and ideals whether political, personal, economic or spiritual. These ideas not only affect the Indian mind but the same are also prevalent in the various social relationships like manwoman, man-god etc. These ideals and ideologies play their respective role in all types of social scenarios. Nonetheless, one can say that a deep study of verses of Ezekiel provides its readers a true picture of and an insight in the Indian society and its various aspects. Ezekiel"s poetry seems to be a comment on the Indian social scenario where he tries to present "what", "how" and "why" of the various aspects of Indian society. He not only tries to highlight the social facts and problems which Indians face because of their poverty, superstitions, squalor etc. but also expresses his deep admiration for the Indian spiritual values. But the admiration for the Indian spiritual values does not mean that he is not aware of the degradation or perversion of the social, moral and spiritual values in the Indian society. He is equally attentive to them as they lead the society to the way of spiritual hypocrisy.

As far as Ezekiel is concerned, the concept of "Indianness" is quite controversial because of his foreign origin. He has accepted the fact in his poetry that being a "natural foreigner", he himself felt alineated from the Hindu culture but his desire "to turn the situation" to the positive made him committed and dedicated to Indian society and culture That"s why, in "Background, Casually"

he says: I have made my commitments now. This is one: to stay where I am, As others choose to give themselves In some remote and backward place. My backward place is where I am.1 Ezekiel"s India can be highly individual; at times it can also be subjective to the point of being quirky.

However, his own gift for telling detail and reference emerges from his outstanding understanding of the society. What is the most amusing fact of his observation is that his observation does not involve the rejection of the aspects of Indian society and life. He sometimes adopts critical language for India. He criticizes her because he loves her. He is ironic not only about India, but of himself too. He states his position honestly and without being rhetoric, India is simply my environment. A man can do something for and in his environment by being fully what he is, by not withdrawing from it. I have not withdrawn from India.

He not only love to write about human affection, but he also extends his imagination on songs, stars, winds and violins in his work Sixty Poems. In tribute, he shows innocence and gaiety of his love in the poem lines of A Time to Change.

"I followed her, we joined the crowds, We drove the tandem cars, we cast A penny in the slot and won, Hung about and left the fun-fair last."

The above lines clearly shows, how the author presents his sincerity and candour in deep love through this poem.

The line shows how the Indian make mistakes while they talking. Indians are not the native speakers of English. When we starts to learn a new language, surely the mistakes will happen. Indians will never mind mistakes of their words. They just compose their feelings in a simple way. Here the speaker feels about his sister"s depart and he just brought out his feelings and expressions without thinking about his mistakes. "is departing for foreign in two three days and"

Usually in those days, Indians will not gather for Goodbye party. But here, her collegues gathered for Miss Pushpa"s depart. They gathered and feels about their sister"s depart. None of the countries, had the same feelings. It is a special thing to take ones feelings and realize it in their life. Here they gathered to bless and wish her journey. "We are meeting today to wish her bon voyage"

Indian English poetry is very different from its western counter part in the theme, language, style of writing, imagery etc. Every writer has source of inspiration of influence. It is this source that makes Indian English Poetry 'Indian'. Indian writers are very much influenced by the Indian culture and customs, traditions etc. The writer also writes for Indian audience, so it has to have an Indian appeal, which is likable to all people. The writers also write for non-Indian audiences, and to them the feature of Indianness makes it exotic and gives a deep feeling and experience of real India.

Indianness is an element of the poem, which shows India through its language, imagery, sensibility or anything, which makes the Indian as 'Indian'. Indianness in a poem is something that is not really definable yet remains a very remarkable character in Indian poems. Indianness can be defined in terms of what and how Indians are and what makes them what they are.

Qualities of Indianness in Indian English Poetry

Indian Poets writing in English around fifties have produced a fairly voluminous body of verse that is often deeply rooted in the traditional Indian sensibility and is yet strikingly modern in expression. The

question of Indianness is not merely a question of the material of poetry, or even sensibility, it is tied up with the factor called the audience. Indian English poets write for Indian audience, but they also write quite inevitably, for non-Indian, western audience. Thus, consciously or unconsciously they cannot help using their Indianness at least some of the time, in some way, to a greater or lesser extent. This had become a way of identifying oneself for the early Indian English poets, even the best modern Indian English poets continue to exploit 'Indianness', but in a more subtle and sophisticated manner. Every human being is influenced by the environment, culture and tradition of his time and place. Just as western poets show their culture Indian English poets also show the same characteristic. Indian English poets such as A.K Ramanujan depict the Hindu tradition of Cremation and the process of throwing the ashes in the river in 'The Obituary' "Being the burning type, he burned properly at the cremation". It is easier for a writer to write about what he sees and hears. Like William Wordsworth who wrote about the 'daffodils' after he saw thousands of daffodils in a valley, he is inspired to write a poem by what he saw. Likewise, Kamala Das saw wrote 'the dance of the eunuchs' when she saw them dancing on the streets of Calcutta. Wordsworth had stated, "Poetry is a spontaneous overflow of powerful feelings, recollected in tranquillity". For an Indian English poet living in India what else would touch the emotion other than India and the things happening in and around it? Therefore, Indianness can be found in their poems by default.

Conclusion: -

To conclude, though he dwelled in India, but was apart from Indian culture, philosophy, spirituality, thought and tradition, Indianism did not lure him at all, but instead of it was Indian and he could not banish it. He has skillfully used most of the aspects of Indian life and cultures in his poetry.

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Occurance of two species of *Dictyozamites*, Oldham, 1863 from Uttatur Formation, Tamil-Nadu, India

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Abstract: -

The paper deals with morphological studies of the fossil flora of Uttatur Formation plant beds in Tiruchirapalli Early Cretaceous age. Gymnospermic impressions are described.

Keywards: Fossil plant impression, Uttatur formation plant beds, early creataceous age.

Introduction: -

The Cauvery Basin covers some 25000 km² of the TamilNadu region and extend into the Bay of Bengal and the Gulf of Mannar (Prabhakar and Zutshi, 1993). The Basin constitute the southermost sedimentary basin along the east coast of India. Recent researches have demarcated precise formational limitations and categorised fossile content with their stratigraphic zonation (Sundaram et al, 2001, Nagendra et al 2013. The Cretaceous roks are generally grouped into 3 litho units namely Uttatur, Trichinopoly and Ariyalur in ascending order.

The Cycadophyta are represented by genera *Dictyozamites* belonging to family Williamsoniacae. The genus was frond pinnate, ninnae linear, falcate or rounded base asymmetrical and auriculate, apex acute, obtuse or round and reticulate veniation showing affinities of the family Williamsoniacae. The relative species of divercity of various plant groups in the Cauveri Basins shows predominance of bennettitaleans-34%, followed by pteridophytes-33%, coniferaleans-18%, pteridospermaleans-6% and pentoxylaleans, cycadaleans, and ginkgoaleans poorly represented-3%. It is characterized by spirally arranged, appressed leaves having thick lamina. The leaves are triangular conical or rhomboidal in shape. From India twelve species are reported.

Several plant impression have been collected from localities in Tiruchirpalli district of Tamil-Nadu. The impression was preserved on Ferrginous Sandstone and reddish-yellow in colour. Following two promising impressions are described.

Material And Method:-

The impression gives morphological of the plant preserved. In the field the impression were checked for the strength of the material. Some shales are brittle in nature and easily get disintegrated. The other are more durable and can easily be protected. The impression on brittle material were carefully packed by covering cotton material around them and then wrapped in the newspaper bag. The durable material is directly packed in the newspaper bag. All these packed in plastic bag. They were carefully transported to the laboratory. In the laboratory the impression were cleaned by using soft hair brush. Each specimen is properly lablled. This can be done by applying a white paint on corner of the material. The painted area is further labeled by using India ink.

First habit sketches of the plants were drawn on ivory sheet. The figures are drawn proportionately. Finally they are inked and properly cut of the material on them. The explanation of textfigures is given with magnification calculated. The specimens were further photographed using colour film. For this purpose digital camera was used. The developing and printing of the colour film was processed. The enlargement of desirable size were made. The prints were fixed on the cardsheet which forms the plate figures. The explanation of plate figures is given with the magnification calculated.

I) Result And Discussion-

Genus- Dictyozamites Oldham 1863 Dictyozamites feistmantelii Bose and Zeba-Bano

(Text Fig. 1, Plate Fig. 1)



The specimen is a pinnate frond measuring 4.5 cm in length and 3.5 cm in breadth. Rachis is exposed, longitudinally striated and 2mm thick. Basal part is devoid of pinnae. Pinnae alternate, slightly sparse, and do not show overlapping. Pinnae are linear to lanceolate. They measure 2 cm long and 0.8 cm broad. Apex is obtuse. Acroscopic and basiscopic margins are auriculate. Basal part of pinnae produce a stalk. Pinnae are attached by this stack to the rachis at an angle of 80° . Veins arise from basal part of pinnae. they divide and form anastomosis. The meshes in the middle part are elongated while those near margins and bases are smaller in size.

Identification and Comparison:

The leaf agrees with the character of *D.Feistmantelli* Bose and Zeba Bano in having, 1) Exposed rachis, 2) Linear to lanceolate pinnae arranged in slightly spares mannei, 3) Apex obtuse, 4) Both acroscopic and basiscopic margins auriculate, 5) Presence of stalk produced from middle part of pinnae base of which they attached to rachis. 6) venation showing reticulate pattern forming elongated meshes in the middle part and short meshes near margins.

Hence it is defined and described as D. *feistmantelii* Bose and Zeba Bano. It differs from D. *falcatus* in having exposed rachis and auriculate margins. The important feature is formation of stalk by which it is attached to the rachis. It also differs from D. *sahnii* in having medium sized pinnae and presence of stalk. D. *Sahnii* is sessile and pinnae are longer.

According to Bose and Zeba-Bano (1978) D. *feistmantelii* is quite common along the East Coast of India. It is also reported from Hoshangabad district in Madhya Pradesh. It is abundant in Vemavaram. Present specimen is collected from Karu in TamilNadu. This suggest wider distribution of D. *feistmantelii* along the East Coast.

Type - KAR/7/99

Locality - Kari, District- Tiruchirpalli, TamilNadu 340-63

Horizon - Early Cretaceous, Uttatur Formation

Dictyozamites indicus Feistmantel

(Text Fig 2., Plate Fig 1.)



The specimen is a fragmentary pinnate leaf measuring 308 cm in length and 3 cm in breadth. It is uniformly wide along the available length. Rachis is broad 3 mm thick, and partially covered by pinnae bases. Pinnae is closely arranged and touching the next pinnae above. Pinnae are linear to lancheolate in shape and smaller size. They measure 1.2 cm long and 0.6 broad. Acroscopic and basiscopic margins auriculate. Margins are entire and apex in obtuse. Pinnae are attached to the rachis by auriculate base at an angle of 70° veins emerge from the base, diverge and then divide to form meshes of equal size.

Identification and comparison:

The specimen resembles with the morphological characters by *Dictyozamites indicus* Feistmantel given by Bose and Zeba-Bano (1978) in having uniformly wide smaller pinnae, Acroscopic and Basiscopic margins, auroculate. Obtuse apex, pinnae are attached at an angle of 70°. Veins diverge and divide to form meshes of equal size. Therefore it is identified and described as D. indicum Feistmantel. It is compared with D.indicum described by Bose and Zeba-Bano (1978) from Maharipur in Rahmahal hills in having smaller pinnae, obtuse apex and venation pattern. It resembles with D. minusculus described by Menendez (1966) from Argentina in shape and pinnae size. It is also recembles with D. krusinensis described by Korino (1972) from East Malaysia in smaller pinnae. In India D. Indicum is widely distributed and reported from Rajmahal Hills, in Bihar, Parsapani in Madhya Pradesh and Vemavaram in Andhra Pradesh. Present specimen is collected from Marvatur in TamilNadu. This suggests its wider occurrence on East Coast. Type : MARV/6/98

Locality : Marvatur, District- Tiruchirpalli, TamilNadu

Early Cretaceous, Uttatur Formation

Conclusion-

The Mesozoic Gondwana deposits in East-coast of India occurs in series of detached outcrops. East Coast Gondwana deposits occurs in different Cauvery river basin. The Cycadophytes are represented by genera belonging to family Williamsoniacae. The present work on the basis of mega fossil studies support the Lower Cretaceous age.

Acknowledgment-

The authors are grateful to Secretary Dr. Vishwajeet Kadam, Bharati Vidyapeeth University, Pune for encouragement and advise. Thanks are due to Principal Dr. D.G. Kanase of B.V. Patangrao Kadam Mahavidyalya, Sangli for constant inspiration and providing facilities.

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Financial Literacy of Bank Employees and Its Association with Demographic Factors

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Abstract

Financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of money. It helps any individual to grow up their own level of understanding about financial sector and take decisions related to personal finance. This paper aims at analysing the level of financial literacy among bank employees and its association with demographic factors. The data have been collected through structured interview schedule, from 540 bank employ<mark>e</mark>es working in <mark>bank branches situat</mark>ed in Kolhapu<mark>r d</mark>istrict. The financial literacy of bank employees has been analysed by fo<mark>cusing on three dimensions of fi</mark>nancial lite<mark>ra</mark>cy i.e. financial knowledge, financial behaviour and financial attitude. It was observed that 45 % bank employees have medium and moderate lower level financial literacy and o<mark>nly 55% bank employees have moderate highe</mark>r and high<mark>e</mark>r level financial literacy. There is significant association between Education Level, Social Category, Religion, Marital Status, Annual Income and financial literacy level of bank employees. Every bank should arrange training and development programme on financial literacy for their e<mark>mployees. The banks should give motivation to their e</mark>mployee for taking financial education and complete educat<mark>ional courses; it will help to improve the level of their fina</mark>ncial lite<mark>r</mark>acy.

Key Words: Financial Literacy, Bank Employees, Financial Knowledge, Financial Behaviour and Financial Attitude

1.1 Introduction:

The Organization for Economic Co-operation and Development (OECD) has defined financial literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual well being". Financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of money (Noctor et al. 1992). Financially literate individuals make informed decisions about their money and minimize their chances of being misled on financial matters (Beal and Delpachitra, 2003).

Financial decisions are becoming more complex because there are more choices available for saving, spending, borrowing and investing. Improving financial literacy skills help people to make those decisions with full of confidence. India are among the least financially literate people across the globe, with youngsters and women struggling most with their financial knowledge due to lack of discussions within the families on money management issues. As per the Global financial literacy barometer India is ranked 23rd among the 28 countries surveyed, with 35% of its population termed financial literate. For improving the financial literacy of peoples first up all there is need to study the financial literacy of peoples working in financial sector and improves the financial literacy of these peoples. This will help to improve the financial literacy of people in the country. In this context the present study has been conducted on "Financial Literacy of Bank Employees and Its Association with Demographic Factors"

1.2 Statement of the Problem:

In India the level of financial literacy is cause of concern in all sectors of the economy. The situation of financial literacy in India is very critical, not only the rural peoples have lower level of financial literacy but the working peoples in urban area have also facing this problem of poor financial literacy. The Government of India is consistently implementing economic reforms in the country focusing on considerable changes in financial sector. Here is the need of studying financial literacy of bank employees as they are working in financial sector and it was anticipated that their level of financial literacy is higher.

1.3 Objectives of the Study:

The main objective of the study is to study the financial literacy of bank employees in Kolhapur district and specific objectives are as follows

- 1. To determine the level of financial literacy of banks employees in Kolhapur District.
- 2. To suggest remedies to improve the level of financial literacy of bank employees in Kolhapur District.

1.4 Hypotheses of the Study:

- 1. The level of financial literacy of bank employees is high.
- 2. There is an association between demographic factors and financial literacy level of bank employees.

1.5 Research Methodology:

In Kolhapur district there are total 8880 bank employees. At 95% confidence level and confidence interval 5 the sample size has been 383 for the population of 8880. For the study purpose 540 bank employees are selected from 12 talukas of Kolhapur district and three sectors of banking i.e. public sector banks, private sector banks and co-operative banks.

It is a descriptive study the survey has been conducted to collect the data. The data have been analyzed by using different techniques and statistical tools such as percentage and used software's like MS-Excel, SPSS etc.

1.6Analysis and Interpretation:

1.6.1 Analysis through Financial Literacy Quotient:

One of the important outcomes of this study is Financial Literacy Quotient (FLQ). By using the basic idea of Prof. Dr. Shrikrishna Mahajan, who has developed FIQ, the researchers has attempted to calculate FLQ for every individual on the basis of the measurement of 100 statements regarding (i) Financial Knowledge (55 statements) (ii) Financial Behaviour (45 statements) and (iii) Financial Attitude (50 statements).

Financial Literacy Quotient (FLQ) is the total of score of financial knowledge, financial behaviour and financial attitude.

Financial Literacy Quotient = $\frac{\text{Actual Score}}{\text{Total Score}}$

After calculation of FLQ, various levels of financial literacy can be determined as follows-

Table 1.1

Distribution of Bank Employees on the basis of Financial Literacy Quotient

	1 0		_^
Financial Literacy	Frequency	Percent	Level of Financial
Quotient	ajiri a	ournal.	Literacy
0.01- 0.20	0	0.0	Lower
0.21- 0.40	18	3.3	Moderate Lower
0.41- 0.60	225	41.7	Medium
0.61- 0.80	261	48.3	Moderate Higher
0.81- 1.00	36	6.7	Higher
Total	540	100.0	

Table 1.1 shows the level of financial literacy of bank employees. There is highest number of bank employees i.e. 261 (48.3%) have moderate higher level of financial literacy and followed by 225 (41.7%) bank employees have medium level financial literacy. The 3.3% bank employees fall in the category of moderate lower level financial literacy. Only 6.7% bank employees have higher level financial literacy and there is no any bank employee fall in lower level of financial literacy.

1.6.3 Inferential Analysis:

The researchers have been used one sample t test for testing the level of financial literacy of bank employees and also used Chi-Square test to understand the association between demographic factors and financial literacy level of bank employees.

Hypothesis-1:

 H_0 - The level of financial literacy of bank employees is not high.

H_a-The level of financial literacy of bank employees is high.

Table 1.2
One-Sample t Test

	Test Value = 0.60					Result	
	Table Value	df	Sig. (2-tailed)	Mean	95% C	onfidence	
	('t' Value)		('p' Value)	Difference	Interv	al of the	
					Diff	erence	
					Lower	Upper	
Financial	4.688	539	.000	.02393	.0139	.0340	Reject H ₀
Literacy level							

The researcher has used one sample t test for testing this hypothesis. As per the classification of levels of financial literacy score above 0.60 has been considered as moderate high or high level of financial literacy so the test value 0.60 has used. The 'p' values for financial literacy level is 0.000, which is less than the significant value i.e. 0.05 ('p' value < 0.05) so we reject the null hypothesis and alternative hypothesis is accepted. It means that the level of financial literacy of bank employees is high.

The table 1.1 also shows that most of the bank employees i.e. 55% have moderately higher or higher level of financial literacy. This also proves that level of financial literacy of bank employees is high.

Hypothesis- 2:

H₀- There is no significant association between demographic factors and financial literacy level of bank employees.

H_a- There is a significant association between demographic factors and financial literacy level of bank employees.

Table 1.3 Chi-Square Tests

Demographic factors & Financial Literacy	χ ² Value	2 df 4	Asymp. Sig. (2- sided)	table value	Results
			'p' value		
Age & Financial Literacy	11.664 ^a	9	.233	16.919	Accepted
Gender & Financial	3.367 a	3	.288	7.815	Accepted
Literacy	O	Ilrio	urnai.		
Education Level&	8.008a	3	.046	7.815	Rejected
Financial Literacy					
Social Category& Financial	26.906a	15	.030	24.996	Rejected
Literacy					·
Religion& Financial	23.325a	12	.025	21.026	Rejected
Literacy					
Marital Status& Financial	27.727 ^a	9	.001	16.919	Rejected
Literacy					-
Place of bank Branch &	2.309a	3	.511	7.815	Accepted
Financial Literacy					
Living Place& Financial	4.121a	3	.249	7.815	Accepted
Literacy					
Annual Income& Financial	52.486a	18	.000	28.869	Rejected
Literacy					

Age & Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (11.664^a) of X^2 (Table) is less than the table value (16.919) of X^2 at df 9 at 0.05 significance level. Here, we accept H_0 and reject H_1 hence conclude that there is no significant association between age and financial literacy level of bank employees.

Gender & Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (3.367^a) of X^2 (Table) is less than the table value (7.815) of X^2 at df 3 at 0.05 significance level. Here, we accept H_0 and reject H_1 hence conclude that there is no significant association between gender and financial literacy level of bank employees.

Education Level& Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (8.008^a) of X^2 (Table) is greater than the table value (7.815) of X^2 at df 3 at 0.05 significance level. Here, we reject H_0 and accept H_I hence conclude that there is a significant association between education and financial literacy level of bank employees.

Social Category& Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (26.906^a) of X^2 (Table) is greater than the table value (24.996) of X^2 at df 15 at 0.05 significance level. Here, we reject H_0 and accept H_I hence conclude that there is a significant association between social category and financial literacy level of bank employees.

Religion Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (23.325^a) of X^2 (Table) is greater than the table value (21.026) of X^2 at df 12 at 0.05 significance level. Here, we reject H_0 and accept H_1 hence, conclude that an association exists between Religion and financial literacy level of bank employees.

Marital Status Financial Literacy: As a result of Chi-square (X^2) test, the computed value (27.727^a) of X^2 (Table) is greater than the table value (16.919) of X^2 at df 9 at 0.05 significance level. Here, we reject H_0 and accept H_I hence, conclude that there is an association exists between marital states and financial literacy level of bank employees.

Place of bank Branch & Financial Literacy: As a result of *Chi-square* (X²) test, the computed value (2.309^a) of X^2 (Table) is less than the table value (7.815) of X^2 at df 3 at 0.05 significance level. Here, we accept H_0 and reject H_I hence conclude that there is no significant association between place of bank branch and financial literacy level of bank employees.

Living Place & Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (4.121^a) of X^2 (Table) is less than the table value (7.815) of X^2 at df 3 at 0.05 significance level. Here, we accept H_0 and reject H_1 hence conclude that there is no significant association between living place and financial literacy level of bank employees.

Annual Income & Financial Literacy: As a result of *Chi-square* (X^2) test, the computed value (52.486^a) of X^2 (Table) is greater than the table value (28.869) of X^2 at df 18 at 0.05 significance level. Here, we reject H_0 and accept H_I hence, conclude that there is an association exists between annual income and financial literacy level of bank employees. SSN 2349-6387

1.8 Findings of the Study:

- 1. The degree of financial literacy indicates that 48.3% bank employees have moderately high level of financial literacy and only 6.7% bank employees have high level of financial literacy. There are 41.7% bank employees who have medium level of financial literacy and 3.3% bank employees are having moderately lower level of financial literacy.
- 2. There is no significant difference in level of financial literacy of bank employees.
- 3. There is significant association between Education Level, Social Category, Religion, Marital Status, Annual Income and financial literacy level of bank employees.
- 4. There is no significant association between age, Gender, Place of bank branch, Living place and financial literacy level of bank employees.

1.9 Suggestions:

- 1. Every bank should arrange training and development programme (knowledge of investment, savings and create awareness about repayment of loan etc.) on financial literacy for their employees.
- 2. The banks should give special financial education to its employees through their financial literacy centre for improving their financial literacy.

- 3. Every bank should create separate financial literacy fund from its profit for providing advanced training and expert lectures to its employees for improving their financial knowledge.
- 4. The banks should conduct financial literacy test of its employees after every training programme and give prize for those whose performance is excellent in that, it will encourage employees to enhance the financial behaviour.
- 5. The banks should give motivation (give increments, promotion, leave for financial education etc.) to their employee for taking financial education and complete educational courses; it will help to improve the level of their financial literacy.

1.10 Conclusion:

After the analysis it is understood that most of the bank employees have Medium or Moderate low level of financial knowledge and behaviour but moderate high level of financial attitude. There is no significant difference in level of financial literacy of bank employees. There is significant association between education level, social category, religion, marital status, annual income and financial literacy level, but there is no significant association between age, gender, place of bank branch, living place and financial literacy level of bank employees. The banks should arrange training and development programme on financial literacy for their employees and give them motivation for taking financial education and completed educational coerces, it will help to improve the level of financial literacy of them.

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Educational Status among the Scheduled Tribes: Issues and Challenges

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Introduction: -

Education plays a vital role through aims and habits and culture sustains from generation to generation. It is the process through which the society deliberately transmits its collected knowledge, skill and value-form generation to generation. With the knowledge and skill level of education extended and contributes to the increase in national productivity. One who is having a good education he can accumulate skill, knowledge which will be beneficial to their society. Article 45 of the Indian constitution declares the state endeavour to provide free and compulsory education for all children until they complete the age of fourteen.

Education is one of the essential requirements for man-making and nation-building. It is indispensable for the development of human resources. Education imparts knowledge, skills, and character. After independence, the governments in India relied more on literacy mission emphasizing 3Rs (Reading, Writing and Arithmetic) to fulfil the expectations of the Directive Principles of State Policy. At the backdrop of the New Education Policy, likely to come up short, the paper makes a critical attempt to appraise the statistics and status of the education among Tribes across India. Development should not be studied in isolation. Development is not synonymous with the growth of a few affluent persons. As Amartya Sen (1999) stated unless the capabilities among human beings are adequately addressed and deprivations faced by marginalized groups are overcome, development cannot take place. He stressed on the capabilities and human freedoms, and this freedom can only be achieved when the people are guaranteed political freedom, economic facilities, social opportunities, transparency, and security. Although these conditions are different from one another, they are all interconnected. According to D.N. Majumdar "A tribe is a social group with territorial afflation, endogamous with no specialization of functions, rule by tribal officers, hereditary or otherwise united in language and dialect, recognizing social distance with other tribes or caste without any social obloquy attaching to them, as it does in the caste structure, following tribal traditions, beliefs, and customs, illiberal of naturalization of ideas, from alien sources, above all conscious of homogeneity of ethnic and territorial integration" (quoted in Varma 4996). The tribes in India usually reside in hill areas, forests, near the seas, and islands. Their lifestyle is quite different from non-tribal (Preet 1994). It is not that their societies are static, but the pace of social change in tribal society is very slow. Since they are materially and economically backward, attempts have been made by the Government to develop them. Today, the governments in all countries are paying special attention to the development of the tribes (Nithya 2014).

Objectives: -

The main objectives of this paper are: –

- 1. To study the complex variables responsible for the lower level of education among tribals;
- 2. To review the effectiveness of different educational programs and their impact on tribals, and
- 3. To assess the educational gaps and suggest suitable remedial measures for improvement of their education.
- 4. To assess the educational gaps and suggest suitable remedial measures for improvement Of their education.
- 5. To review the effectiveness of different educational programs and their impact on Tribals.

Sources of Data: -

The present paper is mostly based on secondary data from various research studies including census data, committee reports on tribals, annual reports of tribal welfare ministry, Report on Selected Educational Statistics

Secondary data - Social website, Magazine, Newspaper, Article, Tribal education journal, etc.

Review of Literature: -

There is considerable literature on tribal development and the growth of education among the tribals. According to Virginius Xaxa (2015), the colonial state did almost nothing to improve the socio-economic conditions of the tribals other than providing them protective measures. He says that the post- Independent India also continued the same policy with little modification such as providing a certain percentage of seats in state-sponsored educational institutions and government services. Under these provisions, 7.5 percent of jobs were reserved both in central and state governments for tribals. This has opened a large pool of government services to them. Though reservation provides employment opportunities, the lack of educational qualifications and necessary skills denied them of the jobs, and the reserved seats remain vacant in many cases. In the case of quota for higher grade services, the condition is even worse as candidates with necessary qualifications are not available.

Gaurang Rami's (2012) paper discusses the status of primary education in the tribal district of Dang in Gujarat. In the district, there are about 412 primary schools; out of which 378 primary schools are run by the district panchayat. The paper concludes that most of the schools have buildings, but they fail to attract the girl students owing to a lack of other essential natural or biophysical factors.

Vinoba Gautam's paper (2003) on Janasala experience, a collaborative program between the Government of India and United Nations agencies to achieve universal elementary education, especially for girls and children from deprived communities, working children, and children with specific needs. It tries to cover nearly three million children; out of it, 33% would be tribal children. Under Janasala, many favourable interventions were undertaken to improve the quality of education of tribal children. The study proposes that as the tribal children possess cognitive abilities, a suitable curriculum and teaching methods need to devise. Finally, the paper concludes that non-tribal education has very limited value in tribal cultural milieu because it does not match with the lifestyle of individuals and the needs of the tribal community. There is a need for linking school education with life and the needs of the tribal communities.

Kumar Rana et.al (2003), while reviewing the situation of primary education in West Bengal, point out multiple problems that the primary education across India has been facing, such as infrastructure, shortage of schools, shortage of teachers, and financial handicap of the parents. He also observed that just addressing the problems of infrastructure would not provide any guarantee to improvement either in quality or the spread of primary education. To improve the literacy level, several issues were suggested such as parents' participation in monitoring and governance to improve the delivery of primary education. It can be cited in this regard that the Bengal government's "Sishu Siksha Karmasuchi" (SSK) experiment provides cost-effective primary education particularly to the most underprivileged sections of society. Finally, the evils of private tuition must be put to an end.

Tribal Scenario: -

The tribal population in India is numerically a small minority, and they represent an enormous diversity of groups. They vary among themselves in respect of language, dialects, physical features, size of the population, etc. They live largely in isolation, but they spread over the length and breadth of the country. Before the Constitution, the tribes were variously termed as aboriginals, Adivasis, forest tribes, hill tribes, primitive tribes, etc. Up to 1919, these groups were included in the 'Depressed Classes'. Later, the Indian Franchise Committee of 1919 had accorded a separate nomenclature for these groups for census reports, and in 1931, they were recognized as a primitive tribe. Only in 1951 order, they were identified as a scheduled tribe (Verma 1996). In 1951, the number of scheduled tribes was only 212, and their number has increased

to 705 by 2011 (census). Despite their language, they can speak in the common language of the state where they live. There are more than 270 such languages in India (India Education Report, 2002). As per the 2011 Census, they are 10.43 crore tribes constituting 8.6% of the total population of the country and occupying about 15 percent of the country area in various ecological and geo-climatic conditions ranging from the plains to forests, hills and inaccessible areas. There are 75 ethnic groups considered as Particularly Vulnerable Tribal Groups (PVTGs). Scheduled Tribes are in the largest number in the state of Odisha (i.e. 62%). The largest concentrations of indigenous or Schedule Tribe people are found in two distinct geographical areas. More than half of the Scheduled Tribe population is concentrated in Central India, i.e., Madhya Pradesh (14.69%), Chhattisgarh (7.5%), Jharkhand (8.29%), Andhra Pradesh (5.7%), Maharashtra (10.08%), Orissa (9.2%), Gujarat (8.55%) and Rajasthan (8.86%). The other tribal populated areas are in the North East, i.e., Assam, Nagaland, Mizoram, Manipur, Meghalaya, Tripura, Sikkim, and Arunachal Pradesh. Among the states of India, Mizoram has the highest proportion of Scheduled Tribes (94.43). In contrast, Uttar Pradesh stands with the lowest proportion of Scheduled Tribes (0.57). In India, as many as 20 states and 2 union territories have the highest concentration of ST population. The national average is 8.6%.

Educational Status of Tribals in India: -

The Kothari Commission has also highlighted that the tribals deserve education with great emphasis and attention (Kothari 1966). Given this, the Kothari Commission endorsed the recommendations of the Dhebar Commission with a note of urgency that "intensive efforts' must be made to provide for five years of early education to all tribal children by 1975-76.

To achieve the literacy rate among tribals, the Commission also suggested the need to educate parents simultaneously. Initially, despite intensive efforts on tribal education, the literacy rate increased marginally from 11.3 percent in 1971 to 16.35 percent in 1981(Table-1); whereas in female literacy, there was no sign of relief, and it remained single digit, i.e., 8.04 percent in 1984. This indicates that in the first three decades of independence, the growth of tribal education was very slow due to the high dropout rate and the growing gap between tribals and non-tribals. Due to this higher education among the tribals also suffered severely. India advocates inclusive growth, but owing to lack of education and skill development, the marginalized sections are not becoming part of the inclusive growth. To ensure inclusive growth, the Constitution has empowered the backward classes with reservations in education and jobs. For this purpose, the Constitution of India has earmarked certain special provisions to enable the SCs and STs to access education. These special provisions were adopted through the amendment to the Constitution in 1951, and a special clause was added to article 15(4). his clause empowers the state to make special provisions for the educational development of the SCs and STs (Sahoo 2009). These special provisions too have failed to bring impressive impact on their literacy level as many tribals have their own peculiar and vernacular language different from the common language spoken in the state where they reside. It's found that as many as 22 percent of tribal habitations have less than 100 population, and more than 40 percent have between 100 to less than 300 people, while others have less than 500 people (Panda 2011; Sujatha 2008). Their literacy rate did not go beyond 8.5 percent in 1961. In the same period, the female literacy rate was much more depressing than that of male literacy, just 3.2 percent. Recognizing their deprivation and marginalization in Indian society, the Government of India has started an innovative scheme for the promotion of education among Scheduled Tribes, i.e., the establishment of Ashram schools. The Ashram school concept started in the Third Plan in all scheduled areas across India. It aims to promote education to the marginalized in a customized way. In addition to Ashram schools, there was the construction of hostels for boarding and lodging to tribal students in the scheduled areas. These special measures were introduced to achieve targeted results in elementary education among the tribals. Despite this, the literacy rate has not crossed beyond 11.39 percent in 1971 because of the complex nature of issues like absenteeism, stagnation, drop-out, and seasonal migration by the tribal children. In the meantime, the Dhebar Commission of 1960 identified certain specified reasons for the educational backwardness of tribals. They were vague generalizations like inappropriate and unattractive teaching methods adopted by the teachers, etc. It also touched other problems

like poor economic conditions and subsistence economy. In such a situation, children are seen as economic assets to supplement the family income by working with the parents and with others (Hasnain 2004). In a situation of dire necessitates of life, education becomes a matter of luxury for the tribal family (Pradhan 2011). All these factors have contributed to work out a broader policy for tribal education. In this background, the Dhebar Commission made recommendations to provide the mid-day meal, clothing, free book, reading and writing materials, etc. to all the tribal children in backward areas. The commission further recognizing the topographical factors recommended the opening of schools in localities where there were at least 30 school-going children, though there should be a school within one mile. The commission then suggested adjustment of timing, vacations, and holidays of schools to suit the tribal social and cultural life. It even proposed to create an atmosphere of tribal culture in the schools (Ministry of Tribal Welfare, High Powered Committee, and Government of India Report 2014:158-159).

	Table 1 Scheduled Tribe Literacy Rate and Gap, 1961 -1981						
Year	Scheduled Tribe	Scheduled Caste	GEN	The gap between ST and SC	The gap between ST and GEN		
1961	8.54	10.27	27.86	1.73	19.32		
1971	11.29	14.67	33.80	3.37	22.5		
1981	16.35	21.38	41.30	5.03	24.95		

Source: Census of India, Registrar General of India

The working group on Empowerment of Scheduled Tribes (2007) has indicated that large scale industrialization and exploitation of mineral resources on one side and construction of irrigation dams on the other side have uprooted the tribal people out of their lands. Displacement has adversely affected the school going children and more often than not, acted as the factor of their discontinuation. The socio-cultural practices or socialization has also directly impacted on tribal children's education. (2011) observed that traditional tribal society was not aware of formal education. It was the Christian missionaries who introduced this alien phenomenon of education to tribal society. As the school and its environment were alien to the traditional tribal milieu, young tribal children do not wish to stay in it. Entering school brings a new and external environment in which the child may not adjust. Also as those engaged in imparting knowledge were strangers to their society, the tribal students do not feel comfortable. The serious problem of the high drop-out rate in tribal society is to a considerable extent linked to this phenomenon also. The tribal drop-outs at primary, upper primary and secondary levels were much higher than that of the general population in 2001- 02. The data on drop-out rates for the period 2005-06 to 2011-12 indicate a decreasing trend and hence an improvement in the status of school-going tribal children at all levels. During 2005-06 to 2011-12, the all-India dropout rates fell by 3.4 percent for all children in classes 1-5 and 4.5 percent for tribal children.

Scheduled Tribes Students' Participation in Premier Institutions: -

The Scheduled Tribe students are very few in specialized courses offered by the premier institutions like the Indian Institute of Technology (IITs) and the Indian Institute of Management (IIMs). Since 1973, premier institutions have been following the constitutional provisions of reservation of seats 15% for SC and 7% for ST. Initially, the IITs had a quota system, but the quota system was scrapped and a modified scheme was introduced in 1983. Instead of the quota system of reservation prevalent across the country, there is slightly a different scheme in place at IITs, as these are the Institutes of National Importance. This strategy evolved based on the experience of implementing the quota system over a decade (1973–1983). The logic cited for this change is that the IITs, being Institutes of national importance, should not compromise on the quality of students studying there. Accordingly, students admitted through the reserved quota have no relaxation in requirements for qualifying the courses or getting the degrees. They are, however, allowed to

complete the program at a slower pace (take longer to get the degree). In case, a good number of candidates fail to satisfy the minimum eligibility criteria in written tests, the SC/ST candidates are given a relaxation of 50%. If vacancies still exist, further relaxation is offered with a deferred admission after one year of preparatory course study covering Physics, Chemistry, and Mathematics. After one year of study, only those candidates who can clear a cut-off in the final semester exams are allowed to regular studies. The seats reserved for SC/ST students are not transferable to the general category and roll on to the next year's students for the Preparatory Courses.

Suggestion and recommendations: -

Suggestion and recommendations Home languages in the classroom process are also essential to build a child's self-esteem and self-confidence. It is very essential to make awareness among SC/STs about the importance of education and social activities and development. This is important particularly in the context of the caution sounded by researchers about the difficulty of making schools closer to tribal children's' worlds. It is very essential to change the mind of teachers against castism which affects the enrolment of the students in the remote area, required to create awareness and promote the adjustment with the environment of the higher education institutions and self-confidence to succeed in their efforts. Arrange camp in the remote area to improve the studies, gender awareness programmers, standard of living, and technology development and to protect SC/ST from ragging and teasing. Scholarships should be released in time; free education should be for a remote area on any level. Providing books and other materials, introducing incentives for SC and ST Students. Earn while learn scheme should be adapted to SC and ST students pursuing higher education are some of the measures to increase the participation of SC and ST students in higher education. To make aware of family planning and the marriage age. All the schemes related to SC and ST is on the paper and the schemes implementation process very inferior. The significance of social culture factors, education level. Inclusion of local culture, folklore, and history to the curriculum can help to build confidence among the tribal children, and this approach may help in increasing their enrolment and retention at school since music and dance are the essential aspects of their cultural life. Therefore, storytelling, theatre, painting, music, and dance performances should be promoted at schools. Similarly, sports like archery, football, and other popular local sports are extremely beneficial remedies for dropouts; it should be promoted. The tribal literature and ethnology constitute invaluable indigenous knowledge. It should be documented, researched, and promoted. For developing a better understanding of tribal cultures and their promotion, there should be an adequate number of cultural research and educational centers in tribal regions. An important step in this direction is to teach tribal history and culture at schools to both tribal and non-tribal children. It would indirectly help to overcome the paucity of teachers in tribal areas.

The dearth of adequate schools and competent teachers to fulfil the goals of the Right to Education Act, 2009 is another impediment in achieving the target of education in tribal areas. For addressing the current scarcity of competent teachers in tribal areas, special efforts must be made to train the teachers so that the number of competent teachers can get into the education system. Most of the educational schemes /missions are not supportive of their betterment, and they have not generated any significant impact. The state education machinery is largely responsible for this situation. There should be proper accountability of the state education department to mobilize tribals to primary education and skill developments. It's pertinent to note that along with primary education, skill development is very essential. There are a good number of Self-Help Groups (SHGs) based on a micro-finance credit system. Many tribals get into it and have had the first-hand experience of self-determination.

Conclusion: -

This study reflects the reality of caste Scheduled Tribes in India that the national policy and bureaucracy together serve to provide quantitatively the most inadequate and qualitatively the most inferior education. Their children are in Elite school and children of remote area are in inferior schools where there

is no class and no top management. If this responsibility is not accepted then there will be a widening of the relative gap between them and the other caste and classes, in both quantities and qualities of education so we need to urgently respond to this situation.

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Psychological Effects on Students in Rural Area of Prayagraj Due to Covid 19

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Abstract:

The world health organization declared the Corona virus disease 2019 (outbreak) a pandemic on march 11,2020 The coronavirus disease (COVID 19) Is An infectious disease caused by a newly discovered SARS COV 2 Cases of COVID 19 first reported on 27th Jan 2020 in Karnataka (INDIA).) The COVID 19 virus spreads primarily through saliva or discharge from the drop when an infected person coughs or sneeze the the person who get infected may carry and transmit covid 19 without showing any symptoms of 14 days, so don't go close contact to people, especially in the public places. The Covid 19 pandemic is having a serious adverse impact on the students life across the world. The corona virus disease 2019 pandemic has not only challenges foe health system all over the world but also fueled the surge of rumors, misinformation outcomes, and cure of the disease such type of misinformation effect healthy behaviors and mental health outcomes among students the social media usage was related to both depression and health behavior change of students the students very much depend on the social media Plateform for maintain communication with his friends and family and also to reduce the boredom, Anxiety. This study main aim to find out how covid 19 (pandemic) impact on students psychologically during lockdown

Keywords: Anxiety, Depression, psychological impact, School students, pandemic

Introduction:

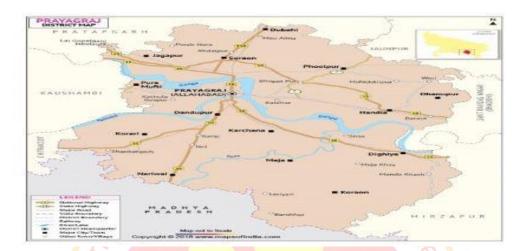
COVID 19 Pandemic disorder the educational process the first case of COVID19 was reported in Wuhan city in the Hubei province in china on 31st Dec 2019. From that moment, it spared fast in china, and soon spread the world. Kerala marked the first case of corona virus in January 2020. Around 114 countries had been effected by corona virus in just two month on 11 march WHO declared it a Pandemic, over all as of 29 June approximately 216 countries have been affected, with 99,62,193 verified cases and 4,98,723 affirmed deaths during the lockdown period of COVID19 students show Stress, Anxiety. Factors related to changes in a academic structure examination and manage with limited recourses. This situation has produced a emotional impact on students, medical workers and the common people with stress and anxiety. in Spain 130,759 COVID 19 cases had been registered, making it the third country in the world most effected people by this pandemic march 9th and 13th there was progressive closure of schools and colleges, the Spanish government declared state of alert and population lockdown was imposed as of 16th march. Although the overall effect on education and mental health of the school environment is unknown, it is expected to be very considerable, considering the high incidence of emotional disorders in school students of prayagraj.

Methodology:

I Have collected data from personal contact and manually .it is so changeable due to covid 19 lockdown and social distancing protocols. so that online survey was conducted, confidentially and questions were formed in English or Hindi language or psychological impact of COVID 19 on 1. Social impact (lockdown, strategy follow) personal impact (Mental stability, Anxiety, depression and social media usage effect their thinking power). These responses were taken on two scales five Likert scale for questions or personal impact (Agree, strongly agree, Disagree and Strongly disagree) the data collection has kept open for a week. based on responses collected from the students participation, Headmaster participation and parents. a total no. of Response 300 was recorded. The data consisted mainly of rural area students Muaima from the state of prayagraj.

Sample

The study through primary Data and Secondary Data method of research and it is most suitable for the present study. In this paper we will study on four primary schools ,the four primary schools are Prathmik vidyalay Malkhanpur Mauaima, prathmik vidyalay Alipur Mauaima, Prayagraj, Prathmik Vidyalay Deogalpur Mauaima Prayagraj, Prathamik Vidyalay Basdaiya, Mauaima Prayagraj.



Sample Size

A Random Sampling Technique is adopted for the selecting of Sample 240 Primary School Students and 20 Primary School Teachers were selected for the present study.

Category of respondents		Total			
	Basdaiya	Deogalpur	Malkhanpur	A Alipur	10
Primary school teachers	05	05	05	05	20
Primary school students	60	60	60	60	240
Head teachers'	01	01	01	1	04
Parents/education stakeholders	09	09	09	09	36
Total	75	75	75	75	300

Statistical Techniques

After the data was collected and classified ,using

- SPSS
- Analysis using mean and S.D

Result

During the pandemic the government of India has launched the scheme on 29 of June 2020 that they will be upgrading the university by 2025 according to the digital aide of the time Google has also agreed to invest a sum of 10 billion in India by the year 2026 to help resolve the issue of investment connectivity and major .milestone India achieved by providing 500 million internet connection across the country.

Conclusion

After conducting the survey and interacting with student, people and teacher we can say that a vast majority of people are facing the internet issue and lack the knowledge to use and resolve the problems related to technology, using the technology is also creating a void among the people, we all students teachers and management need to work together. Educational institution need to resolve the issues that are slowing us down in the growth of academic life and find an absolute solution which help us endeavor. The current situation of COVID 19 has affected the students mental health, students are anxious about their future feel they are being left behind and isolated from their peers and friends .parents are suffering from job losses and students are dealing with school closures and isolation .we help students cope with the issues related to mental health, during a pandemic or otherwise.

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Tribal Mask Performer And Miniature Painter: An Observation In Maratha Painting

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Abstract

Festivals in India are always associated with the various art forms, Deities; religious object means to celebrate season-wise events. Its vocational appearance not only encourages many tribal artists in the production of the art objects but also provides a big platform to express their creativity, manually prepared and for retail purpose. Besides many art facets, Mask making is one of the famous types of art for its distinguished quality includes with Festivals performance, which impresses the viewer with its simplicity and aboriginal aesthetic essences. Such Festivals relates to Tribal Mask inspired many modern Artists as a tool of their Creative energies and they tried to formulate it in various concepts and theories e.g. Picasso's usage of the African Mask. Based on such a concept the Tribal Mask and its impact on Painting, occupy a similar consequence in observing the relations between the Tribal Mask Performer and Miniature Painter. The area of research, where both artists occupied the geographical region belongs to Rangamahal, a Palaces in Chandwad taluka at Nasik District of Maharashtra state. It seems to have existed much early to evident the exchange happens in both the media (Mask performing and painting themes). The Modern Process of extracting aboriginal themes and translating them into modern visual language had some relativity with the Indian Artist too before the infiltrations of Colonial Art in India.

Introduction

The Folk and Tribal art have their individuality i.e. first denote the Miniature and later originate in the native land, both have a certain similarity in their execution. The 'Folk lore' word was first coined by the British, (William Thomas), antiquarian, 1846, to relate it with the art material. He neglects the concept of a supernatural belief system and associated those practices as works of art and expression. Clarifying the functionality of folklore in non-literate societies (Jadhav 1998;04). Such a concept has a great reflection in a tribal community, which participates in fairs and festivals. (Sukumar, 1988).

According to (Robin D. Tribhuwan, 2003). besided with the various social aspect of tribal aesthetic, one that's related to festival are mere of dance and musici.e. cultural dance with Mask wearing on the head and dancing on lyrical music to pretend the analog of the Mask, remain unexplored. The art of Mask-making has been important in almost all tribal regions. The Mask always remains associated with the dance and music to juxtapose the narrative recitation of Deities' greatness and evoke his greatness of how he saves the world from evil. The tribal dance with a mask on their head tells the stories of Hindu Gods and Goddess. In tribal dance the purpose serves always focus on celebrated deities like – Waghdeo, a Bhill community festival, Ritual procession, Communal dancing, singing, and drinking –to celebrate agricultural, honoring panchayat tradition. The variety of art forms displayed in the festival provides the different types of interpretation towards natural form and the result is reflected in the variation of tribal class formation in India. The tribal artist had their individualistic view on the concept of creation in art through the codification of the nature that shapes their visuals understanding of the form. Such different kind of uniqueness in art form produce by the tribal artist has the community record which belongs to the 573 different types of its community in India with 678 million population that spread throughout the country (Robin D. Tribhuwan, 2003).

According to *Anilkumar Ramdas Pathare-2013* in one of the thesis on the study of Population in Nasik, gives the information of tribal population exceeds in 2001. The tribal population in Nasik was 23.92% with the highest tribal population in the village of *Surgana*, *Peite*. The reason for tribal settlement in those areas was due to the hilly region and dense forest.

According to (*James -1954*), the location of the tribal population differs within the study region due to racial and social characteristics known as *koli,mahadia,kokna, bhill,Thakur,warli ,kathodi, katkari,koli,dhar,tokar,pardhi*.In Maharashtra, Tribal festivals are found to be practices in the region like *Ahmadnagar, Raigad, Nashik. Pune, Thane* as the festival of *Mahadeo Kolis* tribes. Whereas in some parts of Thane, Dhule region, of *Warli* and *Kokna* celebrated some festivals like *Padva, Akhaja, Teravas, Diwali ,Holi, Ptra Amavasya thaur*.etc.

Aother features like Mask (Songa) has traditional dance are still practices in some of the villages in Chandwad, like Uswad, Kajji Sangvi, Vitave, Gangave. The Mask tradition is known as the Akhadi dance Festival. The Mask is mostly prepared for the lyrical stories of Ramayana and the famous sequence of Ravana and Jatayu yudha, Ram and Ravana yudha, Seeta Haran, etc. Besides character, Ravana Mask is mostly prepared with ten masks attached to the performer's head and made the audience visualize its length and breadth mention in literature. The Mask is prepared in big size and to reduce its weight, the artist usually prepared with Papier-mâché, light-weighted material like cardboard, etc. While Performing in the Public, the Artist dance with the analog of the Ramayana Character .The Story seems to be merely associated with the dance performance and musical lyrics. Sometimes the procession of dance with Mask wearing remains a whole day or sometimes extended till three days. He rallies with maskwearing and dancing on continuous tribal music keeps on rotating in the village to collect an offering. At the end of the festival, the mask is again kept in the secret place for worshiping regularly till next year's procession. To formulate the connection between the Tribal tradition of Mask wearing and its reflection in the mural themes, the most relevant aspect in tribal areas near the Nasik region was selected for the factfinding to one of the aspects in mural theme title 'Seeta Swanvar' (Kamal Chavan, 1978) to Mask of Tribal performance. Both the Artistic product are preserved in equal proportion by the artist, to depict the essence of the performer, as mention in Natyashastra Quotes for the Abhinaya.

According to *Solapurkar. V.M.* in *Marathi Vishwakosh*, the Maratha painting had a unique fusion of both tribal art and Rajput Miniature to result in a characteristic of Innocently express in feature of figurative painting. My study focuses on the tribal areas in some of the villages in Maharashtra with the tradition of Mask wearing and dancing to narrate the role of Deities in serving the human society. It will highlight the impact of such tradition reflected in the mural theme associates with *Rangamahal* themes.

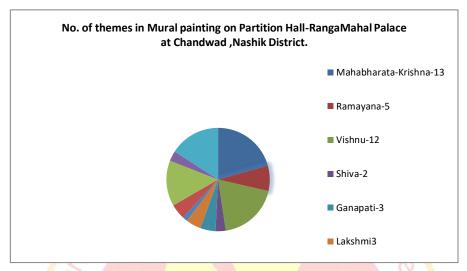
As an artistic palace of *Punyashlok Ahilyadevi Holkar*, *Malva* Dynasty and her presence in *Chandwad taluka*, an important city in Nasik District was a blessed boon for the region that brought prosperity and boost to the art. The Mural painting on its wall connects the important evidence toward the extended work of Maratha Mural tradition during 17th century B.C. The Figurative work in the Miniature painting on the wall of its Palace had certain connectivity with the tribal art tradition of Mask wearing and dancing on the lyric of the tribal song and Music.

Tribal Mask Tradition Reflect In Mural Painting Of Rangamahal Palace, Chandwad, Nashik District.

As per the scholar in (Kamal Chavan, 1978) in his thesis- 'Maratha murals_late medieval painting of Deccan 1650-1850' pune "the district was fortunate in having places like Chandwad within its jurisdiction. All the places in this district have preserved a good example of wood carving and the extant remain of murals speak of very high artistic state to investigate the site visit to Rangamahal Palace, Chandwad following observation was extracted with the help of Guide, Professor, Dr. Ganesh Tartare, from Sir J.J. School of Art, Mumbai. Prima facie the site was under the process of restoration in the hand of the Archeology Department. Painting on the mural has been located on the right side of the Palace building towards the first floor of Darbar Hall. Besides it, the mural is also painted on the wall of a small room. Both the room have been decorated with painting and wall decorative art in some of the niches and

decorative rectangular frames made for painting purposes. Prima facie all the surface around the niches and rectangular frame areas had been utilized for Painting with various themes based on Religious, Mythological, and courting Stories.

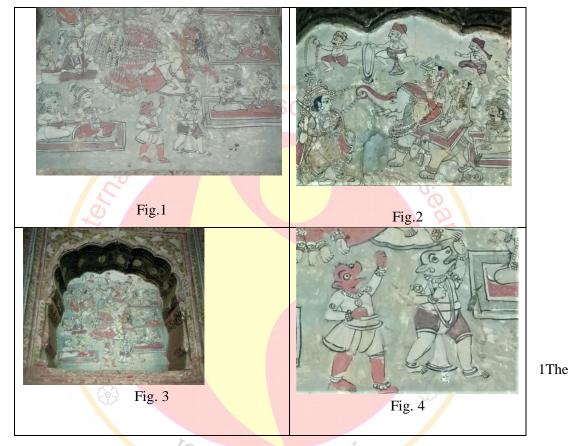
Analysis Of Data And Information:



According to Emigh, John (1996) "Masked characters, usually divinities, are a central feature of Indian dramatic forms, many based on depicting the epics Mahabharata and Ramayana."

As per the above statement and observation in my study, I have been relating the Mask tradition in the tribal area of Nasik with one of the Mural Painting at Rangamahal Palace, and search its process of transcription, reflected on the theme, of Seeta swayanvar. The selection of such a theme in one of the Mural works of Rangamahal palace shows some of the aspects relates to the Tribal tradition of the Mask festival, like Bowada and Akhada dance festival based on the theme of Ramayana. The activity involves in the preparation of such a Dance festival has a pain stalking work, especially of Ravana's Maske making process, and to perform with it in an open area in presence of a local audience generates the unique skill of the artist. Such tradition continues in tribal areas some few km. away from Chandwad, which formulate the statement of some connectivity with the mural artist, who painted on the Ramayana theme. Since the artist had depicted the Maharashtrian dress code of his figurative work, to visualize the Mythic Character of Ramayana indicates his transcript view the theme with regional taste. Secondly to depict the tenheaded Ravana's figure he directly uses the image from the costume of Tribal Mass of Ravana. Thirdly the royal personality seated in the hall of *Darbar* is preferably shown as it, compared with other themes on them. Such fusion of two contemporary locations in Pictorial composition provides the unique methods utilized by those artists to transcript the experience received from all the sources of oral literature, an analog of tribal performance, and an undisturbed profile of the Royal Personality in Darbar. Therefore the product of Ravana's Mask and the image produce by Painter has the same creative intention to provide with aesthetic taste derived from the fusion of all three purposes mentioned above. Such artistic fusion of tribal festival with the images of *Darbari person* indicates that the occasional invitation for Tribal performers uses to happen in Palace as for some special functions. Such replacement of Mythic images with the contemporary personality mostly indicates the active and non-active participation of the performing actors. Such a method in narrative tradition allows the audience, (tribal dance and Mural painting) to interplay with their interest that keeps on shifting from the Mythic story to the current situation in past. Such a situation in the Painting has a narrative style, that keeps on shifting its position from mythological character to the contemporary character with a mime of tribal Mask. All the members of the court wearing the Maratha types of dress with Peshwa Pagadi on their head, whereas women's dress code in Maharashtra 9 fold sari gives the essence of contemporary life of *Darbar*, whereas the *Ravana* figure and some figure are shown with

Mask like the treatment given to their character. Even *Rama* and *Laxmana* figure resemble to be the imitation of the character, which perform in the Tribal Mask procession. On the above side of the picture, a female figure is shown seated on Elephant and the elephant puts the garland around Lord *Rama*, provide the artist with the compositional skill to select the theme based on live performance, that use to happen on the campus of *Rangamahal*. The painting also suggests the impact of the live mask performance of tribal artists may have happened occasionally in the premises of *Rangamahal*. The painting speaks about the realistic approach of the artist to depict the real costume of his time, including some of the recording of events that happened in *Rangamahal*.



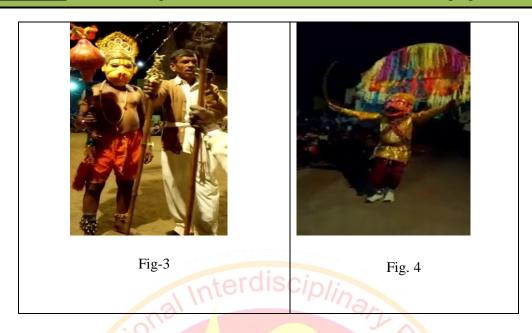
Rangamahal, Chandwad title - 'Seeta swanvar'.

Fig.

- Fig. 2 Lord Rama venerated with flower garland.
- Fig. 3 The wall decorative Niche mean for painting.
- Fig. 4 The Mask wearer character similar to Tribal Mask.

Source: Visit to actual site, mobile photo click for the reference picture.





- Fig. 1 Tribal Mask performer at Nashik Tribal region-Chichpada Bhovada festival
- Fig. 2 Tribal Mask performer at *Usvad*, *Chandvad Bhovada Festival*
- Fig. 3 Tribal Mask performer at *Chandvad Akhadi Festival*
- Fig. 4 Tribal Mask performer at *Usvad*, *Bhovada Festival*.
- Source: 1) https://youtu.be/TjxxboZGADY
 - 2) https://youtu.be/q7Vr FGAfGc
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Conclusion

The population of the Tribal community associated with the Mask making and performing in the festival is still carrying the legacy of their forefather in the area of Nasik District in form of *Bhovada and Akhadi* dance festivals. Besides ritual importance, their artistic presentation invites a lot of appreciation in the local public; they seem to be the real heroes for the tribal community carrying with the analog of their Deities. The condition lies in preparing the Tribal Mask and entertaining the audience are lacking interest due to the economy and generation gaps. Ideas are boosting with innumerate art effects, but due to technical literacy and lack of global exposure, its tradition remains for limits. Cultural and Administrative support for their future generation is the essential need for its preservation. The technical training and its participation in global festivals are required to be promoted in an organized manner, formulating the artistic taste through Dance, music, painting, and performance. As a catalyst in the study of Folk literature for the new generation, more research work has to be done.

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Globalization: Culture and Society

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Abstract:

Globalization is often exclusively associated with worldwide economic integration and the emergence of a borderless global market. However, globalization also involves sweeping changes on the social, cultural and political terrains. Globalization is not an inclusive or progressive form of internationalism. Rather, it is the successful expansion on a world scale of

particular localisms of social, economic, and political organization, which are neo-liberal and capitalist in character. The mix of material and ideological elements that make this expansion possible makes globalization a hegemonic process. Nor does globalization create or encourage economic freedom, opportunities, and choice at all levels; rather it is more akin to a monoculture of ideas, politics, and economic models. The major consequences of globalization have been: the transmogrification of traditional religions and belief systems; the beginning of the disintegration of the traditional social fabrics and shared norms by consumerism, cyberculture, newfangled religions and changing work ethics and work rhythms; the fast spreading anomie forcing an ever increasing number of individuals to fall back upon the easily accessible pretentious religious banalities, and attributing to religion the creation and acceleration of extremist, fundamentalist and terrorist tendencies in the third world countries. To sum up, culture as a way of human life is constantly undergoing change. Today, every culture of the world is under the umbrella of Western culture, It was always interest of West to rule over the world especially to marginalize the developing world. West becomes successful in its mission by implementing a slogan that was globalization. Through this process West projected, its own culture, polity, economy, values, across the globe etc.

Key Words: Globalization, Impact, Society, Culture

Introduction:

The term 'Globalization' is in itself self-explanatory. It is a global platform for maintaining evenness in the living mode of the individuals all over the world. Globalisation is the resultant of the interchange of worldly views, opinions and varied aspects of the culture all over the world. This is the method of giving the globalised world a way of intermixing of individuals from various segments, culture and lingos and figure out how to move and approach socially without harming and influencing every others' prestige and glory. Globalization highly affects social, fiscal, political, and mutual existence of nations. Plentiful hypothetical investigations exhibited that globalization mediates in a social existence of people that pertains various basic issues. Globalization is depicted by scholars as the procedure through which social orders and economies are incorporated through cross-border flows of thoughts, correspondence, innovation, capital, individuals, finances, merchandise, administrations, services and information. The term globalization means international integration, the world trade prospects being opened, development of advanced means of communication, internationalization of financial markets, growing importance of MNC's and population migrations. It has also widened the scope of the mobility of persons, goods, capital, data and ideas. It is a way through which the dissimilar world is unified into one society. The wave of globalization started entering and effecting India at the end of the last century and still the country is flowing with the present of global changes.

Understanding Globalization:

What is globalization? Is it the integration of economic, political, and cultural systems across the globe? Or is it Americanization of world culture and United States dominance of world affairs? Is globalization a force for economic growth, prosperity, and democratic freedom? Or is it a force for environmental devastation, exploitation of the developing world, and suppression of human rights? In sum,

is globalization "good" or "bad"? Globalization is the acceleration and intensification of interaction and integration among the people, companies, and governments of different nations. In the 1990s "globalization" has become a particularly fashionable way to analyze changes in the international economy and in world politics. Advances in technology and modern communications, we are told, have unleashed new contacts and intercourse among peoples, social movements, transnational corporations and governments. The result is a set of processes which have affected world politics in a new and extraordinary way. Yet the argument itself is not a new one—nor is the phenomenon. Globalization is neither good nor bad. Rather, certain aspects of the complex, and multifaceted process of globalization have impacts that can be viewed in different ways depending on the values at stake.

Globalization has become one of the most popular buzzword of our time frequently used by people. Globalization is the increasing interaction of national economy with that of the First World which ultimately aims at creating a state of frictionless capitalism. It is a process of creating a global market in which increasingly all nations are forced to participate. terdisciplin

Concept of Culture:

Culture specifies what behaviors are desirable or proscribed for members of the culture (norms), for individuals in the social structure (roles), as well as the important goals and Principles in one's life (values). Culture also specifies how things are to be evaluated (Carnevale, 1995). This implies that people of different cultures will have greater difficulty In interaction, in understanding, and in valuation. Culture is ones recognition and identity through which he is being recognized. Culture has been defined differently by people. The different definitions attach to culture is based on the differences in the orientation of the people. According Ekeh (1989), culture is constructing used in an attempt to analyze and integrate events and ideas in broad spectrum of areas of society. Jekayinfa (2002) states that from wider perspective, culture includes the total repertoire of human action which are socially transmitted from generation to generation. Tyler (1871), in Jekayinfa (2002), views culture as configuration of institutions and modes of life.

Furthermore, he states that culture is the complex while which includes knowledge, belief, arts, morals, laws, customs, and any other capabilities and habits acquired by man as member of the society. Among the feature that characterize culture is that has its own personality and identity. The fact that we are human does not mean we are the same. However, it is noted that every moment, we are being transformed, always growing like the cell in our bodies. Culture changes exactly the same way as the human being change. In other words, culture is dynamic.

According to Odiora the transformation of culture is gradual and not sudden. Obiora contends that culture is a continuous process of change. In spite of the change culture continues to give a community a sense of dignity, continuity, security and binds society together. Another attribute of culture is that it is learned, acquired, transmitted or diffused through contact or other means of communication flow from one generation to another. For instance, in the old days a young Nigerian Girl from Yoruba culture would knee down to greet their elders. For the Britain a Girl may stretch hand shake. In the modern day third world countries, absolute kneeing down may be fading as noted by Tardif (2002) opines that culture is not genetically transmitted rather it takes place by process of absorption from the social environment or through deliberate instruction. This is to say that culture is learned.

The effects of globalization on Indian society and culture: Family Structure and Role of Women in Family:

The joint family which had been the basis of traditional Indian families has undergone serious changes. Those residing in the metropolitan cities in the small flat culture prefer nuclear families. We have lost the persistence to get balanced into the joint family, assimilating the experiences of the older folks and getting the youthful ones raised under the shadow of their grandparents. Kids have begun treating grandparents like visitors or guests, and such upbringing of children is one of the principle reasons of expanding old-age homes, as those youngsters think about their own parents as burden in their adulthood.

Although women and men are equal before the law and therefore the trend toward gender equality has been noticeable, women and men still occupy distinct functions in Indian society. Woman's role within the society is usually to perform family and household related activities. However, with the change in time men and women are gaining equal right to education, to earn, and to articulate.

Marriage System and Values:

Additionally, marriages in comparison to earlier times have lost their values and morality. It is especially obvious from the expanding number of separation cases and extra-marital affairs reported every now and then. Marriage used to be considered as bonding of souls which will be connected even after the demise of the partners; yet today marriage resembles an expert bond or a purported pledge to share existence without bargaining their self-interests. Traditional ways of arranged marriages by the parents consent has been replaced by marriage by own liking by the partners. The sense of self factor into the Indian youth is again a result of globalization.

Infidelity:

Both the genders had to maintain a distance as much as possible, with numerous confinements and impediments for a very long time in our culture and way of life. With the rise of globalization and western culture, youth have begun mixing up well with each other. The cordial approach and the mingling are apparent. The aggregate breakout of restrictions has tainted the Indian mentality, playing up with the physical relationship. A new type of relationship concepts namely live-in-relationship has emerged. Additionally the exaggerated cases of sexual offense cases are the results of the perverted mind that are very much the values considerably alien to our mother culture.

Festivals and Social Values:

We have the included values of treating the guests as God, warm-hearted welcoming, greeting elders with due respect and a celebrating every small festival with great colour of enjoyment and togetherness. Such a wide gathering with full shade and light can barely be seen today. Individuals have profoundly limited themselves in social collaboration. The relation in present generation is exceptionally conciliatory thinking about the money related status and riches. We are losing our social morals and ideals and happy moments of harmony and peace. The present age generation is glad observing Valentine's Day and friendship day than Holi and Diwali. Traditionally namaste, namaskar or touching of feet of elders is a common way of greeting in the Indian subcontinent. But in modern times 'Hi', 'Hello' is used to greet people in place of Namaskar.

Food, Clothing and Dialect:

Indian food, attire and dialects are different in different states. The food varies in its taste having its own nutrient values and each region is specific and rich in its restorative arrangements with the home cures. Indeed, even the attire fluctuates in various states which are especially specific in keeping up the nobility of lady. The various cuisines from different places throughout the world however have distinctive flavours to include; still the food ingredients that have inflicted with much popularity are the junk food items which have increased the health disorders in the country. Again, the dressing like the clothes for the males are an unseemly comfortable for the Indian climate. The female dresses are again a diversion to the tainted minds. Indeed, even the Indians are not in favour of promoting their mother tongue or our national language. Rather, the adolescent today view it as a disgraceful condition to talk in their national dialect Hindi. The manner in which the foreign languages are getting common in India like the French, German and Spanish, right from the school level, gives the examples of the amount of significance we give to Indian dialects and languages in contrast with the remote ones.

Work and Agricultural Sector:

India was overwhelmingly an agriculture based nation. With the propelled globalization and springing up of MNCs, the farming and agriculture has lost its prime importance in India. Agriculture science has minimal concentration among the youths who consider cultivating as a despicable calling. We are losing our wellbeing and our status and gradually getting to the period of financial servitude because of these MNCs.

Education Sector:

There are significant effects in academic sector because of globalisation like higher literacy rate and foreign universities collaborating with different Indian universities. The Indian academic system faces challenges of globalisation through info-technology although it offers opportunities to evolve new paradigms shifts in developmental education. Globalization promotes new tools and techniques such as Elearning, flexible learning, distance education programs and overseas training programs.

Indian Business Culture:

The foreign culture has both constructive and contrary impact on individuals and business firms. New ways of thinking and working has developed leading to higher efficiency. Indian organizations have embraced international accounting standards, Just-in-time and other more effective methods of stock control, flexitime and new practices of human asset administration, social duty and business morals thoughts, improvement in corporate governance practices, customer relationship management practices, inflow of outside assets and healthy competition with foreign products. The business area in India is profoundly encouraging in the present situation. The effect of globalization has changed the business system in India in terms of psychology, approach, innovation, attitude, work culture and so on. As a consequence of globalisation Indian industries are adapting themselves to newer challenges and taking benefit from the new and better opportunities making their business all the more profitable with prospects of future growth. The colossal populace of India has made a huge unsaturated market of customers. This is one reason why worldwide organizations are particularly inspired in doing business in India. In the post globalization period this degree has expanded enormously for worldwide multinational organizations as Government of India has likewise played an exceptionally essential and steady part in this regard through changed liberalized strategies and administrative structure. A few situations that have arisen in India post liberalization era are as follows: urbanisation and people of rural areas preferring to shift to urban areas, agriculture workers shifting to industry sector, trade market getting opened, boom in international import and export, big open saturated market for products, a growing market for high quality and low price product, gradual increase of organized retail chain, growing range of merger and acquisitions and lucid license policies for overseas multinational corporation. High growth rate is showing economic prosperity in India. Indian market leaders are going global.

Space, Science and Technology:

India has created a distinct place in the field of space science and technology viz. launch services, earth observation, communication & navigation and application of space technology for national development. Today, India stands one amongst the top six space faring nations in the world. The areas that are benefitted/ seemingly to be benefitted with the use of space technology and its applications embrace – resource monitoring, weather forecasting, telecommunication, broadcasting, rural connectivity, health & education, governance, disaster management support, location based services, space commerce together with host of social applications.

Globalization and Its Impact on People:

For the purpose of this presentation, I will discuss globalization and its impact on people at social and cultural, levels. As a social scientist, I am interested in how societies and people change because of this economic phenomena and how the process of change can impact families, individuals and communities. Globalization is associated with rapid and significant human changes. The movements of people from rural to urban areas have accelerated, and the growth of cities in the developing world especially is linked to substandard living for many. Family disruption and social and domestic violence are increasing. For example, 2004 New Delhi police reports indicate that deaths in the city of about six women everyday are dowry-related suicides. Concepts of national identity and of family, job and tradition are changing rapidly and significantly. There is concern that competitiveness introduced by globalization is leading to more individualistic societies' On the other hand, rapid change can encourage fundamentalism, a desire for the past, and a loss of tolerance for differences in religion and culture. The nation state is losing influence

relative to global economic pressures, and in some countries there is a failure or hesitation to develop social policies. All of these changes increase the likelihood that vulnerable people will be exploited, and threats to the human rights of less able people will increase. It is believed by economists that the crash of the stock market in Asia in 1994 was an example of the rapid spread of adverse human consequences because of the interdependence of economies and people. Millions of people lost prosperity and livelihoods, and education and health services were among those cut across the region. The effects, including social unrest and poverty, are still evident. Domestic violence and suicide increased in this period in several of the countries in the region. It is believed that the illicit drug trade has grown in recent years to form a significant proportion of the total business volume in the world. Let me revisit the business perspective of globalization: In a capitalistic market, multinational companies are taking the lead in establishing themselves and creating a major presence in almost every part of the world. Coca Cola, McDonalds and Nike are examples of such growth and proliferation. The media then plays a major role in advertising the benefits of new products and services as being BETTER AND SUPERIOR to what the local market has. And slowly but steadily the food that we eat, the clothes we wear and the life style we lead begins to change. This process becomes consumerism within a capitalistic culture. So people as consumers are being studied for their patterns and behaviors of spending.

Conclusion:

Globalization is neither good nor bad. Rather, certain aspects of the complex, and multi-faceted process of globalization have impacts that can be viewed in different ways depending on the values at stake. Individual free choice is important, but so is a society's ability to make decisions according to what is best for all of its members. The free market is important, but so is the ability of governments to deal with problems when the free market fails. Local democratic accountability is important, but so is international agreement on problems that can only be solved with cooperation far beyond the direct control of individual citizens. The major consequences of globalization have been: the transmogrification of traditional religions and belief systems; the beginning of the disintegration of the traditional social fabrics and shared norms by consumerism, cyber-culture, newfangled religions and changing work ethics and work rhythms; the fast spreading anomie forcing an ever increasing number of individuals to fall back upon the easily accessible pretentious religious banalities, and attributing to religion the creation and acceleration of extremist, fundamentalist and terrorist tendencies in the third world countries. It is fair to say that the impact of globalization in the cultural sphere has, most generally, been viewed in a pessimistic light. Typically, it has been associated with the destruction of cultural identities, victims of the accelerating encroachment of a homogenized, westernized, consumer culture. This view, the constituency for which extends from (some) academics to anti globalization activists (Shepard and Hayduk 2002), tends to interpret globalization as a seamless extension of - indeed, as a euphemism for - western cultural imperialism. Values can play a role in defining globalization. A definition of globalization as "Americanization" or, perhaps, the "McDonaldization," of the world presents globalization as a process driven by American consumer culture that rolls over other cultures. On the other hand, another definition of globalization would highlight its crosscultural impact, taking into account the nature of globalization as a way cultures interact and learn from each other. It is very important to mention here that every culture of the world have been affected by the monopoly of western culture. So, the planning of the west to homogenize the world in order to rule over it became successful through the instrument and means of globalization. First they captured market then gradually and slowly every field was controlled by them. Every nation in the world has its distinct culture and values which is transmitted to them by their ancestors which can be called ones cultural heritage.

India's culture was regarded best example of unity in diversity but it was also affected by the western mores and values. It is natural that if there will be a power in few hands then there are most chances that culture will flourish and survive. Due the great technology which affluent countries possess they use their technology to capture the wealth and resources of the developing countries. African countries can be cited as the example where the major resources are being controlled by the west because African countries

don't possess a good technology. Any way so the major cause of westernization and globalization is nothing but the expansion of capitalism and imperial culture.

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Adulteration: A Social Challenge

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Introduction:

Adulteration is a very serious problem posing serious health risks to many people in India. In every product there is adulteration starting from our daily groceries it moves on to our life. It is in short an addition of another substance to a food item in order to increase the quantity of the food item in raw form or prepared form, which may result in the loss of actual quality of food item. The most common reason for adulteration is the use by manufacturers of undeclared materials that are cheaper than the correct and declared ones. The adulterants may be harmful, or reduce the potency of the product, or they may be harmless. Adulteration can be defined as the act of making something impure or altering its original form by adding materials or elements that aren't usually part of it, especially inferior ones.

The main reasons for adulterating food products:-

- 1. Practised as a part of the business strategy.
- 2. An imitation of some other food substance.
- 3. Lack of knowledge of proper food consumption.
- 4. To increase the quantity of food production and sales.
- 5. Increased food demand for a rapidly growing population.
- 6. To make maximum profit from food items by fewer investments.



Food items, medicines, vegetables, paste, creams, products of famous brands and so on and so forth. May be because of this adulteration, people who consume such adulterated food suffer with upset stomach and other health related issues. I can say more than 20% patients who visit a doctor or any clinic or any hospital are those who had consumed such adulterated food and food products.

Most common adulterants which have been added:

- 1. Adding certain chemicals for faster ripening of fruits.
- 2. Mixing of decomposed fruits and vegetables with the good ones.
- 3. Adding certain natural and chemical dyes to attract consumers.
- 4. Mixing of clay, pebbles, stones, sand, and marble chips, to the grains, pulses and other crops.
- 5. Cheaper and inferior substances are added wholly or partially with the good ones to increase the weight or nature of the product.

History of Adulteration:

Historically, the use of adulterants has been common; sometimes dangerous substances have been used. In the United Kingdom up to the Victorian era, adulterants were common; for example, cheeses were sometimes colored with lead. Similar adulteration issues were seen in industry in the United States, during

the 19th century. There is dispute over whether these practices declined primarily due to government regulation or to increased public awareness and concern over the practices.

In the early 21st century, cases of dangerous adulteration occurred in the People's Republic of China. In some African countries, it is not uncommon for thieves to break electric transformers to steal transformer oil, which is then sold to the operators of roadside food stalls to be used for deep frying. When used for frying, it is reported that transformer oil lasts much longer than regular cooking oil. The downside of this misuse of the transformer oil is the threat to the health of the consumers, due to the presence of PCBs.

Adulterant use was first investigated in 1820 by the German chemist Frederick Accum, who identified many toxic metal colorings in food and drink. His work antagonized food suppliers, and he was ultimately discredited by a scandal over his alleged mutilation of books of the Royal Institution library. The physician Arthur Hill Hassall conducted extensive studies in the early 1850s, which were published in The Lancet and led to the 1860 Food Adulteration Act and other legislation. John Postgate led a further campaign, leading to another Act of 1875, which forms the basis of the modern legislation and a system of public analysts who test for adulteration.

Adulterated food is dangerous because it may be toxic and can affect health and it could deprive nutrients essential for proper growth and development of a human being. Adulteration is an illegal practice of adding raw and other cheaper ingredients to excellent quality products to increase the quantity. Having this adulterated food is highly toxic and leads to several health issues, including certain nutrition deficiency diseases, kidney disorders, and failure of an individual's organ systems, including heart, kidney and liver. The worst part is some adulterated food even causes cancer, the most life threatening disease. Also, in many cases, many pregnant women who consumed such adulterated food ended up with miscarriages because of poor feotus growth and in some extreme cases the women died while delivering babies.

Food adulteration with poisonous chemical like formalin is widespread and regularly applied on fish, fruit, meat and milk that causes different types of cancers, asthma and skin diseases. Colouring dyes, calcium carbide, urea, brunt engine oil and even some permitted preservatives are used in excessive amount that affect multiple organs of human body. Mostly it causes cancer like colon, peptic ulcer diseases, chronic liver diseases including cirrhosis and liver failure, electrolyte imbalance and eventually kidney failure.

Effects of Adulteration:

Heart diseases, blood disorders and bone marrow abnormality are also detected. Chance of malignancy increases and neurological impairment or brain functions are also often compromised. Skin problems are frequently seen including allergic manifestation. We know it is a punishable offence and it creates health hazards and can kill human being, even then we forget everything just for business interest. Now to save ourselves and our descendants, we have to fight all together against these ill trends of adulteration. Government should also take serious action with tougher law against those culprits.

Food adulteration is one of the serious challenges in the Indian society. Despite various measures and penalties, the problem continues to remain a big challenge. The saddest part is those who engage in such dirty practice do not leave even infants' milk products and life saving medicines.

Adulteration of food is a menace to the society and the perpetrators cannot be let off lightly.

After the arrival of fast food concept and online order practices, the consumers really do not bother what type of food is being served to them. They totally forget the health aspect and only concentrate to get their order served at their doorsteps. Taking advantage of a consumer's laziness, many restaurants and food joints which serve food do not bother to give importance to the quality aspect of the food but only want to satisfy their customers by serving them on time.

Serious Incidents of Adulteration of Food:

1. In 1981, denatured Colza oil was added to Olive oil in Spain and 600 people were killed (See Toxic oil syndrome)

- 2. In 1987, Beech-Nut was fined for violating the US Federal Food, Drug, and Cosmetic Act by selling flavoured sugar water as apple juice.
- 3. In 1997, ConAgra Foods illegally sprayed water on stored grain to increase its weight.
- 4. In 2007, samples of wheat gluten mixed with melamine, presumably to produce inflated results from tests for protein content, were discovered in the USA. They were found to have come from China.
- In 2008, significant portions of China's milk supply were found to have been adulterated with melamine.
 Infant formula produced from this milk killed at least six children and is believed to have harmed thousands of others.
- 6. In 2012, a study in India across 29 states and union territories found that milk was adulterated with detergent, fat, and even urea, and diluted with water. Just 31.5% of samples conformed to FSSAI standards.
- 7. In the 2013 meat adulteration scandal in Europe, horsemeat was passed off as beef.

Why do companies engage in adulteration? Their one and only intention is that they want to increase their profit margin and want to earn big in a short time. Just to make more profit and money, risking other's lives is absolutely an unethical practice. But they do not bother at all.

Action against Adulteration:-

The central government, on its part, is trying everything possible to control this "crime". In India, the ministry of health and family welfare is completely responsible for providing safe food to the citizens. The Prevention of Food Adulteration Act, 1954, has laid down guidelines to provide pure and wholesome foods to consumers. The Act was last amended in 1986 to make punishments more stringent and to empower consumers further. But the government is planning to enforce harsher punishment now.

The FSSAI has issued the draft amendments to the Food Safety and Standards (FSS) Act, which was passed in 2006 but the regulations were notified only in 2011. Among the key amendments, the FSSAI has proposed to include a new section to crack down on food adulteration.



People need to be very cautious when they buy products from stores and malls. They should check for standards like ISI standard mark, Agmark for quality products, FSSAI standard mark, date of packing and date of expiry etc. If none of the prescribed standard marks is there, then they should totally avoid buying such products.

Certain safety tips to avoid Adulteration are as follows:

- 1. Avoid dark coloured, junk and other processed foods.
- 2. Make sure to clean and store all the grains, pulses and other food products.
- 3. Wash fruits and vegetables thoroughly in running water before they are used.
- 4. Check if the seal is valid or not, before buying food products like milk, oil and other pouches.
- 5. Always make sure to check and buy products having an FSSAI-validated label, along with the license number, list of ingredients, manufactured date, and its expiration.
- 6. Avoid dark coloured, junk and other processed foods.
- 7. Make sure to clean and store all the grains, pulses and other food products.
- 8. Wash fruits and vegetables thoroughly in running water before they are used.
- 9. Check if the seal is valid or not, before buying food products like milk, oil and other pouches.
- 10. Always make sure to check and buy products having an FSSAI-validated label, along with the license number, list of ingredients, manufactured date, and its expiration.

- 11. Avoid dark coloured, junk and other processed foods.
- 12. Make sure to clean and store all the grains, pulses and other food products.
- 13. Wash fruits and vegetables thoroughly in running water before they are used.
- 14. Check if the seal is valid or not, before buying food products like milk, oil and other pouches.

Always make sure to check and buy products having an FSSAI-validated label, along with the license number, list of ingredients, manufactured date, and its expiration.

Conclusion:-

The government must focus on dealing strictly with those who engage in food adulteration. One way of doing this is by hiking the penalty, including making it analogous to attempt to murder in some extreme cases of adulteration. It is equally important to regularly check food stuff for adulteration and ensure speedy trials through specific fast track courts.

Eat healthy, live long!

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Schooling on Moral Education for Evolution of Self, Family and Community

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Abstract:

The present paper aims to identify the effectiveness of the "Aap Badho Desh ko Badhao" TM (ABDB) Training of Lead India Foundation (LIF) in empowering the school children to develop themselves into confident, responsible citizens working towards "self, family/community and national development". A case study through its empirical research, on the trainings imparted by LIF in the High Schools of Khammam District in Telangana State, found that the ABDB Trainings is an effective tool in achieving transformation into School Children in terms of physical, mental, intellectual, emotional, social, spiritual and national wellbeing in line with the National Education Policy (NEP) 2020.

Key Words: Lead India, Moral Values, School Children, Khammam District, Acharya-Kalam Human Transformation Model, ABDB School Training.

Introduction

Considering the significance of moral education to children in the Schools, amidst confusions and disagreements all over the world, including in India, the Government of India has made several initiatives since independence to bring reforms in the educational system, particularly, the School Education in India. As a part of this process, the NEP 1968, 1986 and the National Education Policy- 2020 also strongly recommended for profound changes in the Indian School Education as the socio-economic and cultural development of the nation entirely depend on the young children.

Role of Lead India Foundation (LIF): In this context, it is identified that the Lead India is an effective vehicle to induct moral values in the School Education, which in fact is the visionary programme of Dr Sudershan Acharya under the mentorship of His Excellency, the then Vice-President of India, Dr Abdul Kalam. Dr Acharya is the Chief Executive Officer and Founder Chairman of LIF. The objective of the program is Aap *Badho Desh Kho Badao* (ABDB) i.e., the "Individual Development leads to National Development". The LIF has been working for reaching-out to about one million-plus students under the guidance of the former President of India to take along Revolution of Human Transformation. The prime focus is alleviating poverty of the families through the improvement of human values and life skill education. This slogan itself reflects that individual development lies in the thoughts and ideas of an individual and Lead India works for the change in the mental state of the individual, such that a great change can be observed in the national development.

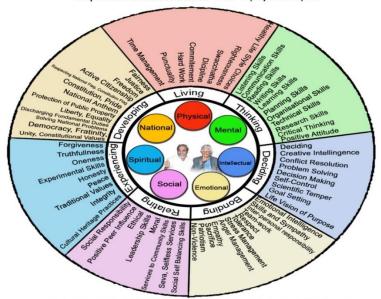
Materials and Methods

The objective of the Study: To identify the effectiveness of the ABDB Training of LIF 2020 in empowering the youth to develop themselves into confident, responsible citizens working towards self, family, community development thereby leading India towards a developed nation as the ABDB (Aap Badho, Desh ko Badhao) Training Program was designed as the primary vehicle in this direction to accomplish Dr Kalam's vision based on the following "Acharya-Kalam Human Transformation Model" as its core functioning.

Conceptual Framework and Research Model

Fig. 1: Acharya-Kalam Human Transformation Model

Wheel of Ethical /Moral /Human Values and Skills for Holistic Development Programme Acharya -Kalams Human Transformation Model Aap Badho Desh Ko Badho - आप बढ़ो देश को बढ़ाओ



Inculcate 70 Ethical -Moral Values and Skills Iniated by UNO, UNICEF, WHO, Indian Constitutional Values 12th five years Plan and National Education Policy -2020 to make Enlightened Empowered Responsible Citizen

Source: Lead India Foundation

The Conceptual Study and the Research Frame-Work of the Present Study was based on the Acharya-Kalam Human Transformative Model which was compiled with three decades of research by Dr.N.B.Sudershan Acharya under the noble guidance of Dr. Abdul Kalam, the then President of India on the hypotheses that "Values Are Not Taught, Values Are Caught". The major goal of the study is to establish through the Lead India Trainings and Research that this is most relevant Model for transformation at physical, mental, intellectual, emotional, social and spiritual levels of the students for integrating the present Model into the School Education curriculum.

Significance of the Study: The present study reveals the results of the Lead India Trainings divulged to the school children, how it helps School Children to nurture into responsible citizens towards self, family and community development.

Target group: The target group for this Study Programme is 11 to 21-year School Students in the Khammam District, Telangana State who underwent the ABDB Training Programmes of the LIF during the year 2017-2020.

Methodology: In order to accomplish the aims of the study, the Researcher used both primary and secondary data, by conducting a series of in-depth interviews personally and through e-mode. This is apart from the interactions with the School Teachers in Khammam District who have inducted ABDB Training Programmes to the students in their Schools and had experiential learnings on the outcome of the trainings through the behavioral aspects of the school children and their parents as well. The study was conducted on the synthesis of ethical and moral education through leisure activity. The target group was trained through a well-motivated resource person who was in-turn trained between 2017 and 2020 by the Founder and CEO of Lead India 2020 and its Core Group from time to time. The Teachers are trained about the significance and application of ABDB Trainings to the School Children on the following magnitudes by way of Ten Point Oath Taking which was designed personally by the great Visionary of India and His Excellency Dr Abdul Kalam in consultation with Dr Sudershan Acharya, the founder Chairman of LIF.

The Resource Persons of LIF have conducted a week's training to the students in various schools in Khammam district of Telangana, which is as follows:

Table-1: Details of Trainings in Upper Primary Schools of Khammam Districts

	Details of Trainings	2017-18	2018-19	2019-20
.No.				
	Total No. of Schools in Khammam	420	432	432
	Schools Trained	420	376	323
	Students Trained	9526	8720	8142
	Lead India National Clubs Opened	340	254	323
	Lead India Change Agents Trained	4760	4856	5168
	Colleges Trained	05	10	1051
	College Students Trained	1000	2640	300
	College Change Agents Trained	200	160	400
	Village Awareness Programs conducted	150	115	151
	Villagers Participated	4266	2838	6423
	Villagers Participated in Swatch Bharat	5917	917	5800
	Persons Stopped Drinking and Smoking	558	423	229
	Illiterates Taught Reading and Writing	812	944	685
	Unemployed Trained	1190	1454	1300
	Headmasters/Teachers Trained	540	620	736

Source: LIF Brief Reports (2020)

The LIF through its reports claimed that a total of 4039 village awareness programmes were conducted during summer vacation in which 11,384 village leaders have participated and took the responsibility to bring required changes in the villages. About 5917 youth leaders participated in Swachh Bharath Mission Open Defecation Free Campaign.

Salient Features of Lead India Program

The LEAD INDIA – 2020 Program planned in Khammam and Kothagudem Districts between 2017-2020 to target 4500 students in 191 schools covering 211 habitations during this program, however, undertook trainings much beyond their target as stated in the Table-1 of the Study. The Lead India Organization conducted regular training programs to the students and educated them on various values and skills for self-improvement on the lines of academic improvement, school attendance, homework, stage-fear, scientific temper, physical exercise and English proficiency. Also undertook trainings on the values of family by way of respecting parents, helping siblings and neighbours, usage of dustbins etc. The trainings on Village Development were conducted on teaching to one illiterate, awareness about quit smoking and alcohol, protecting trees, participation in Swachh Bharat and campaign on corruption free politics. Further, the Innovative programmes taken up in the schools through "Truth – Box" which is a platform in the school to practice path of Truth. Lot of creative activities were conducted in the schools in the areas of writing poems, drawing pictures, handcrafting, sharing different ideas and experimenting with different thoughts.

A positive Feedback from 50 Schools in Khammam on various aspects of the Aap Bado Desh Ko Badao (ABDB) Training Programmes conducted by the Lead India Foundation 2020 is as follows:

		Feedback (%)			
S.No.	Evaluation Parameters	50 Head Masters (%)	100 Teachers	10000 students	
5.110.	Evaluation 1 arameters	30 ficad Masicis (70)	(2 per school)	(200 per school)	
	Overcoming Fear and Expressive	70	100	90	
	Patriotism towards Nation	100	100	100	
	Goal Settings	100	100	70	
	Creativity in Work	100	100	100	

	Scientific Temper	70	70	80
	Respect to Parents and Teachers	100	100	100
	Truthful & Truth Box usage	100	70	100
	Think and Practice	70	100	90
	Physical Exercise, Food Habit and Meditation	70	100	100
	Other activities	88	70	100
0				

Based on the above feedback, the following analysis is made to know the efficacy of the ABDB Trainings conducted by the LIF 2020:

Statistical Methods

Following is the analysis on the Trainings of ABDB under Lead India in Khammam Pilot Project, which is based on the feed-back of the concerned Headmasters/Teachers/Students in the respective schools. The same was categorized into three zones viz., impact on Self-Improvement, impact on Family and others and the impact on the Community.

Table-2(i) –Impact of ABDB Training on Self-Improvement (Skills)

	Skill/Value/Imp		Craining on Self-Improvement (Skills) Observation
l. No	act		C C C C C C C C C C C C C C C C C C C
	Students have set a life goal	171 175 175 170 170	After this ABDB Programme, out of 414 students checked for this skill improvement, 90% of the students showed remarkable change with sustainable edge.
	Students have set an immediate academic goal	22 75 38 50%	416 students were checked for finding the setting of an immediate academic goal, and 93% succeeded in this goal-setting.
	Improvement in school attendance	3 15 12 20%	405 students were sampled for this skill improvement analysis, 30% students showed slight improvement and 69% showed drastic improvement. This is certified by the school teachers.
	Improvement in doing homework	27 75 111 445 455 455 455 455 455 455 455 45	408 students were tested for this survey and 44% students show very little improvement and 49% students shows strong improvement. This is also certified by the respective school teachers.
	Overcome Stage fear	20% 1880 45%	Out of 414 students, 45% overcomes the stage fear slightly, but 55% students strongly overcame the stage fear and able to participate in the stage discussions.
	Scientific Temper – Curiosity in questions	50 270 270 270	Out of 406 students, improvement is recorded in case of 230 (57%) students in questioning and in-quest in science classes and 42% with average progress.
	Physical exercise	79 87 19% 19%	Teachers reported that out of 411 student's data, 66% (270) students increased physical activity after ABDB. 15% students showed the change but only slight change is recorded.

Critical Employable Skill - Improving English proficiency	0 25 47 100s	100% students out of 411 have been improvi English proficiency. English communication is critical employment. Students have daily routines of watchi English news, reading English paper, learning new wor and trying conversations with friends in English		
Academic improvement (Compare and Compete with self)	11 (c)	94% (412) of students showed academic improvement after the ABDB programme.		

Table-2(ii)Impact of ABDB Training on Family and Others (Values) School-wise

Sl.	Skill/Value/Imp	a section of the sect	Observation
No	act		
1	Respect towards parents	30 28%	After this ABDB Programme, 74% (411) students showed remarkable change in respecting parents and 26% students showed with average change still requiring motivation.
2	Helping siblings and neighbors	134 225 277 578	67% (413) students strongly changed their attitude towards helping and 23% requires some motivation in this regard.
3	Swachh Bharat- Improvement in dustbin usage	3 13 13 450 278 450 450 450	Test in this concept building reveals that 66% (412) changed the attitude in using the dustbins and 33% need improvement and 1% students has no change in this area, still requiring some more training.

Table-3:Impact of ABDB Training on Community Development – Involvement in Village Development activities School-wise.

	Sign cost	
Sl. No.	Activity - 03	% of participation
1	Students who are teaching at least one illiterate after ABDB (414)	38% of (414) students
2	Students who are continuously creating awareness in their community to quit smoking and alcohol	32% of (412 students)
3	Average number of trees survived which were planted by students after ABDB	6 of (50) trees

Results: Based on the feedback given by the teachers and analytical results of the trainings, the Study observed that 90% of the students, who got trained, have set definite life goals as an outcome of the ABDB programme. After undergoing the ABDB training, there is a drastic improvement in the school attendance as reported by the concerned School Teachers and Principals during the qualitative interviews held with them after the training. There is a good improvement in maintaining the cleanliness in the school

premises, especially the usage of dustbins. The study found the other impacts like improved behaviour of handwashing, regular use of toilets, discouraging corruption, saving water, saving power, engaging more on the sports and physical activities etc.

Acknowledgement: We are grateful to the Lead India Foundation for providing data and the results for a wider dissemination to universalise the schooling on moral education.

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Socio-Economic Empowerment of Tribal Women in Tamil Nadu: Schmes and Programmes

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Introduction

On the patrimonial society women have faced several difficulties because of women. But tribal women faced two kind of problems because women and tribal women. However, for empowering women both central and state government implementing innovative plans to enhance their identity and position. On the consequences, State Government of Tamil Nadu made numerous programmes and scheme for uplifting women, especially tribal women. However, some of constrains have to implementing schemes and issues over the tribal women. The tribal society has unique feature in the every aspect like their culture and dialects, Religious beliefs everything. As tribal people are the oldest ethological segments in the Indian world population. They have their own identity which is very unique in nature and still in 20th century the identity has not been changed. It is really true sight of their life that still today their living quality not has been fairly good, many of them are still leaving below poverty line whatsoever world is changing fast and we are globally equipped with all necessities. In the earlier chapter, researcher has included their history, characteristic and about their life. Some efforts are needed in the direction to study about their problems. This article made an attempt to how the Government programmes and scheme helpful for empower women, especially tribal women. Moreover, it analyse the tribal women issues and challenges on Tamil Nadu.

Importance for tribal development

After the independence, planned development started and approaches were advanced for the tribal as we know that tribal are residing in the hilly areas and they have their own culture and religion and different faith which are totally concern about their communities. The three approaches are important for tribal development.- 1) Isolationist, 2) Assimilation, 3)Integration. As per above three approaches tribal lives, First approach isolation that is forest areas or hilly areas the first concern about isolation they themselves are taking efforts from their communities that they should come out of their isolation areas if they want to develop as we have notice that they have already started with this aspect and are coming out of their isolation zone.

The second approach that is assimilation it took in different parts of country as to accept the tribal people but approach of isolation and assimilation took some time in due course it became necessary for the planner to find midway between these two approaches it consist of protective and promotional measures the first approach that is concern with land policies their forest, culture, traditions, for the development and second approach that is promotional where the welfare programme by government through plans and other voluntary organisations and making sub plan for them which started in 1980-85, and in this manner planning strategies were formulated. In the Ninth plan tribal women focused 1997-2002, 2002-2007 and till the date number of programmes for women is covered in the schemes for implementation for empowerment even funds are also allocated. In the development process the progress of men and women is equally important so if on ninth plan objective is progress of tribal women or marginalised women hence the topic becomes important for progress of tribal women

Empowerment schemes and programems

Since very long period empowerment process has already been started and Govt, NGO's and people at social concern are taking steps toward this approach it becomes very essential that tribal women face many problems it is not that they are fully dominating the society but mostly it is the women who made or

destroys the family or society. Even in the Indian planning it has been the major concern for welfare and development of weaker section of society. As required by directives and principles of Article 46 of our constitution, efforts have been made in different plan to raise the social and economic status of these backward classes. The Tribal women picture in the mind set of the people is working on farms with a traditional were and heap of wooden on her head to change this mind set and to take her out from poverty and to make her aware of her power the study is needed to analyse the needs to empower her.

The Tribal Cooperative Marketing Development Federation (TRIFED)

The Tribal Cooperative Marketing Development Federation of India Limited known as TRIFED was set up by the Government of India, in the year 1987, as an apex. Level Cooperative Federation with the following broad objectives:

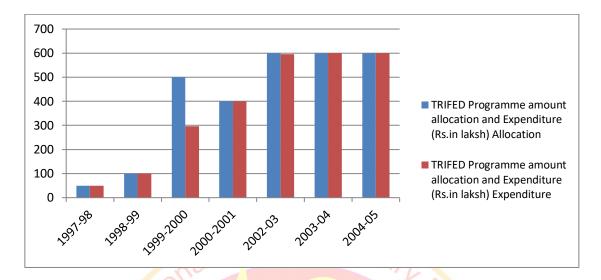
- I. To organize and plan the growth and development of natural products collected by tribal's;
- II. To strive to ensure higher earning and larger employment opportunities of the tribal population;
- III. To ensure full utilization of natural products by improving their marketability;
- IV. To boost up the economic and commercial viability of the TDCCs, FDCs and other State level agencies;
- V. To arrange finances for its activities;
- VI. To identify items of Minor Forest Produce (MFP) in different States/and promote their marketing.

The price of minor forest produce (MFP) and surplus agriculture produce (SAP) are subject to fluctuations. For meeting the unforeseen contingencies of losses because of such fluctuations in the prices and to ensure remunerative prices to the tribal farmers for their produce, the Ministry has been giving financial assistance to TRIFED to set off a part of such losses. In the year 2002-03, TRIFED reoriented its activities and shifted the focus from direct procurement & sales of MFP & AP commodities to its basic mandate of marketing development of tribal products. Under the new role, TRIFED has to basically play the role of a service provider and market developer of tribal products. Under the new role direction, the Management has initiated a series of measures to focus the role of TRIFED towards that of a market developer for tribal products rather than undertaking trading activities of procurement and sales. Towards this end, the Federation has embarked upon the following projects on a limited scale keeping in view the expertise available in terms of skills, human and financial resources:

- I. Implementation of Babasaheb Ambedkar Hastshilp Vikas Yojana (AHVY).
- II. Value addition of Sal/Siali leaves into moulded plates and bowls (Dona Pattals).
- III. Demonstration project on cultivation of safed Musli and Amla.
- IV. Training to tribals of Karnataka State (LAMPS) for producing of AGMARK quality of honey.
- V. Project for vocational training programme at Jagdalpur (Bastar).
- VI. Nutrition Project on setting up of training & food processing centres in State of Karnataka, Jharkhand, Maharashtra & Orissa.
- VII. Mobilization of self help groups across the country and arranging their livelihood Micro-Finance for their social and economic empowerment.

The price of Minor Forest Produce (MFP) and Surplus Agricultural Produce (SAP) are subject to fluctuations. For meeting the unforeseen contingencies of losses because of such fluctuations in the prices and to ensure remunerative prices to the tribal farmers for their produce, the Ministry has been giving financial assistance to the TRIFED to set off part of such losses. The scheme was initially launched during 1990-91 with an allocation of Rs.1.00 crore. The tenth plan outlay of the scheme is Rs.33.58 crores. During the year 2004-05 the entire approved outlay of Rs.6.00 crores has been spent. The year-wise releases made under the scheme, since inception, are given below:-

TRIFED programme amount allocation and expenditure (Rs. in lakhs)



Under the existing system, the grants are released directly to the State Tribal Development Cooperative Corporations, and thereafter there is no monitoring by the Ministry of Tribal Affairs on the actual utilization of these grants for ensuring remunerative prices to the tribal farmers for their produce. The Commission recommends that the Ministry of Tribal Affairs should evolve some monitoring mechanism on utilization of the grants by the various Tribal Development Cooperative Corporations.

Conclusion

In Tamil Nadu there are 36 tribal societies were lived, among six were the primitive tribes. Whether primitive or normal tribes, both are fighting to survive their life from ancient to modern era. But, Baruah the central Government and State Government of Tamil Nadu have implemented the schemes for to enhance their economical prosperity. On the consequences, The Tribal Cooperative Marketing Development Federation made dramatic changes on the tribal life, especially women. However, the lack of awareness, Arunima illiteracy, and patriarchy, tribal women still not get the full befit from the plan.

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Milk Production in Satara District: A Geographical Review

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Abstract

This research paper based on the secondary data obtained from the socio economic abstract of the Satara District for calculation the production of milk in Satara District and impact of milk production on the socio economic development of the farmer as well as the society. The production of milk is increases during the study period during 1991 to 2011 but mode of change is more during 2001 to 2011, 94.33 (thousand liters) per 100 milking animals than in 1991 to 2001. The highest production of milk is observed in Phaltan tahsil. The development of milk processing industries and availability of market of Pune and Mumbai, boost up milk production in this tahsil. Tahsils located in drought prone and western hilly area having low production of milk. This is happened due to unfavorable climatic and physiographic condition such drought prone climate in Man and Khatav tahsil and high rain fall and hilly track of Sahyadry in Mahabaleshwar, Jaoli and Patan tahsils. Low production of milk of milk is also observed in Karad tahsil due to the commercial farming of sugar cane. It is also observed that production of milk is also contributed in the economic development and to enhance the living standard of the farmer.

Key Words: Milking Animals, Organic Fertilizers

Introduction

Animal herding is major ancillary activity supporting to the agriculture for the purpose of provision of organic fertilizers such as feces and urine of cattle and buffalos and milk production. In these animals Ox and male buffalo are used for the cultivation by the farmers and crossbreed, local cows and buffalos are reared for the milk production. This is another source of economy of the farmers. Production of milk can help to enhance the economic status of the farmer. He can be able to provide the domestic needs from the earning by the milk. With the help of economic benefit of milk and organic fertilizers, farmers can be develop their farm and enhance the crop production. So production of milk in thousand liters per 100 milking animals is also one important indicator is selected for the calculation of levels of agricultural development. Present research paper focuses on tahsilwise production of milk in Satara District in 20 years, from 1991 to 2011 and also studied the roll of milk production in the socio-economic development of the farmer, agricultural development and rural economy also.

Study Area

Satara district is historically and economically most important district in Maharashtra situated in the western part of the state. It is extended during 17°5′ to 18°11′ north latitudes and 73°33′ to 74°53′ east longitudes. The district consists of 1739 villages, 22 towns and 11 tahsils according to 2011 census and it is bounded by Pune in North, Solapur in East, Sangali in South and Ratnagiri and Raigad in West. District has variation in climatic situation having high (more than 6000 cm) rainfall in western hilly region and very low (less than 50 cm) in eastern region during the year. The central part of the district is occupied by river Krishna, which is mostly irrigated and having black loamy soil and it is capable to yielding good crops. The northern part also have river Nira basin and canal irrigation facility, so it is also have the capability of high yielding of crops. The district recorded 30,03,741 population including 5,70,228 (18.99%) urban and 24,33,363 (81.01%) rural population respectively in 2011 having rank 122nd out of 640 districts in the country.

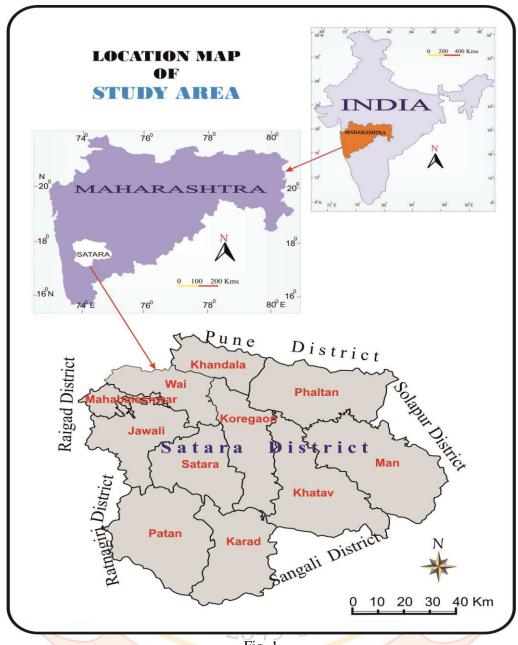


Fig. 1

Objectives

- 12. To study the tahsil-wise milk production in Satara District during the study period of time.
- 13. To study the role of milk production in the socio-economic status of the farmers in Satara District.

Methodology

The present research article is based on the secondary data obtained from socio-economic review of Satara District, Gazetteer of Satara. The ratio of production of milk is measured and analyzed by simple statistical methods. Production of milk is computed by the simple ratio to per 100 milking animals in liters. For the calculation of decadal variation or change in milk production during the study period following formula is used:

$$x = \frac{P1 - P2}{P2} \times 100$$

Where,

X= Decadal Change in Milk Production

- P1 = Production of Milk in Current Year
- P2 = Production of Milk in Previous Year

Analysis of Milk Production in Satara District:

1. Area of Low Milk Production

This group is concerned to the production of milk is 30 thousand liters per 100 milking animals. As per 1991, five tahsils namely Khatav, Karad, Patan, Jaoli and Mahabaleshwar are included in this group. In 2001, these tahsils are still remain but Mahabaleshwar is left due to increase in milk production but in 2011, no any tehsil is observed in this category due to increasing milk production.

Table 1

Tahsil-wise Production of Milk (000 Liters) in Satara District (Per 100 Milking Animals)

Sr.	Tahsil	1991	2001	1991-2001	2011	2001-2011
No.		Production	Production	Change in %	Production	Change in %
1	Jaoli	9.32	16.97	82.06	63.47	274.10
2	Karad	22.21	27.63	24.39	57.75	109.05
3	Khandala	53.81	68.14	26.62	214.89	215.39
4	Khatav	28.80	27.79	-3.49	68.15	145.20
5	Koregaon	38.04	75.97	99.72	129.57	70.57
6	Mahabaleshwar	19.12	36.63	91.56	33.28	-9.15
7	Man	39.60	41.88	5.75	50.18	19.81
8	Patan	29.43	10.40	-64.65	47.85	359.87
9	Phaltan	85.76	73.44	-14.37	406.55	453.58
10	Satara	49.83	68.59	37.64	101.54	48.05
11	Wai	52.87	46.24	-12.54	95.00	105.44
	Satara District	37.11	38.21	2.95	94.33	146.87

Source: Socio economic Abstract of Satara District 1991,2001 and 2011.

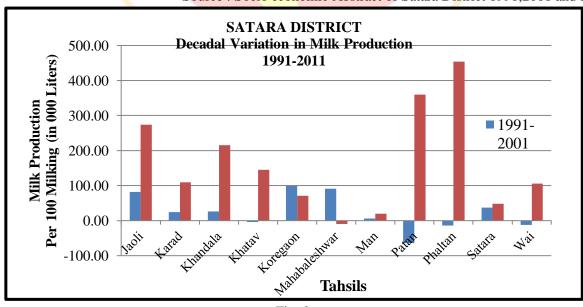


Fig. 2

2. Area of Moderate Milk Production

This group is represents the production of milk is 30 to 60 thousand liters per 100 milking animals. In 1991, Man, Koregaon, Satars, Wai and Khandala tahsils are observed in this group. In 2001, Man and

Wai tahsils are still remain but Mahabaleshwar tahsil is being newly added and Khandala, Koregaon and Satara tahsils are left from this group due to increase in milk production. In 2011, Man and Mahabalwshwar are still remaining but Patan and Karad are newly added in this group and Wai is left due to increasing milk production. Man tahsil is permanently observed in this group for all three time study period. The production of milk in Man tahsil is shows increasing trend but it have slight change is observed between 39.60 to 50.18 thousand liters per 100 milking animals during 1991 to 2011.

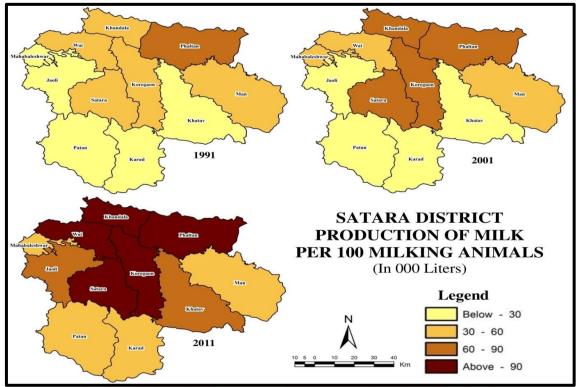


Fig. 3

3. Area of High Milk Production

This group represents the production of milk is 60 to 90 thousand liters per 100 milking animals. In 1991, only Phaltan tehsil is observed in this group but in 2001 number of tahsils in this group is increased on four, includes Khandala, Koregaon and Satara other than Phaltan tehsil. These tahsils are newly added in this group due to increase in their milk production. In 2011, these all tahsils are left and Khatav and Jaoli tahsils are being newly added in this group due to increasing its milk production.

4. Area of Very High Milk Production

In this group tahsils which have above 90 thousand liters production per 100 milking animals are observed. In 1991 and 2001 no any tehsil is recorded in this group but in 2011, total five tahsils namely Wai, Khandala, Phaltan, Koregaon and Satara tahsils are observed in this group. Phaltan tahsil have highest positive change (406.55 per cent) during 2001-2011, because of availability of market of Pune city and development of milk industries in this tahsil, farmers are attracted to the milk production.

Decadal Change In Milk Production

In the first decade of study period decadal change of milk production in overall district is low (2.95 per cent). It has been also observed that, in Khatav, Patan, Phaltan and Wai tahsils have negative growth of milk production in 1991-2001 and Man tahsil have positive growth but the ratio is very low (5.75 per cent) in relation to other tahsils because of the scarcity of fodder due to low rainfall and drought in Khatav, Man and Phaltan tahsil. Patan and Wai tahsils have good rainfall but due to hilly area, undulation topographic features and unawareness about commercial milk production in the farmers production of milk shows negative change. This situation is also found in other tahsils have positive change in the district.

In 2001-2011, all tahsils have drastic change in milk production and shows positive change except Mahabaleshwar tahsil (-9.15 per cent). Because of hilly topographic features, high rainfall, high forest area and low availability of cultivation land and also fodder. This critical geographical condition is not suitable for cross breed cattle. One more thing is, tourism industry is developed in this decade and most of the population is engaged in this industry being main economic activity. In this decade over all district have positive (146.87 per cent) change in milk production.

Conclusion

From the above said description it has been concluded that, the production of milk is continuously increases in all tahsils during the study period but the amount is observed more or less in proportion. Tahsils situated in the western part of the district mainly Mahabaleshwar, Jaoli and Patan have relatively low to moderate production. Because, these tahsils have undulation geomorphic topography, high rainfall, forest area and low production of fodder, this critical condition is not suitable for crossbreed cattle which are purposefully ranching for milk production. In this area proportion of local milking animals like local cattle and buffalo are available. In Man and Khatav tehsil, production is relatively slow due to the drought prone climatic condition and scarcity of water. In these tahsil, due to low rainfall, production of fodder is low and to purchase the fodder from other area is not affordability thing to all farmers, even so the relatively plain topographic surface and medium deep black fertile soil, due to the above unfavorable condition farmers could not provide sufficient fodder to their animals, that's why production of milk in these tahsil is also relatively low. In Karad tehsil all conditions are suitable for animal herding but the ratio of fodder production is low, because farmers prefer to sugarcane production as a cash crop. They can be able to purchase organic fertilizer from the other areas which is essential to maintain the fertility of their farm. So milk production in this tahsil is low.

Phaltan tahsil also have climatic condition as like Man and Khatav, but due to availability of canal irrigation in this tahsil production of fodder is good in proportion. In Phaltan tehsil Milk processing industries are developed in 2001-2011, so farmers have good opportunity to enhance to increase their economic condition from this occupation. So this tehsil is permanently observed in high to very high milk production area. Wai, Koregaon and Khandala tahsils have urban market center of Satara for their milk and also they are beneficiary of milk industries in Phaltan tahsi. So production in these tehsil is observed relatively more than low milk producing tahsils. Farmers in Satara tehsil have a good urban market for their milk so farmers give preference to milk production of specially buffalos.

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GPI of Scheduled Tribes in India

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Abstract:

Since last two decades, importance of inclusive growth is increased in the field of socio economic environment at every level of governance. Social inclusion is depends on various factors but out of them level of education and employment is prior because it is directly related to purchasing power and finally level of satisfaction of any society. This paper presents macro view of education level, gross enrollment in different level of education and gender parity index of Indian scheduled tribes. Gender parity index indicates potential of human capital base of a community. The analysis is made comparatively and connected it with their aggregate socio economic development. Key words: Gross enrollment, GPI, socio-economic development, inclusive growth

1. Introduction:

Success of socially inclusive growth of any region or nation is depends on development of marginalized section. Scheduled tribes are locally known as 'Adiwasi'. The term ST- scheduled Tribes is first appeared in the Constitute of India. The definition of scheduled tribes is given in article 366(25) as "Such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under article 342 to be scheduled tribes for the purpose of this constitution." Article 342 prescribes procedure to be followed in the matter of specification of scheduled tribes. In India, tribal communities are varied in their socio economic development. There are many policies are made and implemented for this community but only small portion or say number of tribal people have been benefited by the policies and programmes meant for specially this community. This shows an imbalanced progress and uneven process of change and development in their occupational structure and their standard of livings.

The term workforce is also called as labour force which indicates total supply of labour or worker in the economy at a particular period of time either they are employed or unemployed. The socioeconomic development of any community is depends on favorable change in structure of occupation or workforce engaged in more productive sector. This situation is related with level of education. There is close and direct relationship between education, workforce engagement and socioeconomic development. Well designed and successfully implemented education policy, skilled human capital and required adequate training facility develops workforce so that they obtain job on one side and creates favorable environment for sustainable economic progress ultimately.

Gender Parity Index:

GPI that is Gender parity index is an indicator which indicates relative access to education of male and females. This index is released by United Nations Educational, Scientific and Cultural Organization i.e. UNESCO. It is measured by using quotient of the number of females by the number of males enrolled in given stage of education. The stages of education are primary education, secondary education, higher secondary education and higher education. GPI value equal to one indicates that there is equality between male and female. If the numeric value of GPI is less than one then it indicates that females are away from educational opportunities and if the GPI is more than one then it indicates that it is in favors in female than the male.

2. Objectives:

- 1. To know education status of ST in India
- 2. To understand GPI of ST in India.

3. Research Methodology:

The approach of the paper is descriptive and exploratory. The information and data is collected from secondary sources.

4. Review of Literature

Motkuri, Venkatanarayana in his research paper 'Stagnant Structure of Workforce among Scheduled Tribes (STs) in Andhra Pradesh: A Macro View' published in MPRA has analyzed the changes in the structure of the workforce of Scheduled Tribes in Andhra Pradesh its impact in the inclusive growth perspective. He has find out that although there has been progress on many development indicators in the Scheduled Tribe community in the state Andhra Pradesh, the said community still lagged behind the 'other' social groups. Slow progress in expected change in structure of employment towards secondary and tertiary sector or non-agriculture in general and stagnation among Scheduled Tribes for a long time is a cause of concern.

Mohanty Abhijit in his article 'Education for tribals: Bottlenecks and the way Forward' published in 'DownToEarth' has explained about tribal culture their languages, cognitive strength and inherent learning capacity of children's and find out that there is need of strategic discourse between different level of governance for tribal education. He also suggested that policy framers need to focus on a long term strategy to enhance educational status of tribal children's.

The TATA trusts have been working to improve systems and infrastructure by partnering with governments bodies. The Tata Institute of Social Sciences reviewed tribal residential schools in 2019 and point out that the schools were distant from nearby villages, leading to the isolation of students and an increased apathy of school management and teachers towards the students' welfare. Number of the schools are facing problems of basic infrastructure. By setting some important and needy goals the trust is working on it.

Daripa Shamal Kumar has published a research paper on 'Tribal Education in India: Government Initiative and Challenges' and elucidate educational status of ST with different schemes up to 201. He find out that since the attainment of independence, government of India has taken several initiatives, schemes and programmes and allotted funds to different plans to spread education among the tribes. He also suggested that to take help of various NGOs and local media to create awareness among the tribes about importance of education and initiatives of government.

Some of these earlier studies focused on efforts made by government on spared of education among the tribes and analyzed it statistically. The present research paper is spotlighting on gender based enrollment of tribes and their relevance.

5. Scheduled Tribes in India

The Tribal communities have social and cultural importance in India. There are near about 550 communities comes under tribes. A **tribe** is a social division in a traditional society consisting of families linked by social, economical and religious ties, with a common culture. These communities possesses certain qualities and characteristics that make it a unique cultural with social and political entity.

In 1951, the number of scheduled tribes in India was 5.6 percent of total population. As per 2001 Census, it was 8.2% of the total population of India. Census data 2011 shows that the number of scheduled tribes in India is 10,42,81,034. It is 8.6 percent of the total population of India.

Table No. 1 Literacy rate in Scheduled Tribes							
		1961	1971	1981	1991	2001	2011
Year							
Total	All India	28.3	34.45	43.57	52.21	64.84	73
	ST	8.53	11.3	16.35	29.6	47.1	59
Male	All India	40.4	45.96	56.38	64.13	75.26	80.9

	ST	13.83	17.63	24.52	40.65	59.17	68.5	
Female	All India	15.35	21.97	29.76	39.29	53.67	64.6	
	ST	3.16	4.85	8.04	18.19	34.76	49.4	
C								

Source: Office of the Registrar General, India

Since last sixty years, overall literacy rate of India has increased. In case of scheduled tribes the literacy rate was just 8.53 percent in 1961 and in the year 2011 it seems 59 percent of total ST population but it is less than general literacy rate. The male literacy rate of scheduled tribes is also increased from 13.83 percent in 1961 to 68.5 percent in 2011 and it is also comparatively low. In side of tribal women literacy the condition was poor in 1961 and rate was just only 3.16 percent and it takes favorable change and the ratio is 49.4 percent.

Gender Parity Index (GPI):

The Gender Parity Score indicates women's enrollment or success to acquire education at different level of education. The key advantage of the Gender Parity Index is that it enables comparisons to be made over time and among region or communities on the basis of gender.

Table 2 : Gender Parity Index (GPI) for Scheduled Tribe							
Year Secondary (IX-X)		Senior Secondary (XI-XII)	Higher Education				
2013-14	1.00	0.93	0.81				
2014-15	1.01	0.95	0.81				
2015-16	1.02	0.97	0.83				
2016-17	NA	NA	0.85				

NA: Not available

Data Source:

For School Education: U-DISE), NUEPA

For Higher Education: AISHE Reports, MHRD

On the basis of information collected by Unified- District Information System for Education (U-DISE), NUEPA for school level education and the data available with All India Survey on Higher Education (AISHE), MHRD related to higher education gender parity index is calculated. The table no. 2 shows that since 2013-14 Gender Parity Index of Scheduled tribe in India at school level is more than 01 it indicates that the enrollment of female is more than male at this level. In case of senior secondary level of education the score is always more than 0.90 and it is also somehow favor in female. Index related to higher education indicates that there is need to made efforts for providing opportunities to tribal women's for higher education. The data series indicates inconsistency of women education in tribes. In the year 2013-14 STs GPI at secondary level of education is 1.00 and in the next phase of same enrolled candidates GPI is 0.95 and 0.97 for the year 2015-16 and 2016-17 respectively. This gap indicates female dropout at the level and the dropout rate is increased at higher level of education because it is comes to score 0.85 on the year 2016-17.

Basically tribes are located in hilly area and most of the communities are changing their locations as per their occupation it impacts on the education status of this community in general and on female's education in particular. The factors which reduce school enrollment and drop out in ST community and the GPI less than 1 are illiterate parents, lack of awareness, Poor physical facilities, expensive schooling, lack of teaching staff and punitive practices etc.

To increase enrollment of tribes on all levels of education as well as to sustain GPI up to higher level there is need to provide physical and academic facilities to tribe located educational institutes on one

side and on another side efforts to be made on government level as well as with the help of NGOs for to create awareness and provide scholarship like financial facilities. Now it is phase that higher education should provide placements related facilities and active in placement drive so that these newly higher educated employed tribes will be an ideals for their community and they can understand the importance of education with gender neutrality.

Conclusion:

Social development and standard of living of any community is depends on economic condition of the members of that society. There is strong relationship between the education level and employment opportunities. Inclusive growth is possible if it is based on equal opportunities. GPI of scheduled tribes indicates that there is need of strategic plan for creating equality in education so that it helps to create favorable environment for inclusive growth and socioeconomic upliftment of tribes in India

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To Study Prize and Seasonalvariation Of Onion Commodity for Financial **Security of Farmers and Consumers**

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Abstract

In this Paper, we use correlation, regression and Time series analysis of onion commodity, Also the data on consumer prices are collected from personal markets which are available for consumers. This data collected by direct interview of dealer and consumer's. They have given the information and can be divided into the range. The information collected from Jan2006 to Dec 2010. Our data gives in average values. The quantities are given in quintal and price in rupees.

Key Words:- correlation, regression and Time series analysis.

1 Introduction

India being an agricultural country, with 80% of the country comprising of villages, the major part of the National Income is from the agricultural sector. Today, India stands worldwide second ranks in farm output. Agriculture and allied sectors like forestry and logging accounted for 16.6% of the GDP in 2007, employed 52 % of the total workforce and despite a steady decline of its share in the GDP, is still the largest economic sector and plays a significant role in the overall socio-economic development of India. Agriculture in India is one of the most prominent sectors in its economy.

We see from last few months, dearness increases rapidly but this is not useful anybody like farmers, consumers. Dearness is increased but on other hand agricultural production is reduced, it has lots of reasons. The most famous cause is draught and irregular rainfall. Therefore farmers should not get the net benefit of their agricultural products. There is difference in prices received by farmer and consumers. If farmer should not get the net benefit of their goods, so someone suicide.

We all are from rural area and farmer family. In Maharashtra the onion is the important agricultural product. The aim of this research paper is to studied price variation and productions of Onion which helps to N 2349-6381 farmers and consumers.

2. Methodology

The data required for this project are collected from 'Krushi Utpanna Bajar Samiti, mostly onion is collected. We have collected secondary data from this centre on agricultural product Satara. This centre is older established centre. There are many centers of such kind in Maharashtra State. In these centre different types of agricultural product collected, but information about this product is recorded from register of the centre. We have classified and tabulated these data appear our requirements of projects the data collected from 2006-2010 month wise.

Also the data on consumer prices are collected from personal markets which are available for consumers. This data collected by direct interview of dealer and consumer's. They have given the information and can be divided into the range. The information collected from Jan2010 to Dec 2010. Our data gives in average values. The quantities are given in quintal and price in rupees.

3. Statistical Analysis

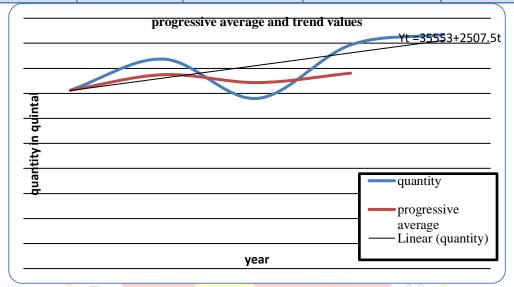
3.1 TIME SERIES ANALYSIS AND FORECASTING FOR ONION:-

In this paper, we have studied time series analysis, graphical representation and forecasting the quantity and price of onion for the year 2010.

3.1.1 for quantity:- Total quantities of onion are recorder from register for the years 2006 to 2010. This is given in the following table.

Table no.4.1.1.1Progressive average and trend values for onion Following graph shows quantity, progressive average and trend values (linear quantity) of onion:

year	Quantity	Progressive total	Progressive average	Trend value
2006	35620	35620	35620	35553
2007	41835	77455	38727.5	38060.5
2008	33979	111434	37144.66667	40568
2009	44662	156096	39024	43075.5
2010	46744	200758	40151.6	45583



Required equation of trend line Yt =35553+2507.5t

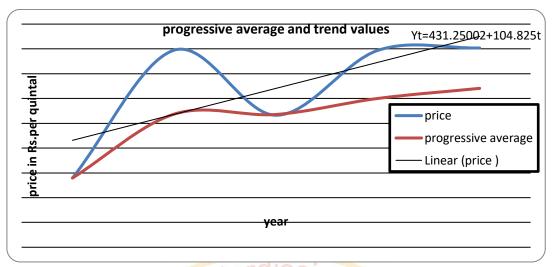
3.1.2. for price:-

Average prices of onion are recorded from register for the years 2006 to 2010. This is given in the following table.

Table no. 4.1.2. 1 Progressive average and trend values for onion:-

Year	Price	Progressive total	Progressive average	Prend values
2006	279.1667	279.1667 279.1667		431.25002
2007	795	1074.1667	537.08335	536.07502
2008	532.5	1606.6667	535.5555667	640.90002
2009	2009 794.0833 2400.75		600.1875	745.72502
2010	2010 803.75 3204.5		640.9	850.55002

Following graph shows price, progressive average and trend values (linear price) of onion:-



Required equation of trend line Yt=431.25002+104.825t

4.2 TIME SERIES AND SEASONAL VARIATION FOR ONION:-

In this unit we have studied seasonal variation of quantity and price of onion.

3.2.1 for quantity:-

We have recorded quantity of onion month wise from the years 2006 to 2010 and its seasonal indices are given in following table.

Tuble no. 4.2.1.15easonal maters for quantity of onton							
Month	2006	2007	2008	2009	2010	Seasonal	Adjusted seasonal
	9	2				indices(arithmetic	indices=seasonal
	ii i	S				average)	indices*C.F.
Jan		81.940788	132.12	113.607	147.343	118.7528	120.1669
Feb	Ā	228.75793	133.111	117.721	120.1231	149.928243	151.7135
Mar		209.61883	140.602	187.901	138.2463	169.091926	171.1054
Apr		107.04211	167.988	130.498	126.431	132.989921	134.5735
May		106.33417	103.483	116.944	104.6223	107.845831	109.13
Jun		67.544599	12.1084	98.4586	88.86542	66.7442688	67.53903
Jul	51.622	39.019355	86.983	60.857		59.6202173	60.33015
Aug	43.023	57.860975	51.1087	70.7534	210-63	55.6865497	56.34964
Sep	44.08	85.232444	35.2431	55.3354		54.9726152	55.62721
Oct	63.99	84.513595	71.0295	78.428		74.4903121	75.37731
Nov	77.759	113.56641	107.423	88.9981		96.9368045	98.09109
Dec	90.109	107.21857	92.3992	105.552	OUTTO	98.819537	99.99624
Total						1185.87903	

Table no. 4.2.1.1Seasonal indices for quantity of onion

Correction factor:-C.F.=(1200/1185.87903) =1.0119076

3.2.2 for price:-

We have recorded average prices of onion month wise from the years 2016 to 2020 and its seasonal indices are given in following table.

Table no. 4..2.2.1 Seasonal indices for prices of onion

month	2006	2007	2008	2009	2010	seasonal indices(arithmetic average)	adjusted seasonal indices=seasonal indices*C.F.
Jan		127.1764	47.3338	133.015	116.831	106.088955	109.6234

Feb		118.4211	41.1215	123.698	67.82545	87.7664125	90.69042
Mar		77.19298	51.0638	79.0786	63.65297	67.747085	70.00413
Apr		65.82556	54.1806	63.7	61.89112	61.399325	63.44489
May		65.82278	60.7595	76.6317	69.48775	68.1754225	70.44674
Jun		150.3916	67.9612	117.852	73.96387	102.542035	105.9583
Jul	84.746	128.6863	125.942	82.8113		105.54645	109.0628
Aug	78.294	203.5048	150.5	84.6141		129.228203	133.5335
Sep	81.54	136.5738	134.874	82.9471		108.983675	112.6145
Oct	78.481	114.4954	84.2105	155.701		108.221985	111.8275
Nov	92.49	98.11321	104.348	132.964		106.978783	110.5429
Dec	104.71	69.58867	114.049	146.177		108.631743	112.2509
	Total						

Correction factor:-C.F.=(1200/1161.31007) =1.03331576

4 Concluding Remarks-

The comment on seasonal variation-

- 1. Seasonal indices for the month April is small as compare to other month's .Hence, the price of onion in April is small as compare to other months.
- 2. A seasonal index for the month august is large as compare to other months. Hence, the price of onion in august is large as compare to other months.
- 3. After June the seasonal indices are increases up to January after January seasonal indices decreases. Hence the price of onion in month's June to January is large but in months February to May is small.

The comment on prize variation-

- 1. From graph, there is initially increased trend of price of onion after year 2007 this trend decreased up to 2008, again rapidly increased price after 2008.
- 2. To reduce fluctuations, we further fit a straight line to progressive averages and forecast the trend value for the year 2011. Forecasting value for the year 2011 is 955.375 On an average. That is the average price of onion for the year is Rs.955.375 per quintal. (Production) of onion in month September is small as compare to other months.

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Role of Values and Ethics in Higher Education

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Abstract:

The quality of higher education is the most crucial factor for deciding the future of any country and necessitates utmost attention and constant assessment to foresee prospective outcomes, especially in a developing nation like India. Values and ethics are eternal and important for the survival of human beings. Educational institutions must be built on pillars of strong value systems and ethical practices to mentor and develop individuals of high character through value-based holistic education.

The National Education Policy (NEP) 2020 has imbibed values and ethics in its principles and various provisions. One of the fundamental principles of NEP 2020 clearly mentions the integration of ethics, and human and constitutional values such as empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice" in educational systems. It aims at developing traditional Indian values and all basic human and constitutional values among students for ethical decision making. Environment education and respect for the environment have been given due importance in the value inculcation process. It also emphasizes that the curriculum must include values for building character and enabling learners to be ethical, rational, compassionate, and caring. Realizing the role of teachers in education, it reinforces that the teachers must be deeply grounded in values, knowledge and ethos, as they are the crafts persons who will nurture the younger generation for the future.

Institutions of higher education play an integral part in social and economic development of any nation by preparing young minds to accept different responsibilities. They not only provide required knowledge and skills for career, but also provide for holistic development of individuals. Pillay (2013) opines, "Education, in addition to being an entitlement, is instrumental in promoting development, social justice and other human rights.... and encourages a spirit of common and shared responsibility for our planet and for humanity. The values imparted through education are perhaps its most important product." Aristotle has rightly said, "Educating the mind without educating the heart is no education at all." The highest education is that which does not merely give us information, but makes our life in harmony with all existence. Formation of character in youth is one of the primary purposes of any University. In this perspective the Founder of Banaras Hindu University, Mahamanav Pandit Madan Mohan Malviya Ji said, "A teaching university would but half perform its function if it does not seek to develop the heart-power of its scholars with the same solicitude with which it develops their brain-power.... the university would seek not merely to turn out men as engineers, scientists, doctors, merchants, theologists, but also as men of high character, probity and honour, whose conduct through life would show that they bear the hallmark of a great university." Value-based holistic education has to be the prime goal of HEIs.

Framework For Values And Ethics For Quality Higher Education

In view of emerging challenges in higher education there is a need to ensure integration of value orientation and ethical practices in all round activities performed within any institution of higher education. It is only through a strong foundation of value- and ethics-based culture of performance that any educational institution can achieve its purpose of existence.

Strategic Focus:

Quality higher education must focus on five critical dimensions: Integrity, Transparency, Accountability, Competency, and Participation.

Integrity: The first and foremost requirement is of Educational or Academic Integrity. Every individual must reflect values of integrity in his or her area of performance in the institution. Bretag (2013) describes academic integrity, according to the International Centre for Academic Integrity (ICAI), which encompasses the five values: honesty, trust, respect, fairness, and responsibility. It has to ensure that research, teaching, and learning are conducted honestly and fairly by faculty, staff, and students alike. It is equally important that people involved at all the levels in the educational system must reflect the highest level of integrity in areas of their performance. The Integrity Pledge introduced by Transparency International can also be effectively used to ensure educational integrity.

Transparency: It is widely reported that transparency is one of the most effective weapons in fighting fraud and corruption. High financial stakes in the form of grants and other means of financial resources mobilization is a major reason for corruption in higher education.

Accountability: : Hallak and Poisson (2007) suggest, "Creating and maintaining transparent regulatory systems, strengthening management capacities for greater accountability and enhancing ownership of the management process can help build a virtuous triangle that is favourable to educational system free from corruption." It is important to carry out the job as defined and specified for a particular purpose. Who is responsible for doing what, when, where, how, and for whom, needs to be clearly spelt out in policy, rules, procedures, or any other code of conduct. Compliance to such specified practices has to be carefully monitored to identify a person responsible for any lapses in performance.

Participation: Greater participation of all the stakeholders at various levels in the institutions of higher education can build trust and confidence in the educational systems. Since quality is the responsibility of everyone in the institutions, it calls for empowering individuals to have greater say in decision making. Involvement of faculty, students, and staff in different decision-making bodies will enhance access to information and reduce the risk of corruption in the system. Zaman (2013) reports, "The Integrity Pledge is a micro-level social accountability tool built on the premise that ensuring people's participation in planning, budgeting, implementation and monitoring the process of service delivery can significantly reduce corruption at all stages." It can be effectively used in HEIs.

Competency: Every individual responsible for a specific task must possess the required level of competency in terms of knowledge, skills, and expertise in the desired area of performance. Incompetency breeds corruption. Competent people do not resort to shortcuts for performing their tasks and achieving results. They exude self-confidence and develop self-respect, which further prevents them to resort to any unethical measures. Institutions must not only recruit the best talent but also provide opportunities for regular upgradation and for developing core competencies.

Strategic Elements:

The key elements for developing the strategic framework include: People (Academic and administrative staff and students, among others), Governance, Technology, and Regulatory Bodies.

People: They are the key elements responsible for knowledge creation, advancement and dissemination, and quality higher education. Personal integrity and competence are the essential requirement for each individual involved in higher education. People should be strong in both values and competencies. Teachers, students, staff, and people involved in administrative processes must reflect the highest standards of ethical practices in all their endeavours.

Governance: Quality higher education calls for well-defined, robust, and transparent systems, process, and practices for educational institutions. Welldefined organizational hierarchies, lines of interaction, policies, rules, legal or statutory requirements, procedures and other details help in increasing transparency and accountability. Institutions must evolve to reflect good governance practices.

Technology: Use of technology can help immensely to ensure quality in higher education. Information Communication Technology (ICT) enables ease of access to information and contributes to enhancing transparency in the process. Institutional websites, Educational Management Information Systems, social media, and mobile applications are very effective tools for the implementation and monitoring of

educational activities. Judicious use of advancements in technology will continue to enhance quality in higher education.

Regulatory Bodies: Public and private, international and national regulatory bodies such as UNESCO, OECD, Transparency International, Quality Assurance Agencies of different countries, Ministries of Education, University Grants Commissions, and other agencies will continue to play a key role in the planning, and implementation and control of quality in Higher Education. They act as guardians for the adoption of value-oriented ethical practices in the educational processes and systems.

Strategic Implementation:

Effective implementation will require preparing institutions for value orientation and ethical practices in higher education. All the strategic elements need to be intelligently woven in the action plans. It also calls for undertaking a series of measures which would include: Defining value-based vision and mission statements of the institution; promoting a culture of value orientation and ethical activities in all areas of performance; developing and adhering to value policy and code of conduct for students, teachers and staff; integrity pledge; establishing centres for values and ethics for education, promotion, and training for the integration of values and ethics in teaching, research and governance; sensitization for sustainable development activities; value audits; and developing networks for sharing of practices. Implementing these measures demands strong leadership and committed efforts. Effective leadership will be able to integrate each element of the educational system for achieving the goals of higher education.

Promotion Of Values And Ethical Practices By (Ugc):

As an apex body and key regulator of higher education in India, UGC plays a vital role in promoting values and ethical practices through a series of initiatives aimed at all the important stakeholders. In order to inculcate values and ethical practices among the students certain specific programmes are available

Deeksharambh (UGC 2019b), a student-induction programme, which includes mentoring sessions on universal human values.

Jeevan Kaushal Imparting Life Skills to Students (UGC 2019e), an exclusive course on Life Skills, has been designed, which has modules on human values encompassing truth, love, compassion, peace, non-violence, righteousness, service, and renunciation.

Guru Dakshata (UGC 2019d), to engage the faculty members in this mission, this Faculty Induction Programme includes modules on academic integrity, universal values and professional ethics, constitutional values, human rights and fundamental duties, environmental consciousness and sustainable development goals.

CARE — Consortium for Academic Research and Ethics (UGC 2019a)

Mulya Pravah (UGC 2019f): As a big leap towards creating a culture, systems, and processes of values and ethical practices, UGC has brought out a policy document. It is major step towards providing a guiding framework with required details and methodology for the inculcation of human values and professional ethics in higher education. It suggests core values such as: integrity, trusteeship, harmony, accountability, inclusiveness, commitment, respectfulness, belongingness, and sustainability, to be adopted by all in the HEIs.

SWAYAM — Study Webs of Active-Learning for Young Aspiring Minds: Our list of MOOC platforms developed and used in India will remain incomplete if we do not mention SWAYAM, a platform launched in 2016 by MHRD. For running SWAYAM courses an independent platform was developed in collaboration with Microsoft. It was launched with the objective of combining on-line and off-line education. It's declared goal is to develop, launch, and run 2000 open on-line courses. These are all meant as credit courses and SWAYAM courses allow the transfer of credits between institutions. It has been decided by UGC that an academic institute in India would be allowed to offer up to 20 per cent of its syllabus adopted for a particular programme via SWAYAM.

Social and Industry Connect: University social responsibility The crucial goal of any education institution of higher learning is to create skilled, highly sought-after, globally competent professionals. To prepare its

graduates for immediate employment HEIs must fulfill the expectations of industry and prepare employable and skilled graduates. It is vital for an HEI is to intensify university-industry interaction to identify the core knowledge and skills that graduates need to enhance their employability. Laboratories and research facilities in HEIs have to be strengthened and faculty have to take up innovative R&D-related to social needs to create an entrepreneurial ecosystem in the campuses.

Conclusion:

With the growing importance of education for a better planet and life, it becomes imperative to ensure value orientation and ethical practices in achieving quality higher education. Reforms are required to fight with the evils of corruption and frauds in educational systems. We have to recognize and face the challenges in higher education and ensure value-based knowledge creation, advancement, and dissemination. It places greater emphasis on sharpening our focus on integrity, transparency, accountability, competency, and participation in our quality orientation efforts. We need to formulate a well-crafted strategy involving people, governance, technology and regulatory body to achieve the goals of higher education. Inclusion of "Values and Ethical Practices", in the core ideology and fabric of HEIs will definitely provide a strong momentum to quality initiatives and good governance, bodies and networks will have to adopt a much wider role in sharing their wisdom and practices for evolving value-based ethical practices for quality higher education.

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Florestic Diversity of Monocot Plants of Chamorshi Tahsil

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Abstact

Florestic investigation of some monocotyledones plants from Chamorshi Tahsil done during 2019-120 to collect, identify and record this plants. A total 59 plants are explore from 53 genera and 19 families. Dominant families were Poaceae (16), Cyperaceae(8), commelinaceae(5) followed by Araceae, Asperagaceae, Hydrocharitaceae. Most of monocotyledons plants are wetland hydrophytes, some are hydrophytes and few are moderat land plants. Keywords: Florestic, Monocotyledones, Chamorshi Tahsil

Introduction

Chamorshi is tahisil in Gadchiroli district. It is situated between 19°52' 1.9920" North latitude, 80°.0' 1.4004"East longitude. It is famous for ancient historic temple "Markandeshwar" at Markanda. It is rich in variety of resources and forest wealth. Florestic diversity is necessary to maintain balance ecosystem. Major threats to ecosystems and biodiversity are habitat loss and fragmentation, overexploitation, poiiution, invasions of alien species and global climate change (2003). Floristic diversity can be measured at any level from overall global diversity to ecosystem, community up to species level. Occurrence of some obnoxious grasses [Bor N.L.1960] was also observed. The present study deals with the floristic diversity of monocot plants of Chamorshi Tahsil of Gadchiroli district.

Earlier Work

As per as Chamorshi tahsil is conserned ,practically the tahsil is unexplored till today. Haines (1916) however, did make to a few shrub and trees of tahsil in the book "Discribtive list of trees, shrubs and economic herbs of the southern circle, central province and Berar". A few more plants have however been reported by Tiwari and Maheshwari (1964). Malhotra and Moorthy (1971-1974, 1981), Jagtap and Mukherjee (2013) explore some of the plant of this region.

Marerials and methods

An extensive field visit in all seasons during 2019-20. Collection of plants from different area of Chamorshi Tahsil. Data was collected using standard procedures (Jain 1989) Identification done with Flora (Sharma et al 1996, Singh 2000, Ugemuge 1986)

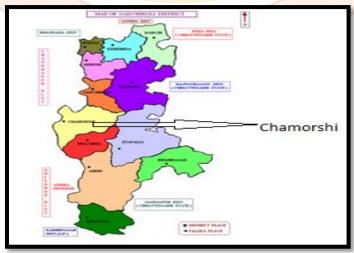


Fig:1.Map of gadchiroli showing study area

Result

In the present study there are 59 species of monocot plant belonging to 53 genera and 19 families have been identified. Poaceae is major dominant family followed by Cyperaceae, Commelinaceae, Araceae, Asperagaceae, Hydrocharitaceae. All species of poacea and Cyperaceae having wet land growth form and hydrocharitaceae family species are hydrophytes (Table-1).

Discussion

Rathod (2014) reported where Poaceae was reported dominant family according to species number from Sangamner Tahsil of Ahemednagar District.

M.Bhaumik (2014) in his studies on an account of Monocotyledonous plants from Dihang Dibang Biosphere Reserve, Arunachal Pradesh, India. The dominant families by number of genera are represented by Poaceae (55 genera), Cyperaceae (14 genera), Commelinaceae (9) and Zizgiberaceae(9 genera), Araceae (8 genera); similar results for dominance of family found in present study.

Conclusion

Chamorshi tahsil Bless with rich floral diversity. Most of the wetland plants are from poacea and Cyperaceae family and Hydrophytes are from Hydrocharitaceae. Total 19 families plants are expore which are useful to maintain biodiversity

Table 1.List of Monocotyledonous plant from Chamorshi Tahsil

Sr.No.	Name of Plant	Family
1	Agave cantala(Haw.)Roxb.	Asparagaceae
2	Aloe vera L.(Burm.)	Xanthorrhoeaceae
3	Alloteropsis cimicina C.Pres	Poaceae
4	Aptuda mutica L.	Poaceae
5	Arachne racemosa Wright & Arn.	Poaceae
6	Aristida funiculate L.	Poaceae
7	Amorphophallus commutatus Engi	Araceae
8	Amorphophallus sylvaticus(Roxb.)Kunth.	Araceae
9	Anthraxon hispidus Thunb	Poaceae
10	Asparagus racemosus Willd	Asparagac <mark>e</mark> ae
11	Bambusa glaucescens(Willd.)Sied.ex Munro	Poaceae
12	Borassus flabellifer L.	Arecaceae
13	Butomopsis latifolia(D.Don)Kunth.	Butomaceae
14	Canna indica L.	Cannaceae
15	Chlorophytum tuberosum Baker	Asparagaceae
16	Choris barbata Sw.	Poaceae
17	Colocasia esculenta L.	Araceae
18	Cocas nucifera L.	Arecaceae
19	Commelina benghalensis L.	Commelinaceae
20	Commelina diffusa Burm.F.	Commelinaceae
21	Commelina erecta L.	Commelinaceae
22	Costus speciosus Sm.	Zinziberaceae
23	Crinum viviparum(Lam.)R.Ansari	Amaryllidaceae
24	Curcuma pseudomontana Grahm.	Zinziberaceae
25	Cyperus rotundus L.	Cyperaceae
26	Cynodon doctylon L.	Poaceae
27	Cynotis cristata L.D.don	Commelinaceae
28	Cynotis fasciculate Heyne ex Roth.	Commelinaceae
29	Diascorea alata L.	Dioscoreaceae

	= :	
30	Diascorea bulbifera L.	Dioscoreaceae
31	Eleocharis acutangula(Roxb.)J.A.Schult.	Cyperaceae
32	Eleocharis atropurpurea(Retz.)J.K.Presl.	Cyperaceae
33	Fimbristylis dichotoma L.(Vahl.)	Cyperaceae
34	Gloriosa superb L.	Colchicaceae
35	Heteropogon contortus L.	Poaceae
36	Hydrilla verticillata (L.F.)Royal	Hydrocharitaceae
37	Iphigenia indica L.	Colchicaceae
38	Juncellus alopecuroides(Rottb.)C.B.Cl.	Cyperaceae
39	Kyllinga bulbosa Rottb.	Cyperaceae
40	Lagerosiphon alternifolia(Roxb.)Druce.	Hydrocharitaceae
41	Leersia hexandra Swatz.	Poaceae
42	Lemna perpusilla Torr.	Lemnaceae
43	Musa paradisiacal L.	Musaceae
44	Oryza rufipogon Griff.	Poaceae
45	Paspalum vaginatum Swart.	Poaceae
46	Pennesetum purpure <mark>um Schum.Beskr.</mark>	Poaceae
47	Polianthes tuberose L.	Asparagaceae
48	Phoenix sylvestris L.	Arecaceae
49	Pseudoraphis spinescens(R.Br.)Vickery	Poaceae
50	Rhynchospora wightiana(Willd) Stapf.	Cyperaceae
51	Sacciolepis interrupta(Willd)Stapf.	Poaceae
52	Schoenoplectus articulates L.Palla.	Cyperaceae
53	Sporobolus subtilus R.Br.	Poaceae
54	Typha anguistifolia L.	Typhaceae
55	Vallisneria spiralis L.	Hydrocharitaceae
56	Vanda tessellata(Roxb.)Hook	Orchidaceae
57	Vanda testacea Reich.f.	Orchidaceae
58	Zannichellia palustris L.	Zannichelliaceae
59	Zinziber cernuum Dalz.	Zinziberaceae

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Soybean Cultivation in Maharashtra: A Study on Constraints Faced by The Farmer

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Abstract

Soybean is viewed as exceptionally nutritive yield. Moreover it has high yield potential. Soybean is known as the 'Golden bean' and 'marvel crop' due to its several uses. It is an excellent source of protein and oil. It contains about 43% of good quality protein, 21% carbohydrates, 5% minerals, 8% moisture, 20% fat, 4% fiber and reasonable amounts of vitamins. In Maharashtra, soybean is cultivated on a space of 3.8 M ha with making of 3.07 m ton with second position in India. Regardless, low proficiency of the yield remains a critical issue of soybean improvement, requiring the need to find the issues looked by soybean growers. A study was conducted in the 20 villages of five districts of western Maharashtra. A survey method using personal interview of 100 farmers and focused group discussion with villagers, were used for data collection during the year 2019-20. Study found that five major problems which are faced by farmers are - labor problems, irrigation facilities, weed management, marketing of produce, pest and disease management. Shortage of labor and higher wages during peak period (95%) was major labor related constraints faced by farmers. In irrigation, farmers reported lack of irrigation facilities (81%) as major constraints in soybean cultivation. Proper farm mechanization, water conservation measures, short duration drought resistant varieties of soybean, timely supply of institutional credits and training to farmers on improved cultivation practices are significant proposed measures to conquer the limitations looked by these farmers, for reasonable and beneficial soybean production.

Key words: Improved cultivation, Nutrients, disease management, Production constraints, Soybean.

Introduction:

Soybean [Glycine max (L.) Merill] is a significant seed legume and assumes imperative part in human occupation. India positions fifth in territory and production of soybean (Table 1) after USA, Brazil, Argentina, and China¹. It contains top caliber of proteins (40%) and edible oil (20%) containing significant fundamental amino acids². Soybean acts as a top notch protein hotspot for domesticated animals feed apportions³. It is the world's most significant seed vegetable, which adds to 25% of the worldwide edible oil, about two-thirds of the world's protein concentrate for domestic animals feeding ⁴. Soybean improve the soil health and fertility by fixing nitrogen through biological nitrogen fixation in soil which is carried out by symbiotic nitrogen fixing bacteria residing in the root nodule of soybeans ⁵. Soybean likewise has the ability to upgrade efficiency of different crops and furthermore protects the climate ⁶.

In India, region under soybean crop from recent many years has expanded apparently, during 2019-20 the harvest was developed on 11.1 M ha region with 81.8 kg/ha yield and the productivity 9 m. ton ⁷ Madhya Pradesh, Maharashtra, Rajasthan, Karnataka furthermore, Andhra Pradesh are the main states in soybean development. In Maharashtra soybean is fundamentally cultivated as rain fed harvest from June to November. Nandurwar, Nasik, Satara, Sangli and Kolhapur and so on are significant soybean developing regions of Maharashtra state. When contrasted with the world efficiency (2670 kg/ha) of soybean, the Indian soybean profitability (955 kg/ha) is missing behind ⁷.

In spite of having made fast step for both area inclusion and complete production, soybean actually endures on profitability front, there are numerous requirements which restricted the soybean efficiency which incorporates edaphic, climatic, production and innovation angles blocking the soybean efficiency in India⁴. One method of improving agricultural productivity and profitability specifically and rustic occupation overall is the acquaintance of improved rural advances with farmers^{8,9}. For solutions of the constraints, labor-saving technologies should be made available to farmers; farmers should also be linked to

sources of financial support so as to enable them afford hired labor; improved seeds that possess high yielding and early maturing characteristics should be provided to farmers; while extension service should educate and encourage farmers on the utilization of soybean as a household food item^{3, 10}.

Keeping this scenario of bridging the gap in the productivity, For arrangements of the constraints, labor saving innovations ought to be made accessible to farmers; farmers ought to likewise be connected to monetary help in order to empower them bear the cost of recruited work; improved seeds that have high yielding and early developing qualities ought to be given to farmers; while augmentation administration ought to teach and support farmers on the usage of soybean as a family food item. Keeping this situation of overcoming any barrier in the efficiency, present investigation was embraced to know the bottlenecks and constraints of soybean production in the western Maharashtra, one of the important soybean growing parts of country.

Table 1: World area, production and productivity of soybea	Table 1: World	area, production	and productivit	v of sovbea
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Country	2017-2018		201	2018-2019		2019-2020			
	A	P	Y	A	P	Y	A	P	Y
USA	36.2	120.065	331.67	35.7	120.515	337.57	30.7	96.615	314.70
Brazil	35.2	122.000	348.37	35.8	117.000	326.81	36.6	123.000	336.06
Argentina	16.3	37.800	231.90	17.3	55.300	319.65	17.4	53.000	304.59
China	8.2	15.283	186.37	8.4	15.900	189.28	8.9	17.100	192.13
India	10.4	9.000	86.53	11.2	10.930	97.58	11.1	9.000	81.08

A: area (M ha), P: production (m t) and Y: yield (kg/ha) Source: USDA-March, 2020.

Rationale Of The Study:

Due to many constraints, lack of enough support and knowledge many farmers don't consider soybean as a financial crop and many are not in a position to repay loans taken from financial institutions. But this crop has a very bright and good future. Statistics reveals that the cultivation, yield, production and exports of soybean have been increasing year after year. The importance of this study lies in analyzing the constraints faced by the farmers in cultivation and finding solutions to the existing problems so that soybean emerges as a true Golden Harvest.

Objective Of The Study:

- 1. To find out the constraints faced by the farmers in the cultivation of soybean in western Maharashtra
- 2. To analyze overall ranking of constraints faced by soybean farmers

Hypothesis:

H₀: The constraints in soybean cultivation positively affect the production of soybean

H₁: The constraints in soybean cultivation negatively affect the production o soybean

Materials And Methods

Study Area: Study was carried out in Nandurwar, Nasik, Satara, Sangli and Kolhapur areas of Maharashtra (Table 2) with an objective of finding out the constraints faced by the farmers in the cultivation of soybean in western Maharashtra. Soybean, groundnut, bajra, maize and so on are the significant yields filled in these locale in kharif season, while sorghum, wheat, chickpea and so forth are filled in rabi season.

Table 2: Area, productivity and production of soybean in selected locale

Name of District	Area (L ha)	Productivity(kg/ha)	Production(LMT)
Nandurwar	0.196	1112	0.218
Nasik	0.783	1103	0.86
Satara	0.686	1147	0.787

Sangli	0.391	1130	0.442
Kolhapur	0.415	1142	0.474

Source: SOPA, Indore 2020

Sampling framework: Using simple random sampling technique, two blocks were selected from a district while two villages were selected from each block, comprising a total of 20 villages for complete study. From each village, five farmers were selected randomly as respondents making total sample of 100 soybean cultivating farmers.

Data Collection and Analysis:

The data were gathered utilizing focused group discussion with the villagers and in depth interview of selected respondents using standardized interview schedule. Reaction was elicited from the farmers on whether they face specific recorded constraints while production of the soybean. Gathered information was categorized under major heads and analyzed using descriptive statistics such as frequency and percentage.

Results And Discussion:

Results of the study are introduced under the wide headings of socio-economics, demographic qualities of respondents and constraints faced by them.

Socio-economic and demographic characteristics of respondents:

The information on the instructive status shows that, just 4% farmers were uneducated, around 35% had finished secondary schooling and 22 % graduate level (Table 3). All respondents had farming as an essential occupation and around 28% were likewise occupied with auxiliary occupations like dairy and poultry. Small and marginal farmers comprise around 40% of the respondents (under 2 hectare), while 22% farmers were having large land holding (in excess of 10 ha).

Table 3: Socio-economic condition of the respondents

Variables	Percentage (%)
A) Educational status	
Uneducated	4
Primary	9
Middle	30
Secondary	35
Graduate	22
B) Occupation	10-6381
Agriculture	100
Subsidiary	28
C) Land holding	
Small(up to 2 hectares)	40
Medium(2 to 4 hectares)	38
Large(more than 4 hectares)	22

Constraints In Soybean Cultivation:

Constraints studied are categorized into ten categories on the basis of their order of importance and ranking. The labour, irrigation, weed management and market related constraints were major constraints faced by farmers followed by lack of training, pest and disease, nutrition and fertilizers, seed, sowing and seed treatment.

a) Labour related requirement: Labor issue was positioned first among the significant classes of constraints (Table 4, 5). Around 95% farmers announced that deficiency of the work during the pinnacle time of interest; inaccessibility of work during planting, intercultural activities, showering, harvesting and threshing; as significant requirement in soybean production. Same number of farmers (95%) announced high work charges at season of pinnacle activities like planting.

Table 4: Constraints faced by farmers in soybean cultivation²¹

Sr.no	Constraints in soybean cultivation	Frequency and percentage	S.D				
A	Labour related constraints						
	Unavailability of labour at sowing/wedding/harvesting etc	95	0.42				
	High labour charges at weeding/harvesting	95	0.36				
	Irrigation facility						
	Unavailability of irrigation at critical growth stages	67	0.85				
В	Improper rainfall at critical growth stages	92.00	0.56				
	Unavailability of tools/machines for moisture conservation	76.00	1.26				
	Moisture stress in late maturing varieties Difficulties	95.00	0.41				
	in use of BBF/conservation furrows	76.00	1.27				
	Weed management	유					
C	Non availability of herbicide in time	95.00	0.55				
	Lack of knowledge	35.00	1.03				
	High cost of herbicide	92.00	0.64				
	Marketing of produce	311					
	Lack of transport facilities/long distance of market	05.0	0.49				
D	Dependency on middleman	78.00	0.96				
	Lack of storage facility	98.00	0.58				
	Lack of processing facility nearby	100.00	0.46				
	Lack of remunerative price	88.00	0.75				
E	Pest and disease management						
E	Lack of knowledge on pest and diseases	70.00	1.03				
	Lack of machinery for application of insecticide /fungicide	7.00	0.55				
	Timely unavailability of pesticides	94.00	0.65				
	High cost of pesticides	99	0.66				
	Nutrition and fertilizers						
	Lack of knowledge on recommended dose of fertilizer	69.00	0.96				
F	Timely unavailability of fertilizers	95.00	0.65				
	Lack of money for purchase of fertilizers	8.00	0.66				
	High cost of fertilizers	89.00	0.73				
	Lack of knowledge about integrated nutrient management	80.00	0.90				
G	Seed treatment related						
G	Non availability of required fungicide	85.00	0.78				
	Lack of availability of rhizobium and PSM culture	64.00	1.05				
	Lack of knowledge about seed treatment 11.00 0.66	11.00	0.66				

	Seed and sowing relat	ted				
Н	Poor germination of seed due to hard crust	03.00	0.41			
	Non availability of pure quality seed	5.00	0.49			
	Locally unavailability of seed of improved variety	74.00	0.89			
	Non availability of drought resistant varieties seed	97.00	0.51			
	High cost of HYV seed	45.00	1.06			
-	Credit or institutional constraints					
I	Unavailability of timely crop loan	29.00	0.95			
	Difficulty in getting crop loan	21.00	0.82			
	Unavailability of required amount of loan	28.00	1.04			
	Lack of knowledge about crop insurance scheme	10.00	0.64			
	Other constraints	dry				
J	Lack of training facilities on improved methods	73.00	0.94			
	Lack of training facility regarding marketing skills	74.00	0.93			

- b) Weeding and Harvesting- As the labour requirement during the sowing, intercultural operations and harvesting of soybean is generally high due to glut of harvesting kharif crops at a time, availability of sufficient labour at reasonable wages is the major monetary aspect of soybean cultivation which directly helps in the earning economic benefits to farmer^{11,12}. Majority of farmer were small and marginal hence mechanization of farm was not high as much and hence for carrying out different agricultural operations farmers had to depend on hired labour^{13,14}. Shortage of labour for carrying out the agricultural work might be due to migration of the youths from rural to urban area in search of jobs in industries, constructions companies etc.
- c) Irrigation facility: Absence of Irrigation system office during crop development period (81.2%) was second most significant requirement looked by respondent (Table 4). Among them, 67% detailed the inaccessibility of water to inundate the yield at basic development stages like seedling, blossoming and pod filling. Around 92% farmers detailed enduring of harvest because of improper rainfall at basic development stages. A late maturing variety subject to water problem was an constraint revealed by 95% of the farmers. Singh et al found that absence of water irrigation system (91.72%) during the soybean crop development period was the one of the major technological constraints and detailed that 88% farmers proposed giving water irrigation system to get high return of soybean¹⁵.
- d)Weed Management: Soybean is fundamentally developed as rain fed crop during June to October; the weed pervasion during the yield development period was significant danger to farmers (Table 4, 5). Under weed management classification 35% farmers reported absence of information about a large portion of the weeds and herbicide to be utilized for weed control henceforth they denied utilizing herbicides at their farms. Locally inaccessibility of herbicides on time (95%) and significant expense (92%) were serious issues looked by farmers in receiving the legitimate weed practice management. Weed compete the soybean for supplements, moisture and daylight when they are restricted; the early season rivalry is the most basic along these lines diminishes the yield¹⁶. As work deficiency during peak period prevailing in the investigation region, manual weed control was unrealistic and a large number of the respondents had low educational status subsequently having absence of information on utilizing the herbicides and its job to control the weeds.

Categories of the constraints	Percent (%)	Rank
Labour related constraints	95.00	I
Irrigation facility	81.20	II
Weed management	74.00	III
Marketing of produce	73.80	IV
Other constraints	73.50	V
Pest and disease management	72.60	VI
Nutrition and fertilizers	68.20	VII
Seed treatment related	53.33	VIII
Seed and sowing related	48.80	IX
Credit or institutional constraints	22.00	X

Table 5: Overall ranking of constraints faced by soybean farmers

- e) Marketing of produce: Farmers under investigation confronted the marketing issues like non accessibility of the coordinated market close by, storage, processing unit, impact of broker in promoting the produce, absence of sensible cost. Lack of storage capacity (98%) and processing facility (100%) were the serious issues (Table 4). Huge number of farmers had detailed absence of appropriate acquirement framework to buy produce at sensible costs at nearby level¹⁷. Because of the felt of need of cash following harvest of yield numerous farmers sell out the produce in the nearby market irrespective of thinking about better cost for produce. Farmers convey their produce to significant distance markets arranged at region places and commonly because of the excess and surge at the market, produce should be marked for 2-3 days and stand by till the closeout begins. Numerous farmers communicated the need of coordinated market at town level, which will offer the sensible costs to the produce with the goal that they need not to go in the inaccessible market to sale the produce.
- f) **Pest and disease management :** Pest and disease management are a significant parts of getting higher soybean yield and it contributes 72% of the relative multitude of limitations examined. It was seen that 70% of the farmers were uninformed of the sucking and leaf eating pests assaulting the soybean and their control measures (Table 4). In like manner, 99% respondents communicated that there was inaccessibility of seeds. Convenient inaccessibility of pest and disease resistant variety seeds, unavailability of required pesticides in the neighborhood markets (94%) trailed by significant expense (93%) were different limitations looked by the ranchers. During the study it was seen that large numbers of the farmers come up short on the information about which insect spray or fungicide ought to be utilized against the particular pest or disease. The pest and diseases are the significant determinants in the soybean production 18.
- f) Nutrition and fertilizers: About 69% farmers come up short on the information on prescribed portion of fertilizers to meet the healthful prerequisite of soybean crop (Table 4). Numerous farmers are unaware about the soybean being legume crop requires low amount of nitrogen through fertilizers, still farmers applying fertilizers according to customary thinking. During study period 68.2% farmers faced the nutrition and fertilizer related constraint. Absence of coordinated way to deal with give adjusted nourishment has been reserved as one of the significant justification deteriorating yield of soybean under genuine farm circumstances¹⁹.
- g) Seed, planting and seed treatment: It was tracked down that 97% farmers detailed non accessibility of seeds of dry season resistant varieties which can give better yield with restricted water (Table 4). Poor germination because of hard soil outside layer and impure nature of seed was likewise the disabling variables of the soybean cultivation in the study territory. Seeds of the improved assortment were not accessible in the nearby market (74%) was the one of the restricting component in soybean cultivation. Absence of information about seed treatment, inaccessibility of microbial culture of rhizobium, PSB and fungicides for seed treatment were the significant issues of the soybean cultivators in the study region. Germination failure because of utilization of weakened seed quality for planting was accounted for ordinarily before.

- h) Institutional limitations: About 22% respondents found the institutional issue in fulfillment of credit needs to complete diverse cultivation activities of soybean (Table 4). Inaccessibility of convenient harvest credit, long interaction of loan endorsing, troubles in getting the necessary advance sum and absence of information about crop insurance plans were critical variables which limited the soybean cultivation. As a result of little holding, farmers couldn't grow their size of creation to get the more yields and returns. Because of insufficient capital numerous small farmers get cash from private cash moneylenders at higher pace of revenue and incapable to take care of the colossal advance sum if there should be an occurrence of yield disappointment.
- i) Other limitations: Lack of preparing with respect to the improved strategies for development and end utilization of produce (73%) and promoting abilities (74%) were the problems detailed by farmers, restricting the soybean production (Table 4) Technique and result exhibitions, frontline demonstrations, town adaption frameworks, association of farmer's days, kisan mela will serve the better apparatus to prepare the rancher with the improved harvest production innovation²¹. Numerous farmers communicated the need of preparing on various parts of production from sowing to conclusive advertising of the produce. In this investigation revealed that 62.5 percent farmers recommended that training facility ought to be given to farmers for adoption of new technologies.

Conclusion:

The study reported that labour issues, water irrigation system, weed management, marketing of produce, pest and disease management were the main five constraints looked by the farmers in soybean cultivation and hence prove the hypothesis that constraints in soybean cultivation positively affect the production of soybean.

Recommendation:

Labour deficiency during peak period ought to be figured out by following the to the ideal level farm mechanization. Water preservation measures can be attempted for endurance of the soybean crop in drought condition. Farmers ought to be energized for utilization of high yielding-improved soybean varieties which require less water, short span and impervious to bother pest and diseases. Institutional credit to the farmers should be made easily available to carry out the different farm operations on time. Special emphasize on training of the farmers on improved cultivation practices and marketing skills should be given.

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The Changing Role of Agriculture in the Indian Economy and Challenges

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Introduction:

India is still an agricultural country. While India's economic growth in the post-independence period has seen an increase in the share of industry and services in the gross domestic product, the portion of agriculture has been declining. However, the importance of agriculture in the Indian economy is unique as it is a means of feeding and accommodating a growing population. Over the last 70 years, India has adopted an agricultural policy with the help of a five-year plan and established various institutions for it. The first green revolution took place in India after 1967-68. As a result, food grain production increased and India became self-sufficient in food grains in 1976. After that there was a white revolution in India and milk production increased tremendously. At the same time, a suitable strategy for the Yellow Revolution is being implemented to increase the use of hybrid oil seeds to increase oil seed production. India's economic growth depends on the rate of agricultural development. In 1950-51, agriculture accounted for 51.5 per cent of India's GDP; It has increased to 15.41 percent in 2018-19. 48.9 per cent employment is from agriculture. The increase in food grain production during the Five Year Plan period has made India self-sufficient in food grains. Although the structure of the Indian economy is changing comparatively, the contribution of agriculture is significant.

II. LITERATURE REVIEW

In his research article entitled "Indian Agriculture- Status, Importance and Role in Indian Economy", described an insight about the impact of changing Role of Agriculture in Indian Economy. This paper is based on descriptive design with the involvement of secondary data. The researchers stated that Role of agriculture in Indian economy and 4 Importance in International Trade. Some suggestions have been recommended at the end of the study [1]

In his research article "Changing Role of Agriculture in Income and Employment, and Trends of Agricultural Worker Productivity in Indian States", mentioned about the significance as well as challenges agriculture in Income and Employment, and of Trends of Agricultural Worker Productivity in India. Secondary data was used for this study collected from various newspapers as well as websites. The researcher concluded through the study made that [2]

In his research article "Changing dimension of the role of agriculture in the Indian economy", this paper is an attempt at an analysis of changing role of agriculture in the Indian economy, based on the published sources, and showcasing the current Indian economic scenario. Researcher concluded that changing the role of agriculture in Economy of country is continuing process the efforts should never halt anywhere and anytime. [3]

In his research article "Agriculture Role on Indian Economy", described the needs to provide support in case of land, bank loans and other machineries to the small farmers along with the big farmers with this we can expect some improvement in Indian economy has been discussed in this paper. [4]

III. OBJECTIVES OF THE STUDY

- To study the Changing Role of Agriculture in Indian Economy
- To provide a basis of monitoring and evaluation

IV. METHODOLOGY

Data collection: 1) Secondary data collection method. The study of sustainable development in India is based on secondary method of data collection from various books, Newspapers, government publication

report etc. This study is an attempt to explore the changing role of agriculture in the Indian economy and the challenges facing agriculture

Changing role of agriculture in the Indian economy

Indian agriculture ranks second in the world in terms of agricultural production. In 2016-17, food production from Indian agriculture reached 275.68 million tones. India is a world leader in fruit production and milk production. It is clear that the contribution of agriculture to the Indian economy is changing.

1. Declining share of agriculture in GDP:

In 1950-51, the share of agricultural production in India's GDP has declined from 51.9 per cent to 13.69 per cent. This is clear from the 2014 report of the Central Statistical Organization.

Table No. 1.1 Component Prices (2004-05), the share of agriculture in the gross national product.

Year	Share of Net Agriculture Production	Share of Agriculture and Agriculture Allied Production
	Production	Agriculture Amed Production
1950-51	41.83	51.01
1960-61	39.41	47.65
1970-71	34.16	41.66
1980-81	29.82	35.69
1990-91	24.94	29.53
2000-01	18.71	22.26
2010-11	12.29	14.145
2012-13	11.65	13.69
2013-14	13.9	26.1
2016-18	16.36	15.4
2018-19	15.39	28.63
2019-20	16.2	17.8

(Source : Internet)

The above data shows that in 1950-51, the share of agriculture in India's GDP was 41.83 per cent, while the combined share of agriculture and allied components was 51.09 per cent. When the gross of the industry. The changing role of agriculture in the Indian economy accounted for 16.19 per cent of GDP and 29.54 per cent for services. The share of agriculture has declined due to the rapid expansion of industry and services along with agriculture during the Five Year Plan period. In 2012-13, the share of net agriculture declined to 11.65 per cent, while the combined share of agriculture and allied sectors declined to 13.69 per cent. The industrial sector grew by 26.75 per cent and the services sector by 59.57 per cent. The share of agriculture in the GDP of developed countries seems to be less than that of India. In 2019-20, the share of net agriculture declined to 17.8 per cent, while the combined share of agriculture and allied sectors declined to 17.8 per cent.

2. Declining importance of agriculture in economic development:

The importance of agriculture in India's economic and industrial development is now diminishing. Initially the supply of raw materials from the agricultural sector was important in industrial development. Small and cottage industries depended on agricultural products. But in recent times, the development of non-traditional industries has started on a large scale in the industrial sector as well. Through financial planning, many new industries were developed by implementing the Five Year Plan. The share of capital manufacturing industries, machinery, engineering and chemical industries, automobiles, electronics, information technology, etc. in industrial production has started increasing. This shows that the dependence of industrialization on agriculture has decreased. Recently, however, the importance of the food processing industry has been increasing.

3. Decrease in Government Expenditure on Agriculture:

During the financial planning period, huge investments were made by the Government in irrigation, soil conservation, dry land farming and other arable lands, supply of fertilizers, improved cultivation practices, etc. to increase agriculture and agricultural production in India. Government expenditure was incurred on institutional matters sch as social development schemes, agricultural research and extension services.

4. Changing Croping Pattern:

In a century, the area under different crops is called cropping pattern. A change in cropping pattern is a change in the area under different crops. During the post-independence period between 1950-51, the area under food crops was 74 per cent and the area under non-food crops was 26 per cent. The area under non food grains increased by 34% in 2010-11. As the prices of cash crops have gone up more than the prices of food grains, the area under cash crops is on the rise.

Table 1.2 Changing pattern in the crop structure is shown in the table below.

Crop	1950-51	1970-71	2006-07	2010-11
Food Grain	75	74	64	66
Non Food Grain	25	26	36	34

(Source: Indian Economy 72th edition)

Considering the proportion under main crop cultivation in 2016-17, it is 23 per cent paddy, 16 per cent wheat, 13 per cent cereal, 15 per cent pulses, 14 per cent oilseeds, 6 per cent cotton and 2 per cent sugarcane.

5. Self-sufficiency of food grains and growth in horticulture sector:

Food production has an important place in agricultural production. India was once dependent on food imports. But in 1976, India became self-sufficient in food. As India's population grows rapidly, the country has access to ample food grains through agriculture. Horticulture production in India is also on the rise. Recent cereals and horticultural production are shown in the following table.

Table No 1.3 Cereals and horticultural production are shown in the following table.

Year	Cereals production	Horticultural production
2004-05	198.38	166.94
2008-09	234.47 2349	214.72
2012-13	253.13	268.85
2016-17	275.68	299.85
2018-19	285.21	310.74

In the case of food grain production, the total increase was 39 per cent from 2004-05 to 2016-17, while horticulture production increased by 80 per cent during the period.

6. Changing proportion of farmers and agricultural laborers:

Out of the total population in India, the proportion of people engaged in agriculture is still higher than other sectors. However, it appears to be declining.

Table 1.4: Changing proportion of farmers and agricultural laborers:

Year	Population	Village	Village Total 1		Farm	Total
		Population	Worker		Worker	
1951	361.1	298.6(82.7)	139.5	69.9(71.9)	27.3(28.1)	97.2(69.7)
1961	439.2	360.3(82.0)	188.7	99.6(76.0)	31.5(24.0)	131.1(69.5)
1971	548.2	439.0(80.1)	180.4	78.2(62.2)	47.5(37.8)	125.7(69.7)

1981	683.4	525.6(76.9)	244.6	92.5(62.5)	55.5(37.5)	148(60.5)
1991	846.4	630.6(74.5)	314.1	110.7(59.7)	74.6(40.3)	185.3(59.0)
2001	1028.7	742.6(72.2)	402.2	127.3(54.4)	106.8(45.6)	234.1(58.2)
2011	1210.9	833.7(68.9)	481.9	118.8(45.1)	144.3(54.9)	263.1(54.6)
2015	1,391.99	885 (65.97)	485.7	119.9(46.1)	145.3(53)	266.1(54.6)

(Aadhaar: Registrar General, India.) *

The numbers in brackets in column 4 represent the percentage of the total population. * The numbers in brackets in columns 5 and 6 indicate the percentage of column 7. * The numbers in parentheses in column 7 represent the percentage of column 4. Table no. 1.5 shows the proportion of farmers and agricultural laborers i.e. the population engaged in agriculture. A look at columns 5, 6 and 7 shows that the proportion of farmers engaged in agriculture has declined from 71.9 per cent of the rural population in 1951 to 45.1 per cent in 2011. The proportion of agricultural laborers has increased from 28.1 per cent to 54.9 per cent. However, the proportion of people engaged in agriculture in the total labor supply has declined from 69.7 per cent to 54.6 per cent. (Column No. 7)

7. Changes in Land Holding Structure:

The size of Indian agriculture is divided into five main parts. During the period 2000-01 to 2010-11, the proportion of land holders has increased from 18.7 per cent to 22.5 per cent. Similarly, the proportion of smallholder holders has also increased from 20.2 per cent to 22.1 per cent during the same period. While a little medium; The proportion of medium and large land holders has declined to 10.0 per cent, 4.2 per cent and 0.7 per cent respectively.

Table no. 1.5 Proportion of land holder (percentage)

	_	*	<u> </u>
Holding area	2001-01	2005-06	2010-11
Classification			
Marginal land holder	62.9	64.8	67.1
(less than 1 hectare)	(18.7)	(20.2)	(22.5)
Less Landho <mark>ld</mark> er	18.9	18.5(20.9)	17.9
(1 to 2 hectares)	(20.2)		(22.1)
Small Medium Land	11.7(24.0)	10.9(23.9)	10.0(23.6)
Holder (2 To 4 hectares)			
Medium Land Holder (4	5.5(24.0)	4.9(23.1)	4.2(21.2)
to 10 hectares)	SIN	10 6381	
Large Land Holder (10	1.0(13.2)	0.8(11.8)	0.7(10.6)
hectares and above)			

(Source : Internet)

8. Changes in the agricultural sector in import-export trade:

In the post-independence period 1950-51, exports of agricultural commodities like tea, coffee, sugar, oilseeds, tobacco, and spices were 50 per cent, while linen, cotton and agro-based exports accounted for 20 per cent of total exports. About 70 per cent of exports were commodities. However, due to the diversification of exports, the import-export ratio in the agricultural sector has changed since 1990-91 during the economic recovery period.

Table no. 1.6 Agricultural Imports in India - Exports (Percentage)

Year	Total Imports	Total Exports					
	Agricultural Import	Agricultural Exports					
1990-91	2.79	18.49					
2000-01	5.29	14.23					
2010-11	3.03	9.94					
2015-16	5.63	12.55					
2018-19	5.40	12.60					

(Source: WTO)

After 1990-91, the volume of agricultural imports has been increasing and the proportion of agricultural exports has declined. Agricultural exports declined from 18.49 per cent in 1990-91 to 12.55 per cent in 2015-16. Agricultural imports rose to 5.63 per cent from 2.79 per cent. India's share of global agricultural exports has increased from 1.1 per cent in 2000 to 2.1 per cent in 2016, while its share of imports has increased from 0.7 per cent to 1.8 per cent in the same period.

9. Challenges

- a) Distribution of Farmland: When a family is separated, all ancestral property is divided into equal parts. This leads to fragmentation of agricultural lands. When farmland was being fragmented, there was often no grouping. A group is made up of several pieces. Therefore, land division is a curse on Indian agriculture. That is to say. The division of agriculture leads to a smaller division of land. But due to fragmentation, these small farms cannot remain intact. As each heir insisted on the division of all types of land at the time of division of agriculture, the division of such a small piece into smaller pieces began to take place. Naturally, more and more small pieces of farm land fall into disintegration due to land near the village, land far from the village, high fertility land, medium and low quality arable land, arable land, rocky land.
- b) Lack of warehouses and cold storage for storage of agricultural commodities. So that farmers can be brought to the market for sale at market price. But there is a dearth of warehouses and cold storages in India for storing farm produce. If cold storages and warehouses are available, they are located in districts. Farmers in rural areas do not get any benefit from these warehouses and cold storages. Often merchants take farm produce from farmers at low prices and store it and make a profit. There is no alternative but to keep some crops of fruits, flowers and vegetables in cold storages.
- c) Lack of Water Supply Facilities Monsoon rainfall in India is not uniform everywhere. Inadequate rainfall occurs in most regions. The unpredictability of the monsoon adversely affects the agribusiness. The use of irrigation is essential to help crop growth by retaining soil moisture. Similarly, where there is water scarcity, water supply is available. Of the total farmland in India, only 20 per cent is guaranteed irrigation, but the remaining 80 per cent is dependent on rainwater. The nature of monsoon in India is erratic and unpredictable, sometimes it starts early, sometimes it starts late, sometimes it rains more, sometimes it rains less, sometimes it ends early and sometimes it ends late. The erratic nature of the rains caused huge losses to agriculture.
- d) Lack of Capital and Poverty Lack of Capital and Poverty Most of the farming in India is done in traditional way. Farmers need a lot of capital for plowing, digging, tillage, purchase of seeds, hoeing, harvesting, threshing, storage of food grains and farm produce, purchase of oxen for tillage, purchase of farm implements, hire of truckers and harvesters. But the income from agriculture is used to support the farmer's family 9/16 so the capital expenditure on agriculture does not remain until the next season. Absolute poverty is more prevalent among Indian farmers.
- e) Lack of Agricultural Research (Lack of Agricultural Research) In the modern world, new types of research have been done in agriculture. Knowledge like biotechnology has explored new dimensions in agriculture. However, due to the lack of commercial approach to agriculture in India, this technical knowledge and research has not spread as much as it should. The Indian agribusiness still needs a great deal of scientific and mechanical reform. Innovation of improved seeds for extraction of crops from the field Indian farmers need to be guided by the use of chemical and organic fertilizers, find new crops according to the weather and soil conditions, protect crops and guide them to good growth.

Conclusion

Most Indians directly or indirectly go to agriculture. Some are directly involved in agriculture and some people are involved in doing business with these goods. India has the potential to produce grain which can make a huge difference to the Indian economy. Achieving the government's target needs to provide real

estate support, bank loans and other equipment to smallholder and large scale farmers so we can expect some development in the Indian economy.

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Levels of Literacy Structure in Chandrapur District (M. S.)

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Abstract :-

In demographic characteristics of population Literacy is one of the important aspects. The degree of education is a good because of progress towords modernization. Literacy not only helps to enhance human resources but also help to control population growth and ultimately projecting towords welfare of the Society. According to census of 2011 total population of the District is 2194262 comprising 1120316 male and 1073946 female. In the District 769838 (89.7%) Population and 1424424 (76.8%) resides in urban and rural area. As per the census of 2011 the arithmatic density of the population in the District is 192 persons per sq. km.

Key Words: Literacy, Demography

Introduction:

Literacy is traditionally understood as the ability to read, write and use arithmetic. The modern term's meaning has been expanded to include the ability to use language, number images' computers, and other basic means to understand, communicate, gain useful knowledge and use the dominant symbol systems of a culture. The concept of literacy is expanding in OECD countries to include skills to access knowledge through technology and ability to assess complex contents.

The key to literacy is reading development a progression of skills that begins with the ability to understand spoken words and decode written words, and culminates in the deep understanding of text.

Once these skill are acquired the reader can attain full language literacy, which includes the abilities to apply to printed material critical analysis inference and synthesis, to write with accuracy and coherence and to use information and insights from text as the basis for informed decisions and creative thought The inability to do so is called it iliteracy or analphabetism.

The united Nations Educational, scientific and cultural organization (UNESCO) defines literacy as the ability to identify understand interpret, create, communicate and compute, using printed and written materials associated with varying contexts literacy involves a continuum of learning in enabling individuals to achieve their goals to develop their knowledge and potential and to participate fully in their community and wider society.

Literacy completely depends upon the available educational facilities in an area. Education is the significant Milestone of economic development of lack of education shows back-wardress of a particular region. Economic progress political awareness, social development so maturity revote around education and training-

Objectives

- 1. To study spatial pattern of literacy.
- 2. To analyze the decadal changes in literacy.
- 3. Spatio temporal variation in rural & urban areas.
- 4. Spatio temporal variation in male of female
- 5. Appraisal of educational facilities available in the District.
- 6. To find out the factors affected to lever of literacy.

Hypothesis

Due to variation in rural urban character of gender discrimination level of literacy varies in the district.

Database & Methodology

Present study in mainly based on the reliable & accurate census data It is secondary data has been collected from

- 1. District census handbook
- 2. Other government publications
- 3. Socio economic review
- 4. Records of zila parished
- 5. District statistical abstract-

The collected data has been processed and analyzed by using different quantitative statistical technique. The tabulated data has been presented by cartographic technique To calculate level of literacy the formula is as follows.

Crude Literacy Rate =L/P X K

Where L is the total literate population, P is the total population & K is 100

To find out the inter censual changes the following Formula has been applied:

Change of index CY - by / by x 100

Where CY is the current year literacy rate, & By is the base year literacy rate.

Profile of the chandrapur District

The chandrapur district is one of the parts of deccan plateau where is we found natural diversity as well as geographically density also rich. For this study the chandrapur district is selected which is in the east side of Maharashtra state latitudinal Extend is 19° 27′ North to 20° 43′ North and longitudinal extend is 78° 48′East to 79°59′ East The total area of district is 11443 sq. k. m.

The attitude of this district from sea level is 150-200 mt. south west side there is perjagharh hill in mul-chimur in south side hill here the main river is wardha and it is occupied with its tributaries. District is the eastern district of Maharashtra comprising fifteen tahsils They are chandrapur, Bhadrawati, Warora, Chimur, Nagbhid, Bhramhpuri, Mul, Gondpipri, Rajura, Sawali, Ballarshaha, Korpana Sindewai Jiwati, Pobhurna.

Chandrapur District is a district in Nagpur Division of the Indian state of Maharashtra. The district was formerly known as chanda district In 1964 it was renamed as chandrapurIt was the largest district in india suntil it was split into the separate district of Gadchiroli.

It is fomous for its super Thermal power plant one of the biggest in Asia, and its vast reserves of coal in Wardha valley coalfield. Chandrapur also has large reservoirs of limestone. The abundance of time and coal supplies many cement factories like L & T. (now ultra Tech cement) Gujarat Ambuja (Maratha cement works) manikgarh, murli cement and ACC cement in the district. Tadoba National Park near chandrapur is one of india's 28 project tiger reserves.

According to the 2011 census chandrapur district had a population of 2194262 The district has a population density of 192 inhabitants per square kilometer. its population growth rate over the decade 2001 – 2011 was 5.95 % Chandrapur has a sex ratio of 959 females for every 1000 males and a literacy rate of 81.35% According to census of 2011 total population of the district is 2194262 comprising 1120316 male and 1073946 female In the district 1424424 (81.04%) population. As per the census of 2011 the arithmetic density of the population in the district is 192 persons per sq. km. In the year 2011 Sex ratio in the district is 959 female per 1000 male in the year 2001 the sex ratio was 948 female for the district as a whole while 962 in the rural area & 919 in the urban area.

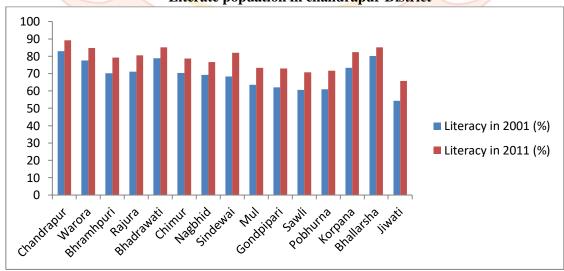
Literacy structure in chandrapur dist.

As per the census 2011 the district is highly literate as the ratio of the literate. Population to total population is 81.04% while it was 73.2 % in the year 2001. This change indicates that various measures have

been adopted to increase the literacy level of the district. It is the positive indication that the minimum rate of literate population in the district is not less than 65.75% and it is maximum counted in chandrapur Tahsil where it is 89.18%.

	Table No 1.1									
	Literate popuation in chandrapur District									
Sr. No.	Tahasil	Literacy in 2001 (%)	Literacy in 2011 (%)	Change in literacy (%)						
1	Chandrapur	82.85	89.18	6.33						
2	Warora	77.51	84.77	7.26						
3	Bhramhpuri	70.11	79.23	9.12						
4	Rajura	71.11	80.48	9.37						
5	Bhadrawati	78.78	85.20	6.42						
6	Ch <mark>i</mark> mur	70.42	78.66	8.24						
7	Nagbhid	69.35	76.69	10.58						
8	Sindewai	68.55	82.03	19.66						
9	Mul	63.52	73.33	15.44						
10	Gondpipari	62.13	72.87	17.28						
11	Sawli	60.57	70.79	16.87						
12	Pobhurna	60.96	71.60	17.45						
13	Korpana	73.24	82.38	12.47						
14	Bhallarsha	80.20	85.04	6.03						
15	Jiwati	54.28	65.75	21.13						
	Total	73.17	80.01	9.34						

Graph No. 2.1
Literate popuation in chandrapur District



During the last decade the total growth of literate population in the District is 9.34% The maximum growth has been counted in jiwati Talukas, Which is the most backward& tribal dominant taluka of the District

Where in the year 2001, 54.28% Population registered literate. This increased upto 65.75% in the year 2011, that's why the change ratio counted 21.03% in this Tahsil. The second highest growth is counted in the sindewai Tahsil 19.66%, the minimum growth counted in the Ballarsha Where in the year 2001, the ratio of literate population was 80.20% whichincreased up to 85.04% over all growth took place in the Tahsil was 6.03%.

Literacy Differentials in the Chandrapur District

One of the most important aspects of literacy differentials in the District relates to male female gaps in literacy rates. Gender differential in literacy rate is so pervasive that it exist in total population as well as in the rural and urban areas and in different social segments though in varying magnitude.

Out of the District total literate population male literacy in the District as per census year 2001 was 82.9% and in the year 2011 it was 88.7% in the district The district has counted the growth of 6.99% as a whole. The district is classified in the three categories one in the Tahsils where growth percent in more than 6%, Jiwati, Gondpipri, Pobhurna, Sawali, Mul, Rajura, Bhramhpuri, Korpan, Chimur, Sindewai, Nagbhid, and Warora, Bhadrawati, ChandrapurTahasils counted growth between 4 to 6% while in the third category only one BallarshaTahsils counted the growth rate in male literacy below 4%

Above analysis reveals one of the positive Sigrid in the Ballarsha Where the biggest problem the increasing industries of male literacy will the problem. Referring to the table it can be seen that there has been a wide and increasing trend of female education in the last decade, 2001 and 2011. The 2011 census reveals on overall female literacy rate of 73.7% while it was 62.9% in the census year 2001 in the last decade 17.17% growth has been recorded in female literate population. The district has counted growth rate from 9.13% in Ballarsha to Maximum in SindewaiTahsis where it is 38.12% second highest growth rate has taken place in JiwatiTahsil 37.08% again it is a positive sign to raise the economic and social status of the region

1	Table No 1,2									
	Male Female Gap in literacy Rate in Chandrapur District									
Sr. No.	Tahasil	Gap in 2001	Gap in 2011	c <mark>ha</mark> nge in Gap						
1	Chandrapur	14.49	10.14	4.35						
2	Warora	17.53	12.83	4.7						
3	Bhramhpuri	23.56	18.17	5.39						
4	Rajura	19.25	14.66	4.59						
5	Bhadrawati	17.19	13.36	3.83						
6	Chimur	20.88	16.32	4.56						
7	Nagbhid	22.68	19.32	3.36						
8	Sindewai	26.34	11.15	15.19						
9	Mul	23.24	19.12	4.12						
10	Gondpipari	24.22	20.48	3.74						
11	Sawli	26.55	22.62	3.93						
12	Pobhurna	24.45	20.31	4.14						
13	Korpana	19.67	14.11	5.56						

14		Bh	allaı	rsha					1	6.91		Т	1	3.68	8	3.23
15		Jiwati				27.02				21.02		2	6.00			
		То	tal						2	0.00			1	15.00	0	5.00
	Graph No. 2.2 Male Female Gap in literacy Rate in Chandrapur District															
30 -]															
25 -	-															
20 -	_		L								I	ŀ				
15 -		L	ı	h							ı	ı	ŀ			■ Gap in 2001
10 -																
5 -		ı	ı								ı	ı				■ Gap in 2011
0 -																1
	Chandrapur	Warora	Bhramhpuri	Rajura	Bhadrawati	Chimur	Nagbhid	Sindewai	Mul	Gondpipari	Sawli	Pobhurna	Korpana	Bhallarsha	Jiwati	

Literacy Differentials of male & female in the chandrapur district.

One of the most important aspects of literacy differentials in the district relates to male female gap in literacy rate. Referring back to table it can be seen that there has been a gap of literacy rate between male and female though the decline has been counted from 2001 to 2011 It was 20.00% aggregate for the District as a whole and 15.00% in the year 2011. The average change in gap counted for the District is 5.00%.

		Table No 1.3								
	Rural literacy Differentials in chandrapur District (2001-2011)									
Sr. No.	Tahasils Change % in Change % in change % in Total rural male Rural inFemale R									
1	Chandrapur	12.36	9.16	18.67						
2	Warora	aiir 10.91 ma	6.94	16.56						
3	Bhramhpuri	14.79	8.98	23.61						
4	Rajura	14.09	9.80	20.30						
5	Bhadrawati	11.67	7.61	17.27						
6	Chimur	11.70	7.48	17.72						
7	Nagbhid	10.58	7.09	15.67						
8	Sindewai	19.66	7.94	38.12						
9	Mul	17.07	11.55	25.94						
10	Gondpipari	14.88	10.73	21.63						
11	Sawli	16.87	11.02	25.50						
12	Pombhurna	17.45	11.73	26.17						

13	Korpana	11.55	7.26	17.64
14	Bhallarsha	3.89	2.01	6.37
15	Jiwati	21.13	13.21	37.08
	Total	13.44	8.50	21.07
	Rural literacy Differen	Graph No. 2.3 ntials in chandrapur	· District (2001-2	011)
45 40 35 30 25 20 15 10 5 0	annaur Rajura anati mur Ragani	dewai and parisari sami	into Brahasha jiwa	Change % in male Rural

Male Rural literacy in District

Male rural literacy rate in the district was accounted 78.8% aggregate which were accounted growth of 8.50% and increased up to 85.5% in the census 2011. Maximum male rural literacy counted in the year 2001 was in Ballarasha 83.90% while lowest in Jiwati which was 67.12%. In the year 2011 it was again maximum in chandrapur where 89.18% out of the total male rural population was literate and minimum was counted again in Mul 67.65% The growth of male rural literate population in the district in the last decade ranged between 2.01% in Ballarsha to 13.21% in Jiwati Tahsil.

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Female Rural literacy in District

In the census year 2001 out of the district total female rural 56.0% were literate and growth 21.07% were aided in the ratio which reached up to 67.8% with regard to female literacy in the year 2011. Warora Tahsil occupied first position in the District having ratio 64.06% ranging upto 40.10% lowest in jiwati Tahsil.In the census 2011 it was recorded 76.41% in sindewai and again minimum in jiwati 54.97%. Total growth of 21.07% female literacy aided in the district out of which maximum decadal growth accounted in Gondpipari 38.12% and lowest in Ballarsha 6.37% the gender wise gap was maximum in jiwati 27.02% sawali and Snindewai it was about 26% while it was recorded minimum in chandrapurTahsils it was 14.49% in chandrapur tahsil low differentials may be due to urban impact and industrial development.

The 2011 census reveals on overall literacy gap of 15.00% Which ranges from maximum 22.62% to minimum 10.14% in chandrapurtahsil. Table reveals that the gap of male and female literacy has been declined all over the district during last decade. The total change accounted was 5.00%. And maximum change in gap accounted in sindhewai Tahsil where it is 18.19% while it is minimum change in gap 3.23% with declile in the gender gap in literacy rate in may be suggested that literacy transition in the district is fast appearing to the advanced stage.

Literacy differentials in rural & urban regions

The 2001 census reveals on overall literacy rate of 67.7% rural areas and 84.7% in urban areas. As the district is predominantly rural in nature as out of the total fifteen Tahsils of the district eight tahasils is having urban characteristics. The economy of rural areas is predominantly depends upon primary sector and does not prescribe any formal level of literacy skills for entry into work force. In the census 2001 of the district in overall rural literacy in the district was 67.07% and growth of about 13.14% aided in this ratio which reached upto 76.80% in the year 2011. Rural literacy rate is marked with a great amount of resional variation from one part to another.

In the census year 2001 ratio of urban literate population in the district was 84.7% out of which more urban literate ratio was 91.3%, 2011 ratio of urban literate population in the district was 89.7% out of which male urban literate ration was 94.6% In the year 2011 this ratio reached up to 89.7% overall and 94.6% male and 84.6% Female urban literacy.

Conclusion:

Above analysis reveals some of the important aspects overall growth of literate population has been recorded in the district though the growth rate is not very high only 11.20%. In comparison to male female literacy growth is higher and 17.17% in female and 6.99% in male it is a positive sign to show the awareness and importance of female education in literacy structure in urban and rural also show disparity. In rural areas total growth of literacy accounted 13.44%. Though in urban areas it was comparatively slow while in rural areas it was 13.44%.

In chandrapur and Ballarsha Tahsil, for this increasing literary rate the following factors are responsible they are educational facility, awareness about education, free and compulsory education program of government, economical good, migration, sarv shiksha abhiyan beside this trend of employment in young generation.

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Innovation in E- Banking Services in India- Use of Various E-Modes

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Abstract:

The financial sector in India is changing very fast using various channels and technologies. Now a day's banking is needed of the hour. Now a days you can get banking services anywhere anytime, wherever and whenever you want. The government of India introduce various measures from time to time to ensure reliability, security, and integrity. In today's modern era, banking sector plays a very important role in human life. It providing number of facilities to the people, banking service has become a need of the society. In this 21st century every sector have a great challenges and being a part of society banks also facing these challenges and they are accepting these challenges very nicely for the improvement of services to the customers. The objectives of this paper is to analyze the various services provided by banks and how the technology has impacting on banking sector and how these new services are beneficial to society as well as to banks. This paper is in descriptive nature and data has been collected through various secondary sources.

Keyword: banking sector, various modes of e-banking, innovative services.

Introduction:

Financial sector plays a key role in the economic growth of a country. Banks are considered the most paramount part of the financial sector. The recent origin in banking sector is electronic banking has many names like e-banking, online banking or internet banking. It is simply the use of electronic and telecommunication network for delivering various banking services. Through e-banking, a customer can access his account and conduct many transactions using his laptop or smart phone. With the rapid and extensive increase in technology, innovation and telecommunications in the financial sector are coming up rapidly. SMS is used for the earliest mobile banking services, a service known as SMS banking. The introduction of smart phone in 1999 support enabling the use of mobile, the first European banks started to offer mobile banking to their customers. The internet has made it possible for the customers of banks to avail banking services using computers and mobile phones. Through the internet is quit old e-banking is relatively new. The demonetisation exercise of November 2016 has given a push to such services. Till very recently internet banking was the major mode of e-banking but now there are various choices viz, Paytm, free charges, Google pay, ICICI app, SBI app, UPI based platforms, USSD and debit/credit cards.

Today's banking mainly focused on new Banking technology innovations. Banks created to use technology to provide effective quality and services to customers and get high speed. In the recent scenario has been changed, there are around 380 banks are working in India, in which are public and private banks.

E-banking: e-banking is a safe, easy and efficient electronic service that enables you access to bank account and to carry out online banking services, 24 hours a day and 7 days a week.

Evolution of e-banking: e-banking came into existence in UK and USA in 1920. It became prominently popular during 1960s through electronic funds transfer and credit cards.

E-banking in India: in India e-banking is recent origin. The ICICI bank was the first in India who started internet banking. City bank and HDFC bank followed internet banking in 1999. Several initiatives have been taken by the government of India as well as RBI to facilitate the development of e-banking in India. The government of India enacted the IT Act, in 2000. The RBI is monitoring and reviewing the legal and other requirements of e-banking on a continuous basis.

Recent trends in banking:

Today we are having a very well developed banking system with different classes of banks-public sector banks, foreign banks, private sector banks, regional rural banks and co-operative banks. The RBI uses

monetary policy to maintain price stability and adequate flow of credit. The government opened the doors in 1991 for foreign banks to start their operations in India and provide their wide range of facilities. There has been a considerable innovation and diversification in the major commercial banks.

Objectives of the study:

- To find out various digital payment modes in India
- ➤ Impact of technology on e-banking

Methodology:

This is descriptive in nature with detailed review of literature. The official bank websites are considered with review if literature. Journals and research paper were also considered for study.

Various Digital Payment modes of e-banking services:

Banking cards: cards are the most widely used payment methods and come with various features and benefits such as security of payments, convenience etc. Some of the most reputed and well known card payment systems are Rupay and Master Card.

USSD: USSD is a recent origin of digital payment method, *99#, can be used to carry out mobile transactions without downloading any app. These types of payment can also be made with no mobile internet facility. The main aim of this digital payment service is to create an environment of inclusion among the underserved sections of society and integrate them into mainstream banking.

AEPS: Aadhar Enabled Payment System can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhar to Aadhar fund transfer etc. This service can only be availed if your Aadhar number is registered with banks where you hold an account.

Internet banking: internet banking refers to carrying out banking transaction online these includes many services such as fund transfer, opening new fixed deposit, closing an account. Internet banking also called as virtual banking or e-banking. Internet banking is mainly used to make a online fund transfer via NEFT, RTGS or IMPS.

Mobile banking: mobile banking refers to carrying out banking transaction via smart phones. The mobile banking is expanding its scope with the introduction of many mobile wallets, digital payment apps and other services like the UPI. Majority of banks have their own apps and customers can download the same to carry out banking transactions at the click of a button.

Paytm: Paytm is a recent origin in India's e-commerce payment system and digital wallet. Paytm is available in 11 Indian languages and offers online services like mobile recharge, utility bill payment, travel, movies and event booking as well as in store payment with the Paytm QR code.

Google Pay: Google pay means pay with Google is digital wallet platform and online payment system developed by Google, enabling users to make payments with android phones, tablets. Google pay takes the advantages of physical authentications such as fingerprint ID where available. On device without fingerprint ID, Google pay is activated with pass code. When the user's makes a payment to a merchant, Google pay does not send the credit or debit card number with the payment. It creates virtual account number representing the user's account information. This service of Google pay keeps customer payment information private, sending a one-time security code.

BHIM App: BHIM app is a Bharat Interface for Money is a mobile payment app developed by Payment Corporation of India (NPCI) based on the Unified Payment Interface (UPI). It was launched by Prime Minister Narendra Modi in Dec 2016. It facilitates e-payments directly through banks as part of the 2016 Indian demonetisation and drive towards cashless transactions. The app supports all Indian banks which use UPI it allows the users to instantly transfer money between bank account of any two parties. Unlike mobile wallets which hold money, the BHIM app is only a mechanism which transfers money between different bank accounts. Transactions on BHIM app are nearly instantaneous and can be done 24/7 including weekends and bank holidays. Using of BHIM app also allows users to check the current

balance in their bank accounts. Users can create their own OR code for a fixed amount of money, which is helpful in merchant transactions. Users of BHIM app can also have more than one payment address.

Positive impact of technology on banking sector:

The biggest revolution came in baking sector is digitization. Modern banking is faster than before and more reliable. Maintenance and restore of documents and records have become much faster and easier. Using of technology also improves the core banking system with the help of core banking all branches have access to common centralized data and are interconnected. USSD (Unstructured Supplementary Service Data) launched by government with the help of this people can access their bank account details with no internet connection. The scope of frauds in banking also minimized.

Negative impact of technology on banking sector:

The biggest negative impact of technology is loss of jobs as automation has placed number of jobs in banking sector. Technology come the threat of cyber attack; millions of data can be lost in the blink of eye.

Benefits of online banking to society:

Since online banking is major service offered by the banks, it is highly secure platform. Banks generally use encryption devices to protect information of clients. Even if it is the last day of your bill payment and you are minute away from being levied a penalty, you can rely on online banking. While using e-banking customer can do transactions anytime of the day from the convenience of your place. While easy access is one of the benefits of online banking it also makes banking highly convenient. With the help of online transactions waiting in long queues at the bank is completely eliminated. Moreover with mobile banking option available for most banks, transfer and payments have become easier.

Conclusion:

The banking sector in India is rapidly changing with increased customer and due to newly improved and innovative facilities offered by IT. As the coin has two faces likewise technology also has its two sides on banking sector-the positive and negative side. Indian banks are making sincere efforts for providing e-banking services to its customers.

ISSN 2349-6387

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Dr. B. R. Ambedkar's Vision on Gender Equality: Relevance in The Present Indian Society

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Abstract

Dr. B. R. Ambadkar made an enormous contribution for the development of women in India. His vision for women development includes abolition of superstition, unwanted traditionalism, gender equality, education, socio-economic and political upliftment, women rights through Constitution. The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. He laid down the foundation for social justice that, there can be no social justice without gender equality. This has been strongly backed by our constitution through articles 14, 15, 16, 42, 313 and Special Marriage Act etc., Our Prime Minister N.Modi also said that, Dr. B. R. Ambedkar was a visionary and a profound thinker whose socio-economic thought and vision is still not fully understood and needs to be appreciated, even though his contribution towards social justice have been recognized. In this connection the present paper focuses on how far his vision for gender equality has been achieved in the present social scenario of India.

Key Words: Gender, Gender Equality, Fundamental Rights, Empowerment, Traditionalism

Introduction:

Dr. Babasaheb Ambedkar was a saviour of the suppressed classes, a noted jurist, the chief architect of Indian constitution, a profound scholar, a daring leader, overall a multifaceted personality, an intellectual revolutionary, a ray of hope for the downtrodden and underprivileged section of Indian society. He also worked tirelessly throughout his life to challenge the legitimacy of orthodox Hindu social order that upheld iniquitous gender relations in an institutionalized man-ner. (Barnwal-2014)

Dr. B.R. Ambedkar's Struggle towards Gender Equality:

Dr.B. R. Ambedkar's approach to women's empowerment is entirely different from other social reformers like Mahatma Jyotiba Phule, Raja Ram Mohan Roy, Ishwar Chandra Vidyasagar, Sumy Dayanada Sarawati and E.V Ramasamy who tried to reform the Hindu society of certain outdated customs and practices without questioning the hierarchical social order. His approach also differed from Bhakti movement which discourse brotherhood without attacking the evil in the Hindu social order that was based on graded system of caste hierarchy. Dr.B. R.Ambedkar's mission in life was to challenge the ideological foundations of graded system of caste hierarchy that denied equality, freedom and human dignity to women in Hindu society. Therefore, in order to reconstruct Hindu society along modern democratic ideas of liberty, equality and fraternity, he suggests in "The Annihilation of Caste System" To quote him, "Make every man and woman free from the thralldom of the Shastras, cleanse their minds of the pernicious notions founded on the Shastras and he or she will inter-dine and inter-marry without your telling him or her to do so". He found education, inter-caste marriage and inter-dinning as methods by which caste and patriarchy, maintained through endogamy, can be eliminated.

Dr.B. R.Ambedkar began to voice his concern about the low status of women in Indian society while he was still studying in Columbia University. He perceived education as a mechanism for accelerated change. He began to raise his voice for the liberation of women through his newspapers *Mook Nayak* (1920) and *Bahishkrit Bharat* (1927). Through his writings in these newspapers, he raised the issue of gender inequality prevalent in Hindu society and the need of women's education to raise their social status. He involved women in his social reform movements against social evils and demanded socio-economic and political rights for the depressed classes and women. In 1927 at a Conference of Depressed Classes held at Mahad, Dr. B.R. Ambedkar made a bonfire of Manusmriti in presence of more than fifty women to protest against the discrimination of women and untouchables upheld by it. At the end of the Conference, Dr. Ambedkar also addressed a meeting of about three thousand women, the first meeting of its kind in modern

India and recommends them to dress well and live a clean life. He advised to women not to feed their spouse and sons if they are drunk, send their children to schools because education is necessary for females as it is for males.

Dr. B. R. Ambedkar championed the cause of women within the Legislative Council as well. As a member of Bombay Legislative Council, he raised the problems of Indian women in the discussion within the Council and sought their solutions. His arguments on the Maternity Benefit Bill and on Birth Control were quite relevant to recognize the dignity of women. Supporting the Maternity Benefit Bill for women laborers in his speech, he said: 'It is in the interest of the nation that the mother must to get a certain amount of rest during the pre-natal period and also subsequently and the Bill is based entirely on that principle'.

In January 1928, a Women's Association was founded in Bombay with Ramabai, Ambedkar's wife as its president. Women also had their separate conference. In the famous Kalaram temple entry movement at Nasik (1930) about five hundred women participated in the non-violent Satyagraha and many of them were arrested along with men and ill-treated in jails. To face tortures along with their men, women also organized their SamataSainik Dal. When Dr. Ambedkar returned to India after attending the Round Table Conference (1932) hundreds of women were present for the committee meetings. At various places, depressed classes women's conferences were held and they began to present their demands assertively.

The encouragement by Dr.B. R.Ambedkar empowered women to speak out boldly their feelings. In a press conference held in 1931, Radhabai Vadale said, We should get the political right to rule, sitting near the seat of the Viceroy. In his address at the Depressed Classes Women's Conference held at Nagpur (1942) under the presidentship of Mrs. Sulochanabai Dongre in which 25000 women attended, Dr. B. R. Ambedkar said, "I am a great believer in women's organizations. I know what they can do to improve the condition of society if they are convinced. In the eradication of social evils they have rendered great services". He also underlined that women should learn to be clean and keep themselves away from vices. They should educate their children and instill high ambition in them. Speaking on marriage and parental responsibilities, he advised women to get married only when they are financially able. They should stand by their husband as a friend and equal and refuse to be his slave. He reminded them that having too many children is a crime. The paternal duty lies in giving each child a better start than its parents had. He concluded his address, "I am sure if you follow this advice, you will bring honour and glory to yourselves". ¹⁶ As the first Law Minister of independent India, Dr.B. R.Ambedkar introduced Hindu Code Bill in the Parliament in 1951, so as to codify Hindu laws pertaining to marriage, divorce, inheritance that sought to give equal rights to women vis-à-vis men in these aspects. ISIN 2349-638t

Research Methodology: **Objectives:-**

- 1. To understand the ideas and vision of Dr. B. R. Ambedkar on gender equality.
- 2. To analyse the relevance of his vision in the present social scenario of India.

Tool for data collection:

The present study is descriptive in nature. It is based on secondary data collected from authenticated sources. The data has been taken from research journals, News-papers, books, articles, internet sources, etc.

Relevance of Dr. B. R. Ambedtar's Vision on Gender Equality:

The status of women is a key factor for determining the development of any society. Hence, Government of India and our constitutions concentrate for the welfare of them. Gender based Budgeting nowadays felt essential for the upliftment of women socially and economically. From the Fifth Five Year Plan (1974-78) onwards there has been a marked shift in the approach to women's issues from welfare to development. The National Commission for Women also was set up by an Act of Parliament in 1990 to safeguard the rights and legal entitlements of women. The 73rd and 74th Amendments (1993) to the Constitution of India have provided for reservation of seats in the local bodies of Panchayats and

Municipalities for women, laying a strong foundation for their participation in decision making at the local levels. Indian Society is moving path way towards Dr. B. R. Ambedkar vision but, not full accomplishment even after 80 years, his aspiration about gender equality is not fully realized. The considerable statistical evidences shows that, gender inequality continues t exist in education, employments, politically and in economy in Indian society. The following facts show the persistence of gender inequality.

Crimes against Women in Karnataka:

The National Family Health Survey- 5 (2019-20) data has revealed that 44 per cent of women, aged between 18 and 49 years, surveyed in Karnataka have experienced spousal violence (physical and/or sexual) in their lifetime. With this percentage, Karnataka topped the list of 17 states and five UTs included in the survey. The factsheets of the survey, released by the Union Health Minister Dr Harsh Vardhan on Tuesday, showed that Bihar had the second-highest percentage of such cases at 40 per cent, followed by Manipur (39. 6 per cent), Telangana (36.9 per cent), Assam (32 per cent) and Andhra Pradesh (30 per cent). Compared with NFHS- 4 (2015-16) data, cases of spousal violence in 2019-20 in Karnataka and Assam have increased by 20.6 per cent and 24.5 per cent respectively. However, in Manipur, Bihar, Andhra Pradesh, Telangana, West Bengal such crimes have dipped since 2015-16, (*The Times of India*).

We are tiny happy for the number of females per 1000 males as per 2011 census is 973 and as per 2001 census it was 965, hence there is slight increase in the number of females. In comparison to 2001 child population census figure with that of 2011 there is an overall total decline in both male and female child population. The sex ratio in 0-6 age group has declined sharply from 960 in 1991 to 946 in 2001 and again there was a slight raise from 946 in 2001 to 948 as per 2011 Census. Government of India formulated lot of polices and programme for the upliftment of their life. Like, a new scheme called "Rajiv Gandhi" scheme for Empowerment of Adolescent Girls "SABALA" merging "KISHORI SHAKTI YOJANA" (KSY) and NUTRITION PROGRAMME FOR ADOLESCENT GIRLS (NPAG). The new scheme "SABALA" is implemented on pilot basis in 9 districts namely Gulbarga, Kolar, Dharwad, Chickmagalur, Bangalore Rural, Bellary, Bijapur, Kodagu and Uttara Kannada. In the remaining 21 District Kishori Shakti Yojana operational component like Vocational Training is being provided under this scheme.

Summary:

Dr. B.R.Ambedkar was a great champion of gender equality is clear from his various writings on Hindu social order. In order to find out the root cause of degraded status of women in Hindu society, he studied Shastras, Smritis, Buddhist literature, Kautilya's Arthshastra and so on. Through his critical appraisal of these historical and religious texts, Dr. Ambedkar clearly establishes the fact that while women in Pre-Manu days enjoyed equal social status vis-à-vis men and even were economically independent, their status declined in the post-Manu period under the influence of *Manusmriti*. The inseparability of caste and gender inequality in the conceptualization of Hindu social order by Dr. B. R.Ambedkar is an important theoretical input in understanding the hurdles to empowerment of women in the Indian social milieu and needs to be taken note of by the Indian feminists. In other words, any feminist discourse/agenda for the empowerment of Indian women must take into account the realities of Shastras (Manusmriti). It was due to the encouragement by Dr.Ambedkar that a large number of women came out openly on the public streets to reclaim their social rights and self-respect. Dr. B.R.Ambedkar was in the forefront in championing the cause of women's empowerment by forcefully arguing for the passage of Maternity Benefit Bill. As the Chairman of Constitution Drafting Committee, Dr.Ambedkar made a pioneering contribution in introducing Articles 14, 15, 15(3), 16, 39(a), 39(b), 39(c), 42 and amendment 73 and 74 of the constitution is of specific importance in this regard that guarantee protection to women from any kind of discrimination. This shows, that the great importance he attached to the cause of gender equality in India.

Conclusion:

Dr. B. R. Ambedkar has made a notable contribution towards the emancipation of Indian women through his rich and illuminating interpretations of Hindu social order. The contemporary feminist discourse in India has largely ignored this rich classic literature. However, it needs to be realized that any feminist discourse on gender equality in India. Unless this social reality dawns on Indian feminists, they would be devoid of any concrete agenda that truly empowers common women. There is, therefore, a need for Indian feminists to turn to Dr. B. R.Ambedkar to understand the complex matrix of caste and gender so, as to build a counter narrative that challenges the hegemony of patriarchal, Hindu social order which reproduces gender inequality and violence in a systematic manner. He is regarded as one of the greatest intellectual and social reformer of modern India who struggled throughout his life for the liberation of Indian women from the lifelong bondage and slavery under the weight of Hindu social institutions. By conceptualizing caste and gender inequality as inseparable constituents of Hindu social order, Dr. B.R.Ambedkar laid the foundations for gradual transformation of Indian social consciousness and gender justice in India.

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Application of Sawi Transform in Bessel Functions

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Abstract

Now a days everybody van observe that, Bessel functions appear in solving many problems of sciences and engineering. It also appears in many equations such as Schrodinger equation, heat equation, wave equation, Laplace equation and Helmholtz equation in cylindrical or spherical coordinates. In this paper, we study Sawi transform of Bessel functions. Some applications of Sawi transform of Bessel functions for evaluating the integral, which contain Bessel functions, are given in this paper.

Keywords: Sawi transform, Convolution theorem, Inverse Sawi transform, Bessel function, integral containing Bessel's function.

AMS 2010: 33C10, 44-XX, 35A22.

1. Introduction:

In the advance time, Bessel functions play a very important role for solving the problems of mathematical physics, atomic physics, acoustics, radio physics, nuclear physics, engineering and sciences such as flux distribution in a nuclear reactor, fluid mechanics, heat transfer, vibrations, hydrodynamics, stress analysis etc. Sawi transform is introduced by Mahgoub Mohand M. Abdelrahim [4] in 2019. Eduardo Kausel [9] studied Laplace transform of products of Bessel functions in 2012. The Fourier transform of Bessel functions over complex numbers was obtained by Zhi Qi [8]. Aggarwal S., Sharma N.and Chauhan R [5] studied Mahgoub transform of Bessel functions in 2018. Aggarwal S. [6] obtained Kamal transform of Bessel functions. Aggarwal and Gupta [1] studied dualities between some useful integral transforms and Sawi transform in sept. 2019 Niyazi Yukcu [7] obtained Fourier transform of Bessel type functions. Bessel function of order n, where $n \in N$ is the non-negative integer, is given by [2], [3]. Bessel function of order n is defined as

$$J_n(t) = \frac{t^n}{2^n \cdot n!} \left[1 - \frac{t^2}{2(2n+2)} + \frac{t^4}{2(4) \cdot (2n+2) \cdot (2n+4)} + \frac{t^6}{2(4)(6) \cdot (2n+2) \cdot (2n+4) \cdot ((2n+6))} \dots \right]$$
(1.1)

In particular, when n = 0, we have Bessel function of zero order and it is denoted by $J_0(t)$ and it is given by the infinite power,

$$J_0(t) = 1 - \frac{t^2}{2^2} + \frac{t^4}{2^2 \cdot 4^2} - \frac{t^6}{2^2 \cdot 4^2 \cdot 6^2} \cdot \cdot \cdot$$
 (1.2)

For n = 1, we have Bessel function of order one and it is denoted by $J_1(t)$ and it is given by,

$$J_1(t) = \frac{t}{2} - \frac{t^3}{2^2 \cdot 4} + \frac{t^5}{2^2 \cdot 4^2 \cdot 6} - \frac{t^7}{2^2 \cdot 4^2 \cdot 6^2 \cdot 8} \dots$$
 (1.3)

Equation (1.3) can be written as.

$$J_1(t) = \frac{t}{2} - \frac{t^3}{2^3 \cdot 2!} + \frac{t^5}{2^5 \cdot 2! \cdot 3!} - \frac{t^7}{2^7 \cdot 3! \cdot 4!} \dots$$
 (1.4)

For n = 2, we have Bessel function of order two and it is denoted by $J_2(t)$ and it is given by,

$$J_2(t) = \frac{t^2}{(2)(4)} - \frac{t^4}{2^2(4)(6)} + \frac{t^6}{2^2 \cdot 4^2(6)(8)} - \frac{t^8}{2^2 \cdot 4^2 \cdot 6^2(8)(10)} \dots$$
 (1.5)

In 2019, Mohand and Mahgoub defined a new integral transform Sawi transform of the function F(t) for $t \ge 0$ as

$$S\{F(t)\} = R(v) = \frac{1}{v^2} \int_{0}^{\infty} F(t)e^{-\frac{t}{v}} dt \ t \ge 0$$
 (1..6)

where operator S is called the Sawi transform operator. If F(t) is piecewise continuous and of exponential order then the sawi transform of the function F(t) for $t \ge 0$ exists.

The main purpose of the present article is to determine Sawi transform of error function and explain the importance of Sawi transform of Bessel function by giving some numerical applications. Paper is organized as follows. Useful properties of Sawi transform are stated in second section. Third section is devoted to the Sawi transform of some standard functions. Fourth section contains Sawi transform of Bessel's function. As application some problems are solved in fifth section. Conclusion is drawn in last sixth section.

2 Some Useful Properties OI Sawi 11 aug. 7. This section contains some useful properties and theorem.

2.1 Linearity property:

If Sawi transform of function $F_1(t)$ and $F_2(t)$ are $R_1(v)$ and $R_2(v)$ respectively then Sawi transform of $[aF_1(t) + bF_2(t)]$ is given by $[aR_1(v) + bR_2(v)]$, where a; b are arbitrary constants. Proof: Using the definition of Sawi transform, we can obtain

$$S[F(t)] = \frac{1}{v^{2}} \int_{0}^{\infty} F(t)e^{-\frac{t}{v}} dt$$

$$\therefore S[aF_{1}(t) + bF_{2}(t)] = \frac{1}{v^{2}} \int_{0}^{\infty} [aF_{1}(t) + bF_{2}(t)]e^{-\frac{t}{v}} dt$$

$$= a \frac{1}{v^{2}} \int_{0}^{\infty} [F_{1}(t)]e^{-\frac{t}{v}} dt + b \frac{1}{v^{2}} \int_{0}^{\infty} [F_{2}(t)]e^{-\frac{t}{v}} dt$$

$$\Rightarrow S[aF_{1}(t) + bF_{2}(t)] = aS[F_{1}(t)] + bS[F_{2}(t)]$$

$$\Rightarrow S[aF_{1}(t) + bF_{2}(t)] = aR_{1}(v) + bR_{2}(v)$$

$$(2.2)$$

2.2 Change of scale property:

If Sawi transform of function F(t) is R(v) then Sawi transform of function F(at) is given by R(av). **Proof**: We use the definition of Sawi transform and can obtain

$$S[F(at)] = \frac{1}{v^2} \int_{0}^{\infty} F(at)e^{-\frac{t}{v}} dt$$
 (2.3)

Put $at = p \Rightarrow adt = dp$ in equation (2:3); we have

$$S[F(at)] = \frac{1}{a \cdot v^2} \int_0^\infty F(p) e^{-\frac{p}{a \cdot v}} dp$$

$$S[F(at)] = a \frac{1}{(av)^2} \int_0^\infty F(p) e^{-\frac{p}{a \cdot v}} dp = a R(v) \qquad (2.4)$$

2.3 Sawi transform of the derivatives of the function F(t):

If SF(t) = R(v) then (a)
$$S[F'(t)] = \frac{R(v)}{v} - \frac{F(0)}{v^2}$$

(b) $S[F''(t)] = \frac{R(v)}{v^2} - \frac{F'(0)}{v^2} - \frac{F(0)}{v^3}$
(c) $[F^{(n)}(t)] = \frac{R(v)}{v^n} - \sum_{k=0}^{n-1} \frac{F^{(k)}(0)}{v^{(n-k+1)}}$

2.4 Convolution theorem for Sawi transforms:

If Sawi transform of function $F_1(t)$ and $F_2(t)$ are $R_1(v)$ and $R_2(v)$ respectively then the Sawi transform of their convolution $F_1(t) * F_2(t)$ is given by $S[F_1(t) * F_2(t)] = v^2 R_1(v) R_2(v)$ where $F_1(t) * F2(t)$ is defined by

$$F_1(t) * F_2(t) = \int_0^t F_1(t-x)F_2(x)dx = \int_0^t F_1(t)F_2(t-x)dx$$

3 Sawi transform of some functions:

Table No. 1

14516 110. 1			
Sr. No. F(t) S[F(t)]		
1 1 1			
$\frac{1}{v}$			
2 T 1			
3 t^2 2!.v			
$4 t^n, n \in N n!. v^n$	-1		
$5 e^{at}$			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\overline{av)}$		
6 sin at a	<u> </u>		
$1+a^2$	v^{2}		
7 cos at 1			
v(1+a)	$(2v^2)$		
8 sinh at a	0		
$1-a^2$	v^2		
9 cosh at 1			
8 $\frac{a}{1-a^2}$ 9 $\cosh at$ $\frac{1}{v(1-a)}$	$(2v^2)$		

Relation between $J_0(t)$ and $J_1(t)$:

$$\frac{d}{dt}J_0(t) = -J_1(t) {(3.1)}$$

Relation between $J_0(t)$ and $J_2(t)$

$$J_2(t) = J_0(t) + 2[J_0''(t)]$$
 (3.2)

4. Sawi Transform of Bessel Function:

In this section we obtain Sawi transform of Bessel function of zero, one and two order.

4.1 Sawi Transform of Bessel Function of Zero Order:

Applying Sawi Transform both sides of equation (1.2) we get

$$S[J_0(t)] = S(1) - \frac{S(t^2)}{2^2} + \frac{S(t^4)}{2^2 \cdot 4^2} - \frac{S(t^6)}{2^2 \cdot 4^2 \cdot 6^2} \dots \dots \dots$$

$$\therefore S[J_0(t)] = \frac{1}{v} - \frac{2! \cdot v}{2^2} + \frac{4! \cdot v^3}{2^2 \cdot 4^2} - \frac{6! \cdot v^5}{2^2 \cdot 4^2 \cdot 6^2} \dots \dots \dots$$

$$(4.1)$$

4.2 Sawi Transform Of Bessel Function of 1st order: We know that

$$\frac{d}{dt}J_0(t) = -J_1(t)$$

Applying Sawi Transform on both side

$$S(J_1(t)) = -SJ_0'(t) = -\left[\frac{1}{v}S\{J_0(t)\} - \frac{J_0(0)}{v^2}\right] = \frac{1}{v^2}\left\{1 - \frac{1}{\sqrt{1+v^2}}\right\}$$

4.3 Sawi Transform Of Bessel Function of 2nd Order: We know that

$$J_2(t) = J_0(t) + 2J_0''(t)$$

Applying Sawi Transform on both side

$$SJ_2(t) = SJ_0(t) + 2SJ_0''(t) = \frac{1}{v} \left\{ \frac{1}{\sqrt{1+v^2}} \right\} + 2\left[\frac{1}{v^2} S\{J_0(t)\} - \frac{J_0'(0)}{v^2} - \frac{J_0(0)}{v^3} \right]$$

$$\therefore SJ_2(t) = \frac{1}{v} \left\{ \frac{1}{\sqrt{1+v^2}} \right\} + \frac{2}{v^3} \left\{ \frac{1}{\sqrt{1+v^2}} - 1 \right\}$$

4.4 Sawi Transform of J₀(at):
$$S[J_0(at)] = \frac{1}{v} \left(\frac{1}{\sqrt{1+(av)^2}} \right)$$

4.5 Sawi Transform of
$$J_1(at)$$
 $S[J_1(at)] = -\frac{1}{av} \left(\frac{1}{\sqrt{1+(av)^2}} - 1\right)$

4.6 Sawi Transform of J2(at))
$$S[J_2(at)] = \frac{1}{v} \left(\frac{1}{\sqrt{1 + (av)^2}} \right) + \frac{2}{a^2 \cdot v^3} \left(\frac{1}{\sqrt{1 + (av)^2}} - 1 \right)$$

5 Applications:

In this section, some problems are solved in order to demonstrate the effectiveness of Sawi transform of Bessel functions for evaluating the integral which contain Bessel functions.

Problem: 1 Evaluate the integral $I(t) = \int_0^t J_0(t-u).J_0(u)du$.

Solution: Applying the Sawi transform on side of above equation,

$$S\{I(t)\} = S\left\{ \int_{0}^{t} J_{0}(t-u).J_{0}(u)du. \right\}$$

Using convolution theorem of Sawi transform on above equation

$$S\{I(t)\} = v^2 S\{J_0(t)\}.S \left\{J_0(t)\} = v^2 \left[\frac{1}{v} \left\{\frac{1}{\sqrt{1+v^2}}\right\}.\frac{1}{v} \left\{\frac{1}{\sqrt{1+v^2}}\right\}\right] = \frac{1}{1+v^2}$$

Applying Inverse of Sawi transform on above equation

$$I(t) = S^{-1} \left\{ \frac{1}{1 + v^2} \right\}$$
$$\therefore I(t) = \sin t$$

which is the required solution.

Problem: 2 Evaluate the integral $I(t) = \int_0^t J_1(t-u).J_0(u)du$.

Solution: Applying the Sawi transform on both side of above equation,

$$S\{I(t)\} = S\left\{ \int_{0}^{t} J_{1}(t-u).J_{0}(u)du. \right\}$$

Using convolution theorem of Sawi transform on above equation

$$S\{I(t)\} = v^{2} S\{J_{0}(t)\}.S \{J_{1}(t)\} = v^{2} \left[\frac{1}{v} \left(\frac{1}{\sqrt{1+v^{2}}}\right)\right] \frac{1}{v^{2}} \left(1 - \frac{1}{\sqrt{1+v^{2}}}\right)$$

$$\therefore S\{I(t)\} = \frac{1}{v} \left(\frac{1}{\sqrt{1+v^{2}}}\right) - \frac{1}{v} \left(\frac{1}{1+v^{2}}\right)$$

Applying Inverse of Sawi transform on above e

$$I(t) = S^{-1} \left[\frac{1}{v} \left(\frac{1}{\sqrt{1 + v^2}} \right) \right] - S^{-1} \left[\frac{1}{v} \left(\frac{1}{1 + v^2} \right) \right]$$

$$\therefore I(t) = J_0(t) - \cos t$$

This is the required solution.

Problem: 3 Evaluate the integral $I(t) = \int_0^t J_1(t-u)du$.

Solution: $I(t) = \int_0^t J_1(t-u) du = \int_0^t J_1(t-u)(1) du$ Applying the Sawi transform on both side of above equation,

$$S\{I(t)\} = S\left\{\int_{0}^{t} J_{1}\left(t - u\right)(1)du\right\}$$

Using convolution theorem of Sawi transform on above equation,

$$S\{I(t)\} = v^2 S(1) S\{J_1(t)\} = v^2 \cdot \frac{1}{v} \cdot \frac{1}{v^2} \left\{ 1 - \frac{1}{\sqrt{1+v^2}} \right\} = \frac{1}{v} - \frac{1}{v} \frac{1}{\sqrt{1+v^2}}$$

Applying Inverse Sawi transform on above equation,

$$I(t) = S^{-1} \left(\frac{1}{v}\right) - S^{-1} \left(\frac{1}{v} \frac{1}{\sqrt{1+v^2}}\right)$$

$$\therefore I(t) = 1 - J_0(t)$$

this is the required solution.

Conclusion:

In this article ,we have successfully discussed the Sawi transform of Bessel's function of zero one, and two orders Also the given applications show that the advantage of Sawi transform of Bessel's functions to evaluate the integral containing Bessel's functions.

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Health Issues of Transgender- A Sociological Study

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Abstract

Transgender people are those individuals whose gender identities do not pertain to their biological sex, and thus they differ from the stereotype of how women and men normally are. Though the term transgender does not include sexual orientation, it pertains to gender identity and expression. It is for this reason their identity and behaviour do not adhere to stereotypical gender norms. They suffer from lot of health issues and they are not accessible to proper medical facilities and they suffer lot of difficulties while undergoing surgery which is called as emasculation. This paper identifies the health problems of transgender, the difficulties they face and what are the steps taken by the government to look in to their medical care.

Transgender people come from all walks of life. They are dads, moms, brothers and sisters, sons and daughters. From 7 year old to 70 year old, they belong to diverse community representing all racial and ethnic backgrounds. Both male and female transgender do not lead the life to their fullest as they themselves are in a dilemma how they should be addressed in the society and it is also very difficult for the society to recognize them and accept them in the said gender.

There are certain medical theories about why people tend to be transgender. The theories speculate that imbalances and fluctuations in hormones and use of certain medications during pregnancy may cause intersex or transgender conditions. Some of the research say that there are links between brain structure and transgender identity.

Some of the people believe that psychological factors also cause the existence of transgender. Most of the studies show that people are transgender from their earliest memories. Most of the trans people feel that their gender identity is an integral part of them. Some of them also feel that they have the right to choose their gender and also freedom to express themselves. Both sex and gender are complex issues. Transgender are also part of the group which makes human community.

The life of transgender includes lot of problems which include-

- a) Neglect from family and society.
- b) They are restricted to participate in social and cultural life.
- c) They also face lot of problems with references to education, health services and public spaces
- d) They also face difficulties in exercising basic civil rights.
- e) They also face lot of violence in society.
- f) They are also excluded from effectively participating in both social and cultural life.

Austin J. Fonville, a transgender man living in NewBern, North Carolina, says he never felt comfortable using the women's restroom. He says he had a urinary tract infection, because he was just scared to go into the women's room because he felt like it didn't belong to him.

Abhina Aher was born a boy biologically and is now a hijra, a member of an ancient transgender community in India. Of her painful physical and psychological transformation, Aher remembers now: "I just wanted to become a beautiful butterfly". The signs came early that Abhina Aher was different. She has undertaken a long and arduous journey, rejecting her biological sex and opting to become a hijra- a member of an ancient transgender community in India, popularly referred to as eunuchs.

Many hijras experience life thorough dual identities. Like Nayan, they change clothing or assume certain personalities to be accepted in society but later adopt different ones, in accordance with their true

identity. The government of Bangladesh recognised hijras as belonging to third gender in 2013. Hijras usually earn a living by singing, dancing, giving blessings at ceremonies traditionally. But this scene has been changing considerably in Bangladesh now and with opportunities for regular employment being rare, they often rely on gurus for protection, or turn to sex work.

In other incident, "I told them I was Indira and not Inder(the name given at birth), but no one called me by that name. I wasn't allowed a separate restroom, and was instead forced to continue going to the male restroom. Employers can't send a trans person undergoing hormone replacement to restrooms meant for men," says Indira. As a result of this Indira found herself battling a case of urinary tract infection. "I didn't want to use the men's restroom, so I just stopped drinking water" she says. Though she has a Bachelor's degree, she never set her foot inside her college because of the mental and physical harassment she faced while in school.

While coming to the public health and medical issues, many studies show that transgender people are more prone to sexual diseases as they earn their living through sexual activities. As majority of the transgender have lower socioeconomic status and low literacy level is a major setback to concentrate on their health issues. They also face mental disorders such as depression, lack of social support, suicidal tendencies, violence related stress and so on. Venkatesan Chakrapani, MD, Centre for Sexuality and Health Research and Policy has also expressed the health care system barriers faced by Indian transgender people (ICAAP-11, Bangkok, 2013).

Transgender Health Handbook reveals the story of Somchai, a transgender. "We don't need to modify our bodies to be beautiful or proud of ourselves. We don't need to change our bodies to become women if we already feel that we are. Whether or not we have a sex change, regardless of what our identification cards say, if we appear as women, we should be accepted as women"- Somchai.

Somehai's words reveal the plight of transgender which they are facing facing in day to day life. Transgender women are at high risk for HIV and STDs. This is not their choice, but because the social discrimination that they face in the society. It also includes discrimination in employment that leads to sex work, discrimination in health care settings that prevent transgender from trusting or seeking care.

Most of the youth among hijra community face lot of problems with gender identity, gender expression, and also gender role which are imposed on them on the basis of their biological characteristics. They face lot of problems such as shame, fear, adapting, fear of relationships, internalized transphobia and so on. Most of the transgender consume alcohol in order to forget stress and depression that they undergo in daily life.

Patricia Gagne, Richard Tewksbury and Deanna Mcgaughey in the article Coming Out and Crossing Over-Identity Formation and Proclamation in a Transgender Community (1997) have coined the term 'Coming Out' which is a term generally used to refer to the processes whereby gay men, lesbians or bisexuals inform others of their sexual identity. Despite this popular notion, the social scientific literature has shown coming out to be a broader and more complex process whereby people recognize and accept their sexual preference, adopt a sexual identity, inform others of their sexual orientation, and become involved in relationships with others of similar sexual identity (Cass 1979, 1984; Coleman 1981-82; Isay 1990; Troiden and Goode 1980; Weinberg 1978).

United Nations has advocated for the protection and promotion of rights of sexual minorities including transgender persons. Article 6 of the Universal Declaration of Human Rights, 1948and Article 16 of the International Covenant on Civil and Political Rights 1966(ICCPR) recognize that every human being has the inherent right to live and this right shall be protected by law and that no one shall be arbitrarily denied of that right.

In Germany, a new law has come into force on 5th November, 2013, which allows the parents to register the sex of the children as 'not specified' in the case of children with intersex variation. The law has also added a category of x, apart from "M" and "F" under the classification of gender in the passports. To conclude, when other countries can do justice to third gender, then why not India?

Gender identity resides at the core of one's personal identity, gender expression and presentation. It is very important to treat them with humanity and laws should be strictly passed as other countries towards bringing justice to this marginalized section of the society. Any State cannot prohibit, restrict or interfere with a transgender's expression of such personality which reflects that inherent personality. Due to the negligence of some authorities their identity in the society is not focussed and not given importance. We therefore hold that values of privacy, self-identity, autonomy, and personal integrity are fundamental rights guaranteed to members of the transgender community under Article 19(1)(a) of the Constitution of India and the State is bound to protect and recognize those rights.

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Relook on Subaltern Studies and Decolonisation Historiograhy

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Abstract

This study has attempted to retrace the concept of Subaltern studies on post colonialism in India. Decolonization helps to revive or change the historical studies and historiography in India and other countries. Subaltern studies emerged from the writings of Antonio Gramsci, so called "prison Notebooks'. Being an Italian communist he brought the new concept against hegemony and glorified peasants. As per the Oxford dictionary, the word subaltern exhibits the meaning as 'inferior rank 'in military category, on Europe. Indeed, they are the subordinates in south Asian society in terms of caste, class, gender, age and office. The two words history and society were involved in the shorthand for all involved on subaltern conditions. Perhaps, the prominent aims of the subaltern studies have to exhibit or recover the history of unprivileged groups, so called underclass. Moreover, it analyze the society with elite and subordinates, attributed dominance or ruling class with subordinate class in the network of capitalism, colonialism, and nationalism. Without Antonio Gramsci, Ranajith Guha, Gaythri Chakravorty spivak, and E.P.Thomson this field not organize or survive. However, after the eminent scholars subaltern studies diluted at this movement. However, it implicated the other fields like anthropology and feminist studies.

Key words: Decolonization, subaltern studies, historiography, feminist studies, elites, unprivileged groups

Introduction

Some of few people think wise and identify or exhibit the new ideas or vision to this world. Perhaps, they don't know how these thoughts or ideology may focus by the entire world. Indeed, they are called as intellectuals or reformist. Their theory would be affected the higher category also their reflection was cruel. Their bravery thought or ideas help the third class category or common people. On the path some of historians revealed new concept to the society, called Subaltern Studies. In historical studies, the traditional historiography followed by the writers would be focused on kings and its family history. In colonial period, the imperialist or colonial history focused in high esteem. Also, colonial period, the historiography paved a path of elite peoples. During post colonialism, also leader's history highlighted on Indian platform. The historiography of Indian nationalism had been dominated two main concepts for a long while, named bourgeois-nationalist and elitism-colonist criticism. Both originated as an ideological product of British rule in India, but have survived the transfer of power and been assimilated to neo-colonialist and neo-colonialist forms of discourse in Britain and India respectively. Fortunately, the elites like Antonio Gramsci, Ranajith Guha derailed the traditional or historiography, and move a new path and expose the school of studies, so called Subaltern Studies. However, the contributors to Subaltern studies have not yet, given sufficient attention to the forms that domination and hegemony took in colonial India. In the context of the prevailing historiography of the region, the first priority was to pursue Gramsci's other concern and to uncover and appraise the neglected history of subaltern consciousness and subaltern initiative and resistance. This study has attempted to retrace the concept of Subaltern studies on post colonialism in India.

The Nation and Its peasants

The two concepts modern state and peasantry related with each other, with ambiguous meaning. The impact of modernization and industrialization on Western Europe, power to coincides on the process of peasantry. Even in France, where it survived a significantly large mass of the population in the second half of the 19th century, the peasantry movement associated with supposedly tremendous phenomena of 'Bonapartism', and described systematically disciplined and transformed into Frenchmen.² Above the material and conceps utilized in India by Ranajith Guha, on nationalist mass movements.³ From the serious of peasants were revolts in colonial India between 1783 and 1900.

Ramachandra Guha abjured to confine the ideological unchanging of peasant advertence and their relational unity on paradigmatic form. He starts to assume that the superiority and exploitation underneath which the peasants lived, worked existed within a relation of power. There are two major groups on opposite side, first one named as dominators, called also the state or money lenders or landlords. Other group called the peasants. On the colonial period, the second group paved a path on discourse of insurgency. He recognize six elementary aspects, called them, of the insurgent peasant consciousness; ambiguity, negation, modality, transmission solidarity, and territoriality. Antonio Gramsci writings impacted the group of scholars who were working in Indian peasantry, and exhibited series of volumes entitled Subaltern Studies and edited by Ranjith Guha(1982, 1984). His work has been great attempt to review the progress made so far in register Gramician concepts to India.

Subaltern Studies

As per the Oxford dictionary, the word subaltern exhibits the meaning as 'inferior rank 'in military category, on Europe. Indeed, they are the subordinates in south Asian society in terms of caste, class, gender, age and office., 'it will be used in these pages as a name for the general attribute of subordinations in South Aisan society whether this is expressed in terms of class, caste, age, gender, and office or in any other way. The two words history and society were involved in the shorthand for all involved on subaltern conditions. Perhaps, the prominent aims of the subaltern studies have to exhibit or recover the history of unprivileged groups, so called underclass. The subaltern word exhibits antonym the meaning of the word elite. The term elite described as the three prominent theories viz, indigineous, dominant groups, as well as foreign groups.

Although the term 'Subaltern' has several diverse meaning in social science, from psychology to anthropology Historians who use this term take it from Antonio Gramsci(1891-1937), an Italian Marxist and communist who are jailed for long time by Italian dictator Mussolini's police from 1926. Till his death he faced imprisonment. While he written several theories about politics, history and philosophy. He registered that the subaltern might be subjected lower class and society on whom hegemonic and dominant power. The hegemonic foreign groups included with non-Indian, they are foreign industrialist, financiers, merchants, landlords, missionaries and planters. The hegemonic groups have classified into two levels like industrial and mercantile bourgeoisie. The term subaltern came from the work of the great Italian Marxist and reformist writer Antonio Gramsci (1891-1937) work. It refers to any person considered as "inferior" or race, class, gender, etc., ⁵

In 1970, the subaltern studies have started in England, while conversations and subaltern themes along a small group of Indian and England historians reveal the proposal to launch a new journal. Oxford University press from New Delhi has accepted to publish three volumes of essays about Subaltern studies on writings of both south Asian history and society.

These issued annually since 1982 and their success enlivened three main volumes in the next 5 years, all edited by Ranajit Guha. While Ranaji\th Guha retired from editor position, he and his eight collaborators were wrote 34 essays in 6 Subaltern volumes. Also wrote 15 related books, and made success and wrote 3 more volumes and 15 related books. In 1993, a group he remembers as on "an assortment of marginalized academics" has sufficient international prestige that a Latin America Subaltern Studies Group was inspired "by this interdisciplinary organization of South scholars led by Ranajith Guha. Today, ten (and counting Subaltern studies volumes have appeared they include essays by forty-four authors whose allied publications approach two hundred, including translations in several languages. Yet the core group still includes eight founders and Ranjith Guha's "intellectual driving force" is still visible. Perhaps, the subaltern studies were begun in India, while the book reviews come out. On first volume was reviewed separately and come out the collection of essays in 1986. An hoarding of writing inside and outside the project had established a distinctive school of research whose adherents in paperback in 1988, when selected subaltern studies was edited by Ranajit Guha and Gayatri Chakrovorthy spivak and published on Oxford University Press in New York.

From 1990, a historian named Burtein stein may cite the enhancing interest on Sublatern studies. His sign visualized from "a decade of historical efflorescence "in South Asian Studies. ¹²then subaltern

studies might be the hottest topic on academic forum. The numerous continents adopted this discipline across the field's viz., anthropology, sociology, political science, cultural studies and literary criticism. Nationalist politics glorified by elites not for the subordinates. The nationalist movement grossly neglected on historical subjectivity and tempted of the Indian people to acquire freedom. They admired the elites with narrow communal and caste reasons, on a veridical line of patron –client relationship. On the other side the emirates historian Bipan Chandra borrowed critical views from Marxist writings and wrote variants of Marxism, reflection of lain American dependency, which renowned as underdevelopment theory.

The school of historical has been writing given a radical break from Guha's approach and move. Guha brought the role of subaltern subjectivity into the history of anti-colonial struggle in India. Guha profess that the two identical schools imbibed "elite biases" and tremendously forsaken the subaltern in the anti-colonial struggle, or the role of the common "people" Guha contested the nationalist historiography, which promoted the idea that nationalist leaders shepherded the Indian "masses" from pre-political past to nationalist present, transforming them from being subjects of oriental tyrants of citizens of the modern state. On the contrary, it is evident from the postcolonial experience of the India n state that rather than being benevolent, Indian elites were hugely and it agenda. For instance, the Maoist movements that emerged in the 1970s encounter heavy-handed counterinsurgency measures form the state.

The perception and influence of Edward Thompson's historical work has been marked by paradox. It is surprising, for instance, that a historian in whose work the state occupied such an important place should have spawned a vast historiography in which the state was simply left out. His influence came to be more directly and tangibly registered in Indian historiography. This led directly owed something to the significance of morel economy. The subaltern followers of Thomson did not resist this temptation. They have often espoused the conventional wisdom; recently restate by Dipash Chkrabarty, that migrants imported a peasant's culture into the industrial settling.

Decolonization

Decolonization is a new technical and un-dramatic term for more dramatic process in Modern Indian history; it disappeared in empire is an political form, and the end of racial hegemony, as broadly accepted political theory which structuring principal of world order. The oxford English dictionary defined decolonization as the "withdrawal from its former colonies of a colonial power the acquisition of political or economic independence by such colonies". The key words in that definition are: withdrawal" and acquisition that cannot sober financial transaction carried out by mutual agreement. The twentifth century was a notion that the elimination of colonial administrations amounted to the decolonization of the world. This led to the "postcolonial world". Many reasons evolved to subaltern studies on postmodern critique. Decolonization could be more than the transfer of power, but also capacious term to debate. The transfer of power leads the study of cultural history, postcolonial studies subaltern studies, and new imperial history. The subaltern studies historians have brought to light the existence of Decolonization.

Declining of Subaltern studies

Subaltern studies emerged in the early 1980s in a dissident-left milieu, where sharp criticism of orthodox Marxist practice and theory was still combined with the retention of a broad socialist and Marxian horizon. There were obvious affinities with the radical populist moods fo the 1960s and 1970s,, and specifically with effort to write 'histories from below'. The common ground lay in a combination of enthusiastic response to popular, usually peasant rebellions, with growing disillusionment about organized left parties, received versions orthodox Marxist ideology, and the bureaucratic state structure; actually existing socialism. In India, specifically there were the embers of abortive Maoist armed struggle in the country side, the spectacle of one of the two major communist parties supporting an authoritarian regime. Subaltern studies were admired by Gayathri Spivak, then take over, finally Edward said to take over the project.¹⁶

The achievement of the early years of Subaltern studies in terms of widening horizons and concrete historical research need to be rescued, perhaps, form the enormous condescension of recent supports like Gyan parkas,, whose set aside such contribution as the familiar' history form dramatic approach.¹⁷ In the

name of theory, then a tendency emerged towards essential categories of 'Subaltern' and 'autonomy' in the sense of assigning to them more or less absolute, fixed, de-contextual meaning and qualities, That there had been such elements of 'essentialism' teleology and epistemological native in request for the subaltern subject has naturally not escaped the notice of recent post-modern history inclined amides. They tend, however, to blame such abreactions, on Marxist resumes which now , happily , have been largely overcome. What in conveniently forgotten is threat the problem do not appears through a simple substitution of 'class' by 'subaltern' or community. ¹⁸

The political inclinations of the subaltern scholars and the bulk of their leadership are certainly very difficult. But some of their work nowadays seems to be unwittingly feeding into safer versions of not entirely dissimilar moods. Words like secular , rational or progressive have become terms of ridicule and if residence can still be valorize movement seeking transformation get suspected of teleology. All tremendous efforts need, obtained, and input w wise knowledge with radical interests and commitments. this intelligentsia, however, is one constituent of a wider middle-class formation upwardly mobile sections of which today are being sucked into globalizing process that promise material consumerist dividends at the price of dependency.

Conclusion

Decolonisation helps to revive or change the historical studies and historiography in India and other countries. Perhaps, the prominent aims of the subaltern studies have to exhibit or recover the history of unprivileged groups, so called underclass. Moreover, it analyze the society with elite and subordinates, attributed dominance or ruling class with subordinate class in the network of capitalism, colonialism, and nationalism. Without Antonio Gramsci, Ranajith Guha, Gaythri Chakravorty spivak, and E.P.Thomson this field not organize or survive. However, after the eminent scholars subaltern studies diluted at this movement. However, it implicated the other fields like anthropology and feminist studies.

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Digital Marketing and its Benefits

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Abstract:

Online marketing, Internet marketing or web marketing, Digital marketing sits at the intersections of marketing and technology it encompasses any type of marketing effort requiring an electronic device or the internet, and there are a lot of electronic devices connected to the internet now, Even though the term digital marketing coined in the 1990s its complete usage and importance have risen only in the recent past two decades. Digital media has become so wide spread that anybody can access information anytime anywhere. This gives marketers more ways to promote products and services through blogs, websites and social media channels. Marketers can also see what is trending through various tools available, what is the unique selling point of a product and why and when people search for a product or service for better targeting. This paper covers elements of targeting, advantageous of digital marketing for the point of consumers and conclusion point.

Keywords: Digital Marketing, Search Engine, E mail marketing, Pay per click

1.Introduction

Digital marketing is one type of marketing being widely used to promote products or services and to reach the consumers using digital channels very rapidly. Digital marketing extends beyond internet marketing including channels that do not require the use of Internet. It includes mobile phones (both SMS and MMS), social media marketing, display advertising, search engine marketing and many other forms of digital media.

Through digital media, consumers can access information any time and any place where they want. With the presence of digital media, consumers do not just rely on what the company says about their brand but also they can follow what the media, friends, associations, peers, etc., are saying as well. Digital marketing is a broad term that refers to various promotional techniques deployed to reach customers via digital technologies. Digital marketing embodies an extensive selection of service, product and brand marketing tactics which mainly use Internet as a core promotional medium in addition to mobile and traditional TV and radio. Nikon photo Gateway helps consumers share their digital photos with friends online. Titans brand Raga uses email newsletters to keep in touch with customers and hence tries to strengthen customer brand loyalty. Magazine publishers can activate and drive their customers into Internet with e-mails and SMS messages to improve re-subscription rate for Example Film fare Magazines.

Marketers increasingly bring brands closer to consumers' everyday life. The changing role of customers as co-producers of value is becoming increasingly important (Prahalad and Ramaswamy, 2004). Khan and Mahapatra (2009) remarked that technology plays a vital role in improving the quality of services provided by the business units. According to Hoge (1993), electronic marketing (EM) is a transfer of goods or services from seller to buyer involving one or more electronic methods or media. E-Marketing began with the use of telegraphs in the nineteenth century. With the invention and mass acceptance of the telephone, radio, television, and then cable television, electronic media has become the dominant marketing force. McDonald's uses online channel to reinforce brand messages and relationships. They have built online communities for children, such as the Happy Meal website with educative and entertaining games to keep customers always close to themselves (Rowley 2004). Reinartz and Kumar (2003) found that the number of mailing efforts by the company is positively linked with company profitability over time. The primary advantages of social media marketing is reducing costs and enhancing the reach. The cost of a social media platform is typically lower than other marketing platforms such as face-to-face sales or sales with a help of middlemen or distributors. In addition, social media marketing allows firms to reach customers that may not

be accessible due to temporal and locational limitations of existing distribution channels. Generally, main advantage of social media is that it can enable companies to increase reach and reduce costs (Watson et al. 2002; Sheth& Sharma 2005).

According to Chaffey (2011), social media marketing involves "encouraging customer communications on company's own website or through its social presence". Social media marketing is one important technique in digital marketing as companies can use social media form to distribute their messages to their target audience without paying for the publishers or distributor that is characteristic for traditional marketing. Digital marketing, electronic marketing, e-marketing and Internet marketing are all similar terms which, simply put, refer to "marketing online whether via websites, online ads, opt-in emails, interactive kiosks, interactive TV or mobiles" (Chaffey & Smith, 2008). Giese and Gote (2000) finds that customer information satisfaction (CIS) for digital marketing can be conceptualized as a sum of affective response of varying intensity that follows consumption and is stimulated by focal aspects of sales activities, information systems (websites), digital products/services, customer support, after-sales service and company culture.

Waghmare (2012) pointed out that many countries in Asia are taking advantage of e-commerce through opening up, which is essential for promoting competition and diffusion of Internet technologies. Zia and Manish (2012) found that currently, shoppers in metropolitan India are being driven by e-commerce.

These consumers are booking travels, buying consumer electronics and books online. Although spending per online buyer remains low, some 60% of online consumers in metropolitan India already make purchases online at least once in a month. Dave Chaffey (2002) defines e-marketing as "application of digital technologies - online channels (web, e-mail, databases, plus mobile/wireless & digital TV) to contribute to marketing activities aimed at achieving profit acquisition and customers retention (within a multi-channel buying process and customer lifecycle) by improving customer knowledge (of their profiles, behavior, value and loyalty drivers) and further delivering integrated communications and online services that match customers' individual needs. Chaffey's definition reflects the relationship marketing concept; it emphasizes that it should not be technology that drives e-marketing, but the business model. All types of social media provide an opportunity to present company itself or its products to dynamic communities and individuals that may show interest (Roberts &Kraynak, 2008). According to Gurau (2008), online marketing environment raises a series of opportunities and also challenges for social media marketing practitioners.

The main objective of this paper is to identify the Overall Impact of digital marketing in today's Digital competitive market where everything is setting up Digitally active. The supportive objectives are following:

- To show the various elements of digital marketing;
- To focus on the basic comparison between traditional and digital marketing;
- To discuss the effects of various forms of digital marketing on the firm's sales and other activities;
- To show the various advantages of digital marketing to the customers

2.Theoretical and conceptual framework

Traditional Marketing vs Digital Marketing

Traditional marketing is the most Common and recognizable form of marketing. Traditional marketing is non-digital way used to promote the product or services of business entity. On the other hand, digital marketing is the marketing of products or services using digital channels to reachconsumers.

Advertising mediums that might be used as part of digital marketing strategy of a business could include promotional efforts made via Internet, social media, mobile phones, electronic billboards, as well as via digital television and radio channels. Digital marketing is a sub branch of traditional marketing and uses modern digital channels for the placement of products e.g. downloadable music, primarily for communicating with stakeholders e.g. customers and investors about brand, products and business progress.(2016).NachiketS.Sangvikar (2016)

3. Various elements of digital marketing.

There are various elements by which digital marketing is formed. All forms operate through electronic devices. The most important elements of digital marketing are given below:

A] Online advertising

Online advertising is a very important part of digital marketing. It is also called internet advertising through which company can deliver the message about the products or services. Internet-based advertising provides the content and ads that best matches to consumer interests. Publishers put about their products or services on their websites so that consumers or users get free information. Advertisers should place more effective and relevant ads online. Through online advertising, company well controls its budget and it has full control on time.

B] Email Marketing

When message about the products or services is sent through email to the existing or potential consumer, it is defined as email marketing. Direct digital marketing is used to send ads, to build brand and customer loyalty, to build customer trust and to make brand awareness. Company can promote its products and services by using this element of digital marketing easily. It is relatively low cost comparing to advertising or other forms of media exposure. Company can bring complete attention of the customer by creating attractive mix of graphics, text and links on the products and services.

C] Social Media

Today, social media marketing is one of the most important digital marketing channels. It is a computer-based tool that allows people to create, exchange ideas, information and pictures about the company's product or services. According to Nielsen, internet users continue to spend more time with social media sites than any other type. Social media marketing networks include Facebook, Twitter, LinkedIn and Google+. Through Facebook, company can promote events concerning product and services, run promotions that comply with the Facebook guidelines and explore new opportunities. Through Twitter, company can increase the awareness and visibility of their brand. It is the best tool for the promotion of company's products and services. In LinkedIn, professionals write their profile and share information with others. Company can develop their profile in LinkedIn so that the professionals can view and can get more information about the company's product and services. Google+ is also social media network that is more effective than other social media like Facebook, Twitter. It is not only simple social media network but also it is an authorship tool that links web-content directly with its owner.

D] Text Messaging

It is a way to send information about the products and services from cellular and smart phone devices. By using phone devices, company can send information in the form of text (SMS), pictures, video or audio (MMS). Marketing through cellphone SMS (Short Message Service) became increasingly popular in the early 2000s in Europe and some parts of Asia. One can send order confirmations, shipping alerts using text message. Using SMS for campaigns get faster and more substantial results. Under this technique, companies can send marketing messages to their customers in real-time, any time and can be confident that the message will be seen. Company can create a questionnaire and obtain valuable customer feedback essential to develop their products or services in future.

E] Affiliate Marketing

Affiliate marketing is a type of performance-based marketing. In this type of marketing, a company rewards affiliates for each visitor or customer they bring by marketing efforts they create on behalf of company. Industry has four core players: the merchant (also known as "retailer" or "brand"), the network, the publisher (also known as "the affiliate") and the customer. The market has grown in such complexity resulting in the emergence of a secondary tier of players including affiliate management agencies, super-affiliates and specialized third party vendors. There are two ways to approach affiliate marketing: Company can offer an affiliate program to others or it can sign up to be another business's affiliate. If company wants to drive an affiliate program, then, the company owner has to pay affiliates a commission fee for every lead or sale they drive to company's website. Company's main goal here is to find affiliates who can reach

untapped markets. For example, a company with an e-zine may become a good affiliate because its subscribers are hungry for resources. So, introducing one's offer through "trusted" company can grab the attention of prospects which might not have otherwise reached.

F] Search Engine Optimization (SEO)

Search engine optimization (SEO) is the process of affecting the visibility of a website or a web page in a search engine's "natural" or un-paid ("organic") search results. In general, the earlier (or higher ranked on the search results page), and more frequently a website appears in the search result list, the more visitors it will receive from the search engine users. SEO may target different kinds of search including image search, local search, video search, academic search, news search and industry-specific vertical search engines.

G] Pay Per Click (PPC)

Pay-per-click marketing is a way of using search engine advertising to generate clicks to your website rather than "earning" those clicks organically. Pay per click is good for searchers and advertisers. It is the best way for company's ads since it brings low cost and greater engagement with the products and services.

4. Advantages digital marketing for the point of customers

With rapid technological developments, digital marketing has changed customers buying behavior. It has brought various advantages to the consumers as given below:

A] Stay updated with products or services

Digital marketing technologies allow the consumers to stay with the company information updated. Nowadays a lot of consumer can access internet any place anytime and companies are continuously updating information about their products or services.

B] Greater engagement

With digital marketing, consumers can engage with the company's various activities. Consumers can visit company's website, read information about the products or services and make purchases online and provide feedback.

C] Clear information about the products or services. Through digital marketing, consumers get clear information about the products or services. There is a little chance of misinterpretation of the information taken from sales person in a retail store. However, Internet provides comprehensive product information which customers can rely on and make purchase decision.

D] Easy comparison with others

Since many companies are trying to promote their products or services using digital marketing, it is becoming the greatest advantage for the customer in terms that customers can make comparison among products or services by different suppliers in cost and time friendly way. Customers don't need to visit a number of different retail outlets in order to gain knowledge about the products or services.

E] 24/7 Shopping

Since internet is available all day long, there is no time restriction for when customer wants to buy a product online.

F] Share content of the products or services

Digital marketing gives viewers a chance to share the content of the product or services to others. Using digital media, one can easily transfer and get information about the characteristics of the product or services to others.

G] Apparent Pricing

Company shows the prices of products or services through digital marketing channel and this makes prices very clear and transparent for the customers. Company may regularly changes the prices or gives special offers on their products or services and customers are always in advantages by getting informed instantly by just looking at any one mean of digital marketing.

H] Enables instant purchase

With traditional marketing, customers first watch the advertisement and then find relevant physical store to purchase the products or services. However, with digital marketing, customers can purchase the products or services instantly.(2016)Nachiket S.Sangvikar

5. Conclusion:

Digital marketing is based on internet channels with the highest frequency of use, which are dynamic, they can change from year to year and are always influenced by market trends. In particular, digital marketing uses regular review, analysis, interpretation, promotion process and helps to establish strong consumer-brand relationships. The impact of this type of unconventional marketing has been enormous, affecting sales and the number of customers, at best the commercial processes.

As a result, we can highlight a number of features of digital marketing in the formation and development of the business structure:

- 1.Attracting the attention of a large target audience: this process can be carried out through a set of techniques of Internet marketing aimed at targeting customers through a specific type of information. In the scientific literature there are widely presented ways in which there is an opportunity to attract the attention of buyers. For example, SEO promotion, Email mailing list, contextual advertising, advertising in social networks, etc:
- 2.Increase in the number of sales: Internet marketing causes the emergence of e- commerce, which at times facilitates the process of purchasing goods and services, as the purchase is carried out through online stores, where all the necessary information about the various products of the company or company;
- 3.Determines the directions of competition: Internet marketing sets a goal to identify competitors in the market structure, determines the nature of their behavior in competitive conditions and is a mechanism to stimulate the development of this competition to optimize and improve production;
- 4.Does not require high material and financial resources: Internet marketing implies an effective mechanism to bring the product to consumers through targeting in the virtual environment, but is a budgetary one in use, because the main work is carried out directly on the Internet with the involvement of a small number

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Application of Smart M-Libraries With Reference To Mobile Technology in Library after COVID-19

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Abstract:-

As increasing number of patrons have their own browser equipped mobile devices, such as PDA's and mobile phones, it is becoming necessary for the librarians to provide innovative library services of the new century, for their patrons to access on-the-go. The paper aims to present same of the M-Library services and approaches, in order to equip with an understanding of Mobile Digital Librarianship. Overall, the article gives an outlook for possible services in mobile revolution. Libraries have always set an example in experimenting with new technology developments, whether it is automation or adopting other information and communication technologies to improve their services.

Keywords: - Library services, mobile devices, information services, instant messaging, SMS, alerts, elearning, e-resources, Mobile OPAC, Virtual Reference Service. M-Library Services.

Introduction:-

In this telecommunication environment, recent penetration of mobile revolution is remarkable. Information access is increasingly shifting away from the desktop into mobile environment. Lots and lots of people started accessing web content from handheld portable devices instead of using traditional laptop or desktop. This shift caused a new buzzword as 'M-Revolution'. Libraries started exploring mobile devices as way to connect with patrons. Creating library application ("app") or mobile website that allows patrons to access library hours, view their library account or even search databases is easier.

Advantages of Mobile Technology for Library User:-

- ✓ 24/7 access to information, E-Library, E-Books, and E-Journals.
- ✓ Access to information anywhere, no demographic boundary.
- ✓ Instant delivery of e-mail or SMS which facilitates virtual reference service.
- ✓ Relatively inexpensive opportunities, as the cost of mobile services are significantly less than PCs and laptops.
- ✓ Can store hundreds/thousands of E-books on Smartphone.
- ✓ Potentially a more rewarding learning experience.
- ✓ Improving levels of literacy, numeracy and participation in education amongst young adults.
- ✓ Using the communication feature of mobile phone as part of larger learning activity, e.g.: sending media or texts into central portfolio, or exporting audio/video/text files from a learning platform/Library website to your phone.

Challenges in Mobile Technology for Library Services:-

- ✓ Connectivity and battery life
- ✓ Screen size
- ✓ Bandwidth for nonstop/fast streaming
- ✓ Number of file/formats supported by specific device
- ✓ Content security or copyright issue from authoring group
- ✓ Multiple standards, multiple operating systems
- ✓ Limited memory
- ✓ Accessibility and cost barriers for end users: Digital divide.

Mobile services:-

Libraries can provide a variety of mobile services to interested users, some of them are:-

1) M-OPAC:-

Mobile phone can be utilized effectively in providing OPAC services to library users. Library users who don't have to time to reach library or they being occupied with work can get more by accessing M-OPACs on their mobile devices. Libraries using the millennium integrated library system can opt to use this additional OPAC users can search the library catalogue, place and cancel holds and renew items from their cell phones. In comparison to existing browser-based OPACs, libraries can build simple well-liked mobile applications at relatively low cost and effort. Simplicity of an interface is important.

Mobile Applications for the Library:-

Now a day, libraries are functioning in a user centered, technology based atmosphere, providing individualized value added services. Through mobile the mobile phones, users can retrieve information about the checked out items, due dates, fines and personal information and can renew items from their cell phones without leaving their comfort zones.

Mobile apps is a software application developed specifically for use on small, wireless computing device, such as Smartphone's and tablets, rather than desktop or laptop computers. Development of variety of library mobile apps and mobiles friendly websites are essential to facilitates effective delivery of library services and resources through mobile phone. There are varieties of useful apps available freely and some specific library apps could be developed from commercial app developers. Below mentioned are freely available useful mobile apps for the library users.

- ✓ Wikipedia:- Wikipedia is the most popular free encyclopedia online, now available on Android. The user-edited website is the most popular destination for finding out information on millions of subjects. Now you can directly access the site through app and search for the same information in a simply way.
- ✓ **Kindle:**-The kindle is by far the most globally popular e-reader and reading app on the market, and was created by Amazon. Due to its connections with the Amazon it has huge selection of books to choose from in a multitude of categories.
- ✓ Free Books:- The free books app provides 23469 classic titles for your selection, and follows for highlighting, notes, dictionary support, and bookmarks, which makes it an asset for any library.
- ✓ **History: Maps of World:-** This app is perfect for libraries to have on hand during presentations or children's learning events where geography is being discussed.
- ✓ **Dictionary:-** Reading is no fun if you don't know meaning of all the words that you are reading, which is why having a dictionary on the go is great tool for a librarian. This app also works as a thesaurus and offers a word of the day for each day of the week to strengthen your vocabulary and keep things interesting.
- ✓ Google Goggles:- This android application that on be great for librarians who want to look up a certain person place, or item, but can't think of the name. You simply take a photo using your mobile device and then Google goggles will search for it in its database and give you some information about it if it is found in its database.
- ✓ Mango Mobile:- The Mango Mobile Library Edition helps with language learning and is free for both iPhone and Android users. With this app you can take cultural lessons and hear the proper pronunciation of words by active speakers. This is a wonderful way for librarians to enjoy books with other languages featured throughout them, and also to share those books with children in reading programs and other events held at library.

SMS Notifications:-

Library can offer SMS Notifications to users which inform them when their items are due back, remind them about overdue items and advise them of fines incurred. It is also offers alerts to patrons which

notify them when items they have requested become available. These alert are text messages which are delivered to a users cell phone to notify them an event, breaking news item or other occurrence which they have requested to be informed about by previously subscribing to the service. This method, which is an excellent way to strengthen user ties with organizations, is already being utilized by libraries in a variety of

SMS Reference:- Today Reference Service at libraries are becoming increasingly virtual as more and more researchers are working remotely. Technologies such as instant messaging, email and now SMS text messaging are making it easy for libraries to maintain relevance as information hubs by offering convenient services to busy users. As sending and receiving text messages is by far the most popular activity for cell phone owners.

Taking advantage of this, new Text-A-Librarian Service is offering mobile patrons the ability to text in their research questions from afar. The service is easy to set up and ideal for simple questions that can be answered with a brief response. Many libraries has already established an SMS Reference Service in which library patrons can submit their reference questions by texting them to librarian or utilizing one of their special keywords in order to receive instant results.

M-Circulation: Not all mobile tools involve direct patron interaction, some can be used behind the scenes to offer improved library services. A handled circulation tool called pocket circulation which enables librarians to access the library on a PDA device. This wireless solution enables staff to assist patrons in the stack, check out materials while off-site such as at community or campus events and update inventory items while walking around the library.

Libraries are already offering amazing services through the use of mobile web. With the proper programming library patron could check out their own books and media items. This becomes possible with mass adoptions of 2D Barcode Readers similar to the ones available today in conjunction with virtual wallet capabilities which are currently being adopted in Japan.

E-Books/Audio Books:- Now a days, readers have a desire to have the ability to view books on their portable devices. With the installation of a free software program, many of today's mobile phones can also double as e-book readers. The reader can be mobile device and desktop computer and books are collected, read, annotated, and bookmarked synchronously on both devices.

One of the popular e-book reader applications and standard e-book formats is the Amazon-owned Mobipocket. The Mobipocket website has over 50,000 (more than 23000 free) titles its inventory. Many Mobipocket titles can be made available through library systems and can be downloaded from websites.

E-books may also be read on mobile devices in Adobe PDF format and Microsoft Reader for pocket PC format. Books formatted for this standard are available in addition to Mobipocket. Libraries can send readers e-books in short, digestible packets straight to users email inbox.

Access to E-Resources: - Most of the college libraries has subscribed the INFLIBNET N-LIST E-resources i.e. 100000+ E-Books, 7000+ E-Periodicals/Journals all these resources could be accessed through Smartphone. E-book download facility is available wherein a user can download complete book from the subscribed e-resources for short period and it automatically expires after completion of the stipulated time period. The E-Book could be downloaded on computer and mobile. The user has to download few software's like adobe and blue fire reader etc. Apart from INFLIBNET e-resources user can access open source e-resources from their smart phone In this way mobile phones are becoming boon for the library users as well as libraries as it saves the infrastructure cost.

Virtual Reference Service:-With reference to OCLC Virtual Reference is, "Using computer and communication technology to provide reference to patrons anytime and anywhere", Virtual Reference Service could be provided through the online tools such as e-mail, online chat, instant messaging, social networking site like face book, twitter, whats app etc. Smart phone is the new tool which helps to deliver and receive the reference service immediately and satisfy the user needs effectively immediate feedback is also possible from the user's side.

Library Location Finder:- The information on location of the library can be delivered to mobile phones with GPRS. Users reach to the library location with the help of Google maps, which indicates the driving directions, street addresses of the library.

M-Library Instructions:-Some libraries offering Library Instruction Materials and resources via mobile platforms. For example East Carolina University's Research First Aid' is series of podcasts for library researchers on the go. Library users who don't have time to attend an onsite workshop can get most out of the library resources by accessing classes and tutorials on their mobile services. Libraries have begun distributing their knowledge and expertise with library systems and materials via MP3 and video files which patrons can take with them.

As mobile devices continue to proliferate and become more tightly integrated with our daily activities, a number of libraries have begun developing customized mobile web portals and applications to promote accessibility to patrons. The M-Revolution continues to unfold; libraries will experiment with mobile services and services to support the information needs of their users wherever they may be. Though mobility is the strength of this revolution, small screen size, cumbersome keyboard input and limited bandwidth affects the user experience.

Conclusion: -

Libraries are beginning to provide on the go library services are as more people are joining the mobile revolution. Due to the availability of mobile phones with everyone and the ease of reach, it has become a significant technology that a library can use. Application of M-Library Services is inevitable due to demand for new services from library services. Information activities are influenced by the technological innovations. Application of Information and Communication Technology in libraries is inevitable due to overproduction of information and library users also demand for new services. At this point of time, it is significant to use mobile technology in library and information centers.

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Social and Economic Development of India

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Abstract:

The most purpose of this term paper is to get it the socio-economic development and strengthening of impeded bunches. Planned Castes, Planned Tribes and Other In reverse Classes constitute the distraught bunches. Socio-economic development and strengthening of disadvantaged bunches is a basic zone that must be taken into thought in arrange to lead to successful development and development of the country. It is fundamentally concerned with bringing almost advancement within the framework of education, business openings, ways of life, salaries, aptitudes advancement and social factors. Plans have been started to bring them at standard with the more extensive community. The problems of destitution, lack of education and unemployment are the major obstructions inside the course of their socio-economic improvement and strengthening.

Key Words: Social Development, Economical Advancement. Education.

Introduction:

Socio-economic advancement of the distraught bunches could be a comprehensive region and ought to be caught on with respect to different frameworks. Social, political, biological, science and innovation, dialect and writing are the most ranges that got to be created to lead to strengthening of distraught bunches. Within the socio-economic system, development is alluded to enhancement inside the ways of life of the people through improved instruction, livelihoods, skill development and work. It is the method of economic and social change based on social and natural components. Hence, it can be caught on as the method of social and financial improvement inside the society. It is measured with pointers such as, net residential item, life hope, education and levels of business. Social improvement may be a handle, which comes about within the change of the social teach in a way, which progresses the capability of the society to meet the object.

Concept:

Social avoidance is the dissent of break even with openings forced by certain bunches on others, negating within the failure of the individuals to take part within the social, financial and political working of the society. When people are in a denied state and they are not given rights to render a successful commitment, at that point they are expressed to be socially excluded. Two fundamental highlights of social avoidance are, to begin with, hardship is multidimensional, there is dissent of rise to opportunities in different circles. Moment, it is inserted within the societal relations and societal teach. There are differing ways through which social exclusion can cause destitution and hardship. It is respected as a major barrier within the course of their socio-economic improvement and strengthening. Social avoidance encompasses a considerable effect on an individual's get to to break even with opportunity, on the off chance that social intelligent take place between bunches in a control subordinate relationship. Inside the political circle, the untouchables can encounter discrimination in get to to political rights, and interest within the choice making prepare. They are implied to perform their occupations, which primarily incorporate, clearing, and cleaning. They are not permitted to work out, take part or have a say inside the political circle and are implied to take after the rules and comply the orders of people, having a place with upper castes.

Objectives of the Study:

- 1. To study the Social and Economic Status of India.
- 2. To review the Social and Economic development of India.
- 3. To give suggestions for Social and Economic Advancement.

Literature Review:

Ahamadand Pandey (2015) analyze the provincial economy, truth around little scale businesses require of industrialization and mechanical segment and particularly its part within the improvement of rustic ranges in India. In industrialized countries where local economies are coordinates components of the national economy and national arrangements reach citizens in all parts of the country, it is sensible to inquire climate particular consideration ought to be paid to provincial zones, instead of essentially depending upon national programs. To decrease the relocation rate we got to have a feasible arrangement like providing employment openings to provincial open. Mechanical improvement has greater potential in extension of financial exercises and it'll inevitably offer assistance in improvement of rustic resources in conjunction with pay era, improvement of framework, raising standard of living and per capita pay for country individuals. Industrialization act as an instrument both of the making capacity to retain.

William & Christopher (2011) bargain with diverse measurements of provincial improvement, with uncommon reference to India. It empowers the peruse to get it the concepts and later approaches to provincial advancement. Talk on the plans of the central and state governments for distinctive target bunches gives way better understanding of the country advancement exercises of the government. The book gives profitable reference for all concerned understudies of social work, country advancement, the academicians, advancement laborers and approach creators.

Women Empowerment in India:

The rule of sex uniformity is revered within the Indian Structure in its Preamble, Principal Rights, Crucial Obligations and Mandate Standards. The Constitution not as it were leads to balance of ladies, but moreover enables the State to embrace measures for making accessible break even with rights and openings to ladies. In any case, there still exists a wide crevice between the acknowledged objectives and related instruments on one hand and the situational reality of the status of ladies in India, on the other. The get to of distraught women, to instruction, business openings, wellbeing care and beneficial assets is inadequate. They stay marginalized, denied and socially prohibited on a huge scale. In some cases, young ladies are incapable to get the same rights as boys basically with respect to instruction and business openings. In a few cases, male children are favored and females are considered as liabilities. People shape this perspective that guys would contribute in generating riches.

Activities for Socio-Economic Growth:

Instruction for All – One can recognize in a suitable way that not as it were in India, but in other nations of the world as well, Instruction for All is comprehensively recognized. Beneath the authority of UNESCO, a huge number of nations met at Jomtien (Thailand) in 1990 and made the choice to supply Instruction for All by 2000. In 1992, nine populous nations to be specific, China, India, Indonesia, Pakistan, Nigeria, Mexico, Bangladesh, Brazil and Egypt congregated at Delhi to fortify their commitment towards Instruction for All (EFA). For the final two decades India, with the assistance of worldwide organizations, has received various measures towards accomplishing the objective of Instruction For All. The taking after are the most significant: Universalization of Rudimentary Instruction (UEE) - The National Approach on Instruction 1986 envisions that free and obligatory instruction ought to be given to all children up to the age of 14. The 86th Protected Correction Act, 2002 made free and compulsory. Sarva Shiksha Abhiyan (SSA) -The program that points at accomplishing the objectives of Universalization of Basic Instruction is known as Sarva Shiksha Abhiyan, it was initiated in 2001. The objectives of SSA are, enrolment of all children inside the age bunch of six to fourteen a long time in school, Instruction Ensure Plot (EGS) Middle, Bridge Course by 2005. Bridge all sexual orientation and social category holes at essential arrange by 2007 and at basic education level by 2010. All inclusive maintenance by 2010, and center on basic instruction of satisfactory quality with accentuation put upon instruction for life.

National Education Mission (NLM) – The National Education Mission was propelled in 1988. It points at conferring utilitarian proficiency to grown-up non-literates inside the age gather of 15 to 35 a long

time inside the nation. The most programs of the NLM were the Full Education Campaign, its fundamental objective was to confer the fundamental education to grown-up non-literates. Post Literacy Program was propelled to create the education abilities of neo-literates. Proceeding Education Program was started to form arrangement of offices like provincial library, perusing room for the neo-literates and other areas of the community. Through Jan Shikshan Sansthans, professional preparing was given to the neo-literates and other distraught sections of the society.

Defensive Measures of Socio-economic development:

The Service of Social Equity and Strengthening, in its nodal capacity, kept on make extraordinary endeavors towards guaranteeing social equity to the distraught bunches through enforcement of uncommon legislations and execution of defensive programs. The disadvantaged bunches involvement various issues inside their lives, which demonstrate to be major hindrances inside the course of achievement of strengthening openings. These include, the hone of untouchability, avoiding the event of criminal and savage acts, ensuring restoration of the casualties, who have experienced misfortune of life and property due to the event of common calamities and catastrophes and guaranteeing that they are given with proper wellbeing care and nourishment, as ailing health and ailments and illnesses are major problems that they involvement. Distraught bunches are generally in an in reverse state. They as a rule feel helpless and uncertain in communicating with the exterior world. In arrange to coordinated them into the more extensive community, instructive educate and preparing centres have contributed an imperative part. In instructive teach and preparing centres, these people are not as it were provided data with respect to scholastic concepts, but they are moreover made mindful of other areas. These incorporate, having the characteristics of ethical quality and morals, communicating in a decorous way with others, helping ones family individuals, making a difference the poor and the destitute, preservation of the natural conditions and contributing towards the by and large prosperity of the community. Securing of information and data are the defensive measures that would render a successful commitment towards driving to welfare of not as it were people, but also the whole community. It is basic to form arrangement of break even with rights and opportunities.

Employment Opportunities:

Within the field of work and business, the Service of Work is actualizing uncommon training and rehabilitation programs for SCs to supply them the essential preparing in up- gradation of aptitudes and hence, driving to enhancement in their business openings. The scheme of coaching cum direction centres for SCs and STs was executed through 22 centres in different states and UTs to supply word related data as well as individual guidance. They were implied to actualize certainty building programs for the advantage of the job searchers, having a place to SC and ST communities. To empower the enrollment of SC and ST candidates against saved opportunities in different Central Government Services, Departments, the Directorate Common of Business and Preparing (DGET) has propelled another plot, i.e. Extraordinary Coaching Conspire in 1973 for the work searchers, having a place to SC and ST communities enrolled with the business trades to empower them to seem in competitive examinations.

Conclusion:

The major socially distraught bunches contain of Planned Castes, Planned Tribes, Other In reverse Classes, minorities and ladies. These are found in country as well as in urban ranges. There have been start of different plans and programs by the government that point towards their upliftment. Diverse programs that have been started include, mid-day supper conspire, supply of books etc. Schools for SCs and STs, such as Kasturba Gandhi Balika Vidyalaya and uncommon treatment in Navodaya Vidyalaya, National Talent Look Plans, and grants are too given. NSFDC, NSKFDC, NSTFDC, SCDC and STDC have been opened to create arrangement of monetary help to SCs and STs. TRIFED make arrangement of showcasing help to the distraught bunches for their products. Strengthening of ladies, having a place to distraught bunches is in a lacking condition. They have not been able to get adequate get to instruction, wellbeing care and other

profitable assets. They stay marginalized, destitute and socially avoided on an expansive scale. The children having a place to distraught bunches are encountering different sorts of problems, such as, child work and are indeed subjected to abuse and abuse. In the show presence, there have been foundation of programs and plans that have encouraged free instruction and abilities advancement among them. It is fundamental to supply solutions to the issues of destitution, lack of education, and unemployment. Helping people towards producing a source of wage, empowering them to recognize the centrality of education and making arrangement of other assets that would create welfare of the individuals incorporate, civic comforts, foundation, legitimate cleanliness and sanitation etc.

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Economic Growth of India-Problems and Challenges

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Abstract:

India is confronting numerous challenges to climb financial development, being a quick moving economy amid 2016-17 and 2017-18 at 7% -7.5 development rate per annum. It settled a target of 8% per annum in spite of the fact that having potential to develop at 10% yearly. Indian economy appeared quick recuperation in Mechanical Production (IIP), Gross settled capital arrangement (GFCF), and buyer request pointers reflecting a positive financial development rose at 12% within the thi<mark>rd qu</mark>arter (2018-19) from 6.92% w<mark>ithin</mark> the past quarter. Afterward India's Net Domestic Product (GDP) speed got decreased as found from each quarter in 2018-19 due to decay in household request, drop in investment funds from 30. 5% in 2017-18 to 28% in 2018-19, rise in swelling past 4%, slow development in fabricating, decay in horticulture development, rising unemployment in both urban as well country ranges, declining commitment from work constrain, drop in trades, troublesome outside capital streams etc.

Key Words: Economic Reforms, India, Growth of Economy.

Introduction:

Financial growth is exceptionally important for evaluating the improvement of a nation. The status of a nation depends fundamentally on the financial development accomplished and development potential it possess for future improvement. Financial development could be a exceptionally ancient and exceedingly talked about point since all nations over the globe notwithstanding of their improvement attempt to extend their net residential item (GDP). In India Fabricating, administrations, farming and partnered divisions play a major part in financial development and development story of India is examined from the commitment made these divisions. As per the Financial Survey-2018-19 report Indian Economy being a developing creating economy is developing in quick way in final five a long time with yearly normal rate of almost 7-5% normal development per annum and with 4.5 percent yearly normal swelling.

The display execution of Indian economy, somewhat bolstered by Worldwide Money related Support (IMF) estimation of India being one of the quickest developing economies within the World, played a critical part. In spite of the expectations, shockingly the economy has not fared well since within the final quarter of 2018-19 (5.8%) demonstrating a moderate down within the economy. The July 2019 month to month report discharged by the Union Finance Ministry reveals a three year slant of declining financial development. It may be a clear picture of India's underwhelming financial execution for a decade. Advance it highlights around moderate down in agricultural output, drowsy speculation utilization proportion, expanding swelling and shortage adjust of installments within the current account. Hence it may be a story of what might have been, of development that did not happen, of missed opportunity.

Objectives of the Study:

- 1. To understand measure of Economic Growth.
- 2. To review Economic growth of India.
- 3. To give suggestions for Economic growth.

Research Technique:

The think about utilized auxiliary information from different distributed reports from Financial overview of India -2019 & 2020, NITI Aayog reports, Ministry of Measurements and Program execution, Government of India, Reserve Bank of India -Handbook of Statistics, World Bank and IMF reports and Specialists supposition distributed in driving newspapers, distributed articles in diaries.

Review of literature:

Tendulkar and Bhavani (2007) examine a few person activities beneath political economy of reforms9. They bargain with four particular change activities to demonstrate the advancing political economy of intrigued group politics that decides long haul way. They classify the change measures into three wide bunches keeping in intellect the amalgamation legislative issues. These are: (a) measures carried out by an office other than the central government like the monetary division and trade rate changes carried out by the Save Bank of India; (b) measures that lie inside the optional powers of the government; (c) measures that require administrative alterations.

A ponder by Ramaswamy and Agarwal (2013) unequivocally propose that administrations division would be an improbable goal for the millions of moo talented work searchers. India should focus on fabricating segment to supply expansive scale business. Fabricating has the capability since it has more grounded in reverse linkages not at all like the administrations division. We cannot manage to disregard manufacturing at this arrange of improvement. The approach signals got to clearly say that we stand to bolster fabricating action in a huge way. India ought to center on fabricating segment to supply huge scale work. Fabricating has the capability since it has more grounded in reverse linkages.

A ponder on execution of Karanataka's Lokayukta recommends that without update of the country's regulatory structure, ex-post indictment of corruption or withdrawal from financial exercises cannot decrease debasement (Babu et al, 2013) At display the plan of anti-corruption ombudsman takes off a parcel to the identity of Lokayukta. The examination moreover recommends that the overburdened lawful framework needs legal reforms. Numerous individuals feel that administration issue is the greatest imperative for accomplishing our advancement objectives within the nation.

To conclude on financial changes, India has done exceptionally well in numerous pointers on economy within the post-reform period. It must center presently on unfinished changes and the over fivefailures. On financial changes, commenting on the analysis of Tendulkar and Bhavani (2007, 2012), Reddy (2013)says that this work may well be supplemented with two other ranges of ponder. To begin with one is the impact of worldwide money related emergency on the goal of financial changes. Moment is the basic part of states within the future of changes. Typically critical since of the expanding part of state governments in giving financial and social framework.

State of the Economy:

The development status of India amid 2018-19 isn't empowering primarily due to abating down of money related quality. National Institution for changing India (NITI Aayog,) an arrangement think tank of government of India, states that India will achieve the target of \$4 lakh crores budgetary quality by 2022 as it were on the off chance that it secures 8% GDP rate per annum, but the show conditions are not favorable to achieve the desired quality. Based on the display circumstances, it can accomplish as it were 7% in 2019-20. Agreeing to the information presented to Parliament on 4thJuly which was distributed within The Financial overview 2018-19, gave exceptionally clearly the large scale see of the state of the Indian Economy in brief.

With respect to supply side financial matters supporting development, the divisions included appear distinctive levels of development. Horticulture and associated division development in 2018-19 was lower at 2.9% after two a long time of great agribusiness development. The development of fabricating at 3.6% in 2018-19 (4.6% in 2016-17); development posted higher development. Benefit Segment proceeds to be fundamental supporter to development of Indian economy and its share stands at 54% in 2018-19, with this segment, "Financial, Genuine domain, and Proficient services" is the biggest competent, taken after by "Trade, Lodging and Transport".

Development accomplished between 2014-15 and 2018-19

Due to moderate advance of money related division, moo development in mechanical generation and moderate down in horticulture segment India's GDP speed got decreased. Amid the fourth quarter of 2018-19, the GDP development declined to moo level of 5.8% may be a matter of concern. Within the to

begin with quarter it come to to 8% fell to 7% within the moment quarter and 6.6% within the third quarter and 5.8% within the fourth quarter, coming about in 6.8% development rate for the full year (2018-19) belying the GDP gauges of Universal organizations.

Table 1 : Pattern of progress of GDP during 2014-15 to 2018-19 and Provisional estimates of International Institutes/Rating agency during 2018-19

Pattern of progress of GDP during 2014-15 to 2018-19		Provisional estimates of International Institutes/Rating agency during 2018-19	
Year	Rate of progress of GDP %	Institutes	Rate of Progress (%)
2014-15	7.4	IMF	7.3
2015-16	8.2	World Bank	7.5
2016-17	7.1	Fitch Rating	6.6
2017-18	7.2	CRISIL	7.3
2018-19	6.8	UNO	7.4
		Asian Development Bank (ADB)	7.2

Source: Economic Survey -2018-19 & International Institutes official web sites

Production (IIP)and shopper request markers, reflecting a positive financial growth, indicates that India is on the correct direction to become one of the quickest growing economy within the World by outperforming China. Gross fixed capital arrangement (GFCF), a macro economic indicator of speculation action within the economy, rose at 12% within the third quarter (2018-19) from 6.92% within the past quarter. It is since of development picked up in fabricating and development segment on the yield side and whereas on the demand side driven by GFCF. No doubt capital formation in the primary two quarters was driven by the government, and in the third quarter the private segment request started to develop, in spite of the fact that private last utilization use (PFCE), intermediary for utilization investing decreased in the Q3at 5.58%down from 6.56% in Q2and 6.2% in Q1of 2018-19.

Development versus Restoration Measures

The financial and financial arrangement specialists debating on development restoration measures to decide India's financial future suggested an arrangement of approach choices to be introduced in key divisions within the economy. There forms attempted by the government had blended reaction from experts. Amitabh Kant (2019,Aug 3,p15) CEO of arrangement think-tank NITI Aayog communicated that a spate of changes embraced —Goods and Benefit Charge (GST),Indian Liquidation Code(IBC), Genuine Bequest Controls Act (RERA) -by the government has driven to the current lull within the nation and pushed a arrangement of arrangement choices to audit the economy. He proposed that the government ought to focus on four key viewpoints like bring more prominent levels of liquidity, restore the creature soul of the private segment, since riches cannot be made without private division, to reuse a parcel of government resources such as streets, privatization etc.

Numerous changes attempted –Goods benefit Tax (GST), Indebtedness and Liquidation Code (IBC) has driven to current moderate down in Indian economy. India has got to be more unsurprising on assess and administrative changes to pull in more investment. Sectors like genuine estate, construction and infrastructure are in profound inconvenience additionally non-bank back companies (NBFCs) since of loaning to these sectors. Business division will adapt and rehash itself in case India brings down exchange boundaries. Gigantic unused reforms are basic for financial development. The expert's opinion relating to the changes attempted and modern changes to be presented are basic since it serves as a road outline for overhauling government approach choices in imperative segments which drives financial development.

Intrigued Rate and Growth

Any restoration of financial movement will succeed as it were with the combined efforts by government to invigorate demand on the monetary front and the RBI to keep intrigued rate low. Interest rates cut will boost the execution of fabricating, agriculture, construction, genuine domain and foundation sectors that are in profound trouble. Monetary broadcast has been immobilized in rate structure amid 2019 since Plan profitable banks Weighted Normal Loaning Rate (WALR) has not declined in spite of the lessening in repo rate by 135 point since January 2019. Despite the diminish in arrangement rates credit

development to industry is very moo as on November 2019due to negative development rate within the sending of bank credit to Smaller scale, Little and Medium Enterprises (MSME) and materials.

Conclusion:

India is confronting numerous challenges to climb financial growth which was 6.8% (2018-19).It settled a target of 8% per annum in spite of the fact that having potential to develop at 10% annually. IMF underpins India to attain the potential crossing all challenges within the growth of the economy. However the display status of India isn't empowering basically due to abating down of money related strength. In all center segments -Agriculture, manufacturing, foundation, construction, power etc. India is experiencing declining slant and country may discover it troublesome to accomplish 7% development rate per year. India's development is stabilized at 6.5% -7%, government must take prompt steps to rise GDP to 7.5% -8%. India's GDP rate decreased as found from each quarter in 2018-19 from 8% in to begin with quarter to 7% in moment quarter and 6.6% in third quarter and 5.8% in fourth quarter, coming about in 6.8% for the total year and brought down its estimate for 2019-20 to 7%. These challenges are to be handled viably by government because it points to achieve \$5 trillion economy by 2024-25. Government ought to center on procedures for viable governance to construct a solid, affluent and inclusive India to fulfill the developing yearnings of India's display youth. Government ought to moreover center on work changes, imaginative changes to attract venture in mechanical division especially in fabricating sector. In the setting of exchange wars between USA and China, India ought to center on realizing the ways to secure larger benefits. RBI ought to decrease key rates of intrigued, other than correctly assessing expansion rates to assist government climb GDP development potential. During the coming five a long time (2019-20 to 2024-25) in the event that 9-10% development per year is accomplished, India's economy will develop to \$5 Trillion by 2025.

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Presence of Humidity in Atmosphere of the Earth and Variation of Secondary Gamma Radiation Flux at Udaipur, India

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Abstract

The experimental study was conducted to see effect of humidity in atmosphere of the Earth on secondary gamma radiation flux at Udaipur (27° 43' 12.00" N, 75° 28' 48.01" E), India on dates October 31, November 2, 3, 4 and 6, 2020. Data files were stored in the computer for half an hour between times 17.00 IST to 18.00 IST using ground based NaI (Tl) Scintillation detector. The analyzed data gave information of variation of secondary gamma radiation flux (SGR) with the presence of humidity in the atmosphere of the earth.

Key Words: Primary cosmic radiation, solar radiation, formation of secondary gamma radiation in the atmosphere of Earth, presence of humidity in atmosphere of Earth.

Introduction

Cosmic radiation (CR) has about 89% nuclei are protons, 10% nuclei of helium, and 1% of others heavier elements (Lithium, Beryllium and Boron) [1, 2, 3] having energy range between radiation between 10⁹- 10²⁰ eV or more [4]. Simpson (1983) [5] gave information of chemical abundances of cosmic radiation in different energy range. About 20 km primary cosmic radiation produces denser ionization. Due to collisions with atoms of the upper atmosphere primary cosmic radiation produces cascade of lighter particles known as secondary radiation [6]. These particles increase rapidly as these moves downward in the atmosphere and [7, 8]. In this way secondary particles shower down through the atmosphere to the Earth's surface [9]. One of component electromagnetic component present [10], [11], [12] in secondary radiation has electrons and gamma particles is present. Therefore, penetrating cosmic radiation produced shower of secondary particles [13]. Produced secondary radiation flux can be detected using appropriate detector on ground [14], [15].

We conducted experimental study to see effect of humidity in the atmosphere of the Earth on secondary radiation at surface of the Earth.

2. Experimental Set-up and Observations

Scintillation detector is used in this experimental study to observe secondary gamma radiation flux. This counter optically coupled with photo multiplier tube. This integral line was connected to 1k multi-channel analyzer has 1024 channels with usb interface built in high voltage and shaping amplifier. With help of gamma ray software anuspect data were collected in computer.

This Scintillation counter system kept open to collect the counts as a function of time on the roof of Astronomy Laboratory of Department of Physics, Bhupal Nobles' University Udaipur (Rajasthan) India on dates October 31 and November 2. 3 4 and 6 for half an hour between time 17.00 IST to 18.00 IST

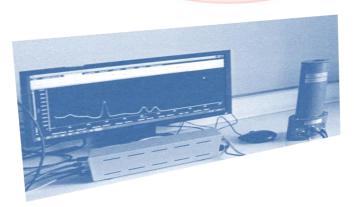


Figure 1 (Scintillation Counter System)

Analysis and Results

Date

November 237291

238774

241755

237467

31

2 3

4

6

As depicted in table 1 the integrated counts of SGR flux, date and humidity in the month of October, 2020. October, 2020 **Table 1**

<u>}</u>	Integrated Counts	Humidity in %
	October	
	239571	21

Using table 1 we made figure 2 between date and integrated counts Figure 2

17

20

23

18

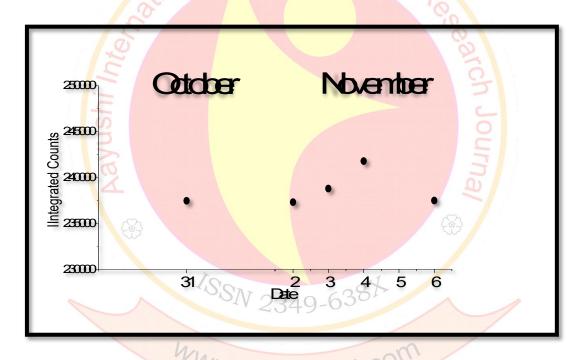


Table 1 and figure 2 showed that on the dates October 31, November 2, 3, 4,6 the integrated counts were 239571, 237291, 238774,241755, 237467 respectively for half hour duration between times 17.00IST to 18.00 IST

4. Discussions

Table 1 and figure 2 showed that integrated counts of secondary gamma radiation flux vary with the presence of humidity in the atmosphere of the Earth.

5. Conclusion

This experimental study gave information about variation of integrated counts of secondary gamma radiation flux with presence of humidity in the atmosphere of the Earth at the surface of the Earth. **6.**

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Emerging Trends in Archeology: Special Refrence to Hero Stones

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Abstract

This study evolves the significance of hero-stones and exhibits the emerging trends in Archaeology. The impact of globalisation and decolonialzation has lead dramatic changes in several fields. On the great consequences, a new concept is traced by the historical elites. While birth of new ideas, and theories, some of the fields forgotten and untouched. Perhaps, Archaeological studies one among them. However, some of elites were focused this concept for writing historical writings. In a great vision, archaeological emirates were focused the study on Archaeology and evolved a new concept to study the historical studies with unearthing Hero-stones. This Hero-stones helps to exhibit the social-cultural history, especially bravery of ancient heroes. The term hero is usually applied to one stands out from among ordinary mortals by his superior quality, conspicuous bravery or sustained power of endurance. Amongst the renowned dead, there are gradations from the men who are recognized as mere mortals to those classed as demi-gods. Since time immemorial man hailed the attitude of courage and thereby encouraged warriors for their valour, victory and martyrdom in order to marvel the excellence of individual and group sacrifice for the cause of the country, society, tradition etc. As a matter of hailing importance of valour sacrifice of the deceased had properly been, commemorated in the form of erection of hero stones and thereby to project such great personalities by the kings, chieftains, village head men, executive members of the society.

Keywords: Hero-stones, Sacrifice, globalisation, recent trends, Archaeological studies, sangam age

Introduction

The impact of globalisation and decolonialization has lead dramatic changes in several fields. On the great consequences, a new concept is traced by the historical elites. While birth of new ideas, and theories, some of the fields forgotten and untouched. Perhaps, Archaeological studies one among them. However, some of elites were focused this concept for writing historical writings. In a great vision, archaeological emirates were focused the study on Archaeology and evolved a new concept to study the historical studies with unearthing Hero-stones. This Hero-stones helps to exhibit the social-cultural history, especially bravery of ancient heroes. The term hero is usually applied to one stands out from among ordinary mortals by his superior quality, conspicuous bravery or sustained power of endurance. Amongst the renowned dead, there are gradations from the men who are recognized as mere mortals to those classed as demi-gods. Since time immemorial man hailed the attitude of courage and thereby encouraged warriors for their valour, victory and martyrdom in order to marvel the excellence of individual and group sacrifice for the cause of the country, society, tradition etc. As a matter of hailing importance of valour sacrifice of the deceased had properly been, commemorated in the form of erection of hero stones and thereby to project such great personalities by the kings, chieftains, village head men, executive members of the society. This study evolves the significance of hero-stones and exhibits the emerging trends in Archaeology.

Sangam Age

The Sangam period extended from roughly 300 BC to 300 AD, when the earliest extant works of Tamil literature were created (also known as *Sangam* literature). However, the name *Sangam* and the associated legends probably derive from a much later period. During this era the social life of the people were great and also they were able to lead a peaceful life. Hero stone (*viirakkal* in Tamil or *veeragallu* in Kannada) is an Indian memorial commemorating die honourable death of a hero in battle in India. A hero stone can display a variety of adornments, including bas relief panels, statues, and figures of carved stone. Usually they are in form of a stone monument have an inscription at the bottom with a narrative of the battle. *Sangam* poetry also contains numerous allusions to the afterlife, showing the early Tamils believed in a life

anger death, especially for their warriors slain in battle. The Hero's heaven of the Tamils what resembled the Valhalla of the Norsemen it's believed dwelled the warriors who fell in battle. The *Purananuru* has it that should a person fall in battle, he will enjoy the bliss of marriage with a spotless maiden in heaven.

Indeed, it is said that those warriors who died a natural death were laid on a grass mat and cut asunder with a sword so that they might die a hero's death and attain heaven, a practice which even applicable to children of the warrior class as evident in statement of the *Purananuru* "Whether it be a still born child or a are foetus, it is spared but cloven asunder". As such, warriors in battle were held in high esteem. The *Sangam* works often allude to Stones erected on the spots where warriors who fell in battle were presumably buried.

For instance, Perunk-Kausikanar in his *Malaipadukadam* refers to stones with epitaphs inscribed on them set up in the memory of departed while in the *Akananuru* we read "Prominent hero-stones erected on the wayside are decorated with Peacock feathers. On them are inscribed the name and might of the fallen warriors." The basic theme connected with memorial stones in Tamil Nadu is cattle lifting or cattle retrieving. In Tamil Nadu, the earliest evidenced on memorial stone is found in *Sangam* literature and it has been described by more than 25 poets. However the archaeological data so far discovered goes back only to 4th, 5th Century AD. Thus, the non availability of the *Sangam* literature to the later day memorial stones. Though the tradition continued for a considerable period, there is a possibility of minor changes in that tradition in the following centuries.

The absence of *Sangam* memorial stones as on today forced to have a second look on the descriptive nature of the literary data. The study of inscribed potsherds from the *Sangam* age sites like Arikkamedu, Kodumanal, Uraiyur, Karur and Alagankulam and from the inscribed coins issued by the Chera kings Kolliporaai and Makotai and the Pandya king Peruvaluthi and from the cave inscriptions found throughout Tamil Nadu with much concentration in and around Madurai, clearly demonstrate that the script used during *Sangam* period is certainly of Tamil *Brahmi*. The occurrence of Tamil Brahmi inscriptions at Jambai belonging to *Sangam* chief Adiyaman and of coins of *Sangam* kings with Tamil *Brahmi* script found in the memorial stone yielding area clearly establishes the fact that this area, like any other area of Tamil Nadu, must have used the Tamil *Brahni* script for their writing during the *Sangam* age.

The Andipatti coin board reading atinan etirana chendan in the script evolved from Tamil Brahmi found in the heart of the memorial stone yielding zone strengthens this fact. Moreover, the recent findings of Indalur memorial stone and Arasalapuram memorial stone near Ennayiram in Villupuram district clearly show evolution of *vatteluttu* script from Tamil Brahmi around the 4th century AD. If one considers these factors the obvious inference would be that the memorial stones of Sangam age must have been written in Tamil *Brahmi* script only. But the earliest memorial stone so far discovered in Tamil Nadu carry only *vatteluttu* script, which developed out of Tamil Brahmi script around 4th 5th century AD. The memorial stones are found with much concentrating in the districts of Dharmapuri and Tiruvannamalai, particularly in the taluks of Chengam, Harur, Uttangarai, Dharrnapuri and Krishnagiri. This region was ruled by *Sangam* chiefs like Athiyaman, Nannan and Malaiyaman lines. Quite interestingly none of the memorial stone, so far recorded, carry the name of any one of the *Sangam* chiefs. Instead they carry the name of the Pallava Kings As pointed out above, all evidences so far found in the of ceramics, coins, seals, rings and on rock beds belonging the *Sangam* period contain only the Tamil *Brahmi* script. The available memorial stones are engraved in vatteluttu script. This clearly indicates that the memorial stones so far discovered are belong to Post *Sangam* period.

The non occurrence of Tamil *Brahmi* script and of the names of *Sangam* age rulers; occurrence of the *vatteluttu* script and if the names of Pallava kings clearly establish the act they belong to the Pallava period only. Keeping this in mind, an attempt is here to explore the true nature of the *Sangam* literary data. The study carried out so for on memorial stones are generally restricted to *Sangam* literature and its grammar. Some comments also have been made by referring to later day *Agams*. But it is unwise and highly debatable to compare the information found in the *Sangam* literature with that of the later date stones because any literature can describe an earlier society or contemporary one but not of society that subsequent to its

date. In this context, it is necessary to reassess real nature an true meaning that stands behind the *Sangam* literature on memorial stones.

The Hero Stones And Sangam Works

The Sangam works like the *Tolkappiyam*, *Akananuru*, *Purananuru*, *Malaipadukadam*, *Aingurunuru*, *Pattinapalai*, etc. speak on memorial stones in detailed manner. The graphic description gives an idea on the evolutionary process involved in the erection of memorial, starting from the megalithic period. A study reveals that the practice of megalithic cult underwent a dramatic change through the years and finally culminated in to *Virakkals* (hero stones) around the 4th AD particularly, in Dharmapuri and Tiruvannamalai region. Broadly speaking, the transformation could be arranged tentatively into five distinctive stages.

First Stage

In first stage (5th century BC) megalithic cist & dolmen (padukhai) is installed as a memorial for the people were killed by the maravas or kanavas. The terms like ambin visai ida vellndor ennu varambu ariya uval idu padukkai (cairn circle entombing cist burial raised for the man who died by charging an arrow) vil ida veelndor padukkai. (cairn circle entombing cist buria raised for the man who died by charging a arrow) al azhittu uyartta anchuvar padukkai (cairn circle entombing cist burial raised in the burial ground) ambu ida veelndor vamba patukkai (cairn circle entombing cist burial raised for the man who died by charging a arrow) uyar padukku ivarnta tadar kodi attral nedu nila nadukkal (cairm circle entombing cist burial having a menhir) etc. Found in Akananuru and Purananuru are clearly indicative of megalithic burial (pudukkai/ cist) not of memorial stone.

Second Stage

In second stage (circa 3rd& 2ndcentury. BC.) the megalithic cist/dolmen was raised and manhir (nadukal) was planted for the people who died generally in the cattle raid. The phrases like *naadudai* maravar peyarum peedumj ezhuhi atharathorum peel isuttiya pirangu nilai nadukal Niraikandanna uval idu padukkai (caim circle entombing cist burial having manhir painted with figure of a hero who retrieved the cattle). And paraludai marungin padukkai serthi....peryar porittu ini nattanar ekallum kanrodu karavai tandu pakaivar ottiya neduntakai (cairn circle entombing cist burial having menhir painted with a figure of a hero who retrieved cattle) support this view. Though there are menhir in the memorial stone zones, no one do not see any scripture on them. This imply that the term eluttu stands only for painting rather than for script .The painting executed on the menhir (nadukal) would have lost due to long exposure.

Third stage

In third stage(circa 1st& 2ndcenary.A.D), the cist/dolmen is abandoned and only the *nadukal* (*menhir*) or memorial stones were raised in memory of heroes who died in cattle raids. The term *natta* polum nata nedunkal refers to a menhir probably devoid of any sculptural representation.

Fourth Stage

In the fourth stage (cirac 3rd—4th cent. AD), the size of the menhir was reduced to the level of memorial stones with outline figure of the hero depicted on them. Their grapic descriptions like ezhuttudai nadukal (menhir/herostone having painting), mudir nadukal (menhir/herostone), peyarpayam padarat thondru kuyil ezhuttu (memorial stone having figure made out of engraving), kur uli kuyindra kodumai ezhuttu (memorial stone having figure made out of engraving). Kur uli kuyindra kodumai ezhuttu (memorial stone having figure made out of sharp chisel), Nadukal ayinan (became memorial) etc., speak about die nature and content of the memorial stones which alone came into existence in large numbers at this stage.

Out Of thirty references made in the *Sangam* literature nearly twenty belong to the last stage. Hence, it seems that in the closing pan of the Sangam period the erection of memorial stone proliferated. Megalithic

burial and memorial found in close proximity at a number of places in Dharumapuri and Tiruvannamalai region supports this view. A poem in Akananuru '67' mentions actually the proximity of megalithic burial and memorial at one place. From the foregoing discussion, it is quite clear that the megalithic burials (padukkai), which are essentially purely sepulchral in character got slowly transformed into nadukals or memorial stones which are commemorative in character. In all the above said five stages mostly the marava or kannuva community is associated. In the early stage, they were actively involved in killing the people who passed through their area. In the later stage, it seems that they were absorbed as warrior servants (sevakar) by local leaders or village heads to protect their cattle. There are references to these maravas fighting each other in a cattle raid. These people also served as bodyguards to a king. The above scrutiny clearly suggests the description that found in the literature must be feel tested to understand the meaning that stands behind it. The day-time worship (nat-pali) of the nadukal was by way of offering bali (food offerings), bathing it with good water, the stone smeared ghee of good smell burning by its side sweet scented incense that put forth large clouds of aromatic smoke.

The termnatpali (nal-pali) may better taken to refer to the day of the death, or anniversary observed every year when such offerings were made. The states that the offering included large balls of rice (turu-u) and liquor that was brewed from fermented rice (toppi-k-kal), accompanied by the beating of the durm called tudi. The ice beer called landa is offered to die memorial stones by the Madiya clan of Madhya Pradesh and Rathava people in Gujarat further qualify the liquor (ari-rice beer) that was strained through the nar or pannadai (meshed bract of the palm tree found). Purananuru describes the village maiden worshipping the nadukal with folded hands. The practice of the bowman (the black bearded maravar of fierce looking eyes) sharpening his arrow (pakali) by whetting it against the standing nadukal (perhaps for luck in his hunt) and the same lines referring to the engraved figure on the nadukal (kuyileluttu) and that the nadukal was haunted by the spirit (pey) of the dead is echoed in several verses.

Besides the rituals performed during erection of memorial stones have been reflected in different forms to a later date also. The later date Purapporul venbamlai also describe as kalkandal, kalkolnilai, kalnirpatutual, nadutal, kalmuraipalichal and ilkondupukutal. Expect the last mentioned ritual ilkondupukutal rest are same. It may be suggesting a dolman/ cist of Sangam Age as most of later nadukals do not have any superstructure. The quarrying of stone, keeping it immersed in waters, planting the carved image, invocation, offering ofgreat food mahanaivedya and prayers in the end, correspond absolutely with the process mentioned in Tolkappiyam for the erection memorials to the dead. Viewed from the angle of the builders of the memorials, the dead is a God.

The stones have undergone distinct changes in size and substance over a period of time. The earliest of them were big in size and were erected mainly for men who lost their lives during cattle raids, that is while trying to steal cattle from other villages. The stones metamorphosed into hero-stones, which were installed to commemorate a heroic act his dying in a battle or while trying to defend his village from intruders and so on. Three hero stones with TamilBrahmi inscriptions were discovered at Pulimaankombai village, 15 km from Andipatti in Theni district, in Tamil Nadu on March 23, 2006. They are rare because that they are among the earliest Tamil Brahmi inscriptions discovered so far and all of them do not have carvings of the heroes in whose memory they were raised.

Conclusion

Over the years, historical studies bring out social, economical, cultural activities of the forefathers. With availability of sources utilized for the same. Moreover, the Archaeological sources unearthed to clarify or authentication to write research. Perhaps, Hero-stones utilized depicted the real history of ancient peoples. Thus, Archaeological evidence like hero stones help to revive history might be the emerging trends on the contemporary world, especially post modernisation.

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Dr. B. R. Ambedkar's P.E.S.: An Epitome of Social Transformation

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Abstract:

This paper intends to focus on the colossal work of Bharat Ratna Dr. B. R. Ambedkar in the field of education which brought about dynamic change in the lives of suppressed, oppressed and marginalized people in particular and middleclass people in general in Indian society. It also pinpoints the gradual growth of People's Education Society (Mumbai) in the course of time. The champion of intellectual honesty and social justice always strived hard for equality. He found no other better weapon than education to bring about this social change. This paper further focuses how P.E.S proved the epitome of social transformation irrespective of any caste, creed or religion.

Introduction:

Dr. B.R. Ambedkar was of the firm belief that only education can help the downtrodden as he righty puts

"It is the education which is the right weapon to cut the social slavery and it is the education which will enlighten the downtrodden masses to come up and gain social status economical betterment and political freedom"

Bharat Ratna Dr. Babasaheb Ambedkar

Professor Dewey in his book book entitled *Democracy and Education: An introduction to the Philosophy of Education*, 1916 had a profound influence on Dr., B.R. It helped him to build his thoughts in the initial days of his career.

"The most notable distinction between living and in animate being is that the former them by renewal..... Life is self renewing process through on the environment...... Continuity of any experience, true renewal of the social group, it is a literal fact, education, in its broadest sense, is the means of this social continuity of life..... Beings who are born..... Indifferent to the aims and habits of the social group have to be printed Cognizant of them and actively interested education and education alone, spans this gap."

[Dewey, John, PGJC Vol. 1996, p 40]

Dr Ambedkar himself was a great philosopher of natural and social change. Buddha of India, Heraclitus of Greece, Darwin of England, and Deweynof America played vital role in shaping the personality of Dr. Ambedkar. The influence is evident in Dr Ambedkar's review of Bertrand Russell's Principles of Social Reconstruction in 1918. In this review he concluded that mere survival in the struggle for existence does not count, but quality of life one has obtained in the process that matters. Is his logic we hear echoes because not only the pragmatic philosophy of Dewey and the theory of biological development of Darwin. Buddhist law of impermanence and character for human self improvement through the noble Eightfold Path makes his ideology more perfect. The amalgamation of all these virtues makes Doctor Ambedkar progressive in his thinking. Like his mentor Dewey Dr Ambedkar also had firm belief that a child must learn broad principles of life and conduct, not a cookbook of do's and don'ts for every situation. He was impressed by the slogan of "Learning by doing" that was devoid of mere slavish imitation of the teacher. Therefore he thought imparting knowledge through scientific enquiry so as to make a student and self-determining thinker, a person of principles and not near storehouse of facts and figures.

Dr Ambedkar knew that Scheduled Caste, Scheduled Tribes and OBC's were kept miles away from education and starved of access to knowledge. Society based on Manu Dharma promoted injustice to these sections of society for for centuries. Ambedkar was of the firm belief that it is only through education these downtrodden could be effectively enlightened and liberated from the slavery of thousands of years.

He wanted to spread education and culture among the Depressed Classes (Ex untouchables). He started his work and founded Bahishkrit Hitkarini Sabha in July 1924. The Sabha started hostel at 16 January 1925 for the benefit of the school students. The Solapur municipality approved grant in aid to the hostel. The Sabha had established a free reading room in Mumbai. They started a Mahar Hockey Club so that the depressed class students keep themselves away from bad habits and remain fit.

Dr Ambedkar established Depressed Classes Education Society in 1928. As a General Secretary he made an appeal to the then provincial government to extend financial assistance to the education society. The government declared that the scheme of 5 hostels would soon be entrusted to the Depressed Classes Education Society with grant of rupees 9000 per annum. As the grant was too meager Ambedkar move toward local bodies, charitable trust and generous people for financial aid. Local bodies and municipalities curtailed tuition fees for the depressed class students they also granted land for hostels.

Bombay Presidency Government selected State Committee to enquire into the educational economic and social conditions of the Depressed Classes, the term used then for the untouchables. Dr. Ambedkar was one of the members of the State Committee. the committee. The Committee recommended common schools, increase in scholarships and hostels for the Depressed Dlasses students of secondary schools for scholarship for industrial training for apprentices in Mills, Railway workshops and scholarship for studying abroad in Engineering works office. In July 1945 Dr Ambedkar, as honorable member of the viceroy's executive Council convinced the Government of India to retain all the technical training schools as a part of the educational system of the country.

Dr. Ambedkar was himself and academic he experience of teaching economics and law and function as principal of government Law College at Mumbai. He constructed a building, Rajagraha at Dadar for locating his personal library. His thirst for knowledge was unquenchable. He had taken a swear to liberate depressed from ignorance and slavery by enlightening them through education.

Dr.Ambedkar founded people's education society on July 8, 1945 at Bombay now called Mumbai. His view was to establish and run the ideal educational institutions for promoting higher education among the lower middle classes in general and Schedule Caste and Scheduled Tribes in particular.

The People's Education Society gave birth to its first child on June 19, 1946 at Bombay in the old military barracks at Marine Lines, with Arts and Science streams. The first child of the People's Education Society took birth in 1946 at military Barracks, located in Marine Drive of Bombay now Mumbai. That were taken on lease from the central government. Dr Ambedkar name it as Siddharth College of Arts and Science. It was coincidence that Dr Ambedkar was also born in a in military Barack at Mhow in India, now Madhya Pradesh, when his father Ramji what Subhedar major in the education department of the military establishment.

As Dr. Ambedkar was the member of Viceroy's Executive Council he obtained Rupees 300000/- as donation and another 3 lacs as a loan from the central government of India for establishing a college at Bombay. But there was a problem of suitable building for the college therefore took old military branch at Marine Lines on lease for five years from the central government. As soon as the lease expired Dr Ambedkar bought magnificent buildings at fort Bombay namely Anand Bhavan and Buddha Bhavan. of people's Education Society Dr BR Ambedkar made an appeal to Republic on November 26 1945 following words

"The college is not a sectarian institution. It will be open to students of all communities and all trade from all provinces and states. The staff of the college will be as far as possible cosmopolitan. The feature of the college will be the particular care of the students of the Scheduled Castes, who will be granted facilities in the matter of admission freeships, scholarships and hostel accommodation. The Governing Body of the society desire to make the college a modern institution for imparting higher education."

[qtd.Jejurilar Kranti, 1996,p ix]

Dr.Ambedkar knew that the Marathwada region of former Nizams territory was educationally backward. There was only one college at Aurangbad imparting education up to intermediate. For graduate courses the students had to go to Osmania University at Hyderabad hence he decided to establish a college at

Aurangabad under the aegis of the People's Education Society. He established PES college at Aurangabad on 19th June 1950. Why he chose Aurangabad was evident from the Souvenir Brochure published on the occasion of the Laying of the Foundation-Stone by the President of the Indian Republic Dr Rajendra Prasad on 1st September 1951 at 5:00 p.m.

" In Aurangabad in the society deliberately shows a District Centre for its activities facilities are mostly concentrated in provincial capitals for the few in his circumstances rural population As a rule has been denied the benefits of Higher Education primary as an attempt to remedy this situation that the society choose Aurangabad for this new college another consideration in favor of this toys watch and historical Appeal of this place The Immortal monuments of Indian art and culture temples of Ellora and Ajanta its neighbourhood in this reason that the early Saint poets of Maharashtra what and stroke yes equality duration of the past and the needs of the present led to the foundation college of the college at Aurangabad".

[qtd inSouvenir Brochure, Sept. 1st 1951 p10]

The PES College was renamed as Milind Mahavidyalay after the Greek king by name Milind. the campus was questioned as nagsen Vana after the Buddhist monk name Nagsen. In 1967Milind Mahavidyalaya was bifurcated in Milind College of Arts and Milind College of Science.

In due course the society established Institutions at Mumbai, Aurangabad, Mhadad, Pune, Nanded At present there are 29 Institutions which are imparting the education to all the marginalized and economically backward students from various social strata.

The institutions run by the People's Education Society are visited by very high dignitaries namely last Viceroy and Governor- General of India Lord Mountbatten, Governor General C Rajagopalachari, President Dr Rajendra Prasad, Prime Minister Jawaharlal Nehru, Prime Ministers Shrimati Indira Gandhi, Prime Minister of Hyderabad state doctor Dr Ramakrishna, Union Home Minister Sardar Vallabhbhai Patel, Governor Shri Sriprakash Nawab Ali Yavar Jung, Mr Morarji Desai, Osmania University Vice Chancellor Dr. Vellodi, Justice MC Chagala, Jusice P. B.Gajendragadkar, K R Narayanan president of Indian Republic all of them held the People's Education Society high esteem for its selfless service to the marginalized suppressed classes the Indian society.

Theme:

Visionary Dr. Amkbedkar knew the one of his guru's words "without knowledge, wisdom was lost; without wisdom, morals were lost; without morals, development was lost; without development wealth was lost without wealth shudras are ruined; all these disasters are due to lack of knowledge" Dr. Ambedkar caught this thred and brought about the change in the society.

He clearly gives the all pervasive objectives of People's Education Society's objectives as "People's education society's objective is not merely to give education but to give education in such a manner as to promote intellectual moral and social democracy what modern India needs and this is what all well wisher of India must promote."

Wairjournal C Bharat Ratna Dr Babasaheb Ambedkar

For a long time P.E.S. is catering to educational requirements of marginalized, oppressed and lower strata of the society irrespective of caste, creed or religion. Still today the society is working on the same vision and mission given by our emancipator Dr. B.R. Ambedkar. It is pertinent to put the thoughts of D.G. Jadhav which uttered in welcome speech at the inauguration of Siddharth College in 1946.

" The People's Education Society is above all fortunate in having at its helm of affairs such a distinguished man of learning as Dr BR Ambedkar, for whom learning and scholarship will always remain the first and last lov. He is a scholar first and last, and under his inspiring guidance and with such a significant name as the society has chosen for its College, we assure everyone that this institution will always remain true to the kindred points of education and service, dispensing sweetness and light, and showing the path of enlightenment to a world surrounded by ignorance, selfishness and greed. The People's Education Society is also for the people and to this aim it will always remain true." [D.G. Jadhav. D.G., SCM, 1946, p1-2]

Dr. Ambedkar proved that the social transformation can b achieved through Heraclitus of Greece, education. The service that Dr. B.R. Ambedkar rendered to his community and to the nation at large is unsurpassable. It proving a milestone in regeneration of our nation.

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A Study of Impact of Technology on Employment

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Abstract

Increased in technology is expected to significantly affect both the quality and quantity of jobs. Employment in any industry is impacted by the introduction of new technology whose objective is to increase productivity. The initial result of such technological introduction is the reduction of workers to some extent. New types of jobs and employment are changing the nature and conditions of work by altering skills requirements and replacing traditional patterns of work and sources of income. They open opportunities, especially for developing countries, to enter new, fast-growing sectors and catch up with more advanced economies. At the same time, new technologies are affecting the functioning of labor markets and challenging the effectiveness of existing labor market institutions, with far-reaching consequences for the number of jobs, their quality and the diversity of opportunities they offer. This paper presents a employment cycles and impact of technology on employment and unemployment.

Key words- Technology, employment, unemployment, jobs etc.

Introduction

Technology-

Technology is the use of scientific knowledge for practical purposes or applications, whether in industry or in our everyday lives. So, basically, whenever we use our scientific knowledge to achieve some specific purpose, we're using technology. Well, there is slightly more to it than that. Technology usually involves a specific piece of equipment, but that equipment can be incredibly simple or dazzlingly complex. It can be anything from the discovery of the wheel, all the way up to computers and MP3 players.

Types Of Technology-

- 1. Communication Technology- Radio, Television, Internet
- 2. Construction Technology- Bridges, Buildings
- 3. Product Technology- Manufacturer services, Material Design
- 4. Medical Technology- Artificial organs, MRI
- 5. Business Technology- application of Information, Engineering, Data and Science
- 6. Eductional Technology- Research, Utilisation of information, Evaluation
- 7. Information Technology- MIS, Various Softwares
- 8. Agricultural Technology- Sorting Products, Seed Plantaion, Harvesting Crops
- 9. Entertainment Technology- Animations, Videos, Sounds, etc.

Objective

- 1. To study the technology which have impacted on employment.
- 2. To study the technology which have impacted on unemployment.
- 3. To study the various types of technology.

Hypothesis

- 1. The use of technology makes work easier and reduce the employment.
- 2. The use of technology create the new job opportunities and standard jobs.

Research Methodology

- 1. In this project we use secondary data for research.
- 2. Secondary data is collected from various books, some publication and websites.

Data Analysis

1. This analysis is in descriptive nature.

Impact Of Technology On Employment And Unemployment

Technology change has undoubtedly impacted the amount, way and situations in all workplaces. For those who were curious to know how technology is destroying jobs? Need to consider the fact that technology has simultaneously created new jobs for people who were keeping up the pace with it. But many people today, believe that the impact of technology on destroying jobs is more prominent than creating them.

Impact Of Technology On Unemployment

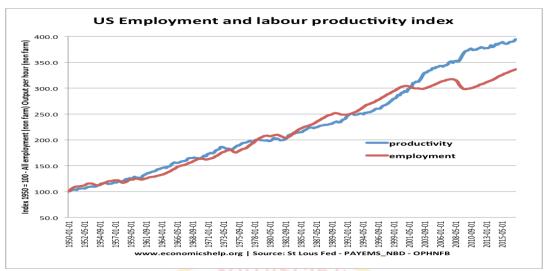
- 1. The impact of technology on our life is integrating rapidly. This technology expansion has raised the concern that it can replace various jobs of the unskilled employ that are not much aware with the recent technological changes.
- 2. So, to kee0p pace with technology the working people need to have more flexibility in work and be a lifelong learner. But not everyone are reluctant to change thus, new technology has a great impact on local job opportunities and this is:
- 3. The impact of technology on our life is integrating rapidly. This technology expansion has raised the concern that it can replace various jobs of the unskilled employ that are not much aware with the recent technological changes.
- 4. So, to kee0p pace with technology the working people need to have more flexibility in work and be a lifelong learner. But not everyone are reluctant to change thus, new technology has a great impact on local job opportunities and this is:

The Empact Of Technology On Employment

- 1. On the other hand, there are some Positive Impacts of technology on Unemployment. Development of Technology has a great impact in the workplace with increased productivity, efficiency, performance and at the same time eliminating the risk and human errors. The key points targeting the impact of technology on employment are:
- 2. Creating skilled jobs: Technology is creating a job for skilled workers that can empower themselves according to the complex world.
- 3. Easy communication: Once used telephone and fax are now replacing tablet and laptops for communication purpose in the workplace
- 4. **Improve performance and accuracy:** Technology makes work process computerized which can reduce risk and error while improving performance.
- 5. **Increased salaries:** An increase in demand for skilled workers of higher wages has boosted high paying jobs in industries.
- 6. **More production creates more jobs:** We often assume that with productivity job decreases but, the truth is highly productive companies offers more job and pay a better.
- 7. **Increase work profile:** When we draw a relation between technology vs unemployment. Technology has generated various new work profile in software, IT and AI field for experts

Our Finding

- 1. Two thirds of workers (66%) believe that technology will create new opportunities.
- 2. The majority of workers (87%) are willing to adapt their skills for the changing workplace.
- 3. More than half of workers (51%) are excited about the opportunity to master new technology in the workplace, and more than one third of workers (35%) whose companies don't use new technology yet are hopeful that their employer will introduce it.
- 4. Nearly half of businesses (45%) hired new employees with technical knowledge or skills in the past year.
- 5. Robotics and Automation Are the Most Common (17%)Forms of Future Technology.



(source-https://www.economicshelp.org/wp-content/uploads/2013/09/technologocical-unemployment-<u>labour-prod.png</u>)

Since 2000, productivity growth has become detached from employment growth. During the early 2000s employment grew at a slower rate than productivity. Since the end of the great depression, employment growth has picked up (though in a flexible labour market - many new jobs are low paid). But, this might indicate the gains in productivity from automation are leading to lower job growth

Following are the suggestions to solve unemployment problem:

(i) Change in industrial technique:

Production technique should suit the needs and means of the country. It is essential that labor intensive technology should be encouraged in place of capital intensive technology.

(ii) Focus on agriculture and agricultural product.

Seasonal unemployment is found in agriculture sector and agro based industries.

(iii) Change in education system:

Educational pattern should be completely changed. Students who have liking for higher studies should be admitted in colleges and universities. Emphasis should be given on vocational education. Qualified students should start their own small units.

(iv) Expansion of Employment exchanges: V 2240_

More employment exchanges should be opened. Information regarding employment opportunities should be given to people.

(v) More assistance to self employed people:

Most people in India are self employed. They are engaged in agriculture, trade, cottage and small scale industries etc. These persons should be helped financially, providing raw materials and technical training.

(vi) Full and more productive employment:

The main objective of county's employment policy should be to increase employment opportunities and productivity of labour. Govt. should adopt a policy that provides employment to all people.

(vii) Increase in Production:

To increase employment, it is essential to increase production in agriculture and industrial sectors. Development of small and cottage industries should be encouraged.

(viii) More importance to employment programmes:

In five year plans more importance should be given to employment. The programmes like irrigation, roads, flood control, power, agriculture, rural electrification can provide better employment to people.

(ix) High rate of capital formation:

Rate of capital formation in the country should be accelerated. Capital formation should be particularly encouraged in such activities which generate greater employment opportunities. Capital output ratio should be kept low.

(x) Industries in co-operative sector:

Industries in co-operative sector should be encouraged. Kerala Govt.' set up a textile mill covering 600 unemployed persons on co-operative basis. This is a novel approach to fight against unemployment. Different State Govt. should take necessary steps in this direction.

(xi) Decentralisation of industrial activity:

Decentralisation of Industrial activity is necessary to reduce unemployment. If industrial activities are centralised at one place, there will be less employment opportunities in the under developed areas. So Govt. should adopt such policies which encourage decentralisation of industrial activity.

(xii) Population control:

The growth of population should be checked in order to solve unemployment, problem. Family planning programme should be implemented widely and effectively.

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Ecochemistry of the Aquatic Snail Indoplanorbis Exustus Acting as Host For Trematode Parasites

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Abstract:

The success of organism or growth of population depends upon of sustainable environmental conditions. In the freshwater environment the physical, chemical and biotic tropic conditions vary more widely than the sea, so there was acute need to analyse the water to understand the tolerance limits of ecochemistry by Planorbidae species. In this consequence the temperature, pH, oxygen, carbon dioxide, and hardness of water was analysed. It was found that the snails were found more in number at particular range of pH, temperature, oxygen, carbon dioxide, and hardness of water. The Indoplanorbis exustus can tolerate particular range of environment factors as related with metabolism. The temperature was increased during late summer. It was remarkable factor because large numbers of empty shells were found to floating on water surface. These shells were of greater size hence they were of infected snails which were failed to tolerate the high temperature. The snails were found more in number in the water bodies having aquatic plants. On one way these plants were formed the food for them and secondly these were maintain the CO2 and O2 balance by photosynthesis.

Key words: Growth of population, Sustainable environment, Empty shells.

Introduction:

The physical factors affect many of the physiological functions of the snail, sometimes leading towards the empty shell apexing towards sky instead of bottom towards aquatic ecosystem. Molluscs are largely marine, the number of species living on land is in between one quarter, one third of that of the sea and the number of Indian freshwater species is very much less, approximately 5,000 freshwater snail species in the world that live in lakes, ponds, rivers, and streams. Within in this the number of freshwater molluscs are reducing at alarming rate at polluted sites (Waghmare *et al.*2012, Verma and Saksena 2010). The gastropods, the bivalves exhibit variations in shell features depending upon the ecology of the species and may produce eco-phenotypes (Subba Rao,1989). Pulmonates are divided into groups, depending upon ecological conditions. The marine Basommatophora, the freshwater Basommatophora and terrestrial Stylommatophora. Majority of fresh water snails are belonging to order Basommatophora. *Indoplanorbis exustus*, belongs to family Planorbidae of order Basommatophora. The activity and behaviour of aquatic pulmonates have been studied by Muley, D.V. (1999); for ecological factors.

The members of family planorbidae are the familiar members of fauna of lakes, ponds, rivers, ditches and stagnant water throughout the world. The *Indoplanorbis exustus* usually do not occur in running waters and in rainy seasons as they are washed away. Temperature is of great importance in the life of fresh water snails in controlling the rate of development. Fraenkel (1960) gave the thermal death point for *Littorina littorea*. Brown (1971) studied the ecology of the Bullia of South Africa. Much of his work deals with chemoreception and responses with leads to feeding. He also studied growth, life span, distribution, and water and heat relationship in Bullia. The review shows that considerable work has been done on ecology. The notable are Mane U.H.,(1994), Kulkarni D.A.,(1988), Muley, D.V.,(1999), etc.By considering all these, in the present study the main aim is focused on analysis of water to study the limiting factors, in which the snail *Indoplanorbis exustus* live. The temperature, pH, hardness of water, oxygen and carbon dioxide amount are studied for the year 2019. Although the work would be at local level, but will boost the conservation of molluscs at different localities.

Material And Methods:

Collection of water sample:

The water samples are collected through the year from 'Gondeshwar' pond at Sinnar, dist. Nashik of Maharashtra, vegetated naturally with clean and stagnant water and adequate number of aquatic molluscs like *Indoplanorbis exustus*. For collection of sample water glass bottle is used. Sample of water can be collected by lowering a closed glass bottle to the bottom, opening and closing it there by hands and taking out water sample without air bubble. Parameters like temperature, pH, free carbon dioxide, dissolved oxygen, hardness of water were immediately recorded or estimated after collecting the sample.

1. Temperature:

Solar radiations and atmospheric temperature bring about thermal changes in natural waters. Temperature is basically an important factor for the chemical and biological reactions in the water. A rise in temperature of water accelerates the chemical reactions, reduces solubility of gases, amplifies taste and odor and elevates metabolic activity of organism to certain limit.

Material: A mercury thermometer of 0 to 50°C range.

2. pH (Hydrogen ion concentration) or potential hydrogen:

pH is scale of intensity of acidity or alkalinity and measures the concentration of hydrogen ion in water. pH of natural water varies around 7, generally over 7 (i.e. alkaline) due to presence of carbonates. It increases at day times largely due to photosynthetic activity (consumption of carbon dioxide), whereas decrease at night due to respiratory activity. Vastest Factors like air, temperature, disposal of industrial etc. also brings about change in pH.

Material: Digital pH meter.

3. Total hardness:

EDTA titrimetric method:

The total hardness of water is the sum of concentration of alkaline earth metal cations present in it. Calcium and magnesium are the principal cations imparting hardness; however to lesser extent cations like iron, manganese and strontium are also responsible for it. Hardness when caused because bicarbonates and carbonates of these cations, is called temporary of hardness since it can be removed by boiling the water. Sulphates and chlorides of these cations cause permanent hardness which is removed by simple boiling of water. In general practice hardness is measured as concentration of only calcium and magnesium (as CaCO₃) which are far high in concentration over other cations.

4. Dissolved Oxygen:

Estimation of oxygen by Golstesman's method:

Oxygen dissolved in water is one of the important parameter of water quality and is an index of physical and biological processes going on in water. There are two main sources of dissolved oxygen in water:

- i) Diffusion from the air
- ii) Photosynthetic activity with in water.

Diffusion of oxygen from air to water is a physical phenomenon and depends upon solubility of oxygen which in turn, is influenced by factors like temperature, water etc. Photosynthetic activity is a biological phenomenon carried cut by autotrophs and depends upon autotrophs population; light conditions and available gases etc. Non-polluted surface waters are normally saturated with dissolved oxygen; while presence of oxygen demanding pollutants (like organic wastes) causes rapid depletion of dissolved oxygen from water.

Oxygen is considered to be A-1 limiting factor especially in lakes. Organisms have specific oxygen requirements, for example, 2-5 mg/lit for most of the fishes. Low dissolved oxygen may prove lethal for many of the organism.

5. Dissolved carbon dioxide:

Rain water according to its solution equilibrium with atmospheric air and absorption coefficient of carbon dioxide contains about 0.6 mg CO₂ per litre. When such water percolates through the soil, additional

 CO_2 is dissolved in ground waters and therefore extra rich in CO_2 . Respiratory activity of aquatic organisms and the process of decomposition are important sources of CO_2 in the bodies of water. Free CO_2 combines with water and form carbonic acids.

Free CO₂ dissolved in water is the only source of carbon can be used in photosynthetic activity of aquatic autotrophs. Once CO₂ fixed by autotrophs it can be further that autotrophs utilized by organisms of at other trophic levels. In absence of free CO₂, the bicarbonates are converted into carbonates by releasing CO₂ which is utilized by autotrophs; thus making the water alkaline.

6. Neutral and alkaline water:

Alkalinity of water is its capacity to neutralize a strong acid and is characterised by presence of hydroxyl (OH) ions capable of combining with hydrogen (H) ions. A number of bases viz., carbonate bicarbonates, hydroxide, phosphates, nitrates, silicates, borates etc. Contribute to alkalinity, however in natural waters carbonates, bicarbonates and hydroxides considered to be predominant bases. Thus alkalinity may be total alkalinity or alkalinity due to individual.

In natural waters most of alkalinity is caused due to CO_2 . Free CO_2 combines with water partly to form carbonic acid (H_2CO_3), which is further dissociated into hydrogen (H) and bicarbonate (HCO_3) ions. The HCO_3 ions thus formed get further dissociated into H^+ ions and carbonate (HCO_3) ions.

Observation And Result:

1. Temperature:

Month and date	Jan. 10	Feb. 10	Mar. 10	Apr. 10	May 10	Jun. 10	Jul 10.	Aug. 10	Sep. 10	Oct. 10	Nov. 10	Dec. 10
Temperature in °C	20	31.5	32	34	34.5	30.5	29	29	28	25	24	20

2. pH:

Month and date												
pН	8.7	8.5	8.5	8.6	7.5	7.9	7.7	7.9	8.0	8.1	8.3	8.5

3. Total hardness:

Month and date	Volume of titrant in ml	Volume of sample in ml	Total hardness mg. / lit. as CaCO3
Jan. 10	4.8	50	96
Feb. 10	5.0	50	100
Mar.10	5.7	50	114
Apr. 10	5.6	50	112
May 10	6.0	50	120
Jun. 10	5.0	50	100
Jul. 10	5.8	50	116
Aug.10	5.1	50	102
Sep.10	5.0	50	112
Oct.10	5.0	50	116
Nov.10	5.0	50	100
Dec.10	5.0	50	120

4. Dissolved Oxygen:

Month and date	Volume of titrant in ml(V1)	Volume of sample in ml.(V2)	Volume of MgSO4 +KI in ml. (V3)	O2 mg/ml
Jan.10	1.3	102	2	2.6

Feb.10	1.2	102	2	2.4
Mar.10	1.3	102	2	2.6
Apr.10	1.5	102	2	3.0
May10	1.6	102	2	3.2
Jun10	1.8	102	2	3.6
Jul. 10	2.0	102	2	4.0
Aug 10	1.9	102	2	3.8
Sep.10	1.3	102	2	2.6
Oct.10	1.3	102	2	2.6
Nov.10	1.2	102	2	2.4
Dec.10	1.3	102	2	2.6

5. Dissolved carbon dioxide:

Month and date	Volume of sample in ml. (Vs)	Volume of titrant In ml. (Vt)	Free CO2 g/lit. or ppm.
Jan.10	50	0.2	4.0
Feb.10	50	0.2	4.0
Mar.10	50	0.3	6.0
Apr.10 /	50	0.2	4.0
May 10	50	0.4	8.0
Jun.10	50	0.4	8.0
Jul. 10	50	0.5	10.0
Aug.10	50	0.5	10.0
Sep.10	50	0.4	8.0
Oct. 10	50	0.2	4.0
Nov.10	50	0.3	6.0
Dec. 10	50	0.2	4.0

6. Neutral and alkaline water:

Month and date	Total volume of Titrant in ml. (t)	Volume of sample In ml.(s)	Total alkalinity (as CaCO3 mg. /lit.)
Jan.10	5.0	50	100
Feb.10	5.3	50	106
Mar.10	5.5	50	110
Apr.10	5.1	50	102
May 10	5.6	50	112
Jun.10	5.6	50	112
Jul.10	6.7	50	134
Aug.10	6.6	50	132
Sep.10	5.5	50	110
Oct. 10	5.0	50	100
Nov.10	5.7	50	114
Dec. 10	5.6	50	112

Discussion:

The survival of any organism or growth of its population depends upon a complex of conditions. Any condition which exceeds the limit of tolerance is said to be a limiting factor. In the fresh water environment the ecochemical and biotic tropic conditions vary more widely than in the sea. So there was acute need to analyse the water same from where the ecochemistry affect the survival of molluscan snail's .In the present study analysis of water is done at the date of 10^{th} of every month.

In the present work it was found that temperature showed the great importance in the life of fresh water snail *Indoplanorbis exustus*, their development and distribution. The temperature was minimum from November to January (20°C to 24°C), maximum from February to May (31°C to 34.5°C) and moderate from June to October (20°C to 30.5°C). Hence from the month of February to May the empty shells of the snails was found floating on the water as it affecting the metabolism. It was also recognised that the highly infected snails having large shells cannot tolerate the temperature from 31°C to 31.5°C. During these months only the healthy snails were found.

It was also found that there was definite correlation between pH and the life of snails. The individuals of *Indoplanorbis exustus* were found more in number, in the water having pH 7.5 - 8.5.It might be a tolerated range as indicated by their abundance. The hardness of water as CaCO3 (96 to 138 mg/lit) did not affect the snails.

Oxygen is considered as A - 1 limiting factor especially in water with heavy load of organic matter. In present study it was observed that snails can survive in the water having 2 to 4 mg of oxygen per litre of water and even more than that.

The snails were observed more in number in the water bodies having aquatic plants. The rain water when percolates through the soil additional CO2 dissolved out of soil and air. The ground water, therefore extra rich in CO2. Respiratory activity of organism is also source of CO2 but the CO2 is taken or used by photosynthetic activity of aquatic autotrophs. Therefore in present study, snails were found more in number in the water having aquatic plants. The snails are survived in the water having $2-10 \text{ CO}_2$ mg/litre of water.

The similar observations were made by Kulkarni (1988) for the pH and survival of snails. Attempts had been made by Mane (1994) and Khatavkar (2004), related to the molluscan with their behaviour and respiration and variations in physico chemical parameters. Clear similarities also found with the *Indoplanorbis exustus* in present work. Similarly Gautam (1982) observed similar range of tolerance of ecobiological factors for the snails and the fishes. fresh water snails, development and distribution.

The temperature was minimum from November to January (20°C to 24°C); maximum from February to May (31°C to 34.5°C) and moderate from June to October (20°C to 30.5°C). Hence from the month of February to May the empty shells of the snails were also found. It indicates that the highly infected snails having large shells cannot tolerate the temperature from 31°C to 31.5°C. During these months only the healthy snails were found.

This entire scenario indicates that ecochemical factors like temperature should be moderate. As a matter of fact temperature of universe increases day-today, which affect metabolism leading towards death, which reduces the population, the species, the shell formation, diversity and increase the risk of threats including extinction. It is; to some way or the other climatic change in relation with ecochemistry is alarming to conserve the mollusc.

Acknowledgement:

We are very grateful to Principal Dr. P. V. Rasal, G.M.D. Arts, B. W. Commerce and Science College, Sinnar, for providing the necessary laboratory facilities and for discussion regarding academic dimensions during pandemic.

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An Analysis of Financial Soundness of Selected Printing and Publishing Companies in India – An Empirical study

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Abstract:

In present study researcher has selected top two Printing and Publishing companies in India based on market capitalization namely India mart Intermesh Ltd. & Navneet Education Ltd. Their financial soundness was analyzed through different selected Accounting tools like financial ratios, mean and statistical test ANOVA two factor analysis without replication considering five years from 2017 to 2021.

Key Words: Printing and Publishing companies, financial soundness, ANOVA

1.1 Introduction:

The printing and publication industry in India is persistently making progress and spawning new window for the advancement with its associated business – paper manufacturing, Ink manufacturing, packaging etc.It is been drive a wedge between – 1. Traditional print media known as publication; its focal concentrations are towards providing books, magazines, periodicals, etc. to the customers and 2. Printing; its central emphases is towards physical production of media which aid to publication house, firms involved in hoarding advertising, promotional activity, financial statements & other documents etc.

1.2 Literature Review:

(SHAH, 2020)¹had conducted a research on "Impact of Receivables Management on Profitability: A Study on Selected Printing Companies Listed at BSE In India" researcher tried to identify impact of receivable management on profitability during 2009-10 to 2018-19 in selected 13 printing companies in India. Secondary data were used and the same were analyses through regression test statistic, Descriptive statistics and Durbin – Watson correlation to justifying above mentioned objective and researcher concluded that receivable management had significant effect over the profitability.

(M & P, 2020)² had carried out "Financial Analysis of Selected It Companies in India" for justifying its research objective researcher had selected 10 IT companies which were analyses using different financial ratios during 2009 to 2019 researcher concluded that over performance of theses selected companies were good during the research period.

(Paswan , 2013)³had performed "Analysis of Solvency of Selected FMCG Companies in India". Researcher aimed at disclosing liquidity and financial position of six selected FMCG companies using different ratios further for advance analysis other statistical tools like Average, SD and Co – efficient of variance were applied from 2005-06 to 2010-11. Moreover researcher concluded that out of all selected companies Emami and Dabur shows less utilization of proprietary fund in order to acquire total assets instead of that they relies on Debt financing.

1.3 Rational Of The Study:

Literature reviews illustrations that there are very few researches that is been conducted on printing and publishing house further no researches is been done during 2017 to 2021. Which make possible scope for the present research and hence research is conducted on "An Analysis of Financial Soundness of Selected Printing and Publishing Companies in India – An Empirical study"

1.4 Objectives:

 To examine financial Soundnessof selected Printing and Publishing Companies during the period of study.

1.5 Hypothesis:

Ho: There is no significant difference in Operating Profit Margin ratio of selected Printing and Publishing Companies during the period of study.

Ho: There is no significant difference in Return on Net worth to Equity ratio of selected Printing and Publishing Companies during the period of study.

Ho: There is no significant difference in Current ratio of selected Printing and Publishing Companies during the period of study.

Ho: There is no significant difference in Assets Turnover ratio of selected Printing and Publishing Companies during the period of study.

1.6 Methodology:

1.6.1 Universe of the Study:

All Printing and Publishing Companies listed in BSE.

1.6.2 Nature of the Study:

In present research, researcher tried to analyze financial performance using quantitative data of selected Printing and Publishing companies in India. So the research is of analytical & quantitative in nature.

1.6.3 Sampling Technique:

In present researcher has selected sample companies considered market capitalization. Here convenience sampling technique is used.

1.6.4 Sample of the study:

In this research researcher has selected Two Printing and Publishing Companies.

Company Name	Market Cap (Rs. Crore.)
Indiamart Inter	23,223.70
Navneet	1,726.83
OSN 234	19-6381 S

Source: Money Control

1.6.5 Collection of Data:

In present research data has been collected from annual reports, money control site, and other different website hence study is based on secondary data.

1.6.6 Period of the Study:

Research is done on the five years data from 2017 to 2021.

1.6.7 TOOLS AND TECHNIQUES:

Ratio Analysis: To Check the financial soundness of the selected Printing and Publishing companies in India.

Mean: It is used see the average performance of the selected Printing and Publishing companies in India.

ANOVATest:To compare mean of different selected financial ratios of the selected Printing and Publishing companies in India during the study period.

1.7 Data Analysis:

	Ta	able 1: Financ	ialRatios of Ir	ndia mart Inte	rmesh Ltd.						
	and Navneet Education Ltd.										
Sample	Ratios			Year							
		2017	2018	2019	2020	2021					
IIL	OPM	0.46	-46.45	9.31	35.3	60.54	11.83				
	RONtE	-0.85	0	7.83	53.26	17.73	15.59				
	CR	0.9	1.19	1.7	1.86	4.4	2.01				
	ATR	94.84	73.42	60.73	55.73	26.43	62.23				
	Mean	23.84	7.04	19.89	36.54	27.28	22.92				
NEL	OPM	20.37	22.95	18.1	17.64	19.11	19.64				
	RONtE	18.43	24.59	16.93	19.32	22.86	20.43				
	CR	3.11	2.29	2.12	1.76	2.19	2.29				
	ATR	123.37	114.48	104.27	109.64	117.24	113.8				
	Mean	41.32	41.08	35.36	37.09	40.35	39.04				

Source: Money Control

Table: 1 displays different financial ratios. In case of IIL, OPM was 0.46 at 2017 which has increased tremendously in 2021 it was 60.54. similarly RONtE was (0.85) in 2017 which increased at a very high rate in 2020 it was 53.26 but suddenly shows a downfall in 2021 it was 17.73. CR shows a constant increasing trend on other hand ATR shows constant decreasing trend. In case of NEL, OPM which increased and in 2018 it was 22.95 then it decreases until 2020 finally it increased in 2021 it is 19.11. RONtE shows fluctuating trend. CR was 3.11 in 2017 which constantly decreasing in 2020 it was 1.76 then it increases in 2021 it is 2.19. ATR was 123.37 in 2017 which keeps on declining until 2019 after that it increases in 2021 it is 117.24.

	Z Ta	ble 2: Anova: '	Two-Fa	actor Without	Replication (
	SOV	SS	DF	MS	F	P-value	F Crit
OPM	Year	152.18	1	152.18	0.17	0.70	7.71
(%)	Company	2966.83	4	741.71	0.85	0.56	6.39
	Error	3507.00	243	4 (876.75)			
	Total	6626.01	9				
RONtE	Year	58.37	1 -	58.37	0.22	0.66	7.71
(%)	Company	977.49	4	244.37	0.92	0.53	6.39
	Error	1060.35	4	265.09			
	Total	2096.21	9				
CR(x)	Year	0.20	1	0.20	0.15	0.72	7.71
	Company	3.35	4	0.84	0.62	0.67	6.39
	Error	5.38	4	1.35			
	Total	8.93	9				
ATR	Year	6648.66	1	6648.66	23.63	0.01	7.71
(%)	Company	1601.26	4	400.31	1.42	0.37	6.39
	Error	1125.52	4	281.38			
	Total	9375.44	9				

Source: Calculated using MS Excel

Table 2 displays Anova: Two-Factor without Replication. In case of OPM, sources of variance between selected years of the study, P – Value is 0.70 and sources of variance between selected companies, P value is 0.56 both of them are higher than 0.05 which means null hypothesis is accepted, there is no significant difference in Operating Profit Margin ratio of selected Printing and Publishing Companies during the period of study. In case of RONtE, sources of variance between selected years of the study, P – Value is 0.66 and sources of variance between selected companies, P value is 0.53 both of them are higher than 0.05 which means null hypothesis is accepted, there is no significant difference in Net Worth to Equity ratio of selected Printing and Publishing Companies during the period of study. In case of CR, sources of variance between selected years of the study, P – Value is 0.72 and sources of variance between selected companies, P value is 0.67 both of them are higher than 0.05 which means null hypothesis is accepted, there is no significant difference in Current ratio of selected Printing and Publishing Companies during the period of study. In case of ATR, sources of variance between selected years of the study, P – Value is 0.01 and sources of variance between selected companies, P value is 0.37 both of them are lower than 0.05 which means null hypothesis is not accepted, there is significant difference in Assets turnover ratio of selected Printing and Publishing Companies during the period of study.

1.8 Conclusion:

Categorically and comprehensive; overall Average of Operating Profit margin, Return on Net Worth to Equity ratio and Current ratio and Average of Assets Turnover ratio in NEL are higher as compared to that of in IIL. As per the observation it is identified that in IIL there is high amount of fluctuation in different selected ratios and in NEL there is almost consistency.

1.9 Recommendations:

Although NEL's financial performance is appreciable still they must constantly develop new strategies and adopt new and advance technologies more over should try to increase its market share to maintain their sound financial status. IIL should try to reduce costs &increasing turnover(sales) by more promotions.

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Abbreviations:

OPM = Operating Profit Margin Ratio RONtE= Return on Net Worth to Equity

CR= Current Ratio

ATR = Assets Turnover Ratio IIL = India mart Intermesh Ltd.

NEL = Navneet Education Ltd.

Informal Workers: The omitted category in the Economy

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Introduction

Informal Economy³ can be termed as an economy predominant in a country comprising of employees. Informal wage workers⁴ form part of the term employees who bear a vital contribution towards In addition, own account operators⁵ have a pivotal role to play in the the economic development. development of the economy. Own account operators who render their services on their own account and they are not being engaged or in other words their services are not being utilised on a continual basis. They can also be classified under the group employees. Informal wage workers who work on regular basis have to face a lot of difficulties for the continuance of their services and upkeep of work. An informal worker more often than not, a seasonal worker, which implies that their services are utilised, more or less, on a seasonal basis as per requirements of the employer who hires the service. They are more or less a contractor and their services are so hired. They may be subjected to seasonal or disguised unemployment, or frictional unemployment whatever the case may be which comes to understand that they are being subjected a lot of difficulties and hardships for the regularisation of their works and payments. In this context it is to be mentioned that an informal economy has been categorised as individual work or business which need not necessarily be scattered or well arranged. The services of vendors, launderers, etc. can be classified under this category. Many informal workers are, either, self-employed or working for the self-employed employers. Since they do not represent a regular pay roll, they are never taxed by the economy in other words their income is never taxable or they are rather exempted from taxation. A large section of Informal workers provide their workers in unsecured and unprotected areas. They are predominantly scattered amongst the unprotected or unsecured areas. There are informal wage workers who work as casual labourers. The services of guest workers (immigrant workers) can be classified under this category.

Apart from the given examples of regular and casual workers, domestic workers, part-time day labourers (who render their services devoid of protection of any kind) industrial outworkers, undisputable workers⁶, and part-time or temporary workers. The temporary or part-time workers work without the benefit of any kind of social protection or job security and other fringe benefits, that are being provided to other formal and regular workers⁷ in industrial establishments. A few employers pay them well the reason being the lack of any kind of tax obligations. However, informal workers are low paid but put to acute hardships in their workplace with the exploitation of informal workers, for instance long hours of work.

³ The **informal** economy represents all work by individuals or businesses which, by law or practice, is not sufficiently catered for through formal arrangements. Examples include food and flea markets, street vendors, laundromats and the like, mostly in rural or informal areas.

⁴ An **informal worker** is often a contractor rather than an employee, does not have a uniform or dress code, might be a seasonal or temp worker, moves from employer to employer, doesn't have taxes taken from his pay checks and works this way out of necessary more often than desire.

⁵ Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of job defined as a self- employed job, and have not engaged on a continuous basis any employees to work for them during the reference period.

⁶ Undeclared work is defined as any paid activities that are lawful as regards their nature, but not declared to public authorities, taking into account differences in the regulatory systems.

⁷ Formal sectors represent all jobs with specific working hours and regular wages and the worker's job is assured. The workers are employed by the government, state or private sector enterprises. It is a licensed organization and is liable to pay taxes.

The output of Industrial outworkers⁸ are to be treated as National Output and the income earned by the industrial establishment therein is to be classified under National Income. However, they are also found to be victims of exploitation, with less payment and more hours of work. Despite the issuance of several enactments in view of industrial welfare, it is a sad plight that progress is but a long unsettled dream. History says that May 1st has been treated as workers day in the year 1886, with the view of the progressive life of workers, adorned with all other fringe benefits. The aim was to eradicate differences in levels and bring about equality amongst employers and employees as has been the underlined principle of personal management. Though a lot of time has gone by since these enactments, it is to say that exploitation and inequality are still but a harsh reality persistent amongst the industrial outworkers.

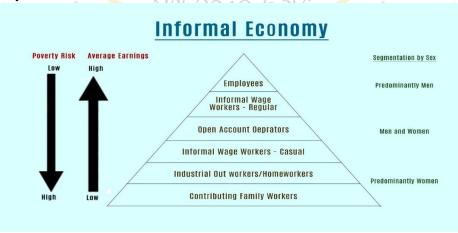
Homeworkers⁹ and Domestic Workers form part and parcel of the low income group devoid of any kind of benefits for their services. The services of housewives are not classified under National Income as those rendered out of love and affection. Though domestic workers do not fall in this category, their services are looked down upon which has been the reason for their underdevelopment and undevelopment. A large section of domestic workers are "born in debt, live in debt and bequeath the debt to the successors" as M L Darling said. Services of homeworkers are devoid of any kind of fringe benefits and there is no scope for their upliftment whatsoever. Market Oriented Workers who work on their own account can be categorised under this head.

Observations

They are victims of poverty from the beginning itself. Despite long hours of work, they find it too difficult to eke out a living on account of the low pay packages received by them. Due care has not been taken for the upliftment despite several enactments passed from time to time. The resultant is their low level of living.

Their average earnings alone are their solace in the matter of fulfilling their own daily needs which forms their basic needs of course. The contributing family workers, homeworkers as well as industrial outworkers form the lowest strata of income groups in an informal economy. However, general employees receive an average income in comparison to low income groups as mentioned earlier.

The next topic to be discussed is about segmentation by sex. Men comprise a large section of employees as well as regular informal wage workers. The role of women is too negligible in this category. As against the equality in number of men and women amongst the Own Account Operators. On the other hand, women form a large part of causal informal labourers, home workers, industrial outworkers and contributing family workers.



⁸ The word '**outworker**' connotes a person who carries out the type... premises not under the control and management of the principal employer.

⁹**Homeworkers** are employees who do paid work out of their own homes for an employer (for example, online research, preparing food for resale, sewing, telephone soliciting, manufacturing, word processing)

Recommendations

All informal workers must be recognised as essential service providers and issued identity cards so that they can go for the free movement in all places, without fear of harassment.

All socieities should be directed to provide weekly payments to informal workers. They must also ensure provision of rest and refreshments for the workers. Residents should be encouraged to respect the work the workers are held with.

The principal of "equal pay for equal work" may be strictly followed in letter and spirit.

Informal workers may be beneficiaries of regularisation of services, leave, retirement, provident fund, etc.

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The Study of Correlation Between Sugarcane Landuse And Human Population in Solapur District

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Abstract

The agriculture is the chief occupation of India, where above 62 percent people in engaged directly and indirectly in agricultural activities. There, farmers have cultivated several crops in three seasons of year. In fact, natural, social and economic factors have determined the cropping pattern. Also, monsoon is one the significant controlled factor of agriculture in India. In long years ago, India was famous for spices trade in world. Sugarcane is vital crop of India, has widely distributed in India. India is native place sugarcane. Due to monsoon climate, maximum rainfall occurs in different parts of India. Therefore, high water is available in some parts of Indian continent. Sugarcane crop has need to highly water for growth and production. Hence, this crop has highly distributed in India. The sugarcane is needed water for growth, harvesting and production. The Solapur district has taken for study which is located in the western part of the Maharashtra. This area is received average annual rainfall about 561 mm. This paper is an attempt to analyze the correlation between Sugarcane landuse and Human population in Solapur District. Spearman's Rank order method is applied for analyzes the correlation of between scale of Sugarcane landuse and Human population. The correlation between scale of Sugarcane landuse and Human population in Solapur District is r = 0.35. It is moderate positive or direct correlation.

Key words: Cropping pattern, Landuse, Sugarcane, Cultivation, Correlation, Solapur.

Introduction

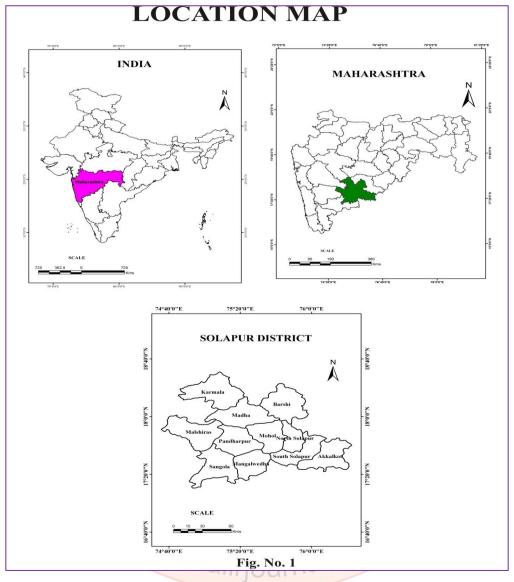
The agriculture is the chief occupation of India, where above 62 percent people in engaged directly and indirectly in agricultural activities. There, farmers have cultivated several crops in three seasons of year. In fact, natural, social and economic factors have determined the cropping pattern. Also, monsoon is one the significant controlled factor of agriculture in India. In long years ago, India was famous for spices trade in world. Sugarcane is vital crop of India, has widely distributed in India. India is native place sugarcane. Due to monsoon climate, maximum rainfall occurs in different parts of India. Therefore, high water is available in some parts of Indian continent. The Solapur district has taken for study which is located in the western part of the Maharashtra. Where Bhima and Sina are the main river and water source of district. Also, Bhatgar and Ujani Channel is another water source agriculture in district. Bhima river basin, Sina river basin, Bhatgar Channel, Ujani Channel etc. area of district is the area of sugarcane belts.

Study Area

The Solapur district selected for the study of correlation between Sugarcane landuse and Human population. The area under study encompasses the south-eastern part of Maharashtra at 4.84 percent area of state. Solapur district is located on 17°10' to 18°32'North latitude and 74°42' to 76°15'East longitude. The district is bounded on the north by Ahmednagar and Osmanabaddistritcs, on the east by Osmanabad and Gulbarga (Karnataka State) districts, on the south by Sangli and Bijapur (Karnataka State) and on the west by Satara and Pune districts. There are some small hill landforms like Chinchangav hill (height-300 feet), Waghobha hill (height-204 feet) and Bodaki hill (196 feet) ranges are some other hills in the district. Also in the north of Barshitaluka several spurs of Balaghat range pass south for a few kilometres. There are also a few scattered hills in Karmala, Madha and MalshirasTalukas. The district in general has flat or undulating terrain. The low table land and small separate hills in Karmala and MadhaTalukas act as a Watershed between Bhima and Sina rivers The district covers geographical area of 14844.6 sq.kms. which is 4.82% of the total area of Maharashtra State. Out of the total area of the district 338.8 sq.kms (2.28%) is Urban area whereas remaining 14505.8 sq.kms.(97.72%) is Rural area. These district contains eleven tehsils, involving Akkalkot, Barshi, Karmala, Madha, Malshiras, Mangalwedha, Mohol, North Solapur, Pandharpur, South

Solapur, Sangola. AreawiseKarmalataluka is biggest covering an area of 1609.7 sq.kms and North Solapur is smallest covering an area of 736.3 sq.kms.

The total population of Solapur district is 43, 17,756 persons according to 2011 Census. The total area is covered by Solapur district is 14,895.0 Sq. k.m, its elevation is 550 m (1,805 ft) from the sea level. This area receives 561.47 mm annual rainfall. The temperature of the district goes upto 46° C in summer and in winter it falls down to 9° C. The area under study is one of the drought-prone comprises regions of the state of Maharashtra.



Objectives

The major objectives of this research paper are as under:

- 1. To study the spatial pattern of Sugarcane Landuse in the study region.
- 2. To study the spatial pattern of Human Population in the study region.
- 3. To examine the correlation between Sugarcane Landuse and Human Population in the study region.

Database And Methodology

The paper is principally based on the secondary data sources. To complete the objectives data regarding Sugarcane land use and Human population of Solapur District is obtained from Socioeconomic abstract (2011-12), statistical abstract of Solapur District. The collected data are processed to analyze the pattern of Sugarcane land use and Human population in Solapur District. Arc GIS 10.5

software used for preparing the map and to show the spatial pattern of Sugarcane landuse and Human population in Solapur District. The tahsils of Solapur District are grouped into three categories i.e. high, moderate and low Sugarcane landuse on the basis of simple statistical method. To analyze spatial pattern of Human population area, the same technique is applied for calculation. The Spearman's Rank Order method is used for analyzes the correlation between Sugarcane land use and Human population.

Formula:-

Rank Order Spearman's Method

$$r = 1 - \sigma \Sigma d^2 / n^2 - N$$

Spatial Pattern of Sugarcane Landuse

About 66174 hectare land area comes under the sugarcanelanduse in 2011-12. But the tahsil level agricultural landuse `is varies from tahsils to tahsils ranges from 2820 hectare to 9995 hectare. All 11 tahsils are categorized into three groups as follows: (in table no. I and Fig. 2)

Table No. I
Sugarcane Landuse In Solapur District

Sr. No.	Name of Tahsils	Landuse(in Hectares)
1	Karmala	4701
2 / 2	Madha	4455
3	Barshi	7928
4	North Solapur	2820
5	Mohol	4921
6	Pandharpur	8271
7	Malshiras	9995
8	Sangole	3699
9	Mangalvedhe	6185
10	South Solapur	3642
11	Akkalkot	9557
,	Solapur District	66174

Source: Socio-Economic Abstract of Solapur District (2011-12)

High SugarcaneLanduse

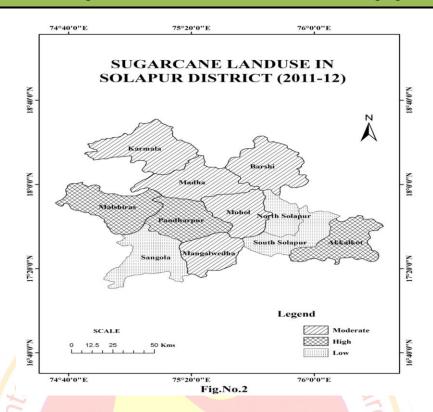
The tahsils which have the Sugarcanelanduse area above 8000 hectare are included into high category. High Sugarcanelanduse area was seen in the tahsils of Malshiras, Akkalkot and Pandharpur.

Moderate SugarcaneLanduse

The tahsils which have the Sugarcanelanduse area area ranges from 4000 hectares to 8000 hectares are included in the moderate category. Moderate Sugarcanelanduse area was shown in the Barshi, Mangalvedhe, Mohol, Karmala, Madhaetc.tahsils.

Low SugarcaneLanduse

The tahsils which have Sugarcanelanduse area below 4000 hectares are included in this group. Low Sugarcanelanduse area was observed in the tahsils of Sangole, South Solapur and North Solapur.



Spatial Pattern Of Human Population

About 29, 18,665number of human populationscome under the district human population in 2011. But the tahsil level,human population is varies from tahsils to tahsils ranges from 184108 human populationto 421244 human population. All 11 tahsils are categorized into three groups as follows: (in table no. II and Fig. 3)

Table No. II
Human Population In Solapur District

Sr. No.	Name of tahsil	No. of Household	Total Population
	1 63	Souther lands with the second second	7 7 7 7
1	Karmala	49017	231290
2	Madha	62153	301564
3	Barshi	55256	253989
4	North Solapur	234921450	105794
5	Mohol	56836	276920
6	Pandharpur	68583	343445
7	Malshiras	86320	421244
8	Sangole	57825	288524
9	Mangalvedhe	37354	184108
10	South Solapur	51230	260897
11	Akkalkot	47536	250890
S	Solapur District	593560	2918665

Source: Solapur District Census Handbook (2011)

High Human Population

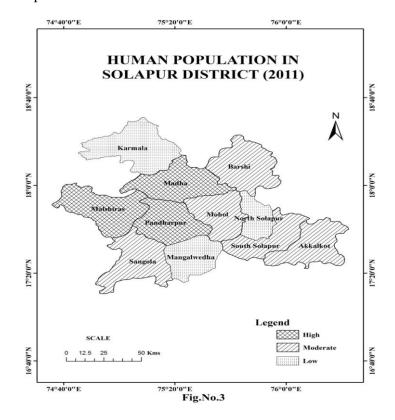
The tahsils which have the Human Population area above 300000number of Human Populations are included into high category. High Sugarcane landuse area was seen in the tahsils of Malshiras, Pandharpur and Madha.

Moderate Human Population

The tahsils which have the Human Population area area ranges from 300000 to 250000number of Human Population are included in the moderate category. Moderate Human Population area was shown in the Sangole, Mohol, South Solapur, Barshi, Akkalkotetc.tahsils.

Low Human Population

The tahsils which have Human Population area below 250000 number of Human Population are included in this group. Low Human Population area was observed in the tahsils of Karmala, Mangalvedheand North Solapur.



Correlation Between Sugarcane Landuse And Human Population

The Spearman's Rank Order method is used for the calculation of the correlation of Sugarcane landuse and Human population in Solapur District. The formula are-

$$r = 1-6(\Sigma d^2)/N(N^2-1)$$

Table No. III
Sugarcane Landuse And Human Population In Solapur District

Sugar can't Eunaust Time Hamair I optimion in Sompar District										
Sr.	Name of	Landuse	Rank	Total	Rank	\mathbf{d}^2				
No.	Tahsils	(in Hect.)		Population						
1	Karmala	4701	7	231290	9	4				
2	Madha	4455	8	301564	3	25				
3	Barshi	7928	4	253989	7	9				
4	North Solapur	2820	11	105794	11	0				
5	Mohol	4921	6	276920	5	1				
6	Pandharpur	8271	3	343445	2	1				
7	Malshiras	9995	1	421244	1	0				

8	Sangole	3699	9	288524	4	25
9	Mangalvedhe	6185	5	184108	10	25
10	South Solapur	3642	10	260897	6	16
11	Akkalkot	9557	2	250890	8	36

Source: Compiled by Researcher

$$r = 1-6(\Sigma d^2)/N(N^2-1)$$
 Here, $r =$ Correlation, $N =$ Number of Observation, $D =$ deviation
$$r = 1-6*142/11~(11^2-1)$$

$$\mathbf{r} = \mathbf{0.35}$$

It is observed that there is moderate positive or direct correlation i.e. p=0.35between the Sugarcane landuse and Human population in Solapur district. There are the some reasons-especially physiography and irrigation system for moderate positive or direct correlation in Solapur district.

Conclusion

There are wide disparities in the Sugarcane landuse and the Human population area of Solapur Disrict. The highest Sugarcane landuse was observed in Malshirastahsil and lowest in North Solapur tahsil. The highest the Human population area is seen in Malshirastahsil whereas lowest in North Solapur of Solapur district. But the correlation between the Sugarcane landuse and the Human population found moderate positive or direct correlation i.e. r = 0.35. It means Sugarcane landuse, high Human population. It was observed higher the Sugarcane landusehigher the Human populationi.e. Malshirastahsil. That tahsil has 9995hect. landuse of Sugarcane and about 421244 number of the Human population area.

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Cloud Computing in Libraries

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Abstract:

Cloud computing brings the revolutionary changes in the world of information and communication technology (ICT) because of its potential benefits such as reduced cost, accessible anywhere, anytime, as well as its elasticity and flexibility. This paper provides brief information on cloud computing, types of cloud computing, component of cloud computing, advantages and disadvantages of cloud computing, use of cloud computing in Library and Information Science, role of cloud computing in tibraries etc.

Keywords: Cloud Computing, Cloud Computing in Libraries

Introduction:

Cloud computing is cluster of distributed computing technologies which provide storage software, computational platform, computational infrastructures on demand over a broad network medium with recourse pooling, rapid elasticity or expansion and measured services. Cloud computing technology has grown very fast in the last ten years in IT sector and shown its high growth rate with the use of internet and centralized remote servers, this technology maintains data and application for providing services. Cloud computing is used by almost those all who have accessed and connected to a internet on a regular basis. Whether they are using Google's Gmail, organizing photo and flicker on searching the web with binges, they are engaged in cloud computing.

Definition: According to Wikipedia "Cloud computing is the delivery of computing as a service rather than a product, where by shared resources, software and information are provide to computers and other devices as a utility.



Source: http://www.justscience.in/wp-content/uploads/2018/01/where-are-the-hardware-and-software-borderline-incloud-computing-870x466.jpg

Characteristics of Cloud Computing: The following are characteristics of cloud computing-

- On demand self services
- Broad network access
- Resource pooling
- Rapid elasticity
- Measured services
- Multi tenancy

- Versatility
- Cost effectiveness
- Virtualization
- Security
- Sustainability
- User friendly
- Resource optimization
- Self healing
- Linearly scalable
- Services oriented
- SLA driven
- Flexible
- Agility
- Scalability

Types of Cloud Computing:

- **Private Cloud:** Private cloud is a infrastructure operated solely for a single organization, whether managed or by a third party and hosted internally or externally undertaking a private cloud project requires a significant level and degree of engagement to vitalize the business environment.
- Public Cloud: When the services are rendered over a network that is open for public use technically there may be little or no different between public and private cloud architecture. Generally public cloud services provide like Amazon, AWS, Microsoft and Google own and operate the infrastructure and refer access only via internet.
- Community Cloud: It shares infrastructure between several organization from a specific community with common and hosted internally or externally.
- **Hybrid Cloud:** Is a cloud environment of two or more cloud (private, public, community) that remain unique entitles boot are bound together. Hybrid cloud can also mean the ability to connect collection, managed and dedicated services with cloud resources. Windows Azure and VMware cloud are hybrid clouds.
- **Distributed Cloud:** Cloud computing can also be provided by a distributed set of machines that are running at different locations. While still connected to a single network or hub services.

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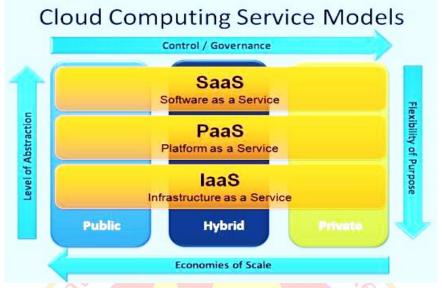
Component of Cloud Computing:

The components of cloud computing make up a wide range of services you can leverage over the web thorough a subscription arrangement there are 11 major categories or patterns of cloud computing technology.

- Storage-as-a-service
- Database-as-a-service
- Information-as-a-service
- Process-as-a-service
- Application-as-a-service
- Platform-as-a-service
- Integration-as-a-service
- Security-as-a-service
- Management-as-a-service
- Testing-as-a-service
- Infrastructure-as-a-service

Cloud Computing Service Model:

SPI is an acronym for the most Common Cloud Computing service models, Saas, Pass, Iass.



Source:https://www.researchgate.net/profile/T_Suryakanthi/publication/320563162/figure/fig1/AS:5526286 81953280@15087683<mark>5</mark>3630/Service-models-for-cloud-computing.png

- Software as a Service (SasS): is a software distribution model in which applications are hosted by a vender or service provider and made available to customers over a network, typically the internet software package such as CRM or CAD/CAM can be accessed under cloud computing scheme.
- Platform as a Service (PaaS): Cloud vendors are companies that offer cloud computing services and products. One of the services that they provide is called PaaS. It delivers what you might call a solution stack an integrated set of software that provide everything a developer need to built on applications.
- Information as a Service (IaaS): In the most basic cloud service model, provider of IaaS offer computers physical or more virtual machines and other resources.

Advantages of Cloud Computing: www aiirjournal.com

- Cost saving
- Flexibility and innovation
- User Centric
- Openness
- Transparency
- Interoperability
- Representation
- Availability anytime anywhere, 24×7×365
- Connect an Converse
- Create and Collaborate
- Easy on installation and maintenance
- Increase Storage
- Highly Automated
- Better Mobility
- More functionality
- Reduction of IT staff
- Sustainability
- Case of Implementation

- Backup and recovery
- Cloud is environmentally

Disadvantages of Cloud Computing

- Data security and privacy in the cloud
- Dependency and vendor-lock-in
- Technical difficulties and downtime
- Limited control and flexibility
- Increase Vulnerability
- Initially the cost could be higher
- Lack of support
- Service availability
- Knowledge and integration

Use of Cloud Computing in Library and Information Science:

Cloud computing offers many interesting possibilities for libraries that may help to reduce technology cost and increase capacity reliability, and performance for some type of automation activities. Cloud computing has made strong inroads into other commercial sectors and is now beginning to find more application in library science.

Role of Cloud Computing in Libraries:

Cloud computing is a completely newer technology and it is known as 3rd revolution after PC and Internet. Cloud computing is and enhancement of distributed computing, parallel computing, grid computing and distributed databases. Among these, grid and utility computing are known as predecessors of cloud more content into the cloud. Using cloud computing user would be browse a physical shelf of books, CDs or DVDs or chose to take out an item or scan a barcode into his mobile device. All historical and rare documents would be scanned into a comprehensive, easily searchable database and would be accessible to any researcher. Many libraries already have online catalogues and share bibliographic data with OCLC. More frequent online catalogues are linked to consortium that share library resources.

Conclusion:

Cloud computing infrastructures are next generation platforms that can provide tremendous value to libraries of any size. Cloud computing have various benefits such as the reduced price, ease of maintenance, sharing of resources, etc. it is just renting of services instead of buying them. Instead of having many advantages, several difficulties must be overcome for cloud computing to be used on a large scale while use in the libraries; the first one is the standardization of services offered by cloud vendor. Another obstacle is the limited support to relational database offered by current cloud solutions; the later difficulty to be overcome is the privacy of data located in a cloud. Once all of these difficulties will be surmounted, cloud computing will have the possibilities to be a massively used paradigm in libraries and information centers.

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Library Automation: A Review

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Abstract

This paper presents a review of library automation. Library and information centers are changing according to changing environment. Uses of ICT, computers, internet are becoming common in this era. This leads to automation of library services and functions. Library automation helps library staff as well as readers to save time and efforts. This paper presents various aspects related to library automation. This includes meaning of library automation, need for library automation, benefits of library automation, disadvantages of library automation, hardware required for library automation etc. It also gives role of librarian in library automation.

Keywords: Library automation, librarian, hardware, software etc.

1. Introduction

Libraries are essential component of higher education institutes. Libraries are playing important role in teaching, learning and research. Now libraries are using various technologies for catering library services to users. Computers and internet are playing very much important part in this regard. Applications of ICT in the libraries are very much essential now. ICT help library professionals to provide library services easily and at faster speed. It avoids duplication of repetitive work. It also saves time of library staff as well as readers. Use of ICT, computers to automate library services is common now days. Library automation has become important in this era. Various apex bodies like NAAC, AICTE, and UGC etc. are giving importance to library automation. Due to which libraries are automating their functions and services.

1.1 Definition of Library Automation

Automation involves use of any kind of machine for performing various operations. Library automation means use of ICT for performing various functions of library.

ALA Glossary of Library and Information Science defines automation as "the performance of an operation, a series of operation or a process by self-activating, self-controlling, or automatic means. Automation implies use of automatic data processing equipment such as a computer or other labor saving devices". The term automation was first introduced by D. S. Harder in 1936; the word library automation is being used in literature for the last five decades.

According to Encyclopedia of Library and Information Sciences (Kent, 1977) "Library Automation is the use of automatic and semi-automatic data processing machines to perform such traditional library activities as acquisitions, cataloguing and circulation. These activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval, automatic indexing and abstracting and automatic textual analysis".

2. Need and Purpose of Library Automation.

Following are the reasons for which library automation is needed.

- 1. To avoid duplication of work
- 2. To reduce efforts of staff
- 3. To save the time of library staff as well as users.
- 4. To improve efficiency of library work

- 5. To handle information explosion.
- 6. To satisfy user demands and needs.
- 7. To change according to technology.
- 8. To adopt new technology.
- 9. For sharing the resources.
- 10. To get the benefits of universal systems.
- 11. To get the division of work and avoid repetitive work.
- 12. To achieve accuracy
- 13. To get various reports, this can be generated automatically.
- 14. To increase productivity of staff.
- 15. To enhance quality of library work.

3. Requirements for Library Automation.

Following are the basic requirements for library automation.

3.1 Budget:

Library automation requires adequate budget according to basic requirements. While preparing budget one should think about hardware, software, human resources, training required for library automation.

3.2 Hardware:

It involves computers, local area network, switch, electricity, inverter backup, internet connectivity, barcode scanners, printer, RFID, CCTV etc.

3.3 Software:

It is important basic requirement of library automation. Library automation software can be divided into two categories i.e. open source and proprietary.

Open Source software: These are free softwares and are easily available on the internet. These softwares can be customized according to library. One of the popular examples of this type of software is KOHA.

Proprietary software: These softwares are to be purchased from vendors by paying certain amount. Vendors help in installation and training of software. Annual maintenance contract (AMC) is required for such softwares after certain period.

Following are the examples of various library softwares.

ABCD (Automation of LiBraries and Centers of Documentation), E-Granthalaya, Evergreen, KOHA, Libman, Libsoft, Libsys, NewGenLib, OPALS, SLIM++, SLIM21, SOUL, Virtua, Autolib (Local software), Vriddhi (Local software) etc.

3.4 Human resources:

Human resources i.e. staff is required for using library automation process.

3.5 Staff training and development:

Initial training is required for staff for using library software. When updated version is installed then further training is also required for staff.

4. Role of Librarian

Librarian plays main role in library automation. Initializing need of automation, required budget, keeping proposal in front of higher authorities, getting approval, selecting software & hardware, taking demos of software, actual implementation, using all features and finally using all the set with daily usage is the role of librarian. For automation librarian should have basic knowledge of computer, internet, hardware, software, network, printers etc.

5. Precautions to be taken

Certain precautions should be taken while automating library. These may include

- a) Deciding actual need of library automation.
- b) Estimating budget.
- c) Observing previously automated libraries.
- d) Choosing appropriate hardware, software.
- e) Keeping in mind needs of users.
- f) Keeping in mind required reports.
- g) Practical implementation. Etc.

6. Benefits of Library automation

- It reduces efforts of staff and avoids duplication of work.
- It save the time of library staff as well as users.
- It improves efficiency of library work and helps to change according to technology.
- It helps to achieve accuracy as well as helps to get various reports, required of various committees.

7. Disadvantages

- Requires sufficient budget.
- Requires adequate and skilled staff for various operations.
- Requires continuous supply of electricity.
 Smaller libraries may face these disadvantages.

8. Conclusion

This article reviews the library automation. It covered need of library automation, basic requirements for automation, precautions to be taken, advantages, disadvantages etc. Overall it will help library and information professionals for automating library.

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Altruism in the time of Greed

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Abstract

Altruism is the concern of other people's happiness; altruism may become a synonym of selflessness as opposed to selfishness. This means to treat a person with care. Altruism is not selfish but comes from an inner sense of love and care. The information to everyone unknowingly recognizes that it needs to connect to humanity in some way.

These are the few stalwarts who are the bonhomie's of altruism. The realisation of life is about sharing giving and loving. This concept is beyond economics, profit and loss. Many psychologists tried to find out the nature of this concept. In the time of darkness of greed, light is shining, this torch is lighted by altruistic people like you and me. In many areas, social formats, the world is a better place because of altruism. It is not designated for only rich or famous. We need to open our eyes look at the surroundings,

We have so many examples to quote in common man doing extraordinary things not seeking profits, rewards, recognition. We have to include in school education such real heroes to inculcate our children, future of this society with values of sharing caring for the society, for the betterment of our nation and world at large.

Keywords: Altruism, Greed, Charity, Resources.

Introduction

Altruism is the concern of other people's happiness; altruism may become a synonym of selflessness as opposed to selfishness.¹

For I was hungry and you gave me something to eat, I was thirsty and you gave me something to drink, I was a stranger and you invited me in, I needed clothes and you clothed me, I was sick and you looked after me, I was in prison and you came to visit me.'

The King will reply, 'Truly I tell you, whatever you did for one of the least of these brothers and sisters of mine, you did for me.' (Mathew 25: 38,40).⁸

According to this passage what you do for the destitute is what you do for God.

This means to treat a person with care. Altruism is not selfish but comes from an inner sense of love and care. The conscious in every human subconsciously realises that it needs to connect to humanity in one way or another

The greedy attitude we see in the world today. Manufacturers make unusual dumps in order to dispose of more material. A producer with an unsold asset avoids starting a price war in the domestic market in order to maintain his competitive position. Excessive property is destroyed. For example, Asian farmers are throwing small chickens into the sea. Another way is that excessive waste is discarded in the foreign market where the product can be sold. Therefore, uncommon disposal aims to that may arise from liquidating excess stocks time to time.²

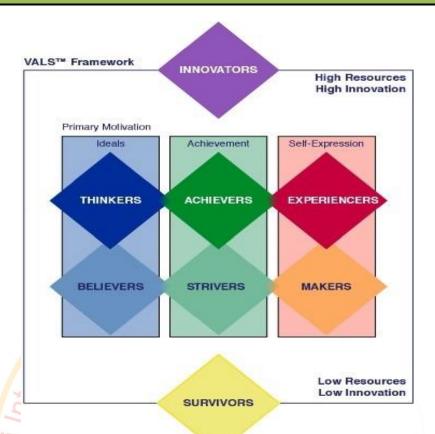
Businesses around the world are dumping locally and internationally or dumping their goods at sea or burning them to keep the price at bay without thinking about the millions starving or lacking resources.

Altruism in the time of Greed

We will be seeing a few people who have shown self-sacrifice during greed.

Two different situations about altruism I would like to highlight. One people with less resources, second people with abundant resources. Stanford University has come up with a concept of lifestyle classification based on resources. It categorises people into

Thinkers, achievers, experiences with high resources, and believers, striver's and makers as people with low resources, the common ideologies are ideal oriented, achievement oriented, self-experience oriented, apart from exceptions such as innovators and survivors. In this paper



Source- https://www.marketing91.com/vals-values-attitude-lifestyle/

we discuss altruism of both persons with less resources and large number of resources.

Little resource

Mother Teresa

Mother Teresa had started Missionary of charity to take care of the hungry, the homeless, the disabled, the blind, the lepers, all those people who felt unwanted, unloved, neglected in the whole community, people who have become a burden to society and shunned by everyone ³

Azhar Masqasi

Azhar Maqsusi, a social activist from Hyderabad, who reached out to poor people and provide them with free food. He organizes meals for about 400 people in the city every day.

Mr Maqsusi's childhood days were difficult. his father died when he was four years old. There were many days when his family used to sleep hungry, one day, he saw a woman crying for food, and he bought her food. That was the day he prayed to God to show him how to help people in need. Mr Maqsusi said he started distributing free food seven years ago from whatever money he had. Three years later, more people joined in and began helping him with food. ⁴

Auto Raja

Prison life is said to have changed the life of Raja who started driving an auto-rickshaw to earn a living. It was during his several trips on the streets of Bangaluru that he met people living on the streets. He brought one such person, a needy woman, home and sheltered her in an auto-rickshaw parking lot. Later, he rented a small house and began caring for the needy, at first with 13 inmates s. Later, with the money raised from the community, he bought a hectare of land in Doddagubbi Village near the town, where he built a 2000 sq. M building. Ft which served as the foundation of the New Ark Mission of India, a non-governmental organization ⁵

This proves that altruism is not because of abundant resources, but answering the conscious call. All the three came from different background. Mother was from a convent a secured life, still she had to beg for

her stay and supplies. Later on, the establishment became recognised. But there were days when she had to struggle for herself and others.

She was not satisfied by just helping some poor, as if her duty is done. She reached as many people let it be orphans, people left to die, lepers.

Azhar did not see whether his family had enough rather he shared with the woman's suffering and lend a helping hand, even sometimes sold the material of his business to feed poor. Now Saini foundation is a known name.

Abundant resource

Ratan Tata

Ratan Tata is a supporter of education, medicine and rural development, Ratan Tata a leading philanthropist. He has

- More than 65% of his shares were invested charitable trusts.
- provided a \$ 28 million Tata Scholarship Fund that will allow Cornell University to provide financial assistance to students graduating from India
 - Contributed \$ 50 million for the construction of a Harvard Business School.
 - donates ₹ 950 million to IIT, Bombay, the largest donation in its history and
- established the Tata Center for Technology and Design to develop design and engineering principles relevant to the needs of individuals and communities with limited resources.
- The team established the MIT Tata Center for Technology and Design at the Massachusetts Institute of Technology (MIT) with the aim of addressing the challenges of resource-intensive communities, with a first focus on India.
 - This year, he has promised ₹ 1,500 crore to fight the Covid-19 epidemic.

(Ratan Tata set a good example of generosity and leadership during the Mumbai attack on 26/11. Armed without weapons, he stood alone outside the Taj hotel and supervised the relief work. He demonstrated his humanity by personally visiting the families of all 80 workers killed or injured.) ⁶

Azim Premji

In 2001, he founded the Azim Premji Foundation, a non-profit organization. promised to donate US \$ 2 billion to improve school education in India. This was done by transferring 213 shares of Wipro Ltd, owned by a number of subsidiaries, to the Azim Premji Trust. This is the largest donation of its kind in India. Premji promised 34% of the Wipro stock he owned at the base. At current value of about US \$ 7.5 billion, this allocation will bring the total amount from him to this foundation to US \$ 21 billion.

In May 2020, the Azim Premji Foundation collaborated with the National Centre for Biological Sciences, and the Institute for Stem Cell Science and Regenerative Medicine to expand experimental infrastructure to deal with the coronavirus epidemic.

He became the first Indian to sign up for The Giving Pledge, a campaign led by Warren Buffett and Bill Gates, to encourage the wealthiest people to commit to donating more of their wealth to charitable purposes. He is the third non-American after Richard Branson and David Sainsbury to join the charity club.

In April 2013 he said he had already donated more than 25 percent of his personal wealth to charities. In July 2015, he donated 18% of his additional stake to Wipro, taking his total contribution to date to 39%.

These are the few stalwarts who are the bonhomie's of altruism. The realisation of life is about sharing giving and loving. This concept is beyond economics, profit and loss. Many psychologists tried to find out the nature of this concept. In the time of darkness of greed, light is shining, this torch is lighted by altruistic people like you and me. In many areas,; social formats, the world is a better place because of altruism. It is not designated for only rich or famous. We need to open our eyes look at the surroundings.

Conclusion

We have so many examples to quote in common man doing extraordinary things not seeking profits, rewards, recognition. We have to include in school education such real heroes to inculcate our children,

"future of this society" with values of sharing caring for the society, for the betterment of our nation and world at large.

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Challenges and Barriers in the Solapur Floriculture Industry in Maharashtra, India

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Abstract

Floriculture is a rapidly growing and highly competitive sector, with new cultivators and cultural techniques being introduced on a regular basis. As a result, new products and innovations emerge, posing new challenges in terms of production, marketing, and export. The biggest challenge and stumbling block for flowers from Maharashtra is their consistency.

The study found that the area of flower cultivation in Maharashtra's Solapur District remained constant throughout the study period, but that flower cultivation fluctuated.

Keywords: Challenges and barriers, Floriculture Industry, Solapur District.

Introdution

We are all conscious that flowers play an important role in our everyday lives as well as our national economy. It is limited by a lack of knowledge of its potential, a lack of high-quality planting material, a lack of infrastructure support, a lack of postharvest facilities, a lack of good markets, exploitation by middlemen, a lack of data, and a lack of information on income and employment generation from various flower cultivation and export barriers.

Farmers in the Solapur District have expressed a strong desire to grow a large variety of loose and cut flowers. It is also believed that the majority of flower growers fall into the category of small and marginal farmers, who face numerous challenges. In the state, no systematic study has been conducted to cover all of these aspects. As a result, an effort has been made to highlight these concerns, as well as include a database for identifying the severity of problems and prospects in the floricultural industry, as well as recommend suitable steps for addressing grower problems and improving the floricultural industry. India has managed to increase the production of flowers which are having a huge potential for export (Prakash and Muniyandi, 2014). Floriculture means the cultivation of flower and ornamental plants within the garden and arable land (Biswas, 2013) for commercial purposes (Mishra and Mishra, 2016).

Study Area

Solapur District is a district in Maharashtra state of India. The city of Solapur is the district headquarters. It is located on the south east edge of the state and lies entirely in the Bhima and Seena basins. The entire district is drained by the Bhima River.[According to the 2011 census, the total population of Solapur district is 43,15,527 and the geographical area is about 14,895 sq. km divided into 11 tahsils (Barakade and Sule, 2011). It ranks fourth in terms of area (4.88 percent) and seventh in terms of population among Maharashtra's 35 districts (4.51 percent). The district's average annual rainfall is 584.3 mm, due to the study area is rain shadow.

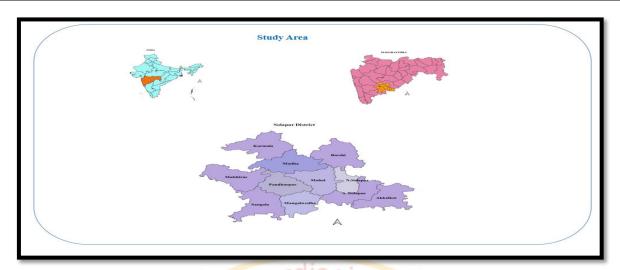


Figure 1: Location map of the study area.

Challenges

Growers face a variety of challenges, including

1. Challenges at the production level

Unauthorized land brokers are known for their speculative trading activities, and the real estate industry has become a magnet for them. They turn flower plantations into construction sites that can be sold for high prices. Due to the fact that the Solapur district is in a rain shadow, farmers are less interested in flower cultivation. Landowners who want to make a lot of money are willing to sell their farms and invest the proceeds in another profitable venture. The lack of skilled labour for plant safety, harvesting, and post-harvesting of floriculture produce has an effect on production.

2. Environmental Changes

Concerns about the environment are critical for farmers. Growers responded by using less water for irrigation, reducing pesticide and fertiliser usage, and reducing greenhouse rinse. The cultivation of flowers is inherently vulnerable to climate change. Temperature is a major determinant of plant development, and warmer temperatures that shorten the development stages of determinate crops will most likely reduce the yield of a given variety as a result of climate change.

Drought may pose a problem in areas with high temperatures and low rainfall, resulting in the loss of petals and colour in blooming flowers. These factors have a major impact on floriculture development in open fields. Diseases, rodents, nematodes, and crops coexist in the climate, which makes effective cultivation and post-harvest handling of crops difficult. Changing climate scenario increased incidence of soil borne pathogens, viral and phytoplasmal infection, nematodes, foliage and flower pests and remergence once of controlled pest and pathogens affecting the quantity as well as quality of production.

3. Storage and Packing Challenges

Drought may pose a problem in areas with high temperatures and low rainfall, resulting in the loss of petals and colour in blooming flowers. These factors have a major impact on floriculture development in open fields. Diseases, rodents, nematodes, and crops coexist in the climate, which makes effective cultivation and post-harvest handling of crops difficult. Flowers require cold storage facilities to maintain their freshness, quality, texture, and longevity. The majority of the farmers were packaging their produce in polythene bags or gunny bags for marketing, which they already owned, according to observations in the region.

4. Marketing and Transportation Challenges

The majority of the farmers were packaging their produce in polythene bags or gunny bags for marketing, which they already owned, according to observations in the region. Table 3 shows how people feel about storage and packing issues. Market constraints were expressed by the growers as a single or a

combination of constraints. More commission was the most popular restriction, followed by the issue of middlemen and the deduction of more charges. Some of the farmers in the sample said that the agents did not obtain their consent until selling the produce at a specific price.

5. Export Obstacles

Due to a shortage of space on flights, some tones of flowers were stranded in the airport. There were some cases of flowers being diverted to the domestic market due to inadequate Flights. All of this resulted in delays in shipments and a decline in flower quality.

6. Margin reduction

Although prices have remained steady in recent years, most production costs have risen steadily. To remain profitable, producers must improve their production and management skills.

7. Pest control

Concerns from the public and producers about pesticide use, as well as pesticide resistance and degradation, prompted farmers to seek out alternative pesticide control methods. In a green house, Integrated Pest Management (IPM) plays a bigger part in pest control. Most farmers already complement or replace conventional pesticides with biological or bio-rational methods.

8. Work opportunities

Labour is a significant component of output. Labour costs can account for up to a third of gross sales for bedding and cutting flower growers. As a result, in order to compete in international markets, mechanisation is needed in the floriculture sector.

9. Costs of capital

The cost of capital for field-grown flowers and the manufacturing of bedding facilities is significantly lower.

10. Seasonal fluctuations in demand

The flower's demand is highly perishable and seasonal. For special occasions or holidays such as St. Valentine's Day, Easter, Mother's Day, and Christmas, many people want to buy flowers. To meet the demands of these times, cultivators must time their yield.

Suggestions

Government and private sector intervention is urgently needed to introduce new and creative methods in the production and marketing of flowers, such as shade-net cultivation and green house technology, which have proven to be successful.

From India, only roses are exported. Indian flower growers can diversify their flower cultivation in terms of export and produce a variety of cut flowers based on market demand.

Integrated pest control, the creation of location-specific package of practises for flowers, value addition of flowers, and the production of high-quality flowers for both domestic and foreign markets, among other things, require further study.

Conclusion

Floriculture also offers a wide range of opportunities. It's turned into a lucrative business deal in Solapur district. It has a sizable foreign exchange capability. It has a huge capacity for job creation and can offer rural economies a boost.

At the production level, the industry is also facing a number of challenges, including the increasing scarcity of basic inputs and skilled labour for harvesting and post-harvesting techniques. Pirated seeds and planting materials are exacerbating the flower industry's problems. Inadequate cold chain management is not only threatening floriculture's existence, but it is also harming it. Product diversification, differentiation, vertical integration and innovation, efficiency, and environmental issues are all major marketing challenges for Indian flower exporters.

With supermarkets becoming more involved in the flower trade, logistical planning is becoming more important for flower exporters. It is indigenizing greenhouse technology for commercial production,

based on past experience. Diversification of products and value addition, such as oil extraction, pigment production, and dry flower production, should be encouraged.

The Indian government should create more agro export zones to promote floriculture exports. Floriculture growers and exporters who follow modern techniques with an eye to the future will undoubtedly conquer these challenges and obstacles in the Indian Floriculture Industry in the future.

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A Geographical Study of Health Care Infrastructure and Medical Facilities in Ahmednagar District, Maharashtra, India.

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Abstract:

Health is considered an important component of social welfare and human resource development. The availability of health alone cannot be considered a component of human development as health facilities need to be put to good use and their distribution needs to be in the right form so that people can use them easily. Proper distribution of health facilities and accessibility is a must a<mark>s well as allocation with sync to</mark> threshold population and rage of goods. In this research paper, it is important to study the extent to which health facilities have been developed between 2014 and 2019, as well as the distribution of these facilities.It has also studied the changes that have taken place in health facilities during this period. These studies have been done according to the talukas in the district.

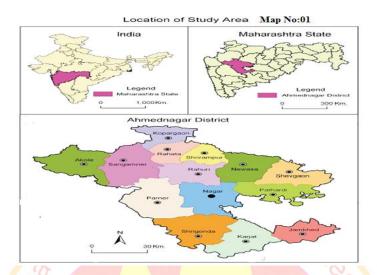
Key word: Health, Medical, Infrastructure, Ahmednagar, qualitative and quantitate methods.

Introduction:

Geographical, socio-political factors affect human health facilities as well as distribution. Also this distribution is greatly affected by the population distribution, population density, and growth rate and transport connectivity. The accessibility of health facility is one of the parameters of social well-being to improve the quality of life in the region, is considered as the best indicator for better Planning and development. In short, health facilities and distribution are considered to be the good components of human resource development. Beside the availability of the Healthcare facility are important measurement of social well-being their distributional pattern affected the overall development of the people [2]. Government Health Organization provide health facility to the masses but there unplanted location due to socio economic, cultural and political factor causes regional imbalance and inequality. Health facilities are considered to be one of the important socio-economic factors in regional development. For this, the health condition of the people in a region can be seen from the health facilities and health distribution. Availability of Health Care amenities and facilities may not be regarded as a good indicators of human resource development until and unless their proper distribution [22, 23]. As well as accessibility and allocation with reference to size of population of settlements and rage of good. Literacy, human density, population growth rate and human health are considered important factors for human resource development [4,5,6,7]. That population is the most important factor affecting human health facilities. Health care is an active process through which human health and personal well-being are enhanced. Good human health is considered important for economic development and growth. All these processes depend on three factors, firstly the environment, secondly human quality of life and health care facilities^[17]. Healthcare is considered to be an important factor for economic development. In short, healthcare is considered to be one of the factors affecting economic development^[8].Birth rate and mortality rate of health facilities are recurring ^[25]. Therefore, in this research paper, the objective of study is to distribute human health facilities. It is important to study how health facilities are distributed in the tehsil wise. This study has been done on the basis of statistical information from 2014 to 2019 and this study has been done by tehsil wise in the Ahmednagardistrict.

Study Area:

The present study Ahmednagar district has been selected as a study area. It extends between 18° 20′ and 19° 59' north latitudes and 73° 40' to 75° 43' east longitudes (Map.1) located in part in the upper Godavari basin. The district is very dense in shape and length of 200 km. a width of 210 km. This study region is divided into there are three physical divisions namely, first Sahyadri moutons ranges i.e. Kalsubai, Adula, Baleshwar and Harishchandragad, second Plateau third plains area. The Godavari, Bhima River is the main rivers in this district with the major tributaries are Paravara, Mula, Sina, Dhora, Kukdiect.



Aims and Objective:

The main objective of this study is evaluate the distributional pattern of health care facilities and Infrastructure in this study area. Also to study the changes in health facilities from 2014 to 2019.

Methodology:

The study is based on the secondary information, the health care facilities and Infrastructure data collected from ZilaArthikSamalochan from 2014 and 2019. Obtained data have been analyzed based on both qualitative and quantitate methods. The use of bar graphs to convert numerical information into qualitative information makes it easier for you to compare and also shows the difference between 2014 and 2019.

Result and Discussion:

The distribution of hospital, clinics, Maternity Home, Available Beds inshown Table no 01 is between 2014 to 2019 years wise. The distribution of health facilities is shown by tehsil wise.

A) Hospital:

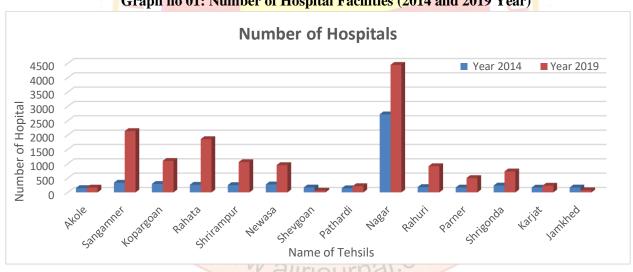
The number of hospitals in the entire Nagar district has increased from 390 in 2014 to 1074 in 2019 year. If you think about the whole tehsil wise, you can see that the number of hospitals has increased according to the tehsil wise. The observation of table no 01 and graph number 01, the number of hospitals in Nagar tehsil has increased the most in 2019, followed by Sangamner, Shrigonda, Kopargaon and Shrirampurtehsils. According to 2019year, the lowest number of hospitals in Shevaga(13)as well as rank wise number of hospitals in Pathardi (24)Akole (24) and Jamkhed (26). From this it is clear that there is a relationship between the total population and the total availability of the hospital. In tehsil where the population is high, the number of hospital is more. For example, Nagar Tehsil is in urban area so the population is high and the number of hospitals is also high. The graph number two shows the change in the number of hospitals from 2014 to 2019. In Nagar tehsil of Ahmednagar district, you can see the highest increase in the number of hospitals in Nagar tehsil, followed by increase in the number of hospitals in Kopargaon tehsil, followed by positive change in Shrigonde and Karjat tehsils. The lowest positive change is in Akole, Akole, Pathardi, Jamkhed tehsils. Out of the remaining tehsil, the number of hospitals in these tehsils has increased less. Where there has been little change, it may not mean that the population has changed, or that large numbers of people may be moving to urban areas for health.

Table no 01: Number of Health Facilities and Infrastructure

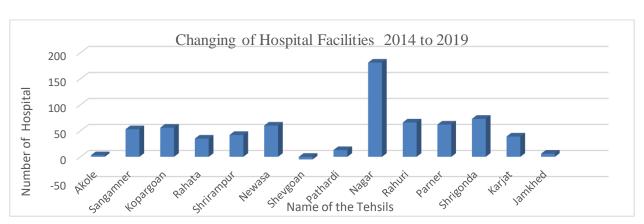
Sr.no	Name the Tehsil	Number of health facilities and Infrastructure							
		Hospital Clinics		Maternity Home		Available Beds			
		2014	2019	2014	2019	2014	2019	2014	2019
1	Akole	21	24	46	12	16	23	152	170
2	Sangamner	42	95	49	140	33	77	338	2140
3	Kopargoan	23	79	63	30	22	80	295	1099
4	Rahata	26	61	59	71	25	47	266	1859
5	Shrirampur	31	73	126	158	23	25	256	1056
6	Newasa	24	84	66	44	26	83	278	952
7	Shevgoan	18	13	67	04	16	13	173	61
8	Pathardi	11	24	49	54	11	24	146	218
9	Nagar	96	277	36	496	89	131	2723	4449
10	Rahuri	19	85	39	64	19	26	186	914
11	Parner	16	78	38	36	15	77	170	501
12	Shrigonda	24	97	36	46	25	84	241	733
13	Karjat	19	58	29	20	16	50	169	236
14	Jamkhed /	20	26	28	07	18	26	173	76
15	Total	390	1074	1063	1182	354	766	5566	14464

Source: ZilaArthikSamalochan, 2014 and 2019

Graph no 01: Number of Hospital Facilities (2014 and 2019 Year)

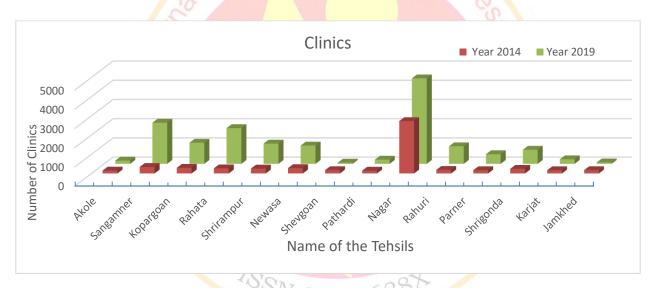


Graph no 02: Changing of Hospital Facilities (2014 -2019 Year)



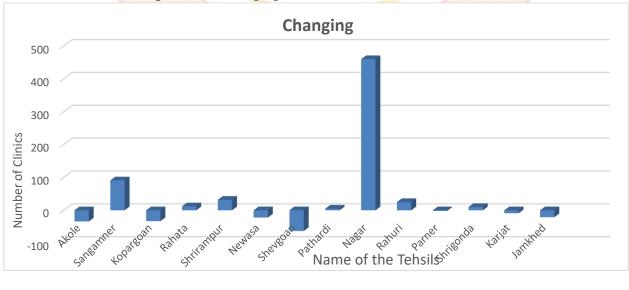
B) Clinics:

The government or co-operative clinics limitation to provide health facilities to the people, private clinics provide health facilities to a large number of people and play an important role in human resource development. In short, where there are difficulties in providing health services through government or semi-government hospitals, private hospitals contribute a lot or private hospitals provide services to the people. Table number one shows that Nagar tehsil has the largest number of clinics. The according to 2014 yearshows that there were fewer healthcare services or fewer clinics in 2014 year than in 2019 year. In 2014 year, they said that the number was 1063 clinics, it was 2019 year, and it was 1182 clinics, which means that it has increased by 119 clinics dailies in 2019 year as compared to 2014 year. Graph No. 4 shows the study of the change of clinic from 2014 to 2019 years. Clinics decaling in Akole, Kopargaon, Shevgaon, Parner, Karjat and Jamkhedtehsilsin 2019 than in 2014year. Nagar tehsil has witnessed the most positive changes followed by Sangamner, Shrirampu,rRahuri, Shrigonde tehsils. The number of clinics in these tehsils has increased by 2019. The most important reason is that in these tehsils the nature dispensaries should have different types of technology available so that people are attracted to these areas. You can see that the transport system as well as various geographical, socio-economic and political factors have affected the tehsils.



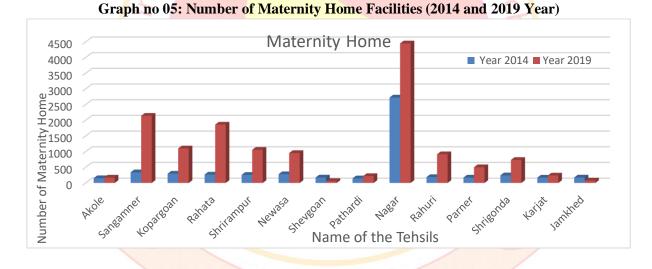
Graph no 03: Number of Clinics Facilities (2014 and 2019 Year)



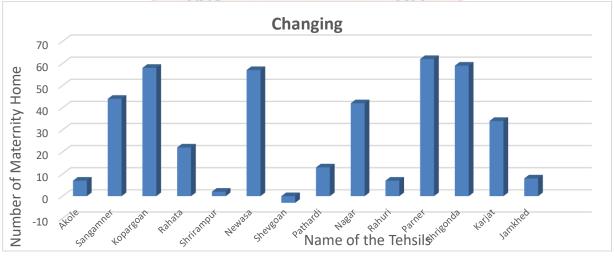


C) Maternity Home:

Table number 01 and customer number 05 show the number of maternity home in the Nagar district. This shows that in 2014 year, Nagar tehsil (89) in Ahmednagar district had the highest number of maternity home facilities, followed by Sangamner (33), Nevasa(26), Shrigonda (25) and Rahata (25). In the same year you see the lowest maternity home facilities in Pathardi (11) followed by Parner(15) and Akole (16)Shevgaon (16)Karjat(16) tehsils. But in 2019 year, you can see a huge increase in maternity home facilities in some tehsils. Considering the entire Ahmednagar district, in 2014 year there were 354 maternity home facilities and in 2019 year there were 766maternity home, so you can see an increase of 412 maternity home. The highest number of maternity home are in Nagar tehsil (131) in the year 2019 year, followed by in Shrigonde (84), Nevasa(83) and Kopargaon (80). In the same year, the lowest maternity home facility is in Shevgaon tehsil (13) followed by, Akole(23)Pathardi (24), Shrirampur (25) and Jamkhed (26). Graph number six shows the difference between maternity home between 2014 and 2019 years. You can see that the number of maternity home has increased in Parner tehsilin 2019 year. Then you can see that the number of maternity home has increased in Shrigonda, Kopargaon, Nevasa, Sanganmer, Nagarand Karjat tehsils. But in 2019 year, it will be more than 50 maternity home facilities on average increasing in Kopargaon, Nevasa, Parner and Shrigonda tehsils. Also, Sangammer, Nagar, Karjat tehsils has increased the number of maternity home on 30 more than the average during the same period. But in maternity home, Shevgaontehsil, you see less, in 2014 year, there are 16 facilities, and in 2019 year 13 maternity home, that is they appear to have three maternity home are decreased.



Graph no 06: Changing Facilities of Maternity Home (2014-2019 Year)

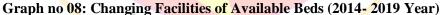


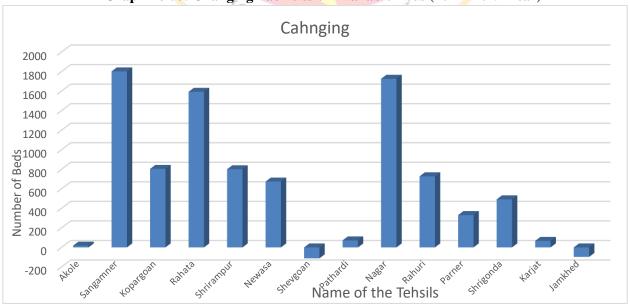
D) Available of Beds:

Table number 01 and graph number 07 show the number of beds available between 2014 and 2019 years. While there were 5566 beds in 2014 year, there are 14464 beds in 2019 year which means 8898 beds have been added in this entire districts. As per 2014 year, most time is available in the Nagar tehsil (2723), then you can see the number of beds available in all the Kopargaon (295) Shrigonda (241) and Sanganmer(338). In terms of population, you can see the lowest number of beds in Patharditehsil (146), followed by, Akole (152), Karjat (169)Parner (170)Shevgaon(173), Jamkhed(173) tehsils. As per 2019year, the highest number of beds is in Nagar tehsil (4449), followed by Rahata (1859)Sanganmer (2140), Shrirampur(1056)tehsil and Kopargaon (1099). Shevgaon tehsil (61) has the lowest availability of beds in terms of population, followed by Jamkhed (76) and Akole (170). Graph No. 08 shows the difference in the number of beds between 2014 and 2019 years. It is clear from this that you can see that the highest number of beds has increased in Sanganmer tehsil followed byRahata,Kopargaon,Shrirampur.The lowest increase of beds is in AkoleKarjat and Pathardi tehsils. But in Shevgaon, Jamkhed and Karjattalukas, the number of beds seems to be less in 2019 than in 2014 year.



Graph no 07: Number of Available Beds Facilities (2014 and 2019 Year)





Conclusion:

2014 and 2019 years, this two years have been selected to study health facilities in Ahmednagar district. According to the statistics of 2014 and 2019 years, the health facilities in Ahmednagar district were less in 2014 but increased in 2019. However, you can see that all these facilities have increased in some tehsils. Considering the population, there are very few health facilities in Shevgaon, Jamkhed, Karjat, Shrigonda and Akole tehsils. You can find most of the health facilities in Ahmednagar district because of district place. Health facilities should be enhanced in Akole, Shevgaon, Karjat, Jamkhed, Pathardiand Parner areas so that development can take place in these tehsils.

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Chemical Safety Education-A Need for Chemistry Students and Supporting Staff Working in Academic Chemical Laboratories

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Abstract:

Developing safety cultures among chemistry students and supporting staff working in academic chemical laboratories requires that students of UG/PG levels and supporting staff be educated by faculty in chemical safety. Yet chemical safety education is missing from the chemistry curriculum. This article considers a report of health problems associated among students and supporting staff working in chemical laboratories as evidence that chemical safety education is needed in the academic curriculum. It offers reasons why chemical safety education should become an integral part of the chemistry curriculum. It offers elements of a chemical safety education with references to materials that can be helpful in accomplishing this process. This article notes that it is important to reach students and supporting staff as early as possible. It concludes that a safety culture in an academic chemical laboratories can be accomplished when chemical safety education is included in the curriculum.

Keywords: Academic Chemical Laboratories, Curriculum, Safety Culture, Supporting Staff

Introduction

Safety culture of an academic institutions a topic of much discussion and some attention-is according to the ACS1 "a reflection of the actions, attitudes, and behaviours of its members concerning safety." Thus, the safety culture of an academic institution is reflected in the actions, attitudes, and behaviours of its faculty, supporting staff members, and its students-the largest body and the primary reason for academic institutions. Three major works have addressed safety culture in academic institutions. 1–3 One of those dealt predominantly with academic institutions that focused on teaching chemistry to undergraduates,1 and the other two focused more on research safety in graduate studies.2,3 The former emphasized safety education of undergraduates as a key component in developing strong safety cultures in academic institutions, while the latter focused more on institutional and group dynamics in developing strong safety cultures in graduate research studies with little emphasis on chemical safety education.

The Journal of Chemical Education was established to reach chemical teachers with ideas and approaches to chemical education. Thus, this article focuses on the role of teachers in creating and sustaining strong safety cultures by educating UG/PG students in chemical safety. Educating UG/PG students in chemical safety throughout the chemistry curriculum provides them with chemical safety knowledge that they will need in future teachers, and it simultaneously with continuous education of safety builds within each student and supporting staff a strong mindset for safety-a safety ethic that can carry forward into their education. This strong mindset for safety in turn builds strong safety cultures within the academic institution. The effect of this chemical safety educational effort can extend outside the institution as safety-minded graduates move to future vocations as secondary school and university teachers, as chemists working in public and private laboratories, and in research laboratories throughout the world.

What is the Ralation of These With Safety Culture?

If the chemical safety education had been taught in a continuous manner throughout the chemistry curriculum, the teachers (previous chemistry students) would have acquired two things: a solid basic education in chemical safety that would allow them to know how they can safely perform their work and demonstrations, and the continuous learning process would promote a strong caring for safety. This could have equipped them to think critically about safety in their particular situation. Chemical safety education also would better prepare graduate students to conduct research safer. When all of the members of an

academic institution—the teachers, staff, and students—begin to value safety and include it all aspects of chemical education, then a strong safety culture can begin to develop.

Laboratory assistants play important roles in many chemistry programs, but they are likely not as knowledgeable about chemical safety as teaching chemistry faculty and most often employ rote safety training (not chemical safety education). So, unless a chemistry faculty teacher purposely includes chemical safety in their specific core chemistry course, it is totally missing, and students are not being educated about chemical safety of hazardous chemicals. Thus, the current chemistry curriculum is incomplete since it is missing a major component of a chemical education. If chemistry faculty do not promote or discuss chemical safety in their core courses—it would seem quite difficult to say that this approach can inspirit any kind of culture of safety.

Developing a strong safety culture in any institution can improve safety for employees and others working in that institution. But it is essential for undergraduate and graduate students who are learning and developing basic knowledge and attitudes for their future careers—they need to be educated within a strong safety culture. These students are placing their trust in chemical educators that they will have the necessary education to work in the chemistry field; they assume that all important chemistry areas will be covered, including chemical safety.

Why Chemical Safety Be An Essential Part Of The Chemistry Curriculam?

- i) The education of undergraduates and postgraduates receiving Bachelor degrees and master degrees is incomplete and missing a critical component of a chemistry education-chemical safety.
- ii) Providing chemical safety education for undergraduates is the right and ethical thing to do-educating undergraduates in knowledge and application of chemistry without teaching them chemical safety puts them and others at risk.
- iii) Root causes of incidents within and outside of academic institutions often relate to a lack of chemical safety knowledge and/or a lack of caring for safety.
- iv) Chemicals are essential to our everyday lives. We chemists understand the importance of chemicals and their use, and we know that chemicals can be safely handled. Providing chemical safety education teaches students the application of chemical principles and chemical safety principles to current safety planning, problems, and issues. Discussing the benefits, risks, and how to minimize risks of hazards should be an integral part of this education. Chemical safety education is the best solution.

What Basic Information About Chemical Safety We Need To Teach?

The first element of safety is to learn and understand chemical safety principles that help guide us to safe practices and prevention of incidents.

Recognizing hazards (RAMP) is the most critical step because if you do not recognize and understand the hazard(s), you will not be able to do the assessing, minimizing, and preparing parts. Students should be able to recognize (and understand) hazards and the chemical properties of these hazards.

Assess the risks of hazards (RAMP) is the next important step.

Minimize the risks of hazards (RAMP) is the next step, and these techniques are essential in providing protection of one's self and others.

How To Create Chemical Safety Culture In Academic Institutions?

A primary obstacle to implementing a strong safety culture within an educational system is the lack of central management. Safety culture and chemical safety education are intertwined; to develop a strong safety culture we need to find ways to educate students in chemical safety.

Safety culture and chemical safety education are intertwined; to develop a strong safety culture we need to find ways to educate students in chemical safety. Incorporating chemical safety education into the curriculum is a challenging task because it requires changing the existing curriculum and convincing others to accept and implement the changes.

There are other actions that also contribute to making strong safety cultures in academic institutions, but without incorporation of chemical safety education, these other actions are not sufficient to promote a strong safety culture.

Conclusions

Obtaining a strong safety culture is a continuous and ongoing process and is not a goal. This article has focused on chemical safety education as a key tool in developing safety cultures by educating undergraduates, along with faculty, staff, and graduate students. Focusing on safety education will also result in better research safety within our institutions since those undergraduates typically become graduate students themselves.

To build a strong, positive safety culture in an academic institution, all members of the institution need to learn and care about safety, but especially students, from the time they start and throughout their educational process. This need requires that academic institutions rethink their current approach to safety and consider incorporating chemical safety education into their curriculum at the very beginning. Reaching chemistry students in their first and second years of chemistry is very important since many will not have chemistry beyond this point. Yet they need to have chemical safety knowledge, and need to have developed a mindset for safety, that they will carry on into their future careers. It is the ethical thing to teach and educate students in the principles and application of chemical safety because all of these students will come to use and come in contact with chemicals in their future.

Building strong safety cultures within academic institutions requires changing and expanding the current chemical education system to include chemical safety education. It will result in a society that better understands the benefits and risks of chemicals.

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A study of Tomato Production and Marketing Process with special reference to Nashik District.

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Abstract

Indian people prefer farming as their profession from ancient times. Agricultural business is not only in India but also as the world's oldest business. The main occupation of 2/3 people in the world is agriculture. 68 percent of India's population lives in villages and their main business is agriculture. The total national income of the country is 43% of agricultural income and agriculture is considered as the primary area of economy. As India's agriculture is a means of livelihood of the people, the economic development and progress of the country depends on the agriculture sector.

India's economy is an agrarian economy and vegetables are being grown on a large scale in India along with various crops. The only one from the vegetable group is "Tomato". Tomato is widely grown in India. China is the world's largest producer of tomatoes, India is second largest. Tomatoes from India export their tomatoes to Pakistan, Bangladesh, Nepal and other countries in Asia. Similarly, in other states, tomatoes in Nashik district send a lot of reply to the North India. Example: Punjab, Haryana, Rajasthan, Madhya Pradesh, Gujarat etc. States are sent. In addition to various states of India, tomato crop has an important role in the rural economy's rural economy. Especially in the Nashik district, during summer, winter and monsoon, the crop of tomatoes is highly popular. That's why the laborers get long work.

Introduction

The field of tomato production and marketing involves many farmers, agricultural laborers, employees, freight companies, barricades, wholesale and retail traders, brokers, agricultural service center directors and tomatoes process industries, and generate large scale employment and self-employment. This leads to the development of the society and contributes to economic development of the country. Tomato crop in Maharashtra is a cash crop, which is a means of livelihood for millions of people in rural areas. Farmers are looking for a peanut tomato crop, which earns more money in fewer days. Tomato fruit is inevitable in the country and in the daily diet of daily life, it is necessary to get the financial income by producing quality tomatoes considering that there is a greater potential for the export of tomatoes than tomatoes abroad. Housewives are required to cook kitchens. Prolonged exposure to prolonged exposure to tomato production increases prices. (Tomatoes lead to proliferation). On the contrary, there is a large increase in tomato production, and the prices of tomato decline and many times the farmers become debt-free.

By meeting the needs of tomato in your country, you export the sub-commodity made from tomatoes and tomatoes abroad. Therefore, tomatoes are the key components of foreign exchange.

It can be described as follows. Export of tomatoes from India in 2014-2015 to 277999.33 India has earned Rs. 44461.34 lakhs. by just export of tomato Juice, tomato Ketchup, tomato Seed and tomato Powder. Tomato is the highest quality among all the fruit and it is an important contributor to the economic development of the country. Therefore it is very important to study the production and marketing of tomatoes.

PROBLEM STATEMENT:

Tomatoes are perishable, its marketing must be done in a short period of time. It is also important to study the tomato marketing process because it is necessary to suggest proper remedies for the study of tomato production and marketing problems.

THE TERM USED -

Marketing ,Merchant ,Godown ,Agricultural laborer ,Agriculture Production ,Grading

REVIEW OF THE PAST MATERIAL -

- **1.Agarwal** (1981) studied the problems of marketing of agricultural goods. He said the following questions are: (1) The pressures, pressure to sell goods, goods. (2) Arbitrators or brokers. (3) Uncontrolled market mechanism (4) Non-availability of quality and non-availability of agricultural goods. (5) Lack of proper storage facilities. (6) Barriers to freight system. Etc. He removed the idea that the problem is in marketing process.
- **2. Bhopal** (1989): Studies the marketing of vegetables in Delhi market. In the major conclusions he outlined, some farmers who took their commodity directly to the customer, have received 86 percent of the money they paid for their customers. The customer also receives cheaper commodities in this way than any other way.
- 3) Patil (1997) studied the marketing of some of the selected vegetables in the Gultekdi market in Pune. In that he observed that the main question was found only in the wrapping material. There was also problem of non-availability of freight services, increasing transportation costs. Other questions which the farmers and vendors were facing in such cases include the burden of brokerage, lack of storage facilities in the production sector, and the absence of strict bidding method in public auction.

Research Objectives- The objectives of the research presented are as follows.—

- 1. Study the history of tomato.
- 2. A Study the Taluka, District and Statewise area, production and productivity of tomatoes.

History of Tomatoes:

Tomato is a vegetable whose road through history was not easy and filled with numerous misconceptions and roadblocks. Finally in the last few centuries this South American plant managed to spread all across the world, becoming one of the best know food ingredients and one of the most beloved vegetables (even though technically its classified as a fruit). Selective breeding managed to refine tomato into very nutritious state, filled with vitamin A, C, E, antioxidants, and more.

The exact origin of Tomato plant is not known, although it is speculated that it evolved from the prehistoric plant Nighshade over millions of years ago in South America(together with potato, tobacco and chili peppers) and slowly moved to north until it was domesticated in the lands of Mesoamerica between Mexico and northern Costa Rica. This land was a home of several advanced Pre-Columbian society who flourished there until arrival of Europeans in the Age of Discovery. During500 BC, one of those cultures managed to domesticate tomato and integrate it into their cuisine. That culture was Aztecs. From that point on, tomato slowly spread across the central and South America, somewhere being used as a food, but somewhere also being used as a hallucinogenic(a use that will later on be a cause of many misconceptions about this vegetable).

The first European contact with tomato came with Christopher Columbus who possibly encountered it in 1493, but it was Spanish conquistador Hernán Cortés who first saw the potential of this plant in the sacked city of Aztec city of Tenochtítlan and took its seeds back to urope. There, seeing that tomato could grow without a problem in a warm Mediterranean climate, Spanish government started encouraging its production in both Europe and its distant colonies. As early as 1540s tomato started being produced in Spanish fields, and was used regularly as a common food in early 17th century. Other European countries did not adopt tomato immediately. For example, even though Italian nobility and scientists found out about tomato from 1548, (which is now famous for their tomato and ketchup industry), they used it only as a tabletop decoration fruit until late 17th and early 18th century. They cherished their beauty, and experimented with selective breeding, managing to create tomatoes of many colors and shapes. Tomato received similar fate in England, where it was introduced in 1597, but it remained viewed as unhealthy, poisonous and unfit to eat in both England and its North American colonies. That changed in mid-18th century after many advances in selective breeding from Spain and Italy.

In early19th century tomato finally arrived in Asia. It arrived there under the guidance of British consul in Syria John Barker who directed first cultivation efforts. By mid-19th century ,tomato gained much popularity and started being used widely in Syria ,Iran and China.

Modern age of commercially grown tomato started with the efforts of Alexander W. Livingston, American botanist and scientist who dedicated much of his life on upgrading tomato with selective breeding into the most commonly known form we know today. His1870s breed called Paragon became instant success in the North America, kick-starring the large tomato industry and approval from public.

In 2009, worldwide tomato production rose to 158. 3 million tons, surpassing the previous year by 3.7%. The largest producers were China with 24 % of world production, followed by United States, Turkey, India, Egypt and Italy.

According to data of Food and Agricultural Organization of United Nations, 2016, India accounts for 2.46 percent of the world's total tomato production and China is 6.82 percent. China is the world's largest producer of tomatoes, the world's largest tomatoes—

TABLE No. 1

	Table no. 1: State wise	details of to <mark>mato area, p</mark>	<mark>roduction</mark> and product	ivity (2015-16)	
No.	State	tomato area	tomato production	productivity of tomato	
	1 5	(000 hectares)	(000mt)	(mt / hectare)	
1.	MADHYA PRADESH	73.70 (9.53)	2285.90 (12.21)	31.02	
2.	Andhra Pradesh	59.08 (7.64)	2236.56 (11.94)	37.86	
3.	KARNATAKA	60.98 (7.88)	2046.14 (10.93)	33.56	
4.	TELANGANA	57.97 (7.50)	1475.00 (7.88)	2 <mark>5</mark> .45	
5.	Gujarat	44.60 (5.77)	1319.11 (7.05)	28.43	
6.	ORISSA	90.91 (11.75)	1290.99 (6.90)	14.21	
7.	WEST BENGAL	57.17 (7.39)	1204.43 (6.43)	21.07	
8.	Bihar	45.81 (5.92)	1001.01 (5.35)	21.86	
9.	MAHARASHTRA	44.24 (5.72)	976.58 (5.22)	22.08	
10.	CHHATTISGARH	54.91 (7.10)	908.98 (4.86)	16.56	
11.	UTTAR PRADESH	20.75 (2.69)	819.37 (4.38)	39.49	
12.	HARYANA	29.03 (3.76)	675.38 (3.61)	23.27	
13.	TAMIL NADU	29.80 (3.86)	645.70 (3.45)	21.67	
14.	HIMACHAL PRADESH	11.04 (1.43)	485.54 (2.60)	43.99	
15.	ASSAM	17.66 (2.29)	445.02 (2.38)	25.20	
16.	OTHERS	74.45 (9.77)	916.28 (4.81)	12.31	
	TOTAL	773.88 (100)	18731.97 (100)	24.20	
	THE FIGURES IN T	THE BRACKETS REPRESENT	T THE AMOUNT IN PERC	ENTAGE.	

(REF.- MINISTRY OF AGRICULTURE REPORT; GOVT. OF INDIA 2015-16)

ACCORDING TO THE ABOVE TABLE, IT SEEMS THAT MADHYA PRADESH IS NUMBER ONE IN THE STATE AFTER CONSUMING 12.20% OF INDIA'S TOTAL TOMATOES PRODUCTION IN TOMATO PRODUCTION. FOLLOWED BY ANDHRA PRADESH (11.94 PERCENT), KARNATAKA (10.93 PERCENT), TELANGANA (7.88 PERCENT), GUJARAT (7.47 PERCENT), ORISSA (6.90 PERCENT), WEST BENGAL (6.43 PERCENT), BIHAR (5.35 PERCENT), MAHARASHTRA (5.22 PERCENT). THAT MEANS THE STATE OF MADHYA PRADESH IS FIRST IN THE TOMATO AREA AND MAHARASHTRA IS TENTH. IN

MAHARASHTRA, NASHIK, PUNE, AHMEDNAGAR, SANGLI, SATARA, NAGPUR ETC. ARE LEADING IN THE FIELD OF TOMATO PRODUCTS.

TABLE NO. 2: District wise tomato production and productivity area under Nashik Divisional Agricultural of Maharashtra

	District w	ise Tomato area, production and pro	ductivity (2014-2015)		
No.	DISTRICT/SECTOR	DISTRICT SECTOR PRODUCTION	Production	PRODUCTIVITY	
		(HECTARE)	(mt)	(MT/HA)	
1.	Nashik	14650 (94.68)	575053 (95.94)	39.25	
2.	Dhule	485 (3.14)	16975 (2.84)	35.00	
3.	Nandurbar	79 (0.52)	1698 (0.29)	21.49	
4.	Jalgaon	260 (1.66)	5720 (0.93)	22.00	
	TOTAL	15474 (100)	599446 (100)	38.73	

(REFER: DIVISIONAL AGRICULTURAL COMMISSIONER OFFICE, NASHIK DIVISION, NASHIK 2014-2015)

ACCORDING TO THE ABOVE TABLE DATA, OUT OF TOTAL TOMATO CULTIVATION IN THE FOUR DISTRICTS UNDER NASHIK DIVISIONAL AGRICULTURAL AREA OF MAHARASHTRA, 94.68 PERCENT OF TOMATO CULTIVATION AREA AND 95.94 PERCENT OF TOMATO PRODUCTION HAVE BEEN PRODUCED FROM NASHIK DISTRICT ALONE, THE HIGHEST NUMBER OF THESE FOUR DISTRICTS IS NASHIK DISTRICT. IF FOUND, DHULE HO TOMATO PRODUCTION (2.84 PERCENT), JALGAON (0.93 PERCENT), NANDURBAR (0.29 PERCENT) WERE FOUND IN THE WRITING.

In Maharashtra, especially Nashik district is leading in the production of tomato and is at the top. In 2015-16, 11654.92 hectare area was planted under tomato and 390794.11 in Nashik district. Tons of tomatoes are produced from Nashik district alone and further in taluka wise are shown in table no. 3

TABLE NO. 3: Taluka wise tomato area in Nashik district, production and productivity (2015-16)

No. Taluka		AREA (HECTOR)	Productivity	Productivity
		2349-6	(MT)	(M.T./ HECTOR)
1.	Peth	3133.83	106550.10	34
2.	Chandwad	3035.50	103207.09	34
3.	Sinnar	967.75	32903.46	34
4.	Chatana	891.19	28518.05	32
5.	Igatpuri	775.62	26371.15	34
6.	Nifad	605.63	19380.13	32
7.	Yeola	477.75	16243.56	34
8.	Nandgaon	377.35	12075.14	32
9.	Trimbakeshwar	309.47	10521.82	34
10.	Dindori	267.67	8565.58	32
11.	Nashik	218.34	7423.72	34
12.	Malegaon	212.38	6796.07	32
13.	Advancing	130.63	4180.27	32
14.	Surgana	127.27	4072.78	32
15.	Devla	124.54	3985.19	32
	TOTAL	11654.92	390794.11	34

(REFER: DISTRICT SUPERINTENDENT, OFFICE OF AGRICULTURAL OFFICE, NASHIK, DISTRICT - NASHIK, 2015-16)

According to the above table data, it is found that tomato area and production is highest in Peth taluka. Other than Chandwad, Sinnar, Satana, Igatpuri, Niphad, Yeola, Nandgaon, Trimbakeshwar, Dindori etc. Lowest area and production was found in Devla taluka.

India ranks second in world tomato production and Maharashtra ranks 9th in India. Out of total TOMATO PRODUCTS, INDIA HAS FOUND 02.09 PERCENT OF TOMATO PRODUCTION FROM NASHIK ALONE.

Findings:

- 1. Studied and find out the information about history of tomatoes.
- 2. Studied about Taluka, District and Statewise area, production and productivity of tomato

Conclusion

According to the data obtained by the secondary sources, the researchers studied the production of tomatoes in four districts of Nashik, Dhule, Nandurbar and Jalgaon in the field of Nashik Regional Agricultural Commission. It was found that 95.94 percent of total tomato production in the Nashik division was found in Nashik district only. This conclusion is in table no. 5.9 appears to be from above.

According to the 2015-16 data obtained by the secondary sources, after studying the tomato productivity of Nashik district, it was found that productivity of seven taluks of Chandwad, Sinnar, Yeola, Igatpuri, Nashik, Peth and Trimbakk (34 mt / ha) was the highest in comparison to other talukas The remaining eight talukas are productivity (32 MT / ha) and average in Nashik district Ometo productivity (3294 looks to be in. MT / ha). This table no. 5.12 Nosar

According to information obtained by secondary sources, researchers studied the history of tomatoes, found that the origin of tomatoes was that of South Africa, Peru and Mexico, and in the middle of the 15th century it was cultivated in American countries. In India, this crop is spread by the Portuguese. In India, tomato trees were found in the forest in Madhya Pradesh and in time it changed and the large-sized sediments were cultivated and tomato was planted as a crop.

Like Africa, America and Europe, tomato is widely grown in India. Sadar Conclusion Case No. It appears to have been received from 5th.

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Advantage & Disadvantage of Rainwater Harvesting

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Abstract:

Rainwater harvesting is the process of Rainwater harvesting collecting rainwater and putting it to good use. There are different ways in which this task can be accomplished. Rainwater harvesting refers to the trapping and storing of rainwater so that it can be used at a later time when the need arises. As the rain falls, water is directed to a suitable collection point. It can also mean collecting rainwater before it infiltrates into the ground and becomes underground water. Harvesting mainly entails gathering something from its natural source. Rainwater harvesting, from the common definition of harvesting, is a process that involves collecting rainwater and increasing its value by eliminating impurities or directing <mark>it to places where</mark> its use is highly required. <mark>It's a</mark> practice that has been around for a long time.

Rainwater harvesting is beneficial because it provides a source of water for domestic use. Industries can also for use in some of their processes. Many areas experience water shortages during summer due to lack of rain and as a result of the high rate of evaporation.. This saves you money by cutting down your monthly expenditure on water bills. Harvesting rainwater plays a key role in mitigate. Collected rainwater can be used for building and construction, Helps In Preventing Water Pollution, Irrigation etc. Disadvantages of Harvesting Rainwater Treating rainwater to make it fit for huma<mark>n</mark> consump<mark>tion will see you incurring additional expenses. Huge Efforts and Resources Required.</mark> Limited Storage, Dependent on Rainfall, Risk of Contamination Cleaning and Maintenance Acidic Rain etc.

Key words

- 1. Mitigates: Reduces the Impacts of Floods
- 2. Trenches: When it rains, the water is directed to the farm using trenches. It is one of the traditional methods of rainwater harvesting<mark>.</mark>

Introduction:

Living creatures of the universe are made of five basic elements, viz., Earth, Water, Fire, Air and Sky, Obviously, water is one of the most important elements and no creature can survive without it. Despite having a great regard for water, we seem to have failed to address this sector seriously. Human being could not save and conserve water and it sources, probably because of its availability in abundance. But this irresponsible attitude resulted in deterioration of water bodies with respect to quantity and quality both. Now, situation has arrived when even a single drop of water matters. However "better late than never", we have not realized the seriousness of this issue and initiated efforts to overcome those problems.

Rainwater harvesting as the name suggests is the harvesting of rainwater in the sense it is a process involving collection and the storage of rain water using the help of artificially designed systems that runs off natural or man-made catchment areas like the roof top, compounds, rock surface, hill slopes, artificially repaired impervious or semi-pervious land surface. Quite obviously a number of factors play a vital role in the amount of water harvested, some of these factors are the frequency and the quantity of rainfall, catchments characteristics, water demands and the quantum of runoff and above all else the speed and ease with which the rainwater percolates through the subsoil to recharge the ground water.

Need for rainwater harvesting:

It makes use of natural resources and reduces flooding, storm water runoff, erosion and contamination of surface water with pesticides, sediment, metals and fertilizers. Reduces the need for imported water. Happens to be an excellent source of water for landscape irrigation with no chemicals such as fluoride and chlorine and no dissolved salts and minerals from the soil. Home systems can be relatively

simple to install and operate; it could very well reduce your water bill. Promotes both water and energy conservation. Does not require a filtration system for landscape irrigation.



Methods of Rainwater Harvesting

There are many ways in which rainwater can be harvested. Some of these methods are very effective and can aid in the collection of a lot of water even for commercial activities while others are only suitable for harvesting water meant for domestic use. Every system has its merits and demerits. These are the common methods of rainwater harvesting:

- 1. Surface Water Collection Systems: Surface water is simply water that accumulates on the ground's surface. When rainwater falls on the surface of the earth, it usually flows down slopes as it moves towards a point of depression where the moving water can collect. Surface water collection systems enable the collection of ground surface rainwater before it flows to other locations. Examples of such systems include rivers, ponds, and wells.
- **2. Rooftop system:** These can also be used to harvest rainwater. They can be used to direct rainwater that falls on the roof of a building into containers or tanks. These tanks are usually elevated so that when the tap is opened, water flows at a high pressure. This method of rainwater harvesting is good because the accumulated water is mostly clean and usually requires no further treatment to make it fit for human use.
- 3. Dams: These are barriers that are designed to trap water. Rainwater can accumulate directly in them or drainage systems can be created to direct water into them. Water collected in dams is mostly used for irrigation purposes or treated and then distributed for domestic use. They can also be used to harvest a lot of water because of the way in which they are modeled. Unlike ponds, measures are put in place to reduce the amount of water draining into the ground.
- **4.** Underground Tanks: These are also ideal for collecting rainwater. They are constructed by digging into the ground and creating a space which is then cemented to reduce water infiltration. The top is also sealed and water is obtained through pipes directed into the tank. To get water out, pumps are used. Underground tanks are wonderful for harvesting rainwater because the rate of evaporation is reduced since they are located underground where sunlight does not really penetrate.
- **5. Rain saucer:** Sometimes one can decide to collect rainwater directly as it falls from the sky by using a rain-saucer. These look like upside down umbrellas or big funnels. Some are usually attached to a pipe so that the collected water is directed elsewhere. Some people also do a little improvisation by placing the collecting container underground with only the rain-saucer above the ground. It is a simple method yet effective.
- **6. Water Collection Reservoirs:** Water collected through this method is not really clean and may be contaminated. However, it can still be used for crop irrigation. such rainwater is harvested from roads and pavements.

- **7. Barrage:** A barrage is a dam that has several openings which can be closed or opened to control the quantity of water that passes through it. It is usually large and can be used to collect a lot of water.
- **8. Slopes:** Rainwater tends to collect at the bottom of slopes when it flows on the ground. When it rains heavily, water levels can rise to the hill top. This is a simple and natural way to harvest rainwater.

Advantages of Rainwater Harvesting

- 1. Water for Domestic Use: Rainwater harvesting is beneficial because it provides a source of water for domestic use. The collected water can be used for house cleaning purposes, washing laundry and for cooking. When treated, rainwater is good for drinking. It is an easy way of obtaining water for use in the home.
- **2.** Water for Industrial Use: Industries can also harvest rainwater for use in some of their processes. Rainwater meant for industrial use is normally harvested in large scale. Such companies can construct their own dams or have underground tanks to store rainwater.
- 3. Supplementary Water Source: Many areas experience water shortages during summer due to lack of rain and as a result of the high rate of evaporation. It can be difficult to get a reliable source of water during these periods. Those who sell water may also increase their prices because of the high demand and short supply. Harvesting rainwater is therefore seen as a way of preparing for the sunny days when water is scarce.
- 4. Cost Effective: We basically harvest rainwater for free because it is naturally occurring. If you store enough water during the rainy season, you may never have to pay for water services again because you'll have enough supply to last you through the summer. This saves you money by cutting down your monthly expenditure on water bills.
- 5. Reliable Flow of Harvested Water: Even though harvesting of rainwater depends on rainfall, once stored, the supply of the available quantity is guaranteed. You can have an uninterrupted flow of water from the place of storage as long as the amount harvested has not been exhausted. The same cannot be said when you depend on an outside source to supply your water. There is also the benefit of location-suitability because the source of water is in your place of stay.
- **6. Mitigates/Reduces the Impacts of Floods:** Harvesting rainwater plays a key role in mitigating or reducing the impacts of floods. When rainwater is directed to farms through trenches or collected in dams, its movement is controlled. This prevents the accumulation of water in one area, something that often causes flooding. Rivers can also overflow and cause flooding in the adjacent areas. The negative impacts of floods are too many and costly. Harvesting rainwater is, therefore, an effective way of reducing the impacts of this natural disaster.
- **7. Building and Construction:** Collected rainwater can be used for building and construction. The process of building a house requires a lot of water. Harvesting rainwater would thus avail water for this activity.
- **8. Helps in Preventing Water Pollution:** Rainwater flowing on the ground surface can carry with it a lot of impurities and toxic substances. When it drains into water bodies, it pollutes them because of these impurities. Harvesting rainwater, therefore, prevents pollution of water bodies.
- **9. Irrigation:** Rainwater is good for farming because once harvested, it can be used for irrigation especially during the summer. One can, therefore, have a thriving farm and realize a bumper harvest.

Disadvantages of Harvesting Rainwater

- 1. Additional Expenditure: Treating rainwater to make it fit for human consumption will see you incurring additional expenses. This would not happen when you use water supplied to you by the local council because it's already treated.
- **2. Huge Efforts and Resources Required:** Constructing a dam or an underground tank is no mean fete. Before you begin harvesting rainwater, you'll have spent a considerable amount of resources. There are other cheap means but then you'll not collect a reasonable amount of water.

- **3. Dependent on Rainfall:** You can't harvest rainwater when it does not rain. This process is therefore solely dependent on the availability of rain which can sometimes be very unreliable. What then happens when the dry spell is prolonged and you don't have an alternative source of water?
- **4. Limited Storage:** Even if it rains for three months straight, you cannot harvest all that water even if you wanted to. This is because there is limited storage to keep the rainwater.
- **5. Risk of Contamination:** If not preserved with care, rainwater can be contaminated. This can cause several health problems especially when the water is used without first being treated. Waterborne diseases are so many and treating them is very costly.
- **6.** Cleaning and Maintenance: The storage facilities have to be occasionally cleaned and maintained. Cleaning an underground water tank is not easy and maintaining a dam is very expensive. This makes the thought of harvesting rainwater unattractive.
- **7. Dual Cost:** You'll incur expenses twice because of paying your normal water bills and installing and maintaining the rainwater harvesting system. This will set you back financially in a way.
- **8. Roof Tops That Contain Chemicals:** Some rooftops contain chemicals and impurities that mix with the rainwater. When consumed, this water can affect human health by causing illnesses and other health conditions.
- **9. Acidic Rain:** Due to pollution, sometimes the rain that falls is acidic. Harvesting this type of rainwater is dangerous because of the chemicals contained. Using acidic rain for irrigation can also cause the death of crops because it erodes the quality of soil and creates conditions that are not conducive for plant germination. When the soil has a high pH, plants do not grow properly.
- 10. Lack of Water for Wildlife: Wild animals get their drinking water from natural sources such as seasonal streams and rivers. They also use them for cooling in the hot weather. Harvesting rainwater reduces the amount of water that flows into these streams and rivers.

Conclusion

Rainfall is a very important weather phenomenon. It is a source of water and is very critical for the growth of crops and farming. Harvesting rainwater is a practice that has been going on for a while. Many people actually engage in it without even realizing that they are doing so. Because of weather changes, water sources can dry up and in the process impact animal, human, and plant life negatively. Rainwater harvesting is a smart way of preparing for such times because even when the conventional water sources dry up, we can still use the stored water for many purposes. The best part is that this type of water is naturally occurring. Some of the setbacks can be avoided by taking precautionary measures. When we employ innovation and technology, we can come up with better ways of rainwater harvesting and increase the storage capacity.

Living creatures of the universe are made of five basic elements, viz., Earth, Water, Fire, Air and Sky, Obviously, water is one of the most important elements and no creature can survive without it. Despite having a great regard for water, we seem to have failed to address this sector seriously. Human being could not save and conserve water and it sources, probably because of its availability in abundance. But this irresponsible attitude resulted in deterioration of water bodies with respect to quantity and quality both.

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The Recent Trend in Economics and Financial Education

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Abstract

This article is devoted to the trends in the economic education development and the knowledge management in the informatization conditions. In this research the authors show the analysis of global trends in the world and education that are important for improving the professional training of graduates at the Universities of Economics. They emphasized the current socio-economic requirements to the higher economic education system, the features of the graduate formation as a product of the education process, the prospective directions of the economic education modernization on the basis of information technologies.

Keywords: economic education, technologization, knowledge management, informatization, industrialization.

Introduction:-

The intellectual potential of workers becomes the main resource for improving the national competitiveness in the modern conditions of the new industrialization. There is the continuing development of the Russian information society and new world markets of knowledge and technologies in the conditions of increasing globalization and the simultaneous aggravation of the competition between countries and regions. All these exacerbate the struggle for the advanced technologies development. There is no doubt that economic science and economic education are the fundamental conditions for the future socio-economic achievements of the country. And the trends in the science development are reflected in the education system and determine the possibilities of the society economic development. However, at present there are a number of contradictory trends that concern the technologization and informatization of the economic education. They affect the ability to the efficient work in the conditions of the new industrialization. This article is devoted to the identification and analysis of these trends.

Objectives:

- To Study Recent Trends In Economics Education.
- To Study Some Economics Thoughts.

Research Methodology:

This paper is based on the new recent trends in economics and financial education. with the help of secondary data collection. The secondary data is gathered from various published, Internet (websites) and other research papers.

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Some Thoughts Of Economics Education:

Analytical techniques in economics have gone through profound transformation in the last half century. The distinction between good economic schools and bad ones at national and global level is mainly based on how well these institutions have been able to incorporate those trends in teaching learning practices and research in economics. Institutions more open to ideas and new thinking are in the front line as indicated in league tables and research assessment exercises. Teaching of economics lags behind in institutions where the dissemination of mainstream knowledge is clouded by attention to old and defunct concepts. Most often these institutions are in need of su¢cient insight or understanding of new development and emerging trends. An economics programme cannot be successful unless it provides strong background in core knowledge of economics to its graduates. It is hard to raise standard of education without originality of thinking, research

oriented teaching practices, more open mind to take challenges on new techniques and a clear focus on the core knowledge of economics.

The major objective of this paper is to illustrate these problems and suggest solutions that can be helpful in solving them. It is about bringing a new revolution in teaching and learning practices in economics. Every economist should possess analytical perspective for a comprehensive understanding of the resource allocation mechanism in modern economies and know how consumers and producer maximize their objectives constrained by resources and the way they interact with the public sector as well as the global economy. They should be aware of the ideas that have descended from the classical economists including Smith (1776), Ricardo (1817), Say (1817), Malthus (1790), Mill (1844), Marshall (1922), Pigou (1918), Hicks (1936) and Keynes (1936) on one hand and be familiar to contributions of economists of recent generations including the Nobel Laureates in economics. They must have some idea on contributions of professional journals. The Royal Economic Society is Economic Journal has been there for more than 118 years.

Reviews of Research:

Steven L. Miller and Phillip VanFossen (2008) in the Handbook of Research in Social Studies Education. This chapter is designed in part as a starting point for graduate students and other researchers to gain an overview of research that has been completed and what remains to be done.

Miller and VanFossen address issues related to economic education. However, the authors acknowledge that personal finance has taken on new importance. In their conclusion, they state that, "in spite of the historic distinction between personal finance (or consumer) education and economic education, it appears possible (even likely) that financial literacy will become an increasingly important part of economic literacy and thus, economic education" (2008, p. 300).

Miller and Van Fossen draw several important generalizations regarding the current state of economic education, three of which are most relevant to our research. First, it seems clear that the development of the Voluntary National Content Standards in Economics published by the National Council on Economic Education in 1997 has played an important role in influencing what economics is taught at the pre-college level. The standards were produced largely by mainstream economists and economic educators and represent something of a consensus regarding what content is most important at the pre-college level. While the debate continues, of course, as a practical matter, the Standards document remains dominant.

Second, teachers remain poorly prepared to teach basic economics. This presents a problem because studies reveal that students learn more economics from teachers who have more formal preparation in economics. Most economics is taught by social studies teachers who have little formal background in economics. These are teachers with comprehensive social studies certifications. One study found that 80% of social studies teachers had four or less economics courses, while another found that 70% had two or less. Either result is not very encouraging.

Schug and Nieder john 2008). These findings intensify the debate between those who favor an integrated approach versus those who favor a specialized approach to including economics in the curriculum. We do not find it surprising that improved knowledge of economics is hard to detect in courses like U.S. history where teachers claim they integrate economics into the host subject (history). In order to work, teachers of integrated courses would need to include explicit economics lessons designed for the host subject. When this happens, integration has a much better chance of being effective. One study, for example, found that when this is the case— when explicit economics lessons are taught in U.S. history—statistically significant knowledge gains can be achieved o, we think there is some reason to believe that, under the right circumstance, integration can be an effective compliment to the capstone high school economics course.

Michael Watts (2006) is noteworthy, even though it overlaps to some extent the work by Miller and VanFossen. Watts' review was prepared for the National Council on Economic Education under a contract with the U.S. Department of Education and is unique in several ways. For example, it draws upon research studies published since 1990 in six different fields: economic education, studies on long-term behavior

effects of economic education, studies from social studies education, studies from business and vocational education, education studies in domain-specific features of learning, and education studies on expert versus novice differences in cognitive understanding. Watts also presents findings from studies that involve precollege, college, and adult education.

Recent Trends In Economic Education:

Economics And Citizenship Education:

The nature of citizenship education remains a constant topic of debate in the social studies literature. Given the economic changes accompanying the collapse of the Soviet Union, as well as the perennial issue of the relationship of economic understanding and disposition to the education of citizens in a democracy, it is not surprising that this topic is receiving a lot of attention (Branson 1991). Interest in economics as a core component of citizenship education has resurged.

Economic Education In Russia And Eastern Europe:

Interrelated with the education of citizens is the issue of the role of economic education in Russia and the newly independent states. Democracy and capitalism require a degree of participatory decision making that was neither practiced in society nor taught in the schools of former communist countries in Central and Eastern Europe. The last five years have witnessed a number of economic education programs involving exchanges between Central and Eastern Europeans and American economics educators which have promoted teaching and learning about market-based economic systems and democratic governance.

The Global Economy:

Economic education throughout much of the 1960s and 1970s concentrated on the application of economic concepts to understanding and analyzing the economy of the United States. Beginning in the 1970s with the oil embargo, the growth of the Japanese economy, and more recently the global ecological issues and political events in Central and Eastern Europe, economic education increasingly has become concerned with international issues. Recent articles and teaching materials have focused on the Chinese, Japanese, Korean, and Latin American economies, as well as the Central and East European economic situation. International trade on a global scale is highlighted in recent publications of the National Council on Economic Education.

Content Standards:

Economic education has followed the national trend of creating content standards. Economic educators at the national and state levels have developed content standards delineating the knowledge and application skills which students should possess at various grade levels. "The Voluntary National Content Standards in Economics," developed and published by the National Council on Economic Education (NCEE), are written in the form of propositions. They include the key concepts that have traditionally served as the framework for economic education materials developed by the National Council on Economic Education. See "A Framework for Teaching Basic Economic Concepts," which provides an explanation of key economic concepts and recommendations for sequencing them within the curriculum.

Each content standard is accompanied by a rationale explaining its significance, as well as the performances of students required to demonstrate achievement of this knowledge at the 4th, 8th, and 12th grade levels. The twenty content standards embody the essential principles of economics and the essential reasoning and decision-making skills that indicate what students should be able to do with their knowledge of economics.

Use Of Computer Technology In Economic Education:

The efficiency of technology holds out the prospect of improved economic education as students gain access to almost unlimited sources of data. Teachers unsure of their economic knowledge are able to almost instantly find answers to questions. Most important, when time is scarce, teachers will have access to lesson plans without having to leaf through a number of separate sources of information, been modified through the Internet access that many teachers and students now enjoy. Students have instant access to data that was unimaginable Teachers, for five years ago. example, type in

http://www.3.mgmt.purdue.edu/icee/ on their World Wide Web browser and gain access to the "Indiana Council for Economic Education" (ICEE) homepage and from there link to more information about the World Wide Web.

The Internet is not the sole source of economic education materials. "Virtual Economics," a CD-ROM program, places the Library of Materials developed by the National Council on Economic Education at the disposal of the classroom teacher. The initial program was distributed to more than 50,000 teachers and administrators in a series of workshops during 1996. Similar to the original version, the new 2.0 program will operate on Microsoft Windows 3.1, Windows 95, Windows NT, or Macintosh II, provided the computer has a 13" color monitor, a sound card and speakers, and a minimum of eight megabytes of RAM.

The updated "Virtual Economics" program will retain the two-fold structure of the original version: a 3-D Interactive Center for Economics and a Resource Library. New features in the updated version include advanced placement economics resources, the national and state content standards in economics, and materials related to The Stock Market Game. "Virtual Economics" will enable teachers to instantly access lesson plans by grade level and content. Furthermore, teachers will be able to print out a majority of these materials for classroom use. The programs provide teachers with multiple explanations for concepts they may not understand, or find difficult to teach.

Conclusion:

Knowledge of economics is an essential component of citizenship education. There are no panaceas to solve the problems contributing to ignorance of the subject: secondary teachers who all too frequently possess the minimum state requirements in economics; elementary teachers who commonly complete no undergraduate courses in economics; and a curriculum centered on history, political science, and geography. The recent trends in economic education, however, give reason for optimism. Not only are educators stressing the importance of economics for personal and business decisions, they also appear to be engaging in serious dialog regarding the relationship among economic systems, democratic governments, and civic education. This bodes well for the future of economics in the core of democratic citizenship education.

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Challenges and Opportunities for Teaching Physics in Under Graduate Level under Covid-19 Pandemic

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Abstract:

Presently the tendency to graduate in the traditional subject or pure science is worst everywhere. Some lacunas in lower classes education lead week content of subject in students which leads again decline the students struggle in graduation examinations. Recent technology and e-content development by various govt. agencies lead motivate the students towards distance education or MOOC courses. Online Education allows continuing education in all worst conditions like the Covid-19 pandemic. All challenges convert the opportunities by teacher and students in teaching-Learning Process. In the present study, we analyze the conceptual study and difficulty in teaching-learning Physics at the graduate level.

Keywords: Teaching-learning -Process, Covid-19 Pandemic, Physics, Pure Science, MOOC Courses, Swayam, etc.

Introduction:

It is observed why students have very little interest in Physics due to some issues or problems. There are various problems in science education and the education system. In our Education system quality of teaching-learning is very poor. Classroom teaching is not interactive up to remark. Insufficient teachers and infrastructure for students lead to a decline in the strength of admission in the science stream. It is observed the student's strength is several times more than facilities. This led to half-hearted science education. Generally, the system does not allow teachers to introduce some innovative practices. It big issue that Beaurocratic Political power involves making influence rather than educationist or technical hold is measure hurdle/ problem. There is observed Teachers do not have mastery over the content and very little accountability of teachers, and little attention on the talent of teachers. Selection of teacher in the teaching process by profession for easy money not out of interest, or for honestly serving the nation. The irregularity of teachers is also due to other government duties in government schools. Less emphasis on the development of concept learning. Less emphasis on cooperative learning. It is observed that the Global context is lacking from our education system. Lack of proper guidance and counselling programs restrict many students to optional subjects.

By presumption by the parents, students and environment of junior college lead the student's minds to prejudice that Physics is difficult Subject and fewer students admitted for under graduation courses taking option as Physics Subject. We make the survey; it shows that due to Family and friend's pressure students decision-making capacity decline.

In Physics concepts are quite difficult and solving the problem is also another aspect that reduces the strength of students in class.

Teaching methods and Implement of new resources for teaching Physics Challenges in Online Teaching-Learning methods

The COVID-19 pandemic has affected the pattern of the Indian education system which was responding with a shift to distance learning from Traditional education. In distance, teaching depends on the development of technological and human resources with careful thinking, planning and, there was a lack of time for preparation in the current COVID-19 pandemic situation. Various physics courses teaching-learning and evaluation depend on such as lectures, tutorials, and the laboratories which to be transferred into online formats rapidly, resulting in a variety of simultaneous, asynchronous, and mixed activities which really difficult task in all aspects like lack of technology resources, pieces of training for teachers and students.¹

The COVID-19 pandemic the whole education community was suddenly forced into an unplanned and unwanted remote teaching. In the process, they had support from their organizations/ Education Systems, administrators (schools and universities) in providing e-learning platforms/ Teaching platforms and other digital learning management systems (LMS) and communication tools. There should be a check on the availability of digital communication resources with students too. The main burden was on the instructors to adjust their teaching methods and materials to an online format according to the suitability of students. It is observed somewhat the teaching approach is still efficient when we shifted from the physical classroom and transferred to technological devices¹

Opportunities in Online Teaching-Learning methods Blended Learning Method

The remote online teaching-learning efforts that all teachers and students are now engaged in do not resemble what we think of as traditional online education. The Online teaching methods require the sufficient time and good Infrastructure. It is difficult to rapid shift to remote learning will reduce the reputation of online education. The future benefits of the virtual classroom will come after our teachers and students return to their physical classrooms. Asynchronous (Canvas, Blackboard) and synchronous (Zoom) platforms have significant benefits when these methods are layered into face-to-face instruction is only the necessity of teaching and learning method .2

Online Education

There was wide variation, syllabus, teaching-learning, and evaluation methods in the degree to which online education was central to an institution's strategic planning. This will all change after COVID-19, which will understand that online education is not only a potential source for new revenues but also recognized as core to every school's plan for institutional resilience and academic continuity. Decentralized and distributed online course development and student support will be centralized. Learning Management Systems will be integrated into according to the syllabus and easily accessible to students leads to accessibility features with shift another learning methods.

New resources for Teaching-Learning Physics

SWAYAM acronym as "Study Webs of Active-Learning for Young Aspiring Minds" is an Indian Massive open online course (MOOC) platform. SWAYAM, launched on 9th July 2017 by Honourable President of India, is an initiative launched by the then Ministry of Human Resource Development (MHRD) (change now as Ministry of Education), GOI under Digital India to give a coordinated stage and free entry to web online courses, covering all advanced education, High School, Graduate, research and skill sector courses. SWAYAM developed under the guidance and Cooperatively with MHRD (Ministry of Human Resource Development) and AICTE (All India Council for Technical Education) with the help of Microsoft and is equipped for facilitating 2,000 courses. The Online platform offers free access to everyone and hosts courses from Higher secondary to post-graduation. The program runs centrally funded institutes like IITs, IIMs, IISERs, etc. to teach students with easily convenient time with online way according to the need of present scenario.

Prof. H.C. Verma MOOC Courses:

Padma Shri Prof. Harish Chandra Verma was a Professor in the Department of Physics at the Indian Institute of Technology, Kanpur. Prof. Verma developed more than 600 physics experiments as DEMO in Physics classrooms. He conducts workshops for Physics school teachers as DEMO-based physics teaching in which helpful for students to connect science with life. Prof. Verma trained more than 8000 teachers. Every year in the summers, Prof. Verma conducts a 6-day workshop of about 50 utsahi (Motivated or interested) physics teachers of which about 35 are new additions. This activity is financially supported by the National Academy of Sciences, India. (https://bsc.hcverma.in/) is one of the best online platforms for learning Physics for graduation in Vernacular Language, bilingual Hindi as well as English. It has some features like BSc level Online courses by Dr. H C Verma and others in his team primarily in Hindi. It is easy to access the MOOC course or Lectures can be viewed on phones, tabs or laptops, or

desktops. The Lectures are always available even after the completion of the course. The MOOC course Certificates will be provided by CDTE, IIT Kanpur for successful students. It is free of Cost means Zero fees for the courses according to the top schedule addition to that Selected students will be offered face-to-face camps for interaction and performing Experiments

Conclusion:

In any Education system, lacunas are present but overcome is an important aspect. In the present scenario, Online educations are the only way to continue remote teaching-learning. Especially teaching Science and traditional teaching method is quite merge due to lack of infrastructure but still, from last two years, we adapt and conduct the Education system effectively. Though all foreign universities shut down the educational institute, In India, we continue it for the last two years with saucerful up to great expectations.

Still, students and teachers do not show face-to-face teaching attachment but still, it's going to improve and run the successful without more denied psychology.

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Analysis of Challenges and Issues of Women Participation in Social Welfare of Rural India

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Abstract

Throughout ages women have played a major role in the upliftment of the society both in the rural and urban areas of India. Just as the ever existent gap between the rich and the poor, the urban and the rural areas cannot be ignored, in a similar fashion the persistent gap between men and women, with regards to employment and educational opportunities, distribution of work, share of responsibilities, freedom of movement is something that cannot be ignored. The prevailing patriarchal mentality tends to keep women dominated and out of the purview of development. In spite of equal efforts and contribution towards the society and the economy, women are not only denied equal recognition but also denied control over the resources they help to produce. Even though this scenario is ubiquitous throughout the country, rural areas in India still being backwards as compared to urban areas, rural women are more disadvantaged in this respect as compared to urban women. This paper tries to analyze the challenges and issues faced by women in participation in the social welfare of rural India. The need for empowerment of women in rural areas has been focused and some suggestions have been made that can improve the lives of rural women in India.

Keywords: Women, empowerment, workforce participation, gender inequality, rural India, social welfare

Introduction

Inequality anywhere in the world in any form is a threat to the stability that policymakers aim to achieve in an economy. Rise in inequality and concentration of wealth in the hands of few not only increases the disparity but also negatively impacts the vulnerable sections of the society. Women are often the ones who bear the unequal burden of such inequalities. They are the ones responsible for allocation of scarce resources in the household. So, in poor families it is the women who suffer the most. Daughters of the household are expected to offer a helping hand to their mothers, thereby forcing them to opt out of education. Rural women and girls across the world spend a considerable span of time in collection of water and firewood. 2.1 billion people in the world lack access to safe drinking water, so women in such households are expected to travel long distances to procure heavy loads of water. They fall in the category of the most disadvantaged people on the earth and suffer from a wide range of discriminations at every stage of life.

(International Fund for Agricultural Development, 2012) states that if women are given equal access to resources they can increase the yield of their agricultural land by 20 to 30 percent, increasing the total agricultural output in developing countries by 4 percent and help reducing hungry people by 12 to 17 percent, globally. Women also have considerably lower rights to land making them vulnerable and dependent. Their lands, if any are comparatively of lesser quality and of smaller size as compared to men (Sexsmith et al., 2017). Only 13 percent of agricultural landowners are women(United Nations, 2019). Since, in developing countries agriculture sector is an indispensable source of reduction in poverty, food security and overall economic growth and development, there should be an increased focus on the role played by women in this regard and ensuring reduced gender inequality which left unattended can lead to catastrophic downfall both socially and economically (Giroud & Salguero Huaman, 2019).

(United Nations, 2019) focuses and recognizes the critical role played by rural women who constitute 43 percent of the agricultural workforce in the developing countries, in the enhancement of agriculture, development of rural society, eradication of rural poverty, improving food security besides ensuring the sustainability in the household and communities of the rural areas. Severe restrictions and constraints prevent them from reaching their full potential. Gender inequality reinforces itself into the lives of women and girls and makes them more exposed to suffering and exploitation.

Situation Of Rural Women In India

In the Global Gender Gap Report of 2020 published by the World Economic Forum, India has ranked poorly at 112 out of 152 countries. Except in political empowerment, India has performed badly in all other three indicators that includes educational attainment, economic participation and opportunity and in health. The condition of female workers in India is in a deplorable state. Unequal treatment at workplace combined with wage gap has discouraged women from participating in the workforce. In the active age group of 15 years and above, three out of four women are either not working or are not looking for work. The female labor force participation rates in rural and urban areas help us to understand the deplorable condition of rural females. While in the year 2004-05 FLFPR (Female Labor Force Participation Rate) for urban women stood at a mere 24.4%, for rural women it was almost double at 49.4%. However, the scenario did reverse in the coming years, with the FLFPR for urban women slightly dropping from 20.5% in 2011-12 to 20.4% in 2017-18 but declining from 35.8% in 2011-12 to 24.6% in 2017-18 for rural women. Lack of educational and employment opportunities along with non-availability of non-farm jobs in the rural sector have served as major drawbacks in this regard (Basu, 2020).

Agriculture and allied activities is the primary source of income in the rural areas of India, which sadly still remains male dominated. Even though three-fourth of all women workers are in agriculture, their extensive contribution and involvement in preparation of land, decisions regarding seed selection and sowing, weeding, harvesting, livestock related work, fish processing, animal husbandry is left largely unrecognized and they are treated mainly as additional workers or family workers but not as productive workers. Their work is not considered as formal instead is treated as home-based, informal and unpaid. Migration of men to urban areas in search of better paying jobs have lead to increased feminization of agriculture in the rural areas, but this is not matched by increase in control of resources (Saxena, 2012).

Issues And Challenges Faced By Women In Rural Areas

Across all social strata, rural women have to face several challenges and constraints for participation in social welfare. Few of the issues and challenges faced by rural women that hinder their participation in the social welfare have been listed below:

- Time constraint due to unequal burden of domestic duties including household activities and care giving
 activities of the elderly and children. As compared to men, women spend twice more time on household work
 and five times more on child care activities. Thus, it sets boundaries on women's participation in the labor
 market.
- Social and religious norms that expect women to behave in a certain specified manner and hence they are not allowed to follow their dreams and behave against the set notions.
- Restrictions on movement of women outside their homes or outside their villages which in turn prevent women from exploring opportunities available elsewhere.
- Prevalence of domestic violence that breaks the confidence of women and restricts them to the four walls of the household.
- Inequality in education of girls that in later stage of life gets transformed into lack of opportunity in the job market.
- Low decision-making power as compared to men.
- Low bargaining powers both at home and in workplace.
- Increase in family income is negatively associated with participation of women in welfare of the society.
- Increase in educational enrollment has been stated in several reports as responsible for keeping women outside the workforce.
- Lower access to and control over land, which is a primary source of income especially in rural areas.
- Women mostly find work in the vulnerable sector and in unpaid work which gives them minimum stability and little chance of improvement. They lack social security and are at a higher risk of being exploited.
- Women are highly underrepresented in value added tasks and activities thereby keeping them outside the chain
 of development.
- Women face a higher risk of climate change and other natural calamities.

Conclusion

Higher gender equality is positively associated with higher Gross Domestic Product (GDP) of a country. Increase in the participation of women in the workforce is associated with an increase in the household income, which in turn increases the household savings along with the consumption. Thus, a positive cycle is generated which increases the output, productivity and the overall welfare of the economy. Ensuring provision of clean drinking water, crèche facilities near workplace, improved transport facilities, increased focus on safety of women by the Government are few of the factors that can encourage women to participate in the workforce. Women play a pivotal role in the family and hence empowerment of women will translate into improvement of the health, education and upbringing of her children benefitting the entire family which in the long run will benefit the community and the society. Inclusive growth and gender equality can help us bridge the gap between men and women in all spheres of life, help people come out of poverty, protect the natural environment and improve the standard of living.

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Prevalence of Obesity in India: A Social Problem

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Introduction:

The COVID-19 crisis has made the gaps in India's healthcare system painfully visible. The spread of obesity could increase the burden on our already stressed health infrastructure. Until now obesity is present mainly in urban areas, where there is easy access to fast food and physical activity is lower than in rural areas, the numbers are rising in the scenery too. Obesity among rural women, for instance, is projected to increase eight times between the year 2010 and 2040 due to COVID-19. Excess weight is also bridging the gap across socio-economic statuses (SES). Overweight is more prevalent among higher SES but the situation is on the go up among lower SES as well. The number of obese children and adolescents is also growing fast. Dr. Manish Baijal, a bariatric surgeon at Max Hospital, Gurgaon, said all groups are at risk: "It's a multi-factorial disease."

These numbers are worrying, but they are also likely to be underestimated. Obesity is determined by BMI, which measures mass, not adiposity, or fat tissue. A group of doctors recently created BMI classifications specifically for Indians, but the difference means obesity is rising even more sharply than previous studies predict. The same doctors concluded that an additional 15-20% of the country would be overweight by their new scale due to COVID-19 pandemic and lockdown of whole country since March 2020.

Recent studies have reported that globally, more than 1.9 billion adults are overweight and 650 million are obese. Approximately 2.8 million deaths are reported as a result of being overweight or obese. Due to the consumption of energy dense food (i.e. unhealthy food habits), inactive life style, lack of health care services and financial support; the developing countries like India are facing high risk of obesity and their adverse consequences (i.e. diabetes, ischemic heart disease, etc). According to ICMR-INDIAB study 2015, prevalence rate of obesity and central obesity are varies from 11.8% to 31.3% and 16.9%-36.3% respectively. In India, more than 135 million (appox.10%) individuals were affected by obesity. The prevalence of obesity in India varies due to age, gender, geographical environment, socio-economic status, etc. In India, abdominal obesity is one of the major risk factors for cardiovascular disease (CVDs). Various studies have shown that the prevalence of obesity among women were significantly higher as compared to men. Obesity is one of the main medical and financial burdens for the Government. This problem of obesity can be preventable by spreading public awareness about obesity and its health consequences. Governmental agencies should promote the benefits of healthy life style, food habits and physical activity.

India is at a halt grappling with the novel coronavirus pandemic, but the country's next health crisis may be closer than we think. The prevalence of obesity among adults is increased to be five times between 2010 and 2040, and by 2040, an estimated 35% of the population is likely to be overweight. For Indians, obesity is defined as a **body mass index** (BMI) of 25 or more. Obesity is associated with high risk of noncommunicable diseases like diabetes, cardiovascular disease and hypertension. Unhealthy, processed food has become much more available following India's continued incorporation in global food markets. This, combined with increasing middle class incomes, is raising the average caloric intake per individual among middle class and high income households. The aim of this article is to report the prevalence of obesity in different regions of India and highlight the problems.

Theme:

India is a developing country which is in a transitional state of under nutrition due to poverty and obesity due to the industrialization and rapid urbanization. Previously, different studies were reported which after using different methodologies and cut off points for defining obesity that created complications in comparison. Presently there is no collective data of prevalence of obesity in India. So, that the present study represents the prevalence of general obesity in India on the basis of studies reported.

Internationally, a BMI over 25 kg/m² is considered overweight. Due to genetic tendency of Indians towards abdominal obesity and its related risk of associated lifestyle diseases such as diabetes and heart disease, guidelines for diagnosis of obesity and abdominal obesity for Indians have been published in JAPI (2009) that a BMI over 23 kg/m² is considered overweight. Further BMI:

Underweight BMI: <18.5 kg/ m^2 Normal BMI: 18.0-22.9 kg/ m^2 , Overweight BMI: 23.0-24.9 kg/ m^2 ,

Obesity BMI: >25 kg/ m² Obesity I: 25-29.9 kg/ m² Obesity II: >30.0 kg/ m².

Approximately 39% of the global adult population were categorized as overweight (Body Mass Index (BMI) 25.0–29.9 kg/m²) or obese (BMI > 29.9kg/m²) in 2014; a doubling since 1975 (Di Cesare et al, 2016). Whereas the occurrence of obesity was 6.4% among women and 3.2% among men in 1975, it had increased to 14.9% and 10.8%, respectively by 2014 (Di Cesare et al, 2016). In developing countries like India, the increasing prevalence of overweight and obesity has concurred with the demographic and epidemiological transitions, in which mortality and fertility have declined, and lifestyle-related diseases have become more common (Tandon et al., 2018; Dandona et al., 2017 and Prabhakaran et al., 2018).

The predominance of overweight and obesity in India is increasing faster than the world average. For instance, the prevalence of overweight increased from 8.4% to 15.5% among women between 1998 and 2015, and the prevalence of obesity increased from 2.2% to 5.1% over the same period (NFHS-2, 2000; NFHS-3, 2009 and NFHS-4, 2017). Despite this, few studies have attempted to estimate future trends in overweight and obesity in India. One study that reports on global trends estimated that 27.8% of all Indians would be overweight, and 5.0% obese, by 2030 (Kelly et al., 2008). Another study estimated that around 20% of rural Indian adults will be either overweight or obese by 2030 (Swain and Chowdhury, 2018).

Results:

Major National Survey i.e. National Family Health Survey-4 (NFHS-4) reported that socioeconomically backward states (i.e. Jharkhand, Bihar, Madhya Pradesh and Chhattisgarh) having low rate of prevalence of obesity as compared to higher socioeconomic states (i.e. Punjab, Goa, Delhi, Andhra Pradesh, Telangana, Puducherry and North East states) (Table 1).

Table 1. Represents the	he prevalence of	obesity in India	(2006-2016)
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Sr. No.	Author	Yr. of study reported	State Vaiirjouri	General obesity (kg/ m ²) BMI	Prevalence Of Obesity (%)		
			,	criteria	Male	Female	
1	Kandpal et al.	2016	Uttarakhand	>25	54.8	57.6	
2	NFHS-4	2015-16	Bihar	≥25	12.6	11.7	
3	NFHS-4	2015-16	Maharashtra	-	23.8	23.4	
4	NFHS-4	2015-16	Gujarat	-	19.7	23.7	
5	ICMR- INDIAB (Urban& Rural)	2015	Tami Nadu	≥25	20.6	28.4	

6	Mungreiphy et al.	2011	Tangkhul Naga	≥25	17.6	
7	NCD risk factor surveillance 2003-2005	2008	North India- (Delhi)	≥25	23.8*	
8	Das M & Bose K	2006	West Bengal (Marwaris)	≥25	44.5	71.8

Mishra et al., (2018) revealed that the urban population were at higher risk of obesity as compared to rural population. Kandpal et al. (2016) in Uttarakhand region reported more than 50% obesity in both the sexes which is higher than the previous NHFS-4 (Joshi et al., 2014 and Kumar et al., 2016) reported. Das and Bose (2006) reported high prevalence of obesity more than 40% among Marwari community which is a socioeconomically well-established community. NCD risk factor surveillance reported that the obesity in South India were higher (i.e. 27.2%) followed by North India (i.e. 23.8%) and lowest in West India (i.e. 15%) [Mohan et al., 2008].

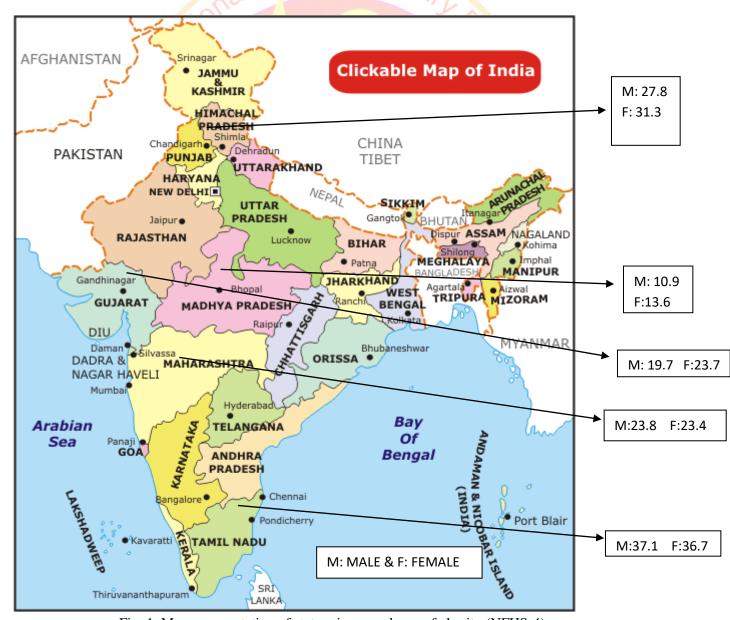


Fig. 1. Map representation of state-wise prevalence of obesity (NFHS-4).

Nationally, as per estimated model study, it is reported that the prevalence of overweight among women will increase from 14.7% to 27.4% between 2010 and 2040, whereas the prevalence of obesity is forecasted to increase from 4.4% to 14.0% over the same period. Among men, the prevalence of overweight and obesity is forecasted to increase from 12.6% and 2.4% in 2010 to 30.5% and 9.5%, respectively, by 2040. There is huge evidence of literature which indicated that women were prime victim of obesity as compared to men.

Discussion:

The prevalence of obesity in India is fluctuating from rural to urban and state-wise also (Fig.1) which is due to various features. The main features for variation in obesity are geographical condition, life style and dietary pattern. For example, population in high socioeconomic states (like Chandigarh and Goa) where the inactive life style and high calories food intake are the main reason for higher frequency obesity as during Covid-19 pandemic due to complete lockdown of country (i.e. more than 30% in both the sexes) as compared to lower socioeconomic states (like Jharkhand, Chhattisgarh, Madhya Pradesh and Bihar) (NFHS-4). In South India (i.e. Andhra Pradesh, Kerala and Pondicherry), populations were having higher prevalence (i.e. more than 25%) of obesity as compared to other states. Das and Bose (2006) studied prevalence of obesity in Marwari population (i.e. high socioeconomic status) reported more than 40% in both the sexes. It was observed that the prevalence of obesity is three fold increases (from 1998 to 2015) in Andhra Pradesh which is due to changes in dietary pattern and lifestyle variables (Reddy, 1998; Joshi et al., 2014 and Kumar et al., 2016). In South India from 1998 to 2018, the prevalence of obesity is rapidly bursting due to sedentary life style and consumption of high calories food. Obesity results into various health problems which are having direct link to cardiovascular disease (CVDs). So, that it's time to focus on the problem and take necessary steps to overcome the problem.

Conclusion:

The researchers concluded that there is a need to have cut-offs for obesity in the country and there should be public awareness pro- grams regarding obesity and its consequences. Health agencies should promote the healthy dietary habits and active lifestyles. The researchers, scientist and academician should also teach people about the bad effect of high calories food i.e. fast food on health.

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Status and Challenges faced by Science and social science in social welfare

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Abstract:

"Science is the foundation for positive social change... We must employ tested methods built on robust data to achieve lasting impact on a scale that makes a profound difference in people's lives." Said Edwina Uehara, president of the Society for Social Work and Research. Present social science theory and public policy are no longer adequate to meet the multi-dimensional challenges posed by rising social aspirations, unemployment, inequality, wasteful patterns of production and consumption, globalization, technological advances, demographic changes, and ecological constraints. The current framework which is used by governments to make policies need to be verified as they are no longer going to help in sustainable development. In this paper we have studied the trends and challenges in social science and languages in social welfare.

Key Words: social science, language, social welfare, technology

Introduction:

Social welfare systems provide assistance to individuals and families through programs such as health care, food stamps, unemployment compensation, housing assistance, and child care assistance. The social welfare system in India is different for the formal and informal sectors of the economy. It consists of two largely parallel systems. India's rapid economic growth is accompanied by economic inequality, poverty, and a range of social issues, thus, raising important questions concerning the breadth and depth of social protection and promotion policies prevalent in the country. With respect to the formal economy or the organized sector, it operates directly through the government, state-owned enterprises, and/ or private corporations that provide reasonably strong social protection to their employees through mandatory legislations spanning aspects such as payment of gratuity, employees' provident fund, and the employees' state insurance fund. In contrast, the informal or the unorganized sector is covered through a fragmented system of welfare schemes and benefits provided by the central government and the respective state governments.

Objective:

- To study the issues faced by social science, science solving the modern issues
- Challenges confronting these issues
- Possible solutions to tackle with these issues aiirjournal.com

Methodology:

The present paper is a review paper based on the previous works of government, non government organizations in the field of science, social science. They are sourced from books, government sites, econtents and other secondary resources.

Discussion:

The list of particularly pressing problems facing our society and the world. Endemic urban poverty, Racial segregation. Lack of universal provision of health services, rising social cost of health care, failing delivery of education for children and adolescents, deepening poverty in many countries, rising inequalities of income, deepening inequalities of wealth, income, and quality of life, Violence against individuals and groups, Ethnic violence, Genocide, Crime, Repressive states, Oppression of women and girls, Global environmental crisis, Climate change, Resource exhaustion, Environment degradation, Political regimes, Persistent authoritarian regimes, Imperfect democracies, Corruption, Inadequate systemic response to disaster. These are all problems with massive consequences for human wellbeing. These represent the complex social and behavioral forces. Re-establishing the connection between social science and social problems should be a high priority for all of us - social scientists and citizens alike.

The social problems we face such as those mentioned above are intractable, and they are often trending in the wrong direction. The solutions will require the artful design of new institutions and new ways of coordinating social behavior. Many universities in the western world have started focusing the study of social sciences to address these issues however In India we are still much behind the world. Although not all issues mentioned above are faced by India, many of these are still exist and need to be addressed sooner than later.

The problems arise from the lack of knowledge of resources and opportunities. Social science theory that is not aligned with the real world functioning, financial markets that siphon off funds from investment in the real economy, capital and technology-intensive manufacturing strategies that eliminate labor resulting in higher levels of unemployment and falling consumer purchasing power, educational systems that fail to impart the knowledge and skills required by the labor market, energy production technologies that threaten the ecosystem, mispricing of natural resources leading to overexploitation and waste, national level institutions incapable and unwilling of coping with global level problems.

To find the solution to these issues, the society as a whole and governments need to work together and think outside the conventional boundaries. There are enough opportunities. What is needed is to change our attitude towards and to approach the challenges and opportunities comprehensively and find an integrated solution to the problems. Not all problems can be addressed at the same time. We need to prioritize it based on the effect and scale of the issue. The social scientists from India need to look into these issues and solving these problems need understanding from Indian context. The social, geographical diversity in India poses different challenges while addressing such issues and hence the finding solutions to these issues need different approach which should be aligned to the India as a society considering its diverse culture, behavior, tradition etc. The concept of efficient market theory to maximize return to investors must be replaced by a theoretical framework that maximizes the efficiency of society by the full utilization of all available social resources to improve human welfare and well-being. At the same time, the resources and capabilities of global society have never been greater than they are today. Scientific knowledge, technological developments, infrastructure, and productive capabilities educated and skilled human resources, entrepreneurial skills, commercial organization and a rapidly expanding global social network offer unprecedented opportunities for rapid social progress. Comprehensive package of solutions to mobilize the untapped potentials of human and social capital based on far-sighted, ecologically sustainable economic policies; advanced delivery systems for higher education and vocational training; innovations in the application of science and technology; and new types of social networks and industrial clusters; together with strategies to release and direct social aspirations and energies into new fields of creativity.

Many social problems, such as poverty, racial/ethnic discrimination, and gender inequality, occur at the societal level. However, local communities can define certain social conditions as social problems (Fuller & Myers, 1941). In addition to recognizing local and societal social problems, we are becoming more aware of global social problems, such as the world's population problem where many people throughout the world do not have enough water to drink and enough fertile land to grow sufficient food, the adverse effect of climate change. A social problem can therefore be at the local, societal, or global level. There are enough laws already available and are being made by governments however these issues cannot be just tackled or stopped by making laws. Part of defining a social condition as a social problem is that we subjectively say to ourselves that something is wrong and that we believe it should be changed. People as a society need to come forward, need to understand such issues and follow the guidelines given by governments or various global bodies or NGOs. There might be enough resources available today for the survival of the human however there may be scarcity of these resources for the future generations of ours and we will be responsible for those issues.

The social science plays a major role in fighting the spread of infectious diseases. A perfect example is the recent Ebola crisis in West Africa or the covid-19 infections worldwide. Science plays it's part of solving this problem by developing a clearer understanding of the pathogens involved and increasing investment in drugs, there were several social science needs as well. It was necessary to understand the people who were suffering from the disease as well as the wider society in which they were living. For example, doctors needed to understand how people's attitudes were shaped towards such things as hand washing and other sanitary behaviors. Once the vaccines are available, there were many misunderstanding regarding the effectiveness of it or side effects. Social scientists played major role in heling solve such problems. It was also necessary to inquire into larger societal questions such as why do states fail, and how can they be rebuilt and strengthened. Additionally, the fight against Ebola or Covid-19 needed specialists in administration, markets, drug pricing, human resources, fund raising, and leadership.

Conclusion:

To find, understand and address the above-mentioned challenges in front of us need right kind of approach. Not only Government but the private organizations, and every individual need to understand their responsibilities. They need to be made aware of the issues, its impacts, their responsibilities, and the actions expected from them. This needs collaboration of government, private organization, and citizens. The collaboration of science and social science, The scientists, social scientists and every individual. The universities and academicians can help in understanding the issues and finding solutions and educating the people and future generations. The social scientists need to maximize their credibility as an expert. The research needs to be made to track, evaluate and describing the impact of research. The governments across the world should understand the role of social scientists and incentivize them for their work. The individuals or self-help groups should also be assessed and incentivized based on their work in the field of research, education, or social work. This will encourage them to expedite the process and betterment of the society at expected speed and achieve the targets set in realistic timeframe. The future is going to throw new challenges which also need to be foreseen and worked on before they become difficult to handle.

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Piscivorous Birds of Kosari Reservior, Jat, Dist-Sangli, (M.S.)

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Abstract

Kosari reservior is manmade reservior it is situated about 11.9 K.m away from jath tahasil. The area is arid prone area. The area shows food availability such as algae, phytoplankton, zooplankton, aquatic weeds, crustacean, amphibians, favourable fishes for the avifauna .Then rich diversity of flora and fauna attract the migratory birds towards the Kosari reservior. The water of reservior is used for bathing, washing, farming, fishing etc. The reservior shows food availability due to that the residential, local migratory, migratory birds attracted towards the Kosari reservior. The study is carried during March 2016 to February 2017. During study period about 15 piscivorous birds and fishes like catla-catla, rohu, and mrigala like fishes was noted.

Keywords – Kosari, Phytoplankton, amphibians, piscivorous

Introduction

Wetlands are most important factors for the living organisms which provides food, shelter to not only to human beings but many otherwise living organism. Human beings uses water for washing, bathing, farming, and as well as fishery which not only provides food but also economy to the human being

Many researches are carried on the wetland avifauna Fish and aquatic birds after exploit similar food resources predators in aquatic food webs. Wetlands are important for bird's habitats they use them for feeding, roosting, breeding various piscivorous birds have been earlier studied by Kulkarni *et. al.* (2006), piscivorous birds around Ekrukh water reservior of north solapur tahasil, solapur P.V Darekar *et.*al. (2015), piscivorous birds around Ekrukh water reservior of north solapur tahasil. Dist. Solapur (M.S)., Piscivorous birds of Madras was studied by Ghazi (1962), Piscivorous birds of Hingani -Pangaon reservior, Barshi (M.S.) was studied by Gavhane and Babare (2013).

Method & material

The study area of tippehalli reservior was visited twice in week during March 2016 to March 2017 during early morning 6.00 to 9.30 am and evening 5.00 to 7.00 pm.

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Material

For the better study & for identification the binocular Nikon Aculon A 211 is used .For the photography the camera Nikon3200 [lense – 50 -150 mm] and zoom camera Nikon P900 is used. Birds were identified on the field using guides by Ali (2002) and Grimmet and inskipp (2007). During visit the below piscivorous avifauna was spotted in this area.

Study area

Jath taluka is arid prone but well developed agricultural area. The landscape of taluka is dotted with many minor and major irrigation reservior. Kosari lake is situated 11.8 Km away from jath tahasil. It is situated in Kosari village. The Kosari dam was completed in 1970. The reservior has 1.448 MCFT water storage capacities. Geographical the reservior shows agriculture, human civilisation. The area is surrounded mostly grassland the big trees are less. Total area of Kosari village is 3437.79. in agriculture mostly bajra & matki is cultivated in this area commercial fishery is not done in the Kosari reservior, due to less fishes the piscivorous birds was affected the water is used for household, drinking, washing, farming and fishery.



1. Satellite view of Kosari reservior

Result and Discussion

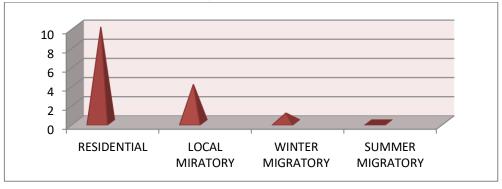
The Kosari wetland water is used for various purposes. And as the rainfall is less the area is drought prone which affect on not only the reservior but also the living organisms which are depended on the water such as fishes as well as avifauna. As the wetland is surrounded by human civilisation and farming the anthropogenic activities affect the wetland avifauna. Total 15 piscivorous birds were observed out of that 10 was residential, 04 was local migratory and 01 migratory piscivorous birds.

TABLE 1. CHECKLIST OF PISCIVOROUS BIRDS KOSARI RESERVIOR

S.r	COMMON NAME	SCIENTIFIC NAME	MIGRATORY STATUS
1	Great cormorant	Phalacrocorax carbo	R
2	Little cormorant	Little cormorant Microcarrbo niger	
3	Indian pondheron	Ardeola grayii	R
4	Grey heron	Ardea cinerea	LM
5	Little egret	Egretta garzetta	LM
6	Large egret	Casmerodius albus	LM
7	Median egret	Ardea intermedia	R
8	Purple heron	Ardea purpurea	R
9	Open bill stork	Anastomas oscitans	R
10	Ruddy shelduck	Tadorna ferruginea	WM
11	Spot billed duck	Anas poecilorhyncha	LM
12	River turn	Sterna aurantia	R
13	Pied kingfisher	Ceryle rudis	R
14	White throated	Mycteria leucocephala	R
	kingfisher		
15	Black winged stilt	Himantopus himantopus	R

As the resident piscivorous birds was dominate during study period. Only one species of winter migratory piscivorous bird in kosari reservior. And 04 local migratory and summer piscivorous migratory birds was not noted during study period the graphical piscivorous birds was **shown in graph-2**

GRAPH-2 Migratory pattern of Kosari reservior avifauna



Discussion

The Kosari wetland is arid area and stony, it is surrounded by farming and human civilisation. Not only for the daily human activities the water is used by the humans but also for their farming the water is utilised. This is one of reason that the water gets polluted that affects the avifauna directly or indirectly. The less rainfall is also decreases the water level of the wetland which alternating decreases the fish counts. Due to that the piscivorus and also migratory birds are less counted in number Kosari reservior.

Conclusion

Recent days the Krishna river basin water is drained into the Kosari reservior, which is increases the water level of the wetland. If the fishery will increase in this wetland area and also the uses for household water will not mostly used the water will not polluted and the migratory birds as well as the wetland avifauna will increase. So the protection as well as the awareness will help to increases the piscivorous avifauna will increase.

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PHOTO PLATES OF KOSARI RESERVIOR



Mycteria leucocephala (Pink painted stork)



Halcyon smyrnensis
(White throated kingfisher)



Tadorna ferruginea (Ruddy shell duck)



Anastomus oscitans (Open billed stork)



Ardeola grayii (Pond heron)



Ardea cinerea (Grey heron)

Effects of Asanas as Well as Yoga on Promptness and Elasticity Level

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Abstract:

Yoga improves dexterity, strength and musculoskeletal coordination of the practitioners. It includes a synchronized action of antagonistic as well as synergistic muscles which brings about an increase in anaerobic power, endurance, flexibility, stamina, strength, steadiness, greater neuro-muscular coordination as well as an improved level of orthostatic tolerance. The bearing of load strengthens the bones as well as averts age-related weakening, as a result helps in the prevention of osteoporosis. Yogic techniques are known to improve one's overall performance and work capacity. Purpose: The present study was conducted to determine the effects of Asanas as well as yoga on promptness and elasticity level of the young students. Method: The subjects for the study were selected on the basis of random group design. Thirty (N=30) male students were selected as subject for the present study from different colleges of Paschim Medinipur. All the selected subjects belonged to the age group of 18-25 years. They were further classified into two groups. Experimental treatment was then assigned to group "A" while group "B" acts as control. "Hexagonal Obstacle Test" was used to measure promptness whereas "Sit and Reach Test" was used to measure Elasticity. Results: The difference in the mean of each group for selected variable was tested for the significance of difference by "t" test. The level of significance was set at 0.05. The result has left the impression that asanas as well as yoga play a great vital role in the promptness and elasticity level of young children.

Keywords: Asanas, Romptness, Elasticity, Young Children, strength

Introduction:

Yoga refers to one of the oldest metaphysical sciences, which helps to investigate the soul's and with the help of its discipline, it leads to the awakening of the individual's mind which leads to the union of the moral being as well as the supreme spirit which is immortal. Yoga helps to maintain balance as well as provides both, a religion and a philosophy. We can enjoy the life to the fullest when we can unify culture and nature, poverty and with, stillness and movement as well as detachment and attachment. The activities of yoga immensely helps a person in his overall development and growth; his personality involving the unity of the self and the greater soul. There is a perception of yoga being a religion, but this is not true, since yoga is a method of living in order to possess a healthy mind as along with a healthy body. An individual is a spiritual, physical as well as a mental being, and yoga assists in balancing all these three forms of development. The various physical exercise forms like Aerobics gives a guarantee of only an individual's phisical well being. They do not have much contribution in the spiritual development of the body. The yogic exercises helps in recharging the individual's body with the energy of the cosmos, which facilitates

- ❖ Attainment of harmony as well as ideal equilibrium,
- Encourages self healing,
- ❖ Takes out negative blocks from the mind and toxins from the body
- Increases personal power and self awareness,
- Helps to achieve focus and concentration, which is in particular very necessary for children,
- Reduces tension and stress in the individual's physical body by setting into motion the nervous system which is parasympathetic.
- The person performing this art feels rejuvenated, thus yoga bestows upon every individual the powers to control the body and mind.

Yoga, the term means meger or union. The spiritual goal of yoga is the unification of the individual soul and the supreme soul, that is God. As per the faith of the Hindus, this particular union leads to the

emancipation or the liberation which turns out to be the supreme objective of all human beings. Yoga works as a tool to assist the aspirants in order to achieve their goals.

Yoga, in practical terms, denotes a functional balance between the mind and the body. The harmony gained due to the yogic practice, helps in the attainment of inexplicable joy, happiness, peace, long life as well as good health. Yoga possesses of immense potentialities to develop both, the mental as well as the physical health. It also helps to cure diseases, even the dreaded ones. Much of Yoga's potential as a therapeutic science till now seems to be not much known. The first person to pen down a compendium or produce a Yogic compilation was Sage Patanjali, assumed to have lived around 200 B.C. or even earlier. This particular compilation of Sage Patanjali, called Yoga Darshana or Yoga Sutras is considered to be the most exact scientific text that has ever been written on Yoga. Sage Patanjali defines Yoga as Yogaschitta vrtti nirodahâ – Yoga is restraining the Mind-stuff from taking various forms. Yoga, in other words, refers to the exclusion of mind modifications and considering it to be one-pointed. Chittaâ, i.e, mind-stuff refers to individual consciousness, which incorporates the unconscious, the subconscious as well as the conscious states of mind. All these three individual minds states are known as Chittaâ. The waves of thought in the Chittaâ are called Vrttisâ. Nirodahâ means restraining or eliminating. So, the end goal or subject matter of yoga is the prevention of the Chittaâm modifications. The process of the prevention of the Chitta, i.e, mind-stuff often turns out to be simple.

But, in practice, it is a very difficult task. The aspirant will know the complexity and depth of the subject matter only while going through the verses, one by one, in all 196 verses, divided into 4 chapters. The work does not contain any techniques to help the beginners. This suggests that the Sutras of Yoga are not at all meant for the beginners and also hints that each and every teacher must pursue his/her studies very seriously. The verse begins with Atha Yoganusanamâ (Now, therefore, complete instructions on Yoga) which signifies that itself is a direct evidence to it. The term Athaâ (now, therefore) indicates that the pupil must have acquired enough Yogic knowledge before learning the Yoga Sutras..

Meditation, pranayama as well as asanas help in maintaining a good health as well as assists in promoting the effectiveness of our body's crucial internal organs. Asanas refers to postures. According to patanjali, "any comfortable position that is steady is an asana". Asanas have a very soothing influence on our entire body system, especially the endocrine, the nervous, the circulatory as well as the respiratory systems. The main goal of asana is the toning up of the systems of our bodies and granting us a healthy life. It helps us in removing all kinds of diseases (N.C.Narayanan, 2002)

Review of Literature:

Robinson, Matthews & Witek-Janusek (2003) used a quasi-experimental, pretest/post-test, non-randomized with comparison group design to examine the Mindfulness-Based Stress Reduction program with patients infected with the human immunodeficiency virus (HIV). The authors found that this program helped to increase the activity and number of natural killer cells in persons infected with HIV. In other words, this form of meditation may help to build the immuno-response of HIV-infected persons. With the increase of these cells, HIV patients may live longer with a better quality of life, or perhaps even fight off completely this virus that leads to acquired immunodeficiency syndrome (AIDS).

Gillani and Smith (2001) paired the relaxation states (R-States3) from the Attention Behavioral Cognitive Relaxation Theory to compare the psychological effects of Zen meditation. The authors questioned which R-States people identified with achieving Zen, in the hopes of designing an intervention tailoring to an individual's needs. In this study, the meditation took place in a temple and used common Buddhist rituals including the "sounding of a gong, bowing to the instructor and temple altar, sitting on a meditation cushion or chair, instructions to breathe in a relaxed manner.

Travis and Pearson (2000) examined the lived experience of pure consciousness, as well as identify other physiological changes that occur during Transcendental Meditation, by asking 52 college students to describe their deepest meditation experiences during Transcendental meditation. All the participants had been practicing this form of meditation for an average of 5.4 years. Even though awake, the majority of the

practitioners became unaware of space, time or body-sense during meditation. A smaller proportion felt peaceful, and an even smaller percentage of meditators experienced unboundedness. Meditators described a feeling of unboundedness as an absence of space, time or body-sense, and an 'unbounded silence' with complete awareness and peace, but without thought.

Objectives:

The main objectives of the present study are as follows:

- To find out the effects of asanas on promptness level of young students.
- To study the effects of yoga on the promptness level of young students.
- To find out the effects of yoga on the elasticity level of young students.
- To find out the effects of asanas on the elasticity level of young students.

Methods and Materials:

The subjects for the present study were selected on the basis of random group design. Thirty (N=40) male students were selected as subject for the present study from different colleges of Paschim Medinipur district, West Bengal. All the subjects belonged to the age group of 18 and 25 years. All of them were further classified into two different groups. Experimental treatment was then assigned to group "A" and group "B" acts as control. All the subjects had to undergo a training programme for six weeks of Gomukhasana, Paschimottanasana, Matsyendrasana, Mayurasana, as well as Swastikasana. and Gomukhasana. Hexagonal obstacle test was used to measure promptness whereas Sit and reach test was used to measure elasticity.66 cm sided hexagon marked out on the floor ,Stop watch, Sit and Reach Box about 30cm (12 inches) high, A meter rule etc were used to conduct the two tests.

Data Analysis and Interpretation:

The study was carried out in order to discover the impacts of selected asanas such as hatha yoga on the level of flexibility as well as agility. The statistical data analysis was done on the basis of the data collected from thirty (N=40) subjects. For every chosen variable, the consequences pertaining to vital difference, if any, in between the control groups and the experimental groups were evaluated by "t" test as well as are also presented in tables.

Table – 1

Mean, SD, SEM of Elasticity of Experimental and Control Group

Group	N	Mean	SD	SEM	t Value		
Experiment(Pre test)	20	48.16	10.98	2.91	8.322		
Experimental(post	20	50.20	10.53	2.8236			
test)							
Control(pre test)	20	47.26	9.20	2.46	0.514		
Control(post test)	20	47.80	8.5874	2.3172			

Significant at 0.05 level of confidence.

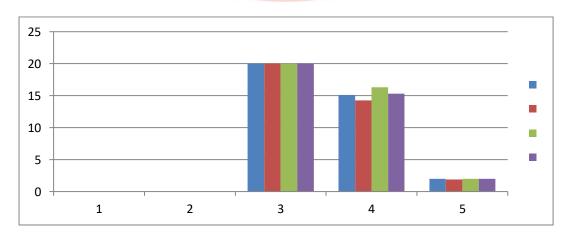


Table-1 shows that the mean of flexibility of pretest of experimental group and posttest of experimental group was 48.16 and 47.26 respectively, whereas the mean of pulse rate of pretest of control and posttest of control group was 50.20 and 47.80. The "t" value in case of experimental group was 8.322 and for control group it was 0.514. Since cal. t (=8.322) > tab t .05 (14) (=2.145), Ho (null hypothesis) is rejected at .05 level of significance. Thus it may be concluded that six week of yogasanas training programme showed significant improvement in elasticity.

Table - 2Mean, SD, SEM of promptness of Experimental and Control Group

Group	N	Mean	SD	SEM	t Value
Experiment(pre test)	20	15.12	1.98	0.58	-7.5
Experimental(post	20	14.27	1.87	0.55	
test)					
Control(pre test)	20	16.31	1.97	0.57	-5.482
Control (post test)	20	15.33	1.99	0.58	

Significant at 0.05 level of confidence

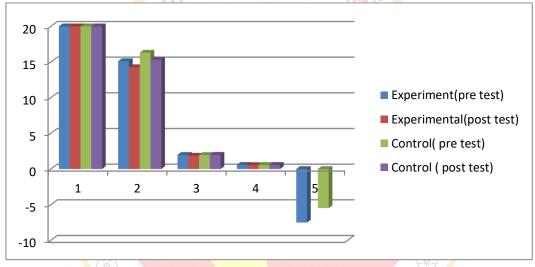


Table-2 shows that the mean of promptness of pretest of experimental group and posttest of experimental group was 15.12 and 14.27 respectively, whereas the mean of promptness of pretest of control and posttest of control group was 16.31 and 15.33. The "t" value in case of experimental group was -7.5 and for control group it was -5.482. Since cal. t (=-7.3) > tab t .05 (14) (=2.145), Ho (null hypothesis) is rejected at .05 level of significance. Thus it may be concluded that six week of yogasanas training programme showed significant improvement in promptness. aiirjournal.com

Conclusion:

Yoga asanas tone the muscles, develop flexibility and improve posture and spinal alignment. Asanas, or yoga postures, fundamentally act as a lubricating routine to the joints, muscles, ligaments and other parts of the body, increasing circulation and flexibility. Yoga postures initially focus on improving body flexibility (your body is as young as it is flexible). They focus on the health of the spine, its strength and flexibility. The spinal column houses the all-important nervous system – the telegraphic system of the body. By maintaining the spine's flexibility and strength through exercise, circulation is increased and the nerves are ensured their supply of nutrients and oxygen. Asanas are beneficial for the muscles, joints, cardiovascular system, nervous system and lymphatic system, as well as the mind, psyche and Chakras (energy centres). They are psychosomatic exercises, which strengthen and balance the entire nervous system and harmonise and stabilise the practitioner's state of mind. The effects of these exercises are a sense of contentment, clarity of mind, relaxation and a feeling of inner freedom and peace.

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Spatio-Temporal Analysis of Primary Schools in Satara District

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Abstract: -

India's leading populous countries of the world. It has substantial power of the country because in populous power uses various purposes Military, Technological development, Agricultural development, Education, and other Processing Industry. Education is a key factor in the economic development of the country. It has progressed the primary education according to Socio-Economic Abstract 2011, over 75% population engaged in primary education age between the 7 and 10 years. Primary education is the basic need of the country because Primary education is also called elementary education it provides the students a basic understanding of the various subjects. Kerala has the first Indian state to achieve 100% primary education through the literacy programmed 'Athulyam'. Maharashtra has one of the baggiest populous states of the country and it adopted National Education Scheme. According to the 2011 census, Maharashtra State literacy rate is 80% and Sarva Shiksha Abhiyan is a program introduced to the Government of India, primary education in the state of Maharashtra has taken is a good achievement. In Maharashtra state, the primary education sector 2.25 corer students are studying.

Key Words: - Primary Education, Development, Literacy,

1. Introduction: -

The State of Maharashtra has come into existence 1 May 1960 it is 35 districts including part of the State. Satara district is most the popular district in the historical period as some as Geographical, Political background. The state is creating administrative Purposes for Six division namely Konkan, Pune, Nagpur, Amravati, and Aurangabad. For the study researcher selected the Satara district of the Pune division of western Maharashtra. In the Satara district divided 11 tehsils for Administrative purposes. Before Independence so many Socialites founded Primary School in this region. In this time socialist aware of the importance of education. Normally Primary education is defined as the first stage of formal education, and it coming after to preschool and before secondary school. According to socio-economic review 2018, Satara district has a total number of Primary Schools 3842 and teacher 14428 existed. Literate people are a prime factor of the economic development of the State. Illiteracy, adult illiteracy, Students drop out is a basic problem of Primary education system in this region. Researcher, we studied the Scenario of educational Institute of Satara District. The current Primary Schools of Satara district is 3842 Schools found there. The study period of Educational Institute of Satara district is 2005-6 to 2017-18. The Primary Schools including various educational sectors such as Government School, Local Government School, Private Grantable School, Private Non-Grantable School. The Satara district after independence awareness of basic education and the number of a Primary Schools is increased. Recently over 75% of population is engaged in primary education.

2. Study Area: -

The study region Satara district is one of the districts of Maharashtra state, it is situated in the South part of Maharashtra State. The shape of the region is quite circular compact type and it comes under in $Bh\bar{l}$ ma (Khandala, Man, and Phaltan) and Krishna river system and lies between north latitudes 17° 05' and 18° 11' and east longitude 73° 33' and 74° 54' (figure 1).

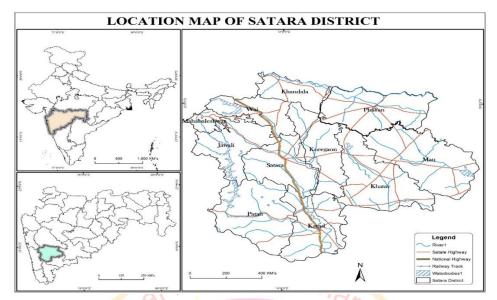


Fig No. 01 Location Map of Study Area

The total area of the district is 10480 sq. km (2011). Which is 3.40 percent of the Maharashtra state, among the 35 districts of the state, Satara ranks 12 in terms of area. There are 11 Panchayat Sammittee's in the district. The study region administratively consists of 11 tehsils which are Jawali, Khandala, Khatav, Karad, Koregaon, Mahabaleshwar, Man, Phaltan, Patan, Satara, and Wai. The Satara town located on the Pune-Bangalore national highway no 4 with the station of the south-central railway.

The district has an east-west stretch of about 144kms and north-south about 120 kms. Administratively it is bounded by the Pune district on the whole of the north side, by the Solapur district on the east side, by the Sangli district on the south-east side and south and by the Ratnagiri district on the west, only over the length of about 25 km's the Raigarh district borders on the north-west side.

The main Sahyadri range on the west and south-west, and the Shikhar Shinganapur section of the Mahadeo hills on the east to of demarcating to some extent the land of Solapur district. For administrative purpose, the district is divided into four subdivisions Koregaon, Satara, Phaltan, and Wai.

3. Objective:-

To Study the Spatio-Temporal scenario of Primary Schools in Satara District.

4. Database And Methodology:-

For the current research paper researcher used secondary sources of data. The researcher used Socio-economic Abstract of Satara district between 2005/06 to 2018-19 years. To determine the tehsil-wise Distribution of Primary Schools researcher used Simple Percentage. For calculating Density researcher applied simple Density formula and following formula are used to determine the growth of Primary Schools.

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$$\begin{aligned} \text{Distribution} &= \frac{\text{Selected tehsils number of Primary Schools}}{\text{Total number of Selected Entitie's of District}} \times 100 \dots 1 \\ \text{Density} &= \frac{\text{Selected tehsils number of Primary Schools}}{\text{Total Geographical area of the Selected Tehsil}} \dots 2 \\ \text{Growth Rate} &= \frac{(P2-P1)}{P1} \times 100 \dots 3 \\ Where, & P1 \dots Primary Schools of Previous Years \\ P2 \dots Primary Schools of Current Years \end{aligned}$$

By using above-mentioned formulas outcomes are classified in various classes like Distribution in Low (Below 5.00), Moderate (5.01 to 10.00) and High (Above 10.01) Distribution. Density is classified in the Low (Below 2.00), Moderate (2.01 to 4.00), and High (Above 4.01) Density. The ratio is calculated into the village; how many schools are coming in a single village. This is classified in following classes, Low Ratio (1:1), Moderate Ratio (1:2), and High Ratio (1:3). Growth rates are categorized in Negative, Low, Moderate, and High growth. All Data/graphs are predicted by appropriate Cartographical techniques. All graphs are made by Using GIS Software.

5. Discussion: -

Above mentioned table no 01 deals with Distribution of Primary Schools in Satara district, 2005/06, 2009/10, 2013/14, and 2017/18 years. On the basis of function or governance, schools are divided in various categories. Those are Government Schools, Local Government Schools, Private Grantable and Private Non-Grantable Schools.

The government schools are derived by the Central Government and State Government. Government are the prime base of this schools. In the Local Government schools are derived by Zilha Parishad, Municipal Council and any local government authority. Some schools are based on Private Basis, the administrative of this schools are may be one person or any private society. They functioning in Grantable and Non grantable basis. Grantable are have some grant and Non-grantable are didn't have any grant. Grantable schools are obtained grant by prime government of the region.

5.1 Distribution of Primary Schools in Satara District: -

The distribution of Primary Schools in Satara district are limited period. It is based on the year 2005-06 to 2017-18. The distribution are demarcated the share of schools in tehsils to district.

5.1.1 Distribution of Primary Schools in 2005-06: -

In the year 2005-06, there are 2505 primary schools are working. Out of the total schools Patan tehsil (482) having highest schools in the district and Khandala tehsil (113) are having lowest number of schools. The Mahabaleshwar (122, 4.87 %) and Khandala (113, 4.51 %) tehsil has delineated the low distribution of Primary school in the Satara district. Mahabaleshwar tehsil has a hilly region and Khandala tehsil have less developed hence, physical resistance of the development and distribution of Primary school of Satara district. The moderate distribution of Primary Schools is delineated the middle part of the district such as the Wai, Koregaon, Jawali, Khatav, Satara, and Man tehsils as 6.43%, 7.58%, 7.66%, 8.82%, 9.10% 9.22% respectively.

Table No: 1 Distribution of Primary Schools in Satara District

Sr. No.	Tehsil	2005-06	2009-10	2013-14	2017-18
1	Mahabaleshwar	4.87	4.24	4.46	4.74
2	Wai	V = 6.43	5.63	6.54	6.53
3	Khandala	4.51	4.56	4.17	4.42
4	Phaltan	10.58	9.78	10.97	10.91
5	Man	9.22	8.87	9.40	9.32
6	Khatav	8.82	8.26	8.79	8.98
7	Koregaon	7.58	8.38	6.83	7.08
8	Satara	9.10	10.17	11.62	12.23
9	Jawali	7.66	6.41	7.03	6.30
10	Patan	19.24	19.65	18.00	16.06
11	Karad	11.98	14.05	12.20	13.43
	Total	100.00	100.00	100.00	100.00

Source: Based on Socio Economic Review of Satara District, 2005-06 to 2018-19, compiled by Author.

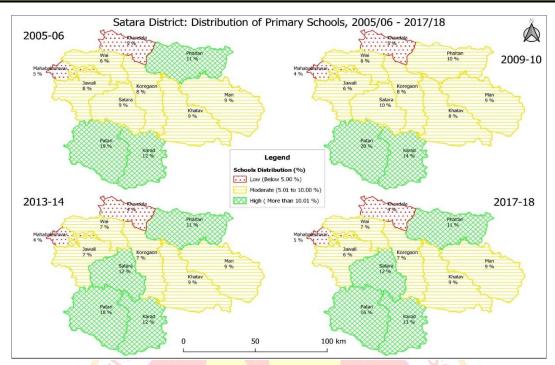


Fig No: 2 Distribution of Educational Institute's

This meddle part of the district has moderately developed. The High distribution of institute is delineated the Patan tehsil is 19.24%, after Karad tehsil has 11.98% and Phaltan tehsil has 10.58% of Primary Schools found the district.

5.1.2 Distribution of Primary Schools in 2009-10: -

The distribution of Primary Schools in the Satara district depicted the total number of schools is 3089 found in the year 2009-10. Out of the total schools Patan (607) tehsil are having highest schools of the district and Mahabaleshwar tehsil (131) are have lowest schools of the district. The Mahabaleshwar (4.24%) and Khandala (4.56%) tehsils have shown the low distribution of Primary Schools. The moderate distribution of primary Schools found in Wai, Jawali, Khatav Man, and Phaltan tehsil. The high concentration of Primary Schools in Satara district is depicted only three tehsils such as Patan (19.65%), Karad (14.05%), and Satara (10.17%) tehsil, the previous year Phaltan tehsil has shown the high concentration of primary Schools but in the year Satara tehsil have progressed their primary Schools condition, it has shown the high concentration Primary Schools in Satara tehsil ranking three of out of 11 tehsils in the Satara district.

5.1.3 Distribution of Primary Schools in 2013-14: -

The distribution of Primary Schools in the Satara District in the year 2013-14, is depicted as the total number Primary School is 3073 located in Satara district. Ou of the total schools, Patan tehsil (553) having highest schools and Khandala tehsil (128) having lowest number of schools are in working. According to socio-economic abstract, the low concentration of primary schools is depicted in Mahabaleshwar (4.46%), and Khandala (4.17%) tehsils in the Satara district. The moderate distribution of Primary School is depicted in five tehsils such as Jawali, Wai, Khatav, Koregaon, and Man tehsils in the Satara district. The high distribution of Primary Schools is depicted the four tehsils such as Patan (18.00%) tehsil it has the first ranking number of Primary schools, after the Karad (12.20%), Satara (11.62%), and Phaltan (10.97%), tehsil shown the high distribution of Primary Schools in the Satara district.

5.1.4 Distribution of Primary Schools in 2017-18: -

The distribution of Primary Schools in the Satara district in the year 2017-18, is depicted as the total number of Primary Schools is 3842 located in the Satara district. Out of the total schools Patan tehsil (617) having highest schools and Khandala tehsil (170) having lowest number of schools in district. According to socio-economic abstract, the low distribution of Primary Schools is depicted in Mahabaleshwar (4.74%) and

Khandala (4.42%) tehsil in the Satara district. The moderate distribution of Primary Schools is depicted in as Jawali, Wai, Koregaon, Khatav, and Man tehsils in the Satara district. The high distribution of Primary Schools in Satara district is depicted the four tehsils of Satara district such as Patan, Karad, Satara, Phaltan tehsils, about these five tehsil Patan (16.06%) tehsil has the first ranking number of Primary Schools in the Satara district.

5.2 Density of Primary Schools in Satara District: -

The term density deals with the ratio between the number of village and Primary Schools of the corresponding region. For this paper, we calculated the tehsil wise density of Primary Schools. This is calculated by per 10 Square km area. Density has calculated the low (2.00), Medium (2.00 to 4.00), and High density (more than 4).

Sr. No.	Tehsil	2005-06	2009-10	2013-14	2017-18
1	Mahabaleshwar	3	3	4	5
2	Wai	3	3/2	3	4
3	Khandala	2	2	2	3
4	Phaltan	2	3	3	4
5	Man	1	2	2	2
6	Khatav	2	2	2	3
7	Koregaon	2	3	2	3
8	Satara	2	3	4	5 5
9	Jawali	2	2	2	3
10	Patan	3	4	4	5 4
11	Karad	3	4	3	5
Ā	Total	2	3	3	3

Table No 02 Density of Primary Schools in Satara District

Source: Based on Socio Economic Review of Satara District, 2005-06 to 2018-19, compiled by Author.

5.2.1 Density of Primary Schools in 2005-06: -

The density of Primary Schools in the Satara district is shown on the fig. No.3. According to the socio-economic review, Satara district has low-density region as recorded as the 7 tehsils of Satara district namely, Khandala, Phaltan, Khatav, Koregaon, Satara, Jawali tehsil. The moderate density is recorded in Satara district is 4 tehsils namely, Mahabaleshwar, Wai, Patan, and Karad tehsils.

5.2.2 Density of Primary Schools in 2009-10: -

According to the 2009-10 year, Primary Schools density in Satara district has shown the 4 tehsils is recorded the low density of Primary Schools namely, Khandala, Man, Khatav, and Jawali tehsil. The moderate density is recorded the 8 tehsils namely, Mahabaleshwar, Wai, Phaltan, Koregaon, Satara, Patan, and Karad tehsil. The high density of Primary School is not recorded in a specific period in the Satara district.

5.2.3 Density of Primary Schools in 2013-14: -

According to the 2013-14 year, the Primary School density in Satara district has shown 5 tehsils recorded as the low density of Primary Schools namely, Khandala, Man, Khatav, Koregaon, and Jawali tehsil. The moderate density of Primary Schools is recorded as the 6 tehsils namely, Mahabaleshwar, Wai, Phaltan, Satara, Patan, and Karad tehsil. The high density of Primary School is not recorded in a specific period in the Satara district.

5.2.4 Density of Primary Schools in 2017-18: -

According to the 217-18 year, the Primary School density in Satara district has shown the only one tehsil has recorded as the low density of Primary School namely, Man tehsil. The moderate density of Primary School is recorded as the 7 tehsils namely Wai, Khandala, Phaltan, Khatav, Koregaon, Jawali, and

Patan tehsils. The high density of Primary Schools is recorded as two tehsils namely Mahabaleshwar and Karad tehsil in the Satara district.

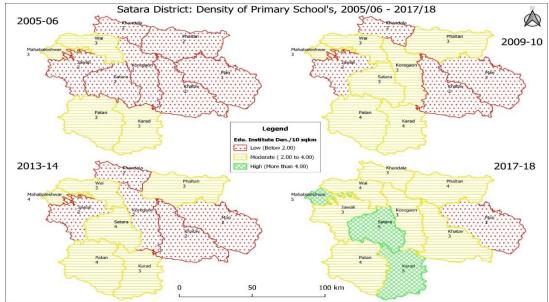


Fig No: 3 Density of Primary School's in Satara District

5.3 Ratio of Primary School's in Satara District: -

The ratio defines the Cambridge Dictionary, 'The relationship between two groups or amounts that expresses how much bigger one is than the other'. It is a term of Quantitative as well as Qualitative. The ratio is calculated into the village; how many schools are coming in a single village. This is classified into three-class Low Ratio (1:1), Moderate Ratio (1:2), and High Ratio (1:3).

5.3.1 Ratio of Primary Schools in 2005-06: -

The Primary Schools in the Satara district ratio is calculated how many schools are coming in a single village. The ratio of Primary School into the single village is recorded and depicted the fig. no.4. The low ratio of the Primary Schools is indicated in the five tehsils of Wai, Jawali, Koregaon, Satara, and Karad tehsils in the Satara district

	Table 140 95 Ita	17	0413	407	
Sr. No.	Tehsil	2005-06	2009-10	2013-14	2017-18
1	Mahabaleshwar	2	2	1	2
2	Wai	1	1 00	2	2
3	Khandala	2	2	2	3
4	Phaltan	4m ₂ our	2	3	3
5	Man	2	3	3	3
6	Khatav	2	2	2	2
7	Koregaon	1	2	2	2
8	Satara	1	1	2	2
9	Jaoli	1	1	1	2
10	Patan	2	2	2	2
11	Karad	1	2	2	2
	Total	1	2	2	2
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Table No 03 Ratio of Primary Schools in Satara District

Source: Based on Socio Economic Review of Satara District, 2005-06 to 2018-19, compiled by Author.

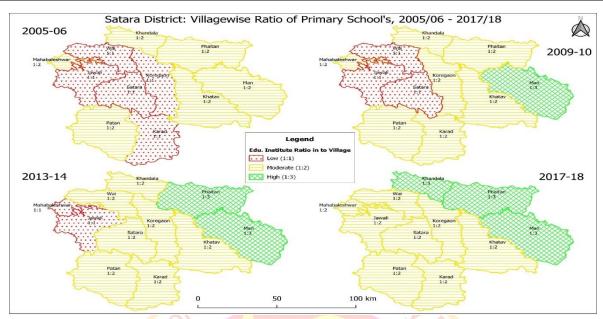


Fig No: 4 Ratio of Primary Schools in Satara District

The moderate ratio of Primary Schools in the Satara district is indicated by the Remaining Six tehsil of Mahabaleshwar, Khandala, Phaltan, Man Khatav, and Patan tehsil. No more tehsil is indicating the high ratio of Primary Schools in the Satara district.

5.3.2 Ratio of Primary Schools in 2009-10: -

The Primary Schools in the Satara district, the low ratio is depicted in the three tehsils of Wai, Jawali, and Satara tehsil. The moderate ratio of the Primary Schools in the Satara district is indicating seven tehsils of Mahabaleshwar, Khandala, Phaltan, Koregaon, Khatav, Karad, and Patan tehsils in Satara district. Only one tehsil has indicated the high ratio of Primary Schools Namely Man tehsil in the Satara district.

5.3.3 Ratio of Primary Schools in 2013-14: -

The ratio of Primary school is changing in a particular period, only two tehsils are indicating the low ratio of Primary Schools in Satara district and moderate ratio being changed in that particular period, seven tehsils are indicating the moderate ratio namely, Wai, Khandala, Satara, Koregaon, Khatav, Karad, and Man tehsil in the Satara district. The high ratio of Primary school indicating two tehsils namely, Phaltan, and Man in Satara district.

5.3.4 Ratio of Primary Schools in 2017-18: - 340-63

The low ratio of Primary Schools in the Satara district is indicating the two tehsils namely, Mahabaleshwar, and Jawali tehsil. The moderate ratio is indicating the seven tehsils in the Satara district. The Phaltan and Man tehsil is a high ratio rate of Primary School indicating in the Satara district.

5.4 Growth of Primary Schools in Satara District: -

The term growth indicated the change of any kind of entity is positively or negatively in terms of Qualitative as well as quantitative content. The growth rate of Primary Schools in the Satara district is indicating in Fluctuated from 2005-06 to 2017-18.

5.4.1 Growth of Primary Schools in 2005/06-09/10: -

The Satara district Primary Schools' growth rate indicating the four categories, the negative growth rate of Primary School in Satara district is not depicted the 2005-06 to2009-10. The low growth rate of Primary School indicating the Jawali (3.13%), Mahabaleshwar (7.38%), Wai (8.07%), Phaltan (13.96%). The moderate growth rate of Primary School in Satara district is indicating the Man (18.61%), Khandala (24.78%), and Patan (25.93%) tehsil. The High growth rate of Primary Schools in the Satara district is indicating the Karad (44.67%), Satara (37.72%), and Koregaon (36.32%) tehsil. The total growth rate of Primary Schools in the Satara district is indicating the moderate (23.31%) growth rate of Primary Schools.

Sr.	Tehsil	2005/06-	2009/10-	2013/14-	2005/06-
No.		2009/10	2013/14	2017/18	2017/18
1	Mahabaleshwar	7.38	4.58	32.85	49.18
2	Wai	8.07	15.52	24.88	55.90
3	Khandala	24.78	-9.22	32.81	50.44
4	Phaltan	13.96	11.59	24.33	58.11
5	Man	18.61	5.47	23.88	54.98
6	Khatav	15.38	5.88	27.78	56.11
7	Koregaon	36.32	-18.92	29.52	43.16
8	Satara	37.72	13.69	31.65	106.14
9	Jawali	3.13	9.09	12.04	26.04
10	Patan	25.93	-8.90	11.57	28.01
11	Karad	44.67	-13.59	37.60	72.00
	Total	23.31	-0.52	25.02	53.37

Table No. 3 Growth of Primary Schools in Satara District

Source: Based on Socio Economic Review of Satara District, 2005-06 to 2018-19, compiled by Author.

5.4.2 Growth of Primary Schools in 200/10-03/14: -

The growth rate of Primary School in that period is shown the drastic change depicted, in this period no more tehsil is showing the High growth rate of Primary Schools but the negative growth rate of Primary School is indicating the four tehsils namely, Patan (-8.90%), Khandala (-9.22%), Karad (-13.59%), and Koregaon (-18.92%) tehsils in the Satara district. The low growth rate of Primary School is indicating the six tehsils namely, Mahabaleshwar (4.58%), Man (5.47%), Khatav (5.88%), Jawali (9.09%), Phaltan (11.59%), and Satara (13.69%) tehsil in the Satara district. only Wai (15.52%) tehsil is indicating the moderate growth rate of Primary Schools in the Satara district indicating the negative growth rate of Primary Schools.

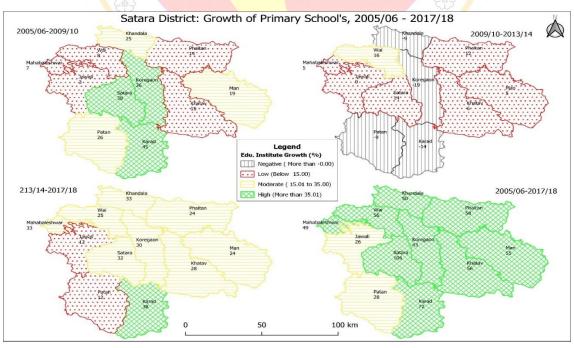


Fig. No. 4: Growth of Primary Schools in Satara District

5.4.3 Growth of Primary Schools in 2013/14-17/18: -

The growth rate of Primary School in Satara district is indicating the low growth rate of Primary Schools in the Satara district is Jawali (12.04%), and Patan (11.57%) tehsil. The moderate growth rate of Primary Schools is indicating the eight tehsils namely, Man (23.88%), Phaltan (24.33%), Wai (24.88%), Khatav (27.78%), Koregaon (29.52%), Satara (31.65%), and Mahabaleshwar (32.85%) tehsil in the Satara district. The Satara district only Karad (37.60%) tehsil indicating the high growth rate of Primary School. Overall growth of Primary Schools in the Satara district is indicating the moderate (25.02%) growth rate.

5.4.4 Growth of Primary Schools in 2005/06-17/18: -

The growth rate of Primary Schools in overall concluding the only two tehsils indicating the moderate growth rate of Primary Schools namely, Jawali (26.04%), and Patan (28.01%) tehsil in the Satara district. The high growth rate of Primary School is indicating the Satara (106.14%) tehsil, a remaining tehsil of Primary Schools namely, Koregaon (43.16%), Mahabaleshwar (49.18%), Khandala (50.44%), Man (54.98%), Wai (55.90%), Khatav (56.11%), Phaltan (58.11%), and Karad (72.00%) tehsils in the Satara district. The overall growth rate of Primary Schools in the Satara district is indicating the high growth rate of Primary Schools in the Satara district.

6. Conclusion: -

The education id one of the process of that, it is helpful to any human lives to maintaining and continuing their life with good manners. It is the continuous process of learning which are started before birth with a birth. But the class room education are started in the primary stage. The primary schools are the main and important stage of the education. Without this stage incomplete this process. The number of schools are increased time to time and space to space. The main reason of that is the birth rate is higher than the successive year. It means that the rate of birth is higher in same time the death rate of child is lesser. It is marking remark on medical facilities of the region in good condition and the government are supporting to education and allied activates of the function.

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Understandings & Alternatives of Remdesivir At Kolhapur!

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Abstract:-

December 2019 we had small news of spreading CORONA - Covid 19 from Wohan China. Till March 22, 2020 In India Delhi the Corona patients were found. That time whole world, our Country, Our Government was having big challenge how to overcome this Pendamic situation. Kolhapur district have good environment for humans so they were just following the instructions given by Government, it's a wave of a new coronavirus disease, named COVID-19 by the World Health Organization (WHO 2). . All Kolhapur Work was stopped. So the patients of Corona number was lass than other districts. But as the people's back from other cities they caught by virus so the sudden growth of patients increased. At the end of 2020 year and start 2021 Year Second wave of Covid 19 starts very strange manner. In Kolhapur almost outsider <mark>people came in contact with native and</mark> Corona spread rate increased much. NGOs, Government, Health Center's, Social workers, Asha workers, Teachers all are confused about the treatment followed to the patients. That time REMDESIVIR antiviral drug name was given by WHO, Doctors to get relief from Corona, Kolhapur people's started to get it by any source to survive, and the rumours start about it, people's were buying it by black with high cost. Medical stores started to collect it. Thus everyone started to understand this is the drug which gives relief from Corona. They avoided to even think of Side effects. But Late Dr K. K. Agarwal told in his Webinares the alternative s of Remdisivir. Dexamethasone Clixane, Vitamin C, Methya prednisolone Clixane lopinvir etc are the names of antiviral drugs which are useful on Corona treatment. The causative agent of this infection is the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The data available on one of the promising therapeutic agents—nucleotid<mark>e analog remdesivir (Gilead Sciences number GS-5734)</mark>—were e<mark>v</mark>aluated. These data were concerned with remdesi<mark>vir activation from the prodrug to the active molecule—trip</mark>hosphate containing 1'-cyano group and modified nucleoba<mark>se. This triphosphate competes with the natural substrate ad</mark>enosine t<mark>r</mark>iphosphate.

Remdesivir as such represents one of the more promising alternatives for COVID-19 therapy, however the current understanding of this disease and the possible ways of dealing with it requires further investigation.

Keywords: Remdesivir; GS-5734; COVID-19; WHO!

What is Remdesivir?

It's antiviral drug used in greater manner by corona patients on demand. Remdesivir was implemented on Nipah Virus and it was effective. As Corona Covid 19 is also a virus so Scientists start doing researc accordingly. It seems somewhat positive response from patients too. At the wondering confused year 2020 researchers, doctors accepted challenge of a new disease, COVID-19, that is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), affected people around the world [1]. First reported Wuhan, in China on 31 December 2019 became a Public Health Emergency of International Concern on 30 January 2020, with the first case of this pneumonia reported outside of China in Thailand on 13 January 2020. China confirmed COVID-19 transmission between humans on 20 January. This general development led the World Health Organization (WHO) to declare the infection a pandemic on 11 March 2020. In May 2020, over 4.5 million confirmed cases of COVID-19 have been registered around the world, and at least 310,000 COVID-19 patients have succumbed to this disease. At Kolhapur Maharashtra people's were aware by knowing basics of Corona. Very slowly Corona Virus diesease enters via people's out of Kolhapur. And today it's the blast of death occurs in the Kolhapur. The reason is due to unlock the city people's came in contacts, some are not serious about the diesease so not using Mask, not maintaining proper social distance, and some are dead due to innoscence or helpless to go to work. (7) In May 2020, there is a frantic search for suitable therapeutic means to cure this disease. Various drugs have been repurposed for this reason with more or less success. These include lopinavir/ritonavir, favipiravir, darunavir/cobicistat, camostat mesilate/nafamostat, tocilizumab, chloroquine/hydroxychloroquine, colchicine, baricitinib, aviptadil, eculizumab, and remdesivir [3]. As remdesivir is a very promising nucleoside analog originally developed for the treatment of Ebola disease, the goal of this review is to summarize the current knowledge

about remdesivir and its COVID-19 effects. Remdesivir became promising drug against corona but now it's side effects were discussed and today WHO decided that it's not that much promising on CORONA.

Important Points

- It's wellknown antiviral drug used as potential on Nipah Virus.
- It's worked on CORONA
- WHO Gives permission to use in Corona Pendamic situation.
- Study of use of it and it's side effects are the challenge infront of Scientists, Doctors.
- Study should be continue.
- While using it, doctors must take permission from patients and their relatives with giving proper information
- People's are worring about death so they demand directly.
- Minute infectious people's are also demanding remdesivir.
- Sevierness is not there in society so the needy people don't get available of Remdisivir as easily.
- False remdesivir made by faulty companies, it was caught at Gujrat.
- It was sold in Black with higher amount.
- It's not perfect for covid but in some cases it can use with prior precaution.
- Scientists are not confident about it.
- In future people's will face more Heart, Blood diseases and its defects.

Chemical Molecule and a Prodrug

The company Gilead Sciences under the name GS-5734 Remdesivir was developed as antiviral drug. Remdesivir is a nucleotide analog with a molecular weight 602.585 g·mol-1 and cumulative formula C27H35N6O8P. The IUPAC (International Union of Pure and Applied Chemistry) name for remdesivir is 2-ethylbutyl(2S)-2-[[[(2R,3S,4R,5R)-5-(4-aminopyrrolo[2,1-f][1,2,4]triazin-7-yl)-5-cyano-3,4-dihydroxyoxolan-2-yl] methoxy-phenoxyphosphoryl]amino]propanoate [10]

Analog active molecule of remdesivir in cells is a triphosphate, with its most important activity being the inhibition of RNA-dependent RNA polymerase. The active triphosphate is in fact a triphosphate of GS-441524 (C-nucleoside, with ribose connected to the nucleobase via a bond formed between two carbons) that is a final product of the remdesivir activation. However, the activation is a more complex process involving an esterase that removes the ester of 2-ethylbutanol and 2-aminopropanoic acid in the lipophilic part of remdesivir. This is followed by an intramolecular rearrangement, resulting in alanine residue connected to the phosphoric acid moiety via nitrogen (thus forming phosphoamide). This is consequently attacked by a phosphoamidase-forming nucleoside monophosphate that is finally activated to the triphosphate by nucleoside-phosphate kinase. The nucleoside monophosphate may be degraded to a nucleoside that, in turn, can be again re-phosphorylated by kinases [6].

Adverse Effects in Patients

Petvadgaon, kandakgaon, Kagal corona recovered patients are having pain in head, vomating, nervous feeling, mucous attack etc. It may happen due to side effect. Activity shows after intravenous administration, the plasma half-life of remdesivir in the primate model is 20 min. However, the active molecule—triphosphate with 1'-cyano group and 4-aminopyrrolo [2,1-f][1,2,4]triazin-7-yl- subtiutent as a nucleobase—is more stable within the cellular environment. The half-life time of the active triphosphate in non-human primates is 14 h and it is 20 h in humans. Remdesivir at the dose of 10 mg/kg was shown to be distributed to the testes, epididymis, eyes, and brain within 4 h [17]. However, data on the remdesivir routes of elimination, volume distribution, clearance, elimination, protein binding, and overdose are not available yet.

A randomized, double-blind, placebo-controlled, multicenter trial (registered in the database ClinicalTrials.gov under the number NCT04257656) evaluating the effect of remdesivir (200 mg on day 1, followed by 100 mg on days 2–10 in single daily infusions) has shown that the adverse effects of this therapy observed were typically respiratory failure; organ impairment, as indicated by low albumin; low potassium; and low red blood and platelet cell counts. A yellow coloration of the skin was also observed. Other reports show the occurrence of gastrointestinal distress, elevated transaminases, infusion site reactions , low blood pressure, nausea, vomiting, sweating, and shivering. Most of doctors suggest 5 mg on 1day at Kolhapur. [11]

Therapeutic Uses

For therapeutic purpose remdesivir as an analog of ribonucleotide adenosine monophosphate has the potential to compromise RNA synthesis in viral RNA infections. It was tested against various RNA viruses with more or less success. Remdesivir was tested against Ebola, Nipah virus, and Middle East respiratory syndrome (MERS) in human medicine and feline infectious peritonitis. Currently, the world is following numerous clinical trials in which remdesivir is tested in patients with COVID-19.

The In Vitro and In Vivo Testing!

In confusion state what the Corona Virus attack was, Scientists start searching remedies upon it. At the start of the COVID-19 pandemic, no specific therapy or specific preventive therapeutic agents were known and available. Clinical results according to vivo and vitro studies such as Agostini and her team used in her study murine astrocytoma cells and baby hamster kidney 21 cells expressing the murine hepatitis virus receptor. She also used the human lung epithelial cells Calu-3 and human tracheobronchial epithelial cells. As much as her data are interesting, they were not obtained specifically for SARS-CoV-2. Sheahan and his team [30] used in their experiment the primary human lung epithelial cell cultures. They studied remdesivir activity on circulating contemporary human CoVs—i.e., SARS-CoV, but not SARS-CoV-2. Only newer scientific reports deal with SARS-CoV. Choy [31] studied the activity of remdesivir and other substances against the SARS-CoV-2 virus in Vero E6 cells. A nice summary of remdesivir preclinical in vitro and in vivo data was published just at the end of May 2020. Another summarization of the in vitro data for remdesivir [33] and several other therapeutics used in COVID-19 appeared online also very recently in May 2020. As for in vivo studies, the preference is given to the use of primate models, as discussed in the sections on Ebola and MERS.[9]

Ebola patients Improvement shown by Remdesivir, it was symbolically moved remdesivir into Phase 2 of clinical development for its use in Ebola patients.[8] Thus it was sed in a newborn from an Ebola virus-positive lady on the day of birth (together with monoclonal antibodies ZMapp), remdesivir contributed to the eradication of the virus in the child (as proved by PCR) and surprise to study and see the impact of it at the 12 months of age.

(MERS) Middle East Respiratory Syndrome

Covid 19, Coronaviruses belong to the Orthocoronavirinae family, their transmission between various species is one of their properties. Remdesivir seems to represent a viable option in the treatment of various corona (and other) infections through the inhibition of the viral RNA dependent RNA polymerase [6]

COVID-19 Evaluating Remdesivir Use as a Treatment for COVID-19 at Kolhapur Hospital CPR

After the first lockdown period is over, the people's start their work innocent ly. With the prior precautions taken by Health department, Collector, Doctors, within the period of August to December 2020, remdesivir was given to individual COVID-19 patients on a compassionate-use basis. Remdesivir was administered for 10 days (200 mg intravenously on day 1, and 100 mg per day on the day 2–10). An analysis of data for 5 patients were treated successfully and 2 patients (13%) died. Clinical improvement was seen in 15 patients [5].

Every Kokhapur kar was running to get anyhow the Remdesivir so the black mentality increased and it effect directly on the cost which was hike till lakhs.

The alternative drug synthesis was prior for scientists. Now a days it's side effect was shown as post covid effect in the form of mucor attack on teeth, jaw, eyes, brain etc. With increase the number of death.

Alternatives

- Patients must aware about vaccination
- Society must follow WHO Instructions.
- If people want to live healthy life they strictly take care of health!
- Sevier patients must take Oxygen, Steroids, L.M.W Hooren so the people should be recover easily.
- If minor corona attack is found in patients they can use paracetamol, complete rest and nutritious food, Vitamin C, Azithral for bacteria infection.
- Patients must get ventilator, Oxygen bed very easily available in manner.
- Patients must follow the instructions and medical treatment given by Covid Master Doctor.
- They can use injection Vitamin C and Intra vinus niti lone blue, antibiotics if in need
- Remdesivir is use only when if it require, not compulsory.

Conclusions

In conclusion, it declared that the COVID-19 pandemic situation will continue till the people's themselves get aware about the sevierness of it and they have to adopt the habits to take care of Corona like or mutated corona viruses. This is the great challenge in front of medical field. Previously Remdesivir was suggested one of the more promising alternatives for COVID-19 therapy, but the current understanding of this disease and of possible ways of dealing with it requires further investigation as the black, white, yellow mucous occurs very dangerously. In the future, the world human community must obey the rules of nature strictly. As the other living being do not dominate others. It's the last chance infront of Humans to live with nature naturally and decrease the Global warming as much possible. Study more on the alternatives such as Dexamethasone Clixane, Vitamin C, Methya prednisolone Clixane lopinvir etc are the names of antiviral drugs which are useful on Corona treatment.

However, also here the data obtained are conflicting and are not yet fully conclusive and need to be verified [2,3,4]. This is true for all COVID-19 therapies, as more time is needed for evaluating clinical experience and outcomes. ISSN 2349-63

Acknowledgments

- The authors are grateful to Shivaji University for support.
- The authors declare no conflicts of interest.

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Social Development and Resource Management

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Abstract:

Human resource is the most important resource for the nation. It takes seconds to make a choice of wrong persons but takes years to get rid of such people and by the time they spoil the organization. To understand the foundational elements that need to be in place to foster a high performance CSR (corporate social responsibility) organization and develop a framework or roadmap for firms wishing to become a high performing CSR organization.

Walnut is Human resource Management?

Human resource Management is the process of acquiring training, appraising and compensating employees and of attending their labour relations health and safety/, and fairness concern.

Keywords: environmental conditions, Human Resource, self -actualization, labour markets, socially responsible behavior, Human Resource Development,

Introduction:

Human resource professionals have a key role to play to help a company achieve its CSR objectives. Employee involvement is a critical success factor for human resource performance. Human resource managers have the tools and the opportunity to leverage employee commitment to, and engagement in, the firm's CSR strategy. High performing CSR organizations foster a culture of CSR and fully integrate CSR throughout their operations, rewarding and incentivizing CSR decisions and initiatives. Employees prefer to work for organizations aligned with their values; thus, incorporating CSR into the employee brand can enhance recruitment and retention, particularly in tight labour markets. CSR can be applied to the HR toolkit, resulting in a roadmap or pathway for human resource practitioners to follow who wish to contribute to the achievement of their organization's sustainability and business aspirations, thereby improving social and environmental conditions locally and globally

Research Problem:

Resource Management for economic and social Development is one of the issue of the world. Since independence India dose not planned properly the human resource management having about 130 cores of hues population resources. ISSN 2349-6387

Objectives of the study

- 1) To Study Nature of Human Resource & Management.
- 2) To Study Resource Management for social Development
- 3) Higher. Education and skill development are essential to enhance human resources
- 4) The personal function, HR and HR and the future

Methodology

The study focuses on study of secondary data collected from various books National and international journals government reports publications on various websites which has been published and focused on various aspects of human resource development for the society.

Objectives of Human Resource management:

- 1) Helping the organization reach its goals.
- 2) Employing the skills and abilities of the workforce efficiently.
- 3) Providing the organization with well-trained and well-motivated employees.
- 4) Increasing, to the fullest the employees job satisfaction and self -actualization.
- 5) Developing and maintaining a quality of work life that makes employment in the organization

desirable,

- 6) Communicating HRM policies to all employees.
- 7) Helping to maintain ethical policies and socially responsible behavior.
- 8) Managing change to the mutual advantage of individuals groups the enterprise and the public.

1) How to plan the human resource:

It is very difficult to plan the human resource in country like India. Because there is diversity e-inn in human population there are different religion languages cultures religious functions. There are different types of business in the country from Kashmir to Kanyakumari and Gujarat tu to Arunachal Pradesh variations in climatic conditions soil types forest so there are variations in in economic activities like agriculture mining fishery forestry e and industry considering all these things we have to plan the population in accordance with all these things

Another thing is that there is a problem of illiteracy in India more than 25% people are illiterate in 21st century it is challenge to plan the human resource in various economic activities in the country.

Nature of HRM:

- HRM consists people- related functions as hiring, training and development, performance review. compensation, safety and health, welfare industrial relations and the like more important functions of HRM are the building of employee skills, knowledge and capabilities that may not show up in a balance sheet but have significant impact of a firm 's performance.
- HRM necessitates alignment of HR policies and practices with the organization strategies.
- As stated above HRM involves the application of management principles and functions to doubles and deliverables of people management.
- HRM assume that it is the people who make the difference, they alone value and adding to the competitive advantage to organizations.
- HR activities, both doubles and deliverables are not the sole responsibility of the HR specialists line managers and equally responsible to carrying out the activities.
- HR functions are not confined to business establishments only, they are applicable to non-business organizations too such as education, healthcare recreation and the like.

HR Functions:

- Planning Preparing forecasts of future HR needs in the light organizations environment mission and objectives strategies and internal strengths and weaknesses, including its structure culture, technology and leadership.
- > Staffing Obtaining people nestle the appropriate skills, abilities, Knowledge and experience to fill jobs in the work organization. Key practices are human resource planning, job analysis, recruitment and selection.
- > Developing Analyzing learning requirements to ensure possess the knowledge and skill to perform satisfactorily in their jobs or to advance in the organization performance appraisal can identify employees key skills and competencies.
- Monitoring- The design and administration of reward system HR practices include job evaluation performance appraisal pay and benefits.
- Managing relationships- Encompasses arrange of employee involvement / participation schemes in non-union union work places In a union environment this includes negotiating contracts and administering the collective agreement.
- Managing change- helping others to envision the future communicating this vision, setting clear expectations for performance and developing the capability to reorganize people and reallocate other resources.

> Evaluating - Designing the procedures and processes that measure, evaluate and communicate the value added component of HR practices and the entire HR system to the organization.

2) Human Resource Development:-

A matter of concern. The social sector development is a major activity which is undertaken by the government under the broad category of development activities within the sector priority areas are defined to comprise elementary education, health and family welfare, nutrition, water supply. Sanitation and rural development. These are sectors which are particularly important for human development. Social sector development by the government has a special importance because it satisfies social wants of the people and enables social welfare society maximization of the society as a whole. It has been witnessing a serious of reforms in government is the biggest spender in the way in which surely will have a bearing on the functioning of the economy in general social and economic development of the weaker sections in particular. The so called reforms composed of structural adjustments and liberalization policies are more or less based on market approach to development and therefore they are likely to have adverse impact on the poor and unemployed, hence it spends a dominant proportion on Revenue expenditure 92% in total social sector expenditure.

3) Higher Education skill development are essential to enhance human resources:-

Education has played significant role in facilitating social and economic progress of a country. Education improves functional and analytical ability and opens up opportunities for individuals and also groups to achieve greater access to labour markets and livelihoods. A better educated labour force is essential to meet the labour supply requirements of faster growth. Education is not only instrument of enhancing efficiency but is also an effective toll of widening and augmenting participation and upgrading the overall quality of individual and social life.

Skills: - Skills and knowledge are the engines of economic growth and social development of any country. India is an transition to acknowledge based economy and its competitive edge will be determined by the abilities of its people to create share and use knowledge more effectively. The skill development initiatives support employment generation economic growth and social development processes. Skill development policy will be an integral part of comprehensive economic, labour and social policies and programs.

4) The Personal function and the future

- 1) Committed people are the root of organizational success.
- 2) All the organization's people at ail a levels must be treated with respect and dignity. If commitment is to be achieved
- 3) The values and belief of the organization as they are practiced (not stated) from crucial backdrop the achievement of commitment and quality.
- 4) People policies must be integrated into the objectives of the organization to ensure a commor purpose.
- 5) There is within people a huge and largely entrapped find of goodwill and desire for personal fulfillment.
- 6) Organization must have a mission a sense of purpose if people are to give their wholehearted support. No better mission exists than customer service and product quality achieved through team-work
- 7) A sound financial base, the aim of all organizations, is achievable through committed people. The aim is however the continuity of the organization above other considerations.

Conclusion: -

Any kind of organization cannot be run without human resources. Under human resource management human being are treated as a resources i.e., assets to draw upon. Therefore, human resources

become unending sources of strength, ability, competence, skill creativity, knowledge. Attitude aptitudes values, beliefs, talents, efficiency, decision making powers valor, zeal, enthusiasms for utilization for accomplishment of organizational objectives. Human resources are most vital and play crucial role in management process.

Higher education and skill development are essential to enhance human resources. In knowledge society, the quality and relevance of education would play crucial role in economic development the education is social process.

Skill development policy will be an integral part of comprehensive economic, labour and social policies and programmers.

Recommendations:

It is observed that the country geographically scattered south and north in long distance. There is diversity in geography, climate, religion, plants, animals, culture. So it is difficult to plan the human resource. We have different and independent states and their administrators in the country So they have to give some independence to plan their human resource planning according to their natural resources and there must be two committees to finalize the planning of human Resources the committee one is subcommittee and another is main final committee which will be recommend to state government and after it will be finalize in in their cabinet after it goes to Central human resource development commission it will be finalized and afterwards actually implementation will be held.

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Survey of Powdery mildew fungi on some medicinal plants in Gautala forest, Aurangabad Maharashtra

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Abstract

Medicinal plants are very important in human health care as well as wealth care is concerned. Depending upon environmental conditions Powdery mildew disease may cause significant destruction and loss in (Angiospermic) medicinal plants.

Therefore survey of the area was carried to study powdery mildew infection on medicinaly important plants from Gautala forest. Four powdery mildew fungi Oidium abri, Oidium caricae papayae, Microsphaera pseudolonicerae and Oidium xanthemi, species on Abrus precatorius, Carica Papaya, Cocculus hirstus and Xanthium strumarium respectively have been collected from Gautala forest, Kannad Dist. Aurangabad (MS) during phytopathological survery of from November 2020 to January 2021.

Keywords: Powdery mildew, Gautala forest, Medicinal plants.

Introduction:

Medicinal plants are very important in human health care as well as wealth care concerned. According to WHO about 80% of worlds population depends on traditional medicine for their health needs. Powdery mildew are very common on cultivated as well as forest medicinal plants grows luxuriantly in dry seasons. Depending upon environment conditions the Powdery mildew disease may cause significant destruction and loss in medicinal plants and yields.

The Gautala reserve forest is situated at North-West side of Kannad. The forest is spread upon sahyadri hill ranges of Western ghats. Small trees, Shrubs, Herbs Climbers and Grasses are medicinally important component of Gautala forest. Therefore an extensive survey of the area was carried out to study Powdery mildew infection on various medicinal plants.

Materials and Methods:

During the primary investigation of Powdery mildew on medicinal plants from Gautala forests in the month of November 2020 to January 2021. Powdery mildew infected four plants along with stem, leaves were collected in seperate paper bags and brought to the laboratory for investigations. The intensity of disease was notice along with symptonological characteristic features of Powdery mildew from infected host. However in pathological investigations slides of infected plant parts were prepared under pathological investigation Conidia, Conidiophore and mycelium observed. In some cases perfect stage of pathogen was reported. However Powdery mildew fungi with host medicinal plants were identified with the help of reputed literature.

Results and Obeservation:

During the phytopathological survey from the month of November 2020 to January 2021, Powdery mildew infection on four plants species abrus Precatorius, Carrica papaya, Cocculus hirsutus and Xanthium strumarium was observed.

Oidium abri on Host Abrus precatorius L. (Family Fabaceae)

Medicinal importance

Plants used in nervous debility and locally lacuderma, stiff joints, paralysis, alopecia and obstinate cough.

The leaves and roots contain glycyrrhizin and minute amounts of the toxin abrin. They used internally to treat sore throats and a range of chest conditions including asthma and dry coughs. Stem decoction is used as a treatment for stomach ache, colds, sore throat and asthma.

Pathosymptoms on host

The infected samples were collected from Kolawadi region of Gautala forest range during the month of January 2021. Powdery mildew normally appears as white florae patches on both the surface of the leaves when plant start flowering and continuoes till the end of session.

Pathogen

Odium abri Hosagoudar has been reported the pathogen for this is hyphae sepatate hyaline, 4 µm in width conidosphore straight $59 - 78 \,\mu\text{m}$ in lenth conidia ovoidal 14.3 to 39.1 μm .

Oidium cariceae papayae on Host Carica papaya Linn. (Family - Caricaceae)

Medicinal importance

The many benefits of papaya owed due to high content of vitamin A, B and C proteolytic enzymes like papain and chymopa pain which have antiviral, antifungal and antibacterial properties. It can also used treatment of a numerous disease like warts, corns, sinuses blood pressure, dyspepsia amenorrhea and stimulate reproductive organs.

Pathosymptoms on host

Papaya is fruit yielding plant. The samples of this infected plants were collected from Hivarkheda starting area of forest in the month of December 2020. The Powdery mildew developes as white granular growth on both the side of leaves. Many times entire leaf blade may be covered by powdery mildew mass.

Pathogen

Oidium cariceae – papayae Yen

Mycelium hyaline branched, sepatate condiophores erect 68.5 – 121 µm in length, conidia cylindrical 34.6 – $45.4 \times 11.5 - 14.8$ in size.

Microsphaera pseudolonicerae On Host Cocculus hirsutus L. Diels. (Family-Euphorbiaceae)

Medicinal importance

Cocculus hirsutus is a popular medicine in Asia especially Pakisthan and India. Cocculus hirstus is used in various state of India by most people especially in rural areas depending on herbal medicines tract many disease including inflammation related ailments such as rheumatism arthritis, muscle swelling insect bites, pains etc. 2349-6381

Pathosymptoms on host

Specimen was collected from Kolwadi area of Gautala forest in November 2020. Disease reported as Powdery growth on upper surface of leaves as well as lower surface of leaves.

Pathogen

Mycelium branched conidiophores simple 45.3 – 112 μm long, septate 4-8 μm in width, conidia solitary ellipsoidal, $30 - 45 \times 11.2 - 21.8 \,\mu m$ in size.

Oidium xanthemi on Host- Xanthium Strumarium Linn (Family - Asteraceae

Medicinal Importance

Xanthium Strumarium has many medicinal properties like cooling, laxative fattening, anthelmintic, tonic, digestive, antipyretic, improves appetite. The plant is considered to be useful in treating long standing cases of malaria, rheumatism, kidney disease, tuberculosis.

Pathosymtoms on host

The species has been collected from Gautala forest in November 2020. The white Powdery mildew infection was found on both surface upper is large and lower is less it turns brownish white colour as disease.

Pathogen

Mycelium superficial dense, hyaline, septate 6-8 µm in diameter, conidiophores simple erect, 2 -3 sepatate, conidia unicellular hyaline rectangular or barrel shaped.

Discussion

Powdery mildew is extremely common and widepred and economically one of the most important groups of disease infecting many plants. Extensive survey of Powdery mildew carried out in the present work and record the incidence of powdery mildew fungi on four medicinal plants. For which extensive visits carried out to different localities in the region. Similarly repeated visit where made to disperse prone areas to observe the incidence of powdery mildew and to capture stages of development on medicinal plants.

Symtomological work, etiology and morphological feature of causal organism may be conidial statge or both conidial and ascocarp stages are notice.

It was observed during survey that Powdery mildew on four medicinal plants were found to be flourished with perfect and oidial stage i.e. Oidium abri on Abrus precatorius, Caricae papayae on Carica papaya, Microsphaera pseudolonicerae on Cocculus hirsutus and Odium xanthemi on Xanthium Strumarium.

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Geographical Study of Monsoon and Drought Prone Region of India

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Abstract

The drought is significant problem in all Maharashtra it become too dangerous in drought prone region. The drought is meteorological Phenomena generally period of scarcity of water called as drought. Today intensity of drought condition increase, region to region their cause's nature change but all drought development causes mainly grouped in two groups. These are as following.1. Causes related increasing outgoing water - due to increase population, change occupation structure, wrong use of modern techniques, uneven distribution of water, wrong use of government irrigation services. Causes related decreasing incoming water- variability of rainfall, nature of monsoon, geological compotation and structure, deforesumon.
observation, survey method, book reference, graphs reference etc. geological compotation and structure, defore<mark>station. The study of drou</mark>ght prone region methodology used mainly

Introduction-

Drought is a temporary reduction in water or moisture availability significantly below the normal or expected amount for a specific period. According to High powered committee on Disaster management Report, 'Any lack of water to satisfy the normal need of agricultural, livestock, industry, human population etc. May be termed as drought. This condition occurs either due to inadequacy of rainfall, lack of irrigation facilities, under exploitation or deficient availability of water for meeting the normal crop requirements in the context of the agro climatic conditions prevailing in any particular area.

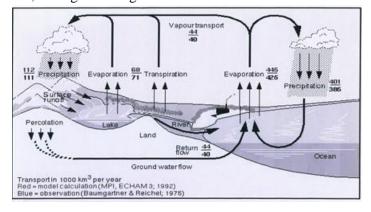
Drought in this context can be defined as adverse M.I. or adverse water balance which may be attributable not only to a prolonged dry spell due to lack of sufficient rainfall but also due to such other factors as excessive evapotranspiration losses, high temperature, low soil holding capacity etc. The drought is an adverse situation caused by lack of rainfall. The lack of rainfall may be reviewed form two aspects, firstly the rainfall may insufficient, and secondly it may be sufficient for the region as a whole but with wide gap separating two wet spells. Thus both the amount & time of rainfall are important. In other words drought is a relative phenomenon therefore the amount of rainfall is not the important as its effectiveness.

Objectives

- 1. To study the causes of drought conditions. 2349-638
- 2. To study the climatic conditions in drought prone region of India.

Interrelations of Climatic Conditions and Drought phenomena-

Although different types of droughts can occur independently, the occurrence of meteorological drought is the primary cause of all the other types of drought. Prolonged meteorological drought will result in hydrological, agricultural, ecological drought in succession.



Causes of Droughts in India-

1. Variability of rainfall:

This is property of Indian monsoon. The country average variability 15-30% but it changes spatially. Generally Coastal to interior region & high rainfall to low rainfall region in increase. The Maharashtra's drought prone region located interior of continent & average precipitation moderate to low so variability of precipitation high than country average rainfall. The drought prone region variability of rainfall above 30%, it dangerous it become first reason develop drought. When rainfall receive higher (30%) than average rainfall such period local people use maximum water, develop various private industry, occupation, so need of water increase but next year when rainfall receive below (30%) than average rainfall that time complete water need become most dangerous. We explain above situation in numerical form as following.

Average Rainfall consider = 100 unit.

Available water human need purpose = 50 unit.

Variability of Region = 30%

When rainfall receive 30% higher = 130 unit.

Human use application increase up to = 65 unit.

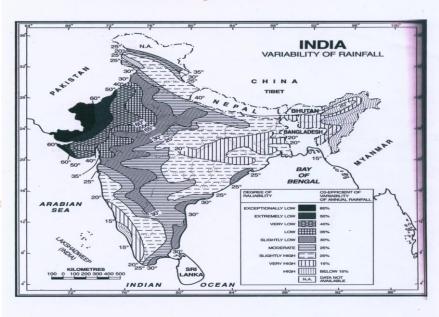
Next year received rainfall 30% low

So available water to human = 35 unit.

The need of water 65 unit & available water 35 unit, so 30u nit scarcity of water situation it become up to 40%.

Means years least 40% period become drought period use purpose.

Variability of Rainfall



Climatological Atlas of India, IMD 2002.

Rainfall Distribution

Area in %	Rainfall in c.m.
11	above 200
21	125-200
37	75-125
24	35-75
07	below -35

Compiled by Researcher

2. Nature of Monsoon-

The Maharashtra's drought prone region receives average rainfall 50-100 cm. It is not very low but receive limited period mainly four rainy months, remaining eight month's are majorly dry months. The four rainy month receiving naturally water further available surface water body form & ground water form. But after rainy season day by day decrease mass of water & at least it become very low. In such year receive low rainfall than average rainfall this year early loss water & develop drought.

- In Example explain it.
- Region receives 100 units water through rainfall.
- Region available 50 units water human man
- Use purpose. Its capacity complete 10 month's human need so least 2 month become drought. Means April & May become drought period.

Some year monsoon come late one month, generally year end drought prone region water bodies become dry so late monsoon time develop drought. While some year rainfall stop at early one month that year summer months least develop drought. So nature of monsoon is major reason of drought.

3. Geological composition & Topographic Structure

Geological composition & topographic structure affected of on water store in the earth surface & on the earth surface respectively. Metamorphic & sedimentary geological composition smooth & helpful penetrates water so such geological composition region ground water mass high. While igneous hard rock geological composition has very low capacity of water penetration process. Maharashtra topography became through volcanic eruption process, geological composition consist within igneous rock so ground water mass very low. Surface water storing good due to plateau topography naturally develop tank, tropical climate ,high temperature, responsible high evaporation manly summer season ,so end of summer scarcity of water crate in this way geological composition and topographic structure affecting on drought development

4. Deforestation

Forest cover increase the chance of rainfall as well as directly increase incoming water amount while indirectly decrease loss of water. Dense forest cover increase rainfall ,stop the surface runoff mainly rainy season , decrease rang of temperature ,decrease evaporation rate generally at forest cover humidity above 40% than barren region .above all process helps to store water in environment. The Maharashtra drought prone region highly deforested, it affected on environmental condition the regions naturally water holding capacity decrease due to deforestation day by day ground water level, surface water level ,environmental humidity decrease it help to Develop drought.

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Use of YouTube in Libraries

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Abstract:

Social networking sites are very effective and useful media of communication. Million of peoples, organization and institutions around the world are using YouTube channel in pandemic situation covid-19. Now a days covid-19 is major barrier to connect the users so YouTube is useful media to connect with the Users digitally. Many libraries are using YouTube channel to share information about how their users read, circulate, discover and share lots of data, news and information. The present paper focus on application and limitation of using YouTube in the libraries.

Keyword: YouTube, Libraries, Users

Introduction:

Social media tools and technologies are an online platform. That allows Users to create a public profile, institution profile ,organization profile and interact with other users and connect each other through a virtual community. Librarian can create share ideas and Information in that virtual world. You Tube is the most popular social networking tool.

History:

It was founded in February 14 2005. By Steve Chen Chad Hurley and Jawel Karim . YouTube is an American online video-sharing platform headquartered in San Bruno, California. Google bought the site in November 2006 for US\$1.65 billion; YouTube now operates as one of Google's subsidiaries. YouTube is the best second popular website in the world . YouTube is a popular video and images sharing application on the internet it is very easy for libraries of their to upload of their own events.

Since 2012, YouTube has gone from strength to strength and now finds itself as a multi-billion dollar company. In terms of the site itself, it has recently added live streaming, around 5 billion videos are watched each day, over 1.3 billion people use the site, and 300 hours of video are uploaded each and every minute. In the years ahead, the support for YouTube is only going to get stronger and it has been predicted that around half of all under-30s will not pay for a TV subscription because of YouTube!

2349-6

Features of YouTube:

1. Video technology

The platform is able to serve videos at optionally lower resolution levels starting at 144p for smoothing playback in areas and countries with limited <u>Internet speeds</u>, improving compatibility, as well as for preservation of limited cellular <u>data plans</u>. The resolution setting can be adjusted automatically based on detected connection speed, as well as be set manually.

- a. Uploading
- b. Quality and formats
- c. Live streaming

Objective of the study:

The present paper deals with an attempt

- 1)To identify the various applications of YouTube in the context of libraries
- 2)To identify the limitations of using YouTube in the libraries.
- 3)To give algorithmic framework regarding use of YouTube in the context of libraries.

Limitations of the Study:

- 1)YouTube has great easy and faster.
- 2)YouTube define his great potential the present paper deals with some application and limitation YouTube in library context in this covid-19 pandemic YouTube is the preferable media to pass out the information in library updation you can connect number of peoples this YouTube channel

Applications:

YouTube as a website and service contains many advantages that reflect positively on the users and the channel creator as well librarians. There are various applications of YouTube. The libraries can develop there own social networking sites for the users. Largest number of peoples use this biggest social networking site. you tube channel use for advertisement. YouTube is best option for advertising of our library resources or library services. YouTube channel provide the information about how their Users read, circulate, discover, share the lots of data, news, and information. YouTube playing vital role to develop better' relation in library and users.

Library Marketing:

- Library can create their own library channel on YouTube. Through these channel they can create library awareness programme among the Users Ex. Warana Library Vachankatta.

 Warana Library Vachankatta YouTube
- The basic objective behind library marketing of library services and products are to achieve users satisfactions in digital environment with the help of YouTube Channel.
- YouTube is a popular video and images sharing application on the internet it is very easy for libraries to upload of their own events and activities. Librarian Day 12th august https://youtu.be/Ms82-WcZv1Q
- Libraries can promote the use of available reading material available on internet (ebook and e-journal) information services through YouTube.
- Libraries can organization of workshop/training programmes about awareness of resources available on National Digital Library of India via YouTube Channel.
- To Improve the image of library and promote the use of the services and products.
- To provide carrier guidance and counselling services by the library to users with the help of you tube

2. Library and information service:

- YouTube is being used to provide reference services by some libraries. In this Pandemic situation more use of social networking sites has increased.
- Attract the Users by organizing book exhibitions of new books with the help of YouTube available
 in the library should be displayed at virtual place. New arrival list
 https://youtu.be/HjSK13RvvuA
- On the occasion of World Book Day some libraries conduct programme on YouTube to provide referral services links initiative users about to research https://youtu.be/WquNiTZYd-s
- Library orientation program
- YouTube can be used to send brief updates to Users reading promotion.
- Interaction with other YouTube users is possible through the comment process.
- Increase the number of users and overall satisfaction with library services
- Many Libraries provide book reviews and also attach book list in the description box.
- Several libraries have also added to ability to search their online catalogue from YouTube.

- Interaction with other YouTube users is possible through the comments.all information available on YouTube
- YouTube is easy to share, You can share videos with users and collaborative college student in <u>Twitter</u>, <u>Facebook</u> or send the video through e-mail to the users. Librarian can attach invitation links to have your viewers conveniently subscribe as well, You can also blog about it and then embed the YouTube video on your college website.

3. Mixture complex application:

- YouTube channel are very effective and useful media of communication.
- Communication is one of the YouTube important feature. Owner can solve question of subscriber or student with the help of comment.
- Libraries can upload huge amount of information using YouTube and transmit this information to any where anytime without any geographical barrier.
- YouTube has privacy policy so you can off the comment section for some data.
- If student/User subscribe library YouTube channel then Channel gives all update to student or use
- No repetition of channel name. Librarians can use their YouTube channel to provide library instructions such as how the users browse the library database and how the users can do a professional search process.
- Librarian upload workshop on YouTube channel such as database types, citation instructions, using references, understanding library software system and many other instructions.
- It is really an interesting channel that provides a helpful information to the users in a smart and quick way.
- Library has uploaded videos about their collection and events.
- Contribute to a better visibility of the library in the digital environment
- Many Libraries are Circulating the larges scale of information within a second to large no of Users.
- Most of Users reading have spent some time on YouTube. Just about every video imaginable can be found on site, from how-to-videos to political ads. The influence which YouTube has on communication can be seen through the various videos which are put out on the site by different organizations. As such, it is important to question if the media influence brought about by YouTube is for the greater good or hinders the ability to share thoughtful content with society.

4. Limitations of using YouTube in libraries are mention below:

- YouTube is one of the most popular social media tools many all type of users subscribe there are many challenges and risk in using these social media tools which librarians must be aware of.
- Librarians need to spend a lot of time on this social media tool.
- Users personalized information can be misused.
- YouTube enables inexpensive distribution of educational content, including course material from educational institutions.
- Libraries must have the original content or have the explicit permission of the author who creates the content to include it in your video, Libraries must own the copyrights and distribution rights for all audio and video content that you upload to You Tube
- Negative post, tweets, images, videos, audios, comments can create the problem.

5. Algorithm framework:

- Library showed frequently update video on their YouTube channel
- Content policy should be design
- YouTube increase both the number of users and there all satisfaction with library services

- Student always busy with finding something new and current information so it can meet the aspect
 of users.
- Librarians can provide a whole programme of instructional lecture in their YouTube channel, such as steps to create a personal library guide.
- Feedback in YouTube is very important because it is the only signal for your services right way or not given to the Users.

Conclusion:

YouTube encourages users to take more advantages of library services it is the useful digital media in this covid-19 pandemic so it has been recommended that YouTube channel should be useful media for libraries. YouTube is the largest online video platform and second most visited website. Libraries can handle the Users groups, according to their interest and can serve them by giving SDI and CAS Services. Increases both the number of users and their overall satisfaction with library services. Research students always busy with finding something new and current information so it can meet the aspects of users.

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Application Of Information & Communication Technology (ICT) In Library

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Abstract:

Information & Communication Technology is playing a significant role in housekeeping activities and services in libraries. ICT consists of three terms – Information, Communication & Technology. Information plays an important role in development of knowledge. Computer, communication & technologies impact on libraries management & services. With the help of ICT, we can do our work in libraries like acquisition, cataloguing, classification, serial control, circulation, stock verification, information storage / retrieval, services of libraries like reference / information service & other services by using library software's. In libraries communication technologies used for their uses. Communication technology is developing at a rapid pace. The need to communicate more quickly and more efficiently has become essential in our technological society.

Keywords - Information, Information Technology, Communication. ICT – Information Communication Technology, library services.

(1) Introduction:

Information Technology (IT) has made significant contribution in all respect of day-to-day life for example majority of peoples are using mobile phone, watching television, listening radio, using computer, etc.Information technology provides very advance facilities like video conferencing, satellite communication, clouds computing, networking, and artificial intelligence in robot. The implementation of IT has changed the structure of libraries. The information itself and way it is accessed have undergone changes owing to the developments in information and communication technology. Quick and easy access to every required information is a supreme importance especially for libraries. Information Communication Technology may be defined as technology which is used to store, progress & communicate the required information on demand or in anticipation. ICT helps uses to manipulate store and transmit information. It involves elimination of telephone network which saves large sum of money of academic libraries. ICT assists the information professionals need to have knowledge and skills in ICT techniques and handling procedures. In this way academic libraries must continuously improve themselves with up-to-date computer technologies for knowledge transmission & networks. ICT plays an important role in libraries & their professionals.

(2) Objective:

- > To guide the library professional regarding various workflow of housekeeping operation using ICT.
- > To provide a pathway on the different features of ICT for web cataloguing and classification.
- ➤ To create consciousness among library professional and users on the use of OPAC and Web- OPAC as a single search platform to library resources.
- ➤ To provide an awareness of the transcendent use of ICT for quick library operation.

(3) What is Information Technology?

According to ALA Glossary: "Information technology is the application of computers and other technologies to the acquisition, organization, storage, retrieval, and dissemination of information."

According to British Department of Industry: It defines Information Technology as "The acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by microelectronics-based combination of computing and telecommunication" According to Webster's New Encyclopaedia: "Information Technology is the collective term for various technologies involved in the processing and transmission of Information they include computing telecommunications and microelectronics"

(4) Communication Technology: Communication technology is the electronic system that transmitted data over communication line from one location to other. (i.e., sharing of data & information, programs). Communication ways are transmitter, channel & receiver. Communication system divided into 5 types: i) Radio Communication, ii) Microwave Communication, iii) Satellite Communication, iv) Co-axial cable communication & v) Fiber optics communication. In this way above three terms when combines with each other to form ICT.

According to Carter (1987), "The system & devices used for receiving, storing, analysing & communication information in all forms and their application to all aspects of our lives including in office, home, factory."

According to UNESCO (2002), ICT is "Combination of informatics technology with other related technologies to process of communicates information. ICT uses newest technologies to process and communication information. It deals with computer & computer software for store protects, process and transmit / retrieve information."

(5) Application of ICT in Libraries: The application and accessibility of IT facilitates the free flow of information, creative expression and effective management. Libraries are using the Information Technology in general and to automate a wide range of administrative and technical process, build databases, networks and provide better services to their users. The use of IT has become imperative for the efficient management of modern libraries. Library Automation is one of the major applications of IT in libraries. It is helped to change the libraries In-house activities (Acquisition, Cataloguing, Indexing, Serial control, Circulation etc.) from manual system to automation (Venkataraman, 1998).

Application of Information Technology in Libraries are repositories of knowledge and information and are indispensable in the information age. With the merging of information technology with library science, the nature of libraries and the scope of their services have radically changed. Organizing and disseminating information.

- **5.1) Library Management:** Library management includes the following activities which will certainly be geared up by the use of these fast IT developments: Classification, Cataloguing, Indexing, Database creation, Database Indexing.
- **5.2)** Library Automation: Library automation is the concept of reducing the human intervention in all the library services so that any user can receive the desired information with the maximum comfort and at the lowest cost. Major areas of the automation can be classified into two -organization of all library databases and all housekeeping operations of library.
- **5.3**) **Library Networking**: Library networking means a group of Libraries and information Centres are interconnected for some common pattern or design for information exchange and communication with a view to improve efficiency.
- **5.4)** Audio-Video Technology: It includes photography, microfilms, microfiches, audio and tapes, printing, optical disk etc.
- **5.5**) **Technical Communication**: Technical Communication consisting of technical writing, editing, publishing, DTP systems etc.

(6) Impact of ICT on Library Services:

- (6.1) Library Services in Digital Development: Most of the researches on digital library development have focused on access to and retrieval of digital information but they have overlooked the personalized service aspects, as primary goal of library information services. However, the technology and information resources, on their own, cannot make up an effective digital library. In this changing scenario, reference works of modern libraries are influenced by a set of related technical and economic factors, especially the increasing use of technology and techniques.
- **(6.2) Web-Based Reference and Information Services**: Several reference and information services are now available on the web and many of these services are provided by non-library organization.

Also, a web site that provides a categorized listing of libraries that offer real-time reference services using specific software,

- **(6.3) Digital Reference Services for General Public**: Today web-based digital reference services are being provided by a network of public libraries. The users make their query on an enquiry page and it is automatically routed to one of the participating libraries which records it as an e-mail message to the user containing necessary and available information.
- **(6.4) Co-Operative Digital Library Services**: The rising cost of digital reference sources and its proper processing by the trained manpower and also the initial infrastructural investment for introducing new services in libraries have influenced different Emergence of Digital Library Services203 organizations to choose a co-operative model of digital reference services.

(7) Advantages of ICT in Libraries.

Introduction of Information Technology (IT) in library has enormous advantages. According to Igbeka (2008), and Adeleke (2014), they enumerated the benefits of ICT to library services as follows:

- ➤ Help researchers for effective literature review search needs.
- To introduce and provide new services, revitalize the existing services by providing faster access to the resources, by overcoming the space and time barriers.
- The Online Public Access Catalogue (OPAC) is the computer form of assisting library users to catalogue library materials.
- To provide need-based, (tailor made), browsing and retrospective search services to the users. To have large number of databases in CDs.
- > Computers have aided libraries with digital library which occupies little space but large storage capacity.
- To utilize the staff for providing better information services.
- To retrieve and disseminate the information in user-defined format.
- To develop/upgrade the abilities of professionals.
- Information is preserved, conserved over a long period of time without image or quality degradation.
- To encourage networking and resource sharing at local level.
- Placing orders, checking to avoid duplication of books, price, ordering etc. are done very effectively using ICT technique.
- To have access to a number of national and international journals which are being published only in machine readable form.
- To digitize the documents for preservation and for space saving.
- To capture, store, manipulate, and distribute information.
- To improve the efficiency of library functions.
- Helps in the process of the serial control, preparing union list of serials and circulating via e-mail to the branch libraries at different locations.
- To improve the cost effectiveness of library operations.
- To support library functions such as circulation, serials control, acquisition control, stock maintenance and other routine office works and developing in-house database.
- To access library catalogues databases of other libraries through library networks.
- Global integration of library services.
- > Universal access to information due to the use of Internet.
- > Increased innovation and transformation of knowledge found in hardcopy books into softcopy.
- ➤ Change in the philosophy of the library from being a physical structure housing books to a database for universal access of information.
- IT has reduced the services/organization of the library by storing, retrieving and discrimination of information in real time.
- ➤ Library automation has been of tremendous help to the library workers

(8) Challenges of ICT in Libraries

- ➤ Poor funding of ICT infrastructures.
- Constant change of software and hardware.

- > Irregular power supply.
- > Insufficient band-width.
- Lack of technical IT knowledge by library staff.
- Copyright & intellectual property right management.

(9) Conclusion:

The wide application of information communication technology not only brings major change to library and information institutions, but also changes the passive, single and traditional library and information service model, expand the service scope, improves service levels and quality, and speeds up the modernization of library and information service.

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Wealth of Ayurveda From Sangli, District, Maharashtra

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Abstract

Sangli district is one of southern district of Maharashtra State. It is situated between the latitudes of 160 43' and 17° 38' N and the longitudes of 73° 41' and 75° 41' E. The district is bordered by Satara district on the north – western side. On the north – eastern side it is bordered by Solapur district . On the southern side it is bordered by Belgaum and Bijapur district of Karnataka State . It meets Kolhapur district in south – western side and Ratnagiri district lies on the west of Sangli district. Total area of district is 8501.05 sq. km. and lying mainly in the basin of river Krishna and tributaries Warana, Yerala, Agrni and Man. District has ten talukas, of which Shirala taluka and to some extent Atpadi taluka are hill<mark>y</mark> , while the gr<mark>eater part of district l</mark>ies in plains . The average rain fall of the district is 692.40 mm per annum . <mark>P</mark>etlond regio<mark>n of the Shirala taluka and its</mark> adjoining is a part of Chandoli Wild Life Sanctuary recently declare<mark>d</mark> as Chand<mark>oli National Park and Sahyadri Tiger P</mark>roject. Another Wild Life Sanctuary in the Sangli district is Sagreshwar W<mark>ild Life Sanctuary . Westward part of the distri</mark>ct is situated in the Western Ghats ranges shows tropical evergreen, tropical semi-evergreen and tropical moist deciduous type of vegetation, while eastern part and major region of <mark>district shows tropical dry deciduous and open tho</mark>rny scrub vegetation . Various types of vegetation of district h<mark>arbors variety of medicinal plants . Survey of plant weal</mark>th of Sangli district resulted in enumeration of over 300 plant species of some therapeutic value. List of the medicinal plants with their botanical and vernacular names , part of p<mark>lant used , medicinal values along with their status of occ</mark>urrence are discussed in the present paper.

Keyword:- Ethno-botany, Plant parts uses, tradition.

Introduction: -

Plants have been used in all the traditional Indian medicine from time immemorial, particularly in folk medicine and house hold remedies. The world health organization estimated that more than 80% of the world population relies on traditional medicine practices for primary health care needs. Over 75% of the world population is depending upon local health practioners and tradition medicines for their primary needs (Kattaamani et al., 2000) India represented by rich traditional practices The present research paper focused on traditional uses of medicinal plant parts and natural diversity. India has rich traditional knowledge of medicine include Ayurveda, Siddha, and Unani use over 7500 plant species have reported. Herbal Medicine are assumed to be a great importance in the primary health care of individual (Sheldon et al., 1997). In India During lat two decades ethnobotanical studies with good scientific base have been appeared.

Enumeration of Medicinal Plants of Sangli District.

Sr. No.	Name of the Plant	Vernacular Name	Part used	Status	Specimen No.
NO.	P				
	DILLENIACEAE				
1.	Dillenia indica L.	Mota Karamal	Seeds	Cultivated	VBA 85
	MENISPERMACEAE				
2.	Tinospora cordifolia (Wlld) Miers	Gul Vel	Stem	Cultivated	VBA 814
	NYMPHAEACEAE				
3.	Nymphaea nouchali Burm .f.	Kamal	Rhizome	Cultivated	VBA 122
4.	Nelumbo nucifera Gaertn	Kamal	Rhizome	Cultivated	
	PAPAVERACEAE				
5.	Argemone mexicana L.	Pivala Dhotara	Seeds	Common	VBA 1069
	CAPPARACEAE				
6.	Crateva adansonii DC.	Waiwarana	Lvs	Wild	VBA 622

	VIOLACEAE	I			
7.	Hybanthus enneaspermus (L.) F. Muell.	Purushratna	Stem	Wild	VBA 955
	BIXACEAE				
8.	Bixa orellana L.	Shendri	Seeds	Wild	VBA 40
	PORTULACACEAE				
9.	Portulaca oleracea L.	Ghol	Lvs	Common	VBA 925
	CLUSIACEAE				
10.	Garcinia indica (Thou.) Chois.	Kokam	Fruits	Wild	VBA 90
	MALVACEAE				
11.	Bombyx micranthus (L.f.) Riedl.		Seeds	Wild	VBA 1065
12.	Hibiscus rosa-sinensis L.	Jaswand	Lvs. Fls	Cultivated	VBA 931
13.	Hibiscus sabdariffa L.	Lal Ambadi	Lvs.	Cultivated	VBA 76
14.	Sida acuta Burm.f.	Bala	Root	Common	VBA 548
15.	Sida rhombifolia L. var. rhombifolia	Jangli Methi		Common	VBA 842
1.0	BOMBACACEAE	C 11. Cl 1.	т .	C 161	X/D A 24
16.	Adansonia digitata L.	Gorakh Chinch	Lvs	Cultivated	VBA 24
17.	Bombox ceiba L. STERCULIACEAE	Kate Savar	Fls	Wild	VBA 499
18.	Helicteris isora L.	Murad Sheng	Frts.	Wild	VBA 764
19.	Sterculia urens Roxb.	Kandol	Lvs	Wild	VBA 492
17.	ZYGOPHYLLACEAE	rando	1140	WIIG	1 DA 172
20.	Balanites aegyptiaca (L.) Del.	Hinganbet	Seeds	Wild	VBA 488
21.	Tribulus terrestris L.	Sarata	Fruits	Wild	VBA 521
	OXALIADACEAE				
22.	Biophytum sensitivum (L.) DC.	Lajalu	Roots	Wild	VBA 982
	RUTACEAE				
23.	Aegle marmelos (L.) Corr.	Bel	Lvs, Frts, Roots, Stem Bark	Cultivated	VBA 491
24.	Murraya koenigii (L.) Spreng.	Kadi Patta	Lvs, Roots	Wild	VBA 857
25.	Toddalia asiatica (L.) Lam.	Jangli Mirachi	Lvs, Roots	Wild	VBA 990
	(=,/ =		Bark		
26.	Zanthoxylum rhetsa (Roxb.) DC.	Tirphal	Frts.	Wild	VBA 845
	BURSERACEAE				
27.	Boswellia serrata Roxb.	Salai	Stem Bark	Wild	VBA 526
28.	Garuga pinnata Roxb.	Kakad	Frts.	Wild	VBA 55
20	MELIACEAE	IZ 1 N° 1	T . El	C. Id. at all	VD 4 407
29.	Azadirachta indica Juss.	Kadu Nimb	Lvs.,Fl., Frts.	Cultivated	VBA 487
30.	Melia azedarach L.	Limbara	Root Stem, Lvs, FlFts.	Cultivated	VBA 486
50.	ICACINACEAE	Limbara	Lv5, 17Ft8.		
31.	Nothapodytes nimmoniana (Grah.) Mabb.	Ghanera	Stem	Wild	VBA 773
	CELASTRACEAE				
32.	Celastrus paniculatus Willd.	Mal Kangoni	Seeds	Wild	VBA 541
	RHAMNACEAE	mjourn			
33.	Ziziphus rugasa Lam.	Toran	Seeds	Wild.	VBA 775
	LEEACEAE				
34.	Leea indica (Burm. f.) Merr.	Dinda	Stem	Wild	VBA 856
	SAPINDACEAE				
35.	Dodonea angustifolia L.f.	Bandukichapal	Lvs	Cultivated	VBA 989
36.	Spindus laurifolius Vahl.	Ritha	Frts.	Cultivated	VBA 32
37.	Schleichera oleosa (Lour.) Oken , Allg.	Kosimb		Wild	VBA 31
20	ANACARDIACEAE	V.:	Thele	337:1.1	37D A 115
38.	Anacardium occidentale L.	Kaju	Thalamus	Wild	VBA 115
39.	Buchanania cochinchinensis (Lour.) Almeida	Char	Seeds	Wild	VBA 739 VBA 874
40.	Holigarna grahamii (Wight) Kurz.	Ran Bibba	Seeds	Wild	
41.	Manaifara indica I	Amba	Frts.	Cultivated	VBA 472
41.	Mangifera indica L.	Amani	Frts	Wild	VBA 636
		Allialli	1713	vv IIU	V DA USU

42.	Rhus sinuatea Thunb.				
72.	Rus sinuica Hullo.				VBA 498
43.	Semecarpus anacardium L.f.	Bibba	Frts	Wild	
	EADACEAE				
	FABACEAE				VBA 683
44.	Abrus precatirious L.	Gunj	Lvs, Seeds	Wild	V DA 003
	·				VBA 475
45.	Butea monosperma Kuntz.	Palas	Seeds	Cultivated	
46.	Clitoria ternatea L. var. pilosa Wall.	Pandhara Gokarna	Lvs, Roots.	Cultivated	VBA 114
40.	Citiona ternatea L. var. pitosa waii.			Cultivated	VBA 1049
47.	Cullen corylifolia (L.) Medik	Bavachi	Seeds	Wild	(2.1101)
					VBA 1457
48.	Indigofera tinctoria L.	Nil	Leaves	Wild	VDA 965
49.	Mucuna monosperma DC.	Khaj kuhiri	Roots, Seeds.	Wild	VBA 865
50.	Pongamia pinnata (L.) Pierre.	Karanji	Seeds	Cultivated	VBA 933
		eruiscip/i.			. = = = = =
51.	Sesbania grandiflora (L.) Poir	Hadga	Lvs, Roots,	Cultivated	VBA 64
52	T. I	C1	Flowers	33711	VD A CCC
52.	Tephrosia purpurea (L.) Pers.	Sharpunkha		Wild	VBA 663
53.	Trigonella foenum- graecum L.	Methi	Lvs	Cultivated	VBA 414
				DI	
54.	Caesalpinia bonduc (L.) Roxb.	Sagaragota	Lvs	Common	VBA416
55.	Cassia fistula L.	Bahava	Seeds	Cultivated	VBA947
56.	Cassia obtusifolia L.	Tarwad	Seeds	Common	VBA668
57.	Cassia tora L.	Takala	Seeds	Common	VBA1057
58.	Moullava spicata (Dalz) Nicols.	Wakeri	Roots	Wild	VBA823
59.	Saraca asoca (Roxb.) Willd.	Sithecha Ashok	Bark, Seeds	Cultivated Cultivated	VBA4 VBA497
60. 61.	Tamarindus indica L. Acacia concinna (Willd) DC.	Chinch Shikekai	Lvs., Seeds Frts	Wild	VBA634
62.	Entada rheedei Spreng.	Garambi	Seeds	Wild	VBA1094
63.	Xylia xylocarpa (Roxb.) Taib.	Jambha	Seeds	Wild.	VBA1095
	CRASSULACEAE				,
64.	Kalanchoe pinnata(Lam) Pers.	Panphuti	Leaves	Wild	VBA
	COMBRETACEAE				
65.	Anogeissus latifolia (Roxb. ex DC.) Wall	Dhavda		Wild	VBA539
66.	Terminalia alata Heyne ex Roth	Ain	Bark	Wild	VBA482
67.	Terminalia bellirica (Gaertn.) Roxb.	Behada	Frts	Wild	VBA471
68.	Terminalia chebula Retz.	Hirda	Frts	Wild	VBA1098
69.	Terminalia cuneata Roth	Arjuna	Bark	Wild	VBA618
70.	Terminalia paniculata Roth. MYRTACEAE	Kinjal	Bark Seeds	Wild	VBA644
71.	Eucalyptus globules Labill	Nilgiri	Lvs	Cultivated	VBA469
72.	Syzygium cumini (L.) Skeels.	Jambhul	Frts.	Cultivated	VBA752
	LECYTHIDACEAE			2 222 2 200 20	
73.	Careya arborea Roxb.	Kumbha	Ftrs	Wild	VBA750
	LYTHRACEAE				
74.	Woodfordia fruticosa (L.) Kurz.	Dhayati	Lvs., Fls	Wild	VBA724
	ONAGRACEAE	D. I.	G. J. I	C	V/D 4 #24
75.	Ludwigia octovalvis (Jacq.) Raven subsp.	Pan- Lavang.	Seeds, Lvs	Common	VBA731
	sesiliflora (Micheli) Raven. PASSIFLORACEAE				
76.	Passiflora foetida L.	Veli- Ghani	Lvs	Wild	VBA449
70.	CARICACEAE	, cii Giigiii	210	11124	12.177
77.	Carica papaya L.	Papai	Frts	Cultivated	VBA176
	CUCURBITACEAE	•			
78.	Cucurbita maxima Duch. Ex Lam.	Bhopala	Frts., Seeds	Cultivated	VBA602
79.	Lagenaria siceraria (Molina) Standl.	Dudhi Bhopala	Frts.	Cultivated.	VBA446
80.	Momordica dioica Roxb. ex Willd	Kartoli	Tubers	Wild.	VBA420
81.	Trichosanthes tricuspidata Lour.	Kaundal	Seeds	Wild	VBA783

	APIACEAE				
82.	Centella asiatica (L.), Urb.	Brahmi	Lvs	Cultivated	VBA421
					VBA421
83.	CORNA CEAE	Jire	Seeds	Cultivated	
0.4	CORNACEAE	A 1 . 1	I . El. E.c.	337'1.1	ND A 552
84.	Alangium salvifolium (L.f.) Wang.	Ankol	Lvs, Fls, Frts	Wild	VBA553
0.7	RUBIACEAE	0.1.1.1	E . C . 1	337'1 1	X/D A F#2
85.	Catunaregam spinosa (Thunb.) Tirveng.	Gelphal	Frts, Seeds	Wild	VBA573
86.	Gardenia resinifera Roth.	Dikemali	Resin	Wild	VBA994
87.	Mitragyna parviflora (Roxb.) Korth.	Kadamb		Cultivated	VBA826
88.	Morinda citrifolia L.	Bartondi	Root, Lvs, Fr	Wild	VBA961
89.	Neolamarckia cadamba (Roxb.) Bosser.	Kadamb	_	Cultivated	VBA797
90.	Rubia cordifolia L.	Manjith	Roots	Wild	VBA1107
91.	Spermadictyon suaveolens Roxb.	Jitsaya	Root, Lvs.	Wild	VBA995
	ASTERACEAE				
92.	Eclipta prostrata (L.) L	Maka	Lvs.	Common	VBA1029
93.	Glossocardia bosvallea (L.f.) DC.	Khadak Shepu	Lvs	Wild	VBA523
94.	Spilanthus calva DC.	Akkalkara	Lvs	Wild	VBA1186
95.	Tridax procumbens L.	Dagadi Pala	Lvs.	Common	VBA1023
96.	Xanthium indicum Koen.	Landaga	Seeds	Common	VBA605
	LOBELLIACEAE				
97.	Lobelia nicotianaefolia Roth ex S. Syst.	Ran Tanbhaku	Root, Lvs,Fl.	Wild	VBA1109
	PLUMBAGINACEAE				
98.	Plumbago zeylanica L.	Pandhara Chitrak	Roots	Common	VBA708
	PRIMULACEAE				
			Lvs, Rooot,	0	VBA
99.	Embelia ribes Burm.	Vavding	Fruits.	Wild	
	SAPOTACEAE				
100.			Seeds ,Frts.,		
	Mimusops elengi L.	Bakul	Stem Bark.	Wild	VBA75
	OLEACEAE				
101.	Jasminum officinale L.	Jai	Seeds	Cultivated	VBA
102.	Nyctanthus arbor- tristis L	Parijatak	Seeds	Cultivated	VBA496
102.	· ·		Seeds		, 2111, 0
102.	APOCYNACEAE	And the second		31	, 2113 C
	APOCYNACEAE		Stem	5/	
103.	· ·	Saptparni	Stem Bark,Lvs,	Cultivated	VBA8
103.	APOCYNACEAE Alstonia scholaris (L.) R.Br.	Saptparni	Stem Bark,Lvs, Milky Juice	Cultivated	VBA8
	APOCYNACEAE		Stem Bark,Lvs, Milky Juice Lvs,Bark,	5/	
103.	APOCYNACEAE Alstonia scholaris (L.) R.Br.	Saptparni	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds	Cultivated	VBA8
103.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don	Saptparni Sadaphuli	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark	Cultivated Cultivated	VBA8 VBA1035
103.	APOCYNACEAE Alstonia scholaris (L.) R.Br.	Saptparni Sadaphuli Pandhara Kuda	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds.	Cultivated	VBA8
103. 104.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark,	Cultivated Cultivated Wild	VBA8 VBA1035 VBA805
103. 104. 105. 106.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L.	Saptparni Sadaphuli Pandhara Kuda	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice.	Cultivated Cultivated	VBA8 VBA1035
103. 104.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky	Cultivated Cultivated Wild Cultivated	VBA8 VBA1035 VBA805 VBA57
103. 104. 105. 106. 107.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh .	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice	Cultivated Cultivated Wild	VBA8 VBA1035 VBA805 VBA57 VBA165
103. 104. 105. 106. 107.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice. Lvs, Lvs,	Cultivated Cultivated Wild Cultivated Wild Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009
103. 104. 105. 106. 107. 108.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice. Lvs, Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494
103. 104. 105. 106. 107. 108. 109. 110.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice. Lvs Lvs Lvs Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild.	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009
103. 104. 105. 106. 107. 108. 109. 110. 111.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs Lvs Lvs Lvs Lvs Lvs	Cultivated Wild Cultivated Wild Common Common Wild. Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623
103. 104. 105. 106. 107. 108. 109. 110.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice. Lvs Lvs Lvs Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild.	VBA805 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501
103. 104. 105. 106. 107. 108. 109. 110. 111.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs Lvs Lvs Lvs Lvs Lvs Roots	Cultivated Wild Cultivated Wild Common Common Wild. Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623
103. 104. 105. 106. 107. 108. 109. 110. 111.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs Lvs Lvs Lvs Lvs Lvs	Cultivated Wild Cultivated Wild Common Common Wild. Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623
103. 104. 105. 106. 107. 108. 109. 110. 111. 112.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forsk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs Lvs Lvs Lvs Lvs Lvs Lvs Lvs Lvs Roots	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003
103. 104. 105. 106. 107. 108. 109. 110. 111. 112.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs Lvs Lvs Lvs Lvs Lvs Lvs Lvs Lvs Roots	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild. Wild	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680
103. 104. 105. 106. 107. 108. 109. 110. 111. 112.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forsk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild. Wild	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild. Wild Wild Wild	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild. Wild Wild Wild	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE Ipomoea batatas (L.) Lam.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Common Wild Common Common	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti Ratali	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Wild wild Common Coultivated	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503 VBA
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE Ipomoea batatas (L.) Lam. Ipomoea maurandioides Meisn.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti Ratali	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Wild wild Common Coultivated	VBA8 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503 VBA
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE Ipomoea batatas (L.) Lam. Ipomoea maurandioides Meisn. SOLANACEAE	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti Ratali Chandvel	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Wild wild Common Common	VBA805 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503 VBA VBA667
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE Ipomoea batatas (L.) Lam. Ipomoea maurandioides Meisn. SOLANACEAE Datura metel L. Nicotiana tabacum L.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti Ratali Chandvel Kala Dhotara Tambakuu	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Wild wild Common Cultivated Common Cultivated Common	VBA805 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503 VBA VBA667 VBA808
103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119.	APOCYNACEAE Alstonia scholaris (L.) R.Br. Catharanthus roseus (L.) G.Don Holarrhena pubscens (BuchHam.) Wall. Plumeria alba L. Tabernaemontana alternifolia (Roxb.) Nicols & Suresh . Calotropis gigantea (L.) R.Br. Calotropis procera (Ait) R.Br. Gymnema sylvestre (Retz.) R.Br. Pergularia daemia (Forssk.) Chiov. Result. Hemidesmus indicus (L.) Sch. BORAGINACEAE Cordia dichotoma Forst.f. Cordia gharaf (Forssk.) Ehrenb & Asch. Heliotropium indicum L. CONVOLVULACEAE Ipomoea batatas (L.) Lam. Ipomoea maurandioides Meisn. SOLANACEAE Datura metel L.	Saptparni Sadaphuli Pandhara Kuda Pandhara Chapha Nagkuda Rui Rui Bedkicha Pala Utarni Anantmul Bhokar Godani Bhurundi Hatti Ratali Chandvel Kala Dhotara	Stem Bark,Lvs, Milky Juice Lvs,Bark, Seeds Stem Bark Lvs, Seeds. Root Bark, Milky Juice. Lvs, Milky Juice. Lvs	Cultivated Cultivated Wild Cultivated Wild Common Common Wild. Common Wild Wild wild Common Cultivated Common Cultivated Common Cultivated Common Cultivated	VBA805 VBA1035 VBA805 VBA57 VBA165 VBA1009 VBA494 VBA501 VBA623 VBA1003 VBA680 VBA152 VBA503 VBA VBA667 VBA808 VBA402

122.	Withania somnifera (L.) Dunal.	Ashwagandha	Seeds	Rare	VBA966
122.	SCROPHULARIACEAE	Asiiwagailulia	Seeds	Kare	V DA 300
123.	Bacopa monnieri (L.) Penn.	Brahmi	All Part	Common	VBA688
104	BIGNONIACEAE	36 11' '	7	XX7'1 1	VD A OOF
124. 125.	Dolichandrone falcate (Wall.ex DC) Seem. Heterophragma quadriloculare (Roxb.) K.	Medshingi Varas	Lvs.	Wild Wild	VBA825 VBA744
	Schum.				
126	Sterospermum chelenoides (L.f.) Dc	Paral	Root, Fl. Bark	Rare	VBA100
	ACANTHACEAE				
127.	Andrographis paniculata (Burm.f.) Wall ex Nees	Kadechirayat	Leaves		VBA566
128.	Crossandra infundibuliformis (L.) Nees	Aboli	Seeds	Cultivated	VBA207
129.	Hygrophila schulli (Buch Ham.) M.R. & S.M.Almeida.	Talimkhana	Seeds	Common	VBA171
130.	Justicia adhatoda L.	Adulsa	Leaves	Cultivated	VBA1052
131.	Lepidagathis cristata Willd.			Wild.	VBA504
132.	Peristrophe paniculata (Forssk.) Brummit.	- 11/	Leavea	Common	VBA604
	VERBENACEAE				
133.	Clerodendrum serratum (L.) Moon.	Bharangi	Root, Leaves	Wild	VBA789
			Root, Leavea,		
134.	Gmelina arbrea Roxb	Shivan	Fl.	Wild	VBA701
135.	Vitex negunda L. var. negundo Cl. LAMIACEAE	Nirgudi	Leaves	Common	VBA788
136.		Dipmal	Seeds	Wild	VBA1056
	Leonotis nepetifolia (L.) R.Br.			Wild.	
137.	Leucas stelligera Wall NYCTAGINACEAE	Shankroba	Root Lvs	Wiid.	VBA593
120		D	A 11	C	V/D A 510
138.	Boerhavia repens L. var. diffusa (L.) Hook.	Punarnava	All parts	Common	VBA518
	AMARANTHACEAE			2	
139.	Achyranthes aspera L.	Aghada	Leaves	Common.	VBA965
140	Celosia argentea L. var. argentea	Kurdu	Leaves	Com <mark>m</mark> on	VBA974
	ARISTLOCHIACEAE				
141	Aristolochia bracteolata Lam.	Kidmar	Leavea	Rare	VBA172
	PIPERACEAE				
142.	Piper betle L.	Paan	Leaves	Cultivated	VBA169
	THYMELAEACEAE				
143.	Gnidia glauca (Fresen.) Gilg.	Datpadi	Root Stem	Wild	VBA833
	ELAEAGNACEAE				
144.	Elaeagnus conferta Roxb.	Ambgul	Fruits	Wild	VBA834
	LORANTHACEAE				
145.	Dendrophthoe falcata (L.f.) var. Falcata	Bandgul	Lvs	Wild	VBA240
	SANTALACEAE				
146.	Viscum articulatum Burm.f.	Bandgul	Lvs	Wild	VBA616
147.	Santalum album L.	Chandan	Stem	Wild	VBA617
	EUPHORBIACEAE				
148.	Bridelia retusa (L.) Spreng.	Katak	Stem Bark, Seeds	Wild	VBA528
149.	Emblica officinalis Gaertn.	Awala	Fruits	Wild.	VBA460
150.	Jatropa curcas L.	Mogali Erand.	Fruits	Common.	VBA672
151.	Macaranga peltata (Roxb.) Muell- Arg.	Chandiva	Latex.	Wild.	VBA 1127
152.	Mallotus philippensis (Lam.) Muell- Arg.	Shendri	Fruits	Wild.	VBA 738
153.	Phyllanthus reticulatus Poir.	Datwan	Fruits	Common	VBA562
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154.	Ricinus commnnis L.	Erand	Seeds	Common.	VBA179
155.	Sapium insigne Benth. var. malabaricum (Wight). Hook.	Hura	Latex	Wild.	VBA1128
156.	Scurinega leucopyrus (Willd.) Muell Arg.	Pandharphalli	Fruits	Wild.	VBA1488
	MORACEAE				
157.	Artocarpus heterophyllus Lam .	Phanas	Frt., Seeds	Cultivated	VBA80
158.	Ficus benghalensis L.	Wad	Milky juice		VBA635
159.	Ficus carica L.	Anjir	Frts		VBA154
160.	Ficus racemosa L.	Umbar	Frts.		VBA979
161.	Ficus religiosa L.	Pimpal	Frts.		VBA459
	SALICACEAE				
162.	Salix tetrasperma Roxb. ZINGIBERACEAE	Walunj	Bark Leaves, Flowers	Common	VBA388
163.	Costus speciosus(Koen.) J. E. Smith	Pev	Tubers	Wild	VBA1142
	HYPOXIDACEAE	- 1911/			
164.	Cuculigo orchioides Caertn.	Kali Musali	Rhizime	Wild	VBA971
	AMARYLLIDACEAE				
165.	Allium cepa L.	Kanda	Leaves, Bulb	Cultivated.	
	DIOSCOREACEAE			0 1	
166.	Dioscorea bulbifera L.	Dukkar Kand	Tubers	Common	VBA762
	LILIACEAE			0	
167.	Aloe vera L.	Korphad	Leaves	Cultivated	
168.	Asparagus racemosus Willd var. javanica (Kunth.) Baker.	Shatavari	Tubers	Wild.	VBA576
169.	Gloriosa superba L.	Kal -lawi	Tubers, Leaves	Wild.	VBA968
	ARACEAE			3	
170.	Colocasia esculenta (L.) Schoot.	Alu	Leaves	Cultivated	
	CYPERACEAE				
171.	Cyperus rotundus L.	Nagarmotha	Root	Common.	VBA270
	POACEAE ANDROPOGONEAE				
172.	Cymbopogon citratus (DC.) Stapf.	Gavati Chaha	Leaves	Cultivated.	VBA691
173.	Cynodon dactylon (L.) Pers.	Harali	Leaves	Common.	

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Acknowdgment:

Authors are thankful to the Conservator of Forest (Wild Life), Kolhapur Division Mr. Samadhan Chavan and RFO Chandoli National Park Mr. Govind Langote for their kind cooperation. Authors grateful to the Principal Dr. D.G. Kanase , Dr. Patangrao Kadam Mahavidyalaya, Sangli, for constant encouragement and for providing necessary facilities. They are also thankful to Mr. Prakash Kumbhar , Department of Statistics, Dr. Patangrao Kadam Mahavidyalaya, Sangli and Deputy Director, B.S.I Western Circle, Pune.

Statistical Analysis:

(A) The Percentage study and goodness of fit of the distribution of the plants.

Ho: The parts used in Medicinal Plants of Sangli District are uniformly distributed.

Against

H1: The parts used in Medicinal Plants of Sangli District are not uniformly distributed.

Parts	No. of Plants (Oi)	Percentage	Ei
Root	25	11.1111111	22.5
Stem	11	4.88888889	22.5
Leaves	68	30.2222222	22.5
Flower	9	4	22.5
Fruit	35	15.555556	22.5
Seeds	42	18.6666667	22.5
Rhizomes	3	1.33333333	22.5
Bark	14	6.2222222	22.5
All plants	3	1.33333333	22.5
Other	15	6.66666667	22.5
Total	225	100	225

Oi	<u>Ei</u>	Chi.
68	22.5	92.01111
42	22.5	16.9
35	22.5	6.944444
25	22.5	0.277778
15	22.5	2.5
14	22.5	3.211111
11	22.5	5.877778
9	22.5	8.1
6	45	33.8
Total		169.6222

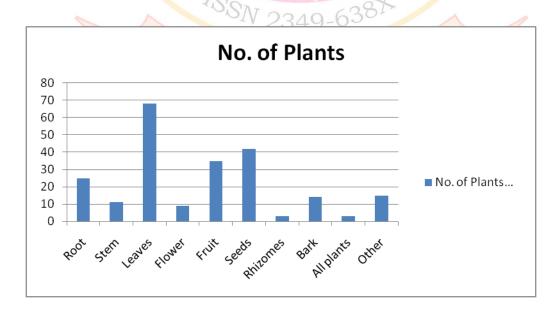
The Tabled Value of Chi. At 5% level of significance (l.s.) and at (9-1=8) d.f. is 15.51.

Since (Chi.) calculated > Chi. Table at 5% l.s. we reject Ho.

And conclude that the medicinal Plants used are not uniformly distributed.

Conclusion:

- 1) There is Max. use of Leaves for a Medicinal purpose.
- 2) There is Min. use of Rhizomes for a Medicinal purpose.
- 3) The percentage use of Leaves are 30.22 %. i.e.Max. use of plants.



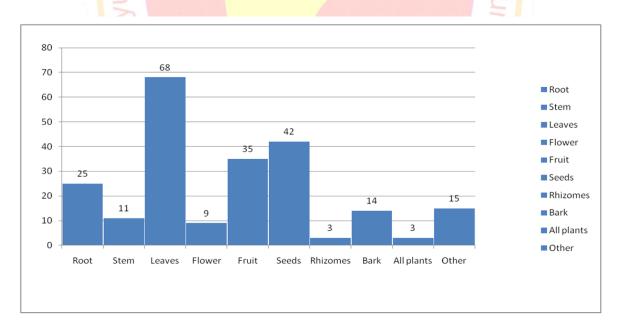
(B) The distribution of Status of the Plants.

Status	No. of Plants	%
Cultivated	49	28.3236994
Wild	87	50.2890173
Rare	4	2.31213873
Common	33	19.0751445
Total	173	100

There is 2.31 % of rare plants, so that we have to Protect these plants.

Status	No. of Plants	%
Cultivated	49	28.3236994
Wild	87	50.2890173
Rare	4	2.31213873
Common	33	19.0751445
Total	173	100

Histogram for the above data.



मराठी कादंबरीतील कोरोनाकाळ

डॉ. गिरीश मोरे.

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प्रास्ताविक

साहित्याची वाटचाल ही समाजजीवनसमांतर असते. लेखक सभीवतालच्या घडामोडींना प्रतिक्रिया देत असतो. त्यातून तो आत्मशोध घेत असतो. भोवतालच्या प्रश्नांवर तो उत्तर शोधत असतो. समाजजीवन पळवाट शोधण्याच्या प्रयत्नात असते तर लेखक पळवाट थोपवित असतो. नवनच्या मार्गांना समाजापुढे आणण्याची लेखकाची कृती निरोगी समाजाच्या वाटचालीसाठी आवश्यक असते. त्यासाठी तो विविध वाङ्मयप्रकारांचा आधार घेत असतो.

कादंबरी हा वाङ्मयप्रकार विस्तृत व्यक्त होण्यासाठी उपयुक्त ठरतो. समाजजीवनाच्या विविधांगांना कादंबरीकर भिडत असतो. वास्तववादी कादंबरीने विविध प्रश्न वाचकांपुढे उघड केले आहेत. दुष्काळ, गरिबी, जातीयता-अस्पृश्यता, ग्रामीण, स्त्रीजीवन, भटक्या विमुक्त, मुस्लीम , आदिवासी , शेतकरी-कामगार अशा किती तरी परिसराला मराठी कादंबरीने कवेत घेतले आहे. प्रस्तुत ठिकाणी मराठी कादंबरीतून कोरोनाकाळ कसा प्रतिबिंबित झाला आहे, याचा शोध घ्यावयचा आहे.

कोरोनाकाळ ही संकल्पना

समाजजीवनात अनेक घडामोडी घडत असतात. त्यातून विविध संकल्पना उदयास येत असतात, उदा. जागतिकीकरण. सध्या जगापुढे निर्माण झालेली एक समस्या म्हणजे कोरोना ही महामारी. हया संसर्गजन्य महामारीवर अंतिम उपाय सापडलेला नाही. इन्फ़्लुएन्झा, कांजिण्या, चिकुनगुन्या, डेंग्यू, देवी, मलेरिया, पटकी, पोलिओ अशा किती तरी रोगांना माणूस सामोरा गेला आहे. त्यांमध्ये कित्येकांनी आपले प्राण गमावले. वैद्यकीय शोध लागले तरी माणूस अंधश्रद्धा सोडत नाही याची प्रचिती कोरोनाकळतही येते.

कोरना व्हायरसमुळे प्रभावित झालेल्या काळास कोरोनाकाळ असे म्हणता येते. कोरोनाला कोविड-१९ असे म्हटले जाते. 'को' म्हणजे कोरोना, 'वि' म्हणजे व्हायरस, 'डी' म्हणजे डिसीज आणि १९ म्हणजे २०१९. चीनमधील हुबेई भागातील 'वुहान' शहरात १७ नोव्हेंबर २०१९ रोजी 'कोरोना' हया विषाणूचा पहिला रुग्ण आढळला. चीनने ही माहिती ८ डिसेंबर २०१९ रोजी जाहीर केली. जानेवारी २०२० पासून कोरोना हा जगभरात पोहोचला. भारतात कोरोनाची लक्षणे असलेला रुग्ण प्रथम केरळमध्ये सापडला. तो चीनच्या वुहान विद्यापीठाचा विद्यार्थी आहे.' (https://mr.m.wikipedia.org) महाराष्ट्रातही कोरोनाने प्रवेश केला. मुंबई-पुणे येथून तो हळू-हळू अनेक ठिकाणी पोहोचला. यावर प्रथमदर्शनी दिसणारा उपाय म्हणजे लॉकडाऊन. १७ मार्च २०२० पासून शासकीय आदेश आला, लॉकडाऊन स्र झाले.

अचानक लॉकडाऊन सुरु झाल्यामुळे काम बंद झाले, खायचे काय हा प्रश्न निर्माण झाला. आपापल्या गावाकडे जाऊन राहता येईल या विचाराने कामगार मिळेल त्या मार्गाने पुणे-मुंबई सोडू लागला. अनेकांनी पायी चालणे पसंत केले. मोठमोठ्या कंपन्यामधील नोकरवर्गाला 'वर्क फ्रॉम होम' नुसार काम करावे लागले. पगारकपातीला स्रुवात झाली. शाळा-महाविद्यालये बंद झाली. होणाऱ्या परीक्षा पुढे ढकलल्या.

कोरोनाकाळात पोलीस यंत्रणा आणि वैद्यकीय क्षेत्रावर ताण पडला. लॉकडाऊन आणि संचारबंदीचा आदेश न पाळणाऱ्यांवर कारवाई सुरू झाली. मास्क न वापरता, विनाकारण फिरणाऱ्यांवर प्रतिबंद करण्यासाठी पोलीस कामाला लागले. जीवनावश्यक वस्तूंच्या खरेदीसाठी सोशल डिस्टर्न्सींग पाळण्याचे भान राहिले नाही. त्यामुळे कोरोनाचा संसर्ग झपाट्याने वाढत गेला. सेवा देण्यासाठी वैदकीय क्षेत्र अप्रे पडू लागले.

स्थानिक स्वयंसेवक, ग्रामपंचायती, ग्रामदक्षता समिती, आरोग्य सेवक, अशा सेविका इथपासून ते कंपाऊंडर, सिस्टर, वैद्यकीय अधिकारी, आरोग्य मंत्री, मुख्यमंत्री अशा किती तरी घटकांवर ताण पडला. मृत्यूचे प्रमाण वाढत गेले. अफवा वाढत गेल्या. भयग्रस्त वातावरण निर्माण झाले.

कोरोनावर उपाययोजना करण्यासाठी मानवी प्रयत्न अपुरे पडत गेले. 'लॉकडाऊन', 'क्वारंटाइन', 'मास्क', 'सॅनेटाईझर', 'सोशल डिस्टर्न्सोंग', 'होम क्वारंटाइन', 'इन्स्टिट्यूशनल क्वारंटाइन', 'वर्क फ्रॉम होम' अशा उपाययोजना लादल्या गेल्या. त्यातले अज्ञान, गैरसमज्ती, अफवा यामुळे जनजीवन विस्कळीत झाले.

कोरोनामुळे प्रत्येक कुटुंबातील सदस्य, कुटुंब , गल्ली, गाव, मोहल्ला, अपार्टमेंट, सोसायट्या संशयग्रस्त झाल्या. जिथे रुग्ण सापडले तो भाग सील होऊ लागला. गावात प्रवेश मिळणे अवघड झाले. स्वॅब तपासणी, चौदा दिवस विलगीकरण, टेस्ट पॉझिटिव्ह आली की विशेष रुग्णकक्षात, बरे झालेल्या रुग्णांची घरी रवानगी, मृत झालेल्या रुग्णांवर अंत्यसंस्कार यातून भीतीचे सावट वाढत गेले.

कोरोनाकाळात बेफिकिरी आणि भयग्रस्तता वाढत गेली. शहरातले गावात, गावातले शेतात जाऊ लागले. शहरातून गावात आलेल्या चाकरमान्यांकडे संशयाने पहिले जाऊ लागले. काही ठिकाणी त्यांच्यावर बहिष्कार टाकला. लग्न समारंभ, यात्रा, उरूस, सण यांच्यांवर निर्वंध आले. मंदिरे बंद केली. परराज्यात आणि परदेशात विद्यार्थी अडकले. त्यांना परत आणण्यासाठी शासकीय पातळीवर प्रयत्न सुरु झाले.

कोरोनाच्या पहिल्या लाटेमुळे माणसाचे अस्तित्व क्षणभंगूर झाले. बरे होणारे जास्त होते, मारणारे कमी होते. प्रसारमाध्यामांमुळे कोरोनाग्रस्त संख्याच लोकांच्या मनावर ठसत गेली. भ्रष्टाचार वाढत गेला. अनेक ठिकाणी निःस्वार्थपणे, जीव धोक्यात घालून सेवा देणारी माणसे आढळून येत होती. काही ठिकाणी गैरफायदा घेण्याचे प्रमाणही वाढले होते. कोरोनाकाळ हा प्रत्येकाला बांधून टाकणारा, मनात भीती निर्माण करणारा, साशंकता वाढवणारा म्हणून समोर आला.

एक्णच कोरोना विषाणुमुळे पसरत चाललेला रोग, त्यातून बाहेर पडण्यासाठी होणारे प्रयत्न विविध क्षेत्रांवर होणारा प्रतिकूल परिणाम म्हणजे कोरोनाकाळ होय. पहिली लाट ओसरली, काहीशी सुटका झाल्यासारखी वाटले आणि मार्च २०२१ मध्ये पुन्हा दुसरी लाट आली. पुन्हा लॉकडाऊन सुरु झाले. कोवॅक्सीन, कोविशिल्ड सारख्या लसी आल्या. लसीकरण सुरु झाले. त्यातही राजकारण आणि भ्रष्टाचाराने भाग घेतला. ऑक्सिजनच्या तुटवड्यामुळे अनेकांचा जीव गेला. निसर्गावर मात करून विकास सध्या करणाऱ्या मानवाला गुढगे टेकायला लावणारा काळ म्हणजे कोरोनाकाळ आहे. तंत्रज्ञानात प्रगती केलेल्या माणसाला कोरोनावर

विजय मिळवणे अवघड होत चालले आहे. या कोरोनाकाळात मराठी कादंबरीकार कशी प्रतिक्रिया देत आहेत याचे चिंतन होणे आवश्यक आहे.

व्हायरसवर आधारित कादंबरी

१८८१ मध्ये अमेरिकन लेखक Dean Koontz यांने Eyes of Darkness ही कादंबरी लिहिली. त्यात वुहान ४०० या विषाणूची कल्पना मांडली आहे. (www.dnaindia.com) १९६९ मध्ये Michael Crichton यांने The Andromeda Stain ही कादंबरी लिहिली. विषाणूवर मात करण्यासाठी शास्त्रज्ञ कसे प्रयत्न करतात हा विषय कादंबरीत मांडला आहे. १९१२ मध्ये Jack London यांने The Scarlet Plague ही कादंबरी लिहिली. चेहरा आणि शरीरावर विषाणूचा परिणाम कसा होतो हे सूत्र या कादंबरीत आहे.(https://www.gutenberg.org). अमेरिकन लेखक Stephen King यांने १९७८ मध्ये The Stand ही कादंबरी लिहिली. इन्फ्ल्यूएन्झामुळे जगावर आलेले संकट कादंबरीकारांने मांडले आहे. या काही निवडक कादंबऱ्या विषाणूवर आधारलेल्या आहेत. कोरोनाव्हायरसचा काळ चित्रित करणारी कादंबरी इंग्रजीत अद्याप लिहिली गेली नाही. मराठीमध्ये मात्र कोरोनाकाळ चित्रित करणारे लेखक मोठ्या प्रमाणावर आढळत आहेत. आनंद बल्लाळ, श्रीकांत पाटील आणि ज्ञानेश्वर जाधवर यांनी कोरोनाकाळाला आपल्या कादंबरीतून प्रतिक्रिया दिली आहे.

मराठी कादंबरीतील कोरोनाकाळ

'लॉकडाऊन' हे एकच शीर्षक घेऊन ज्ञानेश्वर प्रकाश जाधवर आणि डॉ.श्रीकांत पाटील यांनी कादंबरी लिहिली आहे. आनंद बल्लाळ यांनी आपल्या कादंबरीला 'क्वारंटाइन' हे शीर्षक दिले आहे. 'लॉकडाऊन' शीर्षकाच्या दोन कादंबऱ्या सप्टेंबर २०२० मध्ये प्रकाशित झाल्या आहेत तर 'क्वारंटाइन' ही कादंबरी मार्च २०२१ मध्ये प्रकाशित झाली आहे. या कादंबऱ्यांत कोरोनाच्या पहिल्या लाटेमुळे निर्माण झालेला कोरोनाकाळ चित्रित झाला आहे.

ग्रामीण भागातील कोरोनाकाळ

श्रीकांत पाटील यांची 'लॉकडाऊन' ही कादंबरी ग्रामीण भागातील कोरोनाकाळाचे चित्रण करते. आनंद बल्लाळ यांच्या 'क्वारंटाइन' मधूनही ग्रामीण जीवनात कोरोनाने माजवलेला हाहाकार चित्रित झाला आहे. जानेश्वर जाधवर यांच्या 'लॉकडाऊन' मध्ये चर्चेच्या माध्यमातून गावात कोरोनामुळे निर्माण झालेले वास्तव समोर येते.

'क्वारंटाइन' मधील आनंद किसान पवार हा मूळचा गडिंग्लजमधील नावलेवाडीचा. मुंबईला तो 'कन्हैयालाल व्हिजीटेबल'मध्ये नोकरी करतो. लॉकडाऊनमध्ये तो गावी येतो. या काळात गाव, शहर, राज्य, देश आणि जागतिक पातळीवरील कोरोनाकालीन घडामोडींचा अनुभव घेतो. गावपातळीवर कोरोनाविरुद्ध चाललेला संघर्ष त्याच्या लक्षात घेतो. 'लॉकडाऊन' (श्रीकांत पाटील) मधील परशराम (परसू) हा तरुण शेतकरी आपल्या शिक्षक व कामगार मित्रांच्या साहयाने गावात आलेल्या कोरोनाविरुद्ध उपाययोजना राबवतो. त्यातून ग्रामीण भागातील कोरोनाकाळ किती भयावह आहे हे लक्षात येते. ज्ञानेश्वर जाधवर यांची 'लॉकडाऊन' पूर्णतः पुण्यासारख्या शहरी दवाखान्यातील प्रसंग चित्रित करीत असली तरी वॉर्डमधील चर्चतून खेड्यात काय स्थिती आहे समजून येते. या तीनही कादंबऱ्यातील मध्यवर्ती व्यक्तिरेखा आनंद पवार, परशराम आणि संदेश शिंदे ह्या ग्रामीण पार्श्वभूमीतून आलेल्या आहेत. परशरामाने तर खेडे सोडलेले नसते. त्यामुळे गावाविषयीची ओढ,

नातेवाईकांविषयीची आपुलकी, गावातील मित्र आणि इतर व्यक्तीविषयी असलेला स्नेहबंध कादंबरीत चित्रित झाला आहे.

माणूस शहरी असो वा ग्रामीण , कोरोनाकाळातील संकटे ही समान आहेत. वैद्यकीय स्विधा गावात कमी असल्या तरी भीतीचे सावट दोन्हीकडे सारखेच आहे. 'कवारंटाइन'मधील आनंदाला आठवलेली चारोळी म्हणजे कोरोनाकाळाची भयानकता आहे.

> "माणूस कात्रीत अडकलेल्या कागदासारखा जगत असतो जगण्याची इच्छा असते

पण फाटण्याची भीती वाटते" (बल्लाळ आनंद : २०२१, पृ.१२७)

'कवारंटाइन'मधील संत्या चौग्लेला कोरोना झाल्याम्ळे गाव हादरतो. गावाची सीमा बंद केली जाते. प्णे-म्ंबईह्न आलेल्यांना कवारंटाइन व्हावे लागते. आनंद पवारही या प्रक्रियेतून जातो. "प्रत्येकजन एकमेकाकडं संशायानं बघाल्ता. एखाद<mark>या घरात कोणी साधं खोकलं किंवा शिंकलं तरी</mark> लोक स<mark>रकारी दवाखान्यात नायतर</mark> शंभर नंबरला फोन करून तक्रार कराल्ते." (तत्रैव,पृ.४७) गौराक्काचा मुलगा रजनीकांत कारळे मुंबईत कॅन्सरने मरतो. त्याच्या गावाकडील प<mark>त्नीला कोरोनाम्ळे अंत्यविधीसाठी जाता येत ना</mark>ही. ती मोबाईलवरच पतीचा अंत्यविधी बघते.

श्रीकांत पाटील यांच्या 'लॉकडाऊन' मध्ये परस्चे आई-वडील पुण्याला बहिणीकडे अडकतात.त्याच्या पत्नीला गावी घरात कोंडल्यासारखे होते. यात्रा, उरूस, उत्सवावर बंदी घातल्यामुळे परसू घरूनच भैरवनाथाला नैवेद्य दाखवतो. प<mark>रस् म्हणतो, "आयला या कोरोनानं कोणा कोणाला सोडले ना</mark>ही. सगळ्यांची वाट लावली." (पाटील श्रीकांत : २०२१,पृ.९३) काही क्टूंब गाव सोडून निर्जन ठिकाणी राह्ट्या बांधून राहतात. मुंबईचा एक तरुण गावी येतो, कवारंटाइन पूर्ण झाल्यानंतर रानात काजू खातो, घसा खवखवतो, ताप येतो त्याम्ळे त्याला डबल कवारंटाइन व्हावे लागते. हे ऐकून परसुचे मित्र कैरी खाणे बंद करतात, इतकी दहशत कोरोनाची बसलेली असते.

'कवारंटाइन'मधील आनंदही शेतात जातो, कैऱ्या खातो, नदीत पोहतो, त्याला सर्दी होते, ताप येतो. हे गावाला कळातच त्याला आजऱ्याला नेऊन ॲडमीट करतात. स्वंब तपासाला जातो, रिपोर्ट येईपर्यंत तो दवाखान्यात अडकून पडतो. रिपोर्ट निगेटिव्ह येअनही गावाकडची माणसे त्याच्याकडे संशयाने बघतात.

कोरोनाग्रस्तांच्या वॉर्डमध्ये चर्चा करताना ज्ञानेश्वर जाधवर यांच्या कादंबरीतील शांतारामभाऊ कांबळे म्हणतो, "ज्यांच्या घरी हे पुणे-मुंबईची लोक आहेत त्यांना तर वाळीत टाकल्यासारखंच केले होते." (जाधवर ज्ञानेश्वर : २०२०,पृ.५५) गणपा म्हातारा आणि केसर म्हातारी यांच्या घरी प्तण्या सुंदर व त्याची पत्नी येतात. सरपंच-पाटील येऊन त्यांना समज देतात. मास्क बांधण्यास सांगतात. तिखटाचे कापड तोंडाला लावून वैरण आणायला गेलेला म्हातारा बेश्ध्द होऊन पडतो तेव्हा पोलीस पाटील त्याला कोरोना झाल्याचे सांगतात. गावाकडे लग्नात नवरा-नवरीला उचकी लागते त्याम्ळे कोरोनाची अफवा पसरते. अशा किती तरी प्रसंगांतून ग्रामीण भागातील कोरोनाकाळ चित्रित झाला आहे.

कोरोनाचे रुग्ण वाढत असले तरी कोरोनाविरुद्धच्या उपाययोजना गावपातळीवर कशा राबवल्या जातात याचे चित्रण कादंबरीकारांनी केले आहे. 'कवारंटाइन' मधील आनंद गावात येतो त्यावेळी सरपंच, ग्रामसेवक, दक्षता समितीचे मेंबर, प्राथमिक आरोग्य केंद्रातील आशा सेविका घरी येतात. त्याचे नाव नोंदवून पीएचसीत तपासणी करून घेण्याची विनंती करतात. त्याच्या हातावर होम क्वारंटाइनचा शिक्का मारला जातो. डॉक्टर तपासणी करतात. कवारंटाइन संपल्यानंतर प्नहा तपासण्यासाठी येण्यास सांगतात.

श्रीकांत पाटील यांच्या कादंबरीतही अशी दक्षता घेतली जाते. परसू आणि त्याचे मित्र अशोक, विश्वनाथ, शिवागुरुजी आणि मनोजगुरुजी गावासाठी धडपडतात. परसू आपल्या पत्नीला घरी मास्क बनविण्यासाठी कपडा आणून देतो. गावात औषधाची फवारणी करतो. वर्गणी काढून गरिबांना धान्य वाटप करतो. कोरोनाचा विसर पडावा म्हणून मनोजसरांच्या घरी ज्ञानेश्वरीचे वाचन केले जाते. आशा वर्कर, अंगणवाडी सेविका, सर्वेक्षण करणारे शिक्षक यांचा सत्कार केला जातो. परसू स्वतःहून पत्नीसह कोरोनाची चाचणी करून घेतो. चौदा दिवस क्वारंटाइन होतो. शेतात जाऊन राहतो. ई-पास काढून आई-विडलांना गावी आणतो. त्यांचीही तपासणी होते. लोकांमध्ये कोरोनाबाबत तो जनजागृती करतो.

कोरोनाकाळात अनेक घटक भरडले जातात, त्याचेही चित्रण कादंबरीकारांनी केले आहे. 'कवारंटाइन' मधील पौरोहित्य करणारे आपटेकाका कोरोनामुळे मिळकत बंद होते तेव्हा आनंदला पैसे मागतात. तीच अवस्था गावातल्या भट-बामण-गुरवाची होत असेल असे आनंदला वाटते. स्वस्त धान्य दुकानातील भ्रष्टाचारामुळे सर्वसामान्यांना धान्य मिळत नाही. श्रीकांत पाटील यांच्या 'लॉकडाऊन'मध्ये रेशनिंगचा काळा बाजार होतो याचे चित्रण आले आहे. लमाण, नंदीवाले, शेतमजूर यांना काम मिळत नाही. उसतोड कामगारांना शाळेत ठेवले जाते. ऑर्केस्ट्रा कामगारांवर उपासमारीची वेळ येते.

कोरोना वॉर्डमधील वास्तव

ज्ञानेश्वर जाधवर यांची 'लॉकडाऊन' ही कादंबरी पुण्याच्या नायडू हॉस्पिटलमधील कोरोनावास्तव उघड करते. कोरोनामुळे लादलेले लॉकडाऊन किती जीवघेणे ठरते यावर ही कादंबरी प्रकाश टाकते. संदेश शिंदे हा पुण्यातील इंजिनियर लॉकडाऊनमध्ये कुटुंबासह मोटारसायकलवर गावाकडे निघतो. एका नाक्यावर अडवून, त्याच्याकडून ५०० रुपये घेऊन सोडले जाते. पुढच्या नाक्यावर मात्र त्याला पकडून पुण्यातल्या दवाखान्यात भारती केले जाते. मुलगा, मुलगी, पत्नी आणि तो विलगीकरण कक्षात राहतात. पत्नी व मुलगी एका वॉर्डात तर तो आणि मुलगा दुसऱ्या वॉर्डात राहतात. कुटुंबाची ताटातूट होते. नवे शेजारी मिळतात. त्यांच्यात चर्चा होतो. या चर्चतून कोरोनाग्रस्तांचे चित्र कादंबरीत साकार होते.

पत्नी आणि मुलीला संदेश भेटू शकत नाही. वॉर्डमधले शांतारामभाऊ पॉझिटिव्ह येतात. संदेशच्या गळ्यात पडून रडताना नर्स अडवते त्यावेळी संदेश म्हणतो, "आहो मीही पॉझिटिव्ह आणि तेही पॉझिटिव्ह, मग आता सांगा याच्यातून अजून कोणाला कोरोना हणार आहे." (जाधवर ज्ञानेश्वर : २०२०,पृ.११२) एका रात्री तो पत्नीला चोरून भेटायला जातो आणि पकडला जातो. त्यातून कशीतरी सुटका होते. काही दिवसांनी दुसरा रिपोर्ट निगेटिव्ह येतो मात्र पत्नीचा पॉझिटिव्ह येतो. नव्या संघर्षाला सुरुवात होते. काही दिवसांनी पत्नीला आयसीयुमध्ये दाखल केले जाते. शिंदे कुटुंब घरी येते, तिकडे पत्नीचा मृत्यू होतो. अंत्यसंस्कारावेळी पत्नीचे

मुखदर्शन होते. हिंदुत्वाची बाजू घेऊन बोलणारा दीक्षित म्हाताराही मरतो. अशा अनेक वास्तवातून ही कादंबरी कोरोनाकाळ चित्रित करते.

कोरोनाविषयक समज-गैरसमज आणि धर्मांधता

कोरोनाकाळातील वातावरण हे संभ्रम निर्माण करणारे आहे. कोरोनाविषयीचे अज्ञान व अफवा यांमुळे गैरसमज वाढत चालले आहेत. धर्मांधतेच्या कचाट्यातून मानव सुटला नाही, या बाबींवरही कादंबरीकारांनी प्रकाश टाकला आहे.

'क्वारंटाइन'मध्ये पक्याबरोबर चर्चा होते. पक्याला वाटते, व्यायाम करणाऱ्यास कोरोना होत नाही. गावात राहणाऱ्यांची प्रतिकारशक्ती जास्त असल्यामुळे त्यांना कोरोना होत नाही. आनंद म्हणतो, "कोरोना काय 'हा गावातला', 'हा शहरातला' असा बघून नाय पकडत. उगीच अशा गैरसमजात राह् नको." (बल्लाळ आनंद :२०२१,पृ.४०) कोरोना हा मुस्लिम लोकांमुळे पसरला आहे असा गैरसमज वाढत जातो. त्यावरही चर्चा या कादंबऱ्यांमध्ये आढळते. वस्तुतः टी.व्ही. वरील बातम्यांमधून ही बातमी सर्वत्र पसरलेली असते. दिल्लीतील निजामुद्दीन भागात तबलिगी जमा<mark>तीच्या संमेलनामुळे कोरोना वाढत आहे असा</mark> गैरसमज पसरतो. त्याचा परिणाम देशातील इतर मुस्लिमांवर होतो. सम्या हा तरुण म्हणतो, "इता कोरोना के वक्त ओ एक ह्ये, यो चुक्या. खरा एक चुकीकी सजा तुमी सब मुसलमानां को देतयी? यो तुम्हारा चुकता देख... अरे हमना भी इस देश की काळजी है तो." (तत्र<mark>ैव, पृ.६२) श्रीकांत पाटील यांच्या 'लॉकडाऊन' मध्ये दि</mark>ल्लीच्य<mark>ा</mark> धार्मिक कार्यक्रमाचा संदर्भ आला आहे. <mark>ज्ञानेश्वर <mark>जाधवर यांच्या 'लॉकडाऊन' मध्ये अजहरबरोब चर्चा हो</mark>ते. अजितला शांतारामभाऊ</mark> म्हणतो, "साऱ्या <mark>भारतात उठलंय की मुसलमानांनी करूना साऱ्या देशात केला</mark>य." (जाधवर ज्ञानेश्वर : २०२०,पृ.१३७-१३८) यावर अजहर आपली बाजू मांडतो, "इस लॉकडाऊन के माहोल में इकठ्ठा होना नाही चाहिये था।वो इकठ्ठा होनाही एक गलती है। उसमे लोगोंका दोष नाही है। गव्हरमेंटने परमिशेन दी! दिल्ली पोलीस कुछ नाही बोली ... सरकारने रोखा <mark>नाही इसलिए वो धार्मिक कार्यक्रम हुआ</mark> " (तत्रैव, पृ.१३९) या वॉर्डातील ६७ वर्षाचे दीक्षित आजोबा हे <mark>म्सलमानांन<mark>ा दोष देतात. त्यांच्या मताचे खंड</mark>न केले जाते. राजीव देशपांडे म्हणतात,</mark> "आज आपण इथं रुग्ण म्हणून आलो आहोत, इथ कोणती जात, धर्म बिघतला नाही. विशेष म्हणजे कोरोना या आजारानेही जात, धर्म बघितला नाही." (तत्रैव, पृ.१४०) यावरून मराठी कादंबरी ही कोरोनाकालीन म्स्लिम लोकांवर एकतर्फी होणाऱ्या आरोपाचा आणि गैरसमजाचा समाचार घेते, असे म्हणता येते. सभोवताली चाललेले कोते मन, अज्ञानीवस्था ती उघड करते. Waiirioum

ज्ञानेश्वर जाधवर यांच्या कादंबरीत धर्मांधतेचा एक प्रसंग आलेला आहे. संदेशचे कुटुंब निगेटिव्ह रिपोर्ट मिळाल्यामुळे घरी येते. सोसायटीचे अध्यक्ष जोशी त्यांच्या प्रवेशाला विरोध करतात. त्यांची पत्नी पॉझिटिव्ह येते, तिला प्लाइमा द्यायची गरज असते. संदेश त्यासाठी तयार होतो मात्र रक्तगट जुळत नाही. दुसऱ्या ठिकाणचा एक दाता तयार होतो त्यावेळी जोशींना वाटते, तो कोणत्या धर्माचा आहे. योगायोगाने तो हुसेन बरकत अली असतो. जोशी म्हणतात, "आम्हाला या व्यक्तीचा प्लाइमा नकोय. कारण तो आमच्यासाठी योग्य ठरणार नाही." (तत्रैव, पृ.२५८) त्यांची समजूत काढली जाते. ते सहमत होतात मात्र प्लाइमा देणारी व्यक्ती मुस्लीम आहे हे पत्नीला कळू नये अशी विनंती करतात. कोरोनाकाळात धर्माला चिकटून राहणारे, अंधश्रधा बाळगणारे कमी नाहीत, याचा विचार मराठी कादंबरीतून पुढे आला आहे.

समारोप

आनंद बल्लाळ, श्रीकांत पाटील आणि ज्ञानेश्वर जाधवर यांनी आपल्या कादंबरीतून मार्च २०२० पासून स्र झालेला कोरोनाकाळ मांडला आहे. यांमधून कोरोनाकाळातील भयग्रस्त झालेले समाजमन चित्रित झाले आहे. गाव आणि शहराच्या पातळीवर आलेले अन्भव, त्यातील सत्यता, गैरसमज कादंबरीत मांडले आहेत. थाळी वाजवणे व दिवे लावणे यातली अवैज्ञानिकता, म्स्लीम समाजाविषयी पसरलेले गैरसमज याचाही वेध लेखकांनी घेतला आहे. कोरोनामुळे मृत्युचे वाढत चालेले प्रमाण, शासकीय यंत्रणा, वैद्यकीय क्षेत्रातील स्विधांचा अप्रेपणा, भ्रष्टाचार याकडेही मराठी कादंबरीने लक्ष वेधले आहे.

शेतकरी, कामगार, कलावंत, वेश्या, नोकरी गमावलेले तरुण, भिकारी, लहान-लहान उद्योग-व्यवसाय करणारी माणसे यांच्यावर आलेले संकट कादंबरीत आढळते. शाळा-महाविदयालय-विदयापीठातून शिक्षण घेणारी तरुण पिढी अस्थिर झाली आहे. कोरोना परदेशातून येतो, राज्यातील अनेक भागात पसरतो, मृत शरीरांवर अंत्यसंस्कार केले जातात, <mark>त्यातल्या विधी मागे पडून केवळ कर्तव्य उ</mark>रते. कुठल्<mark>या</mark>ही सांस्कृतिक कार्यक्रमात सहभागी होता येत नाही. 'कवारंटा<mark>इन'चा शेवटी आनंदला चॅर्ली चॅप्लीनचे ए</mark>क वाक्य आठवते, 'I always like walking in the rain, so no one can see me crying.' ज्ञानेश्वर जाधवर यांच्या 'लॉकडाऊन' मधील संदेश आपल्या पत्नीचा मृत्यू होतो तेव्ह<mark>ा मुलांना कळू नये म्हणून मुक रडणे पसंत कर</mark>तो. श्रीकांत पाटील यांच्या 'लॉकडाऊन'मधील परसू आणि त्याचे मित्र लसीकरणाची वाट पाहतात.

कोरोनाकाळाला प्रतिक्रिया देताना कादंबरीकारांनी कोरना व्हायरसचा प्रवास, त्याची शासकीय आणि वैद्यकीय माहिती, आकडेवारी, त्यावरचे शासकीय उपाय याविषयी माहिती दिली आहे. मास्क, सॅनिटायझर, सोशल डिस्टर्न्सिंग, आहार-वि<mark>हार, प्रतिकारशक्ती वाढवणे, वैद्यकीय इलाज</mark> करून घे<mark>णे</mark> अशा उपायांवरही कादंबरीने प्रकाश टाकला आहे. एकूणच पहिल्या लाटेतील कोरोनाकाळ समजून घेण्यासाठी या तीनही कादंबऱ्या उपयुक्त ठरतात.

SSN 2349-6387

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कोविड-19 : बालकों के मानसिक और शारीरिक स्वास्थ्य पर प्रभाव - एक अध्ययन

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सारांश :-

कोविड-19 महामारी ने दुनियाभर में हाहाकार मचाया है। सूक्ष्म कोरोना वायरस का संक्रमण दुनियाभर में तेजी से पाँव पसार रहा है। इसके संक्रमण से हजारों लोग अपनी जान गवाँ चुके हैं, जबिक लाखों लोग संक्रमित है। इस वायरस के दूसरी लहर का हम सामना कर रहे हैं। अब वैज्ञानिक तिसरी लहर की घोषणा कर रहे हैं। जिसमें बालक और किशोर संक्रमित होने की संभावना है। महामारी विज्ञान के सिध्दांतो पर आधारित यह घोषणा सही है। कोरोना वायरस के तिसरी लहर के अनुमान से बालकों, किशोरों, अभिभावकों में भय उत्पन्न हो रहा है। परिणामतः बालकों और किशोरों के मानसिक और शारीरिक स्वास्थ्य प्रभावित हो रहा है। वयस्क और बुजुर्ग के आयुवर्ग का टीकाकरण होने के कारण इनके प्रभावित होने की संभावना कम है, जबिक 18 वर्ष से कम आयु वर्ग टीकाकरण से वंचित है इसलिए यह वर्ग तीसरी लहर के चपेट में आ सकता है। इसे रोकने का एकमात्र तरीका टीकाकरण और रोगप्रतिकारकशक्ति विकसित करना आवश्यक है। यह तिसरी लहर कभी भी आ सकती है। अतः हमें इसका सामना करने के लिए तैयार रहना है।

प्रस्तावना :-

कोविड-19 दुनिया भर में आतंक मचाए हुए है। इसके कोहराम से सारी दुनिया जैसे एक पिंजरे में कैद हो गई है। प्रकृति की वो विशाल शक्ति, जो इस सुक्ष्म से वायरस में छिपी है, जिसने भागती-दौडती जिंदगी में अचानक ब्रेक लगा दिए और सारी दुनिया को हिला कर रख दिया । इसे वैज्ञानिक 'नोवेल कोरोना वायरस' कहते है। 'कोरोना' यह लॅटिन शब्द से लिया गया है, जिसका अर्थ होता है 'ताज' या 'मुकुट'। मायक्रोस्कोप से देखने पर यह वायरस 'मुकुट' के समान दिखाई देता है। विश्व स्वास्थ्य संगठन ने दिनांक 12 फरवरी 2020 को इस घातक कोरोना वायरस से होने वाली बिमारी को कोविड-19 नाम दिया गया। WHO के प्रमुख Tedras Adhanom ने जिनेवा में कोविड-19 की व्याख्या करते हुये कहा कि 'CO' का मतलब कोरोना, 'V' का मतलब वायरस और 'D' का मतलब Disease (बीमारी) है।

भारत इस वक्त कोरोना वायरस की दूसरी लहर से जूझ रहा है, इस दूसरी लहर के लिए हम बिल्कुल तैयार नहीं थे। पहली लहर की तुलना में दूसरी लहर अधिक खतरनाक है। दोनो लहर में यह देखा गया है कि कोरोना वायरस हर लहर में अलग बर्ताव करता है। यह बहुरूपिया है जो अपना व्यवहार लगातार बदलता रहता है। कोरोना ने पहली लहर में वयस्क और बुजुर्गों को अपनी चपेट में लिया, तब यह हमारे immunity से लड रहा था, जिसमे लोग आसानी से ठीक हो रहे थे। दूसरी लहर में युवा पिढी को चपेट में लिया, जिसके लिए हम बिलकुल तैयार नहीं थे, इसलिए यह immunity को आसानी से हरा पा रहा है। तिसरी लहर में इसका व्यवहार फिर बदल जायेगा। जो बालक और किशोरों को अपना शिकार बना सकता

हैं। पहली और दुसरी लहर में भी बालक और किशोर इस वायरस के शिकार ह्ये थे परंतु इनमें संक्रमण के मामले बह्त ही कम पाये गये।

कोरोना वायरस की तिसरी लहर कब?

वैज्ञानिकों का मानना है कि तिसरी लहर आयेगी। सुप्रीम कोर्ट के जस्टिस डी. वाय. चंद्रचुड ने कहा है कि "कई वैज्ञानिकों की रिपोर्ट है कि तिसरी लहर आ सकती है। इसलिए तिसरी लहर की तैयारी करना जरूरी है।" वैज्ञानिक दूसरे देशों का आकलन करके अन्मान लगा रहे है - जैसे दूसरे देशों में कोरोना वायरस संक्रमण के दूसरे-तिसरे लहर में ढाई महिने का अंतर था। भारत में पहली लहर के छह महिने के बाद दूसरी लहर आयी। दूसरी लहर को आये 60 दिनों से अधिक दिन ह्ये है अतः संभावना है कि तिसरी लहर कभी भी आ सकती है जो बालक और किशोरों को अपनी चपेट में ले सकती है। वैज्ञानिकों की एक स्टडी में तिसरी लहर ज्यादा खतरनाक होने की संभावना है क्योंकि संक्रमण के नये और अलग-अलग लक्षण मरीजों में दिखाई देंगे जो कि अधि<mark>क खतरना</mark>क ह<mark>ो सकते है। हालांकी यह सब आकल</mark>न और अनुमान लगाया जा रहा है, ऐसा ही होगा यह <mark>जरूरी भी नही है। फिर भी तिसरी लहर के लि</mark>ए हमें तै<mark>या</mark>र रहना आवश्यक है।

कोरोना वायरस के संक्रमण के दुसरी लहर ने जो कहर मचाया है, और तिसरी लहर की आशंका ने किशोरों और अभिभावकों में भय उत्पन्न हो रहा है, बालकों पर इस वायरस ने हमला किया तो बालक खुद का ख्याल कैसे रखेंगे? बा<mark>लक अकेले कैसे आयसोलेशन में रहेंगे? अकेले कैसे अस्पताल</mark> जायेंगे? संकट की इस घडी में कैसे निपटेंगे? इत्यादी प्रश्नों से घिरा भयभीत अभिभावक, किशोर, बालकों में मनोवैज्ञानिक समस्याएँ निर्माण हो रही है। जिसका प्रभाव मानव के जीवनशैली में दिखाई दे रहा है। इसी उद्देश्य को ध्यान में रखते ह्<mark>ये</mark> प्रस्त्त शोध निबंध का विषय "कोविड-19 :बालकों के शारीरिक स्वास्थ्य और मानसिक स्वास्थ्य पर प्रभाव <mark>-</mark> एक अध्<mark>ययन" का च्नाव किया गया है।</mark>

उददेश्य :-

- 1) कोविड-19 का बालकों के स्वास्थ्य पर होने वाले प्रभाव का अध्ययन करना।
- 2) बालकों के शारीरिक स्वास्थ्य पर होने वाले प्रभाव का अध्ययन करना।
- 3) बालकों के मानसिक स्वास्थ्य पर होने वाले प्रभावों का अध्ययन करना।
- 4) कोरोना से लड़ने के लिए उपाययोजन और सुझाव बताना। तथ्य संकलन :-

प्रस्तुत शोधनिबंध के लिए दुय्यम स्त्रोतों जैसे - इंटरनेट, संदर्भग्रंथ, समाचार पत्र, टी. वी. न्य्ज, चर्चासत्र इत्यादी का उपयोग करके तथ्य संकलित किये गये है।

कोरोना वायरस को हराना विश्व के लिए एक चुनौती है। दुनियाभर में वायरस ने आतंक मचाए ह्ये है। कोरोना वायरस के संक्रमण का माध्यम मन्ष्यों की साँस है, जिससे यह एक मन्ष्य से दूसरे में फैलता है। लॉकडाऊन ने जैसे मनुष्य को पिंजरे में कैद कर लिया है। अब तक यह वायरस हजारों लोगों की जान निगल चुका है। और यह बह्रूपिया अपना रूप बदलकर हर आयुवर्ग पर मँडरा रहा है। अब यह वायरस 18 वर्ष से कम उम्र वाले बालको की ओर रूख करने वाला है। अभी तक पहली व दुसरी लहर मे बालकों को

बड़ी म्श्किल से इस वायरस ने अपनी चपेट में ले पाया था परंत् तिसरी लहर में यह बालकों और किशोरों को संक्रमित करने वाला है।

बालकों पर किए गये संक्रमण के अध्ययन के निष्कर्ष :-

- चाइनीज सेंटर फॉर डिजीज कंट्रोल एंड प्रिवेंशन ने 20 फरवरी तक करीब 72,314 कोविड-19 पिडितों का डाटा इकठ्ठा किया था जिसमें एक मात्र 2 फीसदी लोग 19 साल से कम उम्र के थे।
- इसी तरह 508 कोरोना पीडितों पर अमरीका ने एक अध्ययन किया जिसमें एक भी बालक की मौत कोरोना से नही ह्यी थी।
- बच्चों के डॉक्टर संजय पटेल कहते है, कि "कोरोना आम तौर से एक इंसान से दूसरे इंसान में फैलता है। चूंकि वयस्क लोगों का ही बाहर आना-जाना, घूमना-फिरना और लोगों से मिलना अधिक होता है लिहाजा इस वायरस का शिकार भी वही ज्यादा होते है।"

उपरोक्त किये गये अध्ययनों के निष्कर्ष यह दर्शाते है कि वयस्कों की त्लना में बालकों पर इस वायरस का प्रभाव कम हुआ है।

ब्रिटेन की साउथैम्पटन यु<mark>निवर्सिटी में बाल-रोग के वरिष्ठ विशेषज्ञ ग्रा</mark>हम रॉबर्ट्स कहते है - "कोविड-19 बच्चों के फेफड़ों में ना जाकर ऊपरी हिस्सों यानी नाक, मुँह, गले तक ही सीमित रहता है और उन्हें खाँसी, नजले की मामूली शि<mark>कायत होती है। यही वजह है कि बच्चों में कोरोना के</mark> लक्षण वयस्कों जैसे नजर नहीं आते है। और न ही य<mark>ह वायरस मौत की वजह बनता है।"</mark>

डॉक्टर ग्राहम रॉबर्ट बच्चों की हालत दूसरे आयुवर्ग से बेहतर बताते हुए कहते है कि - "रिसर्च के लिहाज से ये वायर<mark>स अभी नया है। लिहाजा अभी कुछ भी पुख्ता तौर पर कहना</mark> जल्द<mark>बा</mark>जी होगा, बहरहाल अब तक जो रिसर्च ह्यी है, उसके आधार पर कहा जा सकता है कि कोरोना वायरस को शरीर मे पह्ँचकर एक्टिव होने के लिए एंजियोटेनसिन कनवर्टिंग एंजाइम-2 (ACI-2) की जरूरत होती है और बच्चों के लोवर एयरवेज यानी फेफड़ो में <mark>(ACI-2) उनके अपर एयरवेज यानी नाक</mark>, मुँह, गल<mark>े</mark> के मुकाबले कम होता है। इसलिए बच्चों में ये वायरस इन्ही इलाकों में अपना असर दिखाता है। एक वजह ये भी है कि बच्चों में रोग प्रतिरोधक क्षमता लगातार बढती रहती है।"

बाल्यावस्था में बालकों को संक्रमण से बचाव के लिए विविध टीके लगाएँ जाते है, जिस कारण बालक चारदिवारी और आस पड़ौस के माहौल से निकलकर जब शाला में जाते है तो साँसो के जरिये जाने वाले विविध प्रकार के वायरसों का सामना करते रहते है। उनके शरीर में स्वयं ही इन वायरस से लड़ने की क्षमता पैदा होती रहती है। इसीलिए बालकों की कई साधनों में रोगप्रतिरोधक क्षमता वयस्कों की त्लना में बेहतर होती रहती है। हमारा शरीर किसी भी बीमारी से लड़ने के लिए स्वयं ही प्रतिरोधक क्षमता बढाता है। इसे "आइटोकाइन स्टॉर्म" कहते है। यह कई बार 'मल्टी ऑर्गन फैलियर' की वजह भी बनाता है, जबकि बालकों की अपरिपक्व प्रतिरोधक क्षमता इस स्तर तक नहीं पह्ंचती। इसीलिए कोरोना से संक्रमित बालकों में वह स्थिति नही आती जो वयस्कों में आती है।

उपरोक्त अध्ययन के निष्कर्षों से स्पष्ट होता है कि बालकों पर वयस्कों की तुलना में संक्रमण का खतरा कम होता है, परंतु बह्रूपिया कोरोना वायरस तिसरी लहर में कौनसे लक्षणों का शिकार करेगा कह

नहीं सकते। "बालक" दुनिया का साझा भविष्य है, अतः उन पर ज्यादा ध्यान देने की जरूरत है। इसलिए बालकों और किशोरों को मानसिक और शारीरिक रूप से सुदृढ करना आवश्यक है। कोविड-19 से बालकों के शारीरिक और मानसिक स्वास्थ्य पर प्रभाव :-

- 1. बाल्यावस्था के टीकाकरण :- बाल्यावस्था में आयुनुसार तय की गयी तारीखों में टीकाकरण करना आवश्यक है परंतु कोरोनाकाल में घरों में कैद बालको में टीकाकरण की दर कम हो गयी है। क्योंकी अभिभावक घर से बाहर निकलने से डर रहे है और बालकों को अस्पताल से संपर्क न हो इसलिए उन्हें तय समय पर टीकाकरण नहीं करवा रहे है। बालरोग विशेषज्ञों का कहना है कि "बालक अचानक खसरा, काली खाँसी से लेकर मेनिन्जाइटिस जैसे आवश्यक टीकाकरण नहीं कर रहे है। ऐसे स्थिति में बालक यदि बीमार होता है तो उसकी रोगप्रतिकारक क्षमता कम हो जाती है।
- 2. आहार एवं पोषण :- बाल्यावस्था में बालकों को एक उन्मुक्त और गतिशील वातावरण की आवश्यकता होती है, परंतु वे घर की चारदिवारी में कैद है। जिस कारण बालकों का शारीरिक व्यायाम नहीं हो पा रहा है। लॉकड़ाऊन से आर्थिक परिस्थिती के कारण बालकों को संतुलित आहार नहीं मिल रहा है। परिणामत: बालकों में कुपोषण हो रहा है। कुछ बालक अति पोषण तो कुछ बालक पोषण के अभाव से ग्रसित हो रहे है। ऐसे में बालकों की रोगप्रतिरोधक क्षमता कम हो रही है।
- 3. भावनात्मक और मानसिक दबाव :- कोविड-19 महामारी का भय बालकों के मन और दिमाग में व्याप्त है। कोरोना महामारी से कई बालक अनाथ हो गये। परिवार में बड़े सदस्यों, बड़े बुजुर्गों की कोरोना से हुयी मौत बालकों के लिए सदमें जैसा है। बालकों को समवयस्कों से मेल मिलाप नहीं होने के कारण भी उनका मानसिक स्वास्थ्य पर प्रभाव पड़ रहा है। उनमें नकारात्मकता, चिडचिडापन, गुस्सा, आक्रमकताएँ बढ़ रही है साथ ही कोरोना वायरस का भय तनाव उत्पन्न कर रहा है। यदि स्थिती नहीं संभली तो धीरे-धीरे यह तनाव गहरे अवसाद का रूप धारण कर सकता है।
- 4. सामाजिक दूरी :- महामारी के दौर में माता-पिता, सामाजिक दूरी बनाये रखने की सीख देते है। पार्को, खेलकुद के मैदानों की जगह चारदिवारी ने ली है। जैसे-जैसे बालक बडे होते है उनकी भावनात्मक जरूरते भी बदल जाती है, परंतु सामाजिक दूरी बनायें रखने के कारण अन्य लोगों से जुडाव महसूस नहीं कर रहे है।
- 5. आर्थिक परिस्थिती :- गरीबी, सबसे बडी बीमारी हैं । आम दिनों में ही गरीब बच्चे बुनियादी आवश्यकताओं के लिए संघर्ष करते है। कोरोना महामारी में गरीब परिवार के बालक ज्यादा प्रभावित हो रहे है। क्योंकि इनके पास स्वच्छता और आजीविका के साधन तक नही है। लॉकडाऊन के बाद इनमें कोरोना संक्रमण का खतरा अधिक हो रहा हैं।
- 6. ऑनलाईन पढाई: महामारी के कारण शालाएँ बंद है। इसीलिए शिक्षक ऑनलाईन कक्षाएँ ले रहे हैं। इसका दुष्प्रभाव बालकों के शारीरिक स्वास्थ्य और मानिसक स्वास्थ्य पर भी हो रहा है। ऑनलाईन पढाई के कारण बालकों के हाथों में मोबाईल, लॅपटॉप, कम्प्युटर आदि आ गये। बालक पढाई के

अलावा उसका दुरूपयोग भी करने लगा है। कुछ बालक ऐसे है जो इस सुविधा से वंचित है। इस कारण कमजोर वर्ग के बालकों की पढाई का न्कसान हो रहा है।

निष्कर्ष :-

'कोविड-19' यह विश्व की समस्या है जिसका प्रभाव संपूर्ण मानवजाती पर हो रहा है। महामारी का यह दौर बालकों के शारीरिक और मानसिक स्वास्थ्य को प्रभावित कर रहा है। भारत में कोरोना वायरस की आनेवाली तिसरी लहर ने अभिभावकों को झकझोंर दिया। अतः अध्ययन के निष्कर्ष इस प्रकार है :-

- 1. घरो में कैद बालक, मनोवैज्ञानिक दबावों से जूझ रहे है। सामाजिक दूरी के कारण वे अपने समवयस्कों के साथ खेलकुद, उनके साथ समय व्यतीत नहीं करने के कारण उनके मन में भय, तनाव निर्माण हो रहा है। बालकों में आक्रामकता, नकारात्मकता, हिंसात्मकता, चिडचिडाहट, गुस्सा आदि मानसिकताएँ पनप रही है।
- 2. बालकों को एक ही वातावरण में रहने के कारण उनके शारीरिक विकास में बाधाएँ आ रही है। लॉकडाऊन के कारण उनके आहार एवं पोषण की समस्या निर्माण हो रही है। जिस कारण बालकों की रोगप्रतिरोधक क्षमता प्रभावित हो रही है।
- 3. कोरोना वायरस महामारी के कारण बालकों के बौध्दिक विकास में बाधा निर्माण हो रही है। ऑनलाईन कक्षा से बालकों की आकलन शक्ती प्रभावीत हो रही है और आर्थिक परिस्थिती के कारण अधिकतर बालक ऑनर्लाईन शिक्षा से वंचित है। अतः बालकों का बडा समुह शिक्षा में पिछड रहा है।

उपाययोजना :-

- 1. वायरस से बचाव के लिए रोगप्रतिरोधक क्षमता का होना आवश्यक है। ऐसे में मल्टीविटामीनयुक्त आहार होना आवश्यक है। अतः आहार में फल और सब्जियाँ, फलों का रस भरपूर मात्रा में तथा अंडे, हल्दी वाला दूध आहार में होना चाहिए। बालकों को उसके रूची नुसार आहार देना चाहिए।
- 2. अभिभावकों ने बालकों के साथ रोज समय बिताना चाहिए। उनके साथ धूप सेकना चाहिए। उन्हें रोज प्राणायाम, योग करने की सलाह दे और स्वयं भी करे। उनके साथ उनके हमउम्र बनकर उनका मनोरंजन करे।
- 3. अभिभावकों ने अपने बालकों की भावनाओं और मनोदशा में बदलावों को भाँपते रहना चाहिए। उनमें हो रहे मानसिक बदलाव का कारण उनका घरों में कैद होना है, यह समझने का प्रयास करके उन्हें सही मार्गदर्शन करना चाहिए।

सुझाव :-

- 1. सरकार ने कोविड-19 की तिसरी लहर से बचाव के लिए जल्द से जल्द टीकाकरण की प्रक्रियाँ पूर्ण करनी चाहिए।
- 2. सरकार ने हर राज्य, जिले, और गाँव में स्वास्थ्य प्रणालियों को मजबूत करना चाहिए।
- 3. सरकार ने सार्वजनिक सेवाओं को मजबूत करना चाहिए।

संदर्भ ग्रंथ सूची :-

- 1) https://www.bbc.com 5 April, 2020
- 2) https://www.amarujala.com
- 3) https://hindi.news18.com 24 July, 2020
- 4) https://hindi.theprint.in 2 July, 2020
- 5) www.indiatv.in
- 6) www.zeenews



भारतीय अर्थव्यवस्थेतील शेती क्षेत्रासमोरील आव्हाने

महेशकुमार विष्णू साळुंखे

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गोषवारा

भारत हा कृषिप्रधान देश म्हणून ओळखला जातो. भारतीय अर्थट्यवस्थेत शेती क्षेत्राला अनन्यसाधारण महत्त्व आहे. भारताच्या एकूण लोकसंख्येपैकी 64 टक्के लोकसंख्या ही शेती क्षेत्रावर अवलंबून आहे. त्यामुळे शेती व शेतकरी हे दोन घटक भारतीय अर्थट्यवस्था व समाज व्यवस्थेमधील मूलभूत घटक समजले जातात. परंतु स्वातंत्र्योत्तर काळात फार मोठी स्थित्यंतरे घडून आली. आज शेती क्षेत्राला अनेक आव्हानांना तोंड द्यावे लागत आहेत. शेती प्रगतीसाठी रासायनिक खते, कीटकनाशके आणि संकरित बियाणांच्या जाती यामध्ये प्रचंड वाढ झाल्याचे दिसून येते. भारतातील हिरत क्रांती व सन 1991 नंतर जागितकीकरण, खाजगीकरण आणि उदारीकरण या धोरणाचा स्वीकार केल्यामुळे शेती आणि शेतकरी वर्गाचा विकास झपाट्याने व्हायला मदत झाली. हे जरी खरे असले तरी, भारतातील सवंग लोकप्रियतेच्या राजकारणाम्ळे आजच्या शेती क्षेत्राचे चित्र खूप विदारक आहे.

प्रस्तावना

भारताने 1950 पासून आर्थिक नियोजनाला सुरुवात केली. तत्कालीन राज्यव्यवस्थेने शेती हा भारतीय अर्थव्यवस्थेचा कणा आहे, हा विचार मध्यवर्ती ठेवून पहिल्या पंचवार्षिक योजनेत शेती क्षेत्रावर भर दिला गेला. पहिल्या पंचवार्षिक योजनेत हेरॉल्ड-डोमर प्रारुपानुसार निश्चित वृद्धी दरापेक्षा 1.5 टक्के इतका आर्थिक वृद्धी दर वाढल्याचे दिसून येते. परंतु दुसऱ्या पंचवार्षिक योजनेत शेती क्षेत्राऐवजी जड व मूलभूत उद्योगावर भर देण्यात आला. पुन्हा तिसऱ्या योजनेत शेती क्षेत्रावर भर देण्यात आला. आजपर्यंत भारतामध्ये 12 पंचवर्षीय योजना राबविण्यात आल्या. परंतु या योजनांमधील शेती क्षेत्राचा हिस्सा मात्र घटक गेल्याचे दिसते.

भारताने आधुनिकीकरणाची कास धरल्यामुळे भारतीय समाज सर्वांगीण प्रगल्भ झाल्याची वल्गनाच केली जाते. खऱ्या अर्थाने वाढत्या लोकसंख्येच्या प्रमाणात अन्नधान्याचा विचार करिता शेती क्षेत्रात आमूलाग्र बदल करण्याच्या हेतूने हरित क्रांती घडवून आणली खरी, परंतु त्यातूनच शेतीक्षेत्र आज फार मोठ्या संकटात सापडले आहे. सन 1991 मध्ये स्वीकारलेल्या खुल्या व मुक्त अर्थव्यवस्थेमुळे शेती क्षेत्रावर प्रतिकूल परिणाम झाले आहेत. तसेच आज शेती क्षेत्रामधील अनाठायी राजकीय हस्तक्षेप, खाजगीकरण, उदारीकरण आणि जागतिकीकरणाचा स्वीकार, उत्पादनवाढीच्या अनुषंगाने शेतीक्षेत्रात रासायनिक खते, कीटकनाशके तसेच तणनाशके यांचा अवाजवी वापर, हवामान बदल व आपती, लोकसंख्या व शहरीकरण, व्यापार आणि

शेतमालाचे अनिश्चित किंमतविषयक धोरण इत्यादी अनेक आव्हानांना शेतीक्षेत्राला सामोरे जावे लागत आहे. याच आव्हानांचा प्रस्तुत निबंधांमध्ये ऊहापोह करण्यात आलेला आहे.

शोधनिबंधाच्या मांडणीसाठी माहितीचे स्त्रोत व उद्दिष्टे निश्चित केली आहेत. शोधनिबंधाची मांडणी ही वर्णनात्मक, ऐतिहासिक आणि व्यावहारिक संशोधन पद्धतीने केली आहे. शोधनिबंधाची मांडणी ही संदर्भ ग्रंथ, शोधप्रबंध, शोधनिबंध, वृत्तपत्रे आणि इंटरनेट इत्यादी प्रकाशित व अप्रकाशित दुय्यम साधनांचा उपयोग करून मांडली आहे. या शोधनिबंधाच्या अभ्यासाची उद्दिष्टे प्ढीलप्रमाणे समजावून घेता येतील.

उद्दिष्टे

- 1. भारतीय अर्थव्यवस्थेतील शेती क्षेत्राची स्थिती जाणून घेणे.
- 2. भारतीय अर्थव्यवस्थेतील शेती क्षेत्रासमोरील सदयस्थितीतील आव्हानांचा अभ्यास करणे.

भारतीय अर्थव्यवस्थेतील शेतीचे स्थान

कृषी हा भारतातील लोकांचा प्रमुख व्यवसाय असल्यामुळे देशाच्या राष्ट्रीय उत्पन्नात, रोजगारात, औद्योगिक विकास, विदेशी व्यापार आणि एकंदरीतच देशाच्या आर्थिक विकासात कृषी क्षेत्राचे स्थान महत्त्वाचे आहे. भारतीय अर्थव्यवस्थेतील कृषी क्षेत्राचा स्थूल देशांतर्गत उत्पादनातील वाटा किती आहे? हे समजून घेण्यासाठी पढील तक्ता अभ्यासणे आवश्यक आहे.

वर्ष	स्थूल देशांतर्गत उत्पन्नातील शेतीचा वाटा (%)	आर्थिक वृद् <mark>धीदरातील</mark> शेतीचा वाटा (%)
1950-51	55.40	1.9
1960-61	54.70	₹ 7.1
1970-71	48.10	6.3
1980-81	41.80	12.8
1990-91	34.90	4.7
2000-01	24.20	0.3
2010-11	14.50	8.3
2020-21	19.907 irjournal	0.9

- स्रोत:- 1) मध्यवर्ती सांख्यिकी संघटना विविध अहवाल
 - 2) भारत सरकार, आर्थिक पाहणी, २०११-१२ पृ. १८0
 - 3) downtoearth.org.in/news/agriculture
 - 4) Economic survey 2020-21, statistical appendix vol.2, pp-A 11 to A 13

वरील तक्त्याच्या निरीक्षणाअंती असे लक्षात येते की, भारतीय अर्थव्यवस्थेतील कृषी क्षेत्राचा स्थूल देशांतर्गत उत्पादनानुसार हिस्सा सन 1950-51 मध्ये 55.40 टक्के इतका उच्चांकी होता. तर 2020-21 मध्ये 19.90 टक्के पर्यंत स्थूल देशांतर्गत उत्पादनातील शेतीचा हिस्सा कमी झाल्याचे दिसून येते. तसेच देशाच्या एकूण आर्थिक वृद्धी दराचा विचार करिता सन 1980-81 मध्ये शेती क्षेत्राचा हिस्सा 12.8 टक्के

इतका होता. परंतु सन 2020-21 मध्ये अगदीच 0.9 टक्के इतका निच्चांकी झाला आहे. यावरुन असे लक्षात येते कि, आज शेती क्षेत्राला अनेक आव्हानांना सामोरे जावे लागत आहे. ती आव्हाने पुढीलप्रमाणे समजून घेता येतील.

अ) सरकारचे कृषिविषयक अनिश्चित धोरण

एखाद्या देशातील राजकीय धोरणे शेती विकासास पूरक असतात. त्या देशांमध्ये शेतीचा विकास जलद गतीने होतो. शेतकऱ्यांना कमी व्याजदराने भांडवल पुरवठा करणे, शेतमालाला हमीभाव मिळवून देणे, विविध प्रकारच्या पिकांच्या वाढीसाठी सानुग्रह अनुदान देणे, शेती विकासामध्ये यांत्रिकीकरणासाठी प्रोत्साहन देणे त्यासाठी आर्थिक पाठबळ उभे करून देणे, कृषि विकासासाठी जैवतंत्रज्ञानाचा विकास करणे, नैसर्गिक आपत्तीच्या काळात शेतकऱ्यांच्या पाठीमागे खंबीरपणे उभे राहणे यासारख्या बाबी राजकीय इच्छाशक्तीशिवाय पूर्ण होत नाही. कोणत्याही देशातील पीक रचना, लागवडीखालील क्षेत्र व पिकांची उत्पादकता त्या देशातील राजकीय धोरणावर अवलंबून असते. बहुतांशपणे देशाच्या आर्थिक स्थितीला अनुसरूनच राजकीय धोरणे ठरविली जातात.

स्वातंत्र्योत्तर भारतीय अ<mark>र्थव्यवस्थेचे विकास कार्यक्रम राबवित असताना रा</mark>जकीय व्यवस्थेकडून नियोजन काळात पहिल्या, तिसऱ्या आणि नव्या पंचवार्षिक योजनेमध्ये कृषी क्षेत्रावर सर्वाधिक भर देण्यात आला. आजपर्यंतच्<mark>या पंचवार्षिक योजनांचा विचार करता, भारतीय राज्यव्यवस्थे</mark>कडून शेती क्षेत्रापेक्षा उद्योग व सेवा क्षेत्रावर अधिक भर देण्यात आला. अकराव्या पंचवार्षिक योजनेच्या दरम्यान भारत सरकारने शेती क्षेत्राचे मोठ्या प्र<mark>माणात खाजगीकरण केले होते. विशेष आर्थिक क्षेत्राच्या</mark> विका<mark>सा</mark>साठी शेती क्षेत्र शेतकऱ्यांकडून काढून घेतले जात आहे. वाढीव भाववाढीतून मिळालेली रक्कम शहरी भागापासून दूरच्या जिमनी खरेदी करण्यात ग्ंतिविली जात आहे. यामुळे भारतातील शेती क्षेत्र भांडवलीकरणाकडे वळू लागले आहे.² सन 2000 नंत<mark>र नव्या, खुल्या व उदार अर्थव्यवस्थेमध्ये शेती खर्चा</mark>चे व[्]उत्पन्नाचे गणित बिघडले. या संकटाची योग्य जाणी<mark>व सरकारला स्रूवातीपासूनच नव्हती.³ सरका</mark>रच्या यो<mark>जने</mark>तील एकूण खर्चाचा शेती क्षेत्रातील वाटा पहिल्या पंचवा<mark>र्षिक योजनेत 31 टक्के इतका होता आणि आज</mark> पाहिले तर तो राजकारणाच्या हस्तक्षेपाम्ळे स्मारे 4 टक्केच्याही खाली आला असून, आज शेती क्षेत्र दूर्लक्षित झाले आहे. सन 2014 मध्ये भारतातील ऐतिहासिक <mark>राजकीय सत्तांतरानंतर शे</mark>तीविषयक धोरणांची अधिकच उपेक्षा होत गेली. कारण या सत्ताधाऱ्यांनी उद्योग आणि से<mark>वा क्षेत्रावर अधिक भर दिल्याचे दिसते. नियोज</mark>न आयोगाच्या 10व्या, 11व्या आणि 12व्या पंचवार्षिक योजनेत रोजगारनिर्मिती आणि कृषी धोरणाला प्रेसे स्थान दिले गेले नाही. त्याम्ळे कृषी क्षेत्रातील गुंतवणूक कमी होऊन उत्पन्न 60 टक्क्यावरून 10 टक्क्यापर्यंत झाली आहे. पुढे केंद्र सरकारने नियोजन आयोग रद्द करून जानेवारी 2015 मध्ये 'निती आयोग' स्थापन केला. तीन सदस्य असलेल्या नीती आयोगाकडे फक्त शिफारशीचे काम आहे.4

भारत सरकारने शेती आणि पणन सुधारणाविषयीचा कायदा 17 सप्टेंबर 2020 रोजी मंजूर केला. त्यामध्ये 'एक देश एक बाजार', जीवनावश्यक वस्तू कायद्यातून शेतमाल वगळणे आणि करार शेतीला प्रोत्साहन देणे अशी तीन विधेयक आहेत. या विधेयकांना भारतातील शेतकरी आणि शेतकरी संघटना यांच्याकडून विरोध म्हणून आंदोलने केली जात आहेत. 'एक देश एक बाजार' या पहिल्या विधेयकामध्ये

शेतमाल नियंत्रणमुक्त करण्याची तरतूद आहे. यामध्ये बाजार सिमत्यांची मक्तेदारी संपून जाणार आहे. परंतु यामध्ये व्यापारी मक्तेदारी वाढण्याची शक्यता असून व्यापारी जो भाव देतील तो शेतकऱ्यांना स्वीकारावा लागेल. दुसऱ्या विधेयकामध्ये शेतमाल जीवनावश्यक वस्तूमधून वगळल्यामुळे शेतकऱ्यांना जादा भाव देता येतील, मात्र व्यापारी कंपन्यांच्या साठवणूक व प्रक्रियेवर शासनाचे कोणतेही नियंत्रण नसल्याने त्याचा फायदा कोणाला होणार? हे स्पष्ट होत नाही, आणि तिसरे, म्हणजे करार शेतीला प्रोत्साहन देणाऱ्या विधेयकामुळे शेतमाल उत्पादनाच्या प्रक्रियेत देशी-विदेशी मोठ्या कंपन्या गुंतवणूक करतील, तसेच करारही करतील. त्यामुळे कंपनीची मक्तेदारी वाढण्याची भिती समस्त शेतकरी वर्गाला आहे.⁵

ब) हरित क्रांती आणि 1991 चे आर्थिक धोरण

देशातील अन्नधान्याचे उत्पादन वाढवण्यासाठी 1970 च्या दशकात देशव्यापी हरित क्रांतीची योजना आखली गेली. यासाठी रासायनिक खते, कीटकनाशके, औषधे, रसायने यांचा पिकांवर मारा करून पिकांचे उत्पादन वाढविणे ही हरित क्रांतीची ओळख होती. जिमनीचा पोत जाणून न घेता भरपूर पाणी देणे, रासायनिक खतांचा पिकांवर भडीमार करणे यांसारख्या उपायांमुळे देशातील शेतजिमनीचा कस कमी होऊ लागल्याचे दिसून येऊ लागले आहे. त्याचबरोबर हरित क्रांतीचे उद्दिष्ट साध्य करण्यासाठी जिमनीला बेसुमार पाणी दिले जाऊ लागले. यासाठी भूगर्भातील पाण्याचा प्रचंड प्रमाणात उपसा केला जाऊ लागला. 6

सन 1991 मधील नवीन आर्थिक धोरणामध्ये कृषी धोरणात मूलभूत बदल झाले. या धोरणावर जागितकीकरण, खाजगीकरण, उदारीकरण आणि स्पर्धात्मकता या चार घटकांचा प्रभाव पडला. भारताने WTO चे सदस्यत्व स्वीकारल्याने भारतात कृषी क्षेत्रावरील जी बंधने होती ती दूर करण्यात आली. त्यामुळे विदेशी उत्पादकांना भारताची दरवाजे पुर्णपणे खुली झाली. कृषी क्षेत्रात उदारीकरणाचे धोरण स्वीकारल्याने सबिसडी समाप्त करणे, कृषी बी-बियाणासाठी पेटंट कायदा केल्याने बी-बियाणाबाबत बहुराष्ट्रीय कंपन्यांचे वर्चस्व वाढले. खुल्या आयात धोरणामुळे सधन देशातला शेतीमाल भारतात आल्याने देशी मालाला किंमत मिळाली नाही. त्यामुळे खर्च अधिक व उत्पन्न कमी अशा संकटात शेतकरी सापडल्यामुळे आत्महत्या करू लागला. या उलट सेवा क्षेत्राचा हिस्सा वाढून, माहिती आणि तंत्रज्ञान क्षेत्राचा हिस्सा 53 टक्क्यांपर्यंत पोहोचला आहे.⁷

यावरून असे लक्षात येते की, हरित क्रांती आणि सन 1991 चे नवीन आर्थिक धोरणानुसार कृषी क्षेत्रावर फारसा प्रभाव दिसून येत नाही. उलट शेती क्षेत्रावर प्रतिकूल परिणाम दिसून येतात.

क) आपत्ती (हवामान बदल)

शेतीप्रधान असणाऱ्या भारतातील शेती मान्सून प्रधान आहे. देशात संपूर्ण वर्षभरात पडणाऱ्या एकंदर पावसापैकी 75 ते 80 टक्के पाऊस हा जून ते सप्टेंबर या मान्सूनच्या चार महिन्यातच पडतो. त्यामुळे, मान्सूनचा हा पाऊस वेळेवर येणे, वेळापत्रकाप्रमाणे बरसणे आणि पुरेशी वृष्टी होणे, या तीनही गोष्टी देशाच्या कृषी क्षेत्रासाठी खूपच महत्वपूर्ण ठरतात. खरीप आणि रब्बी असे आपल्या देशात शेतीचे दोन हंगाम. यातील मुख्यत: खरीपाचा हंगाम हा मान्सूनवरच विसंबलेला असतो. आपल्या देशात होणाऱ्या वर्षभरातील एकूण धान्योत्पादनातील जवळपास 53 टक्के उत्पादन हे खरीपाच्या हंगामात होते. मान्सून सामान्य असेल, तर खरीपाचे उत्पादन मोठ्या प्रमाणात झाल्यास रबीच्या हंगामालाही आधार मिळतो. मुळात पाऊसच कमी

झाला तर भूगर्भांतर्गत जलस्त्रोतांचे पुनर्भरण होत नाही. त्यामुळे रबीच्या पिकांची जोमदार वाढ होण्यास आवश्यक असलेला जिमनीतील ओलावा पुरेसा मिळत नाही. दुसरे म्हणजे, कमी पावसामुळे धरणे भरत नाहीत आणि त्याचा परिणाम भूपृष्ठीय सिंचनावर होतो. आपल्या देशात लागवडीखाली आणल्या जाणाऱ्या एकूण क्षेत्रापैकी केवळ 40 ते 45 टक्के क्षेत्रालाच सिंचनाची हमी आहे. ज्या देशातील शेती मुख्यतः पावसावरच अवलंबून असते, अशा देशामध्ये पावसाळा व्यवस्थित झाला नाही, तर सगळे अर्थकारणच अस्थिर बनते.

याबरोबरच अनिश्चित पर्जन्यामुळे शेती क्षेत्राची दुरावस्था होत आहे. सन 1970 ते सन 2004 या कालखंडात प्रतिवर्षी आपल्या देशात सरासरी तीन महापूर आले. याच प्रचंड महापूरांची संख्या सन 2005 पासून ते सन 2019 पर्यंत प्रतिवर्षी 19 झाली आहे. याच कालावधीत शेतजमीन वाहून गेली, शेतीचे प्रचंड नुकसान झाले, अल्पभूधारक संपून गेले, उभे पीक वाहून गेले आणि मागे वाळवंट उरले आहे. सन 2005 पासून ते मागच्या वर्षापर्यंत प्रतिवर्षी सरासरी 55 जिल्हे नद्यांच्या महापूरांनी प्रभावित झाले होते. सन 2019 मध्ये भारतातील 151 जिल्ह्यांची महापूरामुळे संपूर्ण वाताहात झाली होती. वातावरण बदलाच्या संकटामुळे आज देशामधील 9 कोटी 70 लाख लोकसंख्येला झळ पोचली आहे आणि यामध्ये शेतकऱ्यांचीच संख्या सर्वात जास्त आहे.

याशिवाय कोरोनासारख्या जैविक आपतीचाही कृषी क्षेत्रावर प्रतिकूल परिणाम झाल्याचे पाहावयास मिळतात. कोरोना विषाणू संसर्गामुळे संपूर्ण जगावर लॉकडाऊन करण्याची अभूतपूर्व वेळ आली. भारतातून निर्यात होणाऱ्या फळभाज्या आणि फळे गोदामामध्ये पडून आहेत. देशातील स्थानिक बाजारपेठा बंद पडल्या आहेत. कोरोना संसर्ग आजार असल्याने शासनाने गर्दी न करण्याचे आदेश दिले होते. यामुळे शहरांमधील बाजारपेठा आणि आठवडी बाजारपेठा या बंद पडत आहेत. त्यामुळे देशातील भाजीपाल्याची निर्यात 50 टक्क्यांनी घटली आहे. देशातील आंबा, द्राक्षे आदी फळे ही जगातील विविध देशात निर्यात केली जातात. मात्र, आंतरराष्ट्रीय वाहतुक सेवा बंद झाली आणि याचा फटका निर्यातदार शेतकऱ्यांपासून ते व्यापाऱ्यांपर्यंत आणि कामगारांपासून ते उद्योजकांपर्यंत सर्वांना बसला. फळे, फुले आणि भाजीपाला यांची साठवणूक आणि विक्री या प्रत्येक बाबतीत सध्या अडचण निर्माण झाली आहे. 11 त्यामुळे शेतीमालाचे मोठे नुकसान होत आहे.

अशा प्रकारे देशातील कृषी क्षेत्राला अनेक आपत्तींचा सामना करावा लागत आहे.

ड) वाढती लोकसंख्या आणि शहरीकरण वांगां पार्व

लोकसंख्या वाढ ही समस्या आपल्याला देशासाठी नवीन नाही. 1971 पासून 2011 या 40 वर्षांमध्ये देशाची लोकसंख्या 54 कोटी 81 लाखवरून 121 कोटींपर्यंत वाढली आहे. वाढत्या लोकसंख्येची सर्वप्रथम अन्नधान्याची सोय करावी लागते. या प्रचंड लोकसंख्येचे पोट भरण्यासाठी देशामध्ये 32 कोटी टन अन्नधान्याचे उत्पादन होणे अत्यावश्यक आहे. सध्या अन्नधान्य उत्पादन साधारण 25 कोटी टन आहे. त्यामध्ये निदान 28-30 टक्के वाढ करणे जरुरीचे आहे. अन्नधान्य पिकविण्यासाठी अधिकाधिक जमीन लागवडीखाली आणणे आता शक्य नाही. कारण तेवढी शेतजमीनच आता शिल्लक नाही. वाढत्या लोकसंख्येला रोजगार प्राप्त होत नसल्याने अतिरिक्त-जादा भार शेती क्षेत्रावर पडत आहे. त्यामुळे 'छुपी बेकारी' हा प्रकार शेतीमध्ये जास्त पाहावयास मिळतो.

भारत जरी खेडय़ांचा देश असला तरी वाढते शहरीकरण हे आपल्या लोकसंख्येचे एक महत्त्वाचे लक्षण आहे. खेडय़ांची शहरे आणि शहरांची महानगरे होत आहेत. लोकसंख्येचे केंद्रीकरण वाढते आहे. तसेच वाढत्या लोकसंख्येसाठी पुरेशी घरबांधणी, उद्योगधंदे, रस्ते, महामार्ग, लोहमार्ग, विमानतळ यासाठी प्रचंड प्रमाणामध्ये जमीन या घटकाची आवश्यकता असते. त्यामुळे जिमनीवरील झाडे, वनस्पती, पशुपक्षी हे सर्व नष्ट होत आहे. 11 त्याचा परिणाम म्हणून मोठ्या प्रमाणात शेतजमीन ही बिगरशेती झाली आहे.

इ) व्यापार आणि किंमतविषयक अयोग्य धोरण

जागतिकीकरण आणि जागतिक व्यापार संघटनेतील तरतुदींमुळे कृषीमालाच्या विक्रीसाठी जागतिक बाजारपेठ खुली झाली असून कृषीमालाच्या आयात-निर्यातीच्या संधी वाढलेल्या आहेत. कृषीमालाची निर्यात ही उत्पादकांकडून होणे गरजेचे आहे. कारण त्याशिवाय निर्यातीतून मिळणारा खरा फायदा हा शेतकरी, शेतकरी उत्पादक कंपन्या, ग्रामीण भागातील युवक, उद्योजकांना मिळणे अशक्यप्राय वाटते. देशातील 'कृषी निर्यात धोरण 2018-19' हे कृषी <mark>विकासासाठीचे महत्त्वपूर्ण धोरण आखण्यात आले.</mark> या धोरणात अस्सल देशी वाणाच्या, नाविन्यपूर्ण, सेंद्रिय राष्ट्री<mark>य वैशिष्ट्ये असलेल्या उत्पादनांच्या</mark> निर्यातीला प्रोत्साहन देण्याचा विचार आहे. केंद्राच्या या नव्या कृषी <mark>व्यापार धोरणात अर्थव्यवस्थेचे निर्यातप्रवण</mark> उदारीकर<mark>ण</mark> अपेक्षित आहे. यात उत्पादन व्यवस्था आणि बाजार यांमध्ये शासनाचे फारसे निर्बंध न राहता स्पर्धायुक्त वातावरण असते. निर्यातवाढी शासना<mark>च्या योजना, कार्यपद्धती प्रभावीरित्या अमलात आल्या तरच हे शक्य होते. स्वातंत्र्यानंतर</mark> आजवर सर्व सरकारांची कृषिविषयक नीती बह्तांशाने यासंबंधात तारक नसून मारक ठरली आहे. या धोरणाबददल आज<mark>चे चित्रही तितकेसे स्पष्ट नाही. निर्यातीच्या दृष्टीने एकतर प्रत्येक देशा</mark>तील कृषिमालाच्या उत्पादन खर्चात तफावत आढळते. आपल्या देशात तर हे प्रकर्षाने जाणवते. मधल्या दलालांची साखळी एवढी मजबूत असते की, निर्यातक्षम <mark>कृषिमालाच्या विक्रीतून शेतकऱ्याला फारसा फाय</mark>दा होत नाही. देशाचे आयात-निर्यात धोरण स्थिर नाही. सवंग लोकप्रियतेसाठी देशांतर्गत कृषिमालाचे भाव वाढले की, आयात केली जाते व निर्यात रोखली जाते. <mark>त्यावेळी उत्पादक शेतकरी भरडतात. अ</mark>लिकडे, कां<mark>दा</mark>, साखर, तांदूळ, गह् या उत्पादनांचे भारतीय शेतकऱ्यांना खूप वाईट अनुभव आले. वाटेल त्यावेळी आयात व वाटेल त्यावेळी निर्यातबंदी असा सरकारने अतिरेकच केला. विकसनशील देशातील कृषी क्षेत्राचे संरक्षण कमी केल्याचे दाखवून 'ग्रीन बॉक्स'च्या नावा<mark>खाली प्रोत्साहनात्मक मदत देऊन ते कवच अबाधित ठेवता</mark>हेत.¹² पण, इथे मात्र सबसिडीज कमी करून शेती क्षेत्र दूर्लक्षित केले जात आहे.

भारताच्या अंतर्गत बाजारातही शेतमालाच्या किंमती दबलेल्या राहिल्या. त्याउलट शेती उत्पादनासाठी लागणारे अनेक आदान घटक अधिकाधिक महाग होत गेले. शेती व उर्वरित अर्थव्यवस्था यांच्यातील व्यापार शर्ती प्रत्यक्ष बाजारात वाढत्या प्रमाणात प्रतिकूल झाल्या. जोपर्यंत बाजारात शेतमालाच्या किंमती (व्यापारी संरक्षणाच्या काळात) कृषिमूल्य आयोगाच्या किंमतीपेक्षा जास्त होत्या, तोपर्यंत सरकारवर हमीभावाने मोठ्या प्रमाणात शेती उत्पादन खरेदी करण्याची वेळ आली नसती. हमीभावाचे बंधन सरकारवर असते, ते खाजगी ग्राहकास बंधनकारक करण्याचा कायदा संविधानाशी विसंगत ठरेल. डॉ. एम. एस. स्वामिनाथन या कृषी-अर्थशास्त्रज्ञाच्या अहवालातील उत्पादन खर्च+पन्नास टक्के नफा हे कृषिमाल किंमतीचे सूत्र व त्याच धर्तीचे

सध्याच्या केंद्र शासनाचे आश्वासन, यामुळे शेती उत्पादकांच्या मूल्यअपेक्षा वाढल्या तर खुल्या व्यापारामुळे दबलेल्या बाजारकिंमती यातून अपेक्षाभंगाचा तणाव शेतकऱ्यांच्या मनात वाढत चालला आहे.¹³

निष्कर्ष

भारतीय अर्थव्यवस्थेतील शेती क्षेत्राचा हिस्सा दिवसेंदिवस घटत चालला आहे. प्रामुख्याने भारतीय राजकीय व्यवस्थेकडून शेती क्षेत्राच्या केलेल्या उपेक्षेमुळे आज शेती क्षेत्र अधिक दुर्लक्षित होत आहे. सरकारच्या अनिश्चित कृषी धोरणामुळे भारतीय अर्थव्यवस्थेतील शेती क्षेत्रामध्ये अनेक नवी आव्हाने उभी राहत आहेत. दुसरे म्हणजे शेतीच्या आधुनिकतेच्या अंधानुकरणामुळे शेतीचे विशेषतः जिमनीचा पोत, उत्पादन यावर प्रतिकूल परिणाम मोठ्या प्रमाणात पाहावयास मिळत आहेत. तिसरे म्हणजे नैसर्गिक आपती व हवामान बदलांमुळे आज शेतीक्षेत्र अधिकतर संकटात सापडलेले आहे. त्यामुळे संपूर्ण भारतीय अर्थकारण विस्कळीत स्वरूपात असल्याचे पहावयास मिळते. त्याबरोबरच देशाच्या वाढत्या लोकसंख्येमुळे जिमनीचे विभाजन होऊन उत्पादनात अधिकतर घट होत आहे. शिवाय शहरीकरणामुळे विकासाच्या नावाखाली लागवडीखालील जिमनी वापरण्यात आल्या. त्याचा परिणाम म्हणून आज बरीच शेतजमीन ही बिगरशेती झाली आहे. शेतमाल व्यापाराबद्दल सरकारचे असलेले दुटप्पी धोरण आणि कृषिमालाच्या भाव निश्चितीमधील विसंगती या कारणास्तव आज शेती क्षेत्राला वाईट अनुभव येत आहे.

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औरंगाबाद जिल्ह्यातील तेलबीया लागवड व उत्पादन : एक अभ्यास

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सारांश :

मानवी आहारामध्ये गहू, ज्वारी, बाजरी, तांदुळ, पालेभाज्या, कडधाय, इत्यादींचा समावेश असतो. यावर प्रक्रिया करून खाद्य पदार्थ तयार केले जातात. खाद्यपदार्थ तयार करण्यासाठी विविध मसाले, साखर, गुळ इत्यादी घटकांबरोबरच खाद्यतेलाचाही वापर केला जातो. तेल बियांवर प्रक्रिया करून खाद्य तेलाची निर्मिती केली जाते. जसे भूईमुग, करडई, सूर्यफुल, तिळ, सोयाबीन, मोहरी, जवस इत्यादी तेल बियांपासून खाद्य तेल निर्माण केले जाते. विविध प्रकारचे खाद्य पदार्थ बनवण्यासाठी तेलाचा वापर वाढत आहे. यामुळे खाद्य तेलास प्रचंड मागणी आहे. भारतीय शेतीमध्ये भूईमुग, करडई, तीळ, सोयाबीन, जवस, मोहरी, सुर्यफुल इत्यादी तेल बियांची लागवड करून तेल उत्पादन घेतले जाते.

बीज संज्ञा : तेलबिया, लागवड क्षेत्र, तेलबिया उत्पादन

प्रस्तावाना :

खाद्यतेल निर्मितीसाठी कच्चा मलाच्या स्वरूपात तेल बियांची आवश्यकता असते. खाद्यतेलाचा वापर जास्त असल्यामुळे बाजारपेठेत तेल बियांना मागणी जास्त आहे. म्हणून शेतीमध्ये तेलबियांची लागवड केली जाते. भारतातील तेल बीया उत्पादन व त्यापासून निर्माण होणारे खाद्यतेल ही मागणी पूर्ण करू शकत नाही. यामुळे इतर देशातुन खाद्य तेल आयात करावे लागते. महाराष्ट्रामध्ये सोयाबीन, भूईमुग, करडई, इत्यादी तेल बियांची लागवड जास्त आहे. तसेच तेल बियांवर प्रक्रिया करणारे खाद्यतेल निर्मिती कारखाने देखिल आहेत. औरंगाबाद जिल्ह्यात शेत जिमन तेल बियांपिकास उपयुक्त आहे. सिंचन सुविधेचा वापर करून तेलबीया लागवड केली जाते.

अभ्यास क्षेत्र :

महाराष्ट्र राज्याच्या उत्तरमध्य भागातील औरंगाबाद एक महत्वाचा जिल्हा आहे. मराठवाडा विभागातील या जिल्हयास ऐतीहासीक वारसा लाभलेला आहे. औरंगाबाद जिल्हयाचा विस्तार 19° ते 20° उत्तर अक्षांस आणि 74° ते 76° पूर्व रेखांशामध्ये आहे. औरंगाबाद जिल्हयां पूर्वेस जालना, पश्चिमेस नाशिक, नैऋत्येस अहमद नगर, उत्तरेस जळगाव, अग्नेयेस बीड या जिल्ह्यांच्या सीमा लाभलेल्या आहेत. औरंगाबाद जिल्ह्यांचे क्षेत्रफळ 10137.61 चौ.की.मी. असून महाराष्ट्र राज्याच्या 3.28% इतके आहे. औरंगाबाद जिल्ह्यांचे क्षेत्रफळ 10137.61 चौ.की.मी. असून महाराष्ट्र राज्याच्या 3.28% इतके आहे. औरंगाबाद जिल्ह्यात 9 तालुके आहेत. यामध्ये कन्नड, सोयगाव, सिल्लोड, फुलंब्री, औरंगाबाद, खुलताबाद, वैजापुर, गंगापूर, पैठण, या तालुक्याचा समावेश होतो. या जिल्ह्यात पावसाळा, हिवाळा, उन्हाळा तीन ऋत् असून जिल्ह्याचे सरासरी पर्जन्यमान हे 675.46 मी.मी. आहे. हा जिल्हा गोदावरी व तापी नदीच्या खोऱ्यात येत असून तापी खोऱ्यातील वाघूर एक महत्वाची नदी आहे. त्याच बरोबर गोदावरी नदी जिल्ह्यातील वैजापूर,

गंगापूर, पैठण तालुक्यातून वाहते. तसेच पुर्णा, शिवना, खांब, दूधना, गल्हाटी, गिरणा इत्यादी महत्त्वाच्या नद्या वाहतात. जनगणना 2011 प्रमाणे औरंगाबाद जिल्ह्याची एकूण लोकसंख्या 37,01,282 इतकी आहे.

संशोधानाची उदीष्टे :

- 1. औरंगाबाद जिल्ह्यातील तेलबीया लागवड क्षेत्राचा अभ्यास करणे.
- 2. औरंगाबाद जिल्ह्यातील तेलबीया उत्पादनाचा अभ्यास करणे.

गृहितके :

तेल बिया लागवड क्षेत्र वाढल्यास तेलबिया उत्पादानात वाढ होते.

संशोधन पद्धती व आधार साम्ग्री संकला :

औरंगाबाद जिल्ह्यातील तेलिबया लागवड क्षेत्र व उत्पादानाचा अभ्यास करण्यासाठी दिवतीय साधन सामुग्री संकलित करण्यात आली असू औरंगाबाद जिल्हा सामाजिक व आर्थिक समालोचानाचा आधार घेतला असू माहिती विश्लेषण करण्यासाठी आलेख, तक्ते इत्यादीचा वापर करण्यात आलेला आहे. संदर्भासाठी विविध प्स्तके, मासिके, वर्तमानपत्रे इत्यादीचा वापर करण्यात आलेला आहे.

विषय विवेचा:

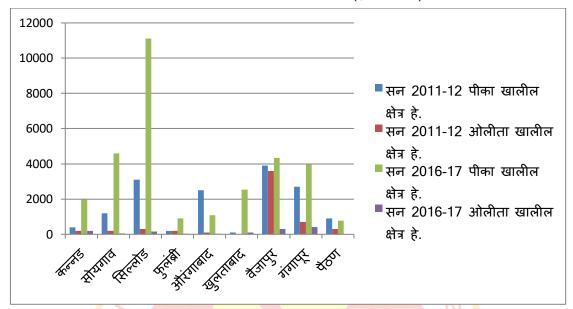
'भारत दरवर्षी 70 हजार कोटी रूपयांची खाद्यतेल आयात करतो. त्यामुळे आपले बरेच परकीय चलन खर्च होते. सरकारने तेलिबया उत्पादन योजनेला प्राधन्य दिले असून यंदा तेल बियांची लागवड वाढली आहे. तसेच तेल बियांना शेतमाल जीवनावश्यक वस्तूंच्या यादीतून वगळण्याची तरतुद नवीन कायद्यात करण्यात आली. त्यामुळे तेलिबयांची लागवड जास्त प्रमाणात होण्याची शक्यता आहे.' (दैनिक लोकसंता 6 ऑक्टोबर 2020) औरंगाबाद मराठवाड्यातील प्रशासिकय जिल्हा असून जिल्ह्यात भूईमुग, सोयाबीन, करडई, या तेलिबयांची लागवड केली जाते. सूर्यफुल, तीळ यांची लागवड काही प्रमाणात केली जाते.

औरंगाबाद जिल्ह्यातील तेलबीयाचे लागवड क्षेत्र (हेक्टरमध्ये) (तक्ता क्र. 1)

अ.क्र.	तालुका	सन 2	011-12	सन 2	016-17	
	20	पीका खालील क्षेत्र	ओलीता खालील	पीका खालील क्षेत्र	ओलीता खालील	
		(हे.)	क्षेत्र (हे.)	(हे.)	क्षेत्र (हे.)	
1	कन्नड	400	200	1966	194	
2	सोयगाव	1200	200	4598	54	
3	सिल्लोड	3100	300	11107	154	
4	फुलंब्री	200	200	902	37	
5	औरंगाबाद	2500	100	1090	25	
6	खुलताबाद	100	0	2531	97	
7	वैजापुर	3900	3600	4334	307	
8	गंगापूर	2700	700	3968	412	
9	ਪੈ ਠण	900	300	772	7	
	एक्ण	15000	5600	31268	1287	

आधार : जिल्हा अधिक्षक कृषि अधिकारी, औरंगाबाद

स्त्रोत : सामाजिक आर्थिक समालोचन औरंगाबाद जिल्हा औरंगाबाद जिल्ह्यातील तेलबीयाचे लागवड क्षेत्र (हेक्टरमध्ये) आलेख क्र. 1



औरंगाबाद जिल्ह्यात सन 2011-12 मध्ये एकूण तेल बीया लागवड क्षेत्र 15000 हे. असून ओलीताचे क्षेत्र 5600 हे. आहे. तर सर्वात जास्त तेल बिया लागवड क्षेत्र हे वैजापूर तालुक्यात 3900 हे. असून ओलिताचे क्षेत्र 3600 हे. आहे. सगळ्यात कमी लागवड क्षेत्र खुलताबाद तालुक्यात असू 100 हे. आहे.

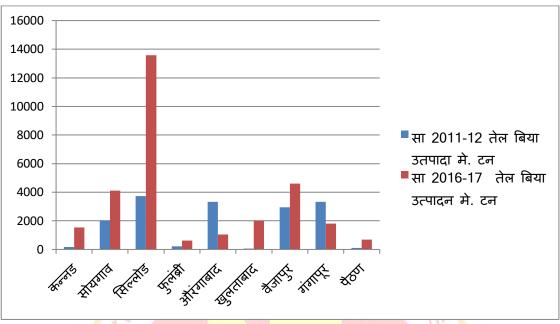
सन 2016-17 या वर्षात जिल्ह्यात तेल बीया लागवड क्षेत्र 31268 हे. असून ओलीताचे क्षेत्र 1287 हे. आहे. सर्वात जास्त लागवड क्षेत्र हे सिल्लोड तालुक्यात असून 11107 हे. आहे. सर्वात कमी लागवड क्षेत्र पैठण तालुक्यात 772 हे. आहे.

औरंगाबाद जिल्ह्यातील तेलबिया उत्पादन (तक्ता क्र. 2)

अ.क्र.	तालुका	सा 2011-12	सा 2016-17
		तेल बिया उतपादा मे.	
		टन	टन
1	कन्नड	174	1544
2	सोयगाव	2040	4120
3	सिल्लोड	3721 journal.	13568
4	फुलंब्री	224	622
5	औरंगाबाद	3339	1051
6	खुलताबाद	52	2006
7	वैजापुर	2942	4595
8	गंगापूर	3331	1812
9	ਪੈ ਠण	100	676
	एक्ण	15923	29994

आधार : जिल्हा अधिक्षक कृषि अधिकारी, औरंगाबाद

स्त्रोत : सामाजिक आर्थिक समालोचन औरंगाबाद जिल्हा



औरंगाबाद जिल्ह्यातील तेलबिया उत्पादन (आलेख क्र. 2)

वरील तक्त्याच्या आधारे औरंगाबाद जिल्ह्यातील सन 2011-12 मधील तेल बिया उत्पादन 15923 मे. टन झालेले आहे. यामध्ये सर्वाधिक उत्पादन हे सिल्लोड तालुक्यातील असून 3721 मे. टन ऐवढे आहे. सर्वात कमी उत्पादन हे खुलताबाद तालुक्यातील असून 52 मे. टन ऐवढे आहे.

सन 2016-17 मधील जिल्ह्यातील एकूण तेल बिया उत्पादन 29994 मे. टन ऐवढे आहे. सर्वाधिक उत्पादन हे सिल्लोड तालुक्यातील असून 13568 मे. टन ऐवढे आहे. सर्वात कमी फुलंब्री तालुक्यातील असून 622 मे. टन ऐवढे आहे.

निष्कर्ष:

औरंगाबाद जिल्ह्यातील तेलिबया लागवड क्षेत्रामध्ये सन 2016-17 या वर्षी सन 2011-2012 पेक्षा वाढ झालेली आहे. सन 2011-12 यावर्षी जिल्ह्यातील एकूण लागवड क्षेत्र हे 15000 हे. ऐवढे आहे. तर सन 2016-17 या वर्षी 31268 हे. ऐवढे आहे.

सन 2011-12 मध्ये तेल बिया उत्पादन 15923 मे. टन ऐवढे आहे. तर 2016-17 यावर्षी तेलबिया उत्पादन हे 29994 मे. टन ऐवढे झालेले.

सन 2016-17 यावर्षी 2011-12 पेक्षा तेल बिया लागवड क्षेत्र अधिक असून तेल बिया उत्पादनहीं अधिक आहे.

संदर्भ :

- 1) औरंगाबाद जिल्हा सामाजिक आर्थिक समालोचन
- 2) कृषी भूगोल-डॉ. सूर्यवंशी डी.एस. / निराली प्रकाशन
- 3) कृषि विभाग महाराष्ट्र शासन संकेत स्थळ
- 4) Barooch, S. (1995): "Modern fruit Cunltivation", Kalyani Publication New Delhi.
- 5) Singh, Jasbir & Dhillan S.S. (2000): "Agricultural Geography", Tata McGraw Hill publishing Company, New Delhi
- 6) दैनिक लोकसत्ता (दि. 6/10/2020)

कोव्हिड-19 च्या नियोजन कार्यातील राजकारण हेच भारतासमोरील एक आव्हान

डॉ. सोमनाथ दऱ्याप्पा ह्बाले

गोषवारा

कोव्हिड-19 किंवा कोरोना ही जागतिक महामारी आहे. जगातील ही सर्वात मोठी आपती आहे. या आपतीमुळे जगाचा दैनंदिन व्यवहार पूर्णपणे बदललेला आहे. शिवाय कोरोनाच्या प्रादुर्भावामुळे राजकीय व्यवस्थेपुढे अनेक आव्हाने निर्माण झालेले आहेत. हे जितके खरे आहे, तितकेच कोरोना काळात प्रत्येक घटकांमधील सवंग लोकप्रियतेसाठी केलेले राजकारण हेच एक भारतासमोरील मोठे आव्हान ठरत आहे. या काळात मानवाच्या भौतिक गरजा पूर्ण करण्यासाठी ज्या लोककल्याणकारी योजना राबविल्या जात आहेत. परंतु त्यामध्ये कोरोना आपती ही एक संधी या दृष्टीने राज्यकर्त्यांकडून राजकीय हेतू साध्य करण्याचा प्रयत्न लक्षात येतो.

प्रस्तावना

कोव्हिड-19 हा रोग 21व्या शतकाचा इतिहास निश्चितपणाने अधोरेखित करणारा असा आहे. कदाचित या साथीच्या आजारामुळे मानवी संस्कृतीच्या दिशा आणि विकासावर लक्षणीय परिणाम होऊ शकतो. या रोगापुढे आज जगातील अनेक विकसित राष्ट्रेही हतबल झालेली आपण पाहत आहोत. म्हणून या रोगाचा प्रतिकार करण्याची जबाबदारी अनेक संस्थांकडे जाते. यामध्ये स्वयंसेवी संस्था, सामाजिक संस्था, धार्मिक संस्था, राज्यसंस्था, भांडवलशाही यांचा समावेश होतो. परंतु या संस्था केवळ एवढेच काम करीत आहेत, असे नव्हे! तर या महामारीच्या निमित्ताने या संस्थांकडून राजकारणही केले जात आहे.

राज्य ही संस्था लोककल्याणकारी मानली जाते. परंतु राज्याकडून या कोरोना काळात योग्य ते नियोजन व व्यवस्थापन होऊ शकले नाही. शिवाय कोव्हिड काळात संपूर्ण भारतातील जनता अनेक समस्यांमुळे हतबल झालेली आहे, असे असताना कोरोनाने मेलेल्या जनतेच्या टाळूवरचे लोणी खाण्यामध्येही राज्यकर्त्यांकडून कोणतीही चाडभीड ठेवलेली दिसत नाही. कोरोनामुळे सध्या आणि भविष्यात उभे राहणाऱ्या आव्हानांना सामोरे जाण्यासाठी सरकार व प्रशासनाकडून योग्य नियोजन व व्यवस्थापन आवश्यक असताना देशात प्रतिष्ठेचे राजकारण केले जात आहे.

आज राज्यव्यवस्थेकडून लोकशाहीच्या नावाखाली नियोजन या शब्दाची तर पुरती अहवेलनाच केल्यासारखे वाटते. तसेच आरोग्य यंत्रणा व सुविधेमधील राजकारणाचा अतिरेक, कोव्हिड काळातही निवडणुकांचे नियोजन, टाळेबंदीचे राजकारण आणि अर्थकारणाचे राजकारण या माध्यमातून केलेले सतेचे व पक्षीय राजकारण आज भारतीय जनतेसमोरील एक मोठे आव्हान ठरलेले आहे. हाच विचार मध्यवर्ती ठेवून प्रस्तुत शोधनिबंधाची मांडणी करण्यात आलेली आहे.

शोधनिबंधाची उद्दिष्टे

- 1) कोव्हिड-19 काळातील नियोजन कामाचे राजकीय पक्षाकडून केलेल्या राजकारणाचा अभ्यास करणे. गृहीतके
 - 1) कोव्हिड-19 काळातील कल्याणकारी कामांमध्ये पक्षीय व श्रेयवादी राजकारण आहे.

प्रस्तुत शोधनिबंधाच्या मांडणीसाठी विश्लेषणात्मक संशोधन पद्धतीचा आधार घेतलेला आहे. यामध्ये संदर्भीय पुस्तक, विविध मासिकातील लेख, वर्तमानपत्रे, इंटरनेट, इत्यादी दुय्यम साधनांचा उपयोग केलेला आहे. या साधनाद्वारे कोरोनाच्या नियोजनामधील झालेल्या राजकारणाचा प्रत्यय पुढील मुद्यांद्वारे अधिक स्पष्टपणे समजून घेता येईल.

कोव्हिड - 19 काळातील भारतीय लोकशाही

जगातील सर्वात मोठी लोकशाही अशी बिरुदावली लावणाऱ्या भारतीय लोकशाहीची तत्वे कोरोना काळात राज्यकर्त्यांकडून पायदळी तुडविलेली दिसतात. कोरोनाकाळात भारतामध्ये नागरिकांच्या स्वातंत्र्यामध्ये घट झाल्याचे अमेरिकेतील 'फ्रीडम हाऊस' या संस्थेने आपल्या अहवालात नमूद केले आहे. राज्यसंस्थेने स्वातंत्र्याची हमी दिली होती. परंतु करोनामुळे सर्वेलियन्सच्या यंत्रणांनी हुकूमशाही पद्धती सुरू केली. संपतीबद्दल राज्यसंस्था काळजी घेते, परंतु कोणाच्या संपत्तीबद्दल राज्यसंस्था काळजी घेते, हा महत्वाचा प्रश्न् आहे. गोरगरीब जनता रस्त्यावर आली. त्यांचा रोजगार गेला, याउलट राज्यसंस्था भांडवली संपत्तीचे रक्षण करण्यासाठी प्रयत्न करीत आहे. लोकशाही व्यवस्था असलेल्या राष्ट्रामध्ये नियोजनाला अधिक महत्त्व दिले जाते. राज्यघटनेच्या मूलतत्त्वांवर लोककल्याणकारी राज्याची भूमिका स्वीकारून देशाच्या जनतेला विकासाच्या प्रवाहात आणण्यासाठी विविध योजना राबविणे, हे केंद्र आणि राज्य शासनाचे मध्यवर्ती कार्य आहे. शिवाय वंचित व असाह्य जनतेला न्याय देण्यासाठी शासनाने प्रशासन, विविध विभागांची निर्मिती करून समाजातील शेवटच्या घटकापर्यंत स्विधा प्रविणे, हे लोकशाहीचे दयोतक आहे.

सर्वसाधारण परिस्थितीत केंद्रातील विशिष्ट राजकीय पक्षाचे सरकार आणि राज्यातील भिन्न राजकीय पक्षांचे सरकार यांच्यातील संबंध हे पक्षीय स्पर्धेचे आणि सूड बुद्धीचे राजकारण करणारे असते. केंद्रातील सत्ताधारी पक्षाव्यतिरिक्त अन्य पक्षांकडून चालवल्या जाणाच्या राज्य सरकारांचे केंद्रातील सत्ताधारी पक्षाकडून दमन होण्याचा इतिहास हा केंद्र आणि राज्य संबंधाच्या संरचनेतील अन्यायीपणाचा इतिहास आहे. अशाप्रकारे सर्वसाधारण परिस्थितीत केंद्र आणि राज्य यांच्यातील मर्यादशील संघराज्य संबंधांना पक्षीय राजकारणाचे स्वरूप प्राप्त होते. या अरिष्टाचे गंभीर स्वरूप लक्षात घेता कोविड-19 या साथरोगाच्या उद्रेकानंतर विरोधी पक्षाच्या नेतृत्वाखालील राज्य सरकारांच्या दमनाच्या राजकारणाचे दैनंदिन स्वरूप काही काळासाठी सुप्तावस्थेत राहील असे म्हणायला हरकत नाही. तथापि, अशा अरिष्टाच्या परिस्थितीत राज्य सरकारांची मते विचारात न घेता निर्णय घेण्याबाबत केंद्र सरकारला विशेष स्थान प्राप्त होईल. आणि त्याद्वारे सत्तेचा असमतोल निर्माण होण्याची शक्यता कोणीही नाकारू शकत नाही. ५ सध्या केंद्र सरकार लॉकडाऊन संदर्भातील निर्णय राज्य सरकारांवर सोपवण्याच्या आपल्या अधिकाराचा वापर करताना दिसत आहे. त्यातून या साथरोगाचा सामना करण्याची जबाबदारी राज्य सरकारांवर सोपवली जात आहे. साथरोगातून निर्माण झालेल्या व्यापक जनसमुदायाच्या जीविताच्या आणि उदरनिर्वाहाच्या संरक्षणाचे आव्हान आणि त्याची तीव्रता लक्षात घेता काही गोष्टी घडवून आणण्याच्या सर्वसाधारण पद्धतीत बदल करणे अत्यावश्यक ठरले आहे.

देशात कोरोनाचे संकट वाढत चालले असताना, या काळातही अनेकांना राजकारण सुचत आहे. खरे तर या संकटकाळात राजकीय नेत्यांनी संयम बाळगून सरकारच्या प्रयत्नांना बळ द्यायला हवे. परंतु तसे काही होताना दिसत नाही. आपले पूर्वीचे हिशोब चुकते करण्यातच अनेक जण धन्यता मानत आहेत.⁶ कोरोना संकटाच्या काळात सार्वजनिक आरोग्यसेवेची वाताहत होणे म्हणजे लोकशाहीचे अपयश आहे. कोरोना काळात केंद्र व राज्य यांच्या साठमारीमध्ये स्थानिक स्वराज्य संस्थाना कोणतेही स्थान वा किंमत नव्हती. नगरपालिका, महानगरपालिका आणि जिल्हा परिषदा निर्णयांच्या संदर्भात ह्या संस्था पराधीन होत्या. आपल्या लोकशाहीचे हेही एक विदारक चित्र आहे . प्रशासन केवळ लोकप्रतिनिधीमार्फतच लोकांशी संबंध ठेवू शकते आणि हे प्रतिनिधी जेव्हा कार्यक्षम नसतात, तेव्हा नोकरशाहीच्या हातात नियंत्रण जाते! ह्यात जनता कुठे आहे ? मुळातला कारभारच वसाहतवादी असल्याने जनतेच्या हातात काहीच सूत्रे नसतात. जनतेमधले काही घटक बेशिस्तपणे वागतात, त्याची कारणे लोकांचे अज्ञान, बेफिकिरी, काही प्रमाणात निराशा आणि बंडखोरी आहे. जनतेला संघटित करणाऱ्या आणि त्यांच्या हातात कारभार देणाऱ्या मोहल्ला सभा, वार्ड कमिट्या, नागरिक सभा अशा यंत्रणा आपण निर्माणच केलेल्या नाहीत. यामुळे कोविड काळात लोकशाहीचे तत्व अधिकच दुबळे झाले.

आरोग्य यंत्रणेतील राजकारण

कोव्हिड संकटामुळे देशाच्या आरोग्य यंत्रणेच्या बाबतीत अनेक प्रश्न जनतेसमोर उभे राहिले. जनतेसमोर हे प्रश्न प्रामुख्याने राजकीय अनास्थेमुळे निर्माण झाले. सार्वजनिक आरोग्य व्यवस्थेतील गलथान कारभारामुळे जनतेला अनेक प्रकारचा त्रास सहन करावा लागला. या संकट काळात आरोग्यासंबंधी देशामध्ये प्रत्येक पक्ष व संघटनांनी समन्वयाने प्रयत्न करणे गरजेचे होते. परंतु कोव्हिडच्या संकटात सुविधा उपलब्ध करण्याच्या नावाखाली दवाखाने, बेड्स, डॉक्टर, औषध कंपन्या, लसीकरण यामधील पक्षीय व श्रेयवादी राजकारण पाहावयास मिळाले. याचा प्रत्यय महाराष्ट्र राज्यामध्ये अधिक आला. याचे कारण म्हणजे आरोग्य यंत्रणेचे झालेले अतिरिक्त खाजगीकरण होय. केंद्र सरकारकडून केलेल्या खाजगीकरणामुळे बाजारपेठेला अपेक्षित असलेले आरोग्य क्षेत्राची नियमन, पारदर्शकता, उत्तरदायित्व यांच्या यंत्रणा, पद्धतीदेखील भारतात प्रेशा विकसित झालेल्या नाही.

आज भारतात 70 टक्के दवाखाने खाजगी स्वरूपाचे तर 30 टक्के सरकारी आहेत. कोव्हिड काळात शासकीय रुग्णालय अपुरी पडत आहेत, म्हणून सरकारने खाजगी रुग्णालयांना व्यवस्थेत जोडून घेतलेले आहे. परंतु कोव्हिड या महामारीत आरोग्य सेवेच्या नावाखाली औषध व उपकरण जनतेला महाग मिळत आहेत. तसेच आरोग्य सुविधेचा तुटवडा दाखवून रुग्णांकडून अधिक पैसे उकळणे, शिवाय सामान्यतः औषध कंपन्यांचे हित सरकारे सांभाळत असतात. त्याचप्रमाणे अशा महामारीच्या काळात काही राजकीय पक्षांनी व राजकारण्यांनी विवेक आणि नैतिक दृष्टिकोन बाजूला ठेवून लॉकडाऊन, औषधे व लसीकरण, रुग्णालयातील दुर्घटना यामध्येही श्रेयवादाचे राजकारण केल्याचे लक्षात येते. या महामारीच्या काळात सत्ताधारी आणि विरोधी पक्ष आरोग्य यंत्रणा मध्यवर्ती ठेवून एकमेकांवर टिका टिप्पणीचे राजकारण करीत बसण्यापेक्षा जनतेला सौहादर्य दाखवणे आज काळाची गरज आहे.

जागतिक आरोग्य संघटनेच्या धोरणानुसार देशाच्या जीडीपीच्या किमान 5 टक्के रक्कम ही सार्वजिनक आरोग्यावर खर्च करणे आवश्यक आहे. परंतु याबाबत आजपर्यंतच्या भारतातील सरकारांची धोरणे अयोग्य राहिली आहेत. सार्वजिनक आरोग्यावर होणारा खर्च हा सन 1985 ते सन 2003 या काळात 1.3 टक्क्यांवरून 0.9 टक्क्यांपर्यंत खाली आणला गेला. तर सन 2020 मधील आरोग्यावर होणारा खर्च

जीडीपीच्या 1.3 टक्क्यांपर्यंत इतका मर्यादितच राहिला आहे. यावरून असे लक्षात येते की, आरोग्य यंत्रणा ही आज कोरोना काळात राजकारणाचे माध्यम बनत आहे.

कोव्हिड काळातील निवडण्का

कोरोना काळात देशाची आरोग्यासंदर्भात खूप वाईट स्थिती असताना काही राज्यांमध्ये निवडणुका व्यवस्थितिरत्या पार पाडल्या, तर काही राज्यांमध्ये निवडणुका टाळण्याचे राजकारण करण्यात आले. राज्य निवडणूक आयोग आणि राज्य सरकारमध्ये निवडणुका घेण्यासंबंधी अनेक वाद निर्माण झाले होते. यामध्ये विधानसभा व स्थानिक स्वराज्य संस्थांच्या निवडणुका स्थिगित करण्याविषयीचे राजकारण काही राज्यांमध्ये दिसून आले. कोरोना काळात बिहार, हैदराबाद, जम्मू-काश्मीर येथील निवडणुका व्यवस्थित पार पाडल्या. तर आंध्रप्रदेश मधील निवडणुकांवर प्रश्नचिन्ह उभा केली. या निवडणुकांमध्ये सोयीचे राजकारण पाहावयास मिळते.

फेब्र्-मार्च, 2021 मध्ये कोरोनाची भारतात द्सरी लाट आली असताना, देशात मात्र चार राज्ये आणि एका केंद्रशासित प्रदेशातील निवडण्का जाहीर झाल्या. दरम्यान निवडण्क प्रचारासाठी राजकीय पक्षांनी मोठ-मोठ्या सभा घेतल्या. त्यामुळे या राज्यांमध्ये कोरोनाचा प्रादुर्भाव मोठ्या प्रमाणात वाढला. यावरून असे लक्षात येते की, दे<mark>शातील पक्षांना व निवडणूक आयोगाला जनतेच्या आरोग्या</mark>पेक्षा निवडणुका महत्त्वाच्या वाटत होत्या. भारतात संसदीय शासनपद्धती असल्याम्ळे कायदेमंडळ, कार्यकारी व न्यायमंडळ या शाखा एकमेकांवर नियंत्रण ठेवण्याचे काम करीत असतात. परंत् या तिन्ही शाखांमध्ये समन्वय व एकवाक्यता दिसून येत नाही. न्यायमंडळ न्यायदानाचे कार्य करीत असते. परंतु या निवडणुकीवेळी मूग गिळून गप्प बसलेली न्यायव्यवस्था कोरो<mark>नाचा वाढता प्रभाव पाह्न मानवतेविषयी न्याय संकल्</mark>पनेचा पोकळ पुळका आणून पुढे सरसावली. न्यायालयाने निवडणूक आयोगावर कायद्याचा बडगा वेळीच उचलायला हवा होता. राजकीय पक्षांना प्रचार सभा घे<mark>ण्यासाठी परवानगी कशी दिली? सभाच घ्यायच्या होत</mark>्या, तर डिजिटल इंडियाचा वापर होणे योग्यतेचे होते. तसेही आज भार<mark>तातील शिक्षण व्यवस्था ऑनला</mark>इन पद्<mark>धती</mark>वर व्यस्त आहे. पण या आध्निक काळातही भारतातील काही घटक अनेक माध्यमापासून वंचित व अनभिज्ञ आहेत. हाच का तो सामाजिक न्याय? असा प्रश्न शिक्षणासंदर्भात कायम भेडसावत असतो. निवडण्कासंबंधी मद्रास उच्च न्यायालयाने प्रश्न उपस्थित केलाही, न्यायालयीन आदेशानंतरही निवडणूक प्रचार सभांमध्ये फेममास्क, सॅनिटायझरचा वापर, सोशल डिस्टंन्सिंगचे नियम सर्वच राजकीय पक्षांनी पाळले नाहीत.¹¹ तर मग जनतेकडून या सर्व गोष्टींची अपेक्षा का? यावरून असे लक्षात येते की, जगातील सर्वात मोठी लोकशाहीचे तत्व मिरविणाऱ्या देशात लोक कल्याणकारी व्यवस्था अस्तित्वात नाही, असे म्हटले तर वावगे ठरणार नाही.

टाळेबंदीतील (लॉकडाऊन) राजकारण

कोरोना काळात केंद्र सरकारने अनियोजित लॉकडाऊन केल्यामुळे अनेक आव्हाने पेलण्यास भारतातील अनेक घटक असमर्थ ठरले आहेत. कोरोनाच्या सुरुवातीच्या काळामध्ये केंद्र सरकारने असहाय्य वंचित घटकाला तर अदखलपात्र केले होते. दरम्यान वाहतूक व्यवस्था स्थगित केल्यामुळे कामगार व मजुरांना आपल्या कुटुंबासमवेत अनेक कि.मी.चे अंतर पायी चालत जावे लागले होते. अचानक केंद्र शासनाने घेतलेल्या निर्णयामुळे स्थलांतरित मजूर वर्गाला अनेक हाल-अपेष्टा सहन कराव्या लागल्या आहेत.

कोव्हिड-19 च्या निमित्ताने लागू करण्यात आलेल्या टाळेबंदी च्या पार्श्वभूमीवर डॉ. गोपाल गुरू ज्यांनी नैतिकतेची संकल्पना आणि औपचारिक राजकारणाचा व्यवहार या घटकांमधील संबंधावर प्रकाश टाकलेला आहे. समाजातील गरीब; वंचित तसेच वृद्ध लोकांची काळजी घेण्याचे नैतिक आवाहन असो किंवा सेवाभावी संस्थांनी गरजू लोकांना मदत करण्याचे सरकारने केलेले औपचारिक आवाहन असो. अशा आवाहनांचा सरकारच्या लॉकडाऊन वाढवण्याच्या निर्णयांमध्ये विशेषत्वाने उल्लेख होतो. कोव्हिड-19 ला आटोक्यात आणण्याकरिता केंद्र आणि राज्य सरकारकडून जनतेला घराबाहेर पडू नये, असे आवाहन केले जात आहे. परंतु तरीही काही लोक समूहाने घराबाहेर, रस्त्यावर पोलीस प्रशासनाशी हुज्जत घालताना दिसतात. यामध्ये बहुतांशी लोक हे समाजातील वंचित घटकांमधील आहेत. हे अशा प्रकारचे लोक आहेत की, ज्यांच्याकडे घरातच राहण्यासाठी त्यांना भाग पाडू शकेल अशा अंतर्गत कारणांचा अभाव आहे. या आकलनविषयक कमतरतेमुळेच सरकारी यंत्रणेला त्यांच्यावर बाहेरून जबरदस्ती करण्याची वेळ आली आहे.

लॉकडाऊन यशस्वी व्हायचा असेल तर एक नैतिक तत्त्व लक्षात घेणे महत्त्वाचे ठरते. ते नैतिक तत्त्व महणजे, 'परिस्थितीचे न्याय वितरण'. सामाजिक आणि भावनिक सुरक्षिततेचे न्याय वाटप अर्थात, मनोद्वेग/चिंता/व्याकूळता यांपासून किमान स्वातंत्र्य असा खरा अर्थ आहे. कोव्हिड काळात दोन वेळा टाळेबंदी झाली. मात्र भारताच्या विविध भागात नागरिकांसाठी पुरेशा उपाययोजना केल्या नाहीत. नैतिक दृष्टीकोनातून जर विचार केला, तर अडकून पडलेल्या लोकांवर आरोप करणे न्याय्याचे ठरणार नाही. कारण अशा परिस्थितीमध्ये अस्वस्थता व नैराश्यामध्ये अधिक वाढ होत आहे. लॉकडाऊनच्या वेळा निश्चित करून राजकीय निर्णय घेतले असते, तर लोकांचा भावनातिरेक टाळला जाऊ शकतो. यावरूनच नैतिक सबलीकरणावर भावनिक स्थैर्य निर्भर करते. शेवटी लॉकडाऊनच्या राजकीय निर्णयांची सफलता ही नैतिक घटकांवर अवलंबून होती. अशा प्रकारचा लॉकडाऊनमधील राजकीय प्रत्यय लक्षात येतो.

कोरोना काळातील अर्थकारणाचे राजकारण

कोव्हिड-19 मुळे जगाच्या अर्थव्यवस्था कोलमङ्ग्या आहेत. त्यामध्ये भारताची अर्थव्यवस्था अपवाद नाही. कोव्हिड-19 च्या प्रादुर्भावामुळे लॉकडाउनच्या घेतलेल्या निर्णयामुळे देशाच्या अर्थव्यवस्थेवर विपरीत परिणाम होत आहे. देशातील अधिकतर उद्योगधंदे बंद असल्यामुळे त्याचा देशाच्या महसुलावर परिणाम झाला आहे. भारताची कोरोना काळात आर्थिक कोंडी मोठ्या प्रमाणात झाली. यामध्ये विशेषतः हवाई वाहतूक, पर्यटन, शेअरबाजार, हॉटेल्स उद्योग, उद्योगधंदे आणि सेवा क्षेत्राला नुकसानीस तोंड द्यावे लागत आहे. भारताने 1 लाख 70 हजार कोटी रुपये म्हणजे आपल्या देशाच्या राष्ट्रीय उत्पन्नाच्या 1 टक्का खर्चाबाबत तरतूद केली. परंतु देशासमोर रोजगार वाढ, स्थलांतिरत, शेतकरी, मजूर, मच्छीमार आदी घटकांना देशातील टाळेबंदीम्ळे मोठे आव्हान उभे राहिले आहे. 14

भारतात कोरोना काळातील आर्थिक स्तरावरील परिस्थिती गंभीर आहे. कोरोना प्रादुर्भावामुळे लॉकडाउनचा फटका भारतीय अर्थव्यवस्थेला अधिक बसला. यामुळे सद्यस्थितीतील भारतीय आर्थिक विकास दर हा उणे 23 टक्के इतका निच्चांकी झाला. ¹⁵ देशाची अर्थव्यवस्था ही सरकारच्या धोरणानुसार ठरत असते. परंतु या महामारीच्या काळात केंद्र सरकारने घेतलेल्या अयोग्य व अनियोजित धोरणामुळे आजची भारताची आर्थिक घडी विस्कटलेली आहे. अर्थव्यवस्थेला मंदीतून सावरण्यासाठी सरकार पूर्ण असफल ठरले आहे.

कारण देशातील अर्थकारणावरील पकड सरकारने पूर्णपणे गमावल्यासारखे चित्र सध्या दिसत आहे. हे अर्थकारण आणि राजकारण यांच्यातील सततच्या झगड्यांचे एक रूप आहे. कोणत्याही सरकारला त्यांच्या राजकीय निर्णयांचे अपेक्षित परिणाम ताबडतोब दिसावेत अशी घाई असते. पण अर्थकारणात तसे घडत नाही. नेमकी हीच बाब केंद्रात सत्तेवर असलेल्या सरकारने नजरेआड केली. अर्थव्यवस्थेच्या वाईट परिस्थितीला देशातील राज्यकर्त्यांची धोरणे कारणीभूत आहेत.

निष्कर्ष

जगात कोरोना महामारीने जनजीवन विस्कळीत झाले आहे. या परिस्थितीला भारत देश अधिक सामोरे जात आहे. परंतु कोरोना ही महामारी भारतीय राज्यकर्त्यांना जणू काय एक संधीच बनून आली आहे. भारतीय लोकशाही ही जगातील सर्वात मोठी व्यवस्था आहे. परंतु कोरोना काळात लोकशाहीचे तत्वे पायदळी तुडवली जात आहे. कोरोना काळातील नागरिकांचे स्वातंत्र्य, समता, बंधुता, न्याय आणि धर्मनिरपेक्षता या तत्वांचे श्रेयवादी राजकारणांमुळे हनन झाले आहे. या परिस्थितीमध्ये आरोग्य यंत्रणेतील सवंग लोकप्रियतेसाठी केलेले राजकारणांमुळे जनतेचे सर्वांगीण नुकसान झाले आहे. लोक कल्याणकारी योजनेच्या नावाखाली राजकीय व्यवस्थेकडून जनतेचे आर्थिक आणि मानसिक खच्चीकरण केले जात आहे. शिवाय या काळात निवणुका घेऊन देशाच्या आरोग्याची अधिकच वाताहत केली. जनतेला टाळेबंदी आणि राज्यकर्त्यांना निवणुका, प्रचारसभा घेण्यास मोकळीक हे म्हणजे हुकूमशाहीचे द्योतक आहे. कोव्हिड काळात देशाची अर्थव्यवस्था अधिक कमकुवत झाली आहे. याला सर्वस्वी राज्यकर्त्यांचे निर्णय आणि धोरणे कारणीभूत आहे. कोरोना काळामध्ये नियोजन कामातील राजकीय व्यवस्थेकडून केलेले राजकारण हे पक्षीय व श्रेयवादी होते.

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छत्रपती शाह् महाराज यांचे समाजकल्याणविषयक आणि शैक्षणिक कार्य

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इतिहास विभाग प्रम्ख

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Abstract

शाहू महाराज हे एक अष्टपैलू व्यक्तिमत्व होते. शाहू महाराजांनी त्यांच्या जीवन काळात शैक्षणिक , धार्मिक, सामाजिक, आर्थिक, सहकार अशा अनेक क्षेत्रात आपल्या अनमोल कार्याचा ठसा उमटवला. शाहू महाराजांचे शैक्षणिक कार्य अतुलनीय आहे . शाहू महाराजांनी स्वतः स्वातंत्र्यप्राप्तीच्या कितीतरी आधीपासून त्यांच्या संस्थानात प्राथमिक शिक्षण सक्तीचे केले होते. पिढ्यानपिढ्या शिक्षणाचा गंध नसलेल्या मागास जाति-जमातीतील मुलांना शिक्षणाची चव चाखता यावी म्हणून त्यांनी सहयाद्रीच्या दन्याखोन्यात 'गाव तिथे शाळा' ही योजना राबविली. आपल्या संस्थानात 50 टक्के जागा बहुजन वर्गासाठी राखीव ठेवून आरक्षणाची प्रथा निर्माण करणारे ते भारतातील पहिले संस्थानिक ठरले. तद्वतच समाजातील तळागाळाच्या, शोषित विद्यार्थ्यांना दुय्यम व उच्च शिक्षणाची संधी प्राप्त व्हावी म्हणून त्यांनी अनेक वसितगृहाची निर्मिती केली. संपूर्ण भारतातील वसितगृहाचे आद्य जनक असे आपणास शाहू महाराजांना म्हणता येईल. शैक्षणिक कार्या खेरीज धार्मिक, आर्थिक, सहकार, शेती, उद्योग, सामाजिक, लष्करी, दलितोद्धार अशा विविध क्षेत्रांना त्यांनी आपल्या कार्यांने प्रभावित केले. तसेच ते स्वतः एक उत्कृष्ट मल्ल व निष्णात शिकारी होते. त्यांनी आपल्या संस्थानात मल्ल विद्याला प्रोत्साहन दिले. शाहू महाराज हे एक कलाप्रेमी व नाट्यप्रेमी राजा होते. शाहू महाराज गुणीजणांचे चाहते होते. त्यांनी संस्थानातील शाहीर, तमासगीर व कवी यांना प्रोत्साहित केले. त्यांनी त्यांचे संपूर्ण जीवनप्रजा हितासाठी खर्ची धातले.

राजर्षी छत्रपती शाहू महाराज हे महाराष्ट्राच्या सामाजिक, शैक्षणिक व सांस्कृतिक क्रांतीचे अग्रदूत होते. शाहू महाराजांनी राष्ट्रीय संगीताचा, शास्त्रीय संगीताचा चाहता व पुरस्कर्ता, मराठी रंगभूमीचा एक शिल्पकार, मल्लिविद्येचा आधारस्तंभ, नाट्यप्रेमी, कलाप्रेमी, यासोबतच एक श्रेष्ठ समाजसुधारक व आधुनिक महाराष्ट्राचा एक निष्ठावंत भाग्यविधाता अशा विविध भूमिका यशस्वीरित्या पार पाडल्या. ते मानवावर केवळ माणूस म्हणून प्रेम करणारे लोकोत्तर नेते होते. लोककल्याणासाठी त्यांनी स्वतःच्या जीवास व राज्यास धोका पत्करूनही महाराष्ट्रात क्रांतिकारक सुधारणा घडवून आणल्या. सामान्य जनतेस सामाजिक न्याय मिळावा व प्रत्येक व्यक्तीला समान अधिकार प्राप्त व्हावे म्हणून त्यांनी पुरोगामी निर्वध लावून वरिष्ठवर्ग व कनिष्ठवर्ग यांच्यातील भेद नष्ट केला. शाहू महाराजांनी दिलितवर्ग व मागासवर्ग यांच्या उद्धारासाठी वटहुकूम काढून त्यांची उन्नती करणे म्हणजेच देशोद्धार करणे होय असे मत स्पष्ट केले. शाहू महाराजांनी त्यांच्या संस्थानात ज्ञानाची ज्योत प्रज्वित करून आणि आपल्या राज्यात सक्तीचे मोफत शिक्षण सुरु करून महाराष्ट्रातील दिलत व मागास वर्गाची सामाजिक व मानसिक गुलामिगरीतून मुक्तता करण्याचा कसोशीने प्रयत्न केला. भारतीय कामगारांच्या प्रश्नाकडे लक्ष वेधून कामगारांना संघटित होण्यास प्रोत्साहित केले.

शाह् महाराज - बालपण व शिक्षण :-

आबासाहेब घाटगे यांना २६ जून १८७४ रोजी एक पुत्र झाला. त्यांचे नाव यशवंतराव आबासाहेब असे ठेवण्यात आले. ते पुढे समाजोद्धारक राजर्षी शाह् छत्रपती म्हणून सुविख्यात झाले. १८७७ साली यशवंतरावांच्या आई राधाबाई अकाली निधन पावल्या. यशवंतरावांचे वडील आबासाहेबांनी १८७८ साली कारभाराची सूत्रे स्वीकारली. त्यांनी सर्वप्रथम जहागिरीत शांतता व सुव्यवस्था स्थापन केली. चौथे शिवाजी राजे आजारी असताना त्यांची ग्रीन या गोऱ्या अधिकाऱ्यासोबत झटापट झाली. त्यात २५ डिसेंबर १८८३ रोजी भयंकर दुखापतीमुळे चौथे शिवाजी राजे यांचा दुख:द अंत झाला. या स्थितीत करवीर संस्थानाची गादी धोक्यात आली असताना चौथी शिवाजी राजांच्या पत्नी राणीसाहेब आनंदीबाई सकवार यांनी शास्त्रोक्त पद्धतीने १८ मार्च १८८४ रोजी आबासाहेब घाटगे यांचा मोठा मुलगा यशवंत यास दत्तक घेऊन या दत्तक पुत्राचे नाव छत्रपती शाहू महाराज असे ठेवले.3

राज प्रतिनिधी आबासाहेब घाटगे यांनी शाहू व त्यांचा दुसरा पुत्र बापूसाहेब यांच्या शिक्षणाची योग्य व्यवस्था केली त्यांच्यासाठी कृष्णाजी भिकाजी गोखले आणि हरिपंत गोखले यांची शिक्षक म्हणून नेमणूक केली. शाहू महाराजांना जानेवारी १८८६ मध्ये शिक्षणासाठी राजकोटला पाठविण्यात आले. २२ मे १८८९ पासून स्ट्अर्ट फ्रेजर त्यांना शिक्षक म्हणून लाभले. केशवराव गोखले यांनी सुद्धा त्यांना शिक्षण दिले.

छत्रपती शाह् महाराजांचा राज्याभिषेक :-

२ एप्रिल १८९४ रोजी शाह् महाराजांना सत्ता प्राप्त झाली. त्याच दिवशी त्यांनी प्रजाजनांना उद्देशून एक जाहिरनामा काढला. जाहीरनाम्यात त्यांनी म्हटले. "आमची सर्व प्रजा तृप्त राहुन सुखी असावी, तिचे कल्याणाची सतत वृद्धी व्हावी व आमचे संस्थानची हरएक प्रकारे सदोदित भरभराट होत जावी, अशी आमची उत्कट इच्छा आहे". शाह् महाराजांनी जाहीरनाम्यात व्यक्त केलेली उत्कट इच्छा ही केवळ औपचारिक नव्हती हे सर्वांनाच त्यांनी भावी आयुष्यात समाजातील लोकांच्या सुख समाधानासाठी कार्य केले त्या वरूनच कळून चुकले.

शाह् महाराजांचे - शैक्षणिक कार्य :-

शाहू महाराजांनी त्यांच्या जीवन काळात सातत्याने सामाजिक, धार्मिक, आर्थिक, सहकार, शेती, उद्योग, अस्पृश्यता निवारण, दिलतोद्धार अशा अनेक क्षेत्रात भरीव कार्य केले. पण शाहू महाराजांनी केलेले शैक्षणिक कार्य भारतात अद्वितीय, अनमोल व अतुलनीय ठरले.

शाह् महाराजांचे शिक्षण विषयक विचार :-

शाहू महाराजांनी जेव्हा कोल्हापूर संस्थानाचे सूत्रे हातात घेतली तेव्हा १.६२ टक्के लोक शिक्षणार्थी होते. त्यांनी १० - ११- १९१८ रोजी केलेल्या भाषणात हिंदुस्थानाच्या शैक्षणिक स्थितीचे अवलोकन करून म्हटले होते की, "शिक्षणाचे संदर्भात आमचा गतकाल म्हणजे इतिहासातील एक अखंड अंधारी रात्र आहे. केवळ एकच जात विद्येचा उपभोग घेत होती. मनु आणि त्यांच्या मागून आलेल्या शास्त्रकारांनी त्या त्या वेळच्या धोरणाला अनुसरून निरनिराळ्या जातीच्या व्यवहारास बंधनकारक असे निर्वध रचले आणि आमच्या जातीच्या लोकांना विद्या मंदिराचे दरवाजे बंद करण्यात आले. त्यांचे स्वतःचे धर्मग्रंथ आणि वेद हे सुद्धा वाचायची त्यांना मनाई होती. खामगाव येथील भाषणात देखील ते म्हणतात की, 'शेतकीच्या व्यवसायामध्ये जरी आमच्यातील बहुतेक लोक गुंतले आहेत. तथापि त्यात सुद्धा शिक्षणाची आम्हास जरुरत आहे. शिक्षणाची जरुरी नाही अशी कोणतीही चळवळ नाही'.

छत्रपती शाहू महाराजांनी सामान्य माणसाच्या शिक्षणासाठी, कल्याणासाठी तळमळीने कार्य केले. जोपर्यंत भारतातील प्रत्येक स्त्री पुरुषास शिक्षण मिळत नाही, तोपर्यंत भारत स्वतंत्र, समृद्ध, एकजीव आणि बलवान होऊ शकत नाही. या विषयी त्यांना पूर्ण विश्वास वाटत होता. प्राथमिक शिक्षणापासून तांत्रिक शिक्षणापर्यंत जी धडपड करावयाची ती मानवी भविष्याच्या दृष्टीने गुंतवणूक आहे. 'आज' च्या दृष्टीने ही गुंतवणूक अनुत्पादक असली तरी 'उद्या' साठी ती करणे इष्ट आहे असे शाहू महाराज यांचे मत होते. प्रत्येक व्यक्तीच्या विकासासाठी सर्वप्रथम शिक्षणाची गरज असते. जीवनसंघर्षात शिक्षणाचे साधन प्रत्येकाच्या हाती असलेच पाहिजे. शिक्षणात मागासलेली माणसे जीवनसंघर्षात अपयशी होतात हे त्यांनी हेरले होते. एका भाषणात महाराजांनी म्हटले होते, 'वरिष्ठ वर्गाच्या बरोबरीने बहुजन समाजाचा शिक्षणाचा दर्जा जोपर्यंत वाढत नाही तोपर्यंत आपल्या संस्थानाचा कारभार लोकांच्या हाती देण्याचे धाडस मी करणार नाही'. राजर्षी शाहू महाराजांनी शिक्षण हेच मानवी विकासाचे, किंबहुना राष्ट्राच्या सर्व प्रगतीचे मुख्य अंग आहे हे ओळखून बहुजनांना शिक्षण देण्याच्या दृष्टीने मुक्त प्रवाहित शिक्षण योजना आखून १९१३ पासून सक्तीच्या प्राथमिक शिक्षणप्रसाराचा पाया खेड्यापाड्यात घातला. स

शाह् महाराज - भारतातील विद्यार्थी वसतिगृहाचे आद्य जनक :-

शहरात बोर्डिंग नसले तर अनेक होतकर विद्यार्थ्यांची शिकण्याची इच्छा असून त्यांना शिक्षण देणे शक्य होत नाही. हे शाहू महाराजांना दिसून आले होते. कित्येकाची गरीबी व जात आडवी येत आहे. हे पाहून त्यांनी १८९६ साली कोल्हापुरात सर्व जाती - जमाती साठी एक बोर्डिंग काढले होते. त्यानंतर शाहू महाराजांनी अनेक जातींसाठी बोर्डिंग काढलेत. जातवार बोर्डिंग त्याबद्दल त्यांच्यावर कधी कधी टीका केली जात असे. त्यामागे महाराजांची राष्ट्रीय दृष्टी अशी होती की, जातवार बोर्डिंग काढली, तर निदान त्या त्या जातींची मुले तरी त्यात येतील व जसजसा शिक्षणाचा प्रसार होईल तसतसा जातीभेद कमी होत जाऊन कालांतराने जातीवाचक बोर्डींग काढण्याची आवश्यकता राहणार नाही. एका भाषणात ते म्हणतात 'जातीचा अभिमान मर्यादित असावा. आपण हिंदी आहोत. देशाची उन्नती करण्याची जबाबदारी आपल्यावर आहे. याची विस्मृती होऊ देता कामा नये. थोडक्यात म्हणजे जातभिमान हा राष्ट्राच्या कार्यास पोषक असावा. राष्ट्रसेवा नजरेआड करणारा नसावा'.

शाह् महाराजांनी समाजातील प्रत्येक जातीजमातीतील होतकर विद्यार्थ्यांना दुय्यम व उच्च शिक्षणाच्या संधी मिळाव्या म्हणून अनेक वसितगृहे स्थापन केली. शाह् महाराजांनी १८ एप्रिल १९०१ रोजी विक्टोरिया मराठा बोर्डिंग, एप्रिल १९०१ दिगंबर जैन बोर्डिंग, १९०६ साली वीरशैव लिंगायत विद्यार्थी वस्तीगृह, १९०६ साली मुस्लीम बोर्डिंग, २४ डिसेंबर १९०८ साली दैवज्ञ शिक्षण समाज बोर्डिंग, २ एप्रिल १९११ रोजी श्री नामदेव बोर्डींग वस्तीगृह, २० मे १९१५ रोजी श्री सरस्वताबाई गौड सारस्वत ब्राहमण विद्यार्थी वस्तीगृह, १९१५ रोजी इंडियन खिश्चन होस्टेल, सप्टेंबर १९१५ मध्ये रावबहादुर सबनीस प्रभू बोर्डिंग, १८ मार्च १९१८ रोजी आर्य समाज गुरुकुल, १८१८ साली वैश्य बोर्डींग, १९१९ साली ढोर - चांभार बोर्डिंग, २ जुलै १९२० रोजी शिवाजी वैदिक विद्यालय वसितगृह, १ जुलै १९२० रोजी श्री प्रिन्स शिवाजी मराठा बोर्डींग हाऊस, ६ जून १९२१ रोजी स्तार बोर्डिंग, १५ ऑगस्ट १९२० रोजी सौम्यवंशी आर्य क्षत्रिय बोर्डिंग, कोष्टी समाजासाठी

श्री देवांग बोर्डिंग अशा अनेक वसतिगृहांची स्थापना केली. इतकेच नव्हे तर शाहू महाराजांनी कोल्हापूर बाहेरच्या विद्यार्थी वसतिगृहांना देखील मदत केली. १४

अनेक कलांना उत्तेजन :-

शाह् महाराजांचे दलितोद्धाराचे कार्य:-

छत्रपती राजर्षी शाहू महाराजांनी अस्पृश्य समजल्या गेलेल्या लोकांना नोकऱ्या दिल्या. त्यांच्या शिक्षणाची सोय केली. एवढेच नव्हे तर डॉक्टर बाबासाहेब आंबेडकरांसारख्या नेत्यांच्या अंगचे गुण ओळखून त्यांना मदत केली. अस्पृश्यांसोबत भेदभाव करू नये यासाठी १५ जानेवारी १९१९ रोजी वटहुकूम काढला. असाच वटहुकूम मेडिकल खात्यासाठी देखील काढला. १८ १९०७ साली अस्पृश्य विद्यार्थी वसतिगृह सुरू केले. अस्पृश्यता निवारण्याचा एक भाग म्हणून माहूत, शिपाई - तलवार बहादुर म्हणून अस्पृश्यांची नेमणूक केली. अस्पृश्यांना पोलीस व तलाठी केले. चहाचे दुकान भरवस्तीत काढून दिले. तसेच त्या दुकानात स्वतःहून चहा घेऊन अस्पृश्यता निवारणाचा आदर्श समाजासमोर ठेवला. समानतेचे हक्क मिळावेत म्हणून बलुते पद्धत व वेठिबगार पद्धत कायद्याने बंद केली. अस्पृश्य शाळा बंद करून स्पृश्य शाळात विलीन केल्या. अस्पृश्य रोग्यांची सेवा नाकारणाऱ्या डॉक्टर व नर्सला राजीनामे द्यायला सांगितले. सुशिक्षित तरुणांना विकलीच्या सनदा दिल्या. मिश्रविवाहास परवानगी देणारा बिलाचा कायदा पास केला. इतसेच मांग विद्यार्थ्यास दरमहा ८ रुपये शिष्यवृती देण्याचा ठराव घेतला. इ

लष्करी कार्य :-

ब्रिटिश सरकारशी संस्थानिक या नात्याने बांधील असल्याने दुसऱ्या महायुद्धात सरकारला सहकार्य महणून भरपूर रिलीफ फंड गोळा करून स्वतः देणगी दिली. रिक्रूट भरतीच्या दृष्टीने आर्थिक व इतर सवलती जाहीर केल्या.

शाह् महाराजांचे आर्थिक विकासातील योगदान :-

शाहू महाराजांनी २ मार्च १९१८ रोजी कुलकर्णी कमी करून त्यांच्या जागी तलाठी नेमण्याची राजाजा काढली होती. त्यांनी २५ जून १९१८ रोजी कुलकर्णी वतने रद्द केल्याची आणि तलाठी पद्धत २९ जुलैपासून कायम केल्याची राजाजा काढली. तसेच महाराजांनी महार वतनदारीतून मुक्त करण्यासाठी १८ सप्टेंबर १८१८ रोजी महाराजांच्या वतनी जिमनी त्यांच्याच नावाने करून दिल्या. शाहू महाराजांनी दुष्काळात रोजगार उपलब्ध करून दिला. अन्नछत्रे उघडली. साऱ्याची सूट दिली. तगाई मंजूर केली. पन्हाळ्यात चहा कॉफीची यशस्वी लागवड केली. भोगवती नदीवर राधानगरी येथे धरण व विद्युत प्रकल्प उभा केला. पाटबंधाऱ्याची व्यवस्था केली. शाहूपुरी या व्यापारीपेठेची स्थापना केली. मार्केट यार्डची जागा मंजूर केली. शाहू

छत्रपती स्पिनिंग व विव्हिंग मिलचा पाया घातला. कापड गिरणी उभारली. इचलकरंजीला जिनिंग फॅक्टरी सुरू केली. कोल्हापुरात रेल्वे आणली. शेती पूरक व्यवसाय काढण्यास प्रोत्साहन दिले. तसेच शाहू महाराजांनी सहकार चळवळीला प्रोत्साहन दिले. ३३

निष्कर्ष :-

शाह् महाराजांनी आपली संपूर्ण हयात तळागाळातील, दीन-दुबळ्या, पिडीत जाति-जमातीतील लोकांसाठी घालविल्याने ते एक लोकोत्तर महाप्रुष ठरले. समाजाचा प्रचंड रोष पत्करून देखील ते अस्पृश्यता निर्मूलन, दलितोद्धाराचे महान कार्य करीत राहिले. शाह् महाराजांनी आर्थिक, धार्मिक, सामाजिक, लष्करी, दिलतोद्धार अशा सर्वच क्षेत्रात समाजस्धारणेचे कार्य केले. त्यामुळे त्यांचा 'आध्निक महाराष्ट्राचे नवनिर्माते' असा उचित गौरव करावाच लागेल. शाह् महाराज यांनी शैक्षणिक क्षेत्रात तर क्रांतीच केली. भारताला स्वातंत्र्य मिळण्याच्या २५ - ३० वर्ष अगोदरच त्यांनी त्यांच्या संस्थानांत सक्तीच्या प्राथमिक शिक्षणाचा कायदा आणला. संपूर्ण करवीर प्रांता<mark>त त्यांनी 'गाव तिथे शाळा' ही योजना राबविली</mark>. तद्वतच शाह् महाराजांनी कोल्हापूर संस्थानात बहुजनांसाठी पन्नास टक्के जागा आरक्षित ठेवून भारतातील आरक्षणाची सुरुवात करणारे हे बिरुद <mark>लावले. बह्जन तथा मागासलेल्या जाति-</mark>जमातीतील विद्यार्थ्यांना उच्च शिक्षणाची सोय उपलब्ध व्हावी म्हणून कोल्हापूर संस्थानात वसतिगृहांचे जाळे विणले. कोल्हापूर म्हणजे 'विद्यार्थी वसतिगृहाची माता' असे मानण्यात शाहू महाराजांना आनंद व सार्थ अभिमान वाटत असे. त्यांनी म्हटले, "ब्रिटिश पार्लमेंटला '<mark>मदर ऑफ पार्लमेंट' असे मोठ्या अभिमानाने इंग्रज</mark> व इ<mark>त</mark>र लोक म्हणतात. त्याप्रमाणे कोल्हापूरास 'मदर ऑफ बोर्डिंग हौसीस' म्हणजे, 'विद्यार्थी वस्तीगृहाची माता' असे सार्थ नाव मिळाले आहे". शाह् महाराजांनी स्थापन केलेली व त्यांच्याकडून आर्थिक साहाय्य मिळालेली ही अनेक बोर्डिंगे महाराजांची अज्ञ स<mark>मा</mark>जावर <mark>असलेल्या नितांत प्रेमाची, त्यांच्या अविरत परिश्र</mark>माची जिवंत स्मारके आहेत. एवढेच नव्हे तर शाह् <mark>महाराजांनी कोल्हापूर बाहेर स्थापल्या गेलेल्या वस</mark>तिगृहांना देखील मदत केली. डॉ. बाबासाहेब आंबेडकरांचे ग<mark>ुण हेरून त्यांना सहाय्य तर केलेच व पुढा</mark>री म्हणून <mark>त्</mark>यांचा गौरवही केला. आज बह्जन समाज राजकीय व सामाजिक क्षेत्रात जो नेतृत्व करताना दिसत आहे त्याचे म्ख्य श्रेय शाह् महाराजांनी कित्ये<mark>क वर्षापूर्वी स्थापन केलेल्या वसतिगृहांना द्यावे लागेल. शाहु महारा</mark>जांनी अस्पृश्यता निर्मूलनासाठी शाळा खात्यात, मेडिकल खात्यात वटह्कूम काढले. सुशिक्षित अस्पृश्य तरुणांना तलाठी व इतर नोकऱ्या दिल्या. वकिलीच्या <mark>सनदा दिल्या. उद्योगधंद्याला प्रोत्साहन दि</mark>ले. कोल्हापूर सांगली भागात हरितक्रांती व औद्योगिक विकासाचा पाया रचला. दुष्काळी भागात दुष्काळ निवारणार्थ कामे काढली. अन्नछत्रे उघडली. शेतीपूरक व्यवसाय व खत कारखाने काढले. आधुनिक महाराष्ट्र घडविण्याचे श्रेय शाह् महाराजांच्या दिव्यदृष्टीला, तळमळीला आणि त्यांच्या अखंड तपश्चर्येला निश्चितपणे द्यावे लागेल.

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पशुवैद्यिकय संस्थांद्वारे पशु संवर्धन व दुग्धोउत्पादनासाठी कृत्रीम तंत्राचा वापर : विशेष संदर्भ बुलडाणा जिल्हा

किशोर अंक्शराव जावळे

संशोधक विद्यार्थी डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद

डॉ. विजय बैसाणे

संशोधक मार्गदर्शक व विभाग प्रमुख दगडोजीराव देशमुख कला, वाणिज्य व विज्ञान महाविद्यालय वाळ्ज, ता. गंगापूर, जि. औरंगाबाद

सारांश:

अनादी काळापासून मानव पशुपालन करत आलेला आहे. सुरूवातीला अन्नासाठी प्राण्यांची शिकार केली जात होती. कालांतराने तो शेती करून उपजीविका करू लागला. त्यानंतर शेतीस जोड व्यवसाय म्हणून तो पशुपालन करू लागला. मानव पशु पालनातून दुध, मांस, अंडी, लोकर, कातडी, अन्न व इतर उपयोगी साहित्य मिळवु लागला. त्याच बरोबर तो प्राण्यांचा वापर शेतीच्या मशागतीसाठी करू लागला. गाय, शेळी, मेंढी, म्हैस यांच्याद्वारे दुध, कोंबडी, बदक यांच्या पालनातून अंडी, मांस इत्यादी मिळवु लागला.

जागतीक पातळीवर दुध व दुग्धजन्य पदार्थांना प्रचंड मागणी आहे. यासाठी गाय, म्हैस यांचे पालन करून दुध उत्पादन घेतले जाते. यातून व्यावसायीक स्वरूपाचे पशुपालन केले जाते. दुधाळ प्राण्याच्या आरोग्याची काळजी घेण्यासाठी त्याचबरोबर संवर्धनासाठी विविध पशुवैद्यिकय संस्था कार्यरत आहेत. भारत सरकार व राज्य सरकार यांच्या मार्फत विविध योजना कार्यरत आहे.

बीज संज्ञा : पशुवैद्यिकय संस्था, कृत्रीम रेतन, दुग्धोत्पादन

प्रस्तावना :

भारताची अर्थ व्यवस्था ही कृषिवर आधारीत आहे. त्यात कृषि, कृषिवर आधारीत व्यवसाय, पशुपालन, मत्स्यपालन हे भारताच्या अर्थ व्यवस्थेचे कणे आहेत. भारतात दुध, मांस, कातडी, लोकर या स्वरूपाचे उत्पादन पशुपालनातून व्यावसायीक दृष्टीकोणातून घेतले जाते. यासाठी पशुपालन हा व्यवसाय मोठ्या प्रमाणात देशामध्ये केला जातो. भारत सरकार व राज्यसरकार द्वारे पशुवैद्यिकय संस्था, पशुवैद्यिकय विद्यापीठे यांच्या मार्फत पशुंचे जतन व संवर्धन केले जाते. भारत सरकारद्वारे विविध योजना पशु संवर्धनासाठी आहेत. उदा. राष्ट्रीय गोकुल मिशन, पशुधन स्वास्थ व रोग नियंत्रण, राष्ट्रीय पशुधन मिशन, डेअरी उद्योमता विकास योजना इत्यादीद्वारे पशु संवर्धनासाठी या योजनेतून मदत होते. दुध उत्पादन वाढविण्यासाठी प्राण्यांवर विविध तंत्राद्वारे संशोधन केले जाते. महाराष्ट्र शासन यांच्या द्वारे पशुपालन व दुग्ध उत्पादन वाढीसाठी विविध योजना उपलब्ध आहेत. राज्यातील पशु वैद्यकीय संस्था, महाराष्ट्र पशु व पशुवैद्यकीय विद्यापीठ यांच्या मार्फत आधुनिक तंत्राचा वापर करून पशु संवर्धन व दुग्ध उत्पादन केले जाते. पशुंच्या आरोग्याची काळजी घेण्यासाठी व पशुंना होणारे विविध आजारांवर उपचार पश्वैद्यिकय संस्थांद्वारे केले जाते. तसेच पश् पैदास व दुध उत्पादन वाढविण्यासाठी पश्वैद्यकीय

संस्थेद्वारे कृत्रिम रेतन योजना राबवली जाते. उच्च प्रतिचे वळु व रेडे यांचे रेतन संकलन करून गाई म्हशींवर त्याचा प्रयोग करण्यात येतो.

आभ्यास क्षेत्र :

महाराष्ट्रात पशु संवर्धनासाठी महाराष्ट्रातील जिल्हयांमध्ये पशु वैद्यकिय संस्था, शासिकय पशु संवर्धन संस्था कार्यरत आहेत. दुधाळ पशुंचे संवर्धन व आरोग्याची काळजी यासंस्थाद्वारे घेतली जाते. महाराष्ट्र राज्यातील विदर्भातील बुलडाणा जिल्हयातही सदर संस्था कार्यरत आहेत. पशुंचे आरोग्य, पशु संवर्धन यासाठी या संस्था कार्य करत आहेत. यामध्ये पशु चिकित्सालय, पशु रुग्णालय, पशु उपरुग्णालय, कृत्रिम रेतन केंद्रे, उपकेंद्रे इत्यादीद्वारे पशु संवर्धन केले जाते. बुलडाणा जिल्हा हा उत्तर अक्षांश 19° 51' ते 21° 17' आणि पुर्व रेखांश 75°5' ते 76° 59' चे दरम्यान पसरलेला आहे. या जिल्ह्याच्या उत्तर बाजुला मध्यप्रदेशातील खांडवा जिल्हा, दक्षिणेस मराठवाङ्यातील परभणी, हिंगोली व जालना जिल्हा, पुर्वेस अमरावती, अकोला व वाशिम हे जिल्हे आणि पश्चिमेस जालना व जळगाव हे शेजारील जिल्हे आहेत. बुलढाणा जिल्ह्याचे क्षेत्रफळ 9661 चौ.की.मी. आहे. या जिल्ह्यातील नदी पैनगंगा ही आहे. पुर्णा, नळगंगा, विश्वगंगा, जानगंगा, कोराडी, मस इत्यादी महत्त्वाच्या नद्या आहेत. जिल्ह्याचे हवामान उष्ण व कोरडे आहे. पर्जन्याचे प्रमाण कमीत कमी 487 मी.मी. तर जास्तीत जास्त 1015 मी.मी. आहे. बुलडाण्या जिल्ह्यात एकूण 13 ताल्के आहेत.

या जिल्ह्यात जर्शी गाईचे पशुपालन मोठ्या प्रमाणात केले जाते. पशुंच्या आरोग्य सुविधेसाठी पशु वैद्यिकय चिकित्सालय, दवाखाने, प्रथमोपचार केंद्र, कृत्रिम रेतन केंद्र कार्यरत आहेत.

उदिष्टे :

- 1) बुलडाणा जिल्ह्<mark>यातील पशुवैद्यिकय संस्थांद्वारे पशुसंवर्धनासाठी केल्या जानाऱ्या</mark> कार्याच<mark>ा</mark> अभ्यास करणे.
- 2) द्धाळ पाण्यांवर (गाय, म्हैस) करण्यात येणाऱ्या कृत्रिम रेतन पद्धतीचा अभ्यास करणे.

संशोधन पद्धती व आधार सामग्री :

प्रस्तुत शोध निबंधासाठी दि्वतीय स्वरूपाची माहिती संकलित करून जसे विविध शासिकय जिल्हा सामाजिक आर्थिक समालोचन, मासिके, शासिकय संकेत स्थळे, याद्वारे माहिती गोळा केली असुन सांख्यिकिय माहितीचे विश्लेषण करण्यासाठी तक्ते आलेख याचा वापर करण्यात आला आहे.

विषय विवेचन :

दुधाळ जनावरांच्या आरोग्य राखण्यासाठी व उच्च प्रतिची पशु पैदास अधिक दुध उत्पादन या हेतुने भारत सरकार, महाराष्ट्र शासन, पशु वैद्यिकय विद्यापीठ व पशु वैद्यिकय संस्था कार्यरत आहेत. पशुंना होणारे विविध आजार व त्यांचे निर्मुलन करण्यासाठी औषोधोपचार व लसीकरण उपलब्ध आहेत. महाराष्ट्रामध्ये दुध उत्पादनांसाठी गाय, म्हैस यांच्यावर कृत्रिम रेतन पद्धतीचा वापर करून उच्च प्रतिची पशु पैदास केली जाते.

पशु आरोग्य : पशुंना विविध जीवाणू व विषाणू याद्वारे संसर्गजन्य आजार पसरतात. श्वसन, चारा, पाणी, सड याद्वारे रोगकारक जंतू प्रवेश करतात. यातून काळा पाय, लाल्या, खुर्कत रोग, गुळकांडी रोग इत्यादी रोगांचा समावेश होतो. याचे निर्मुलन करण्यासाठी औषोधोपचार व लसीकरण करण्यात येते. तसेच असंसर्गजन्य जंत, गोचिड, खनिज कमतरता, दुग्धज्वर, केटुसीस, मॅगेशियम, स्पुरदची कमतरता, इत्यादी आजारावरही औषोधोपचार केले जातात. गाय, म्हैस, शेळी, मेंढी हे दुधाळ प्राण्यांबरोबरच इतर प्राण्यांवरही औषधोपचार करून पश्संवर्धनासाठी मार्गदर्शन केले जाते.

कृतिम रेतन: दुधाळ जनावरे विशेषत: गाई, म्हशी यांच्यात कृत्रिम गर्भधारणा करण्यासाठी वापरण्यात येणारी आधुनिक अशी तांत्रिक पद्धत आहे. उच्च प्रतिचे नर-वळु, रेडा यांचे रेतन संकलीत करून त्याच्यावर प्रक्रिया करून साठवले जाते. गाय, म्हैस यांच्यावर फलन केले जाते. कृत्रिम रेतन फलनाद्वारे उत्तम दर्जा असलेली पश्ंची पैदास होते व त्या आधारे व्यवसाय विशेषत: दुध उत्पादनात वाढ होते.

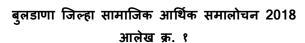
प्रक्रिया : वळु किंवा रेडा यांचे रेतन संकलीत करून - 196 डिग्री सेल्सीयस तापमानावर गोठवतात व त्यानंतर गाय किंवा म्हैस यांच्यावर फलन केले जाते. गायीसाठी लाल कंधारी, डांगी, एचएफ जर्शी, गिर, साहीवाल, खिल्लार तर म्हशींकरीता सुरती, मुर्हा, पंढरपुरी यांचे रेतन संकलीत करून उपलब्ध केले जाते. "राष्ट्रीय गोकुल प्रकल्प भारत सरकारद्वारा अर्थसाहित असुन महाराष्ट्र पशु व मत्सविज्ञान विद्यापीठ (M.A.F.S.U.) यांनी राष्ट्रीय भ्रुण प्रत्यारोपन प्रयोगशाळा स्थापन केली असून उच्च प्रतिच्या देशी गोवंशाचे संवर्धन भ्रुण प्रत्यारोपन तंत्रज्ञानाच्या सहाय्याने करण्याचे प्रमुख उदिष्ट या प्रयोग शाळेस दिले आहे. महाराष्ट्र पशु व मत्सविज्ञान विद्यापीठ (M.A.F.S.U.) यांनी कृत्रिम रेतनाचा प्रयोग यशस्वी करून भ्रुण प्रत्यारोपन प्रयोग यशस्वी केला" (दैनिक लोकसता 30 सप्टेंबर 2020)

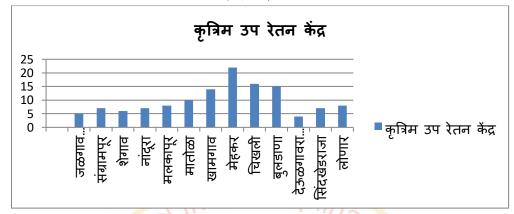
बुलडाणा जिल्ह्यातील पशु वैद्यकिय संस्था : संदर्भ वर्ष 2017-18 (तक्ता क्र. १)

अ.क्र.	तालुका	पशुवैद्यकीय	पशुवैद्यकीय दवाखाने	पशुवैद्यकीय	ू कृत्रिम	कृत्रिम उप
		चिकित्सालय	(राज्य तथा स्थानिक स्तर	प्रथमोपचार केंद्र	रेतन केंद्र	रेतन केंद्र
1	जळगाव	1	4	4		5
	जामोद					
2	संग्रामपूर	0	7	4		7
3	शेगाव	1	5	3		6
4	नांदूरा	0	2349-03	4	<u> </u>	7
5	मलकापूर	1	7	6		8
6	मोताळा	o m	10	CON 6		10
7	खामगाव	1	13	8		14
8	मेहकर	1	21	17		22
9	चिखली	1	15	12		16
10	बुलडाणा	1	14	10	1	15
11	देऊळगावराजा	0	4	1		4
12	सिंदखेडराजा	0	7	5		7
13	लोणार	0	8	7		8
	जिल्हा एकूण	7	12	87	1	129

आधार - 1. जिल्हा उपायुक्त, पशसंवर्धन, बुलडाणा 2. जिल्हा पशुसंवर्धन अधिकारी, जिल्हा परिषद, बुलडाणा.

स्त्रोत :





पशु संवर्धनासाठी बुलडाणा जिल्ह्यात पशुवैद्यिकय संस्था कार्यरत असून यामध्ये पशुवैद्यिकय चिकित्सालयाची संख्या एकूण 7 आहे. तर एकूण 122 पशुवैद्यिकय दवाखाणे आहेत. 87 पशुवैद्यिकीय प्रथमोपचार केंद्र, बुलडाणा येथे 1 कृत्रिम रेतन केंद्र, तर जिल्ह्यात 129 कृत्रिम उपरेतन केंद्र आहे. यामध्ये सगळ्यात जास्त मेहकर तालुक्यात 22 तर सर्वात कमी देऊळगावराजा येथे 4, सिंदखेडराजा, नांदूरा, संग्रामपूर याठिकाणी प्रत्येकी 7 कृत्रिम उपरेतन केंद्रे आहेत.

कृत्रिम रेतन व दुग्ध उत्पादनाची तालुकानिहाय प्रगती तक्रता क्र. २

		5 ;	संदर्भ वर्ष 2011-12	2	संदर्भ वर्ष 2 <mark>0</mark> 17-18			
अ.क.	तालुका	कृत्रिम	कृत्रिम	दुध	कृत्रिम	कृत्रिम	दुध	
		रेतनाचे	रेतानाच्या	उत्पादन मे.	रेतनाचे	रेतानाच्या	उत्पादन	
		वार्षिक	साध्याची	टन	वार्षिक लक्ष्य	साध्याची	मे. टन	
		लक्ष्य	टक्केवारी			टक्केवारी		
1	जळगाव	2970	88.82	6.124	3960	31.1	26.44	
	जामोद		100		4	, ;-		
2	संग्रामपूर	2989	89.5	6.52	6930	42.9	27.20	
3	शेगाव	2871	56.46	56.430	4950	35.5	28.77	
4	नांदूरा	3995	55.47	16.412	6930	41.8	28.90	
5	मलकापूर	2684	96.62 / air	18.142	6930	45.3	24.87	
6	मोताळा	4397	61.45	42.142 9900		46.2	31.17	
7	खामगाव	5534	39.32	25.413	12870	28.3	76.27	
8	मेहकर	7790	38.39	9.192	20790	18.5	44.59	
9	चिखली	5932	47.92	16.204	14850	21.1	39.05	
10	बुलडाणा	7785	71.20	14.480	13860	35.5	28.27	
11	देऊळगावराजा	2032	74.08	18.210	3960	87.0	19.15	
12	सिंदखेडराजा	2734	57.61	8.170	6930	35.1	34.89	
13	लोणार	2795	54.63	7.413	7920	18.7	22.78	
	जिल्हा एक्ण	54508	67.76	196.060	120780	32.7	432.35	

आधार : जिल्हा पशु संवर्धन अधिकारी जिल्हा परिषद, जिल्हा दुग्ध शाळा विकास अधिकारी, बुलडाणा

2011-12 या संदर्भ वर्षात जिल्ह्यात एकूण कृत्रिम रेतनाचे वार्षिक लक्ष 54508, कृत्रिम रेतनाच्या साध्याची टक्केवारी 67.76% तर द्गधोत्पादन 196.060 मे. टन ऐवढे होते. कृत्रिम रेतनाचे वार्षिक लक्ष मेहकर तालुक्यात सर्वाधिक 7790 ऐवढे होते तर कृत्रिम रेतनाच्या साध्याची टक्केवारी 38.39% ऐवढी होती व दुग्धोत्पादन 9.192 मे. टन ऐवढे होते. सर्वात कमी कृत्रिम रेतनाचे वार्षिक लक्ष देऊळगावराजा ताल्क्यात होते. 2032 कृतिम रेतन साध्याची टक्केवारी 74.08 तर दुग्धोत्पादन 18.210 मे. टन ऐवढे होते. त्या खालोखाल सिंदखेडराजा 2734 साध्याची टक्केवारी 57.61% तर दृग्धोत्पादन 8.170 मे. टन ऐवढे होते. कृत्रिम रेतनाचे वार्षिक लक्ष सर्वाधिक मेहकर ताल्क्यात 7790, कृत्रिम रेतनाची साध्याची टक्केवारी मलकापूर तालुका 96.62 टक्के तर दुग्धोत्पादन शेगाव तालुक्यात 56.430 ऐवढे होते.

संदर्भ वर्ष 2017-18 कृत्रिम रेतनाचे वार्षिक लक्ष 120780 ऐवढे होते तर कृत्रिम रेतनाच्या साध्याची टक्केवारी 32.7% व द्र्योत्पादा 432.35 मे. ट्रन एवढे होते. सर्वाधिक वार्षिक लक्ष मेहकर ताल्क्यात 20790, साध्याची टक्केवारी 18.5%, द्ध उत्पादन 44.59 मे. टन सर्वात कमी देऊळगावराजा 3960, साध्याची टक्केवारी 87%, दुध उत्पादन 19.15 मे. टन त्या खालोखाल सिंदखेडराजा, वार्षिक लक्ष्य 6930 तर साध्याची टक्केवारी 35.1<mark>%, दुग्धोत्पादन 34.89 मे. टन कृत्रिम रे</mark>तनाचे सर्वाधिक लक्ष मेहकर तालुक्यात 20790, साध्याची सर्वाधिक टक्केवारी 87% देऊळगावराजा तालुक्यात तर दुग्धोत्पादन खामगाव ताल्क्यात 76.27 मे. टन ऐवढे होते.

निष्कर्ष:

ब्लडाणा जिल्ह्यात सा 2011-12 मध्ये जिल्ह्यासाठी 54508 ऐवढे कृत्रिम रेतनाचे वार्षिक लक्ष दिले होते. त्यातून कृत्रिम रेतनाच्या साध्याची टक्केवारी 67.76% ऐवढी आहे. तर दुग्धोत्पादन हे 196.08 मे.टन ऐवढे झालेले आहे. तर 2017-18 <mark>या वर्षात जिल्ह्याचे कृत्रिम रेतनाचे वार्षिक</mark> लक्ष हे 120780 तर साध्याची टक्केवारी 32.7% व द्ग्धोत्पादन हे 432.35 मे. टन ऐवढे आहे. 2011-12 च्या त्लनेत 2017-18 यावर्षी कृत्रिम रेतनाचे वार्षिक लक्ष <mark>अधि</mark>क असून <mark>दुग्धोत्पादन ही अधिक</mark> आहे.

संदर्भ :

- 1) कृषि भूगोल, डॉ. सूर्यवंशी डी.एस., निराली प्रकाशन

- 3) पशुपालन, डॉ. डी. के. ठाकूर, डिस्कवरी पब्लिसिंग हाऊन 4) डेअरी पशु प्रबंधा. डॉ. उम्मेशन प्रमाणन
- 5) पश् पोषण, डेअरी रसाया एवं द्ग्ध विज्ञान, डॉ. देवरायण पांडे, स्मित प्रकाशन
- 6) सामाजिक आर्थिक समालोचन, बुलडाणा जिल्हा
- 7) दैनिक लोकसत्ता, 30 सप्टेंबर 2020

संकेत स्थळ

- a) मत्स्यपालन, पश्पालन, डेअरी मंत्रालय भारत सरकार, dasd.nic.in
- b) पश्पालन विभाग महाराष्ट्र शासन, ahd.maharashtra.gov.in
- c) महाराष्ट्र पश् व मत्स विज्ञान विद्यापीठ, www.mafsu.in

भूजल मत्स्य व्यवसायाचा भौगोलिक अभ्यास : विशेष संदर्भ औरंगाबाद जिल्हा

स्ंदर खरात

डॉ. विजय बैसाणे

संशोधक विद्यार्थी डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद संशोधक मार्गदर्शक तथा भूगोल विभाग प्रमुख दगडोजीराव देशमुख महाविद्यालय, वाळूज, ता. गंगापूर, जि. औरंगाबाद

सारांश :

मानव आपल्या उपजीविकेसाठी निसर्गातील संसाधनाचा वापर करत आलेला आहे. शिकार करून, कंद गोळा करून तो आपली उपजीविका भागवत असे. शेतीला जोड व्यवसाय म्हणून पशुपालनास सुरूवात केली. उदर निर्वाहाबरोबरच व्यावसायीक दृष्टीकोनातूनही मानवाने शेतीस जोडधंदा म्हणून पशुपालन व्यवसाय सुरू केला. दूध, मांस, अंडी, लोकर इत्यादीचे उत्पादन घेऊ लागला. नदीकाठी व समुद्र किणाऱ्यावर अन्न मिळविण्यासाठी मासेमारी होऊ लागली. कालांतराने मासेमारीस व्यवसायीक महत्त्व प्राप्त झाले. उदर निर्वाहासाठी केली जाणारी मासेमारी आता व्यवसायीक स्वरूपात केली जात आहे. मत्स्य व्यवसायास अंतरराष्ट्रीय स्तरावर आयात-निर्यातीद्वारे आर्थिक महत्त्व प्राप्त झाले आहे.

बीज संज्ञा :भूजल मत्स्यव्यवसाय, भूजल मत्स्योत्पादन, मत्स्य व्यवसायासाठी अनुकूल क्षेत्र प्रस्तावना :

जागतीक पातळीवर मत्स्यव्यवसाय एक महत्त्वाचा व्यवसाय आहे. माशांची जागतीकस्तरावर मोठ्या प्रमाणात मागणी असल्यामुळे आयात-निर्यात मोठ्या प्रमाणात होत असून मासेमारी एक प्रमुख व्यवसाय बनला आहे. दोन प्रकारची मासेमारी केली जाते. एक म्हणजे खाऱ्या पाण्यातील व दुसरी गोड्या पाण्यातील मासेमारी. मत्स्यउत्पादनात जगात चीन प्रथम क्रमांकावर असून भारत हा तिसऱ्या क्रमांकावर आहे. तर अंतर्गत मासेमारीत भारत दुसऱ्या क्रमांकावर आहे. भारतामध्ये मत्स्य निर्यातीत केरळ राज्य प्रथम क्रमांकावर आहे. तर महाराष्ट्र राज्य दुसऱ्या क्रमांकावर आहे. महाराष्ट्रात खाऱ्या पाण्यातील मासेमारीचे प्रमाण 77% असून गोड्या पाण्यातील मासे मारीचे प्रमाण 23% एवढे आहे. मराठवाड्यात गोड्या पाण्यातील मासेमारी केली जाते. नदी, जलाशय, तळी याद्वारे मत्स्योत्पादन घेतले जाते. औरंगाबाद जिल्ह्यात विविध तलावांतून, वाहत्या पाण्यातून, संचयीत पाण्यात मत्स्य व्यवसाय केला जाते. गोदावरी नदीवरील जायकवाडी धरणातून तसेच इतर मध्यम प्रकल्पातून मत्स्यसंवर्धन करून मत्स्यउत्पादन घेतले जाते.

अभ्यास क्षेत्र :

महाराष्ट्र राज्याच्या उत्तरमध्य भागातील औरंगाबाद एक महत्त्वाचा जिल्हा आहे. मराठवाडा विभागातील या जिल्ह्यास ऐतीहासीक वारसा लाभलेला आहे. जगप्रसिद्ध अजिंठा व वेरूळ या लेण्या या जिल्ह्यात आहेत. याच बरोबर बीबीका मकबरा, दौलताबाद येथे किल्ला, औरंगाबाद लेणी, पाणचक्की, इत्यादी ऐतीहासीक वास्तू आहेत. औरंगाबाद जिल्ह्याचा विस्तार 19° ते 20° उत्तर अक्षांस आणि 74° ते 76° पूर्व रेखांशामध्ये आहे. औरंगाबाद जिल्ह्याला पूर्वेस जालना, पश्चिमेस नाशिक, नैऋत्यस अहमद नगर, उत्तरेस जळगाव, अग्नेयेस बीड या जिल्ह्यांच्या सीमा लाभलेल्या आहेत. औरंगाबाद जिल्ह्यांचे क्षेत्रफळ 10137.61

चौ.की.मी. असून महाराष्ट्र राज्याच्या 3.28% इतके आहे. औरंगाबाद जिल्ह्यात 9 तालुके आहेत. यामध्ये कन्नड, सोयगाव, सिल्लोड, फुलंब्री औरंगाबाद, खुलताबाद, वैजापुर, गंगापूर, पैठण, या तालुक्याचा समावेश होतो. या जिल्ह्यात पावसाळा, हिवाळा, उन्हाळा तीन ऋतू असून जिल्ह्याचे सरासरी पर्जन्यमान हे 675.46 मी.मी. आहे. हा जिल्हा गोदावरी व तापी नदीच्या खोऱ्यात येत असून तापी खोऱ्यातील वाघुर एक महत्त्वाची नदी आहे. त्याच बरोबर गोदावरी नदी जिल्ह्यातील वैजापूर, गंगापूर, पैठण तालुक्यातून वाहते. तसेच पुर्णा, शिवना, खांब, दूधना, गल्हाटी, गिरजा इत्यादी महत्त्वाच्या नद्या वाहतात. जनगणना 2011 प्रमाणे औरंगाबाद जिल्ह्याची एकूण लोकसंख्या 37,01,282 इतकी आहे.

संशोधनाची उद्दीष्टे :

- 1) आभ्यास क्षेत्रातील भूजल मत्स्य व्यवसायासाठी अनुकूल क्षेत्राचा अभ्यास करणे.
- 2) आभ्यास क्षेत्रातील भूजल मत्स्य व्यवसायासाठी वापरलेल्या मत्स्य बीजाचा अभ्यास करणे.
- 3) आभ्यास क्षेत्रातील भूजल मत्स्य उत्पादनाचा अभ्यास करणे.

संशोधन पद्धती व आधार साम्ग्री संकलन:

औरंगाबाद जिल्ह्यातील मत्स्य व्यवसायाचा अभ्यास करण्यासाठी द्वितीय साधन सामुग्री संकलित करण्यात आली असून औरंगाबाद जिल्हा सामाजिक व आर्थिक समालोचन 2015-2018 चा आधार घेतला असून माहिती विश्लेषण करण्यासाठी आलेख, तक्ते इत्यादीचा वापर करण्यात आलेला आहे. संदर्भासाठी विविध पुस्तके, मासिके इत्यादीचा वापर करण्यात आलेला आहे.

विषय विवेचन :

औरंगाबाद जिल्ह्यात गोदावरील नदीवरील जायकवाडी या प्रकल्पाव्यतिरिक्त इतर मध्यम प्रकल्पात मत्स्य संवर्धन करून मोठ्या प्रमाणात गोड्या पाण्यातील मत्स्य व्यवसाय केला जातो. मासे पकडण्या करीता सुधारीत बोटीचा वापर व नायलॉन जाळे इत्यादीचा वापर केला जातो. जायकवाडी धरणावर मत्स्यबीज उत्पादन प्रकल्प हाती घेण्यात आलेला आहे. मत्स्य बीज जलाशयात सोडून मत्स्य उत्पादन घेण्यात येते. माशात प्रथिने, स्निग्ध पदार्थ, खनीज पदार्थ, अ व ड जीवनसत्त्व भरपूर प्रमाणात आहे. यामुळे माशांना बाजारात मोठी मागणी दिसून येते.

भूजल मत्स्य व्यवसायाखालील क्षेत्र (हे.)
जिल्हा औरंगाबाद (तक्ता क्र. १)

अ.क्र.	तालुका	नदीची लांबी	- ·		लांबी अनुकूल क्षेत्र (तळी, अनुकूल क्षेत्र (तळी,		मत्स्य व्यवसायाखाली	मत्स्य व्यवसायाखाली	
		(किमी)		ઝભારાય) 2013-2014		जलારાય) 2017-2018	आणलेले एक्एण क्षेत्र (हेक्टर)	आणलेले एकूण क्षेत्र (हेक्टर)	
			संख्या	एक्एण क्षेत्र (हे.)	संख्या	एकूण क्षेत्र (हे.)	2013-14	2017-18	
1	कन्नड	62	236	3282	236	3282	2602	2602	
2	सोयगांव	68	185	866	185	866	651	651	
3	सिल्लोड	80	275	2209	275	2209	1050	1050	

Special Issue No.86 Theme of special Issue: Trends, Challenges and Issues in The Science, Social Science and Languages for Social Welfare

4	फुलंब्री	60	161	894	161	894	620	62
5	औरंगाबाद	95	311	2363	311	2363	1094	1094
6	खुलताबाद	98	180	1550	180	1550	790	790
7	वैजापूर	110	215	2422	215	2422	1520	1520
8	गंगापूर	91	185	2048	185	2048	1200	1200
9	<u> </u> ਪੈਠਾਂ	107	125	727	125	726	620	620
	एक्ण	771	1873	16360	1873	16360	10147	9589

आधार : सहायक आयुक्त मत्स्यव्यवसाय (तांत्रिक) औरंगाबाद स्त्रोत : औरंगाबाद जिल्हा सामाजिक आर्थिक समालोचन-2018

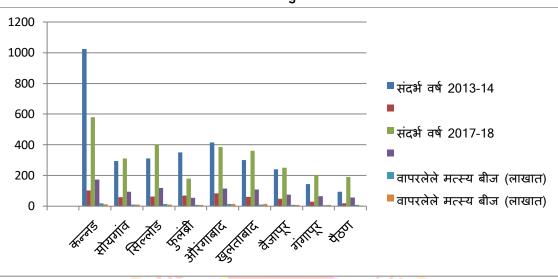
वरील आकडेवारीवरून स्पष्ट होते की, औरंगाबाद जिल्ह्यात नदीची लांबी सर्वात जास्त पैठण तालुक्यात असून 107 की. मी. इतकी आहे. तर सर्वात कमी फुलंब्री तालुक्यात 60 की.मी. एवढी आहे. जलाशयाची संख्या औरंगाबाद तालुक्यात सर्वात जास्त असून 311 एवढी आहे. तर सर्वात कमी पैठण तालुक्यात 125 एवढी आहे. संदर्भ वर्ष 2017-18 मध्ये मत्स्य व्यवसायाखाली सर्वात जास्त क्षेत्र कन्नड तालुक्यात 2602 हे. ऐवढे आहे. तर सर्वात कमी फुलंब्री तालुक्यात 62 हे. ऐवढे आहे.

औरंगाबाद जिल्हयातील भुजल मत्स्य उत्पादन

अ.क्र.	तालुका	संदर्भ वर्ष 2013-14		संदर्भ वर्ष 20	17-18	वापरलेले	वापरलेले
	1 1	भूजल	माशांच्या	भूजल	माशांच्या	मत्स्य बीज	मत्स्य बीज
	1	मत्स्य	उत्पादकास	मत्स्य	उत्पादकास	(लाखा <mark>त</mark>)	(लाखात)
		उत्पादन	मिळालेली किंमत	उत्पादन	मिळालेली किंमत	20	
		(मे.ट.)	(रू.लाखात)	(मे.ट.)	(रू.लाखात)	3	
1	कन्नड	1025	102.5	580	174.00	18.00	13.16
2	सोयगांव	295	59.00	310	93.00	10.0	10.40
3	सिल्लोड	310	62.00 SSA	400	120.00	15.0	11.50
4	फुलंब्री	350	70.00	180	54.00	9.5	9.50
5	औरंगाबाद	415	83.00	385	115.50	15.0	15.00
6	खुलताबाद	300	60.00	360	108.00	11.0	14.00
7	वैजापूर	240	48.00	250	75.00	8.5	9.00
8	गंगापूर	145	29.00	202	65.60	5.5	8.95
9	ਪੈ ਠण	95	19.00	190	57.00	8.00	5.00
	एक्ण	3175	532.5	2857	857.10	100.45	96.51

आधार : सहायक आयुक्त मत्स्यव्यवसाय (तांत्रिक) औरंगाबाद

स्त्रोत : औरंगाबाद जिल्हा सामाजिक आर्थिक समालोचन - 2015, 2018



औरंगाबाद जिल्ह्यातील भ्जल मत्स्य उत्पादन

2013-14 च्या आकडेवारी वरून स्पष्ट होते की, सर्वात जास्त मत्स्योत्पादन कन्नड तालुक्यात १०२५ मे. ट. असून सर्वात कमी पैठण तालुक्यात 95 मे. ट. आहे. पकडलेल्या माशातून उत्पादकास मिळालेली कन्नड तालुक्यात 102.5 (लाख) इतकी असून सर्वात कमी पैठण तालुक्यात 19.00 (लाख) इतकी आहे. 2014-14 साठी 1.45 (लाख) ऐवढे मत्स्यबीज वापरले.

2017-18 च्या आकडेवारी वरून स्पष्ट होते की, सर्वात जास्त मत्स्योत्पादन कन्नड तालुक्यात 580 मे. ट. असून सर्वात कमी फुलंब्री तालुक्यात 180 मे. ट. झाले आहे. उत्पादकास मिळालेली किंमत सर्वात जास्त कन्नड तालुक्यात 174.00 लाख एवढी तर सर्वात कमी फुलंब्री तालुक्यात 54.00 लाख एवढी आहे. मत्स्य व्यवसाय क्षेत्रासाठी वापरलेले मत्स्य बीज 96.51 (लाख) ऐवढे आहे.

निष्कर्ष:

औरंगाबाद जिल्ह्यास 771 कि.मी. नदीची लांबी लाभलेली आहे. मत्स्य व्यवसायासाठी अनुकूल क्षेत्र. जलाशयाची संख्या 1873 असुन त्याचे एकूण क्षेत्र 16360 इतके असून 2013-14 मध्ये मत्स्य व्यवसायाखालील आणलेले एकूण क्षेत्र 10147 हे. एवढे आहे. तर 2017-18 मध्ये 9589 हे. ऐवढे आहे. 2013-14 मध्ये औरंगाबाद जिल्ह्यातील भूजल मत्स्योत्पादन 3175 मे. टन एवढे आहे. तर 2017-18 मध्ये 2857 मे. ट. ऐवढे आहे. 2013-14 या वर्षी मत्स्य व्यवसायासाठी वापरलेले मत्स्य बीज 100.45 (लाख) एवढे आहे. तर 2017-18 मध्ये 96.51 (लाख) इतके आहे. 2013-14 मध्ये उत्पादकास मिळालेली किंमत 532.5 (लाख) तर 2017-18 मध्ये 857.10 (लाख) मिळाली आहे.

संदर्भ :

- 1) औरंगाबाद जिल्हा सामाजिक आर्थिक समालोचन-2015, 2018
- 2) मत्स्य शेती-डॉ. तान्हाजीराव चोरगे दिलीपराज प्रकाशन प्रा. लि.
- 3) कृषी भूगोल-स्रेश फ्ले / विद्या भारती प्रकाशन, लातूर
- 4) कृषि विभाग महाराष्ट्र शासन वेबसाईड
- 5) कृषि अर्थशास्त्र/डॉ. वस्धा प्रोहित-विद्या ब्क्स पब्लिशर्स, औरंगाबाद
- 6) शासिकय संकेतस्थळ : मत्स्य व्यवसाय विभाग महाराष्ट्र शासन (fisheries.maharashtra.gov.in)

सोलापूर जिल्ह्यातील ग्रामीण व नागरी क्षेत्रातील बदलत्या स्त्री-पुरुष प्रमाणाचा- एक भौगोलिक अभ्यास.

श्री. हनुमंत शंकर हेळकर

प्रा. डॉ. डी. जी. शिंदे

एम. ए. (भूगोलशास्त्र) भाग- 2

(संशोधन मार्गदर्शक,)

देशभक्त संभाजीराव गरड महाविदयालय, मोहोळ.

भूगोल विभाग,

देशभक्त संभाजीराव गरड महाविद्यालय, मोहोळ.

सारांश -

आज आधुनिक युगात स्त्री ही पुरुषाच्या खांद्याला खांदा लावून प्रत्येक क्षेत्रात यशस्वीरित्या आपली कामगिरी पार पाडत आहे. प्रत्येक क्षेत्रात भरारी घेत आहे. राष्ट्रपती, पंतप्रधान, वैमानिक, संशोधिका, शास्त्रज्ञ, डॉक्टर, अभियंता, संगणकत्रज्ञ, व्यवसायिक, संपादक, उद्योजक तसेच प्रशासकीय सेवेत उत्तमरित्या योगदान देत असताना आजही आपण स्त्रियांना दुय्यम स्थान देतो, त्यामुळे आजही वंशाचा दिवा व वृद्धापकाळाचा आधार म्हणून मुलाकडे पाहिले जाते. मुलगी म्हणजे परक्याचे धन या वाईट प्रवृतीमुळे भारतात स्त्री-पुरुष प्रमाणात असमानता निर्माण झालेली दिसून येते. त्याचबरोबर पुरुषप्रधान संस्कृती, स्त्री-भूणहत्या, हुंडापद्धती, स्त्री-साक्षरता कमी, दारिद्र, अल्पवयीन विवाह, प्रसूती काळात स्त्रियांचे होणारे मृत्यू, आरोग्याच्या अपुऱ्या सोयी, स्त्रियांकडे पूर्वग्रहदूषित व महिलांना दुय्यम स्थानावर पाहण्याचा दृष्टिकोण इत्यादी सर्व कारणांमुळे भारतात दर हजार पुरुषामागे स्त्रियांचे कमी असलेले प्रमाण दिसून येते. या सर्व घटकांचा विचार करून "सोलापूर जिल्हयातील ग्रामीण व नागरी क्षेत्रातील बदलत्या स्त्री-पुरुष प्रमाणाचा- एक भौगोलिक अभ्यास." या शीर्षकाखाली शोधनिबंधात सन 2001 ते 2011 या दशकात सोलापूर जिल्हयाच्या एकूण स्त्री-पुरुष प्रमाणात झालेला चढ-उतार तसेच जिल्हयातील तालुकानिहाय ग्रामीण व नागरी क्षेत्रातील प्रमाणातील बदलाचा (चढ-उतार) अभ्यास केला आहे.

बीज संज्ञा - स्त्री-पुरुष <mark>प्र</mark>माणातील बदल.

प्रस्तावना -

भारतात स्त्री-पुरुष प्रमाणाच्या बाबतीत मोठ्या प्रमाणात विषमता दिसून येते. भारतात सन 1901 मध्ये दर हजार पुरुषामागे स्त्रियांचे प्रमाण 972 इतके होते. ते प्रमाण 1941 मध्ये 945 स्त्रियांपर्यंत सातत्याने कमी झाल्याचे दिसून येते. त्यानंतर 1951 मध्ये 946, 1961 मध्ये 941, 1971 मध्ये 930, 1981 मध्ये 933, 1991 मध्ये 927, 2001 मध्ये 933 एवढे स्त्रियांचे प्रमाण असल्याचे दिसून येते. सन 1901 वर्षांनंतर दर दशकातील स्त्री-पुरुष प्रमाणाच्या आकडेवारीचा विचार करता, आज आपण आधुनिक विज्ञान-तंत्रज्ञानाच्या युगात वावरत असतानाही भारतात आजच्या घडीला स्त्री-पुरुष प्रमाणात असमानता दिसून येते. 2011 च्या जनगणनेनुसार देशाची लोकसंख्या 121,08,54,977 इतक्या मोठ्या प्रमाणात असून चीननंतर भारताचा जगात दुसरा क्रमांक लागतो. देशाच्या एकूण लोकसंख्येपैकी 623270258 (51.5%) पुरुष व 587584719 (48.5%) स्त्रियांची संख्या आहे. 2001 ते 2011 या दशकात लोकसंख्येत 17.7 टक्क्यांने वाढ झालेली दिसून येते. सन 2011 मध्ये दर हजार पुरुषामागे स्त्रियांचे प्रमाण 940 इतके असल्याचे दिसून येते. 2011 च्या जनगणनेनुसार देशातील सर्वाधिक स्त्री-पुरुष प्रमाण केरळ (1084) राज्यात, तर सर्वाधिक पुदुचेरी (1037) या केंद्रशासित प्रदेशात असल्याचे आढळून येते, सर्वात कमी

हरियाणा (879) राज्यात, तर सर्वात कमी केंद्रशासित प्रदेशात दमण व दीव (618) इतके कमी प्रमाणात असल्याचे आढळून येते.

महाराष्ट्र राज्याचा विचार करता, दर 1000 हजार पुरुषामागे स्त्रियांचे प्रमाण 1961 मध्ये 936, 1971 मध्ये 930, 1981 मध्ये 937, 1991 मध्ये 934 इतके स्त्रियांचे प्रमाण असल्याचे दिसून येते. 2001 च्या जनगणनेनुसार राज्याचे एकूण स्त्री-पुरुष प्रमाण 922 इतके होते. राज्याच्या ग्रामीण क्षेत्रात 960 आणि नागरी क्षेत्रात 873 इतके होते. सन 2011 च्या जनगणनेनुसार राज्याची एकूण लोकसंख्या 112374333 एवढी आहे, त्यापैकी पुरुष 58243056 व स्त्रियांची 54131277 एवढी लोकसंख्या आहे. राज्यात देशाच्या सुमारे 9.29 टक्के इतकी लोकसंख्या आहे. 2011 नुसार राज्याचे एकूण स्त्री-पुरुष प्रमाण 929 आहे. ग्रामीण क्षेत्रात 952 स्त्रिया व नागरी क्षेत्रात 903 स्त्रिया इतके स्त्री-पुरुष प्रमाण असल्याचे दिसून येते. . ग्रामीण भागातील पुरुष उदरनिर्वाहासाठी नागरी भागात स्थलांतर करत असल्याने ग्रामीण भागात स्त्रियांचे प्रमाण अधिक असल्याचे दिसून येते. राज्यात सर्वात जास्त स्त्री-पुरुष प्रमाण रत्नागिरी (1122) जिल्हयात तर मुंबई शहरात (832) सर्वात कमी प्रमाणात असल्याचे दिसून येते.

अभ्यास क्षेत्र -

सोलापूर जिल्हा हा पश्चिम महाराष्ट्रातील एक महत्त्वाचा जिल्हा असून तो राज्याच्या आग्नेय भागात स्थित आहे. त्याचे अक्षांश विस्तार 17.10 अंश उत्तर अक्षवृत ते 18.32 अंश उत्तर अक्षवृत तर रेखावृत विस्तार 74.42 अंश पूर्व रेखावृत ते 76.15 अंश पूर्व रेखावृत आहे. त्याचे एकूण भौगोलिक क्षेत्रफळ 14895 चौ. कि. मी. (4.84%) इतके आहे. जिल्हयाच्या एकूण क्षेत्रफळापैकी ग्रामीण क्षेत्राने 14520.91 चौ. कि.मी. (97.48%) व नागरी क्षेत्राने 374.49 चौ. कि.मी. (2.51%) एवढा भाग व्यापलेला आहे. जिल्हयाला उत्तरेकडून अहमदनगर व उस्मानाबाद जिल्हा, पूर्वेकडून उस्मानाबाद जिल्हा, दक्षिणेकडून सांगली जिल्हा व कर्नाटक राज्य तर पश्चिमेकडून सातारा व पुणे जिल्हयांच्या सीमा स्पर्श होतात. करमाळा, माढा, बार्शी, उत्तर सोलापूर, मोहोळ, पंढरपूर, माळिशिरस, सांगोला, मंगळवेढा, दिक्षिण सोलापूर आणि अक्कलकोट अशा 11 तालुक्यांचा समावेश सोलापूर जिल्हयात होतो.



सोलापुर जिल्ह्याचा स्थानदर्शक नकाशा

उद्दिष्टे -

- 1) सोलापूर जिल्ह्यातील 2001 ते 2011 या दशकातील एकूण स्त्री-पुरुष प्रमाणात झालेल्या बदलाचा अभ्यास करणे.
- सोलापूर जिल्ह्यातील ग्रामीण क्षेत्र आणि नागरी क्षेत्र यांच्यातील स्त्री-पुरुष प्रमाणातील बदल / चढ-उताराचा तुलनात्मक अभ्यास करणे.

गृहीतके -

- 1) सोलापूर जिल्ह्यातील 2001 ते 2011 दशवार्षिकात एकूण स्त्री-पुरुष प्रमाणात धनात्मक बदल / वाढ झालेली दिसून येईल.
- 2) सोलापूर जिल्ह्यातील ग्रामीण क्षेत्रात एकूण स्त्री-पुरुष प्रमाणात ऋणात्मक, तर नागरी क्षेत्रात धनात्मक बदल / वाढ झालेली दिसून येईल.

माहिती स्त्रोत -

प्रस्तुत शोधनिबंधासाठी दुय्यम स्वरूपाच्या माहितीचा वापर केलेला आहे. जिल्हा सामाजिक व आर्थिक समालोचन सोलापूर, संदर्भ ग्रंथ, विविध पुस्तके, इंटरनेट / माहिती तंत्रज्ञानाच्या सहाय्याने माहिती गोळा केली, माहितीचे विश्लेषण करण्यासाठी तक्ता व आलेख यांचा वापर केला, स्त्री-पुरुष प्रमाण काढण्यासाठी सूत्राचा वापर केला.

अभ्यास सूत्र -

"दर हजार पुरुषांमागे स्त्रियांची असणारे प्रमाण म्हणजे स्त्री पुरुष प्रमाण होय" देशातील स्त्री-पुरुष प्रमाण काढण्यासाठी पढील सूत्राचा वापर केला जातो.

स्त्रियांची एकूण लोकसंख्या
स्त्री-पुरुष प्रमाण = ----- × 1000
पुरुषाची एकूण लोकसंख्या

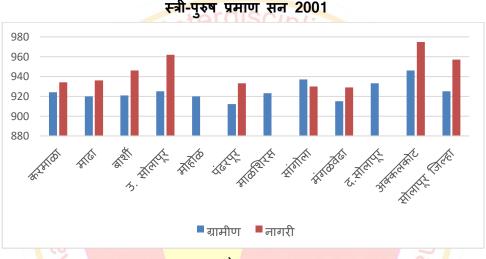
विषय विवेचन -

सोलापूर जिल्ह्यातील तालुकानिहाय स्त्री-पुरुष प्रमाण सन-2001 व 2011.

		स्त्री-पुरुष प्रमाण 2001			स्त्री-पुरुष प्रमाण 2001 स्त्री-पुरुष प्रमाण 2011			2001 ते 2011 या दशकातील स्त्री-पुरुष प्रमाणातील बदल		
쿍.	तालुके	ग्रामीण	नागरी	एक्ण	ग्रामीण	नागरी	एक्ण	ग्रामीण	नागरी	एकूण
								बदल	बदल	बदल
1	करमाळा	924	934	925	915	945	918	-9	11	-7
2	माढा	920	936	922	909	956	912	-11	20	-10
3	बार्शी	921	946	929	910	953	923	-11	7	-6
4	उ.सोलापूर	925	962	958	914	978	971	-11	16	13
5	मोहोळ	920	-	920	919	-	919	-1	-	-1
6	पंढरपूर	912	933	917	911	953	920	-1	20	3

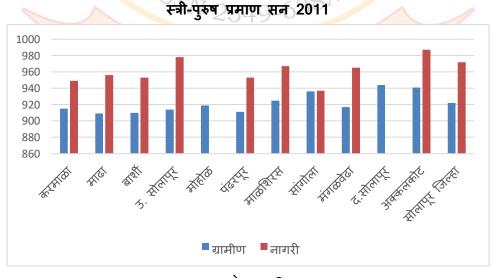
7	माळशिरस	923	-	923	925	967	931	2	0	8
8	सांगोला	937	930	936	936	937	936	-1	7	0
9	मंगळवेढा	915	929	917	917	965	922	2	36	5
10	द.सोलापूर	933	-	933	944	-	944	11	-	11
11	अक्कलकोट	946	975	953	941	987	950	-5	12	-3
12	सोलापूर	925	957	935	922	972	938	-3	15	3
	जिल्हा									

स्त्रोत- Table 6: Sex ratio by Tahsils, 2001 & Table 5: Sex ratio by sub-District, 2011. District Census Handbook, Solapur.



आलेख क्र.1

तक्त्यामध्ये व आलेख क्र. 1 मध्ये दर्शविल्याप्रमाणे सन 2001 च्या जनगणनेनुसार सोलापूर जिल्ह्यातील एकूण स्त्री-पुरुष प्रमाण 935 इतके दिसून येते. जिल्ह्याच्या ग्रामीण क्षेत्रात ते प्रमाण एकूण 925, तर नागरी क्षेत्रात ते एकूण 957 इतके असल्याचे आढळून येते.



आलेख क्र.2

तक्त्यामध्ये व आलेख क्र. 2 मध्ये दर्शविल्याप्रमाणे सन 2011 च्य जनगणनेनुसार सोलापूर जिल्ह्यातील एकूण स्त्री-पुरुष प्रमाण 938 इतके दिसून येते. जिल्ह्याच्या ग्रामीण क्षेत्रात ते प्रमाण एकूण 922, तर नागरी क्षेत्रात ते एकूण 972 इतके असल्याचे आढळून येते.

सन 2001 ते 2011 या दशकातील स्त्री-प्रुष प्रमाणातील बदल.

सन 2001 ते 2011 या दशवार्षिक कालावधीत संपूर्ण सोलापूर जिल्ह्यात स्त्री- पुरुष प्रमाण 935 वरून 938 पर्यंत वाढलेले दिसून येते. ही वाढ फक्त (3) बिंदूने वाढलेली दिसून येते. जिल्ह्यातील एकूण स्त्री-पुरुष प्रमाणात ऋणात्मक वाढ ही करमाळा (-7), माढा (-10), बार्शी (-6), मोहोळ (-1) आणि अक्कलकोट (-3) या पाच तालुक्यात आढळून येते, तर धनात्मक वाढ किंवा बदल उत्तर सोलापूर (13), पंढरपूर (3), माळिशिरस (8), मंगळवेढा (5), दक्षिण सोलापूर (11) या पाच तालुक्यात आढळून येते. जिल्ह्यातील एकमेव सांगोला तालुका हा स्त्री-पुरुष प्रमाणात स्थिर असलेला दिसून येतो.

ग्रामीण क्षेत्रातील बदल -

सन 2001 ते 2011 या दशवार्षिक कालावधीत सोलापूर जिल्ह्यातील ग्रामीण क्षेत्रातील एकूण स्त्री-पुरुष प्रमाण 925 वरून 922 पर्यंत घटल्याचे दिसून येते. म्हणजेच (-3) बिंदूने खाली आल्याचे दिसून येते. जिल्ह्यातील माळशिरस (2), मंगळवेढा (2) आणि दक्षिण सोलापूर (11) या तीन तालुक्यातील ग्रामीण भागात स्त्री-पुरुष प्रमाणात ऋणात्मक बदल / वाढ झालेली दिसून येते, तर इतर सर्व राहिलेल्या तालुक्यातील ग्रामीण क्षेत्रात धनात्मक बदल झालेला दिसून येतो. या ग्रामीण क्षेत्रात स्त्री-पुरुष प्रमाणात वाढ होत आहे; पण ऋणात्मक पद्धतीने होत आहे. स्त्री-साक्षरतेचा अभाव, लवकर विवाह पद्धती, कुपोषण, प्रसूती काळात मृत्युंचे प्रमाण अधिक, दारिद्र, हुंडा पद्धती, पुरुषप्रधान संस्कृतीचा पगडा इत्यादी अनेक कारणांमुळे जिल्ह्याच्या ग्रामीण क्षेत्रात स्त्री-पुरुष प्रमाणात असमानता दिसून येते..

नागरी क्षेत्रातील बदल - 🥎

सन 2001 ते 2011 या दशवार्षिक कालावधी सोलापूर जिल्ह्यातील नागरी क्षेत्रात एकूण स्त्री-पुरुष प्रमाण 957 वरून 972 पर्यंत सकारात्मक वाढ झालेली दिसून येते. म्हणजेच (15) बिंदूने वाढ झालेली दिसून येते. स्त्री-साक्षरतेत होणारी वाढ, आरोग्याच्या सोयीसुविधात होणारी वाढ, विवाहाचे वाढते वय, स्त्रियांच्या बाबतची जनजागृती, स्त्रियांकडे पाहण्याचा सकारात्मक दृष्टिकोन इत्यादी अनेक कारणांमुळे नागरी क्षेत्रात मुलींचे / स्त्रियांचे प्रमाण वाढत असल्याचे दिसून येते.

निष्कर्ष -

- 1) अभ्यास क्षेत्रातील गेल्या दशकातील एकूण स्त्री-पुरुष प्रमाणात वाढ झाल्याचे दिसून येते.
- अभ्यास क्षेत्रातील गेल्या दशकात ग्रामीण क्षेत्रात एकूण स्त्री-पुरुष प्रमाणात ऋणात्मक वाढ झाल्याचे दिसून येते.
- 3) अभ्यास क्षेत्रातील गेल्या दशकात नागरी क्षेत्रातील एकूण स्त्री-पुरुष प्रमाणात धनात्मक वाढ झाल्याचे दिसून येते.
- 4) अलीकडच्या कालावधीमध्ये पुरुषांचा स्त्रियांकडे बघण्याचा सकारात्मक दृष्टिकोन दिसून येतो.

संदर्भ सूची-

- 1) लोकसंख्याशास्त्र- प्रा. भोसले, प्रा. दामजी, प्रा. कदम, प्रा. पाटील.
- 2) लोकसंख्या भूगोल- प्रा. फ्ले, प्रा. शहापूरकर.
- 3) महाराष्ट्रातील जिल्ह्यांचे आणि भारतातील राज्यांचे निवडक निर्देशक 2011-12.
- 4) Census of India 2001, 2011.
- 5) District Census Handbook, Solapur 2001, 2011.
- 6) www.censusindia.in



मागासलेपणाचे राजकारण आणि मराठा समाज

अंकुश रामराव शिंदे

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प्रस्तावना :

मानवी जीवनाला नैसर्गिक स्वातंत्र्य बहाल झाले असले तरी कालांतराने फक्त नैसर्गिक निकषावर त्याचे जगणे अवलंबून राहत नाही किंबहुना राहू दिले जात नाही. यामध्ये मानवाने त्याच्या सोयीनुसार समाजामध्ये वर्गवारी केली. त्यामध्ये गरीब व श्रीमंत, अशिक्षित अडाणी आले. या अशा वर्गवारीचा विचार कर्तृत्व आणि कष्टाच्या निकषावर मोजले जाते. मात्र याच्या पिलकडे जे वर्ग पडले आहेत ते आज मोठ्या विध्वंस आणि द्वेषाचे वातावरण निर्माण करणारे आहे. त्यातील महत्त्वाचे म्हणजे जात, धर्म, वंश आणि वर्ण यावर आधारित वर्ग पडले आणि हेच आज समाजात असलेली विषमता निर्माण करणारे आहे. कोणताही समाज कायमस्वरूपी सदन नसतो आणि कोणताही समाज कायमस्वरूपी निर्धन नसतो हे त्रिकालबाधित सत्य आहे. ते आपण अगोदर स्वीकारले पाहिजे हे स्वीकारले तर समाजातील मागासलेपणाला जो पर्याय संविधानिक पातळीवर निर्माण केला गेला. तो आरक्षणाचा आपण सर्वांगाने विचार करू शकतो. आपल्याला सदरील शोधनिबंधामध्ये मागासलेपणाचा अर्थ आणि त्याचा मराठा समाजाची असलेला संबंध याकडे लक्ष केंद्रित करायचे आहे.

संशोधनाची उद्दिष्टे

- १) राज्यघटनेनुसार मागासलेपणाचा अर्थ समजून घेणे.
- २) मराठा समाज मागास आहे की नाही हे तपासणे.
- अायोगानुसार मागासलेपणाचा निकषाचा अर्थ समजून घेणे.

संशोधनाची गृहीतकृत्ये

- १) आयोगाच्या निकषानुसार मराठा समाज मागास आहे.
- २) बदलत्या काळानुसार मराठा समाजाचे मागासलेपण सिद्ध होते आहे.

संशोधन पद्धती

प्रस्तुत शोधनिबंधासाठी संशोधनाच्या वर्णनात्मक आणि विश्लेषणात्मक संशोधन पध्दतीचा आधार घेण्यात आला आहे. तसेच तथ्ये संकलनाच्या द्वितीय सामग्रीचा उपयोग केला आहे. यामध्ये वर्तमान पत्रे, संदर्भग्रंथ, वेबसाईट आणि ब्लाॅग वरील निवडक लेखाचा वापर केला आहे.

बदल हा निसर्गाचा नियम आहे. व्यक्तीच्या वर्तनामध्ये सामाजिक परिस्थितीमध्ये बदल हा होत असतो. आज महाराष्ट्रामध्ये मराठा समाज आरक्षणाची मागणी करत असल्याचे दिसून येत आहे. परंतु ही आरक्षणाची मागणी कशाच्या आधारावर करत आहे हे पहाणे किंवा जाणून घेणे महत्वाचे ठरते. भारतामध्ये आरक्षणाची सुरुवात छत्रपती राजश्री शाहू महाराज यांच्या राज्यकारभार यामध्ये पाहायला मिळते. त्यांनी आपल्या संस्थानांमध्ये पन्नास टक्के जागा या मागास प्रवर्गासाठी राखून ठेवण्यात आल्या होत्या. भारत स्वातंत्र्य झाल्यानंतर येथील उच्च-नीचतेचा भेदभाव कमी व्हावा यासाठी आरक्षणाचे धोरण अवलंबवले ज्या समूहाचे िकंवा वर्गाचे प्रतिनिधित्व पुरेसे नसेल अशा प्रवर्गाला नोकरी, शिक्षण, आणि राजकारण यामध्ये आरक्षण देण्यात आले. नंतरच्या काळात म्हणजेच १९६७ सालापासून इतर मागासवर्गीय समूहाला आरक्षण देण्यात आले. हे आरक्षण देताना मागासलेपणा हा निकष आयोगाने समोर ठेवून या प्रवर्गामध्ये अनेक जातींना समाविष्ट करण्यात आले. परंतु महाराष्ट्रातील मराठा या समूहाचा इतर मागासवर्गीय याच्या यादी पासून दूर ठेवण्यात आले, या जाती समुहाप्रमाणेच अनेक जाती या १९९२ पासून इतर मागासवर्गीयांमध्ये समावेश व्हावा यासाठी मागणी करत आहेत काहींचा समावेश झाला व काही जातीय समूह आजही संघर्ष करत आहेत त्यापैकी महाराष्ट्रातील मराठा हा समाज आहे

राज्यघटनेनुसार मागासलेपणा चा अर्थ ािटाऽटां

एखाद्या समाजाला किंवा समूहाला आरक्षण द्यायचे असेल तर त्यासाठी मागासलेपण सिद्ध होणे गरजेचे आहे. अशा समूहाला किंवा वर्गाला आरक्षण देता येते की जा समूहाशी किंवा वर्गाशी सामाजिक भेदभाव केला जातो. <mark>म्हणजेच उच्चवर्णीय जातीपासून होणारा भेदभाव किं</mark>वा द्य्यम वागणूक जे की, पूर्वी भारतामध्ये अनुसूचि<mark>त जाती व अनुसूचित जमाती यांच्याबाबत उच्च जाती समू</mark>हाकडून भेदभाव केला जायचा यांना दुय्यम वाग<mark>णूक मिळायची अशा जातीय समूहांना आरक्षण देऊन प्रवाहा</mark>त आण<mark>ण्</mark>यासाठी आरक्षणाचे धोरण स्वीकारले आहे. आ<mark>णि हाच मागासलेपणाचा अर्थ राज्यघटनेला अभिप्रेत आ</mark>हे. आरक्षण हे गरिबी हटाव कार्यक्रम नस्न सामाजिक भेदभाव दूर करून मागास पर्वगाचे प्रेसे प्रतिनिधित्व नसेल तर अशा समूहाला आरक्षण देऊन त्यांना मुख्<mark>य प्रवाहात आणण्यासाठी आरक्षण धोरण स्वीकार</mark>ले आहे. अनेक राज्यामध्ये आरक्षणाची मागणी <mark>होताना दिसते प्रत्येक समाज हा आरक्षणासाठी रस्त्यावर</mark> उतरून आंदोलन करत आहे. १९५२ मध्ये इतर मागसिवर्गीयां<mark>साठी आरक्षणाचे धोरण अवलंबून यासा</mark>ठी केलम ३४० न्सार मागास आयोगाची नेमणूक करण्<mark>यात आली. व आयोगाने ठरवलेल्या निकषान</mark>्सार आर<mark>क्ष</mark>ण देण्यात आले. पहिला मागासवर्ग आयोग १९५२ साल<mark>ी कालेलकर यांच्या अध्यक्षतेखाली नेमण्यात आ</mark>ला. व तो कालेलकर आयोग म्हणून ओळखला जातो. इतर मागासवर्गीय समूहामध्ये समावेश करण्यासाठी आयोगानी काही मागासलेपणाचे निकष लावले गेले आहे<mark>त. उदा. सामाजिक, मा</mark>गासलेपण, शैक्षणिक <mark>मागासलेपण आ</mark>णि आर्थिक मागासलेपण व यामधील प्रत्येक घटकाला <mark>काही ठराविक गुण देण्यात आले. परंत् सामा</mark>जिक मागासलेपण हा निकष हा महत्वाचा निकष ठरवण्यात आला आहे.

मराठा समाजाचे मागासलेपण

मराठा समाज स्वतःला मागास म्हणून घेत आहे. हा समाज मागास आहे की नाही हे सिद्ध करण्यासाठी अनेक आयोग नेमण्यात आले. त्यामध्ये राज्य मागासवर्ग आयोग, बापट आयोग, खत्री आयोग, राणे किमटी, गायकवाड आयोग. इत्यादी आयोगाद्वारे मराठा समाजाचे मागासलेपण तपासण्यात आले. त्यामध्ये बहुतांश आयोगाने मराठा समाज मागास नाही हे सिद्ध केले तर, काही आयोगाने मराठा समाज मागास आहे हे दाखवून दिले व आरक्षणास पात्र आहे असे देखील सांगितले. मराठा समाजाचे मागासलेपण सिद्ध करण्यासाठी न्यायमूर्ती गायकवाड आयोगाने तीन निकष सांगितले. यामध्ये मराठा समाजाचा

शैक्षणिक, आर्थिक व सामाजिक परिस्थितीचा अभ्यास करण्यात आला आहे त्यानुसार मराठा समाजाच्या सदयस्थिती पहावी लागेल.

महाराष्ट्रामध्ये बह्संख्य प्रमाणात मराठा समाज आहे. मराठा समाजाचे प्रभ्त्व हे सर्व क्षेत्रांमध्ये दिसून येते मराठा समाजामध्ये राजकीय नेतृत्व पाहायला मिळते. या समाजाकडे मोठ्या प्रमाणात जमिनीची मालकी आहे. ७७ टक्के लोक शेती, शेतीशी संबंधित व्यवसाय व रोजगारामध्ये गुंतलेली आहेत. परंतु काळाबरोबर या समाजामध्ये देखील बदल होत गेला. निसर्गाचा लहरीपणा, बाजारपेठेचा अभाव, क्ट्ंबातील वाढती संख्या, जिमनीचे विभाजन त्कडीकरण याम्ळे आलेले अल्प जमीनधारणा, शेतीच्या पाण्याची वाढती टंचाई इत्यादी कारणांम्ळे शेती हा व्यवसाय किफायतशीर नाही याची जाणीव मराठा तरुण शेतकऱ्यांना होत आहे. यातून बाहेर पडण्यासाठी अनेक जण <mark>धडपडत आहेत व्य</mark>वसायाकडे, शिक्षणाकडे वाटचाल करत आहेत. परंत् म्हणावे तेवढे त्यांना यश मिळत नाही काळाबरोबर बदलण्याची मानसिकता असणाऱ्या प्ढारलेला जाती समाजाने हॉटेल, सेवा उद्योग अगदी चप्पल-बूट सामान्य विक्री त्याचे व्यवसाय स्वीकारले, व ते कष्ट करून वाढले परंत् मराठा समाजातील लोकां<mark>ना स्वाभिमान, खोटी प्रतिष्ठा आडवी</mark> आली. <mark>या</mark> समाजातील फार थोड्या लोकांच्या हातामध्ये सं<mark>पत्तीचे केंद्रीकरण झाले आहे. गरीब मराठा हा गरीबच</mark> होत गेला जातीच्या आधारावर पुढारले पणाचा शिक्का जरी या समाजावर असला तरी सामाजिक, आर्थिक, शैक्षणिक बाबींमध्ये हा समाज मागास असल्याचे आढळून येते. शेती व्यतिरिक्त व्यवसाय नोकरी करता यावी यासाठी स्वातंत्र्यानंतर गेल्या पंचवीस तीस वर्षांमध्ये मराठा समाजातील मुले उच्च शिक्षणाकडे वळली, परंत् शिक्षण क्षेत्रात देखील आपली क्वत नसल्याम्ळे नैराश्य आले. त्याम्ळे या समाजाला सरकारी नोकरी व शिक्षणामध्ये मदत व्हावी यासाठी मराठा समाज आर<mark>क्षणाची मागणी करत असलेला १९९० पासून दिसत आहे.</mark> अलीकड<mark>च्</mark>या काळामध्ये या मागणीला जास्त जोर धरला <mark>आहे आज हा समाज महाराष्ट्रात मोठ्या प्रमा</mark>णे रस्त्यावर मोठी मोठी मोर्चे काढून स्वतःला मागास महणून घेत आहे. यामुळे या समाजाची सद्यस्थिती मांडणे महत्वाचे ठरते. फडवणीस सरकारने मराठा समाजाच<mark>े सा</mark>माजिक, <mark>शैक्षणिक व आर्थिक मागासलेप</mark>ण तपास<mark>ण्या</mark>साठी न्यायमूर्ती एम. जी. गायकवाड यांच्या अध्यक्षतेखाली 'राज्य मागासवर्ग आयोग' गठीत करून या आयोगाने नोव्हेंबर 2018 मध्ये शासनासमोर आपला अहवाल सादर केला या अहवालात प्ढील प्रमाणे मराठा समाजाची सामाजिक, आर्थिक सदयस्थिती व शैक्षणिक सदयस्थिती बददल माहिती दिली आहे.

मराठा समाजाची सामाजिक आणि आर्थिक स्थिती

मराठा समाज हा ग्रामीण भागामध्ये राहतो. ९० टक्के समाज हा शेतीवर आधारित आहे. या समाजामध्ये प्रामुख्याने दोन प्रकारचे वर्ग पाहायला मिळतात. एक पूर्वजात श्रीमंत वर्ग आणि दुसरा पिढीजात गरीब वर्ग जो की पूर्णतः शेती व मजुरीवर अवलंबून आहे गरीब वर्गाचे प्रमाण सर्वाधिक आहे मूठभर श्रीमंत वर्गाच्या हाती सत्तेची केंद्रस्थान बनलेला आहे. मराठा समाजामध्ये कुणबी मराठा, मराठा, मराठा कुणबी शेतकरी मराठा अशा जाती प्रामुख्याने पाहायला मिळतात. या समाजातील ७० टक्के कुटुंबाकडे कच्ची घरे आहेत. अनेकांकडे राहायला घरे देखील नाहीत झोपडी मध्ये हा समाज आज देखील राहत आहे मराठवाडा येथील मराठा समाज मोठ्या प्रमाणात उसतोडीसाठी इतर राज्यामध्ये स्थलांतर करत असून ६ महिने बाहेरील राज्यामध्ये मजुरी करताना दिसून येतो. केवळ ३६ टक्के कुटुंबाकडे पाण्याची नळजोडणी आहे. तसेच ७७

टक्के कुटुंब हे शेती व संबंधित श्रमिक रोजगारामध्ये गुंतलेली आहेत. आणि एकूण ९० टक्के महिला घरातील कामानंतर बाहेरची कामे करून कमाई करतात. स्त्रियांमध्ये मोठ्या प्रमाणात मजुरी घर कामे शेतीकामे या समाजातील स्त्रियांना करावी लागतात. उदा. शेण काढणे शेतीमधील पाणी देणे ई. दारिद्र्य रेषेखालील मराठा कुटुंबाचे प्रमाण हे ३७ टक्के आहे. जवळ पास ग्रामीण भागातील लोक ही राशन वर आपला उदर निर्वाह करताना दिसून येतात. ९३ टक्के मराठा कुटुंबाचे वार्षिक उत्पन्न एक लाख रुपये किंवा त्यापेक्षा कमी आहे. जिमनीच्या तुकडी कारणामुळे ७१ टक्के मराठा शेतकरी अल्पभूधारक म्हणजेच २.५ एकरपेक्षा कमी जमीन धारणा आहे. काहींना जिमनीचा एक गुंठा देखील नाही त्यामुळे शहरीकरणा ओघ दिसून येत आहे हात मजुरी वर पोट भरत आहे.

मराठा समाजाची शैक्षणिक स्थिती

मराठा समाजामध्ये शिक्षणाचे प्रमाण खूप नगण्य आहे. या समाजातील स्त्रियांना शिक्षण दिले जात नाही कमी वयामध्ये मुलीची लग्न केली जातात मराठा समाजामध्ये निरक्षर लोकसंख्या १३ टक्के आहे. १३ टक्के जरी लोकसंख्या निरक्षर असली तरी उच्च शिक्षणापर्यंत हा समाजात पाहायला मिळत नाही त्यामध्ये प्राथमिक शिक्षण हे ३५ टक्के आहे. माध्यमिक म्हणजे दहावी ते बारावी शिक्षण प्राप्त लोकसंख्या ४४ टक्के तर पदवी शिक्षण प्राप्त लोकसंख्या सात टक्के आहे. म्हणजेच ते किती कमी आहे समजून येते पदवीत्तर शिक्षणामध्ये या समाजाचे प्रमाण नसल्यासारखेच आहेत ते प्रमाण ०.७७ टक्के आहे.

राजकारण आणि मराठा समाज

मराठा समाजाच्या आरक्षणाचा मुद्दा हा सद्यस्थितीला असंवेदनशील होऊन बसला आहे. मागासलेपण सिद्ध जरी झाले तरी या समाजाला कोणत्या प्रवर्गामध्ये टाकायचे हे स्पष्ट होत नाही. स्वतंत्र प्रवर्ग म्हणून आरक्षण द्यावे तर ते कायद्याच्या चौकटी मध्ये बसत नाही कारण इंद्रासाहनी खटल्या यानुसार ५० टक्केपेक्षा जास्त आरक्षणाची मर्यादा ओलांडता येत नाही. महाराष्ट्रामध्ये आधीचेच ५२ टक्के आरक्षण आहे आता यामध्ये मराठा समाजाचा समावेश केला तर पन्नास टक्के मर्यादा आडवी येत आहे. या मुद्द्यावर संपूर्ण महाराष्ट्रामध्ये मोठ्या प्रमाणात राजकारण केले जात आहे. समाजाची दिशाभूल केली जात आहे कोणत्याच बाबतीत स्पष्टतेचा अभाव शासन व्यवस्थेकडून दिसून येत आहे. निवडणुका जवळ आल्या की मराठा आरक्षणाचा व त्याच्या मागासलेपणा सिद्ध करण्यावर मोठ्या हुशारीने राजकारण केले जात आहे. जाती-जातीमध्ये दुरावा निर्माण केला जात आहे. मराठा विरुद्ध-ओबीसी, मराठा विरुद्ध-एसी अशाप्रकारे जाती-जातीमध्ये तेढ निर्माण केली जात आहे. मराठा समाजाने लाखोच्या संख्येने आरक्षणासाठी शांततेच्या मार्गाने मोर्च काढल्या आहेत. कित्येक तरुणाने आपल्या प्राणाचा त्याग केला आहे. परंतु पदरात निराशा मिळाली आहे. शासन आरक्षणाचा कायदा करत आहे तर सरकार बदलले की तो कायदा मोडीत काढला जात आहे. यामध्ये आरक्षणाचा लाभ तर नाहीच पण विद्यार्थ्यांच्या आयुष्याशी खेळले जात आहे.

सारांश

थोडक्यात सांगायचे झाले तर मराठा समाजाचे मागासलेपण हे सिद्ध झालेले आहे. तसा आयोगाचा अहवाल सुद्धा आहे परंतु मागासलेपणाचा राजकारण केले जात असल्यामुळे आरक्षणाचा उपयोग या समाजाला होत नाही तो होऊ दिला जात नाही. या समाजावर महाराष्ट्रातील राजकारण अवलंबून आहे कारण

हा समाज संख्येने मोठा आहे. मताची पेटी या समाजाकडे असली तरी हा समाज वेगवेगळ्या पक्षांमध्ये बांधला गेला आहे.

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छत्रपती शाह् महाराज - एक महान लोककल्याणकारी राजा

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(पदवीधर शिक्षक)

जि.प.व प्राथ. शाळा काळी कारंजा

प.स.कारंजा जि.प.वाशिम

ABSTRACT

छत्रपती शाहू महाराज यांनी समाजातील लोकांचे सर्वांगीण कल्याण करण्याच्या हेतूने केलेल्या कार्याने महाराष्ट्राच्याच नव्हे तर भारतीय जनतेच्या मनात आढळ स्थान प्राप्त केले आहे. तत्कालीन समाज प्रवाहाच्या विरोधात जाऊन त्यांनी केलेले सामाजिक कार्य हे अत्यंत गौरवास्पद आहे. शाहू महाराजांनी अज्ञान ,अंधश्रद्धा, जातीयता या अनिष्ट रूढींच्या गर्तेत सापडलेल्या जनतेला नवचैतन्याची वाट दाखविण्याचे महान कार्य केले.शाहू महाराजांना निरक्षरता, अनिष्ट प्रथा, अज्ञान याविषयी प्रचंड चीड होती. त्यासाठी महाराजांनी जीवनभर संघर्ष करून समाजातील दीनदुबळ्या, पिडीत, शोषित लोकांच्या उत्थानाचे कार्य केले. शाहू महाराज राजे असून स्वतः शेतकऱ्यात मिसळत असत. शेतकऱ्यांची कांदा-भाकर आवडीने खात असत. स्वतःला शेतकरी, मजूर, शिपाई म्हणून घेण्यात त्यांना अभिमान वाटत असे. समाजाला अज्ञान व निरक्षरतेच्या गर्तेतून बाहेर काढण्यासाठी त्यांनी शैक्षणिक क्षेत्रात अत्यंत मोलाचे कार्य केले. राजर्षी शाहू महाराजांनी महाराष्ट्रातील जनतेला आधुनिकतेचे, सर्वधर्मसमभावाचे, साक्षरतेचे धडे दिले. शाहू महाराजांनी त्यांच्या अतुलनीय कार्याने महाराष्ट्राला पुरोगामीत्वाची दिशा दाखविण्याचे कार्य केले.

राजर्षी शाहू महाराज यांनी राजघराण्यातील असून सुद्धा समाज सामान्य जनतेत मिसळून त्यांच्या समस्या, दुःख, वेदना, तळमळ जाणून घेऊन आपले संपूर्ण आयुष्य पिडीत व शोषितांच्या उद्धारासाठी खर्ची घातले. त्यांनी केलेळे शैक्षणिक कार्य हे अतुलनीय आहे. तत्कालीन समाज हा शतकानुशतके निरक्षर होता. अशा निरक्षर लोकांसाठी सोयी सवलती देणारा, आरक्षण देणारा, वसतिगृहाची सोय देणारा भारतीय इतिहासातील पिहला राजा महणून शाहू महाराजांचा सन्मानाने व आदराने उल्लेख करावा लागेल. शाहू महाराजांनी अनेक क्षेत्रातील उल्लेखनीय योगदान दिले. महात्मा फुले यांच्यानंतर सत्यशोधक समाज समाजाची चळवळ त्यांनी पुढे नेली. जातिभेदाचे उच्चाटन व अस्पृश्यता निवारण करण्यासाठी शाहू महाराजांनी महाराष्ट्रात आर्य समाजाची स्थापना केली. दिलतांना समान हक्काचा अधिकार देऊन दिलतोद्धाराचे कार्य केले. त्यांनी आपल्या संस्थानात प्राथमिक शिक्षण सक्तीचे करून शैक्षणिक क्रांती घडवून आणली. रिक्रूट भरतीसाठी सवलती जाहीर करून व आर्थिक मदत देऊन लष्कर भरती केले केली. सावकारी पाशातून गरीब शेतक-यांच्या जिमनी सोडविल्या. दुष्काळात रोजगार निर्माण केला. मोठ्या उद्योगासाठी सहाय्य करून जिल्ह्याचा आर्थिक विकास घडवून आणला. शाहू महाराजांनी त्यांच्या जीवन काळात असंख्य लोकोपयोगी कायदे केले.

शाह् महाराजांचा परिचय :-

जयसिंगराव घाटगे हे १८०९ मध्ये कागलचे अधिपती झाले. करवीर छत्रपतींनी त्यांना 'हिंदुराव' हा किताब दिला. यांना पुत्र नसल्याने त्यांची पत्नी पार्वतीबाईने १८६० साली सखाराम हा चौदा वर्षाचा मुलगा दत्तक घेतला. सखारामचे चार वर्षांनी निधन झाल्याने त्यांची पत्नी सुंदराबाई हिने करवीर छत्रपतींच्या मंजुरीने १८६८ साली जयसिंगराव आबासाहेब यांना दत्तक घेतले. जयसिंगराव आधीपासूनच अत्यंत चाणाक्ष, विलक्षण, बुद्धिमान व शांत प्रवृतीचे होते. त्यांच्या शिक्षणासाठी दरबाराने एलिफस्टन कॉलेजचे फेलो यशवंत वासुदेव आठले यांची जयसिंगरावाचे ट्यूटर म्हणून नेमणूक केली. त्यांनंतर १८७७ साली कृष्णाजी भिकाजी गोखले या विश्वासू व निष्णात शिक्षकाने जयसिंगरावांच्या कुशाग्र बुध्दीला उत्तेजन देण्याचे कार्य केले. आबासाहेबांना लहानपणापासूनच कुस्ती, क्रिकेट व शिकार या खेळाची गोडी लागली. आबासाहेबांचा विवाह मुधोळच्या एकुलत्या एक राजकन्या राधाबाईसाहेब यांच्याबरोबर १८६४ साली झाला. आबासाहेबांना राज्यकारभाराचे प्रत्यक्ष ज्ञान व्हावे म्हणून पोलिटिकल एजंट यांच्या न्यायालयात दिवाणी व फौजदारी खटले कसे चालवायचे याचे शिक्षण घेण्यासाठी पाठवले. जहागिरीत सर्वत्र अंदाधुंदी पसरलेली असतांना १८७८ मध्ये आबासाहेबांनी जहागिरीचा कारभार स्विकारला. त्यांनी जहागिरीत शांतता व सुव्यवस्था निर्माण केली. २४ डिसेंबर १८८३ रोजी चौथ्या शिवाजी महाराजांचा एका गोऱ्या सार्जटशी झालेल्या झटापटीत करूण अंत झाला. त्यांनंतर दत्तकाचा प्रश्न उपस्थित झाला असतांना आनंदीबाई राणीसाहेब यांनी शास्त्रोक्त पद्धतीने आबासाहेबांचा थोरला पुत्र यशवंतराव यास १७ मार्च १८८४ रोजी दत्तक घेऊन त्यांचे नाव शाह छत्रपती असे ठेवले. १

यशवंतरावांचा दत्तकविधीचा समारंभ १८ मार्च १८८४ रोजी मोठ्या उत्साहाने पार पडला. आबासाहेब घाटगे आणि जे. डब्ल्यू. वॉटसन यांनी १८८६ च्या जानेवारीमध्ये शाहूंना शिक्षणासाठी राजकोट राजकुमार महाविद्यालयामध्ये पाठविले. या महाविद्यालयात शाहूंनी त्यांच्या मित्रासोबत शिक्षण घेतले. या राजकुमार महाविद्यालयात शाहूंना मिळालेली वाईट वागणूक त्यांना पसंत नव्हती. काही वर्षानंतर शाहूंनी म्हटले होते की, कोणत्याही राजपुत्राचे शिक्षण त्याच्या संस्थानात व प्रजेमध्ये झाले पाहिजे. त्याला त्यांच्या पासून दूर ठेवून एखाद्या युरोपियन पालकाच्या स्वाधीन करू नये.

२ एप्रिल १८८४ रोजी शाहू महाराजांनी राज्य कारभाराची सूत्रे स्वीकारली. या निमित्ताने त्यांनी जाहीरनामा प्रसिद्ध केला. शाहू महाराज म्हणतात, 'आमची प्रजा सदासर्वदा सुखी व संतुष्ट असावी' दिवसेंदिवस तिचे कल्याण वृद्धिंगत व्हावे आणि आमच्या राज्याचा सर्व बाजूने अभ्युदय व्हावा, अशी आमची उत्कट इच्छा आहे. हा उददेश सफल होण्याचे काही आमचे जहागीरदार, आप्तजन, सरदार, इमानदार, मानकरी, कामदार सर्व दर्जाचे शेठ सावकार आणि तमाम प्रजाजन यांच्या उज्वल राजनिष्ठेची आणि सहकार्याची आम्हास आवश्यकता आहे. आमच्या आमदनीच्या सुरुवातीच्या सुमुहूर्तावर आमची कारकीर्द दीर्घकाळाची आणि सुखद व्हावी म्हणून आम्ही परस्पर जगन्नियंत्याच्या अनुग्रहासाठी प्रार्थना करतो !'३ या जाहीरनाम्यावरून आपल्या प्रजेसाठी व संस्थांना साठी जीवनभर उदात कार्य करण्याची शाहू महाराजांची इच्छा दिसून येते.४

मल्लविद्या आणि शिकारीची आवड:-

शाहू महाराजांना मल्लिविद्येची खुप आवड होती. १८९४ साली कोल्हापूर येथे झालेल्या कुस्त्यांच्या स्पर्धेत शाहू महाराजांनी विजयी मल्लांसोबतच पराभूत मल्लांनाही बक्षीसे दिलीत हार-जीत यापेक्षा मल्लिवद्येचे कौशल्य महत्त्वाचे आहे असे ते मानत. दोन्ही मल्लांना बिक्षिसे देण्याच्या पद्धतीने कोल्हापूर संस्थानात मल्लिविद्येची प्रगती झाली. शाहू महाराज स्वतः सुद्धा एक उत्कृष्ट मल्ल होते. त्यांचे जनक वडील आबासाहेब घाटगे हे एक चांगले कुस्तीगीर होते व त्यांनी लहानपणीच शाहू महाराजांना कुस्तीमध्ये तरबेज केले होते. शाहू

महाराज आपल्या तसेच परप्रांतीय मल्लांना रबडी, बदामाची थंडाई, गुलाबाची फुले, व मोगली बदाणे यांचे मिश्रण , मांस, तूप, आकणी व दूध अशा ख्राकाची व्यवस्था करीत. तसेच शाह् महाराजांना शिकारीचा म्लखावेगळा छंद होता. प्रत्येक रविवारी ते शिकारीला जायचे. शाह् महाराज सिलोनला गेले असता कुत्र्याकडुन सांबराची शिकार कशी करावी हे शिकले. शाह् महाराजांनी कुमार वयातच बडोदे, जोधपुर, या ठिकाणी अनेक वेळा शिकारी केल्या. महाराज कितीही कार्यमग्न असले तरी शिकारीसाठी फ्रसत काढीत. आयुष्यभर हा छंद त्यांनी जोपासला.

दुष्काळ व प्लेगच्या साथीतील शाह् महाराजांचे कार्य :-

कोल्हापूरच्या संस्थानात १८९६ च्या उत्तरार्धात दुष्काळामुळे भीषण स्थिती निर्माण झाली होती. शाह् महाराजांनी पन्हाळवेढा, भ्दरगड आणि कटकोळ या दुष्काळग्रस्त भागात दौरे केले होते. दुष्काळी कामाची पाहणी करून गरिबांच्या घरीच द्ष्काळी मदत देण्याचे काम त्वरित करण्यात आले. तसेच द्ष्काळाम्ळे चिंचली येथील यात्रा महोत्सव रद्द करण्यात आला होता. दुष्काळाच्या पाठोपाठ १८९६ पासून प्लेगचे थैमान सुरू झाले. कोल्हापूरच्या सीमेवरील मराठा संस्थांमध्ये <mark>प्लेग मोठ्या प्रमाणात पसरला होता.</mark> प्लेगने सा<mark>तारा</mark> आणि बेळगाव जिल्ह्यातील खेड्यांमध्ये ध्माकूळ घातला होता. कोल्<mark>हापूर दरबाराने प्लेग विरुद्ध प्रभावी</mark> उपाययोजना केल्याने काही दिवस तरी प्लेगचा प्रवेश झाला नाही. 🚜

शाह् महाराज - भारतातील विद्यार्थी वस्तीगृहाचे आद्यजनक :-

नाशिक येथे १५ एप्रिल १९२० रो<mark>जी केलेल्या भाषणात शाहू महाराजांनी म्हट</mark>ले, 'कोल्हापूरास' मदर ऑफ बोर्डिंग हौसीस' म्हणजे 'विद्यार्थी वस्तीगृहाची माता' असे सार्थ नाव मिळाले आहे'. कोल्हापूर म्हणजे 'विद्यार्थी वस्तीगृहांची माता' असे म्हणण्यात शाहू महाराजांना आनंद व सार्थ अभिमान वाटत असे. स्शाहू महाराजांनी सर्व समाजाला साक्षर क<mark>रण्यासाठी सहयाद्रीच्या दऱ्याखोऱ्यात प्राथमिक शाळा नेऊन पोहच</mark>िवली. तसेच ग्रामीण भागामध्ये जी ह्शार होतकरू आणि गरीब मुले असतील त्यांना दुय्यम आणि उच्च शिक्षणाच्या संधी मिळाव्या म्हणून शाह् महाराजांनी त्यांना 'वस्तीगृहातमक शिक्षणा' ची सोय उपलब्ध करून दिली. शाह् महाराजांना एका दृष्टीने जातीय अस्मिता जागृत करून अज्ञा<mark>न</mark> नष्ट करून <mark>त्या जातींना सर्व क्षेत्रात प्ढे येण्या</mark>साठी संध<mark>ी प्रा</mark>प्त करून द्यावयाची होती. म्हणून त्यांनी जातवार वस्तीगृहे काढली. 'समाजसेवा हीच ईश्वर सेवा' या भावनेने शाहू महाराजांना त्या त्या जमातीच्या विद्यार्थ्यांना वसतिगृहे उपलब्ध करून देऊन शिक्षणाची संधी घेण्यास तयार ठेवावयाचे होते. शाह् महाराज शिक्षणाच्या बाबतीत ज्या ज्या जाती मागे पडल्या आहेत त्यांना 'एकाच जातीचे' म्हणून पुढे घेऊन जात होते. समाजातील मागासलेल्या, पिछे<mark>हाट झालेल्या सर्व जातीतील लोकांना वर खेचण्या</mark>चा त्यांचा मानस होता. आपल्या कोल्हापूर संस्थानात ५०% जागा बहुजन समाजासाठी राखुन ठेवणारे शाहू महाराज हे भारताच्या सातशे संस्थान मधील पहिलेच संस्थानिक होते. त्यांनी स्थापन केलेली वसतिगृहे गोरगरीब, हृशार, होतकरू विद्यार्थ्यांचा आधारवड झाले. ज्यांना प्राथमिक माध्यमिक आणि उच्च शिक्षणाचे दरवाजे बंद होती. त्यांच्या शैक्षणिक प्रगतीची आधारशिला झाले., शाह् महाराजांनी सर्वात प्रथम व्हिक्टोरिया मराठा बोर्डिंग ही संस्था काढली. १९०१ मध्ये दिगंबर जैन बोर्डिंगचा आरंभ झाला. वीरशैव लिंगायत विद्यार्थी वस्तीगृह १९०६ साली स्थापन झाले. मुस्लिम होस्टेलचा आरंभ ३१जानेवारी १९२० रोजी झाला. १४ फेब्रुवारी १९०८ ला मिसक्लार्क होस्टेल सुरु झाले.याप्रमाणे शाह् महाराजांनी दैवज्ञ शिक्षण समाज बोर्डिंग, श्री नामदेवबोर्डिंग, पांचाळ ब्राहमण वसतिगृह, ब्राहमण विद्यार्थी वसतिगृह, इंडियन ख्रिश्चन हॉस्टेल, रावबहादूर सबनीस प्रभू बोर्डिंग, आर्य समाज ग्रुक्ल, वैश्य बोर्डिंग, ढोर - चांभार बोर्डिंग,

शिवाजी वैदिक विद्यालय वसितगृह, श्री प्रिन्स मराठा बोर्डींग हाऊस, सुतार बोर्डिंग, नाभिक विद्यार्थी वसितगृह, सोमवंशी आर्य क्षित्रिय बोर्डिंग, श्री देवांग बोर्डिंग या वसितगृहाची स्थापना केली. समाजातील सर्व विद्यार्थी शिकले पाहिजे हा त्यांचा आग्रह होता. ते म्हणत, 'शेतकीच्या व्यवसायामध्ये जरी आमच्यातील बहुतेक लोक गुंतले आहेत. तथापि त्यात सुद्धा शिक्षणाची आम्हास जरुरत आहे'. शाहू महाराजांनी स्थापन केलेली व त्यांच्याकडून आर्थिक मदत मिळालेली ही बोर्डिंगे शाहू महाराजांची अज्ञ समाजावर असलेल्या नितांत प्रेमाची, त्यांच्या अविरत परिश्रमाची जिवंत स्मारके आहेत. १५

शाह् महाराजांचे धार्मिक कार्य :-

ईश्वर आणि मनुष्य यांच्यातील सर्व मध्यस्थ नाहीसे करण्याचे शाहू महाराजांचे ध्येय होते. या हेतूनेच महात्मा फुल्यांनी सत्यशोधक चळवळीची स्थापना केली होती. फुले यांच्यानंतर ही चळवळ चालविण्याचे महान कार्य शाहू महाराजांनी केले. महाराष्ट्रात आर्य समाजाची स्थापना करून वैदिक धर्म प्रसार, जातिभेदाचे उच्चाटन, अस्पृश्यता - निवारण, मोफत शिक्षण, अंधरूढी व वेडगळ समजुतीचे उच्चाटन, अनाथांचे पालन-पोषण ही कार्य केली. विसाव्या शतकातील भारताच्या धार्मिक व सामाजिक इतिहासात वेदोक्तांच्या चळवळीला महत्त्वाचे स्थान आहे. या वेदोक्त प्रकरणात कर्मठ सनातनी ब्राह्मणांचा तसेच लोकमान्य टिळकांन सारख्या त्यांच्या पाठीराख्यांचा पराभव करून शाहू महाराजांनी अखेर विजय मिळविला.

शाह महाराजांचे दलित उद्धाराचे कार्य :-

शाहू छत्रपती हे अस्पृश्य वर्गाचे व पददिलतांचे कैवारी अशी त्यांची सर्वत्र कीर्ती पसरली होती. अस्पृश्यतेचे निर्मूलन करण्याच्या दृष्टीने महाराष्ट्रातील सर्व प्रमुख ठिकाण कार्यकर्त्यांना महाराजांनी दिली होती . अस्पृश्यतेचे निर्मुलन करण्यासाठी शाहू महाराजांनी धडाडीने काही वटहुकुम काढले होते. शाळा खात्यात अस्पृश्यांच्या मुलांना माणुसकी व न्याय मिळवून देण्यारा वटहुकूम त्यांनी काढला. सार्वजनिक ठिकाणी अस्पृश्यता पाळू नये यासाठी त्यांनी वटहुकूम काढला. शाहू महाराजांनी १९ जानेवारी १९१९ रोजी शाळा खात्याप्रमाणेच मेडिकल खात्यासाठी अस्पृश्यतेच्या कारणावरून भेदभाव करू नये असा वटहुकूम काढला होता. १९

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शाह् महाराजांचे आर्थिक विकासासाठी कार्य :-

शाहू महाराजांनी आपल्या भाषणात शेतीविषयी म्हटले आहे, "हिंदुस्तान हा मुख्य मुख्यत्वेकरून शेतकी चा देश आहे. यातील प्रजेचा मुख्य धंदा शेतकी हा आहे. शेकडा ८०% लोक येथे शेतकीवर उदरनिर्वाह करीत आहेत. येथील कारागिरांचे अंगी कलाकौशल्य श्रेष्ठ दर्जाचे आहे त्याविषयी वाद नाही. परंतु हे कलाकौशल्य सांप्रतच्या यांत्रिक चढाओढीत टिकाव धरण्यासारखे नाही." शाहू महाराजांना उद्योगधंद्याचे महत्त्व मान्य होते. शाहू महाराजांनी दुष्काळात दुष्काळ निवारणार्थ कामे काढली. अन्नछत्रे उघडली. सावकारी जाचातून गरिबांच्या जिमनी सोडून दिल्या. साऱ्यांची सूट दिली व तगाई मंजूर केली. कुलकर्णी वतने नष्ट करण्याचा कायदा केला. तलाठी पद्धती सुरू केली. महार वतने बंद केली. बलुतेदार पद्धतीस बंदी घातली. भोगवती नदीवर राधानगरी येथे धरण व विद्युत प्रकल्प उभारला. उद्योगांच्या विकासासाठी शाहूपुरी या व्यापारी पेठेची स्थापना केली. मार्केट यार्ड ची जागा मंजूर केली. शाहू महाराजांनी स्पिनंग आणि विव्हिंग मिल चा पाया घातला. गिरणी उभारली. इचलकरंजीला जिनिंग फॅक्टरी सुरू केली. कोल्हापुरात रेल्वे आणली. शेतीपूरक व्यवसाय काढण्यास प्रोत्साहन दिले. तसेच शाहू महाराजांनी

सरकारी चळवळीला प्रोत्साहन दिले. शाह् महाराजांनी त्या काळात सहकारी तत्त्वावर कारखाने निर्माण करण्याची योजना आखली. 🕫

निष्कर्ष

शाह् महाराजांनी महाराष्ट्रातील तमाम जनतेच्या मनात जनतेचा राजा, थोर समाज स्धारक, दलीतोद्धारक, महाराष्ट्रातीलच नव्हे तर भारतात सर्वप्रथम आरक्षण निर्माण करणारे संस्थानिक, विद्यार्थी वसतिगृहांचे आद्य जनक म्हणून चिरंतन शाश्वत स्थान निर्माण केले आहे. शाहू महाराजांनी प्रत्येक क्षेत्रात लोकोपयोगी सुधारणा करण्याचे कार्य केले. विसाव्या शतकातील थोर महाप्रुषांमध्ये तथा समाजस्धारकांमध्ये शाह् महाराजांचे स्थान निश्चित वरचे आहे. आध्निक महाराष्ट्राचे शिल्पकार म्हणून त्यांचा उल्लेख करावा लागेल. पिढ्यानपिढ्या शिक्षणापासून वंचित असलेल्या मागास जाती-जमातीतील होतकरू विद्यार्थ्यांना द्य्यम व उच्च शिक्षणाच्या संधी उपलब्ध करून द्यावी म्हणून अशा विद्यार्थ्यांसाठी वसतिगृहाची स्थापना केली. तत्कालीन भारतात असलेल्या सातशे संस्थांना पैकी आपल्या संस्थानात ५० टक्के जागा बहुजनांसाठी राखून ठेवणारे ते देशातील सर्व सर्वप्रथम संस्थानिक ठरले. समाज प्रवाहाच्या विरुद्ध जाणे हे नेहमीच कठीण कार्य असते. शाह् महाराजांनी त्याकाळात अस्पृश्यता निवारणासाठी वटह्कूम <mark>काढलेत. दुष्काळात व प्लेगच्या साथीत स्वतः दुष्काळ</mark>ग्रस्त भागाचे दौरे करून पीडित शेतकऱ्यांना तेथल्या तेथेच मदत केली. महात्मा फुले यांनी उदात हेतूने स्थापन केलेल्या सत्यशोधक चळवळीस पुढे नेण्याचे महान कार्य देखील शाहू महाराजांनी केले. ब्राह्मणेतर वर्गाच्या सामाजिक आणि धार्मिक जीवनाची नव्याने प्<mark>नर्रचना करण्याचे लोकोत्तर कार्य शाह् महाराजांनी केले. त्यांनी आपल्या जीव</mark>नकाळात सातत्याने जातिभेद आणि अस्पृश्यता <mark>नष्ट करण्याच्या प्रश्नांना अग्रक्रम दिला. दीन-द्बळ्या</mark> गाजलेल्या अडाणी, शोषित, पिडीत अशा बहुजनांच्या वा<mark>टेला सुख-समाधानाचे आयुष्य यावे यासाठी शाहू महा</mark>राजांनी शर्थीचे प्रयत्न केले. आपल्या कोल्हापूर सं<mark>स्थानात प्राथमिक शिक्षण सक्तीचे करून सहयाद्रीच्या दऱ्याखोऱ्यात त्यांनी 'गाव तिथे शाळा'</mark> स्थापन केल्या. शेतकऱ्यांच्या उत्थानासाठी कुळकर्णी वतने नष्ट केली. तलाठी पद्धत स्र केली. महार वतने नष्ट केलीत. बल्तेदार पद्धत बंद केली. शाह् महाराजांनी कोल्हापूर-सांगली भागाती<mark>ल</mark> हरितक्रांती व औद्योगिक विकासाचा भक्कम पायाउभार<mark>ला. महाराष्ट्राचे प्रबोधनकार केशवराव ठाकरे यां</mark>नी छत्रपती शाह् महाराजांच्या सामाजिक आणि शैक्षणिक कार्याचे मूल्यमापन 'दीन-दुनियेच्या भवितव्यावर प्रकाश टाकणारा सर्चलाईट' म्हणून केले आहे. www aiirjournal.com

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कोरोना महामारी सारख्या राष्ट्रीय आपत्तीच्या काळात राजकीय एकात्मतेची गरज

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सारांश

प्रस्तुत लेखाचे शीर्षक "कोरोना महामारी सारख्या राष्ट्रीय आपतीच्या काळात राजकीय एकात्मतेची गरज" हे आहे. प्रस्तावनेत भारताने प्राप्त भौगोलिक परिस्थितीत उभ्या केलेल्या राजकीय व्यवस्थेचा थोडक्यात परिचय दिला आहे. विविधतेत एकता निर्माण करण्याच्या उद्देशाने भारतीय घटनाकारांनी राज्य घटनेत स्वीकारलेल्या तरतुदी तसेच आर्थिक सामाजिक न्याय प्रस्थापित करण्यासाठी योजलेले काही उपाय "भारतीय राजकीय व्यवस्था" या मथळ्या खाली थोडक्यात स्पष्ट केले आहेत. भारताला आजपर्यंत कोणकोणत्या प्रमुख आव्हानांना तोंड द्यावे लागले आहे याची काही उदाहरणे या लेखात देवून लेखकाने अशावेळी राज्यकर्त्यांची भूमिका किती महत्वाची असते हे सांगण्याचा प्रयत्न केला आहे. अनेक पक्ष पद्धती लोकशाहीचे प्रमुख आवश्यक वैशिष्ट असले तरी त्यामुळे राजकीय एकत्मातेला बाधा येत असल्याचा उल्लेख या लेखात केला आहे. आंतरराष्ट्रीय संघर्ष असो कि युद्ध असो किंवा नैसर्गिक आपती असो, राज्याची सता, सामर्थ्य, ऐक्य टिकविण्यासाठी राजकीय नेत्यामधील, पक्षांमधील परस्पर सहकार्याची भावना, निःस्वार्थ वृत्ती आणि राष्ट्र प्रेम याला पूर्याय नाही. सध्याच्या कोरोना महामारीच्या परिस्थितीत केंद्र राज्य समन्वय, सताधारी आणि विरोधी पक्षांमधील स्पतंव परस्पर सहकार्य किती गरजेचे आहे हे या लेखातून व्यक्त झाले आहे.

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गृहितके :-

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- राजकीय एकात्मतेचा अभाव निर्माण झाल्यास राष्ट्रीय एकात्मता धोक्यात येवून देशाचे आर्थिक, सामाजिक नुकसान होते.

प्रस्तावना

संपूर्ण जगाची भौगोलिक विविधता एकट्या भारत देशाला लाभलेली आहे. या विधानात जेवढे तथ्य आहे तेवढे भारताने जगातील राजकीय विविधतेचा स्वीकार केला आणि सामाजिक विविधता जोपासली आहे हे देखील खरे आहे. भारताची आजची राजकीय व्यवस्था अनेक शतकापासून होत आलेल्या राजकीय

पुन:रुत्थ्यातून पुनर्वसित झाली आहे. भारतीय राजकीय व्यवस्थेने घेतलेला वसा आणि लाभलेला वारसा हि प्रदीर्घ इतिहासाची देण आहे. देशांतर्गत असलेल्या भौगोलिक, सामाजिक विविधतेचा परिणाम प्रांतवादात आणि शेवट देशांचे तुकडे होण्यात होऊ नये म्हणूनच भारताने लोकशाही, समाजवाद, धर्मनिरपेक्षता, आणि शासन व्यवस्थेसाठी अर्ध संघराज्य व्यवस्थेचा स्वीकार केला. आर्थिक, सामाजिक, न्याय प्रस्थापित करण्यासाठी आरक्षण आणि सामाजिक स्रक्षेच्या राज्यघटनेत तरत्दी केल्या. लोक सहभाग वाढावा, सत्तेचे विकेंद्रीकरण व्हावे यासाठी पंचायत राजचा स्वीकार केला. भारतातील पक्ष पद्धतीचा, एकूण राजकीय व्यवस्थेवर विपरीत परिणाम अधिक झाला. व्यक्तिगत स्वार्थ आणि राजकीय ध्येय सध्या करण्यासाठी आर्थिक, सामाजिक समस्यांचे भांडवल केल्या जाण्याची उदाहरणे भारतात अनेक आहेत. उदा. एक गठ्ठा मतांसाठी दुर्बल घटकांच्या मागासलेपणाचे होणारे भांडवल, आर्थिक विकासाच्या नावाखाली ठराविक उद्योगांना दिले जाणारे संरक्षण इ. भारतात उपजतच असलेल्या समस्यांचे समाधान करताना नैसर्गिक आपत्तीम्**ळे नव्याने निर्माण <mark>होणारे प्र</mark>श्न सोडविणे हे कोणत्या**ही शासनास मोठे आव्हान असते. परिस्थितीत केंद्र आणि राज्य सरकार मध्ये संवाद, समन्वय, सहकार्य असणे आवश्यक असते. पक्षाने सत्ताधारी पक्षास<mark> केवळ राजकीय स्वार्थासाठी अडचणीत आणता कामा</mark> नये तर सामाजिक सौख्यासाठी सहकार्य करून सरकारला अड<mark>चणीतून बाहेर काढण्याचा प्रयत्न केला पाहिजे. को</mark>रोना महामारीने भारताबरोबर संपूर्ण जगासमोर निर्माण केलेला प्रश्न कोणत्याही शासनास एकट्याने सोडविणे अशक्य असल्याचे सर्वानाच माहित असताना राष्ट्रीय आं<mark>तरराष्ट्रीय पातळीवर नेता वर्गाने आपला राजकीय, आ</mark>र्थिक लाभ साधण्यासाठी हा प्रश्न अधिक जटील केला.

कोणत्याही प्रकारच्या राष्ट्रीय आपतीवर सामोरे जाण्यासाठी राजकीय ऐक्य असणे आवश्यक असते. राजकीय ऐक्याअभावी राष्ट्राची शक्ती क्षीण होत जाते हेच कोविड १९ च्या परिस्थितीच्या उदाहरणावर प्रस्तुत लेखात स्पष्ट केले आहे.

भारतीय राजकीय व्यवस्था

पारंपारिक समाजावर वसाहतवादाचे झालेले आरोपण, त्यातून वासाहितक समाजात सुरु झालेली आधुनिकीकरणाची प्रक्रिया, वसाहितक अभिजन वर्गाचा उदय, त्यांनी स्वीकारलेली आधुनिक राज्याची कल्पना, त्याला अनुसरून राष्ट्रीय समाजाची उभारणी, त्यासाठी केलेली राष्ट्रीय जाणिवेची निर्मिती व ती साक्षात साकारण्यासाठी वसाहतवाद विरोधी स्वातंत्र्य चळवळ या टप्प्यांतून तिसऱ्या जगातील राज्यांची राष्ट्र व्यवस्था संक्रमित होऊन राष्ट्र राज्य स्वरुपाची झाली. भारतीय व्यवस्थेत सामाजिक आर्थिक न्याय प्रस्थापित करण्यासाठी राज्य घटनेत तरतुदी केल्या आहेत. कायद्याचे राज्य प्रस्थापित करून त्यांना राज्य घटनेचे संरक्षण पुरविले आहे. संसदीय लोकशाहीमुळे आणि प्रौढ मताधिकारामुळे समान प्रतिनिधित्वाची हमी मिळाली आहे. राज्य घटनेत मार्गदर्शक तत्वे दिल्याने शासन संस्थांनी करावयाची कार्याची दिशा स्पष्ट झाली आहे. प्रादेशिक अस्मितेचा सन्मान करून राष्ट्रीय एकात्मता टिकविण्यासाठी प्रांतीय स्वायतेवर मर्यादा आणली आहे. त्यासाठी निव्वळ संघराज्याचे स्वरूप न स्वीकारता एकात्म राज्याची वैशिष्ट्ये संघराज्यात समाविष्ट केली. घटनात्मक बांधिलकी प्रत्यक्षात आणण्यासाठी स्वाग्व अशा प्रशासकीय यंत्रणेचा स्वीकारही

भारतीय व्यवस्थेने केला आहे. नोकरशाहीची तटस्थता जपण्यासाठी केंद्रीय व राज्य लोकसेवा आयोगाची व्यवस्था स्थापन करण्यात आली आहे.

एकात्मिकरणाच्या प्रक्रियेत राजकीय पक्षांना विशेष महत्व असते. कारण पक्षांच्या माध्यमातूनच निरिनराळ्या जनसमूह व्यवस्थेशी जोडले जातात. भारतीय समाजाचे बहुसांस्कृतिक स्वरूप ध्यानात घेता भारताने स्वीकारलेली बहुपक्ष पद्धती लोकशाही नैसर्गिक किवा अधिक सुदृढ करण्यास आवश्यक होती. स्वातंत्र्यानंतर काही दशके राजकीय व्यवस्थेस काँग्रेस व्यवस्था संबोधली जाई. स्वातंत्र्य लढ्यातून काँग्रेस पक्षाला लाभलेली पुण्याई नंतर ओसरू लागली. जातीय दंगली भारतातील युद्धातील पराभव अन्नधान्य टंचाई काँग्रेस पक्षांतर्गत असणारे मतभेद अशाही कारणांमुळे एक प्रबळ पक्ष पद्धती हे भारतीय पक्ष पद्धतीचे वैशिष्ट्य मागे पडू लागले. राजकीय दृष्ट्या जागृत झालेल्या समूहांच्या वाढत्या मागण्या, अंतर्गत विसंगती दूर न करता काँग्रेस पक्षांचे आखलेल्या आणि तात्पुरत्या लाभ देणाऱ्या योजना आणि पक्ष संघटनेचे विघटन इत्यादीमुळे भारतीय राजकीय व्यवस्थेत बहु पक्ष पद्धती रुजू लागली. धर्म, जात, भाषा, प्रांत, यावर आधारित अनेक राजकीय पक्षांचा जन्म झाला. प्रत्येक समुदायाला आपल्या संस्कृतीचे जतन, संवर्धन करण्याचा असलेला अधिकार अशा पक्ष स्थापनेतूनच व्यक्त होणे हे नैसार्गिक लोकशाहीसाठी आवश्यक बाब आहे. सार्वभौमत्वाच्या अनेक तत्ववादी सिद्धांताप्रमाणे (Pluralist Theory of Sovereignty) देशातील सर्वच संस्था, समुदायांना राजकीय सत्तेत वाटा असणे म्हणजे आदर्श लोकशाहीचे लक्षण आसते. परंतु देशात पुढे याच संस्था संघटनांच्या नावा आडून राजकीय सतेचे सौदे सुरु झाले आणि याच सौद्यात सामुदायिक हिताचा लीलाव होत असताना आज आपण पाहत आहोत.

अनेक वर्षाच्या संघर्षातून प्राप्त झालेले आर्थिक, सामाजिक, राजकीय, स्वातंत्र्य सतेच्या राजकारणात बंदिस्त होत आहे. सर्वांचे सर्व प्रकारचे स्वातंत्र्य अबाधित राखण्यासाठी, राष्ट्रीय एकता अखंडता टिकविण्यासाठी राजकीय एकात्मतेची गरज आहे. विविधतेत एकता निर्माण करण्यासाठी देशाने एक कायदा, एक न्याय व्यवस्था आणि एकेरी नागरिकत्व स्वीकारले आहे. एक सामाईक प्रश्न किंवा समस्या निर्माण झाल्यास एक शासन एक कायदा बासनात बांधून या समस्येतून आर्थिक, सामाजिक, राजकीय लाभ कसा मिळवता येईल याचा सत्ताधारी पक्षासह विरोधी पक्ष देखील विचार करत असताना आपल्याला दिसतात. थोडक्यात भारतीय राजकीय व्यवस्था भारतीय समाजास पूरक आणि पोषक अशी निर्माण करण्याचा प्रयत्न भारतीय घटनाकारांनि केला. परंतु अरिस्टोटलने मांडलेल्या राज्याच्या चक्रीय सिद्धांताप्रमाणे लोकशाहीचे रुपांतर झुंडशाहीमध्ये झाल्याचे दिसत आहे.

राष्ट्रीय समस्या :-

1.सामाजिक भेद :- धर्म, वर्ण, वंश, जात, भाषा, अशा भेदांवर आधारित भारतीय समाजात अनेक गट आहेत. अशा सर्व गटांचे संघटन करून एकसंघ राष्ट्र निर्माण करणे हे स्वातंत्र्यापासूनच देशासमोर मोठे आव्हान उभे राहिले आहे. धर्मावर आधारित फाळणी झालेल्या भारत देशाला जातीय दंगलींचे मिळालेले दान राष्ट्र उभारणीत अजूनही मोठा अडसर बनुन राहिले आहे.

- २.सीमा वाद/ युद्ध :- भारत पाकिस्तान सीमावाद पेटत राहणे, पाकिस्तानास राजकीय दृष्ट्या गरजेचे आहे. त्यामुळे भारत पाकिस्तान सीमेचे आणि जम्मू काश्मीर राज्याचे रक्षण करणे हे भारतासमोरील मोठे आव्हान भविष्यातही कमी होण्याची चिन्हे दिसत नाही. भारतचीन मध्ये झालेल्या पंचशील करारातील मान्य केलेल्या तत्वांशी चीन कधीही एकनिष्ट राहिला नाही. मॅक मोहन सीमा रेखेचे उल्लंघन करून कुरापती काढण्याचे काम चीन अजूनही करत आहे. चीनच्या विस्तारवादाला रोखणे, शह देणे आणि आपल्या देशाचे रक्षण करणे हि भारतासमोरील एक महत्वाची समस्या आहे.
- 3.दारिद्र्य, बेकारी, निरक्षरता, गुन्हेगारी, अष्टाचार :- स्वातंत्र्यानंतर हरित क्रांती, नवीन औद्योगिक धोरण आणल्यानंतर आणि अंत्योदय, जवाहर रोजगार, इंदिरा आवास या सारख्या अनेक योजना राबविल्या नंतर आणि आवश्यक ते कायदे केल्यानंतरही आर्थिक विषमतेची दरी कमी झालेली नाही. लोकांचे जीवनमान काही प्रमाणात सुधारले असले तरी वाढत्या लोकसंखेच्या प्रमाणात रोजगार निर्माण करणे, सर्वांनाच प्राथमिक शिक्षणाबरोबर उच्च शिक्षण पुरविणे, गुन्हेगारीवर नियंत्रण प्रस्थापित करून भ्रष्टाचाराला आळा घालणे इत्यादी प्रश्न सोडविण्याचे आव्हान भारतासमोर आहे.
- ४.नैसर्गिक आपत्ती :- भूकंप, त्सुनामी, चक्रीवादळ, महापूर, वणवा, अशा आपतींना सामोरे जाणे, संरक्षण करणे आणि सावरणे आज जगाच्या पाठीवरील सर्वच देशांसमोरील मोठी आव्हाने आहे. अशा प्रकारच्या नैसर्गिक आपती पूर्णतः थांबविणे अशक्य असले तरी पूर्व खबरदारी, पूर्व नियोजन आणि नागरिकांच्या जागृकता आपतीचा प्रभाव कमी करू शकतात. तसेच राज्याचे धोरण आणि शासकीय अशासकीय संस्थांचे सहकार्य आपतीमुळे विस्कळीत झालेले जनजीवन पूर्ववत करता येते.
- ५.रोगराई किंवा महामारी: पूर्वी देवी, प्लेग, कॉलरा, कुष्ठरोग, या सारख्या साथीच्या रोगाने मानवी जीवन धोक्यात आले होते. १९११ ते १९२६ च्या दशकात रोगराई मुळेच भारताच्या लोकसंख्येत घट झाली होती. आज भारतासमोर अशा रोगराईची समस्या राहिली नसली तरी जैविक युध्याचा नवा फॉर्म्युला आंतरराष्ट्रीय राजकारणात आल्याने त्यातून निर्माण होणा-या रोगराईला जगातील इतर देशांप्रमाणे भारतही बळी पडला आहे. कोविड १९ मुळे जगभर पसरलेल्या महामारीने जगातील सर्वच देशांची अर्थव्यवस्था धोक्यात आणली आहे. आजच्या रोगराईतून झालेली महामारी ही पूर्वीच्या रोगराई सारखी नैसर्गिक आपती नाही. ही आंतरराष्ट्रीय संघर्षातून अवलंबिलेल्या नव्या युद्धनितीचा परिणाम आहे. पुढे असे संकट येतच राहणार असल्याने जगाबरोबर भारताला देखील त्यास सामोरे जाण्याचे मोठे आव्हान आहे.

राजकीय एकात्मता

राष्ट्रीय हितासाठी सर्वच राज्यकर्त्यांनी स्थानिक राजकारण, पक्षीय हित, व्यक्तिगत स्वार्थ बाजूला ठेवून एक होणे असा राजकीय एकात्मतेचा ढोबळ अर्थ काढता येईल. भारताला मिळालेले स्वातंत्र्य ही राजकीय एकात्मतेचीच फलश्रुती आहे. मिळालेल्या स्वराज्याचे सुराज्य करण्यासाठी राजकीय एकात्मतेला पर्याय नाही. राजकीय एकात्मतेत राजकर्त्यांचा प्रामाणिकपणा, इतरांच्या धोरणांचा आदर करण्याची वृत्ती, राष्ट्राबद्दल अभिमान, दिलेली आश्वासने पाळण्याची तयारी, जबाबदारीची जाणीव, इतरांना सहकार्य करण्याची वृत्ती, केवळ विरोधाला विरोध किंवा व्यक्तीगत स्वार्थासाठी विरोध किंवा केवळ स्वार्थासाठी समर्थन करण्याची वृत्ती इत्यादी गुणवैशिष्ट्याचा समावेश आहे. राजकीय सत्ता हेच उदिष्ट असणारे परस्पर विरोधी

विचारप्रणालीचे पक्ष सत्ता स्थापना करू शकतात, नेते सत्तेच्या मागे धावताना अनेकवेळा पक्षांतर करू शकतात. परंत् राष्ट्रीय हितासाठी राष्ट्रीय समस्येला सामोरे जाण्यासाठी एकत्र येत नाहीत, एकजूट होत नाहीत. वर उल्लेख केलेल्या सर्व प्रकारच्या राष्ट्रीय समस्या सोडविताना सर्व पक्षांचे औपचारिक विचार मंथन झाल्याचे दिसले तरी राजकीय स्वार्थासाठी कोणत्याही पक्षाने किंवा नेत्याने या समस्यांचे केव्हाच राजकारण केले नाही किंवा आपला स्वार्थ पाहिला नाही असे ठामपणे सांगता येणार नाही. आज संपूर्ण जग ज्या अवस्थेत जात आहे ते पाहता भारताची एकसंघता, एकात्मताच भारताला संकटातून बाहेर काढेल. देशांतर्गत असलेल्या समस्यांचे पूर्णत: समाधान झालेले नसले तरी काही अंशी आपण विजय प्राप्त केला आहे. परंत् आंतरराष्ट्रीय पातळीवर स्र झालेली जागतिक महायुद्धाची नांदी भारताला मोठ्या प्रमाणावर अपाय करणारी आहे. या आपत्तीवर इतर कोणत्याही उपायांपे<mark>क्षा राजकीय एकात्म</mark>तेचा उपाय जास्त प्रभावी ठरणार आहे.

कोव्हिड १९ च्या प्रभावातून आज कोणतेही क्षेत्र स्टले नाही. छोटे मोठे उद्योग बंद पडल्याम्ळे कामगारांच्या रोजगाराचा प्रश्न निर्माण झा<mark>लाच परंत् कामाशिवाय राहण्याचा</mark> आणि वाहतूक साधनांच्या अभावी परत मूळ गावी <mark>जाण्याचा मोठा प्रश्न निर्माण झाला. दोन राज्यांच्या सरकार</mark> मध्ये समन्वय निर्माण होऊ शकले नाही. इत<mark>र</mark> कोणत्या<mark>ही प्रकारच्या आजारावर उपचार करण्यास का</mark>ही डॉक्ट<mark>रां</mark>नी विरोध केला. तर काही दवाखाने, औ<mark>ष</mark>ध विक्रे<mark>ते यांनी काळाबाजार करून वैदयकीय सेवेचा लि</mark>लाव केला. शासनाला अशा सेवांवर नियंत्रण ठे<mark>व</mark>ण्यात अ<mark>पेक्षित यश आले नाही.</mark>

शाळा कॉलेज बंद पडल्यामुळे शिक्षण व्यवस्था कोलमडली आणि कधीही न भरून येणारे शैक्षणिक नुकसान झाले. खाजगी क्<mark>लासेस चालविणा-यांवर उपासमारीची वेळ आली. शेत</mark>कऱ्यांच्<mark>या</mark> कष्टातून तयार झालेले आणि ओल्या कोर<mark>ड्या दुष्काळातून वाचलेले शेतातील पिक लॉकडाऊन</mark>म्ळे शे<mark>ता</mark>तच नासले. सर्व प्रकारचे चित्रीकरण बंद पडल्यामुळे चित्रपट मालिकांमधील कलाकारांवर बेकारीचे संकट कोसळले. सिनेमागृहे, नाट्यगृहे बंद पडली. हॉटेल्स पर्य<mark>टन व्यवसाय बंद पडले. न्यायालयीन काम</mark>काज बं<mark>द</mark> आणि मंद झाल्यामुळे पिडीताला न्याय आणि गुन्हेगाराला शि<mark>क्षा मिळण्याची आशा अधि</mark>कच धूसर झाली. विकलीचा व्यवसाय अडचणीत आला.थोडक्यात आरोग्य, उद्योग, शेती, शिक्षण, शासन, न्याय अशा सर्वच क्षेत्राने अवकळा पसरवली. आजपर्यंत देशाने अन्भवलेल्या युद्ध, भूकंप, महापूर, वादळ, त्स्नामी, या सारख्या आपत्ती पेक्षाही भयंकर आपत्ती कोव्हिड १९ ने निर्माण केली आहे. अशा परिस्थितीत काही अपवाद वगळता संपूर्ण देशाचे एकात्मिक सुसूत्रीकरणाने केलेले संघटन आणि संकटाचा केलेला सामना संपूर्ण जगात स्त्त्य ठरला. विरोधी पक्षाचे सरकार असलेल्या राज्यांना दिलेली सावत्रपणाची वागणूक, विरोधी पक्षांनी सत्ताधारी पक्षाला, कोंडीत पकडण्यासाठी कोव्हिड १९चा घेतलेला फायदा, केलेला असहकार, दोन राज्यांच्या सरकारमधील समन्वयाचा सहकार्याचा अभाव आणि सत्ताधारी पक्षाने एकाधिकार शाहीतून विरोधी पक्षावर व्यक्त केलेला अविश्वास येत्या काळात देशासमोर राष्ट्रीय एकात्मकतेचा प्रश्न निर्माण करेल. म्हणून आजच आपण स्वीकारलेल्या संसदीय लोकशाहीचा उददेश लक्षात घेवून राजकीय एकत्मतेच्यासाठी प्रयत्न केला नाही तर भविष्यात राष्ट्रीय आपत्ती उदभवल्यास भारतीय राष्ट्र राज्य व्यवस्था कोलमडल्याशिवाय राहणार नाही.

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प्रस्तावना

हवामान बदल हे आज जगातील एक प्रमुख पर्यावरणीय आव्हान आहे. याचा परिणाम प्रत्येक खंडातील प्रत्येक देशावर होत आहे. याचा थेट परिणाम हा त्या देशातील अर्थव्यवस्थेवर व लोकांच्या जीवनावर होत आहे. वातावरणाम<mark>ध्ये मुख्यतः जीवाश्म इंधन जाळण्यासा</mark>रख्या मानववंशविरोधी कार्याम्ळे कार्बन डाय-ऑक्साइड (CO2<mark>) आणि मिथेन (CH4) सारख्या हानिकारक वायूंचे</mark> संचयन होत आहे. हे वायू पृथ्वीच्या हवामान व्यवस्थेत बदल <mark>करीत आहेत. याम्ळे पृथ्वीवरील ताप</mark>मान वाढ होत आहे याचा परिणाम समुद्राचे सरासरी तापमान, बर्फ <mark>आणि बर्फाचे वितळणे, शेती, वनीकरण आणि</mark> मत्स्य<mark>पा</mark>लना सारख्या हवामान संवेदनशील क्षेत्रावर होता आहे. <mark>वाढत्या तापमानाचा भारताला मोठा धोका असून</mark>, भारताला उष्णतेच्या लाटांचा फटका बसेल असा निष्कर्ष (<mark>आयपीसीसी) या हवामान बदलाचा अभ्यास कर</mark>णाऱ्या आंतरराष्ट्रीय संस्थेने काढला आहे. २०१५ मध्ये संयुक्त राष्ट्राने शाश्वत विकास उद्दिष्टे (एस डी जी) ठरविली त्यामध्ये उद्दिष्ट क्रमांक - १३ हवामान कृती हवामान बदल आणि त्याच्या परिणामांचा सामना करण्यासाठी त्वरित कृती करणे हे आहे. ही उद्दिष्ट<mark>े २०३० पर्यंत साध्य करावयाची आहेत. उद्योगातून निघणारे</mark> हरित गृह वायू (ग्रीन हाऊस गॅसेस) कमी करण्या<mark>साठी डिसेंबर १९९७ मध्ये अनेक देशांनी एकत्र येऊन क्</mark>योटो प्रोटोकॉल स्वीकारण्याचे ठरविले; परंत् खऱ्या अर्थाने अस्तित्वात आला फेब्रुवारी २००५ मध्ये त्यात २०२० पर्यंत कर्बवाय (CO2) सहित इतर हरितवायु उत्सर्जनाव<mark>र</mark> संपूर्ण नियंत्र<mark>ण आणावयाचे ठरले. परंतु अ</mark>जूनही भार<mark>ता</mark>सहित अनेक देश त्यांच्या ऊर्जा समस्येवर नियंत्रण आ<mark>णण्यात अपयशी ठरत आहेत. २०१६ मध्ये पॅरि</mark>स करार करण्यात आला त्या करारावर १९७ देशां<mark>नी सहय केल्या असून, हया शतकात सरासरी तापमान २ डिग्रीच्या आत</mark> ठेवण्याचा निर्धार केला आहे. शक्यतो तापमान १.५ डिग्री पर्यंतच मर्यादित ठेवण्यासाठी कर्ब वायुचे प्रमाण २५ टक्के कमी करून तापमान वाढ २०३० पर्यंत पूर्ण नियंत्रित करण्याचे ठरले आहे. कोळसा आधारित सर्व विज प्रकल्प २०५० पर्यंत पूर्ण बंद करून कर्बवायू उत्सर्जन पूर्ण कमी करण्याचा निर्णयही घेण्यात आला आहे. अन्यथा मोठ्या प्रमाणात ध्रुवावरील बर्फ वितळणे, उष्ण लहरीत वाढ होणे, अति पावसाचे प्रमाण वाढणे, अशा अनेक नैसर्गिक आपत्तीत वाढ होण्याच्या घटना घडणार असल्याचे आयपीसीसीने नव्या अहवालात म्हटले आहे. २०३० ही तापमान कमी करण्याची सीमा ठरली असून, त्यात भारतासारख्या उष्ण कटिबंधीय देशात मोठ्याप्रमाणावर उष्ण लहरी वाढण्याचा धोका अहवालात नोंदविण्यात आला आहे.

भारताला अनेक समस्या भेडसावत आहेत. हवामान बदल, शेती, जलसंपदा, जंगल आणि जैवविविधता, आरोग्य, किनाऱ्यावरील व्यवस्थापन आणि तापमान वाढीमुळे होणारे दुष्परिणाम यांच्याशी संबंधित आहे. शेती उत्पादन घटने हा हवामान बदलाचा मुख्य परिणाम भारतावर झाला आहे. बह्संख्य लोकसंख्या थेट किंवा

अप्रत्यक्षपणे शेतीवर अवलंबून आहे. हवामान बदल पर्यावरणीय आणि सामाजिक आर्थिक प्रणालीवर अतिरिक्त ताण दर्शवितात ज्यांना जलद औद्योगिकरण, शहरीकरण आणि आर्थिक विकासामुळे आधीच प्रचंड दबाव येत आहे. या शोधनिबंधामध्ये हवामान बदलाच्या भारतावरील होणाऱ्या परिणामांच्या संदर्भातील विविध पैलूंचे विश्लेषण केले आहे.

संशोधनाची उद्दिष्टे

- १.हवामान बदलामुळे भारतावर होणाऱ्या परिणामांचा अभ्यास करणे.
- २.हवामान बदलाम्ळे वाढणारे तापमान आणि त्याचा भारतावरील अन्नस्रक्षेवर होणारा परिणाम याचा अभ्यास करणे.
- ३.हवामान बदलाम्ळे भारतातील पाण्याच्या स्रोतांवर होणारा परिणाम व सम्द्र पातळीतील वाढ यांचा अभ्यास करणे.
- ४.प्रदूषणामुळे होणारा हवामान बदल आणि त्याचा भारतीय लोकांच्या आरोग्यावर होणारा परिणाम जाण्न घेणे.

संशोधनाची गृहितकृत्ये

- ^१.हवामान बदलामुळे भारताच्या अन्न सुरक्षेला <mark>धोका निर्माण झाला आहे.</mark>
- २.भारतीय किनारपट्टीच्या सम्द्रपातळी हवामान बदलाम्ळे वाढ झाली आहे.
- ३.हवामान बदलाचा भारतीय लोकांच्या <mark>आरोग्यावर गंभीर परिणाम झाला आहे.</mark>

संशोधन पद्धती

प्रस्तुत शोध निबंधासाठी संशोधनाच्या वर्णनात्मक आणि विश्लेषणात्मक संशोधन पद्धती चा आधार घेण्यात आला आहे. तसेच तथ्य संकलनाच्या द्वितीय सामग्रीचा उपयोग केला आहे. यामध्ये वर्तमानपत्रे, वेबसाईट आणि ब्लॉग वरील निवडक लेखांचा वापर केला आहे.

भारताचे हरितगृह वायू उत्सर्जन

विकसित आणि विकसनशील देशांत मोठ्या प्रमाणावर उद्योगांचा विकास झाला, त्यात कोळसा ऊर्जा प्रकल्प हे जगातील सर्वात जास्त वायू प्रदूषण करणारे उद्योग ठरले. त्यातून जागतिक तापमान वाढविणारा कार्बन-डाय-ऑक्साईड आणि सोबत सल्फर डायऑक्साइड, नायट्रोजन डायऑक्साइड, कार्बन मोनॉक्साइड, मीथेन इत्यादी घातक वायू उत्सर्जित होतात, तर सिमेंट उद्योग, कागद उद्योग, रसायन उद्योग, इत्यादीतून मोठ्या प्रमाणात हरितगृह वायू उत्सर्जित होत आहेत. भारतात आज ५७% ऊर्जा ही कोळशापासून तयार होते. चीन, अमेरिका, भारत, आणि रिशया जगात सर्वात जास्त कर्बवायू उत्सर्जन करीत आहेत, आंतरराष्ट्रीय ऊर्जा अभिकरणाच्या सांख्यिकी माहितीनुसार कार्बन-डाय-ऑक्साइडचे (CO2) सर्वाधिक उत्सर्जन चीन- १०.०६ अमेरिका- ५.४१ भारत -२.६५ रिशया- १.७१ (अब्ज मेट्रिक टन) इतके जास्त आहे. आणि हवेतील प्रमाण ४१० पीपीएम इतके वाढले आहे. भारताचे हे उत्सर्जन जागतिक उत्सर्जनाच्या ७% आहे ते त्वरित कमी करणे गरजेचे आहे.

कृषी आणि अन्न सुरक्षा

हवामान बदलाचा सर्वात मोठा परिणाम कृषी क्षेत्रावर होत आहे. देशाच्या एकूण राष्ट्रीय सकल उत्पन्नामध्ये सेवा क्षेत्राचा वाटा अंदाजे ५७.८० टक्के औद्योगिक क्षेत्राचा वाटा २८.३० टक्के आहे. कृषी क्षेत्राचा वाटा १६ टक्के असला, तरी जवळपास ५८ टक्के लोकांना या क्षेत्रातून रोजगार मिळतो. हे अन्न सुरक्षिततेच्या दृष्टीने महत्त्वाचे आहे. भारतीय कृषी ही हवामान संवेदनशील आहे. भारतातील बहुसंख्य लोक

शेतीवर व शेती क्षेत्राशी निगडित व्यवसायांवर अवलंबून आहेत. जागितक हवामान बदलाचा थेट परिणाम भारतीय मॉन्सूनवर झाल्यामुळे अवेळी पाऊस, अतिवृष्टी, दुष्काळ, तापमान वाढ, अशा नैसर्गिक आपत्तींमध्ये वाढ झाली आहे. याचा परिणाम पारंपरिक पीक पद्धतीवर होत आहे. त्यासाठी भारतीय शेतकऱ्यांनी आपल्या पीक पद्धतीसह सरकारनेही आपल्या धोरणांमध्ये बदल करणे अनिवार्य झाले आहे. असा निष्कर्ष मुंबई येथील भारतीय तंत्रज्ञान संस्थेच्या (आय आय टी) शास्त्रज्ञांनी मांडला आहे. हवामान बदलाचा सर्वाधिक फटका महाराष्ट्र आंध्रप्रदेश तेलंगणा आणि कर्नाटक राज्यातील कृषी क्षेत्राला बसत आहे.

भारतामध्ये गहू आणि तांदूळ ही प्रमुख पिके आहेत. हवामान बदलामुळे हंगामाच्या शेवटी पावसाची कमतरता व तापमान वाढल्याने भारताच्या तांदळाच्या उत्पादनात लक्षणीय तोटा झाला आहे. जागतिक बँकेनुसार हवामान बदलाशिवाय तांदळाचे सरासरी उत्पादन जवळजवळ ६ टक्के (७५ दशलक्ष टन) असू शकते. उत्तर भारतामध्ये गव्हाच्या पिकाला ३४ डिग्री सेल्सियस पेक्षा जास्त तापमानाचा नकारात्मक प्रभाव पडला आहे. आणि वाढत्या तापमानामुळे परिस्थिती आणखी तीव्र होऊ शकते. हंगामी पाण्याची कमतरता, वाढते तापमान आणि समुद्राच्या पाण्याची घुसखोरी यामुळे पिकाच्या उत्पन्नास धोका होईल आणि देशाची अन्नसुरक्षा धोक्यात येऊन भारताला अन्नधान्याची आयात करावी लागेल. हवामान बदलाचा भारतीय कृषी क्षेत्रावर होणारा प्रतिकृत परिणाम हा शेतकरी, शेतीची आर्थिक स्थिती, शेतीमधील रोजगार, शेतीमालाच्या किमती, आणि जागतिक कृषी व्यापाराचे स्वरूप यावर दिसणार. कमी दिवसांत पावसाचे वाढणारे तीव्रतेचे परिणाम कोरडवाहू क्षेत्रांमध्ये जास्त जाणवतील. पिकांचा आवश्यक असणारा कार्बन डायऑक्साइड हवेत वाढल्यामुळे काही ठिकाणी काही प्रमाणात पिकांचे उत्पादन वाढले, परंतु तापमान वाढणे, किडी, रोगांचा प्रादुर्भाव वाढ, पावसाचे प्रमाण कमी किंवा अनियमित होणे, वाढणाऱ्या पर्जन्यामुळे जिमनीची धूप होणे इत्यादी कारणांमुळे उत्पादकता कमी होण्याचा संभव आहे.

पाणी स्रक्षेत घट

भारतातील बऱ्याच भागात आधीच पाण्याचा ताण येत आहे. हवामान बदल न करताही भविष्यातील पाण्याची मागणी पूर्ण करणे हे एक मीठे आव्हान असेल. वाढती लोकसंख्या, शेतीचा विस्तार आणि जलद औद्योगीकरण हे जलस्त्रोतांच्या प्रमाणात आणि गुणवर्तत असंतुलनासाठी जबाबदार आहेत. जलसंपदा मंत्रालयाच्या मते भारतातील प्रतिव्यक्ती उपलब्ध पाण्याचे प्रमाण १९५१ मध्ये ३४५० सेंटीमीटर वरून १९९९ मध्ये ते १२५० सेंटीमीटर हळूहळू कमी झाले आणि २०५० पर्यंत ७६० सेंटीमीटर प्रतिव्यक्ती इतके खाली घसरण्याचा अंदाज आहे. कमी पाऊस, जास्त बाष्पीभवन आणि दुष्काळाचा भयानक परिणाम होईल. हवामान बदलामुळे तापमानात झालेली वाढ सर्वत्र पसरली आहे. उष्णतेमुळे हिमालयातील हिमनद्यांचे बर्फाचे संरक्षण कमी झाले आहे. हिमालयीन हिमनदी बारमाही नद्यांसाठी गोइया पाण्याचे स्त्रोत आहेत, विशेषताः सिंधू, गंगा, आणि ब्रह्मपुत्रा नदी प्रणाली. हिमनद्या वितळल्यामुळे नदीच्या पात्रामध्ये उन्हाळ्यात पाण्याचा प्रवाह वाढेल, परिणामी नद्यांच्या पात्रांमध्ये अतिरिक्त पाण्याचा प्रवाह होईल. याचा परिणाम नदी प्रवाहाच्या मार्गावर होईल. भूतकाळातील विविध नद्या (कोसी, गंगा, घागरा, सोन, यमुना, सिंधू यासह) त्यांच्या उपनद्यांनी बऱ्याच वेळा त्यांचा मार्ग बदलला. नेपाळ आणि बिहारमध्ये नुकत्याच झालेल्या विनाशकारी पूर नदीच्या मार्गा मुळे झाला होता. मान्सूनच्या पावसाच्या बदलांमुळे काही भागात पाणीटंचाई वाढण्याची अपेक्षा आहे.

अभ्यासानुसार असे आढळले आहे की, पश्चिम घाटाच्या पर्वतरांगा आणि भारताच्या ईशान्येकडील राज्यांमधील मध्य भारतामध्ये पाण्याच्या स्रक्षेस धोका निर्माण झाला आहे.

समुद्र पातळीत वाढ

पृथ्वीच्या जवळपास ७० टक्के पृष्ठ भागामध्ये सम्द्र स्वरूपात पाण्याचा समावेश आहे. हवामान बदलाम्ळे होणारी तापमानवाढ याम्ळे महासागरीय तापमान वाढल्याने व बर्फ वितळल्याने यामध्ये आणखीनच वाढ होण्याची शक्यता आहे. सम्द्र पातळीतील वाढ आणि तापमान वाढीम्ळे किनारपट्टीच्या परिसंस्थेवर परिणाम होईल. भारतातील जास्त लोकसंख्या असलेल्या मेगा डेल्टा प्रदेशांमध्ये पूर परिस्थिती निर्माण होईल. गोदावरी, सिंधू, महानदी आणि कृष्णा किनारपट्टी डेल्टा मधील बदल होईल. संभाव्यत: कोट्यावधी लोकांना विस्थापित करावे लागेल. महाराष्ट्र, गोवा आणि गुजरात या किनारपट्टीवरील राज्यांना याचा गंभीर धोका आहे. ओरिसाच्या किनारपट्टीला भीषण चक्रीवादळाचा धोका जाणवू लागला आहे. समुद्र पातळीतील वाढीम्ळे भारताच्या सम्द्री उत्पादकतेला धोका निर्माण झाला आहे. किनारपट्टीवर राहणाऱ्या बऱ्याच प्रजातींनाही धोक<mark>ा आहे. भारताच्या जैवमंडळाच्या साठयामध्ये अ</mark>सलेले ख<mark>ड</mark>क देखील क्षारयुक्त आणि संवेदनशील असतात. वाढत्या समुद्र<mark>पातळीमुळे त्यांच्या अस्तित्वालाही धोका</mark> आहे, केवळ कोरल रीफच नाही माशांना लागणारे अन्न, माशां<mark>चा साठा आणि त्यावर अवलंबून असलेले मानवी</mark> जीवन सुद्धा गंभीर धोक्यात आहे. मुंबईत समुद्रकिनारी <mark>पूर येण्याची जगातील सर्वाधिक लोकसंख्या असून,</mark> मुंबई शहराचे बरेचसे भाग भरतीच्या चिन्हा<mark>च्या खाली सांगितलेल्या जमिनीवर बांधले गेले आहेत. जलद आ</mark>णि अनियोजित शहरीकरणाम्ळे सम्द्राच्या पाण्याच्या आत प्रवेश करण्याच्या जोखमींमध्ये आणखी वाढत होत आहे. विष्ववृत्त जवळ असल्याने <mark>भारतीय उपखंडात उच्च अक्षांशापेक्षा समुदाच्या पातळीत जा</mark>स्त वाढ होईल. समुद्राच्या पातळीत वाढ आणि वादळाच्या किनाऱ्यामुळे किनारपट्टीच्या भागात खाऱ्या पाण्याची घुसखोरी होईल, शेतीवर परिणाम होईल, पिण्याचे पाणी दू<mark>षित होईल, आणि शक्यतो अतिसाराचे प्रमा</mark>ण आणि कॉलरा चा प्राद्र्भाव वाढू शकेल, कारण कोलेरा बॅक्टरियम खाऱ्या पाण्यात जास्त काळ टिकते. कोलकाता आणि मुंबई ही दोन्ही दाट लोकसंख्या असलेली शहरे विशेषत: समुद्र पातळीवरील वाढ, उष्णकटिबंधीय चक्रीवादळ आणि नदीच्या पुरामुळे होणाऱ्या द्ष्परिणा<mark>मांना बळी पडता</mark>त.

आरोग्य

हवामान बदल आणि आरोग्य हवामान बदल मानवजातीच्या अस्तित्वासाठी अनेक धोके देत आहे. हवामान बदलाचा भारतातील आरोग्यावर मोठा परिणाम होण्याची शक्यता आहे. भारतात पाच वर्षाखालील मुलांपैकी निम्मी मुले आणि एक तृतीयांश यापेक्षा जास्त मुले प्रौढ कुपोषित आहेत. बिहार, छत्तीसगड, झारखंड, मध्य प्रदेश, आणि ओरिसा पाच पैकी दोन हून अधिक महिला कुपोषित आहेत. अशक्तपणा हा आणखी एक प्रमुख घटक आहे भारतातील पौष्टिक आरोग्याची समस्या विशेषतः महिला आणि मुलांमध्ये आहे. भारतातील ६ ते ५९ महिने वयोगटातील मुले बहुसंख्य (७० टक्के) अशक्तपणाची असतात. संसर्गजन्य रोगांमुळे विकृती, जन्मजात मृत्युदर अकाली प्रसूती, कमी वजनाची बालके आणि मुलांमधील दृष्टीदोष यांची हवामानातील बदलामुळे वारंवारता बदलण्याची शक्यता आहे. एन्सेफलायटीस आणि मलेरिया हवामानातील बदल हा संसर्गजन्य रोगांच्या प्रसाराचा प्रमुख घटक आहे. जागितिक आरोग्य संघटनेने त्यांच्या अभ्यासात

असे संकेत दिले आहेत वाढत्या तापमानामुळे आता मलेरियाचे रुग्ण आढळतात. भारतात मलेरिया आणि डेंगू या रोगांचा प्रादुर्भाव दीर्घकालपासून आहे. वायु प्रदूषणामुळे आठ लाख लोक मरतात. पाणीपुरवठा, स्वच्छता आणि दुर्बल स्वच्छता, अशुद्ध पाण्याद्वारे आणि दूषित अन्नाद्वारे रोगांची संक्रमितता वाढेल. बालमृत्यूचे मुख्य कारण असलेल्या मलेरिया आणि इतर वेक्टर-जनित रोग आणि अतिसाराच्या आजारामुळे अशा ठिकाणी पसरण्याची शक्यता असते जिथे थंड तापमानात पूर्वी संसर्ग मर्यादित होता. वायुप्रदूषणामुळे सुमारे ६ टक्के मुले आणि २ टक्के प्रौढ व्यक्ती श्वसन मार्गाच्या संसर्गामुळे ग्रस्त आहेत. दम्याने ग्रस्त आणि दम्याचे मृत्यू, पूर आणि दुष्काळ यांची वाढती वारंवारता रोगाचा धोका निर्माण करते. समुद्राच्या पातळीच्या वाढीमुळे गोड्या पाण्याच्या कमतरतेमुळे दुष्काळ आणि पुरात गोड्या पाण्यातील पुरवठा दूषित करणे अस्वच्छता इ. अशाप्रकारे अतिसाराच्या आजाराचे दर वाढत आहेत. ओझोन लेयर जो सूर्याच्या हानीकारक थेट किरणांपासून पृथ्वीचे संरक्षण करतो. ओझोन कमी होण्यामुळे अल्ट्राव्हायोलेटमध्ये जास्त प्रमाणात परिणाम होतो. सूर्याच्या किरणांमुळे त्वचेच्या कर्करोगांच्या घटनांमध्ये वाढ होते. डोळ्यांच्या आजाराने ग्रस्त लोकांची संख्याही वाढते जसे, मोतीबिंदू. हवामान बदलामुळे भारतातील गरीब लोकसंख्येच्या आरोग्यावर नकारात्मक परिणाम होत आहेत.

तापमान वाढ

गेल्या १०० वर्षांच्या तापमानाचा इतिहास बघता, आपल्याला तापमान वाढ केव्हापासून सुरु झाली हे कळते. नासा आणि भारती<mark>य हवामान विभागाची आकडेवारी तपासल्यास १९८६ नं</mark>तर पृथ्वीचे तापमान वाढू लागले. तर अत्याधिक तापमान वाढायला २००१ पासून स्रवात झाली. २०१० पासून दर वर्षी तापमान वाढीचे नवनवे विक्रम नोंद<mark>ले गेले. शेवटचे २०१८ वर्ष हे गेल्या १५० वर्षातील सर्वाधिक</mark> तापमा<mark>ना</mark>चे वर्ष ठरले आहे. २०१० पासूनच जगात धृवावरील बर्फ, ग्लेशिअर्स वितळणे, समुद्राची पातळी वाढणे, थंडीच-उष्णतेची वादळे, चक्रीवादळे, ढगफुटी अशा विविध नैसर्गिक आपतीत वाढ झाल्याचे निदर्शनास येते.आयपीसीसीच्या 'युनायटेड नेशन्स एन्वायन्मेंट प्रोग्राम' आणि 'गोडार्ट इन्स्टिट्यूट ऑफ स्पेस स्टिडिज'च्या मागील आकडेवारीन्सार १९५० पासून पृथ्वीच्या सरासरी ताप<mark>माना</mark>त वाढ व्हायला स्रवात झाली आणि द<mark>र द</mark>शकात ०.०५ डिग्री सेल्सियसने वाढ होत गेली. २०१३ पर्यंत तापमान १ डिग्रीने वाढले. गेल्या १०० वर्षांत प्रथमच २०००, २००५, २०१०, २०१३ ही वर्षे सर्वाधिक उष्ण <mark>ठरली. तापमान वाढीम</mark>्ळे केवळ तापमानाच वाढ<mark>ले नसून २</mark>०१० ते २०१३ ही वर्षे सर्वाधिक थंड आणि बर्फांच्य<mark>ा वादळांची वर्ष ठरली. ही तापमान वाढ आ</mark>णि हवामान बदलाचीच नांदी आहे.भारत हा देश उष्ण कटिबंधीय देश <mark>आहे, त्याम्ळे हवामाना</mark>तील थोडा बदल सुद्धा धोकादायक ठरू शकतो. भारतीय हवामान विभागाची १८८६ पासून १९८६ ची १०० वर्षांची हवामानाची आकडेवारी तपासली असता आपला देश किती भयावह स्थितीकडे जात आहे, हयाची त्यातून कल्पना येते. भारतीय हवामान खात्याने ३० वर्षांचा हवामान बदलाचा काळ ठरविला आहे. त्यान्सार १९०१-१९३० हा कोरडा काळ, १९३१-१९६० हा ओला काळ, १९६१-१९९० हा प्न्हा कोरडा काळ, तर १९९१-२०२० हा ओला काळ ठरविला आहे. हयात भारताने १९ कोरडे द्ष्काळ, तर १३ ओले द्ष्काळ पाहिले आहेत. परंत् भारतात झालेली प्रचंड जंगलतोड, थर्मल पॉवर स्टेशन्सच्या संख्येतली वाढ आणि इतर अनेक उद्योगांतून होणारे वायू प्रदूषण, ह्यामुळे २००१

पासून भारतात अत्याधिक हवामान बदलाच्या घटना घडू लागल्याचा आहेत ह्या घटना २०१० पासून वाढत जाऊन २०१८ पर्यंत ही तापमान वाढ आणि हवामान बदलाची घोडदौड अव्याहत सुरु आहे.

सारांश

सदरील शोधनिबंधामध्ये हवामान बदलामुळे भारतावर होत असलेल्या परिणामावर प्रकाश टाकण्यात आला आहे. वाढत्या तापमानाचा भारताला मोठा धोका असून, भारताला उष्णतेच्या लाटांचा फटका बसेल. माणसांच्या आरोग्यावर परिणाम होण्याची शक्यता आहे. भारतीय अर्थव्यवस्थेत कृषी क्षेत्रावर अवलंबन जास्त आहे, या क्षेत्रातून जास्त रोजगार आणि अन्नाची आत्मनिर्भरता सुनिश्चित होते. हवामान बदलाचा भारताच्या कृषी व अन्न सुरक्षेला धोका वाढत आहे. भूभागाखालील पाणी पातळीत घट, समुद्राच्या पाणी पातळीत वाढ, इ. बदल होत आहेत. पृथ्वीचे आणि प्रादेशिक वाढते तापमान कमी करायचे असेल, तर सर्वात उत्तम आणि मोठा उपाय म्हणजे युद्ध पातळीवर वृक्ष लागवड आणि वनीकरण हे होय. तापमान वाढविणारा दुसरा घटक म्हणजे कर्ब वायू (CO२). त्याचे उत्सर्जन पूर्ण कमी करणे गरजेचे आहे. कोळसा आधारित सर्व वीज आणि इतर प्रदूषण करणारे उद्योग त्वरित बंद करून अपारंपरिक ऊर्जा स्रोत (सोलर, विंड, हायड्रो आणि बायो एनर्जी) वाढवले पाहिजेत. आपली उद्योग आधारित अर्थव्यवस्था बदलून वन, वृक्ष, शेती आणि निसर्ग आधारित चिरंतन अर्थव्यवस्था निर्माण करणे काळाची गरज आहे. आपण आपले चैनीचे जीवन बदलून निसर्गाला पूरक अशी जीवनशैली आता अंगीकारली पाहिजे

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संत तुकाराम महाराजांचे तत्कालीन कालखंडातील समाजव्यवस्थेवरील भाष्य

जनार्धन बाबुराव मस्के

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गोषवारा :-

"ज्ञानदेव रचिला पाय

तुका झालासी कळस"

अपेगाव येथे जन्मलेले संतश्रेष्ठ ज्ञानेश्वर महाराजांनी महाराष्ट्रामध्ये भागवत धर्माचा पाया रचला आणि पुढे त्यावर देहूचे जगद्गुरु तुकाराम महाराजांनी कळस चढविला. गंत तुकाराम महाराजांचे अभंग हे मराठीत असून संपूर्ण महाराष्ट्रात सर्वमान्य आहेत तसेच वारकरी सांप्रदायिकांच्या तोंडपाठ झालेले आहेत. याच वारकरी सांप्रदायाने भागवत धर्माचा प्रसार केला. संत तुकाराम महाराजांचे स्वतःचे ऐहिक जीवन खडतर होते. परंतु पारमार्थिक जीवन हे दिव्य होते. तुकारामांच्या अभंगाचा अर्थ शोधत बसलोत तर काही वेळा असेही वाटते की, ते स्वतःची कहाणी सांगत आहेत की काय? त्यांनी स्वतःच्या वैयक्तिक किंवा संसारिक आयुष्याचा परिपाठ सरळ व सोप्या भाषेतून सांगितलेला दिसतो. त्यांचे वैयक्तिक व समाजातील लोकांचे अनुभव, समाजातील वास्तव चित्रण त्यांनी त्यांच्या अभंगातून कथन करताना ते दिसतात. तत्कालीन चालू असलेल्या रुढी, परंपरा, नवस, सावकारी, वर्णव्यवस्था अशा अनेक विषयाचे खंडन करून त्यातील गुणदोषावर भाष्य केले. महणूनच तर आज संबंध महाराष्ट्रच नव्हे तर अनेक प्रांतातील लोकांनी तुकाराम महाराजांचा एक आदर्श संत म्हणून गौरव केलेला दिसतो.

मुख्यत: या शोधनिबंधातून संत तुकाराम महाराजांच्या अभंगांतून तत्कालीन सामाजव्यवस्थेवरील केलेले निर्भिड भाष्य व समाजाचे वास्त<mark>व दर्शन कशा प्रकारे</mark> घडवून आणलेले आहे हे पाहणार आहोत.

प्रास्ताविक :-

तुकाराम ! मानवी जीवनातील नाना प्रकारच्या उत्कट अनुभवांना अत्यंत आशयघन शब्दात साकार करणारा एक शब्दार्थप्रभू प्रतिभावंत. धर्माला नीतीने आणि निष्कपट भावनेचे शब्दात साकार करणारा एक शब्दार्थप्रभू प्रतिभावंत. धर्माला नीतीने आणि निष्कपट भावनेचे अधिष्ठान देणारा एक आचारशील भक्त अक्षरश: सर्वस्व पणाला लावून सांस्कृतिक व सामाजिक अन्यायाच्या विरोधात दंड थोपटविणारा एक आव्हानविर योद्धा प्रतिभावंत, भक्त, आणि योद्धा या तिन्ही भूमिकांचा एकत्र मिलाफ झालेला महापुरुष कवी तुकाराम.2

तुकाराम महाराज हे समाजात व वैयक्तिक जीवनात आलेले कटू अनुभव इतरांना सहज कळावे. म्हणून मराठीत सांगतात. म्हणजेच इतर सकळजणांना उपदेश करतात. पण यात आडवी आली ती वर्णव्यवस्था वर्णव्यवस्थेनुसार वेदांचे ज्ञान इतरांना देणे किंवा घेणे हे फक्त ब्राम्हणांलाच अधिकार हा वेदानुसार मानला जात होता. यामुळे वेद पठण व वेदांचे ज्ञान देण्याचा अधिकार नव्हता. तरीपण स्त्री-शुद्रांना उपदेश करतात याचा राग रामेस्वर भट (वाघोली पुणे) यांना आला व देह गावातील ब्राम्हणांना हाताशी धरुन महाराजांना त्रास द्यायला सुरु केला. असंत तुकाराम महाराजांनी अभंगवाणीत पारमार्थिक अनुभवाचे सार, प्रापंचिकाना केलेला उपदेश, धर्माचे पालन आणि पाखंडखंडन या सर्व घटकामुळे अभंगात सर्व समावेशकता आली. आणि सतराव्या शतकातील तुकाराम महाराज एक वारकरी संत म्हणून प्रख्यात झाले. ब्राम्हण, क्षत्रिय, वैश्य, शुद्र इत्यादी जातीभेद मनुष्य-कृत और श्रतयव स्वार्थमुलक है इत्यादी कल्पनाए लोगो के मन मे दृढमूल होणे लगी थी और इस प्रकार से हिंदुधर्म के कुछ मूलभत तत्व पर ही चोंटे पहचने लगी थी.⁴

संत तुकाराम महाराज हे एक विद्रोही कवी असून मनाला भिडणारे आणि अस्वस्थ करणारे. त्यांनी समाजातील लोकांची नाडी अचूक ओळखली होती. त्यांचे अभंग समाजातील ढोंगी बुवाबाजी, उच्चवर्णीय लोकांना हादरा देणारी आहेत. तसेच अभंगांतून व्यापक सामाजिक जाणीवा व्यक्त होते. आपल्या अभंगांतून समानतेचा पुरस्कार केला. त्यांच्या वाणीतून निघणारे शब्द हे सर्वसामान्य मानवा<mark>च्या स्वातंत्र्याच्या अस्मितेचे, उत्थानाचा कान पक</mark>डून सदाचाराचा आणि नितीमत्तेचा पाढा गीरवीला. वैदिक धर्माभि<mark>मान्याचा गर्व हरण केला. समाजात चाललेली अं</mark>धश्रद्धेची <mark>गुढी</mark> ही काढून फेकण्याचे काम केले. आणि शुद्रअतिशुद्रांचा कोंडलेला, दबलेला श्वास मोकळा केला.

प्रस्तुत शोधनिबंधावर सं<mark>शोधन करण्यासाठी ऐतिहासिक संशोधन पद्धतीचा उप</mark>योग केला असून विश्लेषणात्मक व वर्णनात्मक मांडणी करुन वस्तुनिष्ठ पद्धतीने संशोधन करण्यात आले आहे.

विषयप्रवेश:-

संत ज्ञानेश्वरापासून जवळपास सर्वच संतांना त्या-त्या काळी समाजकंठकाकडून अत्यंत हिनतेची वागणूक व त्रास सहन करावा लागला<mark>. त्या तुकाराम महाराज ही या समाजकंठका पासून सुटले नाहीत.</mark> तरी पण सर्व संतांनी नेहमीच समाजाचे भले व या समाजकंठकापासून समाज कसा वाचेल याचाच विचार केला व त्यांच्या लेखणीतून दिसूनही येतो. समाज हा निरनिराळ्या जाती, जमाती, पंथ, स्त्री, पुरुष, एकत्र येऊन बनलेला असतो. पुरुष, बालक, वयोवृद्ध, स्त्री इ. एकत्र येऊन बनलेला असतो., समाजात राहता<mark>ना सगळ्यांनी एकत्र येउुन जगावे लाग</mark>ते. पण त्याला अपवाद म्हणावा लागेल. तेव्हाच अनेक संतांनी समाजव्यव<mark>स्थे</mark>मध्ये समानता <mark>कशी येईल व तो सुर</mark>ळीत कसा <mark>चाले</mark>ल यावर भर दिला. कोणत्याही गोष्टीकडे व घटनेकडे पाहण्याचा बुद्धिनिष्ठ दृष्टिकोन म्हणजे वैज्ञानिक दृष्टिकोन होय. अंधश्रद्धेचा त्याग करुन वैज्ञानिक दृष्टिकोन ठेवायला हवा. अहिंसा, सत्य, अत्येय ही त्रिसूत्री जीवनमूल्यांचा पाया आहे. सगळे जग हे सत्यावर आधारलेले आहे. सामाजिक, आर्थिक, राजनैतिक, श<mark>ैक्षणिक अशा सर्व प्रकारच्या क्षेत्रात सत्याचे प्रतिष्ठाण</mark> असल्याशिवाय समाजाची प्रगती होऊ शकत नाही.

विषमता हा तुकारामांचा तिरस्काराचा विषय दिसून येतो ते आपल्या अनेक अभंगांतून तिरस्कार व्यक्त करतांना दिसतात. विषमता मनुष्यनिर्मित असून समता नैसर्गिक आहे. गुणाधीष्ठित समाजरचना असावी असा त्यांचा आग्रह होता. सर्व समाजातील जाती, पंथांना समानतेचा अधिकार आहे हा विचार त्या काळात त्यांनी समाजमनात रुजविण्याचा प्रयत्न केला.

> कस्तुरीचें रुप अति । माझी असे सार मोल तया । । आाणिक ही तैसी चंदनाची झाडे । परिमळे वाढे मोल तयां ।।1।। काय रुपें असे परीस चांगला/ धातू केली मोला वाढ तेणे //2//

फिरंगी अटीतां नये बारा रुपे*।* गुणे मोले वि के सहस्त्रवरी *।।*3*।।* तुका म्हणे नाही जातीसवे कामा*।* ज्याच्या मुखी नाम तोचि धन्य*।।*4*।।*5

कस्तुरीला रुप नसते ती मातीसारखी असते पण, परंतु तिच्या सुगंधामुळे तिला मान आहे. चंदनाचे झाड किंवा परिस हे सुद्धा दिसायला सुंदर नसतात पण त्यांच्यातील गुणामुळे त्यांची किंमत वाढते. उत्तम तलवार ही जोपर्यंत तलवारीच्या रुपात असते तोपर्यंत तिला किंमत असते पण तिला वितळले आणि लोखंड केले तर तिचे मूल्य कमी होते. म्हणून समाजात जातीला महत्व नसून गुणांना महत्व असते.

संत तुकाराम महाराजांच्या जीवनकालिन काळातील सामाजिक स्थिती ही खूप दयनीय होती. यावर डॉ. कल्याण काळे म्हणतात. "तुकारामाच्या जीवनकालिन कालखंड हा पारधर्मीय यांच्या राजकीय आणिधार्मिक आक्रमणाचा होता. सारी समाजव्यवस्था गुदमरल्यासारखी झाली होती. त्यातूनच समाजाला मुक्त करावयाचे होते"

आपल्या समाजात फार पूर्वीपासून विषमतेची परंपरा चालत आलेली आहे. मग हे महाभारत असो किंवा रामायण. पण ज्या ठिकाणी सामाजिक स्वास्थाच्या जात महत्वाची नसून गुणकर्मानुसार सेवा महत्त्वाची असते. तुकारामांना या जातीअभिमाना बद्दल दु:ख वाटते. जाती-जातीमध्ये भेद हे समाजामधील काही स्वार्थी लोंकांमुळे घडत आहे हे उघड्या डोळ्यांनी पाहात होते. त्यातच समाजामधील ब्राम्हणवर्ग हा अग्रण्य होता. पण नितिमूल्ये पाळणाऱ्या ब्राम्हणांचा तुकारामांना स्पष्टपणे सांगितले आहे.

महारासी सिवे कोपे। ब्राम्हण तो नव्हे।।
तया प्रायश्चित काहीं। देहत्याग करिता नाही ।।धृ।।
नातळे चांडाळ। त्याचा अंतरी विटाळ ।।2।।
ज्याच्या संग चित्ती। तुका म्हणे तो त्या याती ।।3।।

महारास शिवल्यावर जो ब्राम्हण संतापतो तो खरा ब्राह्मणच नाही. ज्या ब्राम्हणाला संताप राग येतो. दुसऱ्याला अस्पृश्य मानणाऱ्या त्या ब्राम्हणाला देहत्यागाची प्रायश्चित्त ही कमी पडेल. हा मनुष्य चांडाळास जवळ करत नाही, कारण त्याच्या अंतरंगातच विटाळ असतो. हा महार, हा चांडाळ असाच ध्यास एकसारख्या केल्यामुळे तो त्याच जातीचा होतो. महणूनच समाजामधील जातीयता निर्माण होते.

अंधश्रद्धा या अज्ञानाचा, आगितकेचा भाग असतात, सृष्टीतील घडामोडीचे नियम ज्ञात झालेले नसतात, समाजव्यवस्था जन्मसिद्ध विषमतेवर आधारलेली असते आणि ही परिस्थिती दूर करण्यासाठी विज्ञानाचा व अद्ययावत कालोचित मूल्यभावांचा आधार घेतला जात नाही, तेंव्हा समाजातील अंधश्रद्धा निर्माण होऊन कर्मकांड बळावतात. अंधश्रद्धा व कर्मकांड निर्मूलन व्हायला पाहिजे, या विषयी कोणाचेच दुमत होणार नाही. भारतात निर्मूलनाची परंपरा फार प्राचीन काळापासून अस्तित्वात आहे. महाराष्ट्रातही या कार्याला संपन्न परंपरा लाभलेली आहे. यात सतराव्या शतकात महाराष्ट्रातील पाहिले महत्त्वाचे प्रबोधन म्हणून तुकाराम महाराजांनी त्यांच्या अभंगांतून केलेले दिसते.

तुकाराम महाराजांनी अंधश्रद्धा व कर्मकांडाला वेळोवेळी विरोध केला. त्यांच्याविरोधात झोड उठविली. त्यासाठी आपली काया, वाचा, लेखणी झिजविला. अंधश्रद्धा व कर्मकांड या विषयीच्या दृष्टीकोनाबाबत डॉ. मोहरील म्हणतात, "नवसायास, जपजाप्य, जादूटोणा, भविष्य सांगणे, लग्नसोहळा, हुंडापद्धती, कुटुंबकल्याण, व्यसनग्रस्त समाज, बुवाबाजी,

पर्वकाळ, कालबाह्य विधिनिषेध याविषयी लोकशिक्षक तुकारामांनी अत्यंत डोळसपणे प्रबोधन करुन समाजपुरुषाला अंधविश्वाच्या जोखडातून बाहेर काढण्याचे कार्य केले.⁸

मुखे सांगे ब्राम्हज्ञान। जण लोकांची कापती मान।।1।।
ज्ञान सांगतो जणांशी। नाहीअनुभव आपणाशी ।।धृ।।
कथा करितो देवाची। अंतरी अशा बहू लोभाची ।।2।।
तुका म्हणे तो ची वेडा। त्याचे हाणूनि थोबाड फोडा ।।3।।

आजच्या वर्तमानकाळात देखील अंधश्रद्धेच्या विळख्यात जखडलेल्या समाजाला मुक्त करण्यासाठी सर्वतोपरी प्रयत्न चालू आहेत पण सतराव्या शतकातच संत महाराजांनी या अंधश्रद्धा व कर्मकांडावर जोरदार हल्ला चढिवलेला दिसतो. ढोंगी, पाखंडी लोकांचा त्यांनी कडक समाचार घेतला आहे. लोकांच्या श्रद्धाळू मनाचा गैरफायदा घेणारे उपटसुंभ त्याकाळात सुद्धा होते. टिळे लावायचे, जटा वाढवायच्या आणि लोकांना फसवायचा उद्योग करायचा हा या लोकांचा धंदाच असतो. अशा फसव्या लोकांना पकडून शिक्षा करावी तेवढ्यावरच न थांबता त्याचे थोबाड फोडा असे तुकाराम सुचवितात.

समाजामध्ये भविष्य पाहण्याचा एक छंद आहे. समाजमनाची ही गरज भागविण्यासाठी तथागतिथ जोतिशी हे स्वतःला त्रिकालज्ञ व रिधीशद्धी प्राप्त असल्याचा अविर्भात आपले दुकान थाटतात. सर्वसामान्य किंवा भोळ्या भाबड्या लोकांनाच नव्हे तर सुशिक्षित लोकांवर देखील भुरळ घालतात व समाजाचा गैरफायदा उठवितात. तुकारामांनी याबाबत जनजागृती केली व ते म्हणतात.

भूतभविष्य कळो यावे वर्तमान हे तो भाग्यहीन त्याची जीडी 11111 आम्ही विष्णुदासी देव घ्यावे चित्ते होणार ते होते प्रारब्धतेची 11211 जगरुढीसाठी घातली दुकान जातो नारायण अंतरोनी 11311 तुका म्हणे प्रपंचाचा गाडा थोरली ती पीडा रिद्धीसिद्धी 11411

भोंदू बुवांकडून स्वत:च्या जीवनातील भूत, भविष्य आणि नजीकच्या वर्तमानकाळाचे ज्ञान व्हावे असे ज्याला वाटते तो दुर्भागी करंटा आहे. विष्णूदासानी भविष्य जाणण्याच्या भानगडीत न पडता विश्वसेवा अंत:करणपूर्वक करावी. जन्मकुंडली पाहणे, ग्रहमानाची चिकित्सा करणे, भविष्य पाहणे, हस्तरेखा पाहणे हे सारे व्यर्थ आहे, कारण प्रारब्ध, क्रियामान आणि संचित हे कोणालाही सूचत नाही. ज्या लोकांनी जनमानसाच्या कमकुवतपणाचा फायदा घेऊन भविष्य पाहण्याचे दुकान घातलेले असते, अशा लोकांच्या नादी लागून नारायणास दुरावले जाते.

प्राचीन काळी वेदिकांच्या दृष्टीने यज्ञ हाच धर्म होता. आद्य यज्ञ हाच आद्य धर्म हे स्पष्ट करताना 'ताणी धर्मांनी प्रथमान्यासन' असे ऋग्वेदाच्या पुरुषसुक्तात म्हंटलेले आहे. 10 स्वाभाविकच, धर्म, कर्मकांड, यज्ञ, याला प्राचीन काळात चार्वाकाने कठोर विरोध केलेला दिसतो. चार्वाक हा मूर्त घटनांचा पुरस्कर्ता होता. त्याने यज्ञ करणे हे ढोंगीबाजाचे लक्षण आहे असे सांगून त्याला विरोध केला. "आम्ही परलोकांचा विचार करतो, इहलोकांच्या सुखांची आम्हाला अभिलाषा नाही, असे वैदिक लोक म्हणतात. ऐहिक जीवनावर प्रेम करणारे लोक वासनाच्या अधीन आहेत आणि आम्ही मात्र वासनेचा त्याग केला आहे, अशा प्रकारचा अहंकार त्यांच्या ठिकाणी असतो. वस्तुत: याज्ञीकांनीही वासणाचा सर्वस्वी त्याग केलेला नसतो. आपण या जन्मात यज्ञ केले, म्हणजे मृत्यूनंतर आपल्याला स्वर्ग प्राप्त होईल आणि तिथे आपल्याला अप्सरांचा उपभोग घेता

येईल. अशी त्याची धारणा असते. चार्वाकाने या ढोंगीबाजीवर टीका केली आहे. यज्ञात आणखी एक ढोंगीबाजी आढळते. ज्योतिष्टोमात मारलेला पशु स्वर्गाला जातो असे यज्ञीक लोक म्हणतात. त्यांचा स्वत:चा या तत्वावर विश्वास असता तर आपल्या विडलांना स्वर्ग मिळावा म्हणून यज्ञमानाने यज्ञात आपल्या विडलांची हत्या केली असती.¹¹

चार्वानिक जसे पारलौकिक सकल्पनांना जसा विरोध केला अगदी त्याचप्रमाणे तुकारामांनी केला. तुकारामांनी स्वर्गासारख्या पारलौकिक संकल्पना लाथ मारली, आणि दुसरीकडून इहलोकांचा गौरव केला. "धन्य धन्य मृत्यूलोक" या प्रमाणे अभंगांतून गोडवे गायली. ब्रम्हदेव वगैरे देवतांनाही हा मृत्यूलोक धन्य आहे असे पुन:पुन्हा वाटण्याइतके सुख पृथ्वीतलावावर आहे. परलोकात जे सुख मिळणार आहे ते आम्हाला इहलोकातच मिळत आहे असे तुकाराम म्हणतात. पृथ्वीवर भक्तीचा जो दहीभात मिळतो तो परलोकात मिळत नाही, असे म्हणत त्यांनी हिनवले आहे.

आपल्याकडच्या धार्मिक क्षेत्रात विविध प्रकारच्या कर्मकांडाने अक्षरशः थैमान घातल्याचे आढळते. एक तर ते कर्मकांड अत्यंत गुतागुंतीचे आणि किचकट असते ; शिवाय त्यामध्ये केवळ औपचारिकता वा चाकोरीबद्धता महत्वाची ठरते आणि निर्मळ भावनेची उपेक्षा केली जाते. अनेकदा धार्मिकतेचे बाह्य आवरण घेऊन आपल्या विकारांची तृप्ती करणारे ढोंगीलोक येथे साधू म्हणून मिरवताना दिसतात. पैशावर नजर ठेवणारे, स्त्रीलंपट आणि व्यसनी असे हे भोंदू खऱ्याखऱ्या धर्माला विकत स्वरुप देत आहेत. धर्माच्या क्षेत्रात झालेल्या या प्रदूषणावर तुकारामांनी खूप कठोर टीका केली आहे. कर्मकांडापेक्षा भावनेला, मनाच्या शुद्धीला, सदाचाराला खरे महत्व आहे, असा त्यांचा आग्रह होता.

विधी आणि निषेध हा वैदिक धर्माचा गाभा आहे. अमुक कर्म करा अशी विनंती वेदांनी व इतर धर्मशास्त्रांनी दिलेली आज्ञा, म्हणजे विधी होय. याऊलट अमुक कर्म कर नका, अशी त्यांनी दिलेली आज्ञा म्हणजे निषेध होय. 12 उदा. विषयी फळ मिळविण्यासाठी अमुक यज्ञ करावा त्या यज्ञात अमुक वस्तूची आहुती द्यावी. पितरांसाठी श्राद्ध करावे इ. प्रकारचे नियम हे विधी होत. शुद्धाने वेदांच्या मंत्राचा उच्चार करु नये वा ऐकू नये, त्याने यज्ञ करु नये, अस्पृश्य मानल्या गेलेल्या व्यक्तीने इतरांना स्पर्श करु नये इ. प्रकारचे नियम हे निषेध होत. विधिनिषेध म्हणजे मानवी मनावरचे एक ओझे आहे, हा माणसाला खोट्या व भ्रामक गोष्टींमध्ये गुंतवून ठेवणारा पोकळ पसारा आहे असे तुकारामांना वाटत होते. त्यांनी या विधि निषेधाच्या व कर्मकांडाच्या गुंत्यात न अडकलेल्या निर्मळ मनाच्या लोकांचा गौरव केला. याउलट विधिनिषेधाच्या व अंधश्रद्धा, कर्मकांडात जे बुडालेला आहेत त्यांना देव कधीच लाभत नाही.

आम्ही स्वर्गसुखे पायरीप्रमाणे आमच्या पायाखाली घेतली आहेत, हे त्यांचे उदगार होते. ते स्वर्गसुखांकडे तुच्छतेने पाहत होते आणि त्यांच्या मनात स्वर्ग प्राप्त करण्याची इच्छा अजिबात नव्हती.

भुके नाही अन्न, मेल्यावरती पिंडदान।।
हे तो चाळवाचाळवी। केली अपणाची जेवी।।
नैवेदाचा आळ। वेच ठाकणी सकळ।। ¹³

तुकारामांनी आपल्या अभंगांतून लोकांना संदेश दिला आहे. जर एखांद्यावर जीवापाड खरोखरच प्रेम असेल तर ते त्याच्या जिवंतपणीच योग्य कृतीच्या द्वारा व्यक्त करा. त्या व्यक्तीची जिवंतपणी कदर करा, त्याची सेवा करा, त्याच्या मृत्यूनंतर त्याच्या नावावर स्वत:पकवाने खाणे किंवा दुसऱ्याला खाऊ घालणे यापेक्षा त्याच्या जिवंतपणीच भुकेल्या जीवाला चार घास खायला घालून त्याला खरोखरच समाधान द्या.

ज्याप्रमाणे चार्वाकाने यज्ञामध्ये पशुची आहुती द्यायला विरोध केला व हे एक ढोंग आहे हे सांगितले तसेच तुकारामांनी व्यक्ती मेल्यावर त्याचे श्राद्ध करणे किंवा पिंडदान करणे याला विरोध केला. ते म्हणतात पितरांसाठी गयावर्जन नावाचे श्राद्ध करण्याची ही आवश्यकता नाही. कर्मकांडाच्या कृत्रिम जंजाळात अडकण्यापेक्षा त्या कर्मकांडामागे असलेल्या भावनेवर लक्ष केंद्रित करावे.

निष्कर्ष :-

वर्तमान काळात समाजात असलेल्या अनेक रुढी, परंपरा, अंधश्रद्धा, ढोंगीपणा, कर्मकांड, नवस, सावकारी, इ. मध्ये समाज अडकलेला दिसतोय. पण या सर्व बाबींपासून समाज दूर लोटला जावा व समाजामध्ये जागृती निर्माण व्हावी. समाजामध्ये वैज्ञानिक दृष्टिकोन निर्माण व्हावा यासाठी अनेक सामाजिक चळवळीतून समाजसुधारक असो किंवा शासन असो प्रयत्न करत आहेत. पण तरीही यातून समाज बाहेर निघायला तयारच नाही. म्हणूनच संत तुकारामांनी सतराव्या शतकातच या सर्व प्रथावर कठोर शब्दात विरोध करुन समाजाला जागृत करण्याचे कार्य केले. या समाजाला लागलेली ही कीड आजही संत तुकारामांच्या अभंगांतून दूर होईल असे नक्कीच म्हणता येईल. म्हणून त्यांचे अभंग व त्यांचे विचार गुरफटलेल्या समाजापर्यंत पोहचावे व एक सामाजिक चळवळ निर्माण व्हावी या लघुनिबंधाचा उद्देश होय.

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गोषवारा :-

कोरोनामुळे जेव्हा जेव्हा लॉकडॉऊन होत गेले तेव्हा शेतक-यांना अनेक समस्याचा सामना करावा लागला. बाजारात व्यापारी उतरण्याचे प्रमाण कमी झाले. मजुरांच्या अभावामुळे शेतक-यांचे पिक शेतात पडुन राहले. कामाची सवई मजुरी देऊन पिकाची कापनी करावी लागली. सोयाबीन, कपासी हे दोन महत्वाचे पिक हातुन निघुन गेल्यामुळे या लॉकडॉऊच्या काळात शेतकरी हा हतबल झाला आहे. रब्बी हंगामाचा हंगाम जवळ येताच, पीक कसे घ्यायचे याविषयी शेतकरी आपल्या चिंतेत आहेत. कापणीसाठी बरीच फार्म मशीन्स उपलब्ध नाहीत. नुकताच झालेल्या अवकाळी मुसळधार पावसामुळे गहू, मोहरी आणि डाळीचे पीक घेणा-या शेतक-यांचे आधीच नुकसान झाले आहे. शेतक-यांना आर्थिक सहाय्य म्हणुन बँक मधुन जी मदत होत होती तिही या लॉकडॉऊनच्या काळात अडचनीचा प्रश्न निर्माण करून गेली. बि बियाने, खते, किटकनाशक आणि याही पेक्षा अनेक वस्तुच्या पुरवठ्यांसाठी अडचनी निर्माण झाल्या. याचा शेती व्यवसायावर विपरीत परीनाम झाला. शेतक-यांच्या दृष्टीकोनातुन हे परीनाम जानुण घेण्याच्या दृष्टीकोनातुन संशोधन करण्यात आले.

प्रस्तावणा:-

भारतीय अर्थव्यवस्थेचा कणा शेती आहे. कोरोना काळातही इतर अनेक क्षेत्रानी हाय खाल्ली असली तरी शेतीचे उत्पादन या काळात <mark>स</mark>माधानकारक नव्हे, तर काही पीकांसाठी विक्रमीसुध्दा झाले. भारताच्या एकुन सकल उत्पादनात कृषी क्षेत्राचा वाटा 16 टक्<mark>यापेक्षाही अधीक आहे. कृषी क्षेत्राला अधिक उर्जितावस्था देण्याचे काम</mark> कृषी आ<mark>धा</mark>रीत उद्योगांनी केले आहे. भारत हा कृष<mark>ी उत्पादन करणा-या देशांमध्ये जगातील दुस-या क्रमांकाचा देश आहे. आता या विकासाला एक प्रकारची</mark> कोरोनाची किड ला<mark>ग</mark>ली ज्या<mark>मुळे शेतक-यांच्या विकासाला खीळ बसली आहे. या कोरोनाच्या प्रदुर्भावामुळे शेतक-यांवर</mark> अनेक प्रकारचे संकट ओढवले <mark>जात आहे. कोरोनाचे संकट शेतक-यांवरच नव्हे तर मजुर, कामगार, शिक्षण, व्यवसाय,</mark> उद्योगावर व याही पेक्षा अनेक व्यक्त<mark>ीवर कोरोनाचा प्रभाव झालेला दिसुन येतो. कोरो</mark>नाचा प्र<mark>द</mark>ुर्भाव वाढताच शासनाने कोरोनाला आळा घलण्य<mark>ा करीता लॉकडॉऊनचा निर्णय, शेतक-यांच्या अडचनित भर</mark> घालनारा <mark>आ</mark>हे. कारण राज्यात कडक निर्बंद लागु करूनही गर्दिवर नियंत्रन <mark>येत नसल्याने कोरोनाचे संकट गंभीर</mark> झाल्याने रा<mark>ज्</mark>यात कडक लॉकडॉऊन लागु करण्याचा निर्णय घेतला आहे. <mark>राज्यात आता दोन जिल्हयांमध्ये आंतर जि</mark>ल्हा प्रवास क<mark>रण्</mark>यास तसेच दोन शहरादरम्यान प्रवास करण्यावरही बंदी घालण्यात <mark>आली</mark> आहे. ज्याचा फटका अनेक शेतक-यांवर पडला आहे. कारण उत्पादन खुप मोठया प्रमानावर होऊनही <mark>मालाला उठाव जर नसेल तर त्याचा</mark> विपरीत परीणाम शेतक-यांवर होतो. एका जिल्हयातुन दुस-या जिल्हयात शेतीचा माल वा<mark>हतुकीकरिता अनेक अ</mark>डचनीचा सामना शेतक-यांना करावालागत आहे. कोरोनाच्या पहील्याही लाटे पेक्षा दुस-या लाटेने देशातील जनतेला मोठ्या प्रमाणात कवेत घेतले आहे. ज्यामुळे देशात सध्याच्या घडीला हाहाकार माजला आहे. माणसाच्या सर्वांगीन जीव<mark>नासहीत सर्व विश्वाला विळखा घालनारा</mark> कोरोनाग्रस्त कालखंड सुरू होऊन एक वर्ष लोटले की नाही तोच पुन्हा आनखी मोठया प्रमाणात कोरोनाने उग्ररूप धारण केले. पुर्वीच्या लाटे पेक्षा आताच्या लाटेत मरणा-या लोकांचे प्रमाण वाढत चालले आहे. त्यामुळे देशातील काही राज्य या रोगाला बळी पडले आहे. शासनाचे धोरण आणि त्यातही अंर्तगत व विरोधकांच्या राजकारणा पायी एक मेकांवर कुरघोडीचे वाढते प्रमाणामुळे व अपुरी आरोग्य व्यवस्था लोकांच्या मरण्यासाठी कारणीभृत ठरत आहे. म्हणुनच या परीस्थीतीचा सामना करण्यासाठी एकमेव उपाय म्हणजे संपुर्ण लॉकडॉऊन. आणि या लॉकडॉऊचा कोरोनाचा परिणाम सर्वच क्षेत्रावर झालेला दिसुन येतो या पासुन कृषी क्षेत्र सुद्धा सुटले नाही. या लॉकडॉऊचा परीनाम काही क्षेत्रावर जास्त तर काही क्षेत्रावर कमी परीनाम दिसुन येतो. या लॉकडॉऊमध्ये लॉकडॉऊचा परीनाम शेतक-यांवर सर्वच बाजुनी बसला. काही प्रमाणात मध्ये मध्ये बाजार समीत्या बंद होत्या. शेतक-यांना आपला माल बेभाव गावातच किरकोड व्यापा-याला विकावा लागला. पीकाचे भाव कमी झाले. अस्या अनेक समस्याचा सामना शेतक-यांना करावा लागला.

लॉकडाऊनमुळे शेतक-यांवर झालेला परिणाम :-

कोरोनाचा प्रदूर्भाव वाढत चाल्यामुळे तसेच या कोरोनाच्या दुस-या लाटे मध्ये मरणा-यांची संख्यामोठया प्रमाणात असल्यामुळे शासनाने कडक लॉकडॉऊन केले आहे. त्यामुळे अनेक वेळा बाजार समीत्या बंद ठेवण्यात आल्या होत्या त्यामुळे शेतक-यांना आपला माल बेभाव गावातच किरकोड व्यापा-याला विकावा लागला तसेच जेव्हा मार्केट चालु झाले तेव्हा भरपुर प्रमाणात मार्केटला आवक वाढल्या मुळे पीकाचे भाव कमी झाले. शेतकरी हा नेहमी अडचीत असतो त्याला आपला माल आल्या बरोबर विकावा लागतो म्हणुन कोरोमुळे जेव्हा जेव्हा लॉकडॉऊन होत गेले तेव्हा शेतक-यांना अनेक समस्यांचा सामना करावा लागला. मार्केट खुले परंतु लॉकडॉऊन मुळे बाजारात व्यापारी उतरण्याचे प्रमाण कमी झाले. त्यामुळे माल घेणा-याची संख्या कमी झाल्यामुळे मालाला भावसुध्दा कमी मीळत गेला. तसेच मजुरांच्या अभावामुळे शेतक-यांचे पिक शेतात पडुन राहले. पिकाचे मोठया प्रमाणात नुकसान झाले. पिक कापण्याकरीता मजुर मिळत नसल्यामुळे त्याच कामाची सवई मजुरी देऊन पिकाची कापनी करावी लागली. ज्यामुळे शेतक-यांचे खुप मोठया प्रमानावर नुकसान झाले. तसेच यावर्षी सोयाबीन, कपासी हे दोन महत्वाचे पिक हातुन निघुन गेल्यामुळे या लॉकडॉऊच्या काळात शेतकरी हा हतबल झाला आहे. शेतक-यांना आर्थिक साहाय्य म्हणुन बॅक मधुन जी मदत होत होती तिही या लॉकडॉऊनच्या काळात अडचनीचा प्रश्न निर्माण करत आहे. बॅक लोन घेण्याकरीता जे कागद पत्रे गोळा करावी लागत असे ते गोळा करण्याकरीता अनेक संबंधीत अधीकारी कोरोनामुळे भेटत नव्हते. तर काही कोरंटाईन होते तर काही कोरोना पाझीटीव्ह होते. या अशा आर्थिक विवंचनेत शेतकरी सापडला होता.

शेतक-यांचे सोयाबीन या वर्षी पाण्यात सापडल्या मुळे सोयाबीन कापनीच्या वेळेस मोठ्या प्रमाणावर नुकसान झाले. सोयाबीन ओले झाल्या मुळे खराब झाले. म्हणुन शेतक-यांना ते त्वरीत विकावे लागले. ते व्यापा-यानी बेभाव विकत घेतले. आणि जेव्हा शेतक-यां जवळचे सोयाबीन संपताच सोयाबीनचे भाव आज गगनाला भीळले आहे. शेतक-यांकडे सोयाबीन असताना 2500 ते 3000 रूपया पर्यन्त विकावे लागले. व्यापा-यान कडे किंवा किरकोड व्यापा-यांकडे सोयाबीन गेल्यावर आज सोयाबीनचे भाव 7000 रूपये झाले आहे. फारतर बोटावर मोजण्या ईतक्या शेतक-यांकडे व आर्थिक सक्षम शेतक-यांकडे आज सोयाबीन आहे. सोयाबीनचे भाव खुप मोठ्या प्रमानावर वाढल्या मुळे तेलाचे भाव गगनाला भीडले आहे. अस्या या माहागायीच्या स्थितीत आज सर्वसाधारन शेतकरी हालांकिच्या स्थितीमध्ये सापडला आहे. म्हणुन राष्ट्रसंत तुकडोजी महाराजांनी जी ग्रामगीता लिहली ती देशाचा पोशिंदा ग्रामनाथ ज्याला आपण शेतकरी म्हणतो त्याला अर्पण केली आहे. त्याच ग्रामगीते मध्ये राष्ट्रसंत तुकडोजी महाराज लिहतात कच्चा माल मातीमोल विकावा आणि पक्का होताची पाचपटीने घ्यावा असे या ओवी वरून स्पष्ट होते कि शेतक-याजवडील माल हा शेतक-याजवळ असतो तो पर्यन्त त्याला काही किंमत नसते आणि पक्का झाल्यावर त्याच शेतक-याला तो माल पाच पटीने विकत घ्यावा लागतो. म्हणजे आपलाच माल आपलेच हाल असी स्थिती आज शेतक-यांसमोर निर्माण झाली आहे.

या वर्षी सर्रास सोयाबीन ओले झाल्यामुळे बियाण्याची उगवन शमता कमी राहनार आहे. त्याच बरोबर सोयाबीनचे भाव खुप मोठया प्रमानावर वाढल्या मुळे पेरणीच्या वेळेस सोयाबीनचे बि सुध्दा खुप महाग राहनार आहे. त्यातच यावर्षी कृषी सेवा केंद्रावर शासनाच्या जाचक अटीमुळे हवालदिल झालेले कृषी सेवा केंद्र बियाने उपलब्ध करून देण्यास असर्मथ ठरत आहे. या सर्व नितीचा फटका शेतक-यांवर पडनार आहे. हि सुध्दा शेतक-यांसाठी मोठी समस्या आहे.

त्यातच या कोरोना काळात अवकाळी पावसाचा कहर वाढत असल्यामुळे गहु, कांदा, चना, भाजीपाला तसेच संत्रा व फळ युक्त पीकाचे नुकसान झाले आहे. ज्याचा फटका सर्वसाधारण शेतक-याला झाला आहे. त्यामुळे हे सर्व पिक कमी भावात शेतक-यांना विकावे लागत आहे. कांदयाच्या भावात फार मोठया प्रमानावर गिरावट आली आहे. कांदा उत्पादकाचे नुकसान झाले आहे. गाव पातळीवर जे छोटे मोठे बाजार आहे. ते लॉकडॉऊन मुळे बंद ठेवण्याचे आदेश शासनाचे असल्यामुळे शेतातील जो भाजीपाला व फळे शेतकरी गाव पातळीवर दलालाच्या माध्यमातुन विकत होते. तेही बंद झाले आहे. जिल्हयातील शेतकरी मागील 6-7 वर्षा पासून भाजीपाला पीक घेऊ लागला. मात्र, कोरोनाच्या संसर्ग वाढू लागला लॉकडॉऊन लागले व भाजीपाला पिकाला भाव मिळेनासा झाला. एकीकडे लॉकडाऊन लागू होऊन संचारबंदी केल्याने भाजीपाला तोडण्यास मजूर मिळेनासे झाले आहेत. तर दुसरीकडे उत्पादन केलेल्या मालाला भाव मिळत नसल्याने तोडणी खर्च परवडत नसल्याने भाजीपाला पीक शेताच्या बांधावर सडत ठेवण्याची वेळ जिल्हयातील भाजीपाला उत्पादक शेतक-

यांवर आली आहे. काहीमालाची मजुरी सुध्दा निघत नव्हती. असी लॉकडॉऊच्या काळात अनेक प्रकारचे शेतक-याचे नुकसान झाले.

संशोधनाचे महत्व:-

संशोधनाच्या माध्यमातुन लॉकडाऊन काळात शेतक-यांवर काय विपरीत परिणाम झाला. याचा अभ्यास करण्यात आला. सर्व देशाचा अन्नदाता शेतकरी ज्यांच्यावर आज उपास मारीची पाळी आली आहे. या लॉकडाऊनमुळे शेतकरी हवालदिल झाला. ज्यांच्यावर आर्थीक, कौटुंबीक संकट ओढवले आहे. हे संकट निवारण्याच्या दृष्टीकोनातुन एक अल्पसा हातभार लागावा म्हणुन प्रस्तुत संशोधनाचे महत्व आहे.

- 1. प्रस्तुत संशोधनातुन आर्थिक प्रश्न मार्गी लागतील
- अरपुर.
 पारंपारीक शेती आधुनाक प्रत्त.
 आधोनीक शेती संशोधनातुन केल्या जाईल.
 सामुहीक शेतीकडे शेतक-यांचा कल वाढण्यास मदत होईल.
 प्रक पिकाकडे शेतक-यांचा कल वाढेल.

संशोधन उद्धेश:-

समाजकार्य संशोधन विषयाची निवड केल्यानंतर संशोधनाचे उद्देश निश्चित करून उद्धेशाच्या आधारे संशोधनाला योग्य दिशा देता येईल<mark>. या सोबतच संशोधनाला मर्यादीत ठेवण्याकरीता उद्देश महत्वाचे आ</mark>हे. संशो<mark>ध</mark>नाला जर उद्देश नसेल तर संशोधन दिशाह<mark>ीन व व्यर्थ व्हायला वेळ लागणार नाही. म्हणुन सर्वप्रथम संशोधना</mark>ला उद्देश स्पष्ट करणे तितकेच महत्वाचे आहे.

- 1. लॉकडाऊनची स्थिती आणि शेतक-याच्या अडचनीचा अभ्यास करणे.
- 2. शेतक-यानवर लॉकडॉ<mark>ऊचा परीनाम अभ्यासने.</mark>

गृहितकृत्यः-

1) लॉकडाऊनच्या काळात शेतक-यांना आपल्या उदरर्नीवाहासाठी अनेक अडचनीचा सामना करावा लागला.

अध्ययन पद्धती :-

प्रस्तुत संशोधनाकरीता नागपुर जिल्हातील नरखेड तालुक्याची निवड करण्यात आली. प्रस्तुत संशोधनाकरीता नरखेड तालुक्यातील <mark>निवडक संत्रा, सोयाबिन, तुर, चणा, कपास व शेतीपुर</mark>क व्य<mark>वसाय उत्पादक 60</mark> शेतक-यांचा समावेश करण्यात आला. यामध्ये मो<mark>ठे शेतकरी व अल्प भ</mark>ुधारक शेतक-यांचा व सर्व <mark>प्रर्वगातील घटकांचा</mark> समावेश करण्यात आला. या करीता गैरसंभाव्यता नमुणा निवड <mark>पद्धती मधील सोईसकर नमुना निवड पद्धतीचा</mark> वापर करण्यात आला. या सर्व उत्तरदात्याकडुन तंथ्य संकलनाकरीता मुलाख<mark>त अनुसूचीचा वापर करण्यात आ</mark>ला.

तथ्य विश्लेषण व निर्वचन :-

मुलाखत अनुसूचीच्या आधारे संकलीत संपुर्ण तंथ व्यवस्थित क्रमबद्ध करण्यात आली. तंथ्यामध्ये असलेल्या उणीवा दुर करण्यात आल्या. प्राथमिक तंथ व दुय्यम तंथ्याच्या आधारे विविध सारण्याच्या व विविध प्रमाण मापणाचा वापर करून तथ्य गोळा करण्यात आले.

निष्कर्ष :-

आमचे अन्न उत्पादन मानव संसाधनांची उपलब्धता, शेतीच्या साधनांवर आणि कृषी उत्पादनांच्या मुक्त हालचालीवरही अवलंबून आहे. आणि या सर्व वेळी लॉकडाऊनमुळे प्रतिबंधित आहे. हे अधिक दिवस सुरू राहिले तर या वर्षाच्या अखेरीस अन्नधान्याचे उत्पादन कमी होईल. आमचे अन्न उत्पादन मानव संसाधनांची उपलब्धता, शेतीच्या

साधनांवर आणि कृषी उत्पादनांच्या मुक्त हालचालीवरही अवलंबून आहे. कोरोना संसर्गामुळे निर्माण झालेल्या परिस्थितीत व्यापारीही भाव पाडून मागत आहेत, त्यामुळे खर्च ही निघत नसल्याची परिस्थिती शेतक-यांची आहे. कोरोनामुळे उद्भवलेल्या संकटामुळे शेतक-यांची अवस्था वाईट झालीय. वास्तविक पाहता या सा-या समस्यांमध्ये "शेतकरी आणि शेती क्षेत्रावर" सर्वाधिक विपरीत परिणाम झालेला आहे. भाजी विकून भज्याचे पैसेही निघत नसल्याची जिल्ह्यातील शेतक-यांची स्थिती आहे. मालाला भाव मिळत नसल्याने शिवाय कोरोनामुळे मजूर आणि मार्केट उपलब्ध नसल्याने ही परिस्थिती निर्माण झाली आहे. शेतक-यांना एक प्रकारची मदत म्हणुन शासनाने कोरोना काळातील शेतक-यांचे कर्ज माफ करावे. तसेच वि वियाने, खत, औषधीवर मोठया प्रमानावर अनुदान दयावे. शासन स्थरावर शेतक-यांनसाठी विविध योजनाची निर्मीती करण्यात यावी.

शिफारशी:-

कोरोना व्हायरस लॉकडाऊनचा कृषी क्षेत्रावर आणि भारतातील शेतक-यांवर विपरित परिणाम झाला आहे. मजूर आणि शेतीत उत्पादित वस्तूंच्या हालचालीमुळे या क्षेत्राला खूप त्रास झाला आहे. शेतक-याच्या समस्या विषयी वास्तवाविषयी बोलताना, कृषी उत्पादनांना लॉकडाऊन निर्देशांमधून सूट दिली गेली असली तरी पोलिस अडचणी निर्माण करीत आहेत. अलीकडेच मुसळधार पावसामुळे भारताच्या कृषी क्षेत्राला अडथळे व पिकाचे नुकसान झाले. आणि आता कोरोना व्हायरसने तयार केलेल्या व्यत्ययांमुळे याचा आणखी एक फटका बसला आहे. म्हणून शेतक-यानी पुढील बाबीचा अवलंब करणे गरजेचे आहे.

- 1) पारंपारीक शेतीला नवा पर्याय म्हणुन नविण संशोधनातुन शेती करणे.
- 2) फळ पिकानवर शेती करण्यावर जास्त भर देणे.
- 3) सामुहिक शेती करण्याकरीता नव तरून शेतक-यांनी सहभाग घेणे.
- 4) नव तरून शेतक-यांनी आधोनिक दृष्टीकोनातुन शेती करणे.
- 5) धान्य, खाद्यतेल, डाळी, कांदे आणि भाजीपाला यासारख्या वस्तूंच्या साठा मर्यादा व किंमतींवर नियंत्रण ठेवण्यासाठी आवश्यक वस्तू कायद्यात दुरुस्ती करुन शेतक-यांना चांगल्या किंमती कळू देणे.
- 6) कृषी विपणन धोरणात सुधारणा करून शासनाने किचकट निर्बंध हटविने
- 7) इलेक्ट्रॉनिक मार्केट प्लॅटफॉर्मद्वारे <mark>कोणत्याही राज्यात शेतक-यांना त्यांच्या पसंतीच्या कोणत्या</mark>ही खरे<mark>दी</mark>दारास विक्री करण्याची परवानगी देणे
- 8) एपीएमसीची मक्तेदारी थांबविणे.
- 9) शेतक-यां साठी टोल-फ्री हेल्पलाईन कॉल सेंन्टर सरकारणे स्थापित केले पाहिजे.

समाजकार्य कर्त्याची मध्यस्ती :-

आज कोरोनाची माहामारीची स्थिती चालु आहे. भिविष्यात याहिपेक्षा आनखी विदारक स्थिती निर्माण होऊ शकते कारण पर्यावरणाचा समतोल बिघडत चालला असल्यामुळे अनेक रोगाचा प्रतीकार हा देशातील जनतेला करावा लागनार आहे. आणि त्यामध्ये शेतक-यांणा अशा अडचनीच्या काळात या समस्याचा सामना करण्याकरीता सक्षम होने गरजेचे आहे. यासाठी पारंपारीक शेतीला नवा पर्याय शोधने गर्जेचे आहे. कृषी क्षेत्रात रोजगाराच्या नव्या संधी निर्माण करण्यासाठी व शेतक-याचे उत्पादन वाढवण्या साठी आज काळाची गरंज आहे. देशाचे पंतप्रधान नरेंद्र मोदी यांनी आपल्या मनिक बात मध्ये सांगील्या प्रमाणे श्वेतकांतीच्या वेळी देशाने शेतीतील नवीन पर्यायाचा अनुभव घेतल्याने सांगतांना मधमाशी पालन देखील असाच एक पर्याय असुन मधमाशी पालन देशात मध किंवा मधुर क्रांतीचा पाया रचत असल्याचे सांगीतले. शेतकरी आज मोठया संख्येने यात सहभागी होत नव संशोधन करत असुन पश्चिम बंगाल मधील दार्जिलिंगमधील गुरटुम या गावाचे सुदरबन परिसरातील नैसर्गिक सेंद्रीय मधाचे व गुजरात मधील बनारस काठावरील मधुर क्रांतीचा नवीन अध्याय लिहना-या शेतक-यांची उदाहरणे दिली या सर्व संशोधनाचा आज तरून शेतक-यांनी अवलंब करून नविण संशोधनाचा पर्याय शोधुन नविन पिकांचे उत्पादन घेऊन सक्षम होण्याचा हा एक पर्याय आहे. तसेच शेतक-यांसाठी नविण पर्याय म्हणुन शेतक-यांनी उत्पादीत केलेला नाशवंत शेतमाल खराब होऊन आर्थिक नुकसान होऊ नये म्हणुन यासाठी आंतरराज्य व्यापारास चालना देण्यासाठी महाराष्ट्र राज्य कृषी पणन महामंडळाने आंतरराज्य शेतमाल व्यापार रस्ते वाहतुक अनुदान योजना सुरू केली आहे. याचा अवलंब केला आहे. यामध्ये भाजीपाला व नाशवंत फळे लवकर खराब झाल्यास शेतक-यांना नुकसान सोसावे

लागते. त्यामुळे नाशवंत पिकात येनारी केळी, डाळींब, आंबा, द्राक्ष, संत्रा, मोसंबी, कांदा, टोमॅटो, आले व भाजीपाला या सर्व नाशवंत पिकासाठी हि योजना लागु आहे. या सर्व उत्पादकांनी याचा लाभ घेतल्यास शेतक-याच्या उत्पादनात भर पड् शकते.

कौंटुबीक विघटनामुळे अनेक शेतक-यांचे शेतीचे छोटे छोटे तुकडे झाले आहे. त्यामुळे या छोटया शेतीत पाहीजे त्या प्रमाणात उत्पादन घेऊ शकत नाही म्हणून आज शेतक-यांनी सामृहीक शेतीकडे जर आपला कल ओढवला तर प्रत्येक शेतक-याला यामधुन फायदाच व भरघोष उत्पादन घेता येऊ शकतो. सामुहीक शेतीतुन सर्व शेताला शासकीय अनुदानातुन तार कंपाऊड घालता येऊ शकतो ज्यामुळे रानटी प्राण्यापासून आणि पिकाला हानि पोहचवण्या पासून सौरक्षण होऊ शकते. सामृहीक शेतीतुन चांगले पिक चागले बियाण्याचा वापर पाण्याचे नियोजन, बागायती शेती, एकत्रीत शेतमाल वाहन नेण्याची सोय, अशा अनेक प्रकारे सामुहीकतेतुन शेतक-याचे जागो जागी बचत होऊन उत्पादनात भर पडुन सक्षम होण्यास मदत होत जाईल. तसेच नव तरून शेतक-यांनी आधोनीक दृष्टीकोनातुन जर शेती केली तर शेतीच्या उत्पादनात भर पडेल.

संदर्भ

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प्रस्तावना.

लोककलांचे प्रादेशिक वर्गीकरण करत असताना महाराष्ट्र हा लोककलेची खाण असलेला प्रदेश आहे. दर दहा मैलावर दहा कोसावर भाषा बदलते,भाषेचा लहेजा बदलतो. ही भाषा प्रामुख्याने बोलीभाषा असते. बोली भाषेचा आणि लोककलेचा अतिशय जवळचा संबंध असतो.लोककला या विशिष्ट बोली भाषेतूनच सादर होतात.लोककलेचे स्वरूप पाहता विधिनाट्य, भक्तीनाट्य, मनोरंजन नाट्य,प्रबोधननाट्य, श्रमपरिहार्य कला, ग्रामविधि, असे लोककलेचे स्वरूप पहावयास मिळते. लोककला या प्रामुख्याने दोन भागात विभागले जातात. एक हक लोककला आणि हकश्राव्य लोककला,हक कले मध्ये चित्रकला,शिल्पकला, विणकाम,नक्षीकाम,चित्रकथी इ.लोककलेचा समावेश होतो तर हकश्राव्य लोककलांमध्ये सर्व प्रयोगातम लोककलांचा समावेश होतो.यात गोंधळ, जागरण, भराड, दशावतार, खडीगंम्मत, तमाशा, पोवाडा इत्यादी लोककला प्रकारांचा समावेश होतो. लोककलांचे निर्वहन परंपरेने एका पिढीकडून पुढच्या पिढीकडे होत असते.परंपरे शिवाय लोककला संभवनीय नाहीत परंपरा म्हणजे आचरणाचे विशिष्ट संकेत. हे आचरण विधीच्या स्वरूपात, धर्माच्या स्वरूपात असू शकते.अश्या रूढी,समजुती,रीतीरिवाज,चालीरीती यांची विशिष्ट परंपरा असते. स्थळ-काळ व्यक्तिपरत्वे, समाज परत्वे ही परंपरा सुरू राहते. त्यामुळे पारंपरिकता, मौखिकता,उत्स्फूर्तता ,स्थळ सापेक्षतः हे लोककलेचे प्रमुख गुणवैशिष्ट्ये आहेत. लोककलेचे प्रादेशिक वर्गीकरण करीत असताना महाराष्ट्राचे सहा महसूल विभाग असून भाषावार प्रांतरचना हे प्रमुख सूत्र भारतीय प्रशासन निश्चित केलेले आहेत. त्यानुसार लोककलेचे वर्गीकरण करता येईल.

मुंबईसह कोकण पट्टी.

मुंबई कोकणपट्टी हा प्रामुख्याने सागरी किनारपट्टीचा भाग असून आगरी कोळी बांधवाच्या लोककला या भागात प्रसिद्ध आहेत. विवाहप्रसंगी हळदीची गाणी, नारळी पौर्णिमाची गाणी, होळीची गाणी, अशी लोकगीते लोकनृत्य या परिसरात प्रसिद्ध आहेत. रायगड जिल्ह्यात डब्बलबारी भजने, शक्ती तुर्याचे सामने लोकप्रिय आहेत.सिंधुदुर्ग जिल्ह्यात दशावतार, चित्रकथी बाहुल्यांचे खेळ, पांगुळ, भजन,भारूड गाँधळ आदी लोककला प्रकार रूढ आहेत.मुंबईसह कोकणपट्टीत दत्तसंप्रदायाचा अधिक प्रभाव जाणवतो .त्याशिवाय शक्ती आणि शिवकाळातील देवतांचा प्रभाव जाणवतो. सातेरी, भराडी,पावणादेवी, रवळनाथ, वेतोबा ,भैरोबा, म्हसोबा आदी शिवकाळातील देवतांचा प्रभाव जाणवतो. या सर्व देवी आणि देवतांच्या यात्रेत दशावतार म्हणजेच दहीकाल्याचे खेळ रात्रभर होत असतात. व दशावताराच्या पालखीत तरंग काढले जातात.मुंबईसह कोकणपट्टीत असणाऱ्या लोककलेत त्या-त्या प्रदेशातील बोली भाषा बोलली जाते.उदाहरणार्थ संगमेश्वरी,बाणकोटी, मालवणी, आगरी कोळी,आधी बोलीभाषा या लोककला प्रकारांमध्ये उपयोगात आणल्या जातात.

पश्चिम महाराष्ट्र.

पश्चिम महाराष्ट्रामध्ये पुणे, सातारा, सांगली, कोल्हापूर,सोलापूर नगर, असे जिल्हे येतात या जिल्हयांची प्रादेशिक बोली वेगळी असते, जुन्नरी ,नगरी,सोलापुरी वायदेशी,कोल्हापुरी असे बोलीभाषेचे वेगवेगळे प्रकार पश्चिम महाराष्ट्रात आहेत या बोलीभाषेचा वापर पश्चिम महाराष्ट्रातील वेगवेगळ्या लोककलां मध्ये होतो. उदाहरणार्थ लावणीचे वर्गीकरण केले तर पंढरपूर बाजार ची लावणी, जुन्नरी लावणी, बालेघाटी लावणी असे वर्णन करण्यात येते सांगली कोल्हापूरकडे सोंगी रामायण, सोंगी भारुड, भजन भारूड असे लोककला प्रकार रूढ असून, ढोलकी फडाचा तमाशा हा देखील खूप प्रसिद्ध आहे याशिवाय पोवाडा गोंधळ,जागरण .सारखी विधिनाट्य पश्चिम महाराष्ट्रात प्रसिद्ध आहेत मराठवाडा.

मराठवाडा ही संतांची भूमी म्हणून ओळखली जाते .भारुड,लळित पंचमी, आखाडी, गोंधळ,जागरण या लोककला महाराष्ट्रात प्रसिद्ध आहेत.<mark>मराठवाड्यातील पैठण येथे संत एकनाथां</mark>च्या भारुडाची खूप मोठी परंपरा आहे. संत एकनाथांचे वंशज असलेले <mark>गोसावी क्ट्रंब भारुड सादर करीत असत. असे प्रभाकर देशम्ख भारूडकार मराठवाड्यात</mark> भारुड ची परंपरा चालवी<mark>त असत.आज मराठवाड्यात निरंजन भाकरे,मीरा</mark>बाई उमप इत्यादी अनेक भारूड कर आहेत.ऐक अतिशय दुः<mark>ख</mark>द घटना <mark>म्हणजे प्रसिद्ध भारूड रत्न निरंजन भाकरे</mark> आज आपल्यात नाहीत.कोरोनाच्या विळख्यात सापडे, का<mark>लपरवाच आपल्यातून गेले. मराठवाड्यात याशिवाय गोंधळाची मोठी परंपरा आहे . तुळजापूरला</mark> भोसले,चव्हाण चौग्<mark>ले, ही मंडळी गोंधळ सादर करतात त्या शिवाय परभणी येथील प्रसिद्ध गोंधळी राजाराम भाऊ</mark> कदम, आख्यानाच<mark>ा गोंधळ <mark>सादर करण्यासाठी प्रसिद्ध आहेत.तसेच बीड जिल्ह्याती</mark>ल अंबाजोगाई येथे सर्वज्ञ श्री</mark> दासोपंतांची लळीत परंपरा आहे.तर जालना जिल्ह्यातील अंबड तसेच गंगाखेड या परिसरामध्ये सूद्धा लळीत परंपरा आहे. दत्तसंप्रदायाचे लळीत,<mark>समर्थ संप्रदायाचे लळीत, मराठवाड्यात प्रसिद्ध असू</mark>न आखाडी, चैती पंचमीला गणपती,रिद्धी सिद्धी, राम-रा<mark>वण, खंडेराया, भैरवनाथ आंबा, महालक्ष्मी, सरस्वती</mark> अशी सोंगे लळीत मध्ये आणली जातात.मराठवाड्यात कीर्तनाची आणि तमाशाची स्वतंत्र परंपरा असून हुंडा महाराज देगलूरकर,रंगनाथ महाराज परभणीकर, शंकर बापू आपेगावकर, अश<mark>ी वारकरी संप्रदायातील मान्यवर मं</mark>डळी या <mark>मरा</mark>ठवाड्यात होऊन गेली,अन् आहेत.तमाशामध्ये हरिभाऊअनविकर,यांचा ढोलकी पाडा चा तमाशा मराठवाड्या<mark>त प्र</mark>सिद्ध आहे त्याशिवाय संगीतबारी च्या क्षेत्रातील अनेक नामवंत संच मराठवाड्यात होऊन गेले त्यात संजीवनी बिडकर, सरला नांदुरकर मधू कांबीकर आधी संचाचा उल्लेख क<mark>रता येईल, मराठवाड्यात</mark> अशाप्रकारे भारुड गोंधळ, तमाशा,किर्तन,भारूड आदी कलाप्रकार लोकप्रिय आहेत.

उत्तर महाराष्ट्र.

उत्तर महाराष्ट्र प्रामुख्याने खांनदेश म्हणून ओळखला जातो. या परिसरात क्षेत्रपाल देवता प्रसिद्ध असून कानबाई ची गाणी खूप प्रसिद्ध आहेत.खानदेशात विविध लोककलांच्या माध्यमातून ही गाणी म्हटली जातात. त्याशिवाय खंडोबाच्या जागरणाची परंपरा, देवीच्या गोंधळाची परंपरा खानदेशात खूप आहे. खानदेशात आदिवासी बहुल क्षेत्र अधिक असून तेथे आदिवासी टिपरी नृत्य, कोळीनृत्य प्रकार अधिक रूढ आहेत.खानदेशात देवीची गाणी खंडोबाची गाणी म्हटली जातात.खंडोबाची गाणी दिमडी ऐवजी डफावर म्हटली जातात.उत्तर महाराष्ट्रातील लोककलेची ऐक वेगळी ओळख आहेत.

विदर्भ.

विदर्भातील लोककला प्रामुख्याने वन्हाड प्रांतातील आणि नागपूर, चंद्रपूर अशा दोन भागात विभागले आहेत. वन्हाड प्रांत म्हणजे अकोला, अमरावती, वर्धा. या परिसरात गाडगे महाराज संप्रदाय व तुकडोजी महाराज संप्रदायाचा खूप मोठा प्रभाव असून कीर्तन आणि सप्तखंजिरी भजनाची परंपरा या परिसरात आहे. नागपूर, चंद्रपूर, गोंदिया, भंडारा, या जिल्ह्यात खडीगंमत, झाडीपट्टी, दंडार या लोककला प्रकाराची लोकप्रियता खूप असून आणि खडीगंमत हा प्रकार पश्चिम महाराष्ट्रातील तमाशा सारखाच आहे.गण, गवळण, फार्स कथा खडीगम्मत मध्ये सादर होतात. या शिवाय महादेवाची गाणी प्रसिद्ध असून आदिवासी भागात "खंम" हे विधिनाट्य तसेच घोरपड नृत्य, नृत्य आदिवासीनृत्य प्रकार प्रसिद्ध आहेत विदर्भात खम सारख्या विधिनाट्य बरोबरच "तुंबडी" वादन तसेच "बाजीराव नाना" सारखे कला प्रकार प्रसिद्ध आहेत.बहुरूप्याची परंपराही विदर्भात फार जुनी आहे.अमरावती जिल्ह्यात बहुरूपी, रायरंद कलावंताची परंपरा पहावयास मिळते. अशा प्रकार विदर्भातील लोककला आणि बोलीभाषा खूपचं प्रसिद्ध आहे.

अश्या प्रकारे लोककलेचे प्रादेशिक वर्गीकरण करत असताना. सर्व प्रांतामध्ये, विधिनाट्य भक्तनाट्य, प्रबोधननाट्य, मनोरंजननाट्य, श्रमपरिहर्य लोककला, ग्रामविधि अशा प्रयोगात्म लोककला पाहावयास मिळतात. हया सर्व लोककलांचा अविष्कार वेगळाअसला, तरी त्याचा मुख्य हेतू मात्र एकच असतो. कोणत्याही लोककला निर्मितीमागे, कोणताना, कोणता हेतु असतोच, हेतू शिवाय लोककला संभवनीय नाहीत. पंचमहाभूतांचे तुष्टीकरण. आध्यात्मिक उदबोधन, समाज प्रबोधन, मनोरंजन हा त्यांचा मुख्य हेतू असतो. वेगवेगळ्या प्रदेशात लोककला अविष्कृत होत असताना त्या त्या प्रांतातील चालीरीती,रीतीरिवाज, रूढी परंपरा, बोलीभाषेचा खूप मोठा प्रभाव लोककलावंतावर त्या कलेवर पडलेला असतो. म्हणून लोककला आणि लोकजीवन यांचा खूप जवळचा संबंध असतो.. आपल्या लोकसंस्कृतीच प्रतिरूप म्हणजेच लोककला. समूह मनाचा गीत, नृत्य, नाट्य,संगीतमय अविष्कार,कृतिरूप आविष्कार म्हणजेच लोककला होत.

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आध्निक शेतीत जैवतंत्रज्ञान : काळाची गरज

श्रीमती आर. व्ही. पाटील

साहय्यक प्राध्यापक

श्रीमती मथ्बाई गरवारे कन्या महाविदयालय, सांगली.

सारांश -

आज जगात लोकसंख्येचा विस्फोट झाला आहे. वाढत्या लोकसंख्येच्या वाढत्या अन्नधान्याच्या गरजेतून आधुनिक शेती पध्दतीचा अवलंब केला गेला. आधुनिक शेती पध्दतीत रासायनिक खते, रासायनिक कीड-कीटकनाशके, जलसिंचन, यंत्रांचा वापर वाढला. आधुनिक शेती पध्दतीमुळे सुरूवातीच्या काळात शेती उत्पन्नात तात्कालिक वाढ झाली. मात्र आधुनिक शेती पध्दतीचे दीर्घकालीन विघातक परिणाम दिसून येत आहेत. रासायनिक खतांच्या व कीटकनाशकांच्या अयोग्य वापरामुळे मृदा व जल प्रदूषणात वाढ होत आहे. कीटकनाशकांचा अंश शेतमालात उतरत असून अन्नसाखळी असुरक्षित होत आहे. अतिजलसिंचनामुळे मृदा क्षारपड, नापीक होत असून मृदेची उत्पादकता घटत आहे.

आधुनिक शेतीच्या समस्यावरील उपाययोजनांसाठी जैवतंत्रान हे उपयुक्त तंत्र आहे. शेतीत जैवतंत्रज्ञान म्हणजे पिकांची वाढ, पिकांवरील रोग, कीडीचे नियंत्रण व कृषी उत्पादनाचा उत्तम दर्जा प्राप्त करण्यासाठी सजीवांचा वापर करणे होय. शेतीत जैवतंत्रज्ञानाच्या वापराचा कोणताही दुष्परिणाम मानव व पर्यावरणावर होत नाही. मानव व पर्यावरण यांच्या दृष्टीने शेतीत जैवतंत्रान ही काळाची गरज आहे.

बीजसंज्ञा - जैवतंत्रज्ञान, जैवविविधता.

प्रस्तावना -

शेती हा मानवाचा प्राचीन व्यवसाय आहे. आज जगात लोकसंख्येचा विस्फोट झाला आहे. वाढत्या लोकसंख्येमुळे अधिक अन्नधान्य उत्पादनाची गरज निर्माण झाली त्यामुळे आधुनिक शेती पध्दती अवलंबिली गेली. सुरूवातीच्या काळात आधुनिक शेतीपध्दतीमुळे अन्नधान्य उत्पादनात तात्कालिक वाढ झाली मात्र दिर्घकालीन विघातक परिणाम दिसून येत आहेत.

आधुनिक शेती पध्दतीमुळे रासायनिक कीटकनाशके, रासायनिक खते, पाण्याचा, यंत्रे-अवजारांचा वापर वाढला आहे. रासायनिक कीटनाशकांच्या अयोग्य वापराने अन्नसाखळी असुरक्षित होत आहे. विषयुक्त शेतमाल बाजारपेठामधून परत येत आहे. अतिरिक्त जलिसंचनामूळे मृदा क्षारपड होउन नापीक होत आहेत. मृदेची उत्पादकता घटत आहे. पिकांचा दर्जा व गुणवत्ता खालावत आहे. आधुनिक शेतीपध्दतीमूळे मृदा, जल, हवेचे प्रदूषण वाढत आहे पर्यावरण संतुलन बिघडत आहे.

शेतीत जैवतंत्रज्ञानाचा वापर करणे म्हणजे पिकांची वाढ, पिकांवरील रोग, किडींचे नियंत्रण व कृषी उत्पादनाचा उत्तम दर्जा राखण्यासाठी सजीवांचाच शेतीमध्ये वापर करणे होय. त्यामुळे आधुनिक शेतीपध्दतीमुळे निर्माण झालेल्या कृषी समस्यावर उपाययोजना करणे शक्य होईल. अन्नसाखळी, कृषी परिसंस्था, जैवविविधता टिकून राहील म्हणून आधुनिक शेतीत जैवतंत्रज्ञानाचा वापर हा मानव व पर्यावरण यांच्या कल्याणाच्या दृष्टीने उपयुक्त असून ती एक काळाची गरज आहे.

उद्देश

- १ शेतीत जैवतंत्रज्ञान विषयक माहिती घेणे.
- २ आध्निक शेतीच्या समस्या व उपाय अभ्यासणे.

अभ्यासपद्धती

प्रस्तुत शोधनिबंधासाठी दुय्यम साधनसामुग्रीचा वापर केला आहे संदर्भ पुस्तके , मासिक , इंटरनेट इत्यादींमधून माहिती घेतली आहे

अभ्यासविषय विवेचन - आध्निक शेती जैवतंत्रज्ञान : काळाची गरज

जगाच्या वाढत्या लोकसंख्येच्या वाढत्या अन्नाची गरज पूर्ण करण्याच्या उद्देशाने अधिक शेती उत्पादनासाठी आधुनिक शेती पद्धती स्वीकारली गेली आधुनिक शेती पद्धतीत रासायनिक खते , रासायनिक कीटकनाशके , पाण्याचा , यंत्रांचा , वापर अति व अयोग्य प्रमाणात केला जात आहे त्यामुळे कृषी परिसंस्था, मानव व पर्यावरण विषयक अनेक गंभीर समस्या निर्माण होत आहेत

आधुनिक शेतीच्या समस्या

- १. क्षारयुक्त व अल्कधर्मी मृदानिर्मिती शेतमालाच्या उत्पादनासाठी नायट्रोजन, फॉस्फरस , पोटॅशिअम इत्यादी रासायनिक खताच्या अति वापरामुळे मृदेचा खारवटपणा , क्षारयुक्त गुणधर्म वाढत आहे ही बाब पारिस्थितीकी समतोलाच्या दृष्टीने गंभीर आहे.
- २. मृदेच्या उत्पादक क्षमतेत घट पिकांची फेरपालट न करणे , कृषी व्यवस्थापनाचा अभाव , कृषीच्या अयोग्य पद्धती , मृदा व पाणी परीक्षणाचा अभाव , रासायनिक खतांचा अतिवापर इत्यादींमुळे मृदेच्या उत्पादन क्षमतेत घट होत आहे.
- ३. रासायनिक खतांच्या अतिरिक्त वापराचे प्रतिकृत परिणाम -
- सूक्ष्म पोषणमूल्यात असंतुलन पिकांच्या वाढीसाठी कोणताही भेदभाव न करता रासायनिक खतांच्या
 अतिरिक्त वापर केल्याने सूक्ष्म पोषणमूल्यात असंतुलन निर्माण होत आहे
- नायट्रोजन प्रदूषण पाण्याबरोबर खोलवर नत्रयुक्त खते झिरपतात त्यामुळे भूमिगत जलप्रदूषण होऊन आरोग्य धोक्यात येते. डेन्मार्क , इंग्लंड , फ्रान्स , जर्मनी , नेदरलँडमध्ये ही समस्या सार्वित्रिक आहे भारतातही ही समस्या आहे.
- पोषणमूल्यांचा अतिरिक्त प्रमाण शेतामध्ये घातलेली खते वाहत्या पाण्याबरोबर जलाशयात मिसळतात यामुळे संबंधित जलाशयातील पोषणमूल्यांचा प्रमाण वाढते. जलाशयातील शैवाल वाढते ते पाण्यातील पोषणमूल्ये व ऑक्सिजन शोषून घेतात त्यामुळे जलचरांवर विपरीत परिणाम होतात मासे व तत्सम जलचर मृत पावतात तसेच त्यांचे जीवनचक्र लवकर संपते
- ४. कीटकनाशकांच्या अन्नसाखळीतील प्रवेशाने सजीवांचे आरोग्य धोक्यात पर्यावरणात कीटकनाशके दीर्घकाळ टिकून राहतात अन्नसाखळीतून ही विषारी द्रव्ये सजीवांच्या शरीरात प्रवेश करतात याचा मानव, पशुपक्षी, मासे इत्यादी यांच्यावर परिणाम होऊन पक्षी ठिसूळ कवचांची अंडी घालतात अशी अंडी उबवण्यापूर्वीच घरट्यात फुटतात. शिसे, पारा , निकेल , तांबेयुक्त कीटकनाशकांमुळे रक्तदोष निर्माण होतो. डी.डी.टी. च्या अतिवापराने स्थूल शरीराच्या व्यक्तीमध्ये मेदविकार , रक्तदाब ,

कर्करोग , दृष्टिदोष ,यकृताचे - मूत्राशयाचे विकार वाढीस लागतात यामुळेच डी.डी.टी. च्या अतिवापरावर आज अनेक देशात निर्बंध लादलेले आहेत

आधुनिक शेतीत जैवतंत्रज्ञान

जैवतंत्रज्ञान - व्याख्या

" पिकांची उत्पादनवाढ , पिकांवर उद्भवणारे रोग व किडी यांचे नियंत्रण , उत्पादनाचा उत्तम दर्जा प्राप्त करण्यासाठी सजीवांचाच उपयोग करून घेण्याच्या तंत्रास जैवतंत्रज्ञान म्हणतात "

जैविक पद्धतींचा किंवा प्रक्रियांचा औद्योगिक स्तरावर वापर करणे म्हणजे जैवतंत्रज्ञान होय शेतीच्या विविध कामात विविध स्तरावर निरनिराळ्या सजीवांचा सहभाग वाढवून सहकार्य घेणे हे जैवतंत्रज्ञानाचे तत्व आहे

आधुनिक शेतीच्या समस्यांवर उपायोजना करण्यास साहय्य होतील असे जैवतंत्रज्ञाचे घटक -

- १) जीवाणूद्वारा नियंत्रण शेतीतील तण, रोपावरील कीड नियंत्रित करण्यासाठी निरिनराळया जीवाणूंचा वापर करण्याचे हे तंत्र आहे. काही वनस्पती किंवा किटक तणांचे शत्रू असतात त्यांचा तणनाशक म्हणून उपयोग करून घेतला जातो. अनेक पिकांचे नुकसान करण-या मावा व तुडतुडे यांच्या नियंत्रणासाठी क्रोयसोपरलाकारणी हे जीवाणू प्रभावी ठरतात. लेडीबर्ड हा परभक्षक जीवणू शेतक-यांचा मित्र आहे. सोयाबीन, बटाटा व अन्य पिकांचा नाश करणा-या 'स्पोटोटेरा' अळयांच्या नियंत्रणासाठी एस.एल.एन.पी.व्ही हा मॅजिक नावाचा जीवांणू उपयुक्त आहे. तसेच बदके, कोळी व बेड्क यांचाही असाच उपयोग करून घेतला जातो.
- २) परागीभवन व फळधारणा परागीभवन व फळधारणा या नैसर्गिक क्रिया असल्यातरी खात्रीशीर उत्पादन वाढीचा उपाय म्हणून या क्रिया हेत्पूर्वक घडवून आणल्या जातात. मधमाशा पाळणे, भुंगे, फुलपाखरे आकर्षित होण्यासाठी विशिष्ट फूलझाडे लावणे असे उपाय योजले जातात. आंबा, नारळ, जांभळे यांच्या बागामध्ये मधूमिक्षका पालनामुळे परागीभवनास व फळधारणेस चांगलाच उपयोग झालेला आहे. जवस, सूर्यफूल, तीळ यासारख्या तेलिबयांच्या रोपावरील फुलांवर शेतकरी इतकेच हात फिरवतात यामुळे व्यापक परागीभवन होऊन अधिक फळधारणेची शक्यता वाढते.
- 3) सूक्ष्म जीवांचा वापर मृदेतील सूक्ष्म जीवांचे अस्तित्व अत्यंत महत्वाचे असते. उदा.- ऱ्हायझोबियम वनस्पतींना पोषणयोग्य नत्रवायू उपलब्ध करून देण्याचे कार्य करतात. द्वीदल धान्यांच्या मुळांचे या कामी सहकार्य लाभते. द्विदल धान्याचे बी पेरण्यापूर्वी त्यावर त्या जिवाणूंचा लेप दिला जातो. हे बी पेरल्यावर सिक्रिय होतात द्विदल धान्याच्या मुळावर ते हवेतील नत्रवायू घेऊन वाढतात व मृदेत नत्रवायू अधिक प्रमाणात स्थिरावतो यामुळे नत्रखताची आवश्यकता राहत नाही.

गांडूळाचा वापर हे ही जैवतंत्रज्ञान आहे. गांडूळाचे खत शेतीमध्ये वापरतात. गांडूळ मृदा खातात नंतर त्यांच्या शरीरीतून बाहेर पडलेली मृदा, विष्ठा, अंडी, हयुमस यांच्या मिश्रणातून उत्कृष्ट गांडूळ खत तयार होते.

- **४) उती संवर्धन -** एखादी पेशी किंवा पेशीचा समूह किंवा रोपटयाचा भाग, खोडाचे कांडे, पान, यासारखा एखादा भाग योग्य ती पोषणमूल्ये देऊन नियंत्रित वातावरणात वाढवितात याला उतीसंवर्धन म्हणतात. उतीसंवर्धनामध्ये फुलोरा, फलधारणा, बीजोत्पादन यासारख्या पारंपारिक पाय-या वगळून हवीतशी संकरित जात आपणास निर्माण करता येते. गहू, तांदूळ, मका व इतर अनेक पिकांच्या संकरित जाती आजपर्यन्त निर्माण केलेल्या आहेत.
- **५) प्राणीजन्य उर्जेचा कार्यक्षम वापर -** शेती कामासाठी वापल्या जाणा-या प्रामुख्याने बैल, म्हैशी, रेडे इ. प्राण्यांची कार्यक्षमता वाढविण्यासाठी ती ज्या यंत्राला अवजाराला जोडली जातात त्यांच्या रचनेत, आकारात बदल केल्यास या प्राण्यांची उर्जा पर्याप्त प्रमाणात वापरली जाईल म्हणून त्यांची उपयुक्तता वाढेल. नांगराची रचना व आकारात बदल केले. जैविक शक्तीचा पर्याप्त वापर होण्यासाठी केले गेलेले यांत्रिक बदल म्हणून याचाही जैवतंत्रात वापर केला जाऊ शक्तो.

सेंद्रिय शेती - रासायनिक खते, शेतीत वापली जाणारी रसायने, संप्रेरके, रासायनिक कीटकनाशके व जंतूनाशके यांचा वापर न करता सेंद्रिय घटकांचा शेतीत वापर करून जी शेती केली जात त्यासच सेंद्रिय शेती म्हणतात. पर्यावरणाला व मानवी आरोग्याला हानी न पोहचविता अपेक्षित उत्पादन देणारी सेंद्रिय शेती पध्दती आहे.

आध्निक शेती समस्यावर उपाय म्हणून जैवतंत्रज्ञानचा वापर उपयुक्त आहे कारण

- शेती जैवतंत्रज्ञानात जीवाणूंद्वारे कीड नियंत्रण होते.
- विषरहित व ग्णवतापूर्ण दर्जेदार शेती उत्पादने मिळतात.
- अन्नसाखळी सुरक्षित राहते.
- मृदासंवर्धन हो उन्मृदेची उत्पादकता वाढते.
- कृषीपरिसंस्था जैवविविधता टिक्न राहते.
- पर्यावरण संतुलन वाढते व पर्यावरणावर कोणताही दुष्परिणाम परिणाम होत नाही.
 उपरोक्त शेतीत जैवतंत्रज्ञानाच्या वापराचे फायदे होत असल्याने आधुनिक शेतीत जैवतंत्रज्ञानाच्या वापराने आधुनिक शेती समस्यांवर उपाययोजना करणे शक्य आहे.

निष्कर्ष -

जगात लोकसंख्येचा विस्फोट झाला आहे. वाढत्या लोकसंख्येची वाढती अन्नाची मागणी पुर्ततेसाठी आधुनिक शेती पध्दती स्विकारली गेली. आधुनिक शेती पध्दतीच्या तंत्राच्या वापराबाबतचे शेतक-यांचे अज्ञान, शिक्षणाचा अभाव इ. मुळे आधुनिक शेतीमध्ये रासायनिक खते, कीटकनाशके, पाणी, यंत्र इत्यादींचा अयोग्य पध्दतीने वापर केला गेल्याने क्षारपड मृदा, मृदेच्या उत्पादकतेतील घट, कृषी परिसंस्था, मानव, जैवविविधता, पर्यावरण इ. प्रतिकूल परिणाम होतात. असुरक्षित अन्नसाखळी, मृदा जल, हवा इ.चे प्रदूषण यासारख्या विपरीत समस्यांमध्ये वाढ होत आहे.

आधुनिक शेतीच्या समस्यावर उपाययोजना करण्यासाठी शेतीत जैवतंत्रज्ञानाचा वापर वाढविणे गरजेचे आहे. कारण जैवतंत्राच्या वापराने मृदेचे आरोग्य उत्तम राहते. मृदासंवर्धन होते, मृदेची उत्पादकता वाढते, गुणवत्तापूर्ण दर्जेदार शेतमालाचे उत्पादन होते अन्नसाखळी सुरक्षित राहते. कृषी परिसंस्था, जैवविविधता टिकून राहते. पर्यावरणीय संतुलन साधले जाते. म्हणून मानव व पर्यावरणाच्या कल्याणासाठी आधुनिक शेतीत जैवतंत्रज्ञान ही काळाजी गरज बनली आहे.

संदर्भ -

- १) सवदी. ए. बी., पी. एस. कोळेकर भूगोलाची मूलतत्वे (२०१३)
- २) डॉ. सांळ्खे विजया कृषी भूगोल (२००३)
- ३) डॉ. कुंभारे अरूण कृषी भूगोल (२००३)
- ४) शिंदे जगन्नाथ सेंद्रिय खते व जैविक किड नियंत्रण जाने. (२०१४)
- ५) कृषी विचार मासिक अंक ५ सप्टेंबर, (२०१४)
- ६) https://stonezworld.com/advantage-disadvantage-technology-agriculture



कोव्हीड १९ चे परिप्रेक्ष आणि भारतातील मानवाधिकारांची प्रस्तुतता

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प्रस्तावना:

मानवाधिकार संहितेची निर्मिती आणि अनुपालन हे आदर्श राज्यसत्तेचे उत्तम लक्षण असते. मानवाधिकारांची उदघोषणा आणि निर्मिती तसेच भरण-पोषण हेच समाज हा सभ्य, सुसंस्कृत आणि विचार-अभिव्यक्तीने संपन्न असल्याचा दाखला देते. इतिहासात १८ व्या शतकापासून जागतिक समुदायाला आपल्या अधिकारांची प्राकर्षाने जाणीव होऊ लागल्यानेच १७८९ ची फ्रेंच राज्यक्रांती, १९१७ ची रिशयन राज्यक्रांती या घटना पराकोटीच्या मानवाधिकार हनन प्रश्नातून निर्माण झालेल्या परिस्थितीचा परिणाम होता. भारतीय परिस्थितीच्या बाबतीत सांगायचे तर, १८५७ चा उठाव आणि भारतीय स्वातंत्र्याची चळवळ सुद्धा मानवाधिकार नाकारणाऱ्यांच्या विरोधातील उत्स्फूर्त क्रिया-प्रतिक्रिया होती. जगभरात लोकशाही आणि समाजवादाच्या विचारांनी झपाटलेल्या तरूणांनी केलेल्या क्रांत्या या मूलतः राजकीय स्वातंत्र्याबरोबरच मानवाधिकारांच्या उत्कट आशावादाने झालेल्या होत्या. स्वराज्य, स्वातंत्र्य, जनतेचे सार्वभौमत्व, मूलभूत अधिकार, मानवाधिकार या प्रकारच्या आशा-आकांक्षा घेऊन हा उपेक्षित समाज बलाढ्य साम्राज्यावाद्यांसमोर उभा ठाकला.

मानवी हक्क किंबहुना मानवाधिकार ही संकल्पना आधुनिक युगात अधिक स्पष्टपणे आणि ताकतीने अस्तित्वात आलेली दिसत असली तरी तिचा उदभव आणि विकास मात्र प्राचीन काळापासून होत असलेला पहावयास मिळतो. त्या काळात या संकल्पनेला जरी "मानवाधिकार" असा प्रचलित असलेला शब्द अस्तित्वात नव्हता तरी पण लोककल्याणाच्या हेतूने जे कायदे, संहिता, नियमावली, संकेत बनवले गेले त्यात मानवाधिकाराला अपेक्षित असलेले सर्व अर्थ, अन्वयार्थ, जाणिवा, त्यामध्ये समाविष्ट होत्या. प्राचीन ग्रीक नगरराज्यांपासून नंतरच्या काळात जगभर झालेल्या राज्यक्रांत्या, संयुक्त राष्ट्रसंघाने मानवाधिकारां संबंधी घेतलेली भूमिका, भारतीय राज्यघटनेमध्ये समाविष्ट केलेले मूलभूत अधिकार आणि स्वातंत्र्ये असा मानवाधिकारांचा प्रवास होताना दिसतो. 'मानवाच्या आंतरिक विकासासाठी आवश्यक असलेली बाह्य परिस्थिती म्हणजे हक्क होय.' अशी हक्कांची व्याख्या टी.एच. ग्रीन या तत्त्ववेत्त्यांने केलेली आहे. या व्याख्येवरून आपणास असे दिसून येते की मानवाचा खरा विकास हा आंतरिक विकास असतो आणि त्यासाठी बाहेरील परिस्थिती तेवढीच पूरक आणि पोषक हवी असते. अर्थातच ही बाह्य परिस्थिती व्यक्तीच्या आंतरिक विकासासाठी पूरक आणि अनुकूल करण्याची जबाबदारी राज्याची किंवा अधिसत्तेची असते. असे ग्रीन यांना म्हणायचे आहे. ग्रीन यांच्या वरील व्याख्येचा खोलात जाऊन परिसीमन केल्यास मानवाधिकारांची निर्मिती, भरण-पोषण, अनुपालन या सर्व जबाबदाऱ्या राज्याच्या म्हणजेच सरकारच्या असल्याचे दिसते.

भारतीय राज्य घटनेच्या तिसऱ्या भागात कलम नंबर १४ ते ३२ मध्ये दिलेले मूलभूत अधिकार हे देखील मानवाधिकारच होते. भारतीय राज्यघटनेने देखील नागरिकांचे मूलभूत हक्क प्रदान करण्यासाठी आणि त्यांचे रक्षण करण्याची जबाबदारी राजकीय व्यवस्थेकडेच दिलेली आहे व तशी तरतूद लिखित स्वरूपात केलेली आहे आणि अनवधानाने किंवा घटनेतील तरतुदींचा दुहेरी अर्थ काढून शासनाने सुद्धा नागरिकांच्या मूलभूत हक्क्षांच्या रक्षणापासून पळवाट काढू नये म्हणून राज्य, राज्याची व्याख्या व मूलभूत हक्क्षांच्या रक्षणाची जबाबदारी याविषयी स्पष्ट शब्दात लिहून ठेवले आहे. "१२ या भागात संदर्भानुसार अन्यथा आवश्क नसेल तर, "राज्य" या शब्दात भारताचे सरकार व संसद आणि राज्यांपैकी प्रत्येक राज्याचे शासन व विधानमंडळ आणि भारताच्या राज्य क्षेत्रातील अथवा भारत सरकारच्या नियंत्रणाखालील सर्व स्थानिक किंवा अन्य प्राधिकरणे यांचा समावेश आहे.

(२) राज्य, या भागाने प्रदान केलेले हक्क हिरावून घेणार नाही किंवा त्यांचा संकोच करणारा कोणताही कायदा करणार नाही आणि या खंडाचे उल्लंघन करून केलेला कोणताही कायदा त्या उल्लंघनाच्या व्याप्तीपुरता शून्यवत असेल."१

अशा पद्धतीची खंबीर शब्दरचना राज्यघटनेत मूलभूत अधिकारांच्या बाबतीत केलेली आहे. घटनेतील हे मूलभूत अधिकार लोकांना मिळाले पाहिजेत व सुरक्षित पण राहीले पाहिजेत असा डॉक्टर बाबासाहेब आंबेडकरांचा आग्रह होता. डॉक्टर बाबासाहेब आंबेडकरांची लोकशाही मूल्यांवर प्रगाढ श्रद्धा होती व भारतातील मानवाधिकारांचे भविष्य काय असणार याविषयी त्यांना दूरदृष्टी होती त्यामुळे स्वातंत्र्यापूर्वीच १९४६ ला त्यांनी लोकशाहीची चतु:सूत्री देशापुढे ठेवली होती. "१) व्यक्ती हे ध्येय आहे. २) व्यक्तीचे काही अधिकार अदेय आहेत. या अधिकारांची हमी राज्यघटनेने दिली पाहिजे. ३) कोणत्याही व्यक्तीला सुखसोयी प्राप्त करून घेताना त्या व्यक्तीवर राज्यघटनेने दिलेले अधिकार सोडून देण्याची पाळी येऊ नये, आणि ४) राज्याने कोणत्याही खाजगी व्यक्तीला इतरांवर राज्य करण्याचे अधिकार देऊ नयेत."२

मानवाधिकार या संकल्पनेचा प्राचीन काळापासून लिहिलेल्या अनेक सामाजिक, राजकीय, अथवा धार्मिक ग्रंथांचे अध्ययन केल्यास त्यातून मानवी कल्याणाकरिता राजकीय व्यवस्थेनेच पुढाकार घेऊन मानवाधिकारांची निर्मिती आणि रक्षण करण्याची जबाबदारी घेतली पाहिजे. असा अन्वयार्थ निघतो. साधारण १४०० शे वर्षापूवी लिहिलेल्या कुराण या इस्लामीक धर्मग्रंथामध्ये मानवी हक्कांबाबत पुढील उदगार लिहिले आहेत. "The first and the foremost basic right is the right to live and respect human life. The Holy Quran lays down: Whosoever kills a human being without (any reason like) man slaughter, or corruption on earth, it is as though he had killed all mankind The Quran upholds the sanctity and absolute value of human life and points out that, in essence, the life of each individual is comparable to that of an entire community and, therefore, should be treated with the utmost care" ३

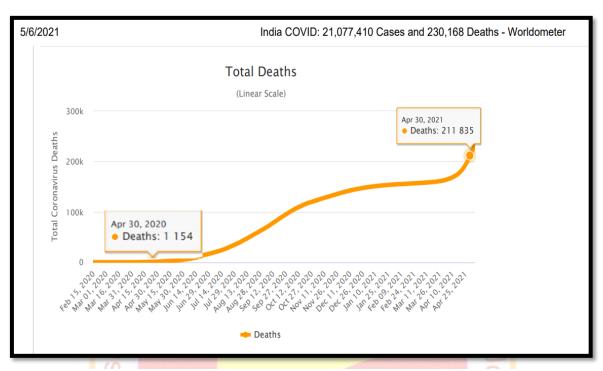
डॉ. कृष्णकुमार शर्मा यांच्या मते, "ये वे अधिकार है जिनकी व्यवस्था राज्य द्वारा की जाती है और जिनका उल्लंघन कानून से दण्डनिय होता है। कानून का संरक्षण प्राप्त होने से इन अधिकारों को लागू करने के लिये राज्य द्वारा आवश्यक कार्यवाही कि जाती है। " 8 हे विवेचन असे स्पष्ट करते की, मानवाधिकारांची निर्मिती आणि रक्षण लोकनियुक्त राजकीय व्यवस्थेचीच असते तसेच डॉक्टर करुणा शर्मा या मानवाधिकाराच्या भारतीय अभ्यासक म्हणतात. " Today human rights have become a subject of animated discussion not only at the international level but also in national jurisdictions, Every country, whether developed or developing, expresses concern for promotion and realization of human rights but the approach varies."

१० डिसेंबर १९४८ ला संयुक्त राष्ट्रसंघाने मानवी हक्कांच्या जाहीरनाम्याला (Universal Declaration of Human Rights) अधीमान्यता प्रदान केली. या जाहीरनाम्यामध्ये सर्व मानव हे हक्क व प्रतिष्ठा याबाबतीत जन्मतः स्वतंत्र व समान आहेत तसेच प्रत्येक व्यक्तीस जीवन जगण्याचा, स्वातंत्र्याचा आणि व्यक्तिगत सुरक्षिततेचा हक्क असल्याचे ठामपणे सांगितले आहे. १९६६ सालच्या नागरी व राजकीय हक्कांवरील आंतरराष्ट्रीय संधी / कराराच्या कलम नंबर ७ मध्ये देखील नागरिकांस छळ किंवा क्रूर अमानवी किंवा अवमानकारक वागणूक किंवा शिक्षा या विरुद्धचा अधिकार दिलेला आहे. भारतीय राज्यघटनेच्या विभाग ३ मध्ये कलम नंबर १४ ते ३२ मध्ये देखील जो समतेचा आणि इतर अधिकार दिले आहेत, त्यांचा परामर्श घेतला असता त्यातून सुद्धा हाच अर्थ ध्वनित होतो की, मानवाधिकार हे मूलतः मूलभूत अधिकार असतात. ते व्यक्तीस जन्मापासून निसर्गतः असले पाहिजेत त्या अधिकारांचे उधगम, रक्षण, दर्जा आणि सन्मान प्रस्थापित करण्याची जबाबदारी शासनाची असते.

"आंबेडकरांच्या मते, लोकशाही केवळ एक घोषणा किवा शासनाचा प्रकार असून चालत नाही तर तो समाजाने स्वीकारलेला जीवनमार्ग असावा लागतो. समाजातील सामाजिक व नैत्तिक सदसदिववेक जर मानवी हक्कांच्या पाठीशी नसेल तर त्याचा त्या हक्कांना संरक्षण देण्यास संविधान, कायदे वा न्यायव्यवस्था अपूर्ण ठरणे अपरिहार्य असते. अशा सदसदिववेका अभावी अमेरिकेतील नीग्रो, जर्मनीतील ज्यू आणि भारतातील अस्पृश्य यांचे हक्क असून नसल्यासारखेच ठरतात." ६

या सर्व स्थानिक, प्रादेशिक, राष्ट्रीय, आंतरराष्ट्रीय, धार्मिक, अध्यात्मिक, वैद्यकीय अशा सर्व बाजूंनी मानवाधिकाराची निर्मिती, जतन, पालन व सुरक्षित ठेवण्यासाठी तरतूद आणि प्रयत्न चालू असताना मार्च २०२० पूर्वीपासून म्हणजे भारतामध्ये कोरोनाचा लॉकडाऊन कालखंड सुरू होण्यापूर्वी पासून कोरोनाच्या महामारीने थैमान घातला आणि आज अखेर अक्षरश: मृत्यूने तांडव घातलेले आहे प्रेतांची विल्हेवाट लावणे हाच सर्वात महत्त्वाचा प्रश्न निर्माण होईपर्यंत भारतातील मानवाधिकारांवर श्रद्धा आणि विश्वास असणाऱ्या माणसांची मृत्यूश्य्येकडे होणाऱ्या वाटचालीला जबाबदार कोण ? असा प्रश्न निर्माण होतो त्यावेळी त्यास कारणीभूत असणारे जेवढे म्हणून घटक आहेत त्यात सर्वोच्च ठिकाणी सरकारी

यंत्रणेचा नंबर लागतो. ३० एप्रिल २०२० ते ३० एप्रिल २०२१ या साधारण वर्षभराच्या कालावधीतील भारतात मृत्यू झालेल्या आकडेवारीचा आलेख पाहिल्यानंतर तो मृत्यूदर पाहून भयचिकत व्हायला होते. वल्डोमीटर या संस्थेने दिलेला आकडेवारी सह आलेख त्यासाठी खुपच बोलका आहे.



कोरोना महामारीत संपूर्ण देश होरपळून निघाला. विशेषतः दिल्ली, अहमदाबाद, मुंबईसह संपूर्ण महाराष्ट्र यात अग्रेसर राहिला. या कालखंडात देशाच्या इतिहासामध्ये कधी झाली नसेल एवढी मानवाधिकारांची हानी झाली. मानवी जीवनमानाची घसरण होऊन माणसाचा जीव कवडीमोल झाला. याही परिस्थितीत काही समाज घटकांनी बक्कळ संपत्ती कमवली. अन्नधान्यांचे दर गगनाला भिडले. दवाखान्याच्या बिलाच्या रकमानी आकाश गाठलं. नोकरी. व्यवसाय. रोजगार अस्तंगत झाले आणि असंघटित क्षेत्रात काम करणारे मजूर, कामगार, बुद्धिजीवी, श्रमजीवी भिकेकंगाल झाले. कोरोनाने धर्म, जात, लिंग, प्रदेश, असा कोणताही भेदभाव केला नाही. भारतामध्ये असणाऱ्या धर्म, जात, भाषा, प्रदेश, यांच्या भिंती खुज्या ठरतील एवढी त्याहून मोठी भिंत नव्याने देशाने पाहिली ती म्हणजे "आहे रे आणि नाही रे" वर्गांची. या दोन वर्गांमध्ये पद्धतशीर विभागणी करणारी भिंत कोरोना पूर्वी सामान्य परिस्थितीत ही भिंत अस्तित्वात होतीच पण कोरोनाच्या कालखंडात मात्र या दोन गटातील लोकांमध्ये फेरबदल झाले आणि खाजगी कंपन्यांमध्ये बक्कळ पगारावर रुजू झालेले तथाकथित "आहे रे" वर्गात पोहोचलेल्या विभूती बघता बघता नोकऱ्या, रोजगार गेल्याने कधी "नाही रे" वर्गात पोहोचले हे त्यांना देखील कळले नाही. नोकरी, रोजगार, व्यवसाय, मोलमजुरी, कॉटेज इंडस्ट्री, लघुउद्योग एवढेच नव्हे तर जड उद्योग सुद्धा अस्तंगताला पोहोचले. देशाच्या जी.डी.पी. ने तळ गाठला. जीविताचा हक्क हा मूलभूत मानवाधिकार समजून उराशी कवटाळून पायपीट करणाऱ्या मजुरांची पोलिसी यंत्रणेमार्फत झालेली मारपीट, उपजिविकेसाठी महाराष्ट्रातील महानगरांमध्ये आलेल्या परराज्यातील कामगारांना वाहतूक व्यवस्थेअभावी शेकडो नव्हे हजारो मैल जीव मुठीत धरुन पायपीट करावी लागली. या प्रयत्नातसुद्धा अनेकांना आपला जीव गमवावा लागला. खरा प्रश्न आहे तो म्हणजे भारतामध्ये एवढी विपरीत आणि भीषण परिस्थिती का निर्माण झाली आणि ही परिस्थिती गंभीर होणार याची जाणीव असताना सरकारने जी भूमिका बजावली ती खरी मानवाधिकाराची धूळधाण करणारी ठरली. मानवाधिकारांचे उल्लंघन किंवा हनन ज्यावेळी एखादी व्यक्ती किंवा व्यक्ती समृह करतो त्यावेळी त्यास रोखण्यासाठी पोलीसी आणि न्यायिक यंत्रणा असते परंत अशी कृती राजकीय अधिसत्तेकडून होते त्यावेळी मात्र त्यास गंभीर आयाम प्राप्त होते.

कोरोनाच्या कालखंडात मानवी समुदायाला सुरक्षित ठेवण्यामध्ये सरकारी यंत्रणा पूर्णपणे अपयशी ठरली. त्यातून मानवधिकारांची पायमल्ली झालीच पण परिस्थितीची जाणीव असतानासुद्धा सरकारने उपलब्ध साधनसामग्रीचा योग्य नियोजन आणि वितरण न केल्यामुळे कोरोनाची दुसरी लाट येईपर्यंत पूर्वतयारीला वाव असतानासुद्धा सरकारने त्याविषयी गांभीर्याने पावले उचललेली दिसली नाहीत. औषधे, लसी, ऑक्सिजन, दवाखान्यातील बेड यांचे उत्पादन व वितरण योग्य प्रकारे झाले असते तर कदाचित आजची परिस्थिती उदभवली नसती म्हणजे एखादी आरोग्याची परिस्थिती बिघडल्यानंतर केली जाणारी हलगर्जी व दुर्लक्षित पणा हे मानवाधिकारांचे उल्लंघन ठरतेच पण येणारी भविष्यकालीन परिस्थिती माहित असताना सुद्धा त्यावर पूर्विनयोजित उपायोजना न करणे म्हणजे देखील मानवाधिकारांचे उल्लंघन ठरते. परिणामी मानवी समुदायाला एका भीषण परिस्थितीत लोटणे हे देखील मानवाधिकारांचे उल्लंघन म्हणावे लागेल.

"मनुष्याच्या समाजिनष्ठ इच्छेचे समाजिहताशी सुसंवादित्व प्रस्थापित होत असते. समाजिनष्ठ इच्छेच्या अमलाखाली असताना व्यक्ती आपले जे मत व्यक्त करतात, त्यास सामाजिक इहा म्हणने योग्य ठरते. या दृष्टीकोनातून मानवी हक्क चळवळ ही सामाजिक इहा होऊ शकते. समाज लाखो व्यक्तीनी मिळून तयार होतो. त्यापैकी ज्या ज्या व्यक्ती, ज्या ज्या क्षणी आपल्या समाजिनष्ठ इच्छेच्या अमलाखाली वागताना जो मनोदय व्यक्त करतात,त्यास सामाजिक इहा - General will – असे म्हणता येईल. समाजातील सर्व समाजिनष्ठ इच्छांची बेरीज म्हणजे 'सामाजिक इहा' होय. वरील विचारांची, अटीची 'मानवी हक्क' हि संकल्पना 'पूर्तता' करीत असल्याने 'मानवी हक्क' चळवळ हि सामाजिक इहा General will of the people , for the people , by the people होऊ शकते."

समारोप

भारतामध्ये कोरोना काळात मानवाधिकारांचे झालेले उल्लंघन ही काही नवीन बाब नव्हे. आपल्या देशात नेहमीच जातीयसंघर्ष, आंदोलने, मोर्चे, सामाजिक तणाव, निवडणूका, दहशतवादी हल्ले, गुन्हेगारी, देशांतर्गत चालू असलेल्या राष्ट्रद्रोही घडामोडी, जत्रा – यात्रा, उरुस, सभा-संमेलने, यातून आपले वर्तन भावनेच्या आधारे होताना दिसते. त्यातून अनेक वेळा प्रकट आणि छुप्या पद्धतीने सामान्य माणूस आणि समाजकंटक तसेच काळाबाजार करणारे मानवाधिकारावर हल्ले करताना दिसतात. या परिस्थितीतून मानवी समुदायाची सुटका करण्याची जबाबदारी जेवढी मानवाधिकार उपभोगनाऱ्या जागृत समाजाची असते त्यापेक्षा अधिक जबाबदारी लोकमान्य अधिसत्तेची असते. व हीच अधिसत्ता मानवाधिकारांशी प्रतारणा करून लागली तर मात्र येणाऱ्या कोरोनोत्तर कालखंडात देखील अशा कोणत्या ना कोणत्या कारणांचा आधार घेऊन मानवाधिकारांची पायमल्ली होत राहणार. यासाठी समाजाने फक्त राजकीय व्यवस्थेवर विसंबून न राहता व्यक्तिगत आणि सामुहिक पातळीवर मानवाधिकारांच्या रक्षणासाठी तत्पर असले पाहिजे.

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महाराष्ट्रातील व्यापारी पिकांचे वैशिष्ट्य अभ्यासणे

प्रियंका जयराम पवार

संशोधक विद्यार्थीनी, अर्थशास्त्र विभाग,

डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद.

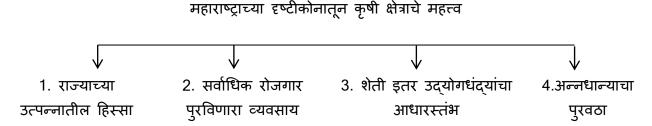
E-mail: pawarpriyanka435@gmail.com

गोषवारा :

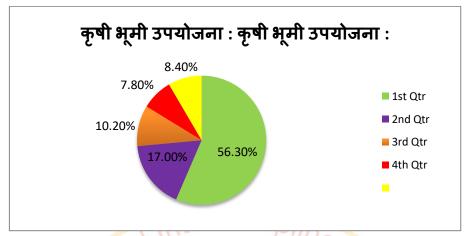
"महाराष्ट्रातील व्यापारी पिकांचे वैशिष्ट्ये अभ्यासणे" हया संशोधनात महाराष्ट्रातील प्रमुख तीन व्यापारी पिकांचा समावेश करण्यात आला. 1) ऊस,2) कापूस, 3) एकूण तेलिबया. या व्यापारी पिकांच्या उत्पन्न, उत्पादकता व क्षेत्रनिहाय आकडेवारी येथे लक्षात घेतलेली आहे. तसे आकडेवारीचे संख्यात्मक विश्लेषणासाठी सरासरी, प्रमाण विचलन (S.D.) विचलन गुणक (C.V.) काढण्यात आलेले आहे. संशोधनासाठी 2004-05 ते 2015-16 कालावधी लक्षात घेतलेला आहे. या संशोधनातून प्रमाण विचलन गुणकाचे मूल्य दर्शनीय भूमिका निभावतात. जे ऊस, कापूस व तेलिबयाचे क्षेत्रातील व उत्पन्नातील बदल तसेच उत्पादकतेतील उत्पन्नावरील बदल मोजण्यास सक्षम ठरतात.

प्रास्ताविक :

मानवाच्या दैनंदिन गरजा भागविण्यासाठी आवश्यक असणारे अन्नधान्य, डाळी, भाजीपाला, फळे इ. पुरविण्याची जबाबदारी शेती क्षेत्रामार्फत समर्थपणे सांभाळली जाते. इतकेच नव्हें तर बहुतेक उद्योग-धंद्यांना लागणारा कच्चा माल हा शेती व्यवसायातून प्राप्त होतो. म्हणजेच एका बाजुला जीवनाश्यक गरजांची पुर्तता करणे व दुसऱ्या बाजुला देशाच्या औद्योगिकीकरणास साहाय्य करणे अशी दुहेरी भूमिका शेती वठविते. त्यामुळेच प्रत्येक देशाच्या अर्थव्यवस्थेमध्ये शेती क्षेत्राला खूपच महत्त्व असते. मानवाच्या उत्पतीपासून भारताच्या आर्थिक व सामाजिक जीवनात शेतीची फार उल्लेखनीय भूमिका राहिली आहे. शेती हा आपल्या अर्थव्यवस्थेचा कणा आहे. महाराष्ट्रातील कृषी क्षेत्राचा विचार केला असता असे लक्षात येते की, महाराष्ट्रातील 60% जनता प्रत्यक्ष व अप्रत्यक्षपणे शेती क्षेत्रावर आधारित आहे. शेती क्षेत्र हे राज्याच्या आर्थिक धोरणातील महत्त्वपूर्ण घटक आहे. म्हणूनच राज्यात औद्योगिक विकास जलद होत असला तरी शेतीचे महत्त्व कायम आहे. अन्नरधान्याच्या उत्पादनात वाढ होत असताना त्यातील महत्त्वाचा प्रश्न म्हणजे शेतकऱ्यांचे न वाढणारे उत्पन्न आहे. उत्पादन वाढले तर उत्पन्न वाढणे अपेक्षित असते. परंतु अन्नधान्य पिकांच्या संदर्भात हे चुकीचे ठरत आहे. फक्त अन्नधान्याच्या पीका संदर्भात नाही तर व्यापारी पीकासंदर्भत देखील असे होत आहे. एखाद्या प्रदेशातील, राज्यातील वा देशातील शेतीचा अभ्यास करताना तेथील महत्त्व, कृषी भूमी उपायोजन तसेच तेथील शेतीच्या समस्यांचा अभ्यास अनिवार्य आहे. म्हणून हया संशोधनात व्यापारी पिकांचे वैशिष्ट्ये अभ्यासलेले आहे.



कृषी भूमी उपयोजना :



स्त्रोत: महाराष्ट्रातील आर्थिक पाहणी अहवाल 2015-16

56.3% निव्वळ प्रेरणी क्षेत्र.

17.00% वनाखालील क्षेत्र.

10.2% मशागतीसाठी उपलब्ध नसलेले क्षेत्र नापिक व मशागतीसाठी अयोग्य जमीन आणि बिगर शेती वापराखलील जमीन.

7.8% मशागत न केलेले इतर क्षेत्र मशागतीसाठी योग्य पडीक जमीन कायमची क्रणे.

7.8% चराऊ क्रणे आणि किरकोळ झाडे-झुडपे यांच्या समुहाखलील क्षेत्र.

संशोधन पद्धती :

प्रस्तुत संशोधन दुय्यम आधार सामग्रीवर आधारलेले आहे. तथ्य संकलन, वर्गीकरण, सारणीयन इ. साठी सांख्यिकीय पद्धतीचा वापर करण्यात आलेला आहे. तसेच अर्थनिर्वचनासाठी समांतर मध्य, प्रमाण विचलन, विचलन गुणक इ. सांख्यिकीय तंत्राचा वापर करण्यात आलेला आहे.

2349-638

Mean
$$X = \Sigma X/n$$

1.समांतर मध्य= (एकूण मूल्य)/(एकूण घटक)

व्याख्या : कोणत्याही आकडेवारीच्या श्रेणतीतील सर्व संख्यांच्या बेरजेला एकूण संख्येने भागले असता येणाऱ्या संख्येला समांतर मध्य म्हणतात.

2. प्रमाण विचलन (Standard Deviation S.D.) :

प्रमाण विचलन संकल्पना सर्वप्रथम 1893 मध्ये कार्ल पिअरसने मांडली. प्रमाण विचलन अपिकरण काढण्यासाठी हे मध्य प्रचलित व उपयुक्त आहे. प्रमाण विचलन काढताना चिन्ह विचारात घेतले जातात. शिवाय प्रमाण विचलन मूल्य सर्व घटकांवर अवलंबून असते. प्रमाण विचलनाचे उत्तर जेवढे जास्त, तेवढे अवलोकनातील एक जिसनीपणा कमी असतो, तर या उलट प्रमाण विचलनाचे उत्तर कमी असताना अवलोकनातील एकजिनसीपणा जास्त असतो. या सर्व गुणांमुळे प्रमाण विचलन ही अपिकरण मोजण्यास सर्वात चांगली पद्धती आहे. प्रमाण विचलनासासठी ग्रीक शब्द सिग्मा हया चिन्हाचा दर्शविण्यासाठी उपयोग केला जातो.

सूत्र :

S.D. $(\sigma) = \sqrt{(\Sigma [dx]^2)/N}$

dx2 = विचलनाचा वर्ग

N = पदांची संख्या

प्रमाण विचलनाचा ग्णक =σ/a

a = मध्य

व्याख्या : दिलेली अवलोकने एकमेकांपासून विख्रण्याची तीव्रता मोजण्याचे सांख्यिकीय साधन म्हणजे प्रमाण विचलन होय.

3. विचरण गुणांक (Co-efficient of variation) (C.V)

ज्या पदमालेत विचरण गुणांक जास्त त्या पदमालेत विचलन जास्त, तर ज्या पदमालेत विचरण ग्णांक कमी त्या पदमालेत विचरण ग्णांक कमी त्या पदमालेत विचलन कमी असते.

सूत्र : विचरण गुणक <mark>= (प्रमाण विचलन)/मध्य×100</mark>

C.V. = (S.D)/x 100

व्याख्या : प्रमाण विचलनाचे समांतर मध्याशी असलेले शेकडा प्रमाण म्हणजे विचरण गुणक होय.

संशोधनाची उद्दिष्टये:

- भौगोलिक स्थिती अभ्यासणे.
- महाराष्ट्रातील प्रमुख व्यापारी पिकांचा अभ्यास करणे.
- व्यापारी पिकांचे वैशिष्टये अभ्यासणे.
- सामाजिक कल्याणात व्यापारी पिकांच्या भूमिका अभ्यासणे.

संशोधन मर्यादा :

संशोधनात महाराष्ट्रातील ऊस, कापूस आणि सर्व प्रकारच्या तेलबियांचे एकूण उत्पादन, क्षेत्र, उत्पादकता हया तीन चला अधारे अभ्यास करण्यात आलेला आहे. तसेच हया संशोधनासाठी 2004-05 ते 2015-16 पर्यंतचा कालावधी लक्षात घेतला आहे.

महाराष्ट्र राज्यातील ऊस, कापूस, एकूण तेलबिया, उत्पादन, क्षेत्र व उत्पादकता निहाय आकडेवारी (2004-2016)

पीके	घटक	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
		-05	-	-07	-08	-09	-10	-11	-12	-13	-14	-15	-16
			06										
ऊस	क्षेत्र	3269	5007	8488	1092	7684	7559	9645	1022	9381	9371	1029	9868
					8				0			6	
	उत्पादन	2391	3881	6627	8843	6064	6415	8569	8945	7533	8395	9153	6923
		37	37	74	71	83	94	14	61	50	42	80	53

	उत्पाद	73	78	78	81	79	85	89	88	80	90	89	70
	कता												
कापूस	क्षेत्र	2839	2875	3106	3195	3146	3391	3941	4166	4187	4159	4189	4206
		5	0	9	4	0	5	9	7	0	5	9	9
	उत्पादन	2938	3160	4617	7014	4752	5111	7472	6820	6793	8834	3576	3913
		5	1	5	9	3	3	7	4	0	5	9	9
	उत्पाद	176	187	253	373	257	256	322	278	276	361	145	158
	कता												
तेलिब	क्षेत्र	3325	3659	3861	3841	3978	3885	3627	3701	3691	4181	4211	4194
या		2	1	7	1	6	2	6	6	4	8	3	9
	उत्पादन	2697	3403	3725	4911	2489	2819	5056	4518	4864	2275	2178	2166
		4	8	20	0	0	9	2 3	5	8	2	2	0
	उत्पाद	811	930	965	279	626	726	394	1221	1398	1163	541	516
	कता												

स्त्रोत : महाराष्ट्राची आर्थिक पा<mark>ह</mark>णी अहवाल 2004-16

(Area in 00 ha, Productivity in Kg/ha, production in 00 Tonnes)

Note: Productivity of sugrame in Tonnes/ha.prduction of cotton in 00 bales of 170 Kg each.

विश्लेषण आणि निष्कर्ष :

तकता क्र. 1 मध्ये महाराष्ट्र राज्यातील ऊस, कापूस, एकूण तेलबिया यांचे क्षेत्र उत्पादन व उत्पादकता निहाय आकडेवारी दर्शवलेली आहे. यात 2004-05 मध्ये ऊसाचे क्षेत्र उत्पादन आणि उत्पादकता अनुक्रमे 3269, 239137 आणि 73 तर 2016 मध्ये त्यात वाढ दिसून येते. क्षेत्र 9868 हेक्टर, उत्पादन 692353 टन आणि उत्पादकता मात्र कमी झालेली आढळते. 70 kg/ha. महाष्ट्रातील कापूस या व्यापारी पिकाचा विचार केल्यास कापसाचे क्षेत्र, उत्पादन आणि उत्पादकता 2004-05 ते 2015-16 अनुक्रमे क्षेत्र 28395 हेक्टर, 29385 टन, 176 kg/ha असे 2004-05 मध्ये तर 42069 हेक्टर क्षेत्र तर उत्पादन 39139 टन आणि 158 उत्पादकता आढळते. येथे देखील ऊसाप्रमाणे क्षेत्र उत्पादनात वाढ दिसते परंतु उत्पादकता मात्र कमी झालेली आहे. महाराष्ट्रातील एकूण तेलबिया उत्पादन क्षेत्र आणि उत्पादकता 2004-05 मध्ये 33252 हेक्टर, 26974 टन 811 kg/ha ऐवढे आढळते तर 2016 मध्ये 41949 हेक्टर, 21660 टन, 516 kg/ha उत्पादकता येथे देखिल कमी झालेली आहे.

तक्ता क्र. 2 महाराष्ट्रातील ऊस, कापूस व तेलबियाची सरासरी, प्रमाण विचलन आणि विचलन गुणक (%)

पिके		सरासरी	प्रमाण विचलन	विचलन गुणक (%)
ऊ स	क्षेत्र	8349818	2362.05	28.29%
	उत्पादन	698385.7	220984.7	31.65%

	उत्पादकता	82.72	5.728	6.93%	
कापूस	क्षेत्र	35635	5647.74	15.85%	
	उत्पादन	55538.27	19471.12	35.06%	
	उत्पादकता	262.18	72.81	27.78%	
तेलबिया	क्षेत्र	38149.64	2556.59	6.70%	
	उत्पादन	38112.55	11262.26	29.55%	
	उत्पादकता	1004.9	305.6313	30.41%	

Note: 2004-05 ते 2015-16 ची आकडेवारीवर आधारित

तक्ता क्र. 2 मध्ये महाराष्ट्रातील प्रमुख व्यापारी पिके ऊस, कापूस आणि तेलबियांची सरासरी, प्रमाण, विचलन आणि विचलन ग्णक दर्श<mark>विलेला आहे. महाराष्ट्रातील ऊसाचे क्षेत्रा</mark>तील चढ-उतारातील प्रमाण 28.29% आहे. तर उत्पादकतेतील <mark>प्रमाण 6.93% आढळते. यावरुन अ</mark>से लक्षात येते की, क्षेत्रातील चढ-उताराचे प्रमाण ऊसाचे उत्पाद<mark>नास प्रभावित करत आहे जे 31.65% आहे</mark>. कापसा संदर्भात उत्पादनाला उत्पादकतेतील चढ-<mark>उताराचे प्रमाण प्रभावित करताना आढळते. जे पुढील प्रमा</mark>णे 15.85% (क्षेत्र प्रमाण) 35.06% (उत्पादन प्रमाण<mark>) 27.78% (उत्पादकता प्रमाण) तेलबिया संदर्भात</mark> 6.70% क्षेत्र प्रमाण तर 29.55% उत्पादन प्रमाण <mark>आणि 30.41% उत्पादकता प्रमाण आढळते.</mark>

सारांश :

बजारपेठेत ऊस व कापूस आणि तेलबिया उत्पन्नाची असणारी मागणी व प्रवठयावरुन त्यांच्या उत्पादन वाढीची तीव्र<mark>ता लक्षात येते. क्षेत्रफळाच्या तुलनेत उत्पन्न व उत्पा</mark>दकतेत <mark>अ</mark>सणारी तफावत तसेच क्षेत्रातील वाढीबरोबर उत्पादकता वा<mark>ढणे देखील अपेक्षित आहे. परंत्</mark> क्षेत्रातील वाढीचा उत्पन्न परिणाम होत आहे परंत् उत्<mark>पाद</mark>कता वाढली तर वरिल तीन्ही व्यापारी पिकांच्या उत्पन्नातून महाराष्ट्रातील कृषी क्षेत्र समृद्धीच्या दिशेने वाटचाल करण्यास सक्षम आहे.

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कबीर दास की धार्मिक भूमिका

डॉ. दतात्रय सदाशिव अनारसे सहायक प्राध्यापक, हिंदी विभाग वीर वाजेकर कला, विज्ञान एवं वाणिज्य महाविद्यालय, फुंडे तह. उरण जिला- रायगड नई मुम्बई dattatrayanarse@gmail.com

सारांश:-

जगत का निर्माण ईश्वरी वरदान है | उसमें अनेकविध परिवर्तन आ गए | जैसे-जैसे मनुष्य परिवर्तन पा रहा था, वैसे-वैसे सामाजिक उथल-पुथल से अपना परिघ अनुभव कर रहा है | प्रकृति का वास्तविक गुण परिवर्तन है | उसके अनुरूप परिवर्तन हमें इतिहासों द्वारा अनुभव कर रहे हैं | ऐसा ही परिवर्तन भिन्तकाल में भिन्ति के मार्ग पर नजर आता है | कर युग का अपने अस्तित्व का गुण होता है |

आदिकालीन परिस्थितियों से समाज अन्याय, अत्याचार, लोगों का भयभीत होना, मंदिरों और मस्जिदों में लोगों का आकर्षण इतिहास के माध्यम से दिखाई देता है | ऐसी ही परिस्थिति में भयभीत लोगों को ढोंगी, पाखंडी साधुओं के द्वारा फसाया दिखाई देता है | इसी को देखकर १४ वीं शती में महात्मा कबीर दास जैसे महान संत का कार्य अधोरेखित करने जैसा प्रतीत होता है | समाज में स्वार्थ और आत्मकेंद्री दिखाई देता है |

कुंजीपटल -

हिन्द्-मुस्लिम <mark>एकता, पाखंड, अन्याय, अत्याचार, मस्जिद-मंदिर,</mark> प्रकृति[े]की महिमा, विश्व में सबसे श्रेष्ठ भारतभूमि की परिक<mark>ल्पना, विश्वबंधुत्व की भावना, निराकार ब्रह्म</mark> की आरा<mark>ध</mark>ना आदि ।

विषय विवरण -

वर्तमान परिस्थिति में समाज को स्थिर करने एवं धीरज देने का कार्य महान संत किव कबीर दास जी ने किया है | उन्होंने निर्गुण ईश्वर को भजने का आग्रह किया है | जिसमें निराकार, अदृश्य ईश्वर को भजने की बाते की है | मानवी सभ्यता और संस्कृति को समाज केन्द्री मनुष्यों ने अपने आचरण और विचार-विवेक से दिशा निर्देशित किया है | उन्होंने सामाजिक स्तर पर अपने सुख- शांति और स्वार्थ को तिलांजिल देकर मानवी सभ्यता-संस्कृति को संपन्न एवं समृध्द किया है | अपने हृदय की विशालता, कर्म की महानता, तथा आचरण की गरिमा का सर्वश्रेष्ठ परिचय देकर मानवी मूल्यों की निर्मित की है |

विश्व में अनेक देश विराजमान है | लेकिन भारतभूमि की महिमा कोई और ही है | जिसमें मन, सम्मान, आदर्श, संस्कार आदि की विरासत दिखाई देती है | धार्मिक चिंतन स्थित परिस्थितियों को मध्यनजर रखते हुए किया जाता है | यही कार्य महात्मा कबीर दास जी ने किया है | धर्म वास्तविक रूप से मानव समाज की साधना और मूल्यों का संस्कार है | तत्कालीन समाज में व्याप्त विषमता, विकृति, छल-कपट आदि स्वाभाविक रूप से प्रकट हुआ है |

कबीर दास अपने विचारों से समाज में जागृति लाने की कोशिश करते हैं, लेकिन समाज में व्याप्त कर्मकांड, बाहयचार, बाहयाडंबर ने सामान्य रूप धारण कर लिया था | कर्मकांड का प्रचार-प्रसार मुल्ला-मौलवी द्वारा हो रहा था | उनके बारे में संत कबीर दास प्रभवी रूप से आलोचना करते हुए दिखाई देते हैं | ईश्वर के नाम पर लोगों को धोका देने वाले लोगों पर करारा व्यंग्य कसा है |

> 'मुरति धरि धन्धा रचा, पाहन का जगदीश | मोल लिया बोलै नहीं, खोटा विसवा बीस ॥' '

कबीर दास ने समाज के जनसामान्य को बचाने की बार-बार कोशिश की है | लेकिन समाज में पंडित-प्रोहितों का बोलबाला होने से उन्हें कहीं बार असफल भी होना पड़ा था | जब तक लड़ते रहेंगे तो एक दिन उनके कार्य को कामयाबी मिलेगी, इसी विश्वास पर कम करते रहें |

वर्तमान समय में बह्जन लोगों का अमूल्य धन, श्रम और समय नष्ट होता था | इसके पीछे धार्मिक रूढ़ि-परंपरा का बढ़ता प्रभाव काम <mark>कर रहा था | अंधविश्वास, कर्मकां</mark>ड में जकड़ने की नीति को उजागर करने का काम किया है | <mark>इस पर कबीर दास कहते हें-"वस्त</mark>्त:यह कर्मकांड प्रोहित के पेट का धन्धा था | इसलिए उ<mark>न्होंने इस<mark>के पीछे यह सब अंधविश्वास लगा रखा था</mark> | आर्यों <mark>की</mark> गद्दी जो बैठता था,</mark> वह इन्द्र कहलाता था | इन्द्र का यह काम होता था कि, जनता में अधिक से अधिक होम-हवन का प्रचार कराये, क्योंकि उसको पूजा-पाठ से अधिक लाभ होता था ।"

संत कबीर दास जी धार्मिक विचारों के बारे में अधिक सतर्क दिखाई देते हैं । धर्म-संप्रदायों के आचार-विचारों से अधिक परिचित थे | घोर अराजक परिस्थिति में सामनी लोगों की आस्था को बनाए रखने का महत्त्वपूर्ण कार्य किया है | सामाजिक स्तर पर उन्होंने बड़ी सतर्कता से भूमिका निभाई है | हिन्दू-म्स्लिम एकता को <mark>ब</mark>नाए रख<mark>ने का साहस केवल संत कबीर दास जैसे लोगों</mark> के पास होता है | उन्होंने हर एक परिस्थिति में स्वयं एक सिध्दहस्त पुरुष की भांति अडिग दिखाई देते हैं । समाज में प्रचलित वातावरण में आलोचना नहीं करते बल्कि उस धर्म को अपने ही सिद्धांतों का स्मरण करा देते हैं । धर्म का सिध्दांत उदात एवं उज्ज्वल होता है उसी प्रकार उसका व्यवहारिक पक्ष भी विसंगतियों से मुक्त और मानव मूल्यों की रक्षा में तत्पर होना चाहिए।

वर्तमान परिवेश में अनेकविध सामाजिक समस्याएं उभरती हुई दिखाई देती है । आए दिन मनुष्य को अनेकविध समस्याओं का सामना करना पड़ता है | इसी परिस्थितियों में लोगों में भरोसा बनाने के लिए संतों की आवश्यकता बनती दिखाई देती है | वैश्विक स्तर बनी हुई आपदा से जीवन जीना म्शिकल हो रहा है | ऐसी परिस्थितियों में लोगों में स्थिरता बनाए रखने की जरुरत है | लोगों में धीरज-आधार बनाने के लिए संत कबीर दास के प्रस्तुत विचारों की जरुरत है |

समय के साथ आए परिवर्तन को स्वीकार करना प्रकृति का उसूल है । उस समस्या को न डरते ह्ए उससे चार हाथ करने की सीख संतों के विचारों में सशक्त रूप से नजर आती है | इसलिए संतों द्वारा दी गई सीख सभी के लिए कारगिर साबित होती हुई दिखाई देती है |

निष्कर्ष :-

उपर्युक्त विषय पर अध्ययन करने के उपरांत संत कबीर दास के विचारों में धर्मविषयक चिंतन बड़े प्रभावी रूप से दिखाई देता है | उन्होंने अधिक प्रकाश हिन्दू-मुस्लिम संबंधों पर डाला है | वे हमेशा सामाजिक एकता को बनाए रखने में आग्रही भूमिका निभाते नजर आते हैं | समाज में व्याप्त अन्याय, अत्याचार, पाखंड, अनाचार, सनातनी आदि प्रवृत्तियों पर आघात किया है | धार्मिकता में खोट करने वाले के प्रति कड़ा विरोध दर्ज केरते हैं | उनका मानना है कि, आचरण की शुध्दता पर विशेष बल दिया है | उनके विचारों में सदाचरण की शुध्दता केवल कहने की बात नहीं है, बल्कि वह आचरण से प्रकट होने वाला तत्त्व है |

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विपणन संकल्पना आणि विपणन व्यवस्थापन पद्धती

सहा. प्रा. संगिता गंगाराम उतेकर

ग्रंथपाल

द. ग. तटकरे महाविद्यालय माणगाव - रायगड.

डॉ. स्धाकर भाऊराव टेलके

ग्रंथपाल

कला, वाणिज्य व विज्ञान महाविद्यालय,

शंकरनगर ता. बिलोली जि. नांदेड.

सारांश:

विपणन व्यवसायिक तत्वज्ञान आहे. विपणन हे एक कार्य आहे. प्रत्येक क्षेत्रात विपणनाचे महत्त्व वाढत आहे. या संकल्पनेची व्याप्ती ही दिवसेंदिवस वाढत आहे. मानवी जीवनाशी संबंधित सर्व क्षेत्रात विपणनाचा प्रत्यक्ष किंवा अप्रत्यक्षरीत्या समावेश झालेला दिसतो. व्यवसाय संघटनेचे विपणन विषयक विचार किंवा तत्त्वज्ञान म्हणजे विपणनाची संकल्पना होय. प्रयत्नांचे नियोजन व व्यवस्थापन याचा विपणन तत्त्वज्ञानावर परिणाम होतो.

परिचय:

ग्रंथालय आणि माहिती सेवा आणि उत्पादने यांचे विपणन ही एक नवीन संकल्पना आहे. विपणन हिष्टिकोन प्रामुख्याने खूप उपयुक्त आहे. विपणनाची प्रतिमा सुधारण्यासाठी आणि आकर्षित करण्यासाठी ग्रंथालयांनी याचा अधिकाधिक वापर केला पाहिजे. शिक्षण संस्था धनात ज्ञान संपादन प्रक्रिया करणे, संग्रहण करणे, पुनर्प्राप्ती करणे आणि त्याचा उपयोग करणे हे क्रियाकलाप आहेत. ते इतर कोणत्याही मानवी प्रयत्नांची किंमत वाढवितात. माहिती ही अर्थिक संसाधन आहे. आजचा समाज दिवसेंदिवस वेगाने बदलत आहे. सध्याचे युग हे माहिती तंत्रज्ञानाचे युग आहे. हवा पाणी अन्न निवारा याच्यानंतर मानवाची पाचवी गरज म्हणून माहिती कडे पाहिले जाते.

उद्योजकाला अवघड वाटणारी गोष्ट म्हणजे ग्राहकाला आकर्षित करणे. त्याला स्वतःचे उत्पादन समजून सांगणे, ग्राहकाला टिकून ठेवणे यासाठी त्यांनी कोणत्या मार्गाचा अवलंब करावा हा प्रत्येक उद्योजकाला पडलेला प्रश्न असतो. या सगळ्या प्रश्नांची उत्तरे म्हणजे विपणन व्यवस्थापन होईल. उद्योजकाला सगळ्यात आधी हे जाणून घेणे आवश्यक आहे की, आपले उत्पादन वापरणारा ग्राहक वर्ग नेमका कोणता आहे, तो कोणत्या भागात राहतो, ग्राहकाला आपल्या उत्पादनाची गरज आहे का आणि आपले उत्पादन ग्राहकास आवडते आहे का. विपणनाची पारंपारिक संकल्पना भिमुख होती तर प्रगत संकल्पनेत ग्राहकांच्या गरजा केंद्रस्थानी आहेत. विपणन व्यवस्थापन व्यवस्था निर्माण करताना पुढील घटकांचा समावेश होतो.

विपणनाची उत्क्रांती / इतिहास:

ज्याप्रमाणे माणूस व समाज उत्क्रांत होत गेला त्याच बरोबरच विपणन हया संकल्पनेचा ही विकास होत गेला. सुरुवातीला या अवस्थेत माणूस हा स्वतःच्या गरजा, निवाऱ्याची व्यवस्था, वस्त्र, अन्नाची व्यवस्था तोच ठरवायचा. त्या काळात विपणनाची कोणतीही आवश्यकता नव्हती. त्यानंतरच्या काळात श्रमविभागणी चार तत्त्वांचा अवलंब होऊ लागला. जेव्हा स्वतःच्या गरजापेक्षा अधिक वस्तूचे उत्पादन तो करू लागला, तेव्हा तो स्वतः तयार करीत असलेल्या वस्तूंपेक्षा इतर वस्तूंची गरज त्याला भासू लागेल. ही परिस्थिती म्हणजे व्यापार संकल्पनेचा पाया होय. व्यापार हा विपणनाचा आत्मा आहे यातूनच वस्तुविनिमय पद्धतीत प्रारंभ झाला. त्याचबरोबर विपणनाचा ही उदय झाला असे म्हणावे लागेल. जसा व्यापाराचा व उत्पादनचा विकास झाला तसा विपणनाचा ही विकास होत. गेला

विकासाच्या पहिल्या टप्प्यावर उत्पादनाचा प्रभाव होता. उत्पादनांना इतर कोणत्याही कार्य पेक्षा अधिक महत्त्व होते. उत्पादन तंत्रात हळूहळू बदल होत गेले. स्पर्धा नसल्याने विक्रीचा ही प्रश्नही गंभीर नव्हता. किंमत ठरविताना उत्पादन खर्च अधिक नफा हे सूत्र वापरले जाते. त्यानंतरच्या काळात स्पर्धा मोठ्या प्रमाणात वाढलेली मागणी पूर्व व मोठ्या प्रमाणावर उत्पादन होऊ लागल्याने वस्तूच्या बाजारपेठ विषयक समस्या निर्माण झाल्या. आपल्या उत्पादनांना मागणी वाढविण्यासाठी उत्पादकांना प्रयत्न करण्याची आवश्यकता निर्माण झाली. जाहिराती व विक्री योजना राबविण्यास प्रारंभ झाला.

पहिल्या महायुद्धानंतर तीव्र स्पर्धा, राजकीय असमतोल, भांडवलाचा त्टवडा यामध्ये १९३० ची जागतिक मंदी आली. त्यानंतर १९३९ ते १९४५ या दुसऱ्या महायुद्धाचा काळ या महायुद्धानंतर विपणन आत मोठ्या प्रमा<mark>णावर बदल झाले. ग्राहकांच्या गरजा व अपेक्षा जाणून घेण्या</mark>ची गर<mark>ज</mark> उत्पादकांना वाटू लागली. त्यातून विपणन संशोधन तत्व प्राप्त झाली. लोकांच्या आवश्यकतेनुसार वस्तू उत्पादनाचे कार्य स्रू झाले. वाढत्या स्पर्धेम्<mark>ळे विक्री, वितरण, जाहिराती, उत्पादक इत्यादी का</mark>र्यासाठी स्वतंत्र विपणन विभाग उद्योगांमध्ये सुरू झाले. <mark>या</mark> काळात वि<mark>पणन कार्य ग्राहकाभिम्ख होते</mark>. ग्राहका<mark>स</mark> अधिक महत्त्व प्राप्त होऊ। लागले. विपणनाच्या उत्क्रांतीती<mark>ल अवस्थेतील हा सर्वात महत्त्वाचा टप्पा होता</mark>. त्यानंतर विपणन संकल्पना उत्क्रांती होऊन उ<mark>दयोजक हे विक्री</mark> पे<mark>क्षा ग्राहकाच्या समाजाला अधिक महत्त्व देऊ लागले. स</mark>माधान देण्यासाठी आवश्यकतेन्सार उत्पादनात बदल करण्यात येऊ लागले. स्पर्धमुळे आकर्षक जाहिरात करून ग्राहकांना अधिकाधिक वस्तूचा उपभोग <mark>घेण्यासाठी प्रवृत करण्यात येऊ लागली. याचा</mark> परिणाम म्हणून जाहिरातीच्या क्षेत्रात व माध्यमात क्रांतिकारक बदल <mark>झाले. या जाहिरातीच्या प्र</mark>भावाम्ळे जगात जाहिरात य्ग स्रू झाले. लोक अधिकाधिक वस्तूचा उपभोग घेऊ लागले. याच काळात सेवा क्षेत्रातही म्हणजे बॅक, विमा, यादी पद्धती, वस्तू उत्पादन याप्रमाणेच वापरल्या जाऊ लागल्या. बॅकांनी व वित्तसंस्थांनी वित्तपुरवठा सुरू केल्याने लोकांच्या उपभोगाचे प्रमाण व भोग स्तर वाढला. त्यातून समाजाच्या राहणीमानात स्धारणा झाली. विपणन हे समाजाभिम्ख बनले. अशा रीतीने विपणानाची संकल्पना हळूहळू उत्क्रांत होऊन विपणानाची संकल्पना विकसित झाली.

विपणनाचा इतिहास : पूर्व साक्षर सोसायटीमध्ये ऑफ पोराच्या विशिष्ट आकाराने केबलची काही कामे केली गेली. उत्पादनाचे क्षेत्र, उत्पादकाचे नाव, याबद्दल माहिती दिली आणि उत्पादनाच्या गुणवत्तेचे दावे केले गेले.

विक्री आणि जाहिराती वर जोर देऊन उत्पादकाकडून ग्राहकाकडे वस्तू बनविण्याच्या प्रक्रियेच्या रुपात मार्केटिंगही समकालीन व्याख्या प्रथम शब्दकोशात १८५७ मध्ये आली. मार्केटिंग हया लॅटिन शब्दाचा अर्थ आहे, मार्काटस म्हणजे मार्केट-प्लेस किंवा व्यापारी.

इतिहासकार विपणन इतिहासाच्या दोन वेगळ्या शाखांमध्ये मोडतात. विपणन अभ्यासाचा इतिहास आणि विपणन विचारांचा इतिहास या फांद्या बऱ्याचदा खोलवर विभागल्या जातात. त्यांची मुळे खूप भिन्न असतात. विपणन पद्धतीचा इतिहास व्यवस्थापन आणि विपणन शाखांमध्ये आधारित आहे, तर विपणन विचारांचा इतिहास आर्थिक आणि सांस्कृतिक इतिहासाच्या वर आधारित आधारित आहे. याचा अर्थ असा की दोन्ही वेगवेगळ्या प्रकारचे संशोधन प्रश्न विचारले जातात.

काही संशोधकांचे म्हणणे आहे की विपणन पद्धती पुरातन काळामध्ये आढळू शकतात. तर इतरांच्या मते विपणन त्यांच्या आधुनिक स्वरूपात सतराव्या आणि अठराव्या शतकातील युरोपमधील ग्राहक संस्कृतीच्या उदयापासून आहे. परंतु इतर संशोधक असे सुचवित आहेत की, आधुनिक ब्रिटनमधील औद्योगिक क्रांतीनंतर च्या दशकात विपणन पूर्णपणे लक्षात आली. तेथून पुढे ती युरोप आणि उत्तर अमेरिकेत पसरली. कॅलेंडर आणि इतरांनी असे सुचवले आहे की, विपणनाच्या उद्धव यांच्या वेगवेगळ्या तारखांना विपणन परिभाषित केलेल्या मागण्यांचा आसपासच्या समस्या द्वारे समजावून सांगितले जाऊ शकते.

विपणन ग्रंथालय सेवांचा इतिहास संकल्पना फार पूर्वीपासून सुरू झाली आहे. जगातील उर्वरित देशांपैकी काही निरीक्षण आणि अधिक पैसा ग्रंथालय आणि ग्रंथालय शाळा असलेल्या ग्रंथालयाच्या सेवेचे आजच्या विपणनाचे मूळ अमेरिका आणि उत्तर युरोपमधील काही भागात आहे. याचा अर्थ असा नाही की सामान्य माणसापर्यंत पोहोचणार या ग्रंथालयाच्या कल्पनेने जगातील इतर भागात ग्रंथालयाचा व्याप केलेला नाही. उदा. २० शतकाच्या सुरुवातीस १९९७ ग्रंथालय चळवळ याचे उदाहरण आहे.

विपणन संकल्पनेचा विकास:

पारंपारिक संकल्पना:

मटका या संकल्पनेत वस्तू व सेवांना सर्वाधिक महत्व होते. विपणनाच्या उद्देश हा केवळ जास्तीत जास्त नफा मिळवणे हा होता. ही संकल्पना नफा प्राधान्य संकल्पना होती. अर्थात ही संकल्पना आधुनिक काळात काळुबाई ठरले आहे. यात ग्राहकांच्या गरजा, आवडी, समाधान याकडे दुर्लक्ष केले जाते व नाव याकडे अधिक लक्ष दिले जाते.

विनिमय संकल्पनाः

उत्पादकाने पैशाच्या मोबदल्यात ग्राहकांना वस्तू व सेवा पुरवणे असा या संकल्पनेचा अर्थ अभिप्रेत आहे. ही संकल्पना उत्पादना भिमुख असून त्यात वस्तू व सेवांच्या विनिमय आला महत्त्व दिले आहे. वस्तूचे उत्पादन झाल्यानंतरच ही प्रक्रिया सुरू होते व वस्तूची विक्री झाल्यानंतर सांगते संपते.

उत्पादन संकल्पनाः

या संकल्पनेत "उत्पादन हाच विपणनाचा गाभा आहे" असे गृहीत धरले आहे. आपण मोठ्या प्रमाणात व सातत्याने उत्पादन केल्यास त्या उत्पादनाचे विपणन आपोआप होईल व आपण केलेले सर्व उत्पादन ग्राहक स्वीकारतील असे या संकल्पनेत गृहीत धरण्यात आले आहे. ही उत्पादन प्रधान संकल्पना आहे.

उपयोगिता निर्मिती संकल्पनाः

विपणनामुळे वस्तूमध्ये स्थळ, काळ व मालकी उपयोगिता निर्माण होते असे या संकल्पनेत गृहीत धरण्यात आले आहे. पारंपारिक संकल्पनेची विस्तारित आवृती म्हणजे ही संकल्पना होय. उपयोगितेची निर्मिती हे या संकल्पनेचे मूळ सूत्र आहे.

राहणीमान प्रधान संकल्पना:

मजूर या विचारवंताने विपणनाची राहणीमान प्रदान करणे ही संकल्पना मांडली आहे.विपणनकार्यामुळे समाजाच्या राहणीमानाचा दर्जा उंचावतो, असे या संकल्पनेत गृहीत धरण्यात आले आहे.

विपणनाची आधुनिक संकल्पनाः

विपणनाच्या आधुनि संकल्पनेमध्ये लोकांच्या गरजा जाणून घेणे, त्यांच्या आवडी-निवडी व अपेक्षा समजावून घेणे, त्यांच्या इच्छांचा विचार करून उत्पादनाचा दर्जा वाढवणे, योग्य िकमती आकारणी, वस्तूचा उपभोग यापासून ग्राहकांना पूर्ण समाधान प्राप्त होईल याची दक्षता घेणे, विक्रय उत्तर सेवा प्रदान करणे. या सर्व बाबी कडे लक्ष दिले जाते. विपणनाची आधुनिक संकल्पना ही ग्राहकाभिमुख िकंवा ग्राहक केंद्रित आहे. डॉक्टर नीलम गम यांच्या मते ग्राहकांना केंद्रबिंदू मानून विपणनाच्या सर्व प्रिया करणे हे आधुनिक संकल्पनेचे मुख्य सूत्र आहे. ग्राहकांना वस्तू वापरा पासून सर्व समाधान मिळावे यासाठी त्यांची क्रयशक्ती, अपेक्षा, इच्छा, आवड समजून घेण्याची यंत्रणा निर्माण करणे व त्यातून मिळालेल्या माहितीच्या आधारे वस्तू विकास करणे याला विपणनाच्या आधुनिक संकल्पनेत विशेष महत्त्व देण्यात आले आहे. या संकल्पनेत ग्राहक या घटकाला सर्वाधिक महत्त्व दिले आहे.

विपणन व्यवस्थापन:

विपणनाच्या क्षेत्रामध्ये व्यवस्थापनाची तत्वे व पद्धती यांचा अवलंब करण्याच्या प्रक्रियेला "विपणन व्यवस्थापन" असे म्हणतात. संपूर्ण विक्रय मोहिमेमध्ये सर्व अवस्थमध्ये केली जाणारी योजनेची आखणी व त्यांची अंमलबजावणी व क्रियांचा अंतर्भाव विक्रय व्यवस्थापनात होतो.

विपणन कार्य करणाऱ्या संस्थेची उद्दिष्टे काढण्याच्या हेतूने विपणनाच्या दोन्ही बाजूंना लाभकारक ठरतील असे विनिमयाचे व्यवहार करण्याकरिता आणि बाजारपेठांचे संबंध प्रस्थापित करण्याकरिता तसेच त्यांचे संवर्धन व जतन करण्याकरिता आखण्यात आलेल्या कार्यक्रमांचे नियोजन, अंमलबजावणी, विश्लेषण व नियंत्रण म्हणजे विपणन व्यवस्थापन होय.

विपणन व्यवस्थापन पद्धती:

वितरणाची पद्धती ही आपण कोणत्या प्रकारची बाजारपेठ निवडतो त्यावर ते अवलंबून असते.विपणनच्या पद्धती पुढीलप्रमाणे आहेत

एकात्मिक नियोजन: विपणन करण्याआधी ते का करावयाचे आहे, ते कोणत्या पद्धतीने करावयाचे आहे, कोणत्या ग्राहक वर्गासाठी करावयाचे आहे, ते आधी निश्चित करून घ्यावे लागेल. या सर्व घटकांचा विचार करून विपणानाची पद्धती निश्चित करावी लागते.

सामग्री विपणनः

विपणन व्यवस्थापन करताना ते कोणत्या घटकाचे करावयाचे आहे हे लक्षात घेणे आवश्यक असल्यामुळे उत्पादनाची गुणवत्ता, उत्पादनाची वैशिष्ट्ये, उत्पादनाचा ग्राहकास होणारा उपयोग, उत्पादनामुळे ग्राहकास येणारी सुलभता या सर्व घटकांचा विचार करावा लागतो.

जाहिरात:

वितरण व्यवस्थेमध्ये जाहिरात ग्राहकांपर्यंत पोहोचवण्यासाठी महत्त्वपूर्ण माध्यम आहे. यामध्ये आपण कोणत्या प्रकारच्या तंत्रज्ञानाचा वापर करतो. यावर ती आपल्या उत्पादनाची प्रसिद्धी आणि ग्राहक संख्या अवलंबून आहे. आपले उत्पादन सातत्यपूर्ण प्रयत्नांनी ग्राहकांच्या नजरेसमोर येत राहिले पाहिजे यासाठी तांत्रिक दृष्ट्या प्रगत आणि पारंपारिक जाहिरात साधनांचा वापर केला जातो. उदा. फेसबुक मार्केटिंग आणि पोस्टर मार्केटिंग अशा पद्धतीचा उपयोग केला जातो.

मूल्यमापन:

आपण वापरत असलेल्या विपणन पद्धतीचे वेग वेळोवेळी मूल्यमापन करणे आवश्यक आहे. यावरून आपणास आपण वापरलेली विपणन पद्धती कितपत ग्राहकास आकर्षित करण्यास फायदेशीर ठरली आहे हे लक्षात येते.

संशोधन:

विपणन व्यवस्थापन करताना आपले संपत स्पर्धा कोणकोणत्या घटकाचा विपणन व्यवस्थापनपणा साठी उपयोग करतात. बाजारपेठेत कोणत्या प्रकारचे विपणन केली जाते. आपण कशाप्रकारे विपणन करून ग्राहकास आकर्षित करू शकतो या सर्व घटकांचे संशोधन करावे लागते.

डिजिटल मार्केटिंग:

विपणन व्यवस्थापन करण्यासाठी डिजिटल मार्केटिंग चा वापर केला जातो. यामध्ये युट्युब, फेसबुक, इंस्टाग्राम, व्हाट्सअप इत्यादी घटकांचा मोठ्या प्रमाणावर उपयोग केला जातो. तसेच सध्या बाजारपेठेत उद्योजक स्वतःची वेबसाईट तयार करून विपणन व्यवस्थापन करतात.

निष्कर्ष:

सध्याच्या प्रगत तंत्रज्ञानाच्या युगात प्रत्येक उद्योगाची आर्थिक उद्दिष्टे उत्पादनांचे ध्येय पूर्ण करण्यासाठी एक मजबूत वितरण व्यवस्थेची गरज आहे. योग्य वितरण व्यवस्थेचा वापर केला तर उद्योगांची आर्थिक ध्येय पूर्ण होऊ शकतील. थोडं वितरण व्यवस्थे बाबतीत ज्ञान होणे गरजेचे आहे. म्हणजेच हातात असणारा पैसा कसा आणि किती खर्च करायचा, आपले उत्पादन ग्राहकांपर्यंत किती वेगवान पद्धतीने पोहोचवावे या सर्व घटकांचा ज्ञान होणे गरजेचे आहे.

ग्रंथालय आणि माहिती हे उत्पादनाचे आणि सेवांच्या विपणन हे उद्दिष्ट ठरवते. उत्पादन योग्य पद्धतीने डिझाईन करून ग्राहकांच्या गरजा लक्षात घेऊन गरजा आणि मागणी संघटनात्मक उद्दिष्टे प्राप्त करण्याच्या उद्देशाने सेवा अधिक प्रभावीपणे देता येतात. ग्रंथालय आणि माहिती केंद्रांकडे विपणन मिश्रित रणनीती करण्याच्या पद्धतीची कल्पना करणे हा हेतू आहे. त्यामध्ये विपणन योजनेचे काही फायदे आहेत. ग्रंथपाल आणि माहितीचे स्वरूप वापरकर्त्यांची आवश्यकता तसेच हस्तांतरण प्रक्रिया समजून घेणे आवश्यक

आहे. ग्रंथालय आणि माहिती सेवांचा नवीन आयाम समज्न घेण्यासाठी संबंधित योजना ग्रंथालयातील ग्रंथालय बनवण्यासाठी योग्य योजना आणि कार्यक्रम तयार करण्यास मदत करते.

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कृषी क्षेत्रावर कोविड-19 लॉकडाऊनचा प्रभाव

डॉ. मनोज श्रीकृष्णराव पवार

(Asst. Professor) समाजकार्य विभाग

मातोश्री अंजनाबाई मुंदाफळे समाजकार्य महाविद्यालय,

नरखेड जि.नागपूर

गोषवारा :-

कोरोना महामारीमुळे जे लॉकडाऊन लावण्यात आले याचा परिणाम सर्वच क्षेत्रावर झालेला दिसुन येतो या पासुन कृषी क्षेत्र सुद्धा सुटले नाही. काही क्षेत्रावर लॉकडाऊन प्रभाव जास्त प्रमाणात काही क्षेत्रावर कमी प्रमाणात झाल्याचे दिसुन येते. शेती व्यवसायावर इतर व्यवसायाच्या तुलनेत प्रभाव कमी झालाचे प्राथमिक स्वरुपात दिसत असले तरी याचा बारकाईने विचार केला असता परिस्थीती तशी नसल्याचे दिसुन येते. लॉकडाऊन च्या कालखंडात शेतीची सर्व कामे चालु होती. शासकीय पातळी वरुन सुद्धा शेती संबधीत सर्व कामे चालु ठेवण्याच्या सुचणा देण्यात आल्या होत्या. त्यामुळे शेतीची सर्व कामे जरी चालु होती तरी सुद्धा शेतमाल विकण्याकरीता ज्या बाजारपेठा पुर्ण क्षमतेने चालु शकल्या नाहीत. लॉकडाऊन मुळे बाजारपेठतील ग्राहक घरी कोंडल्या गेल्या मुळे शेतमालाच्या खरेदीवर त्याचा विपरित परिणाम झाला. या सोबतच शेत मालाच्या निर्यातीवर सुद्धा याचा परिणाम झाला. काही त्याचा परिणाम शेत मालाच्या भावावर झाल्याचे दिसुन येते. या सोबतच वाहतुक व्यवस्ता बंद असल्यामुळे शेतमाल बाजारात पोहचविण्याकरीता सुद्धा अळचणी आल्यात. या सोबतच शेती करीता लागणारे बी बियाणे, किटकनाशके, खते व इतर साहीत्याच्या पुरवठयावर सुद्धा याचा विपरीत परिणाम झाल्याचे दिसुण येते. प्रस्तुत अध्ययनात लॉकडाऊनचा शेती व्यवसायावर कितपत परिणाम झाला, याचे शेतीवर दुरग्रामी काय परिणाम होतील या संपुर्ण घटकांचा समावेश करण्याच प्रयत्न करण्यात आला आहे.

प्रस्तावणा :-

कोविड-19 हे फक्त आरोग्याचे संकटच नाही तर त्यापेक्षा खुप मोठे संकट आहे. या संकटाचा परिणाम फक्त आरोग्यावरच झाला नाही तर आर्थिकता, मानसिकता, सामाजिकता, कौंटुबिक हिंसाचार, रोजगार, अन्न सुरक्षा, सामाजिक सुरक्षा, कौंटुबिक कलह, शोषण, गुन्हेगारी इत्यादी बाबीशी संबधीत आहे. कोविड विषाणूचा परिणाम भारतासारख्या विकसनशिल देशावर फार गंभिर प्रतिकुल परिणाम झाल्याचा दिसुन येत आहे. संयुक्त राष्ट्राच्या अहवाला प्रमाणे भारताचा व्यापार परिणाम घटेल व भारत हा देशातील प्रतिकुल परिणाम झालेला 15 वा देश असेल असे सांगितले. आशियाई विकास बॅकेच्या अभ्यासाप्रमाणे 29.9 अब्ज अमेरिकन डॉलर मध्ये आर्थिक नुकसान होईल. या संकटाचा परिणाम फक्त काही निवडक घटकावर झाला असे नाही तर सर्वच घटकावर याचा परिणाम कमी अधिक प्रमाणात दिसुन येतो.

शेती व्यवसाय व शेतमजुरी करणारे कामगार सुद्धा यामधून सुटलेले नाहीत अनेक शेतक-यांना आपल्या शेतीतील मालाची खरेदी-विक्रीचे व्यवस्था नसल्यामुळे आपले पिके नष्ट करावी लागली आहे. त्यामुळे सुद्धा मोठ्या प्रमाणात शेतकरी अडचणीत सापडलेला आहे. यापुढच्या कालखंडामध्ये शेतक-याला बाजारपेठेमध्ये गेल्याशिवाय पर्यायच नाही. ग्रामीण भागाची परिस्थिती फार विचित्र आहे. शेतक-यांच्या शेतीमध्ये काम करण्याकरिता मजूर उपलब्ध नाही तर दुसरीकडे गावामध्ये रोजगार उपलब्ध नसल्याची ओरड मोठ्या प्रमाणात दिसून येते. या लॉकडाउनच्या कालखंडात जो शहरी मजूर ग्रामीण भागाकडे आलेला आहे. त्याला रोजगार उपलब्ध नाही आणि जो शेतीमध्ये रोजगार उपलब्ध आहे त्या शेतीमध्ये त्याची काम करण्याची त्यांची इच्छा नाही.

अन्न व कृषी :-

जीडीपी मध्ये अन्न व कृषी क्षेत्राचा सर्वाधिक वाटा आहे म्हणजेच रोजगार क्षेत्रात 16.5% आणि 43% अन्न प्रक्रिया क्षेत्रातील प्रमुख भाग दुग्धशाळा (29%), खाद्यतेल (32%) आणि तृणधान्ये (10%) यांच्याशी संबंधित आहे. जागतिक परिस्थिती (निर्यात) येथे दुग्ध व मसाले उत्पादनांमध्ये भारत देखील अव्वल स्थानावर आहे.

आर्थिक सर्वेक्षणात नमुद केले आहे की वर्ष 2018-2019 संपणा-या मागिल 5 वर्षात अन्न प्रक्रिया उद्योग (एफपीआय) क्षेत्र सरासरी वार्षिक वाढिच्या दरात (एएजीआर) 9.99 टक्क्याने वाढत आहे, त्या तुलनेत 2011-12 च्या किंमतीनुसार कृषी क्षेत्रात 3.12 टक्के आणि उत्पादन क्षेत्रात 8.25 टक्के वृद्धी झाली आहे.

कृषी मंत्रालयाने म्हटल्या प्रमाणे अन्न धान्याचा पुरवठा आणि शेती - आगामी हंगामी पिकांच्या कमी पेरणीमुळे उत्पादनावर परिणाम झाला. ज्या कंपन्या ॲग्रो-केमिकलचा व्यापार करतात, ते तयार वस्तूंच्या निर्यातीवर आणि कच्च्या मालाच्या आयातीवर अवलंबून असतात. त्यामुळे त्यांच्या वर सुद्धा परिणाम झालेला आहे.

कोविड-19 च्या लॉकडाऊनमुळे कृषी क्षेत्रावर झालेला परिणाम :-

- लॉकडाऊनमुळे एक मोठी लोकसंख्या गावाकडे परत आली आहे त्यामुळे रोजीरोटी साठी कृषी क्षेत्रावरील दबाव वाढला आहे.
- 2. कृषी आधारीत उत्पादनासाठी पुरवठा साखळी जे निर्माण झाली होती त्यावर लॉकडाऊनचा फार विपरीत परिणाम झाला आहे. शेतीवर आधारीत उत्पादन करणा-या सर्व कंपन्या आज बंद आहे. त्यामुळे शेतीतुन निघणारा कच्चा माल वाया जात आहे. हॉटेल, रेस्टॉरेन्ट बंद असल्यामुळे भाजीपाल्याची मागणी घटली. धार्मिक स्थळांवर बंदी असल्यामुळे फुलांची मागणी सुद्धा घटली त्याचप्रमाणे दुध व पोल्ट्री व्यवसायावर सुद्धा फार विपरीत परिणाम झाला आहे.
- कृषी कराता लागणारे खते व किटकनाशके यांच्या उत्पादनावर सुद्धा विपरीत परिणाम झाल्याचे दिसुन येत आहे. त्यामुळे वेळेवर खते व किटकनाशके उपलब्ध होवू शकत नाही. त्यामुळे उत्पादनात घट झाल्याचे दिसुन येते.

- 4. पाळीव प्राणी व मत्सपालन व्यवसायाला सुद्धा फार मोठा फटका बसला आहे. पोल्ट्री व्यवसायाकरीता लागणारे खादय वेळेवर उपलब्ध होवू शकत नाही. बाजार पेठा बंद असल्यामुळै त्यांची मागणी घटून भाव सुद्धा घटल्याचे दिस्न येत आहे.
- व्यापार बंदी मुळे व वाहतुक व्यवस्था बंद असल्यामुळे सुद्धा शेतमालाच्या पुरवठयावर व बाजार भावावर फार वाईट परिणाम झाला आहे. त्याकरिता व्यापार व्यवस्थेत चालु करणे व वाहतुकीचे साधणे निर्माण करणे सुद्धा गरजेचे झाले आहे.
- 6. या सोबतच कोविड-19 च्या लॉकडाऊनमुळे कृषी क्षेत्रावर काही सकारात्मक परिणामाचा सुद्धा झाल्याचे दिसुन येते. 29 जानेवारी 2012 ला अर्थ मंत्रालयाने सादर केलेल्या अहवालानुसार कोविड-19 कालखंडामध्ये कृषी क्षेत्राने भारतीय अर्थव्यवस्तेने 3.4 टक्के वाढ नोंदवीली आहे. 2019-20 कृषी उत्पादन 285.21 दशलक्ष राहिले मागच्या वर्षच्या तुलनेत 11.44 दशलक्ष टनाने अधिक आहे. तर कृषी संबधीत मालाची निर्यात अंदाजे 252 हजार कोटी रुपये झाली. वर्ष 2019-20 या आर्थिक वर्षेमध्ये शेती करीता 13,92,469.81 कोटी रुपये शेतक-याकरीता कर्ज पुरवढा म्हणुन देण्यात आले. अशा प्रकारे अनेक विपरित परिणामा सोबत काही सकारात्मक परिणाम हे कृषी व्यवसायावर झाल्याचे दिसुन येते.

संशोधनाचे महत्व :-

प्रस्तुत संशोधनाच्या माध्यमातुन कोरोना महामारीमुळे जे लॉकडाऊन लावण्यात आले याचा शेती क्षेत्रावर काय परिणाम झाला याचा अभ्यास करण्याचा प्रयत्न करण्यात आला. शेतक-याला जगाचा पोशिदा अशा सारख्या उपमा दिल्या जाते. शेत मालाच्या आधरावर सर्व जगा आपली उपजिवीका पुर्ण करतो. परंतु शेतक-याला मात्र दोन टाईमचे पुर्ण अन्न मिळेल याची खात्री नाही. आजही मोठयाप्रमाणात भारतातील शेतक-यांचे शोषण मोठया प्रमाणात होतांना दिसुन येते. भारतातील शेती पुर्णताः निर्सगावर आधारलेली आहे. निर्सगाच्या लहरीपणामुळे पिक होईलच याची खात्री देता येत नाही. व त्यानंतर आलेल्या पिकाला योग्य बाजारभाव मिळेल याची पण खात्री नाही. बाजारपेठेची जी व्यवस्था आहे ती दोषपुर्ण असल्यामुळेया ठिकाणी शेतक-यांचे मोठया प्रमाणात शोषण होतांना दिसुन येते.

- 1. प्रस्तुत संशोधनाच्या <mark>आधारावर शेत मालाच्या वितरण व्यवस्थेमध्ये</mark> सुधार करण्यास मदत होईल.
- शेतक-याच्या शेत मालाला योग्य बाजार भाव मिळण्याकरीत मदत मिळेल.
- लॉकडाउनच्या कालखंडामध्ये शहरी बाजारपेठा (कोरोनाचे सर्व नियम पाडुन) व्यवस्थीत चालविण्या करीता मार्गदर्शक ठरेल.
- शासणाने घोषित केलेल्या आधारभुत किमंतीने मालाची खरेदीची करावी या करीता एक व्यवस्थीत व्यवस्था निर्माण करण्याकरीता मदत करेल.
- गावपातळीवर कृषी उत्पादणाची किमान आधारभुत किमतीवर खरेदी करण्यात यावी. या करीता शासणास मार्गदर्शन करेल.

या सोबतच शेतक-यांला कमीत कमी व्याज दराने जास्तीत जास्त कर्ज पुरवठा करण,े कृषी मालाची मागणी टिकवूण ठेवण्यासाठी लॉजिस्टीक मध्ये गुंतवणुक वाढविणे, लघु आणि मध्यम उद्योग गाव पातळीवर सुरु करने. तसेच कृषी मालाची मागणी टिकवूण ठेवण्यासाठी लॉजिस्टीक मध्ये गुंतवणुक वाढविणे या करीता मदत होईल.

संशोधन उद्धेश :-

समाजकार्य संशोधन विषयाची निवड केल्यानंतर विषयाच्या संदर्भात कोणकोणत्या घटकांचा अभ्यास करावयाचा आहे हे निचित करावे लागते. यामध्ये प्रामुख्याने काही प्रष्नांची निर्मीती करूण त्या प्रष्नांची उत्तरे उपलब्ध साहित्याच्या आधारे परताडा घेणे आवष्यक आहे. की ज्या आधारावर संशोधनाचे उद्धेश निष्चित करता येईल व उद्धेशाच्या आधारे संशोधनाला योग्य दिशा देता येईल. या सोबतच संशोधनाला मर्यादीत ठेवण्याकरीता उद्धेश मदत करते. संशोधनाला जर उद्धेश नसेल तर संशोधन दिशाहीन व्हायला वेळ लागणार नाही.

- 1. भारतीय कृषी क्षेत्रावर कोविड-19 लॉकडाऊनचा प्रभावाचे अध्ययन करणे.
- 2. भारतीय कृषी क्षेत्रावरील प्रभावाचे विलेशन करणे.

गृहितकृत्यः -

भारतीय कृषी क्षेत्रावर कोविड-19 लॉकडाऊनचा विपरित परिणाम झाला

अध्ययन पद्धती :-

प्रस्तुत संशोधन हे प्राथमिक संशोधन पद्धतीवर आधारलेले आहे. प्रस्तुत संशोधनाकरीता अमरावती जिल्हातील तिवसा तालुक्यातील तळेगाव ठाकुर या गावाची निवड करण्यात आली. प्रस्तुत संशोधनाकरीता तळेगाव ठाकुर या गावातील संत्रा, सोयाबिन, तुर, चणा, कपास व दुध उत्पादक 40 शेतक-यांचा समावेश करण्यात आला. यामध्ये मोठे शेतकरी व अल्प भुधारक शेतक-यांचा व सर्व प्रवंगातील घटकांचा समावेश करण्यात आला. या करीता गैरसंभाव्यता नमुणा निवड पद्धती मधील सोईकर नमुना निवड पद्धतीचा वापर करण्यात आला. या सर्व उत्तरदात्याकडुन तंथ्य संकलनाकरीता मुलाखत अनुसूची या पद्धतीचा वापर करण्यात आला.

तंथ विष्लेषण व निर्वचन :-

मुलाखत अनुसूचीच्या आधारे संकलीत संपुर्ण तंथ व्यवस्थित क्रमबद्ध करण्यात आली. तंथ्यामध्ये असलेल्या उणीवा दुर करण्यात आल्या. प्राथमिक तंथ व दुय्यम तंथ या आधारावर तंथ विष्लेषणाकरीता विवीध प्रकारच्या सारण्या व अनुमापण चाचण्यांचा वापर करण्यात आला.

निष्कर्षः-

लॉकडाऊन च्या कालखंडामध्ये शेतकरी वर्गाला मोठ्या प्रमाणात मोठ्या प्रमाणात हाल-अपेष्टा सहन कराव्या लागल्या आज त्यांच्या पुढे महत्त्वाचा प्रश्न उभा राहिला तो म्हणजे उपजिवीकेचा या करीता शासकीय पातळीवरुन प्रयत्न होणे गरजेचे आहे. यामध्ये प्रामुख्याने शेती करीता कर्ज पुरवढा करणे, शेतमालाला योग्य बाजारपेठ उपलब्ध करुण शेतमालाला योग्य बाजार भाव मिळवुन देणे आवष्यक आहे. तसेच अल्पभुधारक शेतक-यांना करीता रोजगाराच्या योजना राबविने आवष्यक आहे. या करीता शासनाच्या

माध्यमातून मनरेगा योजने अंतर्गत जो रोजगार उपलब्ध करुन देण्यात आला त्या रोजगाराकरिता अनेक शेतक-यांकडे जॉब कार्ड नसल्यामुळे त्यांना या योजनेचा लाभ घेता आलेला नाही अनेक शेतक-यांना तर यासारख्या योजनेच्या माध्यमातून पुरविण्यात येणा-यां कामाची सवय नसल्यामुळे हे काम करून सुद्धा शकलेले नाहीत. या सोबत रेशन सारख्या योजनांचा योग्यतेने कामगारापर्यत पोहचला नाही.

शेतक-यांकरीता त्यांच्या गावातच लघुउद्योग व कुटीर उद्योगाला चालना देऊन खेडे भागातच नवीन रोजगाराच्या संधी उपलब्ध करून द्याव्यात. तसेच प्राथमिक स्वरूपातील उपाययोजना म्हणून शासकीय रेशन व्यवस्था अधिक बळकट करावी अधिकाधिक शेतकÚरांना कशा पद्धतीने व्यवस्थित स्वरूपात रेशन देता येईल याची व्यवस्था करुण त्याची प्रभावी अंमलबजावणी करावी..

शिफारशी:-

कोविड-19 च्या लॉकडाऊनमुळे कृषी क्षेत्रावर काही सकारात्मक परिणाम झालेत 29 जानेवारी 2012 ला अर्थ मंत्रालयाने सादर केलेल्या अहवालानुसार कोविड-19 कालखंडामध्ये कृषी क्षेत्राने भारतीय अर्थव्यस्थेने 3.4 टक्के वाढ नोंदवीली आहे. 2019-20 कृषी उत्पादन 285.21 दशलक्ष राहिले मागच्या वर्षच्या तुलनेत 11.44 दशलक्ष टनाने अधिक आहे. तर कृषी संबधीत मालाची निर्यात अंदाजे 252 हजार कोटी रुपये झाली. वर्ष 2019-20 या आर्थिक वर्षमध्ये शेती करीता 13,92,469.81 कोटी रुपये शेतक Úयाकरीता कर्ज पुरवढा म्हणून देण्यात आले. हे सर्व करण्यात आले आहे तरी सुद्धा अजुन काही उपाय योजना करणे गरजेचे आहे.

- कृषी व्यवसायाच्या संदर्भात उपयुक्त साधनावर आंतरराष्ट्रीय मक्तेदारी संपिवण्याच्या दृष्टीने सरकारणे कार्य केले पाहीजे.
- 2. लॉकडाउनच्या कालखंडामध्ये सर्व नागरिकांनी निरोगी राहण्यासाठी अन्न पुरवढा करणे आवष्यक आहे. त्याकरीता शहरी बाजारपेठा (कोरोनाचे सर्व नियम पाडुन)व्यवस्थीत चालविणे आवष्यक आहे. की ज्या माध्यमात्न सर्वाना धान्य उपलब्ध होईल. व शेतमालाला योग्य बाजार भाव सुद्धा मिळेल.
- 3. लॉकडाउनच्या कालखंडामध्ये फार मोठा परिणाम हा मालाच्या किंमतीवर झालेला दिसुन येतो. शासनाने घोषित केलेल्या आधारभुत किंमती पेक्षा फार कमी किमतीने माल विकावा लागला. असे होवू नये याकरिता शासणाने घोषित केलेल्या आधारभुत किमंतीने मालाची खरेदीची गरज निर्मान झाली आहे. जेणे करुण शेतमालाला योग्य बाजारपेठ मिळुण योग्य भाव मिळेल व शेतक-यांचे होणारे आर्थिक नुकसान थांबेल.
- 4. गावपातळीवर कृषी उत्पादणाची किमान आधारभुत किमतीवर खरेदी करण्यात यावी. कृषी उत्पादनांच्या निर्याती वरील अवलंबित्व काढुण कृषी मालाच्या आयातीवर बंदी घालावी. व जास्तीत जास्त निर्यात कशा पद्धतीने वाढ् शकतो या करिता प्रयत्न करने गरजेचे आहे.
- 5. दुध, भाज्या, फळ व फुले उत्पादीत शेतक-यांनां मदत केली पाहीजे व या मालाची खरेदी गाव पातळीवर होणे गरजेचे आहे. जेणे करुन शेतक-यांचा वाहतुकीवर होणारा खर्च कमी होवून त्यांच्या उत्पादनात वाढ होईल.

- 6. शेतकÚयांला कमीत कमी व्याज दराने जास्तीत जास्त कर्ज पुरवठा करणे गरजेचे आहे. जेणे करुण या मदतीच्या आधारावर तो आपले उत्पादन वाढवू शकेल.
- 7. लॉकडाउनच्या कालखंडामध्ये गाव आणि शहरामध्ये असलेली पुरवठा साखळी विस्कळीत झाली आहे. या साखळीला पुनरुज्जीवीत करणे आवष्यक आहे. या करीता शासनाने एक विशेष पॅकेज जाहीर केले पाहीजे. कोणत्याही परिस्थितीत संभाव्या ग्राहकांना कृषी उत्पादने उपलब्ध करुण देण्यासाठी सरकारणे प्रयत्न करावे व यासाठी ई-कॉमर्स कंपन्याची मदत घ्यावी.
- 8. भारतामध्ये 85 टक्के शेतकरी अल्प भुधारक शेतकरी आहेत. आणि लोकसंख्येचा एक महत्वपुर्ण भाग हा भुमिहीन शेतमजुरांचा आहे. त्यामुळे त्यांचावर लॉकडाउनचा परिणाम फारच अनिष्ठ स्वरुपाचा झालेला आहे. त्या करीता शासकीय पातळीवरुन त्यांच्या समस्या सोडविण्यासाठी प्रयत्न होणे आवष्यक आहे.
- 9. कृषी मालाची मागणी टिकवूण ठेवण्यासाठी लॉजिस्टीक मध्ये गुंतवणुक वाढविणे आवष्यक आहे. जेणे करून लघु आणि मध्यम उद्योग यांना योग्य प्रकारे कृषी आणि संबधीत क्षेत्राच्या कच्चा वेळेवर उपलब्ध होव् शकेल अशा लघु व मध्यम उद्योगा वर लक्ष देण्याची गरज आहे.

शेती व शेती संदर्भात घोषीत उपाययोजनांची संबधीत आणि शेतक-यांच्या तक्रारीचे निवारण करण्यासाठी व शेती कामकाजाबाबत तसेच कृषी साधनांच्या उपलब्धाता व माला भावाच्या संदर्भात सल्ला देण्यासाठी टोल-फ्री हेल्पलाईन/ कॉल सेंन्टर सरकारणे स्थापित केले पाहिजे.

समाजकार्य कर्त्याची भुमिका व समुपदेशनः-

शेतक-यांकिरता शासनाच्या माध्यमातून राबविण्यात येणा-यां विविध योजना शेतक-यापर्यंत पोचवण्याचं काम करू शकतो यासोबतच मानिसक दृष्ट्या खसलेल्या शेतक-यांना समुपदेशनाच्या माध्यमातून एक मानिसक आधार देण्याचे काम सुद्धा करू शकतो यासोबतच शेतक-यांसबधीत प्रश्न शासन दरबारी मांडण्या करिता सुद्धा कार्यकर्ता है महत्त्वाची भूमिका वटवु शकतो सोबतच या शेतक-यांसोबत आलेल्या कुटुंबातील लहान मुले व स्त्रिंया यांच्या कल्याणाकरिता शासकीय स्तरावर ज्या विविध योजना राबविल्या जात आहे त्या विविध योजना या घटकावर पर्यंत पोहोचण्याचा काम सुद्धा कार्यकर्ता करू शकतो. ज्यांची मानिसक स्थिती फारच खालावलेली आहे अशा शेतक-यांकिरता कौन्सिलंगच्या माध्यमातून त्यांना मानिसक आधार सुद्धा देऊ शकतो शासकीय स्तरावरून राबविण्यात येणा-यां योजनांमध्ये कोण कोणते बदल अपेक्षित आहे त्यामध्ये कोण कोणत्या घटकांचा समावेश करणे गरजेचे आहे ते सुद्धा व्यवस्थित रित्या तो शासनदरबारी मांडू शकतो जेणेकरून शासकीय योजनांमध्ये यथोचित बदलून जास्तीत जास्त लोकांकिरता त्या योजनेचा लाभ उचलता येईल.

संदर्भ

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शेतकरी कामगार पक्षाचा प्रारंभीचा इतिहास विशेषतः सोलापूरच्या संदर्भात

डॉ. किशोर नागनाथ जोगदंड

इतिहास विभाग प्रमुख, वसुंधरा कला महाविद्यालय, जुळे सोलापूर

प्रस्तावना :

भारतीय स्वातंत्र्य लढा हा लोकलढा करण्यात भारतीय राष्ट्रीय कॉग्रेसने महत्वपूर्ण योगदान दिले. कॉग्रेस हि स्वातंत्र्यपूर्वकाळात जनचळवळ होती. स्वातंत्र्यानंतर कॉग्रेस राजकीय पक्षाच्या स्वरुपात रुपांतरीत झाली. त्यानंतर देशात वेगवेगळ्या विचारधारेचे गट, पक्ष निर्माण झाले. आपापल्या हितसंबंधाचे संरक्षण करण्यासाठी अशा स्वरूपाच्या संघटना, पक्ष, चळवळी, दबावगट कार्य करत राहतात. महाराष्ट्रात कॉग्रेस अंतर्गत बहुजन समाजाच्या हिताची जपणूक करणारा, महाराष्ट्रातील सर्वसामान्य जनतेच्या हिताचा राज्यकारभार कसा होईल याचा सतत विचार करणारा एक गट होता. या गटामध्ये तुळशीदासजी जाधव, शंकरराव मोरे, केशवराव जेधे, र. के. खाडीलकर, बाळासाहेब सावंत, भाऊसाहेब राऊत, माधवराव गमाण, बाबासाहेब घोरपडे, बाबुराव गायकवाड, भाऊसाहेब महागांवकर, जानोबा जाधव, रामभाऊ नलावडे, जानोबा भोगले, काकासाहेब वाघ, नाना पाटील, दता देशमुख, ल. मा. पाटील, व्ही. एस. पाटील, इत्यादी मंडळी होती. ही मंडळी दररोज तीन - चार तास चर्चा करत होती कारण शेतकरी, कामगार हिताची बाजू मांडणारा कांग्रेस अंतर्गत असा पक्ष व गट नव्हता त्यामुळे आपणही कॉग्रेस अंतर्गत पक्ष किंवा संघ स्थापन करावा अशी मूळ कल्पना तुळशीदासजी जाधव यानी मांडली . याविषयी वरील सर्व नेते मंडळी पूर्णपणे सहमत झाली. या सर्व विचारमंथनातूनच शेतकरी कामगार पक्षाच्या उदयाची पायाभरणी झाली असे म्हणण्यास हरकत नाही.

शेतकरी संघ

प्रथमतः शेतकरी संघ या नावाने काँग्रेस अंतर्गत पक्ष असावा असे ठरले. यासाठी इंदापूर तालुक्यातील शेटफळ हवेली येथील बहुजन समाजाचे कार्यकर्ते श्री जानोबा भागले यांनी शेतकरी स्थापनेला लवकर सुरुवात करावी असा आग्रह तुळशीदास जाधव यांच्याकडे धरला. म्हणून पुण्यात सर्व पुढारी मंडळीची एक प्राथमिक बैठक घेण्यात आली या बैठकीमध्ये ज्याप्रमाणे कांग्रेस अतर्गत युवक संघटना, महिला संघटना, इंटक संघटना, विद्यार्थी संघटना, समाजवादी संघटना अशा अनेक संघटना होत्या त्याप्रमाणेच बहुजन समाजाच्या हिताचा शेतकरी संघ असावा असे ठरले.

श्री. शंकरराव मोरे, भाऊसाहेब राऊत, बाबासाहेब घोरपडे, बाबुराव गायकवाड, माधवराव मेमाणे इत्यादीनी त्याविषयी पुढील कामाची दिशा आखली. पुण्याच्या बैठकीनंतर बाळासाहेब सावंत, भाऊसाहेब महागावकर, ज्ञानोबा जाधव, ज्ञानोबा भोंगले, शंकरराव मोरे, भाऊसाहेब राऊत, काकासाहेब वाघ, नाना पार्टील, दत्ता देशमुख, व्ही. एन. पाटील, केशवराव जेधे, भाई सथ्था इत्यादी मंडळींच्या विचार विनिमयाने

तुळशीदासजी जाधव, काकासाहेब वाघ, नाना पाटील इत्यादी मंडळीनी महाराष्ट्रात फार मोठ्या प्रमाणात दौरे काढून सभा घेऊन काँग्रेस अंतर्गत शेतकरी संघाची आवश्यकता प्रतिपादन करुन आपले वेगळे स्थान निर्माण केले. यामुळे महाराष्ट्र प्रांतिक काँग्रेस कमिटीचे अध्यक्ष श्री शंकरराव देव यांनी याला ही संघटना आज ना उद्या आपल्या काँग्रेसमधील सत्तास्थानाला मारक ठरेल हे ओळखून शंकरराव देव यांनी संघटनेच्या कामाला विरोध केला. याशिवाय श्री. शंकरराव मोरे, बाबासाहेब घोरपडे यांचेविरुध्द कारस्थान रचून त्यांना विधानसभेसाठी काँग्रेस पक्षाचे तिकिट मिळू नये म्हणून त्यांची बदनामी करण्याचा प्रयत्न केला.

अशा सर्व संघर्षातून सर्वसाधारण बह्जन समाजाचे प्ढारीपणच नष्ट केले जाणार असे दिस् लागल्यामुळे तुलशीदास जाधव यांनी बह्जन समाजातील सर्व पुढान्यांना एकत्र आणून त्यांच्यात नेतृत्व निर्माण करण्यासाठी मेहनत घेत होते. त्यासाठी अहमदनगर येथे भाई सथ्था यांच्या संस्थेत बोलविण्यात आलेली महाराष्ट्रातील स्मारे दोन हजार प्ढारी कार्यकर्त्यांचा बैठक मेळावा हा महत्वपूर्ण होता. या मेळाव्यास त्ळशीदास जाधव, शंकरराव <mark>मोरे, पंजाबराव देशमुख, पंढरी पाटी</mark>ल, भाई सथ्<mark>था,</mark> भापकर, र. के. खाडिलकर, रत्नागिरीचे नाना पाटील. सांगलीच जी. डी. लाड, दता देशम्ख, केशवराव जेधे, इत्यादी प्रम्ख प्ढारी मंडळी उपस्थित होती. ही बा<mark>ब त्यावेळचे मुख्यमंत्री बाळासाहेब खेर यांच्या मनाला</mark> लागली. त्यांनी याविषयी मुंबई विधीमंडळ काँग्रेस पक्षाच्या बैठकीत या सर्व चळवळीचे सुत्रधार तुळशीदास जाधव आहेत असे वेळोवेळी बोलून दाखिवले. तसेच बहुजन समाजवादी पक्ष असे उपहासपूर्ण नाव शेतकरी कामगार संघाला देऊन त्याचे खच्चीकरण करण्याचा प्रयत्न मंत्रीमंडळ व भांडवली वृतपत्रे यांच्याकडून होऊ लागला. यांचा परिणाम असा झाला की, अधिक खंबीर <mark>व अधिक व्यापक संघटना बांधण्याची गरज भासू</mark> लागली. शेतकरी कामगार संघाबाबत कार्यकत्र्यात वैचारिक गोंधळ होता. त्याम्ळे ही निष्क्रियता व अनिश्चिततेची कोंडी फ्टावी, आचारात व विचारात एकसूत्रीपणा व कार्यात सातत्य यावे या दृष्टीने विचार करण्यासाठी २ व ३ ऑगस्ट १ ९ ४७ रोजी आळंदी ये<mark>थे निवडक कार्यकर्त्यांची सभा होऊन या सर्व चळवळीचा शेवट</mark> झाला. धया बैठकीत अध्यक्षपद न ठेवता सेक्रेटरी पद ठेऊन पक्षाचे पहिले सेक्रेटरी म्हणून शंकरराव मोरे, तर कार्यकारी मंडळात त्ळशीदास जाधव, भाऊसाहेब <mark>राऊत, ज्ञानोबा जाधव, दाजीबा देसाई इत्यादीची</mark> निवड करण्यात आली.

शेतकरी कामगार पक्षाचे सेक्नेटरी शंकरराव मोरे, तुळशीदास जाधव, नाना पाटील यांनी महाराष्ट्रात प्रचार दौरे काढून लोकामध्ये जागृती निर्माण केली. त्यामुळे ही संघटना काँग्रेसपेक्षा प्रभावी बन् लागली महणून ऑल इंडिया काँग्रेस कमिटीचे सेक्नेटरी शंकरराव देव यांनी काँग्रेस कमिटीकडे याविषयी तक्रार केली. यांचा परिणाम म्हणून काँग्रेसने काँग्रेसजनाना ज्या गटाला स्वतंत्र घटना व कार्यक्रम आहे अशा कोणत्याही राजकीय गटाचे सभासद होण्यास बंदी घातली. साहजिकच उपपक्षाच्या सभासदांना काँग्रेसचे सदस्यत्व टिकविता येणे अशक्य झाले. विरोधी गटांच्या पुढाऱ्याविरुध्द शिस्तभंगाचा बडगा वापरण्याचे एक नवे साधन काँग्रेस श्रेष्ठीच्या हाती आले. अशा प्रतिगामी बदलामुळे डाव्या गटांना काँग्रेसच्या बाहेर पडण्यावाचून पर्यायच उरला नाही. त्यानुसार १ ९ मार्च १ ९ ४८ रोजी समाजवादी गट आणि १३ मे १ ९ ४८ ला शेतकरी कामगार गट काँग्रेसमधून बाहेर पडला.

काँग्रेसत्याग व शेतकारी कामगार पक्षाची स्थापना

शेतकरी वर्ग हा समाजातील एक महत्वाचा घटक आहे. समाजाचा अन्नदाता, त्याच्या आधारावरच वैभवशाली साम्राज्य निर्माण करु शकतो. क्ठलेही शासन येवो त्याचे राबणे चालूच असते राजकारण त्याला समजत नाही. आपल्या कर्तव्यापासून तो ढळत नाही अशा कृषिप्रधान देशात शेतकऱ्याची होत असलेली दैना, त्याच्या उत्कर्षाकडे होत असलेले काँग्रेसचे दुर्लक्ष, त्याची उपेक्षा, उपहास आणि त्याच्याबद्दलची उदासिनता यामुळे शेतकरी कामगार संघाचा उदय झाला. कॉग्रेस अंतर्गत अनेक संघटना असून शेतकरी कामगार संघटनेला प्रतिबंध का ? असा प्रश्न उभा राहिला. महाराष्ट्र काँग्रेस श्रेष्ठीच्या पक्षपाती वागण्कीला कंटाळून काँग्रेसबाहेर पडण्याचा निर्णय अधिकृतपणे घेण्यासाठी २६ एप्रिल १ ९ ४८ रोजी भाऊसाहेब राऊत यांच्या बंगल्यावर दीडशे कार्यकर्त्यांची एक सभा <mark>झाली. केशवराव जे</mark>धे, नाना पाटील, भाऊराव पाटील यांच्यासह शेतकारी कामगार संघाचे सर्व आमदार या बैठकीस हजर होते. त्यावेळी काँग्रेसबाहेर पडण्याचा ठराव प्रचंड बह्मताने संमत झाला." काँग्रेसचा राजीनामा दे<u>जन बाहेर पडावे असे सर्वान्</u>मते ठरले आणि केशवराव जेधे, रा. म. नलावडे या घटन<mark>ा समितीच्या सभासदानी आणि तुळशीदास जाध</mark>व, दत्ता देशमुख, भाऊसाहेब राऊत, गवळे इत्यादींनी राजीनामे दिले. १३ जून १ ९ ४८ रोजी काँग्रेस शेतकरी कामगार संघाच्या घटनेत योग्य ते बदल करुन 'शेतकरी कामगार पक्ष' असे त्याचे नामकरण केले. वर्षाच्या खर्चाचे अंदाजपत्रक तयार करुन शेतकरी कामगार संघाचाच कार्यक्रम स्वीकारला गेला. तसेच पक्षाचे पूर्णवेळ कार्यकर्ते नेमण्यात आले. कार्यकत्यांनी शिक्षण, आरोग्य, सहकारी संस्था, शेती, लघु उद्योगधंदे व प्रचार इत्यादी कार्य करुन किसान कामगाराशी समरस<mark> व्हावे असा ठराव संमत केला.</mark>

सोलापुरमधील शेतकरी कामगार पक्षाचे पहिले अधिवेशन

तुळशीदास जाधव, शंकरराव मोरे, जानोबा जाधव, भाऊसाहेब राऊत या पुढाऱ्यांनी महाराष्ट्रातील बहुजन समाजातील कार्यकर्त्यात एकसूत्रीपणा आणून त्यांना शेतकरी कामगार पक्षाचे सभासद करून एका नव्या पक्षाच्या उत्साहवर्धक आणि चैतन्यमय कार्यासाठी उद्युक्त केल्यावर पक्षाला शिस्तबध्द स्वरूप येण्यासाठी पक्षाचे पहिले अधिवेशन भरविण्याची गरज होती, तेव्हा पक्षाचे पहिले अधिवेशन घेण्याची जबाबदारी तुळशीदास जाधव यांनी घेतली आणि सोलापूर येथील जुन्या गिरणीजवळ पोलिस लाईनच्या मैदानात रविवार दि. ४ व ५ सप्टेंबर १ ९ ४८ रोजी शेतकरी कामगार पक्षचे अधिवेशन भरविण्यात आले. अधिवेशनाचे अध्यक्ष शंकरराव मोरे होते. तर स्वागताध्यक्ष तुळशीदास जाधव होते. या अधिवेशनाला अनेक पुढारी स्वयंस्फूर्तीने हजर होते. अधिवेशनात आलेल्यामध्ये भाऊसाहेब राऊत, र. के. खाडिलकर, भाऊराव पाटील, पुण्याचे भाऊसाहेब शिरोळे, अहमदनगरचे दत्ता देशमुख, भाई सथ्था, बापूसाहेब भापकर, कुलाब्याचे नाना पाटील, रामभाऊ नलावडे, सांगलीचे व्ही. एन. लाड, लाड मास्तर, जानोबा जाधव नाशिकचे काकासाहेब वाघ, पुण्याचे भाई कडू, खानदेशचे साळुके, जळगावचे जगताप, कोल्हापूरचे महागांवकर, पटणे, खांडेकर विकील, बराळे, शाहूपुरीतील पाटील, सातारचे थोरात विकील, देशमुख विकील, बेळगावचे व्ही. एस. पाटील, दाजिबा देसाई, कृष्णराव धुळप, कुईवाडीचे मेहता, शंकरराव खोत, सोलापूरचे गोविंदराव बुगुट, अंबादास जाधव, लोकसेवा मृद्रणालयाचे व्यवस्थापक सिताराम साळुके, सदाशिव व्यवहारे, हिरभाऊ व्यवहारे, नानासाहेब

जाधव, भीमराव यादव, भीमराव जगताप, यादव थिटे, दामोदर बोधले, यादव नाईकवाडी, बार्शीचे नरसिंग तात्या देशमुख मास्तर, पिंपरीचे आनंदराव पाटील, जयसिंगराव पवार इ. प्ढारी कार्यकर्ते उपस्थित होते.

स्वागताध्यक्ष म्हणून भाषण करताना त्लशीदास जाधव म्हणाले की, " खेड्यापाड्यातील श्रमजीवी, कष्टकरी, शेतकरी, कामगार इत्यादी जनतेच्या विचारांचे व त्यांना आर्थिकदृष्ट्या स्धारण्याचा कारभार चालू झाला पाहिजे व त्यासाठी त्यांचेच पुढारी निर्माण झाले पाहिजेत" अधिवेशनाचे अध्यक्ष श्री. शंकरराव मोरे म्हणाले की, " काँग्रेसमध्ये राहन आणि काँग्रेस श्रेष्ठीशी संघर्ष करुनही म. गांधी, म. फुले, राजर्षि शाह महाराजांचे शेतकरी कामगार वर्गाविषयीचे ध्येय साध्य होऊ शकत नाही हे पाह्न आम्हाला शेतकरी कामगार पक्षाची स्थापना करावी लागली" या अधिवेशानात कर्मवीर भाऊराव पाटील यांचाही सहभाग होता. याप्रसंगी ते म्हणाले की" समाज परिवर्तन हे आपले ब्रीद समजा व कार्याला लागा" एकंदरीत सोलापूर मधील अधिवेशनात पक्ष वाढीसाठीचा कार्य संकल्प क<mark>रण्यात आला. त्यासाठी कार्यकत्यांनी प्र</mark>यत्न करण्याची गरज प्रतिपादन केली.

शेतकरी कामगार पक्ष आणि सोलापूरचा कामगार

महाराष्ट्रातील औद्योगिक कामगारामध्ये सर्वप्रथम साम्यवादी पक्षानेच प्रवेश केला. असे असले तरी साम्यवादी पक्षाला आपला <mark>व्यापक प्रचार आणि प्रसार करता आला ना</mark>ही. तो पक्ष कापड गिरणों कामगारप्रताच मर्यादित <mark>राहिला. इ. स. १ ९ ४२ च्या लढ्यापासून तो दू</mark>र राहिला आणि आपल्या वर्चस्वाखालील कामगार संघटनानास्ध्दा त्यापासून दूर ठेवले. राष्ट्रीय लढ्यातून आलेला कामगार वर्ग आणि त्या लढ्यापासून दूर राहिलेला कामगार वर्ग अशी फूट या वर्गात तेव्हापासूनच पडलेली दिसून येते." अशा परिस्थितीत काँग्रसने इंडियन नॅशनल ट्रेड युनियन काँग्रेसची (इंटक) स्थापना करुन कामगाराचे प्रतिनिधित्व आपल्याकडे ठेवण्या<mark>साठी तशा पध्दतीने प्रयत्न केला. शेतकरी कामगार पक्</mark>षाने तिला भांडवलदारधार्जिनी म्हणून विरोध केला. आणि ' नफ्यासाठी उत्पादन ' ही भांडवलशाही नष्ट करण्यासाठी शेतकऱ्याचे नेतृत्व केले. मुंबई हे कामगारवर्गाचे भारत देशातील सर्वात मोठे व महत्वाचे केंद्र होते. मुंबईचा कामगार प्ढारलेला व जागृत मानला जात असे. सोलापूर हे मुंबईच्या खालोखाल मोठे कामगार केंद्र होते. मार्शलला (१९३१) असो वा संपाबाबत कामगाराचे योगदान असो अशा लढ्यातून सीलापूरचा कामगार दडपशाहीला तोंड देत होता. एक महत्त्वाची बाब म्हणजे <mark>ती अशी की इंटकमध</mark>ून बाहेर पडलेला सोलापूरचा कामगार मुंबईतल्याप्रमाणे समाजबादी पक्षाकडे न जाता शेंकापकडे गेला याचे सर्व श्रेय हे तुळशीदास जाधव यांचेच आहे. बाळासाहेब खेर यांच्या दौऱ्याप्रसंगी सोलापूरातील ७ ते ८ हजार कामगाराचा मोर्चा त्ळशीदास जाधव यांनी काढला होता." त्लशीदास जाधव यांनी आपल्या नेतृत्व कौशल्याने शेतकरी कामगार पक्षाचे काम सोलापूर जिल्ह्यात नेटाने चालविले होते. इ. स. १ ९ ५२ च्या सार्वत्रिक निवडण्कीतील यशातून त्याच्या कार्याची प्रचिती येते. त्यावेळी त्यांनी सहा आमदार निवडून आणले होत. इ. स. १९४८ ते १९५५ पर्यंतचा काळ हा त्ळशीदास जाधव यांच्या राजकीय जीवनातील लोकप्रियतेचा उच्चांक गाठणारा काळ होता. या काळात त्यांनी विधानसभा गाजविली शेतकरी, कामगार, मध्यम वर्ग यांच्या हिताची कामे करुन त्यांनी या तिन्ही वर्गाचा विश्वास संपादन केला." १२ ऑगस्ट १९४९ रोजी सोलापूरच्या ५ गिरण्यापैकी ३ ज्न्या गिरण्यांना मालकांनी टाळे लावल्याम्ळे वीस हजार कामगार बेकार झाले तेव्हा त्यांच्यातर्फे शेतकरी कामगार पक्षाच्या कामगार सभेनेच लढा दिला होता. शेकडो

कामगारांचा सत्याग्रह झाला होता. १३ "१९५२ च्या निवडण्कीत शेकाप व कम्य्नि पक्ष एकत्र येवून भाई गो.द.साने यांना निवडून आपले. त्यावेळी जिल्ह्यात डाव्या पक्षाला मोठे यश मिळाले कम्युनिस्ट पक्षाची लालबावटा गिरणी कामगार युनियन व शेकापची गिरणी कामगार सभा या दोन्ही बरखास्त करुन लालबावटा गिरणी कामगार सभा अशी एकच युनियन सोलाप्रात ३ एप्रिल १ ९ ५२ रोजी स्थापन करण्यात आली.^{१४} अशा प्रकारची ही घटना देशातील कामगार चळवळीच्या इतिहासात महत्वाची घटना होती. परंतू त्याचे इतरत्र पडसाद उमटले नाहीत. या सार्वत्रिक निवडण्कीत शेतकरी कामगार पक्षाने काँग्रेस विरुध्द लढा देऊन आपल्या पक्षाचे पंधरा आमदार मुंबई असेब्लीत निवडून आणले. 🖰

निष्कर्ष:

भारतीय राजकारणात स्वातंत्र्यानंतर सुद्धा विविध गटाचे हित साध्य करण्यासाठी विविध पक्षाचा उदय झाला त्यापैकीच एक शेतकरी कामगार पक्ष होय. थोडक्यात सता मिळवणे आणि सामृहिक हितसंबंध जोपासणे याही बाबी महत्<mark>वाच्या होत्या. वंचिताचा, उपेक्षितचा पक्ष म्हणून शेत</mark>करी कामगार पक्ष स्थापन झाला होता.

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सांगली : एक औद्योगिक कृांतीचे केंद्र

श्री.रोहित बापू उदगावे,

संशोधक विद्यार्थी,

शिवाजी विद्यापीठ,कोल्हापूर.

जगाच्या इतिहासात ओद्योगिक क्रांतीला एक अनन्यसाधारण महत्व आहे. क्रांती म्हणजे बदल अशा स्वरुपात जगाच्या इतिहासाला कलाटणी देणारी घटणा म्हणजे ओद्योगिक क्रांती होय. या क्रांतीची बीजे फ्रान्समध्ये रुजून आलेली आपणास दिसून येतात. इ.स.१७८९ मध्ये हि क्रांती घडून आली आणि नंतरच्या काळात सर्वच राष्ट्रांमध्ये अशी क्रांती कमी-जास्त प्रमाणात उभारणीस आलेली होती. भारत हा कृषीप्रधान राष्ट्र म्हणून ओळखला जातो त्याचे कारण म्हणजे प्रचंड प्रमाणात शेतीच्या पिकांचे उत्पादन या काळात होत होती. यातूनच व्यापाराच्या हेतूने अनेक राष्ट्र भारताकडे येण्यास प्रवृत्त होऊ लागली. भारतामध्ये मोठया प्रमाणात मसाल्याचे पदार्थ, सुती कापड, रेशीम व नीळ इत्यादी प्रकाराची नगदी पिके भारतात मोठया प्रमाणात घेतली जात. यामुळे याचे यूरोपियन राष्ट्रांना आकर्षण वाटणे साहजिकच होते. १४ व्या शतकापासून हळूहळू युरोपिय<mark>न</mark> राष्ट्रांनी भार<mark>तात येण्यास सुरुवात केली व त्यां</mark>नी भारतामधून आंतरराष्ट्रीय व्यापारास सुरुवात झाली. दादाभाई <mark>न</mark>ोरोर्जीच्या ''<mark>पॉवर्टी ॲंड अनब्रिटिश रुल ऑफ इंडिया''</mark> या ग्रं<mark>था</mark>त दादाभाई नौरोजी यांनी भारतातून आयात-निर्यात होणा-या <mark>वस्तू व भारतातून होणारे धननिस्सारण यांचा अभ्यास</mark> करून त्यांनी आपल्या ग्रंथात मांडले व ते भारतीय <mark>जनतेपुढे सादर केले अशा अनेक प्रयत्नातून २० व्या शतकात भारतात औ</mark>द्योगिक क्रांतीची बीजे रोवली गेली आणि स्वातंत्रोत्त<mark>र काळापर्यंत ती मोठया प्रमाणात विस्तृत होत गेली. भा</mark>रतामध्ये अनेक लहान-मोठी संस्थाने निर्माण होण्याच्या मा<mark>र्गावर होती तर काही संस्थाने ही निर्मितीक्षम होती. दक्षिणेक</mark>डिल विचार करता दक्षिणेत १६ लहान-मोठी संस्थाने होती. उदा. कोल्हापूर, जमखंडी, मिरज, कुरुंदवाड, व सांगली इत्यादी अशी संस्थानिक होते. या संस्थानिकांनी आपल्या संस्था<mark>नात मोठया प्रमाणावर व्यापार व उद्योग वाढण्यासाठी चालणा</mark> दिली. अशा संस्थानामधीलच एक दक्षिणेकडिल अतिशय महत्वाचे संस्थान म्हणने 'सांगली' होय.

सांगली नावाची व्युत्पत्ती ही कृष्णातीरी वसलेल्या सुमारे सहा गल्ल्यांच्या गावाला **'सहा गल्ली'** असे म्हणण्यात येऊ लागले व कालपरत्वे त्याचेच सांगली असे नाव पडले अशी एक समजूत रूढ आहे_. त्याचबरोबर पूर्वी '**संगलकी**' संगमहलकी असे कर्नाटकी पध्दतीचे नाव या शहराला होते कालांतराने त्याचे रुपांतर '**सांगली**' असे झाले.⁹

सांगली या गावान<mark>जीक कृष्णा व कोयना या दोन नद्यांचा संगम अ</mark>सल्याने प्रथ<mark>म</mark> संगमावरील गाव म्हणून या गावाला **'संगमी'** असे म्हणण्यात येत होते.

भारतात सुमारे ७०० संस्थाने निर्माण झाली होती त्यातील काही संस्थाने उत्तरेत व काही संस्थाने दक्षिणेत उदयास आली होती. यातील दक्षिणेतील संस्थाने मिरज, तासगांव, जमखंडी, कुरुंदवाड आणि सांगली अशी संस्थाने उदयास आली होती. याठिकाणी पेशव्यांचे मांडलिकत्व रिवकारलेले दक्षिणेतील सरदार म्हणजे पटवर्धन सरदार. यांच्याकडे या संस्थानाची जहागिरदारी सोपविली होती. त्यातूनच इ.स. १७९९ मध्ये खंतत्र सांगली संस्थान अरितत्वात आले. सन १८१८ मध्ये पेशवाईचा -हास झाला व संपूर्ण महाराष्ट्रात संस्थानिकांना इंग्रजांचे मांडलिकत्व रिवकारावे लागले. इंग्रजांनी या संस्थानिकांबरोबर स्वतंत्र करार करुन संस्थानिकांच्या अंतर्गत कारभारात खायत्तता दिली. ही संस्थान १९४८ पर्यंत इंग्रजांचे मांडलिकत्व म्हणून या काळात टिकून राहिले.

सांगली संस्थानामध्ये एकूण तीन संस्थानिक होऊन गेले. हे सर्व प्रागतिक व पुरोगामी विचारांचे होते. त्यातील शेवटचे संस्थानिक चिंतामणराव पटवर्धन दुसरे यांना आधुनिक सांगलीचे भाज्यविधाता समजले जाते त्यांच्या कारिकर्दित सांगली मध्ये अनेक सामाजिक, राजकीय, शेक्षणिक तसेच आर्थिक सुधारणा झाल्याचे दिसून येते. असे सांगली शहर हे संस्थानाच्या राजधानीचे ठिकाण म्हणून इ.स. १८०१ साली अस्तित्वात आले व इ.स. १९४८ मध्ये सांगली संस्थान मुंबई प्रांतात विलिन झाले. अशा सांगलीचे ऐतिहासिक महत्व असल्याने प्रस्तुत शोधात सांगली मधील औद्योगिकीकरणाची सुरुवात व निर्माण झालेले एक व्यापाराचे महत्वाचे केंद्र म्हणून उभा राहिले याचा आढावा घेण्यात आला आहे.

प्रस्तुत शोध निबंधामध्ये सांगली संस्थानचे वार्षिक प्रशासकीय अहवाल, सांगली गॅझेटियर, आर.सी.बर्क डायरी, चिंतामणराव दुसरे यांचा गौरवग्रंथ, सांगली संस्थानचे आर्थिक अहवाल इत्यादि संदर्भ साधनांच्या आधारे शोध निबंधामध्ये सांगलीची झालेली औद्योगिक प्रगती व त्यातून निर्माण झालेले सांगली हे एक औद्योगिक केंद्र याचा तपशिल घेतला आहे.

दक्षिण महाराष्ट्रात एकूण १८ संस्थाने होती त्यात उत्पन्नाच्या दृष्टीने कोल्हापूर नंतर सांगलीचा दुसरा नंबर लागतो. चिंतामणराव पटवर्धन दुसरे यांचा कालखंड सन १९०१ ते १९४८ यांच्या कारिकर्दित त्यांनी सांगलीमध्ये अनेक नवनवीन आर्थिक योजना आखून सांगली संस्थानाची आर्थिक व औद्योगिक प्रगती केलेली दिसून येते म्हणून त्यांना सांगली संस्थानाचे जनक असे समजले जाते. आज सांगली जिल्हा महाराष्ट्रात औद्योगिक व शेती क्षेत्रात अग्रेसर आहे. शेती हा प्रमुख व्यवसाय निर्माण करुन शेतीतून निर्माण होणा-या उत्पादनासाठी व व्यापारासाठी नवनवीन उद्योगधंदे व औद्योगिक कंपन्या निर्माण झालेल्या दिसून येतात म्हणून आजही आपणास सांगली हे एक औद्योगिक केंद्र निर्माण झालेले आपणास दिसून येतात.

सांगली संस्थानातील नाणी :-

सांगली संस्थानात गाडिसूर्ती हे नाणे संस्थानात चालत होते. तत्पुर्वी हुकेरी रुपये चालत असत व त्यांची सुमारे तेरा आणे किंमत असे. संस्थानाच्या खासगीतून देणग्या व दक्षिणा देतेवेळी हुकेरी रुपयांचा उपयोग झालेला आपणास दिसून येतो. परंतू नाणे मिळत नसल्यामूळे बट्टा कापूर हुकेरीच्या बदली गाडी रुपये देत असत. दुस-या नाण्यांपेकी मोहरा, पुतळया, बराई आणि होन बाजारात विकावयास येत होती अशा नाण्यांना सोन्याची किंमत होती.^३

सांगली - मिरन रेल्वे :- (सन १९०७)

संगिली एक औद्योगिक प्रगतिशल मार्गावर होती पण माल वाहतुकिची सोय नव्हती. यासाठी मालाची आयात-निर्यात करणे आवश्यक असल्यामुळे रेल्वे वाहतुक अतिशय गरजेची होती. भारतात प्रथम १८५३ मध्ये मुंबई-ठाणे हे रेल्वे मार्ग निर्माण करण्यात आले यामुळे औद्योगिकीकरणास चालना मिळाली. हि सेवा ब्रिटिशांनी कच्या मालाची आयात-निर्यात करणे व सैन्य नेणे हे प्रमुख उद्देश ठेवून ब्रिटिशांनी रेल्वे सेवा सुरु केली पण पुढे व्यापारासाठी एक रेल्वे एक महत्वाचे वाहतुकिचे साधन ठरले.

सन १८८३ मध्ये मुंबई-कोल्हापूर रेल्वे लाईन निर्माण करण्यात आली व मिरज हे मध्यवर्ती ठिकाण असल्यामुळे पश्चिम महाराष्ट्रातील एक महत्वाचे जंक्शन निर्माण करण्यात आले. पण संग्रालीच्या व्यापा-यांना रेल्वेसाठी मिरज जंक्शनला जावे लागत असे म्हणून कॅ.बर्क ने १ लाख ८१ हजार रुपये खर्च करुन सांग्राली-मिरज हि रेल्वे लाईन जोडण्यात आले व याची वाहतुक १ एप्रिल १९०७ साली सुरुवात झाली. यामुळे सांग्रालीच्या व्यापा-यांचा माल देशभर जाऊ लागला व व्यापारास चालना मिळाली. या रेल्वे वाहतुकिच्या सोईमुळे सांग्राली हे एक औद्योगिक केंद्र बनले.

सांगली मध्ये प्रामुख्याने उत्पादनाची साधने ती म्हणजे हळद, गुळ, तंबाखु, कापुस व मिरची यांचे उत्पादन घेतले जात. रेल्वे वाहतुक सुरु झाल्यामुळे या व्यापारास आणखी चालना मिळाली. कर्नाटकातून मोठया प्रमाणात माल येऊ लागला हा माल सांगलीचे व्यापारी खरेदी करून मुंबई, गुजरात, उत्तर भारत अशा अनेक ठिकाणी पाठवू लागले. सांगली, रबकवी व शहापूर ही महत्वाची व्यापारी केंद्रे निर्माण झाली. सन १९१२-१९१३ मध्ये जवळजवळ ५ लाख २५ हजार रुपयांचा काल निर्यात केला गेला. यावरून आपणास सांगलीचा व्यापार किती झपाटयाने वाढला हे दिसून येते.

सांगली बॅंकेची स्थापना १९१६ -

दळणवळणाच्या जलद सोईसुविधामुळे सांगली मध्ये व्यापार प्रचंड प्रमाणात वाढीस लागला. यामुळे व्यापा-यांना प्रचंड प्रमाणात नफा मिळू लागला यासाठी शेती व व्यापारास अतिशय जलद गतीने चालना मिळण्यासाठी इ.स.१९१६ मध्ये सांगली बॅंकेची स्थापना करण्यात आली. तसेच शेतक-यांना खाजगी सावकारांकडून कर्ज काढावे लागत असे त्यासाठी या बॅंकेची स्थापना करून प्रत्येक गावात या बॅंकेची सोसायटया स्थापन करण्यात आल्या. यावर सांगली संस्थानचा आश्रय देखील मिळाला यामुळे बॅंक अतिशय मोठया प्रमाणात उलाढाल करू शकत होती. आज सांगली बॅंक ही महाराष्ट्रातील एक अग्रगण्य बॅंक म्हणून ओळखली जाते. इ.स.१९९६ अखेर बॅंकेच्या १८२ शाखा स्थापन करण्यात आल्या. ६

श्री गजानन मिलची स्थापना इ.स.१९१४ -

सांगली संस्थानामध्ये अतिशय उपजाऊ जिमन आहे. यामुळे शेतीतून प्रचंड प्रमाणात पिक उत्पादन निर्माण होत होते. यामध्ये कापसाचे व ऊसाचे उत्पादन प्रचंड प्रमाणात होते. म्हणून चिंतामणराव पटवर्धन यांनी व्यापारास व उद्योगधंदयास उत्तेजन देण्यासाठी व जनतेला रोजगार मिळावा यासाठी सांगली संस्थानात एखादी कापसाची मिल सुरु करावी म्हणून सन १९१४ साली सांगली संस्थानचे कुलदैवत श्री गणपती यांच्या नावाने श्री गजानन मिलची स्थापना करण्यात आली. विष्णू रामचंद्र वेलणकर यांनी या मिलची स्थापना केली.

गजानन मिलच्या स्वरुपात कापसापासून कापड तयार करण्याचा उद्योग सुरु झाला. याचबरोबर सांगली संस्थानात शेंग व हळदीचे पीक मोठया प्रमाणात निघत होते. म्हणून चिंतामणरावांच्या राजाश्रयाखाली सांगलीला हळदपूड करण्याचे कारखाने व शेंगेपासून तेल व पेंड तयार करण्याच्या मिल्स निघालेल्या दिसतात. अशा रितीने जिनिंग फॅक्टरी, शेंगदाणा मिल्स, हळद पॉलिशिंग, बेवींग फॅक्टरी, कॉटन प्रेस आणि तेल गिरणी अशा अनेक फॅक्टरीज निर्माण होत गेल्या व उत्तरोत्तर ती वाढत गेली व सांगली संस्थान औद्योगिक दृष्टया प्रगत होत गेले.

सांगली इंडस्ट्रीयल बॅक:-

सांगली संस्थानाच्या औद्योगिक विकासाला चालना मिळावी म्हणून सन १९४६ मध्ये सांगली औद्योगिक बॅंकेची स्थापना करण्यात आली. या बॅंकेचे भांडवल १०,००,००० इतके निश्चित करण्यात आली. त्यापैकी सांगली संस्थानने २ लाख इतके भांडवल दिले. तसेच सुरुवातीच्या काळात दोन वर्षांसाठी ठेव ठेवण्यात आली. बॅंकेची सुरुवात चांगली झाली व पहिल्या वर्षी नफाही बरा झाला पण १९४८ साली ११ हजार रुपयांचा तोटा झाला व १९४८ च्या जाळपोळीनंतर ही बॅंक बंद पडली.

अशारितीने सांगली हे संस्थान प्रारंभापासूनच प्रगतशील होते पण चिंतामणराव राजेसाहेब यांच्या व आर.सी.बर्क यांच्या योगदानामुळे संस्थान खूप प्रगत बनत गेले. यामध्ये औद्योगिकिकीकरणासोबतच सांगलीचा व्यापार आणि शेती याकडे लक्ष देण्यात आले सन १९१० ते १९४८ हा कालखंड म्हणजे सांगलीच्या इतिहासातील सुवर्णमय कालखंड मानला जातो. म्हणूनच चिंतामणराव दुसरे यांना आधुनिक सांगलीचे संकल्पक व भाग्यविधाते समजले जाते. त्यांनी केलेल्या योजना आज फलद्रुप होऊन सांगली हे एक व्यापारी केंद्र, अद्ययावत औद्योगिक केंद्र व हरितकांतीचा जिल्हा म्हणून ओळखला जातो.

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भक्तिकालीन काव्य में लोकमंगल की भावना

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भावों की उदातता एवं कला की उत्तमता की दृष्टि से भिक्तिकाल हिंदी साहित्य का स्वर्णयुग है। इस कालाखण्ड के निर्गुण एवं सगुण भिक्तिधारा के सभी किवयों की रचनाएँ लोकमंगल का विधान करती हैं। इन किवयों ने लोकहित को ध्यान में रखकर काव्य-साधना की। भिक्तिकालीन काव्य में स्विहत के स्थान पर परिहत की भावना प्रबल है। इन सभी किवयों ने जन-कल्याण का मार्ग प्रशस्त किया है। भिक्तिकाल के चार प्रमुख किव अलग-अलग चार काव्यधाराओं का प्रतिनिधित्व करते हैं। कबीरदास संत काव्यधारा के प्रतिनिधि हैं, तो जायसी सूफी काव्यधारा के। साथ ही तुलसीदास राम काव्यधारा का प्रतिनिधित्व करते हैं और सूरदास कृष्ण काव्यधारा का। इन सभी भिक्तिकालीन काव्यधाराओं में लोकमंगल की भावना निहित है।

संत किवयों ने सामाजिक स्तर पर पाखण्ड और अंधिवश्वास का पूरी दृढ़ता से खण्डन किया। सदाचरण पर सबसे अधिक बल इसी काट्यधारा में दिया गया है। इन किवयों ने जाति ट्यवस्था पर करारे प्रहार किए और सत्य, सदाचार, समता, भाईचारे का संदेश देकर समाज को दिशा-निर्देश किया। समाजसुधारक संत कबीर का संपूर्ण काट्य लोक-हितकारी है। 'लोकमंगल की भावना' ही उनके काट्य का प्रयोजन है। आचरण की सभ्यता एवं कर्म की पवित्रता पर बल देने वाले कबीर ने अपने उपदेशों से लोकमंगल का विधान करने का पूरा प्रयास किया है। कबीर के काट्य का प्रभाव इतना ट्यापक है कि वह देश और काल की सीमाओं को पार कर अनेक भाषाओं में अनूदित हुआ है। उन्होंने जाति, वर्ण एवं सम्प्रदायों की सीमाओं का अतिक्रमण कर एक ऐसे मानव समाज की स्थापना की जिसमें विभिन्न दृष्टाकोण रखने वाले ट्यक्ति भी निस्संकोच सम्मिलित हुए। यही कारण है कि कबीर पंथ में हिंदू और मुसलमानों का प्रवेश समान रूप में देखा जाता है। कबीर का विश्वास था कि जब तक हिंदू-मुसलमानों में एकता नहीं हो पाएगी, तब तक किसी तरह का सुधार नहीं हो पाएगा। तमाम विरोधों और अवरोधों के बावजूद कबीर ने दोनों की कटु आलोचना की। उनकी पूरी कलई खोल कर रख दी। इसलिए कबीर कहते हैं -

"हिन्दुवन की हिन्दुआई देखी तुरकन की तुरकाई। कहैं कबीर सुनौ भाई साधो कौन राह है जाई।।" कबीर ने भक्ति के द्वार प्रत्येक के लिए खोलकर सबको उसका अधिकारी बताया। वहाँ ब्राहमण, क्षत्रिय, वैश्य, शूद्र आदि में किसी भी भाँति का भेदभाव नहीं है। ईश्वर की दृष्टि से सब बराबर हैं, सब उसी के बंदे हैं। केवल भक्ति की श्रेष्ठता को अंकित करते हुए तथा जाति-पाँति एवं ऊँच-नीच की भावना का खुलकर विरोध करते हुए वे कहते हैं -

> "जाति-पाँति पूछे निहं कोई, हरि को भजे सो हरि का होई।।"

कबीर ने हर हाल में समाज को पतन की ओर जाने से रोकने की चेष्टा की है। जीवन के कितने ही कटु संघर्षों के बावजूद अपने विचारों पर अडिग रहते हुए उन्होंने समाज का पथ-प्रदर्शन किया। उनके मित्र पीपा, रैदास आदि निम्न जाति के थे। दिलतोद्धार की प्रेरणा को लेकर दिलतों के प्रित समाज के झूठे आडम्बरों पर उन्होंने तीव्र चोट की। कबीर का सामाजिक कार्य महान था। वे समूचे मनुष्य मात्र को समान मानते हुए हर प्रकार के भेदभाव को व्यर्थ मानते थे। इसीलिए मनुष्यत्व एवं मानवतावाद का प्रतिपादन करते हुए उन्होंने कहा है -

"बकरी पात खात है, ताकी काढे खाल। जे जन बकरी खात है, तिनके कौन हवाल।।"

अतः कबीर ने मानव को तात्विक दृष्टि से अभेद बताकर जाति, वर्ग तथा सम्प्रदाय के भेद को दूर किया। मानवतावाद की ओजस्विनी धारा को बहाया। मानव की एकता बनाने के लिए उन्होंने हिंदू-मुस्लिम एकता पर बल दिया। सामाजिक एकता को सदृढ़ किया। नैतिक आचरण पर विशेष बल देकर उन्होंने स्त्री-पुरूष समानता की बात कही। एक तरफ कामिनी नारी (माया) की निंदा की तो दूसरी ओर पतिव्रता नारी को आदर दिया। सद्गुण, नैतिकता, सदाचार, सत्कर्म आदि मानवीय मूल्यों पर बल देकर उन्होंने सामाजिक उत्थान की कोशिश की। उनके समूचे काव्य में लोकमंगल की भावना के दर्शन होते हैं।

संत कबीर की तरह ही रामकाट्य के प्रमुख भक्त कि तुलसीदास की काव्य-साधना भी लोकमंगल की भावना से ओतप्रोत है। तुलसी ने तो अपनी काव्य-रचना का उद्देश्य ही लोक-कल्याण बताया है - "कीरित भिनिति भुति भिले सोई। सुरसिर सम सब कहँ हित होई।" अर्थात् वही किवता श्रेयस्कर होती है, जो गंगा के समान सबका हित करने वाली हो। सगुण रामभिक्ति शाखा का साहित्य सामाजिक मर्यादा और लोकमंगल का साहित्य है। रामकथा में ये गुण विद्यमान हैं। राम का चित्र इतना मर्यादित है, इसीलिए उन्हें 'मर्यादापुरूषोत्तम' कहा जाता है। तुलसी ने अपने युग के संदर्भ को रचनात्मकता में ढ़ालकर उसे लोकोन्मुख एवं लोकग्राही बना दिया है। 'विवके' और 'लोकमंगल' तुलसी के प्रिय शब्द हैं। पिरणामतः यह धारा भिक्ति की वैधीभूमि पर चली। रामकाव्य ने हिंदू जनता में आस्तिकता का भाव उत्पन्न कर ईश्वर के प्रति विश्वास का भाव जाग्रत किया,

जिसने निराश हिंदू जनता में आशा और स्फूर्ति का संचार ह्आ। तुलसीदास ने अपने समय के पराजित और थकी मानसिकता वाले समाज को राम के वनवासी जीवन के संघर्षों से भरी विकट परिस्थितियों से जूझने की प्रेरणा दी है। इसीलिए त्लसी ने राम के राजा वाले रूप के स्थान पर उनके वनवासी जीवन को महिमामंडित किया है। त्लसी ने अपने समय के आपसी मतभेदों और टकराव वाले विचारों में भी मैत्री स्थापित करने का कार्य किया। उन्होंने राम को शिव का और शिव को राम का भक्त दिखाकर धार्मिक सद्भाव स्थापित किया। संस्कृत और लोकभाषा अवधी का अपनी रचनाओं में प्रयोग किया। ब्रज और अवधी दोनों लोक भाषाओं में काव्य रचना कर अपने य्ग की लोक-भाषाओं में मैत्री स्थापित की। साथ ही लोकहित हेत् संस्कृत का मोह त्यागकर तत्कालिन जनभाषा ब्रज, अवधी आदि में अपनी काव्य-रचना की। उनका 'रामचरितमानस' यह महाकाव्य भक्ति, धर्म एवं दर्शन से ओतप्रोत तो है ही, साथ ही विश्व-साहित्य के उत्कृष्ट ग्रंथों में से एक है। डॉ. ग्रियर्सन ने रामचरितमानस के महत्व को बताते हुए लिखा है कि यह राजमहल से झोंपड़ों, हिन्दू समाज के छोटे-<mark>बड़े, धनी-निर्धन, शिक्षित-अशिक्षित यानि</mark> समाज के प्रत्येक वर्ग द्वारा समान गंभीरता से पढ़ा जाता है। कवितावली, गीतावली, दोहावली, विनय-पत्रिका, कृष्ण-गीतावली, जानकी-मंगल, पार्वती-मंगल, राम-लला नहछू, राम-बाह्क आदि-आदि अनेक रचनाएँ देश-विदेश के पाठकों में आज भी सम्मान और भक्ति से पढ़ी जाती हैं। त्लसी ने अपने काव्य में समन्वय की विराट चेष्टा की है, जिसने तत्कालीन समाज को विश्रंखलित होने से बचाया है। उनके साहित्य में लोकमंगल, लोकरंजन एवं लोकरक्षा का जो भाव निहित है, उससे वह उदात एवं गरिमापूर्ण बन गया है। रामचरितमानस का अर्थ है - ''रामचरित-रूपी मानसरोवर जिसमें अवगाहन से तन निर्मल बनता है। दूसरा अर्थ राम के चरित्र <mark>को अपने मानस में उतारने से</mark> है। यह लोक-कल्याणकारी एवं लोकरंजक है। इसको अपने अंतःकरण में उतारने से मानस के समस्त विकार दूर हो जाते हैं और वास्तविक स्ख-शांति की प्राप्ति होती है।"4 रामचरितमानस मर्यादाप्रूषोत्तम आदर्श राम के पूरे आदर्शवाद, सदाचार एवं नैतिकता को लेकर लोक में रामराज्य की प्रतिष्ठापना हेतु लोकमंगल की भावना से ओतप्रोत है।

तुलसीदास ने ऐसे राज्य का सपना देखा था, जिसमें सारी प्रजा सुखी हो। तुलसीदास ने अपने समय के किसी शासक या शासन पर सीधे कोई प्रहार नहीं किया है, लेकिन सामान्य रूप से उन्होंने उन शासकों को कोसा है, जिनके राज्य में प्रजा दुःखी रहती है - "जासु राज प्रिय प्रजा दुखारी, सो नृप अवसि नरक अधिकारी।" तुलसीदास के मतानुसार अच्छा शासन या सुराज वही है, जिसमें दुष्टों की न चले और प्रजा अपनी स्रक्षा के संबंध में आश्वस्त हो -

अर्क जवास पात बिन भयउ। जस सुराज खल उद्यम गयउ।। तुलसी के रामराज्य में हर ओर लोकमंगल की ही कामना है। उनके रामराज्य में कोई भी दुःखी, पीड़ित, रोग से ग्रस्त नहीं है। वे अपने काव्य के माध्यम से लोक में सकारात्मक चेतना को जगाना चाहते थे। इसीलिए उनके रामराज्य की परिकल्पना में चारों तरफ खुशहाली ही खुशहाली के दर्शन होते हैं -

"सब सुंदर सब विरून सरीरा। निहं दिरद्र कोउ दुखी न दीना, निहं कोउ अबुध न लच्छन हीना।"

तुलसी के समन्वय की दृष्टि में लोकमंगल की भावना निहित है। उनका सारा काव्य समन्वय की विराट चेष्टा है। इनके काव्य में लोक और शास्त्र, भाषा और संस्कृति, ब्राह्मण और चाण्डाल, निर्गुण और सगुण, ज्ञान और भिक्ति, पाण्डित्य और अपाण्डित्य तथा व्यक्ति और समाज का पूर्ण समन्वय पाया जाता है। इनकी कविता में व्यक्तिगत साधना के साथ-ही-साथ लोकधर्म की अत्यंत उज्ज्वल छटा वर्तमान है। कुल मिलाकर 'रामचिरतमानस' आदि से अंत तक समन्वय का काव्य है और यही कारण है कि तुलसी लोकनायक बन सके तथा जन-जन के प्रिय बन गए। तुलसीदास ने पारिवारिक, सामाजिक आदर्श की व्याख्या अपने पात्रों के माध्यम से की। उन्होंने मानस के पात्रों के माध्यम से, खास करके राम के माध्यम से समाज के सामने शील, सदाचार का संदेश रखा है -

"सूधे मन सूधे वचन सूधि सब करतूति। त्लसी स्धि सकल विधि, रघ्वर प्रेम प्रसूति।"

अतः तुलसीदास ने रामचिरतमानस तथा अपनी अन्य कृतियों द्वारा लोकमंगल की भावना को अपने सम्मुख रखा है। रामराज्य की संकल्पना के पीछे भी लोकमंगल का मुद्दा सर्वोपिर है। तुलसीदास भक्त थे और भिक्त-मार्ग के द्वारा लोकमंगल तथा लोककल्याण का ही कार्य उन्होंने अपनी रचनाओं द्वारा किया है।

भिन्तकालीन सूफी कवियों के काद्य में भी लोकमंगल की भावना का अंतर्भाव होता है। इन किवयों ने हिंदू-मुस्लिमानों में सांस्कृतिक एकता का अनूठा प्रयास किया। इन्होंने लौकिक प्रेम के माध्यम से अलौकिक प्रेम की व्यंजना की और अपनी प्रेमगाथाओं द्वारा उदारता, सिहष्णुता एवं प्रेम की शिक्षा दी। जायसी जैसे कवियों ने ईश्वर प्रेम के साथ-साथ मानव के प्रति प्रेम का संदेश भी दिया है, जिसमें लोकमंगल की भावना निहित है। जायसी के अनुसार प्रेम वह साधना है, जिसमें तन की क्रियाओं और मन की वृत्तियों की एकता आवश्यक है। अस्थिर मन और अक्षम देह से प्रेम साधना संभव नहीं। जायसी प्रेम तत्व को ही सर्वोच्च मानते थे। उन्होंने प्रेम के महत्व को प्रतिपादित करते हुए लिखा है -

"प्रेम अदिस्ट गगन ते ऊँचा"

जायसी प्रेम-प्राप्ति को ध्येय-प्राप्ति का सर्वोत्तम साधन मानते थे। पद्मावत में उन्होंने अनेक स्थानों पर प्रेम का बखान किया है -

> "तीनि लोक चैदह खंड, सबै परै मोहि सूझ। प्रेम छांडि नहिं लोन किछु, जो देखा मन बूझ।।"

जायसी ने 'पद्मावत' एवं अन्य काट्य के माध्यम से सांस्कृतिक धरातल पर हिंदू-मुस्लिम एकता का विधान करते हुए लोकमंगल की चेष्टा की। उन्होंने सार्वभौमिक प्रेम तत्व का आश्रय लेकर इन दोनों सम्प्रदायों के दिलों को जोड़ने का प्रयास किया। सूफी कवि उदार मतवादी थे। जायसी आदि सूफी कवियों के काट्य में कहीं पर भी साम्प्रदायिक भाव नहीं है। संत कवियों की तरह ही सूफी कवियों ने भी सदाचरण, पवित्र कर्म एवं सहिष्णुता को शुद्ध जीवन के लिए आवश्यक माना है। डॉ. रामकुमार वर्मा ने प्रेम काट्य का सिंहावलोकन करते हुए कहा है - "हिंदू और मुसलमान संस्कृतियों का प्रेमपूर्ण सम्मिलन ही प्रेम-काट्य की अभिट्यक्ति है। हिंदू धर्म के प्रधान आदर्शों को मानते हुए भी सूफी सिद्धांतों के निरूपण में मुसलमान कवियों की कुशलता है। इन दोनों भिन्न सिद्धांतों के एकीकरण ने प्रेम-काट्य को सजीवता के साथ-साथ लोकप्रियता भी प्रदान की। फलस्वरूप जिस प्रकार संत काट्य की परंपरा धार्मिक काल के बाद भी चलती रही, उसी प्रकार प्रेम-काट्य की परंपरा भी धार्मिक काल के बाद भी साहित्य में दृष्टिगोचर होती रही।... हिंदू-संस्कृति ने आदर्शवाद और मुसलमान संस्कृति ने सूफी मत के सिद्धांतों से प्रेम-काट्य को पुष्ट किया। इसका पोषण हिंदू और मुसलमान दो जातियों की संस्कृतियों में हुआ।"

भिक्तिकालीन काट्य में कृष्ण-भक्त किवयों का भी महत्वपूर्ण स्थान है। सूरदास तथा अन्य कृष्ण-भक्त किवयों के साहित्य में उच्चकोटि की भिक्तिभावना एवं साहित्यिकता के दर्शन होते हैं। इन किवयों ने अपनी अद्भुत काट्य-प्रतिभा का परिचय देते हुए कृष्ण के लोकरंजक स्वरूप को चित्रित किया है। कृष्ण-भिक्त साहित्य प्रधानतः भगवान के लोकरंजक रूप को उजागर करता है। यह ऐकांतिक भाव का साहित्य है। यह ध्यान देने की बात है कि यद्यपि कृष्ण के चरित्र में सामाजिकता और लोकमंगल की भावना के समावेश का पूरा अवकाश है, किंतु हिंदी के कृष्ण-भक्त किवयों का ध्यान उधर नहीं गया। सूरदास की किवता में लोक की रक्षा का पक्ष न सही, किंतु रंजन पक्ष विद्यमान है।... कृष्ण-भिक्त काट्य में रामचरितमानस जैसा कोई विशद महाकाट्य तो नहीं रचा गया, लेकिन इसने सामान्य गृहस्थों के दैनंदिन जीवन को कृष्णचरित के उल्लास और ट्यथा से भर दिया।"6

यद्यपि कृष्ण-भक्ति-काव्य लीलावादी काव्य है और लीला, लीला के लिए होती है। लोकमंगल की भावना या समाज से उसका कोई विशेष सरोकार नहीं होता, परंतु फिर भी इस काव्य में उस समय की सामाजिक, धार्मिक एवं सांस्कृतिक दशा का यत्किंचित यथार्थ वर्णन मिलता है। कृष्ण-भक्त किवयों की साधना वैयक्तिक होते हुए भी लोकमंगल की भावना से नितांत शून्य नहीं है। सूरदास के काव्य में लोकरंजन की प्रवृत्ति विद्यमान है। कृष्ण के मधुर रूप की झाँकी अंकित करते हुए उन्होंने जनमानस में प्रेम, माधुर्य एवं सौंदर्य की प्रतिष्ठा की है। सूरदास ने भिक्त के महत्व को अंकित करते हुए भिक्त में जाति-पाँति भेदभाव को व्यर्थ करार दिया। उनकी दृष्टि में भगवान की भिक्त का सबको अधिकार है -

> "हरि के जन ते सब अधिकारी। हौ हरि सब पतितन को नायक।।"

समूचा कृष्ण-भक्ति साहित्य आनंद और उल्लास का साहित्य है। इस साहित्य ने जीवन में व्याप्त जड़ता को भंग कर उसे गतिशील बनाया और उद्देश्यहीनता को दूर कर उसे लक्ष्य की ओर अग्रसर किया। जीवन की नीरसता को समाप्त कर उसे सुषमा, सौंदर्य की ओर अग्रसर करने में कृष्ण-काव्य की महती भूमिका रही है। कृष्ण-भक्त कवियों ने लोकरंजनकारी कृष्ण की मधुर लीलाओं से निराशा से मुरझाए चेहरों पर प्रफुल्लता का संचार करने में सफलता प्राप्त की है, यही लोकमंगल की दृष्टि से उनका सबसे बड़ा योगदान है।

निष्कर्षतः भक्तिकालीन काव्य के केंद्र में लोकहित का भाव समाया हुआ है। इन कवियों ने अपने काव्य दवारा समाज को नैतिकता एवं भाईचारे का उपदेश दिया। निराश जनता के हृदयों में प्नः आशा और स्फूर्ति का संचार करने में उनके काव्य का महत्वपूर्ण योगदान रहा। अपनी काव्य-साधना द्वारा उन्होंने मानवीय मूल्यों की पुनरुथापना की तथा जनसाधारण को एक आदर्श मानव बनने की प्रेरणा दी। कबीर ने बाह्याडम्बरों का खण्डन करते हुए सदाचार पर बल दिया, हिंदू-म्सलमानों में धार्मिक एकता की बात कही। साथ ही सद्गुण, नैतिकता, सदाचार, सत्कर्म आदि मानवीय मूल्यों पर बल देकर उन्होंने सामाजिक उत्थान की कोशिश की। तो जायसी ने हिंदू-म्स्लिम सांस्कृतिक एकता का संदेश दिया। उन्होंने सार्वभौमिक प्रेम तत्व का आश्रय लेकर इन दोनों सम्प्रदायों के दिलों को जोड़ने का प्रयास किया। तुलसी ने मर्यादा पुरूषोत्तम राम के आदर्श चरित्र की परिकल्पना करते हुए जन-रक्षक एवं धर्म-रक्षक के रूप में एक ऐसा चरित्र दिया, जिसने भारतीय जनमानस को आशा का नया संदेश प्रदान किया। रामराज्य की संकल्पना के पीछे भी लोकमंगल का मृद्दा सर्वोपरि है। तुलसीदास भक्त थे और भक्ति-मार्ग के द्वारा लोकमंगल तथा लोककल्याण का ही कार्य उन्होंने अपनी रचनाओं द्वारा किया है। सहिष्ण्ता एवं समन्वयवाद के सिद्धांतों के द्वारा उन्होंने समाज के सभी वर्गों को पारस्पारिक प्रेम का पाठ पढ़ाया। सूरदास ने कृष्ण के लोकरंजक स्वरूप के आकर्षक चित्र अपने काव्य में अंकित किए। कृष्ण के मधुर रूप की झाँकी अंकित करते हुए उन्होंने जनमानस में प्रेम, माध्यं एवं सौंदर्य की प्रतिष्ठा की है। समूचा भिक्तिकाट्य जनभाषा में लिखा गया। कबीर ने जनभाषा में ही अपनी वाणी को अभिट्यक्त किया, जायसी ने जनभाषा अवधी में तो तुलसी और सूर ने अवधी तथा ब्रज में अपनी काट्य-साधन की। अतः निश्चयही समूचा भिक्तिकालीन काट्य लोकमंगल की भावना से ओतप्रोत है।

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मुळशी पेटा -सत्याग्रह : एक चिकित्सक अभ्यास

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कोणत्याही देशाची सर्वांगिण क्रांती व्हावयाची असेल तर त्या देशात ओद्योगिकीकरणाला चालना मिळणे आवश्यक असते व हे औद्योगिकीकरण त्या देशातील कच्चा माल, विजेची उपलब्धता, भांडवल, शासनाची ध्येयधोरणे इ. घटकावर अंवलबून असते. या सर्व घटकामधील उर्जा किंवा विजेची उपलब्धता हा एक महत्त्वाचा घटक आहे आणि विजेच्या उपलब्धतेसाठी मोठमोठया नदयावरती मोठमोठाली धरणे बांधून जलविद्युतची निर्मीती करावी लागते. या जलविद्युत प्रकल्पाच्या सहाय्याने मोठया शहरांना विजेचा पुरवठा करून ओद्योगिकीकरण करता येते च पर्यायाने विकासाला चालना मिळते. पण या विकासाच्या पाठीमागच्या दूस-या बाजूचा ही अभ्यास करणे गरजेचे ठरते. कारण या प्रचंड मोठया धरणामुळे कित्येक <mark>गावे तेथील हजारो एकर जमिन पाण्या</mark>खाली जातात <mark>आ</mark>णि तेथील धरणग्रस्त विस्तापित होतात. तेथील लोकांना सा<mark>माजिक, आ<mark>र्थिक व मानसिक अडचर्णीना सामोरे</mark> जावे <mark>ला</mark>गते. त्यामूळेच या धरणग्रस्त</mark> लोकांचे व्यवस्थित पूनर्व<mark>स</mark>न होणे <mark>अत्यावश्यक टरते. या धरणग्रस्तांच्या पिका</mark>ऊ जिमनी पाण्याखाली जाऊन त्या धरणाच्या पाण्यावरती दुस-या भा<mark>गातील जिमणी समृध्द होणार असतात. त्या भागाचे</mark> औद्योगिकीकरण होऊन विकास होत असतो. म्हणून त्या प्रदेशाती<mark>ल लोकांनी आपल्या भागातील काही जिमनी नुकसान</mark> भरपाई म्हणून धरणग्रस्तांना देणे गरजेचे ठरते किंबहू<mark>ना</mark> तसा शा<mark>सनाने कायदाही केला आहे. परंतु या कायदयाची अंमल</mark>बजावणी शंभर टक्के होताना दिसत नाही. प्रसंगी या धरणग्र<mark>स्तांना आपल्या हक्कासाठी, पुनर्वसनासाठी लढावे लागते.</mark> धरणे, आंदोलन, मोर्चे काढावे लागतात. हीच रिथ<mark>ती तत्का<mark>लीन कोयना धरण, राधानगरी धरण, काळमावाडी धरण इ.</mark> धरणग्रस्<mark>तां</mark>च्या बाबतीत सुधा</mark> घडलेली आहे. या धरण ग्रस्त <mark>सत्याग्रह - आंदोलनाची परंपरा १९२१ च्या मुळशी पेटया</mark> सत्याग्रहापासून सुरू झालेली दिसते. म्हणूनच प्रस्तुत शोध नि<mark>बंधात मुळशी - पेटा धरणग्रस्ताच्या पुनर्वसनासाठी लढल्या</mark> गेलेल्या सत्याग्रहावर साधार प्रकाश टाकला आहे.

या शोध निबंधामधून धरणग्रस्तांच्या पुनर्वसनाच्या लढयामधील महात्मा गांधी व सेनापती बापट यांची सत्याग्रहाची भूमिका, स्त्रियांनी घेतलेला सहभाग, भांडवलशाही, साम्राज्यवादी प्रवृत्तीला केलेला विरोध व या सत्याग्रहामधून प्राप्त झालेली फलिते यांची साधार माहिती मिळते.

मुळशी पेटा सत्याग्रह हा जिमिनिशी संबधीत प्रश्नावर मावळ भागातील शेतक-यांनी आपल्या हक्कासाठी चालविलेला सत्याग्रह होता. या सत्याग्रहाचा मुख्य गाभा होता तो म्हणजे धरणामुळे विस्थापित झालेल्या धरणग्रस्तांच्या (शेतक-यांच्या) पुनर्वसनाचा प्रश्न निकालात काढणे होय आणि हा ब्रिटीश भारतामधील धरणग्रस्तांच्या पुनर्वसनासाठी घडलेली मुळशी - पेटा सत्याग्रह ही घटना विशेष उल्लेखनीय असून सुध्दा ती तशी दुर्लक्षित राहिलेली दिसते. हा मुळशी - पेटा सत्याग्रह महात्मा गांधीजीच्या असहकार आंदोलनावेळी सन १९२१-१९२३ असा तीन वर्षे लढला गेल्याचे दिसते. हा मुळशी सत्याग्रह फक्त मावळ भागात मर्यादित असून सुध्दा या सत्याग्रहाचे अनेक दुरगामी परिणाम झाल्याचे संशोधना अंती दिसते. या सत्याग्रहाचा विविध अंगाने विचार केल्यास त्याचे स्वतंत्र भारतामधील महत्व अधोरेखित होते.

पुणे शहराच्या पश्चिमेला 'मुळशी' तालुका असून त्यास पूर्वी 'मुळशी -पेटा' असे म्हटले जात असे. या भागात मुळा व निरा या दोन नंदयाचा संगम असून पर्जन्याचे प्रमाण ही भरपूर आहे. येथील जिमनीत आंबेमोहोर सारख्या सुगंधीत तांदळाचे उत्पादन घेतले जाते. अशा या मावळ प्रदेशातून बारमाही वाहणा-या नदया व मुबलक पर्जन्यवृष्टी याचा फायदा घेऊन 'टाटा' कंपनीने या ठिकाणी धरण बांधून वीज निर्माण करायची आणि ती वीज उद्योगधंदयाना पुरवायची अशी योजना तयार केली. शेतीप्रधान ब्रिटीश भारतात उदयोग धंदयाची वाढ होणे आवश्यक असल्याने ते विजेवर चालले तर कोळशाच्या वापरात बचत होणार असल्याने जलविद्युत निर्मितीसाठी मोठमाठी धरणे बांधण्यास उत्तेजन देण्याचे सरकारचे धोरण होते. याच धोरणाला अनुसरून मुळशी पेटा प्रकल्पामध्ये निर्माण झालेली वीज मुंबईतील गिरण्यांना पुरवल्यास ५ ते ६ लाख टन कोळसा वाचणार होता. म्हणून ब्रिटीश भारत सरकारने 'टाटा' कंपनीस मुळशी पेटा येथे

मुळा व निरा नदीच्या संगमावर धरण बांधून वीज निर्मीती करण्यास परवानगी दिली आणि याच वीज प्रकल्पामुळे या पेटयातील ५४ गावे धरणाच्या पाण्याखाली बुडणार होती. म्हणूनच सेनापती बापट, विनायकराव भुस्कूटे व शंकरराव देव इत्यादीच्या नेतृत्वाखाली भांडवलशाही विरोधात हा लढा लढला गेल्याचे दिसते.

या टाटा कंपनीच्या योजनेमध्ये टाटाने सरकारबरोबर केलेल्या जिमन विषयक करारात या प्रदेशातील शेतक-यांचा काहीच विचार केलेला नव्हता. ज्यांच्या जिमनी जाणार होत्या त्यांना पर्यायी जिमनी देण्याची कोणतीच योजना नव्हती. थोडक्यात टाटाच्या या वीज प्रकल्पामुळे मावळ प्रदेशातील शेतकरी देशोधडीला लागणार होते. २३ सप्टेंबर १९२१ रोजी स्थापन झालेले मुळशी सत्याग्रह मंडळा मार्फत (या मंडळामध्ये सेनापती बापट, वासुदेव विट्ठल दास्ताने आणि बाळूकाका कानिटकर इ. चा सहभाग होता.) मुळशी सत्याग्रहाची व्याप्ती वाढविण्याचे प्रयत्न सुरू असतानाच सरकारने व टाटा कंपनीने धरणग्रस्त शेतक-यांनी नुकसान भरपाईची रक्कम घेऊन मुकसंमती दयावी असे धोरण आखले होते. या नुकसान भरपाईचे एकरी दर पुण्याचे कलेक्टर यांनी जाहीर केले होते. त्यानुसार अंबेमोहोर तांदूळ पिकणा-या जिमनीस एकरी ५०० ते ५५० रूपये दर, <u>साळीच्या</u> जिमनीस एकरी ३५० रूपये, जिरायत जिमनीस एकरी ५० रूपये हा दर मिळणार होता. हे नुकसान भरपाईचे दर बाजारातील जमिनीच्या किमर्तीपेक्षा फारच अल्प होते. ज्यांना नुकसान भरपाईची रक्कम नको होती. त्यांना नाशिक जिल्हयातील ७०० एकर जिमन धरणग्रस्तांना देण्याचे आश्वासन सरकारकडून देण्यात आले हो<mark>ते. पण या आश्वासनाची पुर्ती झाली नाही.</mark> नोव्हेंबर १९२१ ते मार्च १९२२ पर्यंत टाटा कंपनीने बॅरिस्टर जयकराम मार्फत तड<mark>जोड घडवून आणण्याचे ही अयशस्वी प्र</mark>यत्न करण्यात आल्याचे दिसते. मुळशी पेटयातील मावळयांच्या भावना सम<mark>जावून घेऊन सरकारने आणि कंपनीने सुरवाती</mark>पासून हा प्रश्न हाताळला असता तर तो चिघळला नसता असे त्यांचे मत झाले होते.

सधन भागातील तेरा <mark>हजार एकर जमीन धरणाखाली जाऊन हजारो शेतक-यां</mark>ना विस्थापित करणे अन्यायाचे आहे. त्याचबरोबर मुं<mark>बई प्रांतातील कमी होऊ लागलेले अन्न धान्य उत्पादन ही या वीज प्र</mark>कल्पाला विरोध करण्याची खरे कारणे होती –

मुळशी पेटा सत्याग्र<mark>हाचा अभ्यास करत असताना महात्मा गांधीच्या नेतृत्वाखा</mark>ली सूरू असलेली असहकार चळवळ व त्यांचा नेतृत्वाखाली <mark>कार्य करणारे विनायकराव भुरकूटे, शिवरामपंत परांजपे</mark>, डॉ. वि.दा. फाटक, शंकरराव देव, तात्यासाहेब केळकर, आ<mark>ण्णासाहेब भोपटकर इ. कॉंग्रेस कार्यकर्ते आणि त्यांचे सत्या</mark>ग्रहाविष<mark>यी</mark> असणारे मत व या मुळशी सत्याग्रहाचे दुसरे नेते सेना<mark>पती बापट यांचे सत्याग्रहाविषयीचे विचार यांच्यातील</mark> फरक लक्षात येतो.

महात्मा गांधी यांच्या नेतृत्वाखालील विनायकराव भुस्कूटे व शंकरराव देव यांचे सत्याग्रही विचार व सेनापती बापट यांच्या नेतृत्वामुळे य<mark>ा मुळशी - पेटा सत्याग्रहाला प्राप्त झालेले क्रां</mark>तीकारी जहा<mark>ल</mark> वळण या दोन वेगवेगळया दृष्टीकोनातून मुळशीचा सत्या<mark>ग्रह समजावून घ्यावा लागतो. धरणग्रस्त शेतक-यांना</mark> न्याय मिळावा त्यांना नुकसान भरपाई मिळावी त्यांचे पूनर्वसन व्यवस्थित केले जावे या मागणीसाठी हा सत्याग्रह झाला असला तरी महात्मा गांधीजीचे सत्याग्रहाविषयाचे वि<mark>चार व सेनापती बापटांचे सत्याग्रहाविषयाचे विचार वेगळे होते. हे या अभ्यासातू</mark>न स्पष्ट होते.

मुळशीचा हा वीजप्रकल्प सत्याग्रहाच्या मार्गानेच बंद पाडायचा असे महात्मा गांधीचा बरोबर विनायकराव भुस्कूटे, शंकरराव देव यांनी विचार विनीमय करून ठरविले होते आणि म्हणून या मुळशी - पेटा सत्याग्रहातील पहिले सत्याग्रही म्हणून शंकरराव देव निवडले गेले होते. शंकरराव देवांनी या सत्याग्रहामध्ये दोनदा तुरुंगवास भोगला — त्यानंतर मात्र त्यांनी या सत्याग्रहातून स्वतःला बाजुला केलेले दिसते. त्याचे कारण सेनापती बापट यांची कार्यपध्दती असे देतात. ते म्हणतात सेनापती बापटांच्या नेतृत्वाखाली मुळशीचा सत्याग्रह महाराष्ट्राचा झाला. पण तो मुळशी पेटयातील मावळांचा राहिला नाही. या विधानातील युक्तीवाद करायचा म्हटल्यास सेनापती बापटाचे बेळगांव येथील भाषण महत्वपूर्ण टरते. ते या भाषणात असे म्हणतात, सरकारला हे माहित आहे की मुळशी प्रकरणासी मी संबंधीत असल्याने रक्तपाताशिवाय ते संपणार नाही – प्रथमता आपण सर्व चांगले मार्ग वापरले पाहिजेत परंतु जेव्हा हयाची मर्यादा संपते तेव्हा आपण मालमत्ता नष्ट केली पाहिजे किंवा माणसाविरूध्द हिंसेचा वापर केला पाहिजे. माझा हिंसा व अहिंसा या दोन्हींवर विश्वास आहे. एकेदिवशी तुम्हाला हत्या करण्यास किंवा मरण्यास तयार व्हावे लागतेच.

या सेनापती बापटांच्या भाषणावरून त्यांचा सत्याग्रहाविषयीचा कार्यपध्दती लक्षात येते. आणि ती महात्मा गांधीच्या सत्याग्रहापेक्षा किती वेगळी होती हे दिसते. याला दुजोरा म्हणून महात्मा गांधीच्या पत्राचा उल्लेख करता येईल. ५ एप्रिल १९२४ च्या पत्रामध्ये महात्मा गांधी म्हणतात, या चळवळीचा नेता (सेनापती बापट) अहिंसेवर शंभर टक्के विश्वास ठेवणारा नाही. हा दोष चळवळीच्या यशाला घातक आहे.

हा मुळशी पेटा सत्याग्रह सन १९२१-१९२४ या काळात सुरू राहिला. या सत्याग्रहाच्या ४ फे-या झाल्याचे दिसून येते. दोन आखिल भारतीय मुळशी परिषद झाल्या. या परिषदामधून वेळोवेळी मुळशी - पेटा सत्याग्रहाची व्युहरचना केली गेली. सुरूवातीला गांधी मार्गाने हा सत्याग्रह लढला गेला. पण या सत्याग्रहाची सर्व सुत्रे सेनापती बापट यांच्याकडे आल्यानंतर तो शुध्द सत्याग्रह मार्गाने लढला गेल्याचे दिसते. या सत्याग्रहाची कार्यपध्दती म्हणजे धरण बांधण्या-या मुजरांच्या रेल्वे गाड्या अडविणे, परिषदा भरविणे, व्यापक स्वरूप देण्यासाठी निधी गोळा करणे, मजुरांचे कडे तोडून त्यांचे काम बंद पाडणे, स्वयंसेवकांचे संघटन करणे, पत्रके काढून प्रबोधन करणे, टाटा कंपनीशी संबंधीत कारखान्यामध्ये एक दिवसाचा लाक्षणिक संप घडवून आणणे, सत्याग्रह सहाय्यकारी मंडळाची स्थापना करणे, हिंसेचा पुरस्कार करणे इ. होत्या. त्या कार्यपध्दतीचे सेनापती बापटाच्या मार्गदर्शनाखाली सुरू होत्या.

मुळशी - पेटा सत्याग्रह प्रांरभी लोकजागृती, शांततेच्या मार्गांने केला गेला. तर नंतर सेनापती बापट यांच्या नेतृत्वाखाली या लढयाने हिंसक रूप धारण केलेले दिसते. हा लढा सलग ३ वर्षे सत्याग्रहींनी प्रयत्नांची शिकस्त करून सत्याग्रहींनी चालविला. परंतु टाटा कंपनीला या धरणाचे बांधकाम थांबविण्यास भाग पाडणे सत्याग्रहींना शक्य झाले नसल्याचे दिसते. सुरुवातीला लोकसंग्रह सारख्या वृत्तपत्रानेसुध्दा या सत्याग्रहास पाठिंबा दिलेला दिसतो. पण नंतरच्या काळातील अत्यंत अल्प प्रतिसादाचे प्रतिबिंब याच लोकसंग्रह वृत्तपत्रात उमटलेले दिसते. टाटा कंपनीच्या हस्तकांनी सत्याग्रहाचा कशा पध्दतीने मारहाण केली आणि त्यांच्या रित्रयांच्यावर अन्याय अत्याचार केला यांचेही वर्णन आपल्याला कवी कुंजविहारी यांच्या मुळशीचा पाळणा या कवीतेतून साधार सांगता येते. या धरणासाठी टाटा कंपनीने सुमारे १०८०७ एकर जमीन संपादित केली होती. ही जिमन संपादित करताना येथील शेतक-यांना त्यांनी नुकसान भरपाई त्याच बरोबर पुनर्वसनाबाबत अनेक आश्वासने दिली होती. पण ती टाटा कंपनीने नंतरच्या काळात सुध्दा पाळली नसल्याचे दिसते. या मुळशी सत्याग्रहाचे आणळी एक वैशिष्टय म्हणजे या सत्याग्रहात पुरुषांच्या बरोबरीने रित्रयांनी व अल्पवयीन मुलांनी सुध्दा भाग घेतला. या सत्याग्रहातील रित्रयांचे नेतृत्व जयाबाई भोई या स्त्रीने केले. तर त्यांचा बरोबरीने जिजाबाई भोई व कुसाबाई सुतार या रित्रयांनीही सहभाग घेऊन या सत्याग्रहात आपले योगदान दिल्याचे दिसते.

मुळशी पेटयाचा सत्याग्रह करून धरणग्रस्त शेतक-यांचा पुनर्वसनाचा प्रश्न निकालात काढण्याचा प्रयत्न केला गेला. भारताच्या इतिहासामध्ये मुळशी सत्याग्रहापूर्वी धरणग्रस्तांच्या पुनर्वसनाच्या प्रश्नाकडे कधीही लक्ष देण्यात आले नव्हते. ते या सत्याग्रहाने घडून आले. हेच या सत्याग्रहाचे फलित होय. कोणताही देश उदयोग प्रधान व आर्थिकदृष्टया स्वावलंबी होण्यासाठी औद्योगिकीकरणाची आवश्यकता असते. परंतु हे औद्योगिकीकरण घडून येत असताना अशा विविध प्रकल्पातील धरणग्रस्ताच्या पुनर्वसनाचा त्यांच्या रोजगाराचा प्रश्न सुव्यवस्थितपणे सोडविणे अत्यावश्यक ठरते.

ज्यांच्या जिमनी धरणामुळे समृध्द होतील त्यांनी आपल्या जिमनीचा काही भाग धरणग्रस्तांना तोडून दयावा असा कायदा स्वातंत्रानंतर महाराष्ट्रात झाला. त्यांचे कारण म्हणजे हा मुळशी - पेटा सत्याग्रह होय.

मुळशी - पेटा सत्याग्रहामुळे व कोयना धरणाच्या बांधकामाविरूध्द (१९२९) प्रचार प्रसार (ग.ह. खरे यांनी कोयना धरणाविरूध्द प्रचार केला) केला. कोयना योजना लांबणीवर टाकण्यात आली आणि पर्यायाने महाराष्ट्राचा औद्योगिकीकरणास खिळ बसली असे मुळशी सत्याग्रहात भाग घेऊन कारावास भोगलेल्या पां.वा. गाडगीळ यांनी आपले मत व्यक्त केलेले दिसते. या विधानामधील तथ्य नाकारता येणार नाही. कारण आज कोयना प्रकल्पामुळे महाराष्ट्राचा औदयोगिक विकास घडून येण्यास मोठया प्रमाणावर मदत झाली आहे.

मुळशी - पेटा सत्याग्रह हा भारतीय स्वातंत्र संग्रामामधील एक महत्वाची घटना होती. या सत्याग्रहामध्ये सेनापती बापट, विनायकराव भुस्कूटे, आत्माराम मोडक, दत्तात्रय बांभळे, बळवंत शिवराम गोरे, शंकरराव देव, लालजी पेंडसे, शिवरायपंत परांजपे, बळवंत करंपीकर, वासुदेव दास्ताने, बाळूकाका कानिटकर इ. कार्यकर्त्यांनी सहभाग घेऊन आपले महत्वपुर्ण योगदान दिले आणि कदाचित यामुळेच पुढील काळात कार्यकर्त्यांची एक फळी उदयास आली आणि त्यातूनच स्वातंत्रोत्तर काळात संयुक्त महाराष्ट्राचा लढा ही यशस्वी झाल्याचे दिसते.

सारांश मुळशी - पेटा सत्याग्रह हा धरणग्रस्त शेतक-यांसाठी शहरी भागातील मध्यमवर्गीयांच्या नेतृत्वाखाली आपल्या हक्कासाठी चालविलेला लढा होता. तो फक्त शेतक-यांचे पुनर्वसन किंवा नुकसान भरपाई या पुरताच मर्यादित नव्हता तर ब्रिटीश साम्राज्यशाही आणि भांडवलशाही यांच्या विरोधात होता. आज भारताला स्वातंत्र मिळून ७५ वर्षे झाली

तरी सुध्दा भारतामधील धरणग्रस्तांचे पुनर्वसनाचे प्रश्न आजही लोंबकळत पडलेले दिसतात. गरज आहे ती फक्त सद्सद्विवेकबुध्दी जागृत ठेवून विकास करण्याची जेणेकरून एकीकडे भारताचा विकास साधत असताना दुसरीकडे अशा प्रकल्पग्रस्ताच्यावर अन्याय होणार नाही याची. दक्षता घेणे क्रमप्राप्त ठरते.

सन १९२१-२४ या काळामधील या मुळशी पेटा सत्याग्रहाला जरी यश मिळाले नसले. तरी निश्चितच या चळवळीमध्ये मुलभूत हक्काची अन्यायविरूध्द लढण्याची बीजे रोवली गेली असे. ठामपणाने म्हणता येते.

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बार्शी तालुक्यातील मा. तुळशीदार जाधव प्रशाला, वैराग मधील माध्यमिक स्तरावरील विद्यार्थ्यांच्या गणिताच्या अध्ययनात गणित प्रयोगशाळेच्या परिणामकारकतेचा अभ्यास

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सारांश

संशोधकाने गणित विषय विद्यार्थांना सहज सोप्या पध्दतीने आकलन होण्यासाठी गणित प्रयोगशाळेची निर्मिती केली गणित प्रयोगशाळेच्या माध्यमातून अध्यापन केल्यानंतर विद्यार्थांमध्ये कोणते बदल दिसून येतात हे पाहण्यासाठी सदरचे संशोधन हाती घेतले आहे. गणित प्रयोग शाळेत संशोधकाने विविध साहित्याचा वापर केला आहे त्याबद्दल माहिती परिशिष्टांत दिलेली आहे. संशोधकाने श्री गुरुदेवदत हायस्कूल, भूम या शाळेतील विद्यार्थ्यांना गणित प्रयोगशाळेच्या माध्यमातून अध्यापन केले त्यामध्ये संशोधकाने सर्व विद्यार्थ्यांना योग्य प्रकारे श्रवण होण्यासाठी मायक्रोफोन विथ स्पीकरचा वापर केला त्यामुळे विद्यार्थ्यांची एकाग्रता देखील वाढलेली दिसून आली.

संशोधकाने जे गणित प्रयोगशाळा हे शैक्षणिक साधन निर्माण केले त्याचा फायदा नक्की किती होतो हे शास्त्रीय संशोधनाच्या दृष्टीकोनातून पाहणे आवश्यक आहे. गणित प्रयोगशाळेसंबंधी विद्यार्थ्यांवर होणारा परिणाम शोधण्यासाठी सदर शोधनिबंधाचा विषय संशोधकाने निवडला आहे.

मुख्य मुद्दे : विद्यार्थी संपादणुक, गणितप्रयोगशाळा, परिणाकारकता इ.

प्रस्तावना

प्राथमिक शिक्षणातील गणिताच्या मूलभूत संकल्पना येथेच स्पष्ट झाल्या नाहीत तर गणिताचा पाया कच्चा राहून जाईल. माध्यमिक शाळेतील गणिताचा उपयोग केवळ उच्च शिक्षणाचा पाया म्हणून होतो. असे नाही तर ज्या विदयार्थ्यांना माध्यमिक स्तरावर गणित विषय आकलन न झाल्यास व उत्तीर्ण न झाल्यास शिक्षणासोबत शिक्षणाला रामराम करावा लागतो. आपल्या भविष्यकाळात जीवन व्यतीत करताना लहान मोठया व्यवसायामध्ये प्राथमिक शाळेत शिकलेल्या गणिताची चांगली मदत होते. गणित विषयाच्या संदर्भात गणिताचा पाया पक्का असल्याशिवाय विदयार्थी गणित व विज्ञानाच्या विविध शाखांमध्ये प्राविण्य मिळवू शकणार नाही. या सर्व बाबींचा विचार करता गणित हा विषय शिक्षणात पक्का होणे गरजेचे आहे. त्यामुळे गणितविषयक अध्यापनाच्या वेळी आढळणाऱ्या समस्या शोधणे आवश्यक आहे.

संशोधकाने स्वनिर्मित गणित प्रयोगशाळा निर्माण केली आहे. गणित प्रयोगशाळेत आधुनिक तंत्रज्ञानाच्या सहाय्याने गणिती विषय सोपा करण्याचा प्रयत्न केलेला आहे. गणित प्रयोगशाळेचा फायदा श्री गुरुदेवदत्त हायस्कूल, भूम येथील विद्यार्थ्यांना तर होत आहे परंतू परिसरातील इतर जिल्हयातील शिक्षक देखील गणित प्रयोगशाळेबददल माहिती घेऊन सदर उपक्रम इतर शाळेत राबविण्याचा प्रयत्न करीत आहेत.

संशोधकाने निर्माण केलेली गणित प्रयोगशाळा व त्यातून अध्यापनाचा कोणता परिणाम होतो हे पाहणे आवश्यक आहे.

समस्या विधान

बार्शी तालुक्यातील मा. तुळशीदार जाधव प्रशाला, वैराग मधील माध्यमिक स्तरावरील विद्यार्थ्यांच्या गणिताच्या अध्ययनात गणित प्रयोगशाळेच्या परिणामकारकतेचा अभ्यास

संशोधनाची उद्दिष्टये

- 1) माध्यमिक स्तरावरील विद्यार्थ्यांना गणित विषयामध्ये येणाऱ्या अडचणीची माहिती घेणे.
- 2) माध्यमिक स्तरावरील विदयार्थ्यांच्या गणित आकलनासाठी शैक्षणिक साधनांची निर्मिती करणे.
- 3) माध्यमिक स्तरावरील गणित विषयासाठी गणित प्रयोगशाळेच्या उपयोगाची परिणामकारकता तपासणे.
- 4) माध्यमिक स्तरावरील गणित विषयातील समस्येवर उपाययोजना स्चविणे.

परिकल्पना :

- संशोधन परिकल्पना
- 1. इयता 9 वी विद्<mark>यार्थ्यांना भूमिती विषयातील चौकोन व चौकोना</mark>चे प्रकार या घटकाच्या अध्यापनासाठी गणित प्रयोगशाळेचा वापर केल्यास विद्यार्थ्यांच्या आकलनात फरक पडेल.
- 2. इयता 9 वी विद्<mark>यार्थ्यांना भूमिती विषयातील चौकोन व चौको</mark>नाचे प्रकार या घटकाच्या अध्यापनासाठी गणित प्रयोगशाळेचा वापर केल्यास अध्यापनाचा उपयोग केल्यास विद्यार्थ्यांच्या आकलनात वाढ होईल.
- शून्य परिकल्पना (Null Hypothesis):

इयता 9 वी विद्यार्थ्यांना भूमिती विषयातील चौकोन व चौकोनाचे प्रकार या घटकाच्या अध्यापनासाठी गणित प्रयोगशाळेचा अध्यापनात वापर केल्यास विद्यार्थ्यांच्या आकलनात फरक पडणार नाही

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संशोधनाची गृहितके

- 1. गणित विषयाच्या पुर्नरचित अभ्यासक्रमाच्या अध्यापनामध्ये गणित प्रयोगशाळेचा अभाव आहे.
- 2. गणित विषयाच्या आकलनामध्ये विद्यार्थ्यांना अडचणी येतात.
- 3. गणित प्रयोगशाळेचा वापर केल्यास शिक्षकांना अध्यापन सहजसुलभ होईल.
- 4. गणित प्रयोगशाळेच्या वापर केल्यास गणित विषयाचे आकलन विद्यार्थ्यांना चांगल्या प्रकारे होईल.

चले

- 1) स्वाश्रयी चल: गणितप्रयोगशाळा
- 2) आश्रयी चल: इयता9वीच्या विदयार्थ्यांची गणित विषयातील संपादणुक

संशोधन पध्दती

कार्यकारण संबंधाचे निर्धार व शैक्षणिक प्रविधांची तुलना व मूल्यमापन म्हणजे प्रायोगिक पध्दती होय. कांही विशिष्ट चले काळजीपूर्वक नियंत्रित केल्याने अथवा त्यावर संस्करण केल्याने काय घडेल याचे वर्णन या प्रकारच्या संशोधनाचा केंद्रबिंदू चलातील संबंध हा असतो. हेतुपूर्ण संस्करण हा प्रायोगिक संशोधनाचा अविभाज्य भाग असतो.

प्रस्तुत संशोधनात उद्दिष्टांसाठी प्रायोगिक पध्दतीचा अवलंब केला गेला आहे. बार्शी तालुक्यातील मा. तुळशीदार जाधव प्रशाला, वैराग मधील माध्यमिक स्तरावरील विद्यार्थ्यांच्या गणिताच्या अध्ययनात गणित प्रयोगशाळेच्या परिणामकारकतेचा अभ्यास

करावयाचा असल्याने त्यावर गणित प्रयोगशाळेच्या माध्यमातून अध्यापन् करुन काय घडेल याचा अभ्यास करावयाचा असल्याने प्रस्तुत विषयाकरीता व उद्दिष्टांकरिता प्रायोगिक संशोधन पध्दतीचा वापर करणे इष्ट ठरले.

प्रायोगिक अभिकल्प

प्रस्तुत संशोधनासाठी एकलगट पूर्वोत्तर परिक्षण अभिकल्पाची निवड केली होती.

न्यादर्शन पध्दती

प्रस्तुत संशोधनात संशोधकाने नमुना निवडीच्या असंभाव्यता पध्दतीतील प्रासंगिम (सहेतुक) नमुना निवड पध्दतीचा आधार घेतलेला आहे.

नमुना

प्रस्तुत संशोधनासाठी बार्शी तालुक्यातील मा. तुळशीदास जाधव प्रशाला, वैराग मधील इयता 9 वीचे विद्यार्थी ही जनसंख्या होती. संशोधकाने नमुना निवडीच्या असंभाव्यता पध्दतीतील प्रासंगिक नमुना निवड या प्रकाराचा वापर करुन स्वामी विवेकानंद विद्यामंदिर केज या शाळेतील इयता 9 वीच्या 60 विद्यार्थ्यांची निवड प्रत्यक्ष प्रयोगासाठी करण्यात आली.

संशोधन साधने

प्रस्तुत संशोधनासाठी संशोधकाने संपादणुक चाचणी या साधनाची निवड केलेली होती. पूर्व व उत्तर चाचणीतील प्राप्तांकाचे मूल्यमापन करण्याच्या हेतूने संपादणुक चाचणी हे साधन वापरले आहे.

संख्याशास्त्रीय परिमाणे

प्रस्तुत संशोधनात ज्ञानरचनावादी पध्दतीची पूर्व व उत्तर चाचणीच्या गुणांसाठी मध्यमान, प्रमाणविचलन व t परीक्षिका या सांख्यिकीय तंत्राची निवड केली होती.

विश्लेषण व निष्कर्ष

क्र.	चाचणी	नमुना निवड	मध्य मान	प्रमाण विचलन	सह संबंध	स्वाधीनता मात्रा	प्राप्त मूल्य		गीतील ल्य	निर्णय
1)	पूर्व	60	15.4	5.06	8.83	59	2.77	0.1	0.2	0.02 स्तरांना
2)	उत्तर	60	21.4	5.13		59		1.69	2.44	सार्थ

पूर्व व उत्तर चाचणीतील प्राप्तांकाच्या मूल्यमापनासाठी मध्यमान, प्रमाणविचलन व t परीक्षिका या तंत्राचा वापर केला गेला. या संशोधनातील पूर्व चाचणीतील मध्यमान (15.4) व प्रमाणविचलन (5.06) आहे. तर उत्तर चाचणीतील मध्यमान (21.4) व प्रमाणविचलन (5.13) आहे हा पूर्व व उत्तर चाचणीच्या मध्यमानातील फर tHO1 परीक्षिकेदवारे तपासला असता तो 2.77 एवढा असून हा फरक लक्षणीय सार्थ आहे. त्याम्ळे HO1 शून्य परिकल्पनेचा त्याग केला आहे.

त्याम्ळे असा निष्कर्ष निघतो. की, इयता 9 वी विद्यार्थ्यांना भूमिती विषयातील चौकोन व चौकोनाचे प्रकार या घटकाच्या अध्यापनासाठी गणित प्रयोगशाळेचा अध्यापनात आधरित असलेल्या चाचणीत मिळालेल्या गुणांवरुन अध्यापन कार्यक्रमाद्वारे 9 वीच्या विद्यार्थ्यांच्या गणित प्रयोगशाळाच्या माध्यमातून गणित विषयाच्या अध्ययनावर परिणाम होतो. nterdisciplina,

निष्कर्ष

इयता 9 वी विद्यार्थ्यांना भूमिती विषयातील चौकोन व चौकोनाचे प्रकार या घटकाच्या गणित प्रयोगशाळेचा अध्यापनात वापर केल्याम्ळे गणित विषयाच्या अध्ययनावर परिणाम होतो.

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सारांश :-

व्यापारी दृष्टीकोनातून आपल्या राज्यात फळझाडांची लागवड करावयाची असल्यास उष्ण व उपउष्णकटीबंधीय फळझाडांची निवड केली जाते. या अनुषंगाने संत्रा हे विदर्भातील एक प्रमुख फळपीक आहे व्यापारी दृष्ट्या संत्र्याचे वर्षातून प्रामुख्याने दोन बहारं घेतात मृग आणि आंबिया मृग बहार हा जुन-जुलै मध्ये तर आंबिया हा जाने-फेब्रुवारी मध्ये येतो. 'संदर्भ नागपूर लोकमत दि. ३१ जुलै २००६ संत्री ही व्हिटॅमिन सी समृध्द असून रोगप्रतिकारक श्वती वाढविण्यास मदत करतात विदर्भ आणि मराठवाडा हे काही प्रमाणात महाराष्ट्रात संत्रा पिकविणारे प्रदेश आहेत. अमरावती जिल्ह्यातील मोशीं हे निर्यात गुणवत्तेच्या संत्रा संकलनाचे प्रमुख केंद्र आहे. काही वर्षापूर्वी महाराष्ट्र कृषी उद्योग विकास महामंडळातर्फे मोशीं तालुक्यातील मापवाडी व काटोल तालुक्यातील देवगाव येथे फळ प्रक्रिया उद्योग सुरू करण्यात आला साधारणतः एका हेक्टर मध्ये सर्वसाधारण २७७ संत्रा झाडे असतात आठ ते दहा टन उत्पादन एका हेक्टर मधुन होते. विदर्भात घेतल्या जाणा-या नागपूरी संत्र्याला उर्जितावस्था कशी प्राप्त होईल व शेतक-यांना सुगीचे दिवस येतील हे चिंतन महत्वाचे आहे प्रस्तुत शोध निबंधात महाराष्ट्राव्यतिरीक्त विदर्भातील संत्रा उत्पादक परिस्थिती व त्याचे व्यवस्थापन याचे अध्ययन करण्यात आले आहे.

प्रस्तावना :-

'नागपूरी संत्री' या नावाने ओळखल्या जाणाऱ्या या फळांची अमरावती जिल्हयात प्रामुख्याने मोठया प्रमाणावर लागवड होते. विदर्भाचा कॅलिफोर्निया म्हणून अमरावती जिल्हयातील संत्र्याची ओळख आहे. पश्चिम विदर्भात अमरावती जिल्हयातील वरुड, मोर्शी व अंजनगावसुर्खी तालुक्यात संत्र्याचे सर्वाधिक उत्पादन घेतले जाते. याच भागातील संत्र्यामुळे नागपूर ऑरेंजिसिटी म्हणून ओळखले जाते. बहुतेक लिंबुवर्गीय वनस्पती प्रमाणेच संत्रीही १५.५ डिग्री ते २० डिग्री सेल्सिअस तापमानात घेतली जातात. नारिंगीची झाडे आपल्या गोड फळांसाठी उष्णदेशीय, उपोष्ण-कटिबंधीय हवामानात मोठया प्रमाणात घेतली जातात. गेल्या २५० वर्षापासून विदर्भात व मध्यप्रदेशातील काही भागात नागपूरी संत्री घेतली जातात. याचे कारण काळी चिकणमाती व उष्ण-उपोष्ण कटिबंधीय हवामान होय, २००२ च्या आकडेवारीनतीुसार १ लाख ४५ हजार ८२४ हेक्टर जमीन संत्रा लागवडीखाली होती. त्यापैकी ७५ हजार ६४१ हेक्टर जवळपास ६५ टक्के लागवड एकटया अमरावती जिल्हयात होते. उत्पादन चांगले होत असल्याने संत्र्यासाठी क्षेत्र वाढले विदर्भात सुमारे तीन लाख हेक्टर पर्यंत संत्राबागाचा विस्तार होता. २००२ च्या आकडेवारी नुसार विदर्भाने सुमारे ४ लाख टन संत्रा उपलब्ध होता.

उद्दिदष्ट :-

प्रस्तुत शोधनिबंधात जगाच्या तुलनेत संत्रा उत्पादनात भारताचे स्थान पाहणे महाराष्ट्रातील दर हेक्टरी उत्पादकतेतील वर्ष निहाय बदलाचे, अध्ययन करणे, याव्यतिरिक्त विदर्भातील संत्रा पीकाखालील क्षेत्र व उत्पादनाचा अभ्यास करणे, संत्राबागाचे शेतकऱ्यांनी व्यवस्थापन व नियोजन कसे करावे याचा आढावा घेणे होय.

अभ्यास क्षेत्र :-

विदर्भ हा महाराष्ट्र राज्याच्या ईशान्य दिशेस असणारा प्रदेश आहे. विदर्भाचे दोन उपविभाग आहे विदर्भात नागपूर, अमरावती, अकोला, चंद्रपूर, वर्धा, बुलढाणा, यवतमाळ, भंडारा, गोंदीया, वाशिम, गडचिरोली या तालुक्याचा समावेश केला जातो. या प्रदेशाचा विस्तार उत्तर अक्षांश १९°५' ते २९°४७' आणि पूर्व रेखांश ७५° ५९ ते ७९° ११' या दरम्यान असून यातील बहुतेक भाग तापी, पूर्णा तसेच वर्धा, पैनगंगा व वैनगंगा या नदयांच्या खोऱ्यात मोडतो विदर्भाचे क्षेत्रफळ

महाराष्ट्राच्या एकुण क्षेत्रफळाच्या ३१.६ टक्के आहे. तर महाराष्ट्राच्या लोकसंख्येपैकी २१.३ टक्के आहे. विदर्भाचे क्षेत्रफळ ९७,३२१ाउ^२ आहे (३७५७० चौरस मैल) विदर्भाची २०११ ची लोकसंख्या २३००३७७९ असुन घनता (२४०/किमी^२ ६१० चौरस मैल आहे.)

भुपृष्ठरचना :-

उत्तरेस मेळघाट आणि दक्षिणेला बालाघाट दरम्यानच्या सुपीक पठारी खोऱ्याचा समावेश यात होतो. या भागातील सर्वात उंच शिखर वैराट उंची ११७७ मी. आहे याचा समावेश दिक्षण ट्रॅप मध्ये होतो. हा भाग शिलारसापासुन तयार झालेल्या अग्निजन्य बेसाल्ट खडकांनी बनलेला आहे. विदर्भातील वर्धा, वैनगंगा या नदया दिक्षणवाहिनी आहे. नागपूर प्रदेश संत्री आणि कपाशीसाठी प्रसिध्द आहे. विदर्भाचे हवामान विषम असून सखल प्रदेशात उन्हाळी परिस्थिती तीव्र जाणवते ४२° ते ४३° से.ग्रे. एवढे उच्चतम तापमान असून वार्शिक सरासरी पर्जन्यमान १०८ से. मी. आहे. कापुस, गहु, ज्वारी, तुर, भात, ही विदर्भातील प्रमुख पीके आहेत तर संत्री, आंबा, विडयाची पाने यांच्या बागा आहे. पाण्याचा निचरा होणारी मृदा या पिकास मानवते हलक्या मृदेतही हे पीक होउ शकते.

अभ्यास पध्दती :-

विदर्भातील संत्रा पिकांचा अभ्यास करीत असतांना सांख्यिकी आकडेवारीला महत्व दिलेले आहे. प्रस्तुत शोधनिबंध व्यितीयक स्वरूपाची माहिती स्त्रोतावर आधारीत आहे. व्यितीय स्वरूपाची माहिती स्त्रोतावर आधारीत आहे व्यितीय स्वरूपाची माहिती ही प्रकाशित व अप्रकाशित पुस्तके, मासिके, शासनाची प्रसिध्द पुस्तके इत्यादी मधुन घेतली आहे. तसेच शासकीय निमशासकीय संस्था वेगवेगळ्या प्रकारची संबोधने इ. मधुन माहिती घेतली आहे. तसेच महाराष्ट्र आर्थिक व सामाजीक समालोचन, जिल्हासाख्यिकी कार्यालय मधुन घेतलेली आहे, गोळा केलेल्या आकडेवारीचे सारणीयन व विष्लेशण तक्ते व आलेखच्या सहाय्याने स्पष्ट केलेले आहे संशोधनातील निष्कर्श हे उद्दिष्टावर आधारीत विश्लेषणावरून घेतलेले आहे.

विषय विवेचन :-

जागतिक फळ उत्पादनाचा संदर्भात विचार केला तर द्राक्षानंतर संत्रा उत्पादनाचा क्रम लागतो जगात भारत देशाचे संत्रा उत्पादनात स्थान पुढील प्रमाणे आहे.

देश	उत्पादन लाख टन
ब्राझील	१७.१
चीन	8.08
भारत	९.५
संयुक्त राष्ट्र	٧.٤
मेक्सीको	છ.હ
स्पेन	२०.२
इजिप्त	२.७
विष्व	<i>७</i> . ১ <i>७</i>

विश्वातील ७८.७ लाख टन संत्रा उत्पादनापैकी जगात भारताचा तिसरा क्रमांक असुन एकुण उत्पादन ९.५ लाख टन दिसून येते. देशात होणाऱ्या संत्र्याच्या एकुण उत्पादनापैकी एक चतुर्थांश उत्पादन एकटया महाराष्ट्रात होते.

सारणी	-9	महाराष्ट्रातील	संत्र्याचे	क्षेत्र	व	उत्पादन
VIII V III	•	IGLAL XIAIIA	715 11 1	41.1	٠,	911171

वर्ष	पीक	क्षेत्र हेक्टरमध्ये	उत्पादन मे टन
२०११–१२	संत्री	१,०४८९८	४६०५६२
२०१३–१४		१३५०००	७४२५००

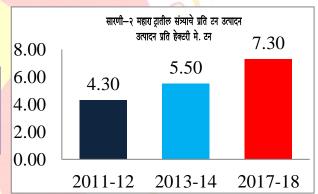
स्त्रोत : क्षेत्रीय सर्वेक्षण :-

२०११-१२ च्या आकडेवारीनुसार महाराष्ट्रात संत्र्याखालील क्षेत्र १,०४८९८ हेक्टर होते व उत्पादन ४६०५६२ मेटीक टन होते. तर २०१३-१४ च्या आकडेवारीचा आढावा घेतला असता एकटया महाराष्ट्रात १ लाख ३५ हजार हेक्टर क्षेत्रात संत्रा लागवड होती म्हणजे २०११-१२ च्या आकडेवारीच्या तुलनेत संत्रा लागवडी खालील क्षेत्रात वाढ झालेली दिसून येते. नागपूर फलोत्पादन विभागानूसार सात लाख ४२ हजार पाचशे टन संत्र्याचे उत्पादन झाले.

महाराष्ट्रातील दर हेक्टरी उत्पादनाचा दर पुढील प्रमाणे आहे.

सारणी-२ म<mark>हाराष्ट्रातील संत्र्याचे प्रति टन उत्पादन</mark> उत्पादन प्रति हेक्टरी मे. टन

	S	
२०११—२०१२	२०१३—२०१४	२०१७—२०१८
٥٤.٧	4.40	٥ ફ. و



२०११-१२ च्या आकडेवारीनुसार दर हेक्टरी उत्पादन ४.३० मे. टन होते तर २०१७-१८ च्या आकडेवाडीनुसार उत्पादकता ७.३० मे. टनावर पोहोचली म्हणजे यामध्ये वाढ होतांना दिसून येते विदर्भातील काही जिल्हयातील संत्र्याखालील क्षेत्र व उत्पादन पुढील प्रमाणे दिसून येते.

सारणी - ३ विदर्भातील संत्रा फळाचे क्षेत्र व उत्पादन

जिल्हा	क्षेत्र हेक्टर	मे. टन उत्पादन
अमरावती	६१,३१५	१,१३,०१६
नगपूर	१३,३५१	१,२२,६९०
वाशिम	११,८०५	१,३९,०५६

२०	२०११-२०१२										
	सारणी — ३ विदर्भातील संत्रा फळाचे क्षेत्र व उत्पादन										
	160000	I		२	०११–२	०१२			1	,39,05	6
	140000		1	12.01	c	1,	,22,69	0	-,	,55,65	
	120000		Ι,	.13,01	.0						
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	80000	61	,315								
	60000		•								
	40000				4.5	. 254		_			
	20000				1:	3,351		13	1,805		
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			अमर	ावती		<u>जा</u>	īŘs		वा	श्रिम	

आकडेवारी २०११-१२ नुसार अमरावती जिल्हयात सर्वात जास्त क्षेत्र ६१३१५ हेक्टर असून उत्पादन ११३०१६ मेट्रीक टन होते पण वाशिममध्ये क्षेत्रफळाच्या तुलनेत उत्पादन १,३९,०५६ मे. टन इतके जास्त दिसून येते.

संत्रा बागाची निगा व व्यवस्थापन :-

संत्रा उत्पादन शेतक-यांना ऐन मोडणीच्या वेळेस संत्र्याची योग्य वाढ व प्रत तयार न झाल्यामुळे अपेक्षित भाव मिळत नाही कृषी उत्पन्न बाजार समितीमार्फत तसेच काही सहकारी तत्वावर स्थापन झालेल्या सोसायटी मार्फत संत्रा निर्यात होत असतो त्यासाठी चांगल्या दर्जाचा संत्रा तयार होणे आवश्यक आहे. निर्यातक्षम संत्रा उत्पादनाकरिता संत्रा फुलो-यावर येण्यापुर्वी संत्राबागाचे योजनापूर्वक व्यवस्थापन व नियोजन आता अपरिहार्य झाले आहे. नागपूर व अमरावती जिल्हा तसेच सातपुडयाच्या पायथ्याशी असणारे क्षेत्र या ठिकाणी उत्तम प्रतीची संत्रा होउ शकतो कारण या पायथ्याशी अरण्यीय प्रदेश असल्याने त्या भागात उष्ण व कोरडे हवामान नसते विदर्भात चिकनमाती युक्त प्रक्षेत्रात संत्रा लागवड होउ लागली आहे. काही ठिकाणी चुनखडीचे प्रमाण वाजवी पेक्षा जास्त तर लोह, जस्त व मॅग्नेशियम इत्यादीची कमतरता असल्याने तेथील बागांचीही अशीच अनुत्पादक अवस्था आहे. विदर्भातील संत्रा पीक शास्त्रीय पध्दतीने वाचविणे ही आता काळाची गरज झाली आहे.

खत व्यवस्थापन :-

संत्र्याची लागवड प्रक्रिया करतांना पाण्याचा उत्तम निचरा होणारी जिमन १ मीटर खोलीची, जमीनीचा सामू ६ ते ८ क्षाराचे प्रमाण ०.१ टक्केपेक्षा कमी, चुनखडीचे प्रमाण १० टक्के पेक्षा कमी जास्त नसावे.

संत्र्याच्या फळे येणाऱ्या प्रत्येक झाडाला ७.५ किलो निंबोळी ढेप_. ८०० ग्रॅम नत्र त्र ३०० ग्रॅम स्फुरद_. ६०० ग्रॅम पलाश व ऑझोटोबॅक्टर दिल्याने उत्तम प्रतिचे अधिक उत्पादन मिळू शकते झाडांना खत देतांना नत्राची अधी मात्रा शेणखत निंबोळी ढेप स्फुरद आणि पूर्ण मात्रा बाहारासाठी पाण्याचा ताण तोडतांना दयावी.

ओलित व्यवस्थापन ⊱

उन्हाळयात ८ ते १० व हिवाळयात १२ ते १५ दिवसांच्या अंतराने दुहेरी आळे पध्दतीने ओलीत करावे पाणी टंचाईत ४ दांड पध्दत वापरावी फळगळ आंबिया बहारातील फळांची गळ ऑगस्ट व ऑक्टोंबर या काळात होते आंबिया बहाराची फळे ऑक्टोंबर नोव्हेंबर मध्ये तर मृग बहाराची फळे मार्च-एप्रिल मध्ये तयार होतात. संदर्भ, सकाळ १२/सोमवार २८ जुलै २००३

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निष्कर्श :-

- 9. एकुण उत्पादनाच्या तुलनेत ६५ टक्के उत्पादन एकटया अमरावती जिल्हयात होत असले तरी संत्री नागपूरी संत्री म्हणूनच ओळखली जातात.
- २. संत्री उत्पादनात जगात भारताचा तिसरा क्रमांक आहे.
- ३. म्हाराष्ट्रातील संत्र्याखालील क्षेत्र पाहिले असता २०११-१२ च्या आकडेवारी नुसार १,०४८९८ हेक्टर होते तर २०१३-१४ नूसार १ लाख ३५ हजार हेक्टर क्षेत्रात संत्रा लागवड झालेली दिसून येते.
- ४. म्हाराष्ट्रातील संत्र्याचे प्रति हेक्टरी उत्पादन ३.० मे. टनाने वाढलेले दिसून येते.
- ५. विदर्भातील अमरावती भागात संत्र्याखालील क्षेत्र अधिक आहे. मोशीं, वरूड या दोन्ही तालुक्यातून गेल्या काही वर्षात मोठया संख्येने संत्री घेतली गेली.
- ६. २०११-१२ च्या आकडेवारी नुसार वाशिम क्षेत्रात संत्रा उत्पादनात वाढ झालेली दिसून येते.

उपाय योजना :-

फळधारणेपासुन ते तोडीपर्यंत किटक नाशकातील आणि बुरशी नाशकाची योग्य वेळी योग्य प्रमाणात फवारणी करावी. कमी पावसाच्या प्रदेशात जलिसंचनावर हे पीक उत्तम येते. पाणी व हवामानाची अनुकुलता भुशास्त्रीय रचना व मातीचा प्रकार लक्षात घेउन प्रत्येक भागात जी अनुकुलता असेल तीच पीक पध्दती विकसित करावी केंद्रीय लिंबुवर्गीय संस्थेच्यापाठपुराव्या अंती अखेरीस अपेंडाने (APEDA The Agriculture Processed Food Product Export Development Authority) संत्रा क्लस्टरला मान्यता दिली त्यामुळे संत्रा निर्यातीला चालना मिळणार आहे. यापुढील काळात शेतकऱ्यांना निर्यातीसाठी प्रवृत्त करने तांत्रिक मार्गदर्शन करणे, फळांची गुणवत्ता सुधारणे निर्यातदारांशी लिंकेज करणे यात अपेडा पणन मार्केटींग बोर्ड व कृषी विभागाचा समावेष राहील तरूणांना शेतीकडे आकृष्ट करण्याच्या दृष्टीने एनसीएफ (राष्ट्रीय शेतकरी आयोग) ने काही शिफारशी केल्या त्यात विक्री व्यवस्थेत अधिकार, सुक्ष्म सिंचनाला प्रोत्साहन इत्यादीचा समावेश होतो.

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- 5. महाराष्ट्र जिल्हे चांदा प्रसिध्दी विभाग महाराष्ट्र शासन मुंबई
- 6. सबदी ए. बी. 'द मेगा स्टेट महाराष्ट्र' दहावी आवृत्ती निराली प्रकाशन पूर्ण २००९
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- 8. Government of India' India Meteorological Department
- 9. Climatologically Dept. Climatologically Table



जालना जिल्ह्यातील हरभरा उत्पादन : एक भौगोलीक अभ्यास

नारायण जयवंतराव पाझाडे

संशोधक विद्यार्थी डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद

डॉ. विजय बैसाणे

संशोधक मार्गदर्शक व विभाग प्रमुख दगडोजीराव देशमुख कला, वाणिज्य व विज्ञान महाविद्यालय वाळुज, ता. गंगापूर, जि. औरंगाबाद

सारांश:

लोकसंख्यावाढीमध्ये भारताचा जगामध्ये दिवतीय क्रमांक लागतो. भारतात लोकसंख्या वाढीमुळे अन्नधान्याची मागणी अधिक आहे. अन्नधान्याची मागणी पुर्ण करण्यासाठी शेतीमध्ये आधुनिक तंत्रज्ञानाच्या सहाय्याने विविध अन्नधान्य पिकांचे उत्पादन वाढवण्याचा प्रयत्न केला जात आहे. भारतीय आहारात गहू, ज्वारी, बाजरी, कडधान्य, तांदुळ, पालेभाज्या इत्यादींचा समावेश असतो. कडधान्यांचा समावेश दररोजच्या आहरामध्ये असतो. कडधान्यांवर प्रक्रिया करून डाळी तयार केल्या जाते. मुग, उडीद, हरभरा, तूर, चवळी, मटकी, मसूर इत्यादी कडधान्यावर प्रक्रिया करून डाळ तयार केली जाते. भारतीय आहारामध्ये डाळींना विशेष मागणी आहे. म्हणून भारतीय शेतीमध्ये कडधान्याची लागवड करून उत्पादन घेतले जाते.

भारतात तूर, मुग, उडीद, हरभरा या प्रमुख कडधान्यास जास्त मागणी दिसून येते. हरभरा या कडधान्यावर प्रक्रिया करून डाळ निर्मिती केली जाते. डाळीचे मानवाच्या आहरामध्ये मोठ्या प्रमाणात वापर केला जातो. हरभरा डाळीपासून विविध खाद्य पदार्थ तयार केले जाते. त्यामुळे हरभरा डाळीस मोठ्या प्रमाणात मागणी आहे.

बीज संजा : कडधान्य, हरभरा लागवड क्षेत्र, हरभरा उत्पादन

प्रस्तावना :

युनायटेड नेशन्स (UNO) ने वर्ष 2016 हे "आंतरराष्ट्रीय कडधान्य वर्ष" म्हणून साजरे केले. कडधान्याचे आपल्या आहारातील महत्व यासाठी लोकांमध्ये जागरुकता निर्माण करणे तसेच अन्न सुरक्षितता व पोषणाच्या दृष्टीने कडधान्य पिकाखालील क्षेत्र वाढ होणे अत्यावश्यक आहे. या शोधनिबंधात जालना जिल्ह्यातील हरभरा पिकांखालील क्षेत्र व उत्पादकता वाढ यासंबंधीची माहिती घेणार आहोत.

हरभरा हे महाराष्ट्रातील महत्वाचे कडधान्य पिक आहे. या पिकाचे उत्पादन महाराष्ट्रातील प्रत्येक जिल्ह्यामध्ये घेतले जाते. तसेच जालना जिल्ह्यातही हरभरा पिकाचे उत्पादन घेतले जाते. जालना जिल्ह्यामध्ये कडधान्यावर प्रक्रिया करणारे डाळिमल आहे. त्यामुळे येथे हरभरा या डाळ वर्गीय पिकाचे उत्पादन घेतले जाते. हरभरा पिक पाण्यास अतिशय संवेदनिशल असे पिक आहे. सिंचनाचे आधारे हरभरा पिक घेतले जाते. ओलीताखालील क्षेत्र कमी जास्त झाल्यास त्याचा परिणाम उत्पादनावर दिसून येतो.

अभ्यास क्षेत्र :

जालना जिल्ह्यातील लोकांचा प्रमुख व्यवसाय शेती हा आहे. मराठवाङ्यातील जालना हा महत्त्वपूर्ण शेती उत्पादक जिल्हा असून येथे मराठवाङ्यातील सर्वात मोठी बाजार समिती आहे. हवामानाच्या दृष्टीने जिल्ह्याचे हवामान 3 विभाग मोडते. जुन ते सप्टेंबर हे चार महिने पावसाचे असून हवामान साधारत: उष्ण असते. साधारपणे किमान तापमान 11°c असून कमाल तापमान 49.50°c असते. ऑक्टोबर ते फेब्रुवारी या कालावधीत थंडी जाणवते. या काळात थंड व कोरडे वारे वाहतात व हवेत गारठा आढळतो. मार्च ते मे या तीन महिन्यात हवा उष्ण व कोरडी असते. एप्रिल व मे महियात कमालीची उष्णता असते. तापमान 41°c च्या पुढे जाते. जिल्ह्यात पावसाचे प्रमाण सरासरी 750.31 मी.मी. इतके आहे. जिल्ह्यात गोदावरी, दुधना, पुर्णा, कुंडलीका, गलाटी, खेळणा, धामणा, गिरजा, जीवरेखा या नद्या आहेत.

जिल्ह्यातील मृदा सुपिक व काळी आहे. जालना, बदनापूर, भोकरदन व जाफ्राबाद या तालुक्यामध्ये मृदा हलक्या प्रतिची व मुरमाड आहे. जिल्ह्यातील दक्षिण व दक्षिणपूर्व भागातील अंबड, घासावंगी, परतूर व मंठा या तालुक्यामध्ये मृदा काळी व स्पिक आहे.

संशोधनाची उदिष्टे :

- 1. जालना जिल्ह्यातील हरभरा पिकांचा अभ्यास करणे.
- 2. जालना जिल्ह्यातील हरभरा लागवड क्षेत्राचा अभ्यास करणे.
- 3. जालना जिल्ह्याती<mark>ल हरभरा उत्पादनाचा अभ्यास.</mark>

गृहितके :

1) ओलीताखालील हरभरा लागवड क्षेत्र कमी झाल्यास उत्पादन कमी होते.

संशोधन पद्धती व आधार सामुग्री संकलन :

जालना जिल्ह्यातील हरभरा पीकाचा भौगोलीक अभ्यास करण्यासाठी दुय्यम स्वरूपाच्या आधार सामुग्रीचा वापर केला आहे. दुय्यम स्वरूपाच्या आकडेवारीसाठी जालना जिल्ह्यातील सामाजिक आर्थिक समालोचन अहवाल कृषि विभाग महाराष्ट्र शासन यांची वेबसाईटवरील माहिती संकलीत केली आहे. संकलित तक्त्यातील आकडेवारीचे विश्लेषण करण्यासाठी विविध तंत्राचा वापर करण्यात आला. माहितीचे विश्लेषणासाठी तक्ते, आलेख यांचा उपयोग केला.

विषय विवेचन:

मानवी आहारामध्ये मोठ्या प्रमाणात हरभरा डाळ व त्यावर प्रक्रिया केलेल्या पदार्थांचा समावेश असतो. कडधान्यांध्ये विविध प्रकारचे प्रथिने तसेच रोगप्रतिकारक घटकांचा समावेश होतो. त्यामुळे आहारात विविध कडधान्यांचा समावेश केला जातो. हरभरा डाळीपासून खाद्य पदार्थ मोठ्या प्रमाणात तयार केले जातात. त्यामुळे हरभरा डाळीस मोठ्या प्रमाणात बाजारात मागणी आहे.

जालना जिल्ह्यात उपलब्ध सिंचनावर आधारीत क्षेत्रामध्ये हरभरा पिकाची लागवड केली जाते. हरभरा पिकाचे ओलिताखालील क्षेत्र कमी किंवा अधिक झाल्यास त्याचा परिणाम उत्पादनावर होतो.

हरभरा पिकास जिमनीचा प्रकार : हलकी, मध्यम, व भारी

जमीनपूर्व मशागत : नांगरणी व वखराची

पाळी पेरणीची वेळ : ऑक्टोबर ते नोव्हेंबर पहिला आठवडा.

हरभरा पिकाला साधारणपणे 25 से.मी. पाणी लागते.

स्त्रोत: कृषि विभाग महाराष्ट्र शासन

जालना जिल्ह्यातील हरभरा लागवड क्षेत्र:

हरभरा, तूर, मुग, उडीद हया प्रमुख कडधान्य पिकांची लागवड केली जाते. जालना जिल्ह्यात हरभरा या कडधान्यासाठी मोठी बाजारपेठ आहे. त्याच बरोबर यावर आधारीत प्रक्रिया उद्योग म्हणजेच डाळ मिल देखिल मोठ्याप्रमाणात दिसून येतात. म्हणून लागवड क्षेत्रही जालना जिल्ह्यात मोठ्या प्रमाणात आहे.

जालना जिल्ह्यातील हरभरा पिक लागवडीखालील एकूण क्षेत्र जालना जिल्हा लागवड क्षेत्र हेक्टर मध्ये

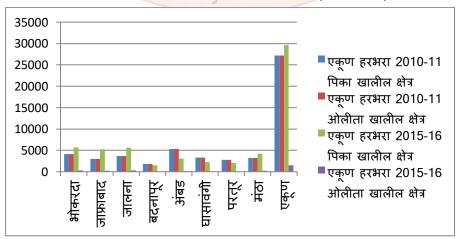
तक्ता क्र. 1

अ.क्र.	तालुका 🕖	एकूण हर <mark>भ</mark> र	т 2010-11	एकूण हरभ	न् रा 2015-1 6	
	0	पिका खालील	ओलीता	पिका खालील	ओलीता	
	12	क्षेत्र	खालील क्षेत्र	क्षेत्र	खालील क्षेत्र	
1	भोकरदन	4100	4100	5717	286	
2	जाफ्राबाद	3000	3000	5263	263	
3	ज <mark>ा</mark> लना	3700	3700	5655	283	
4	बदनापूर	1800	1800	1488	74	
5	अंबड 👚	5300	5300	3094	1 <mark>5</mark> 5	
6	घनसावंगी	3300	3300	2233	112	
7	परतूर	2800	2800	2009	100	
8	मंठा	3200	3200	4182	209	
	एकूण	27200	27200_638	29641	1482	

स्त्रोत: जालना जिल्हा सामाजिक आर्थिक समालोचन

आलेख क्र. 1.

जालना जिल्ह्यातील हरभरा लागवड क्षेत्र (हेक्टरमध्ये)



सा 210-11 च्या आकडेवारीवरून असे दिसून येते की, जालना जिल्ह्यात हरभरा या पीकाचे एकूण लागवड क्षेत्र 27200 हे. आहे. तर ओलिताखालील क्षेत्र हे 27200 हे. आहे. सर्वाधिक हरभरा पिकाखालील क्षेत्र अंबड तालुक्यात 5300 हे. क्षेत्र असून ओलिताखालील क्षेत्र 5300 हे. आहे. तर सर्वात कमी बदनापूर तालुक्यात 1800 हे. असून ओलिताखालीही 1800 हे. क्षेत्र आहे.

सा 2015-16 मध्ये जिल्ह्यात हरभराची एकूण लागवड क्षेत्र हे 29641 हेक्टर असून ओलिताखालील क्षेत्र 1482 हेक्टर ऐवढे आहे. सर्वाधिक लागवड हे भोकरदन तालुक्यात 5717 हेक्टर ऐवढी असून ओलिताखालील क्षेत्र 286 हेक्टर आहे. तर सर्वात कमी हरभरा लागवड क्षेत्र बदानापूर तालुक्याचे 1488 हे. असून ओलिताखाली 74 हे. ऐवढे आहे.

सा 2010-11 च्या तुलनेत सन 2015-16 मध्ये हरभरा लागवड क्षेत्रात वाढ झाल्याचे दिसून येते. परंत् ओलिताखालील क्षेत्र मात्र मोठ्या प्रमाणात घटलेले आहे.

जालना जिल्ह्यातील हरभरा पिकाचे तालुकानिहाय उत्पादन जालना जिल्हा उत्पादन मे.टन मध्ये

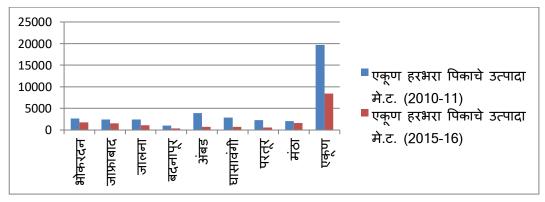
तक्ता क्र. 2

अ.क्र. तालुका		एकूण हरभरा पिकाचे	एकूण हरभरा पिकाचे
12		उत्पादन मे.टन	उत्पादन मे.टन
C.		(2010-11)	(2015-16)
1	भोकरदन	2638	1795
2	जाफ्राबाद	2417	1526
3	जालना	2439	1080
4	बदनापूर	1029	363
5	अंबड	3931	764
6	घनसावंगी	2857	730
7	परतूर	2272	562
8	मंठा	2084	1627
	एक्ण	19667	8450

स्त्रोत: जालना जिल्हा सामाजिक आर्थिक समालोचन

जालना जिल्ह्<mark>यातील हरभरा पिकाचे तालुकानि</mark>हाय उत्पादन

जालना जिल्हा उत्पादन मे.टन मध्ये



सन 2010-11 या वर्षाच्या आकडेवारी वरून असे दिसते की, जालना जिल्ह्यात हरभराचे एकूण उत्पादन 19667 मे. टन ऐवढे आहे. सगळ्यात जास्त उत्पादन अंबड तालुक्यात झाले असून 3931 मे. टन ऐवढे आहे. व सर्वात कमी बदनापूर 1029 मे. टन ऐवढे उत्पादन आहे.

तर सन 2015-16 या वर्षात एकूण हरभरा उत्पादन 8450 मे. टन एवढे झाले. सर्वाधिक उत्पादन हे भोकरदन तालुक्यात 1795 मे.टन एवढे झाले असून सर्वात कमी कडधान्य पिकाचे उत्पादन बदनापूर तालुक्यात 363 मे.टन एवढे झाल्याचे दिसून येते.

नि**ष्कर्ष**:

सन 2010-11 या वर्षात जालना जिल्ह्याचे हरभरा लागवड क्षेत्र 27200 हे. असून संपुर्ण क्षेत्र हे ओलीताखाली आहे. तर उत्पादन 19667 मे. टन ऐवढे आहे. सन 2015-16 मध्ये हरभरा लागवड क्षेत्र हे 29641 हे. ऐवढे आहे. ओलीताखालील क्षेत्र 1482 हे. आहे. सन 2010-11 च्या तुलनेत सन 2015-16 चे लागवड क्षेत्र वाढलेले आहे परंत् ओलिताखालील क्षेत्र हे कमी झालेले आहे.

सन 2010-11 या वर्षात जालना जिल्ह्यातील हरभरा पिकाचे उत्पादन सन 2015-16 च्या तुलनेत वाढलेले दिसून येते. कारण 2015-16 या वर्षात हरभरा पिकाचे ओलिताखालील क्षेत्र 2010-11 मध्ये कमी आहे. म्हणून 2015-16 या वर्षात हरभरा उत्पादन 2010-11 च्या तुलनेत कमी आहे.

संदर्भ :

- 1) जालना जिल्हा सामाजिक आर्थिक समालोचन
- 2) कृषी भूगोल-डॉ. सूर्यवंशी डी.एस. / निराली प्रकाशन
- 3) कृषि विभाग महाराष्ट्र शासन संकेत स्थळ
- 4) मासिक संदेश (जुन 2017) जिल्हा अधिक्षक कृषि अधिकारी, जालना
- 5) कृषि भूगोल डॉ. अरूण कुंभारे पायल पब्लिकेशन
- 6) Barooch, S. (1995): "Modern fruit Cunltivation", Kalyani Publication New Delhi.
- 7) Singh, Jasbir & Dhillan S.S. (2000): "Agricultural Geography", Tata McGraw Hill publishing Company, New Delhi

लोकप्रशासनातील नवप्रपाह - सुशासन

डॉ. वंदना अरुण सातपुते राज्यशाञ्य विभाग डॉ. पतंगराव कदम महाविद्यालय सांगली

प्रस्ताविक :

२१ त्या शतकामध्ये जगभरात माहिती तंत्रज्ञानाचा प्रसार अत्यंत वेगाने झाला आहे. अनेक राष्ट्रांनी नवनवीन तंत्रज्ञानाचा स्वीकार केला आहे. देशाच्या विकासामध्ये नोकरशाही यंत्रणेची भूमिका अत्यंत महत्वाची आहे. नोकरशाही यंत्रणेने काळानुरूप बदल स्वीकारून प्रशासनसमध्ये नवनवीन विज्ञान-तंत्रज्ञानाचा मोठ्या प्रमाणात वापर सुरू केला आहे. प्रशासन हे 'ई-प्रशासन' म्हणून ओळखले जात आहे. सुशासन संकल्पनेचा उदय १९९० च्या दशकात झाला. शासन आपली ध्येयधोरणे व ध्येयधोरणांची अंमलबजावणी करीत असताना पारदर्शकत्व, उत्तरदायित्व, स्थैर्य व सर्वसमावेशकता इ. तत्वांचा आधार घेते त्यास सुशासन म्हणतात. जागतिक बॅकेने १९८९ साली प्रकाशित केलेल्या सहारा-आफ्रिकी उपखंडावरील आपल्या अहवालामध्ये सुशासनाची प्रथम संकल्पना मांडली. लोकशाही राज्यकारभारात कार्यक्षम व प्रभावी प्रशासनाची हमी देणे म्हणजे सुशासन होय.

सुशासनाच्या व्याख्या :-

- १. यै. पानंदीकर यांच्या मतानुसार,"सुशासन म्हणजे अशी व्यवस्था होय ज्या ठिकाणी लोकांचे जीवन शांततापूर्ण, शिस्तबध्द, प्रगतशील व सहभाग दर्शविणारे आहे."
- २. मानवी विकास अहवाल २००२ उतारा- "सुशासन म्हणजे शासकीय संस्थांची आणि नियमांची जास्तीत जास्त परिणामकारकता, पारदर्शीपणा, सहभागित्व, उत्तरदायित्व पूर्णतः जबाबदारी आणि कायद्याचे राज्य होय."
- ३. एस. एस. सिंग.- "जनतेच्या <mark>जेथे समस्या सोडविल्या जातात व</mark> जनतेशी मैत्रीपूर्ण नाते निर्माण करून प्रशासन अधिक लोकाभ्रमुख बनविले जाते.

सुशासन हे SMART असावे :-

सुभाष भटनागर यांच्या मते, सुशासन हे SMART असावे. SMART या शब्दाचा अर्थ असा येतो-

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T – Transparent पारदर्शक

सुशासनसची वैशिष्ट्ये :- सुशासनाची पुढील वैशिष्ट्ये आहेत.

१. जनतेचा सहभाग : सुशासनाचे सर्वात महत्त्वाचे वैशिष्ट्ये म्हणजे निर्णय निर्धारण प्रक्रियेमध्ये समाजातील सर्व जनतेचा सहभाग असणे होय. शासनाच्या प्रत्येक घटकांमध्ये जनतेचा सहभाग

- अधिकाधिक वाढला पाहिजे. शासनाने आपली ध्येयधोरणे व योजना आखताना नागरिकांची मते लक्षात घेतली पाहिजेत
- २. कायदयाचे राज्य : प्रशासकांनी आपल्या मनाप्रमाणे कोणताही प्रकारचा मनमानी कारभार करू नये तर कायदयाच्या तरतूदीप्रमाणे प्रशासन कार्य चालवावे. कायदयाचे सर्वानी पालन करावे.
- ३. सर्वसमावेशक :प्रशासकाने नागरिकांमध्ये कोणत्याही प्रकारच्या भेदभाव न करता सर्व नागरिकांना समान वागपूक देणे शासनाच्या सर्व योजना समाजातील सर्व नागरिकांना लाभदायक ठरतील अशाच असल्या पाहिजेत
- ४. जबाबदारी :प्रशासन हे नेहमी जनतेला जबाबदार असले पाहिजे. प्रशासकाचे आपण जनतेचे सेवक आहोत अशी भावना व जाणीव ठेवली पाहिजे. जनतेचे कल्याण करण्याकरिता ध्येय-धोरणांची अंमलबजावणी पार पाडली पाहिजे
- ४. पारदर्शकता : शासनाने जनतेच्या कल्याणासाठी केलेले कायदे नियम ध्येय-धोरणे, योजना इ. बाबतीत स्पष्टता आणि पारदर्शकता असायला हवी.
- ६. न्याय : शासनाने आपल्या कार्यातून न्याय प्रस्थापित करणे गरजेचे असते. समाजातील दुर्बल व उपेक्षित घटकांना विकासाची संधी उपलब्ध करून देणे अपेक्षित आहे.
- ७. उत्तरद्वारी : शासनातील सर्व <mark>पदाधिकारी व प्रशासकीय अधिका</mark>री यांनी जनतेप्रती उत्तरद्वारित्वाच्या भावनेने आपले वर्तन व कार्य करावे
- ८. प्रतिसादात्मक : प्रशासन हे जनतेशी योग्य असा प्रतिसाद देणारे असने पाहिजे. जनतेच्या अडीअडचणी, गरजा <mark>योग्य वेळेत सोडविणे आवश्यक असते, जनतेच्या</mark> प्रतिसादावरच योजनेचे यश अवलंबुन असते. जनतेच्या मनात शासनाबद्दल विश्वास निर्माण झाला पाहिजे.

भारतातील सुशासनाची झा<mark>लेली अंमलबजावणी :-</mark>

भारतात प्राचीन का<mark>ळापासून सुशासनाविषयी विचार माडलेले दिसून ये</mark>तात. भारतीय स्वातंत्र्यानंतर भारतात सुशासनाची योग्य पध्दतीने अंमलबजावणी झाली आहे.

- १. राज्यघटनेती<mark>ल</mark> तरतूद <mark>:भारतीय राज्यघटनेतील मुलभूत हक्क, मार्गद</mark>र्शक तत्वे, कायद्याचे राज्य, न्यायलयीन स्वातंत्र, विविध आयोगाची तस्तुद इत्यादी तस्तुदीवरून सुशासनाविषयी विचार दिसून येतात.
- २. प्रशासकीय सुधारणा आयोग : भारतीय स्वातंत्र्यानंतर प्रशासनामध्ये सुधारणा घडवून आणण्यासाठी प्रशासकीय सूधारणा आयोगाची स्थापना करण्यात आली मोरारजी देसाईच्या अध्यक्षतेखाली १९६६ मध्ये आयोगाची स्थापना करण्यात आली. यानंतर २००५ मध्ये दुसरा आयोग स्थापन केला. सरकारी यंत्रणेच्या कार्यप्**द्धतीमध्ये सुधारणा घडू**न आल्या. १९९१ नंतर <mark>ई-गटहर्नन्स ई</mark>-शासनाच्या माध्यमातून प्रशासनामध्ये सूधारणा करण्याचा प्रयत्न करण्यात आला.
- ३. सत्तेचे विकेंद्रीकरण : सत्ते<mark>चे विकेंद्रीकरण करणे हा लोकशा</mark>हीचा गाभा असतो. सामान्य जनतेला सत्तेत सहभागी होण्याची अधिक संधी मिळते. ७३ वी व ७४ व्या घटनादुरुस्तीने ग्रामीण व शहरी पातळीवर सत्तेचे जास्त प्रमाणात विकेंद्रीकरण केले आहे. त्याचबरोबर स्थानिक स्वराज्य संख्यमध्ये महिलांना ५०% आरक्षण दिले आहे, तर मागासवर्गीय घटकांना २७% आरक्षणाची तरतूद आहे.
- ४. माहितीचा अधिकार : शासनाने केलेल्या व्यवहारांची माहिती सामान्य जनतेला मिळावी तसेच शासन व जनता यांच्यामध्ये सुसंवाद घडून यावा यासाठी शासनाने २००५ मध्ये 'माहितीचा अधिकार' कायदा निर्माण करण्यात आला. पारदर्शकता आणि उत्तरदायित्व ही सूशासनाची वैशिष्ट्ये प्रत्यक्षात आणण्यासाठी शासनाने भारतीय नागरिकांना माहितीचा अधिकार देण्यात आला आहे.
- नागरिकांची सनद : नागरी सनद १९९६-९७ ला प्रथम मांडण्यात आली. नागरी संसदेमूळे नागरिकांना आपल्या हक्कांची जाणीव होते. त्यामुळे प्रशासनात एक प्रकारची सूसुत्रता येते.

सुशासनातील अडथळे :

- १. सत्तेचे केंद्रीकरण
- २. विविध पातळ्यांवर होणारा भ्रष्टाचार
- ३. समाजातील विविध घटकाकडून होणारे मानवी हक्कांचे उल्लंघन
- ४. राजकारणातील वाढते गुन्हेगारीकरण
- ५. जनतेचा प्रशासनातील कमी सहभाग
- ६ समाजातील विषमता
- ७ पर्यावरणाची वाढती समस्या
- ८. आर्थिक मागासलेपण

वरीलप्रमाणे सुशासनामध्ये अडथळे येत असले तरी, भारतामध्ये सुशासनाच्या संदर्भात माहितीचा अधिकार, नागरिकाची सनद, ई-शासन, मनरेगा ह्या योजना व धोरणांच्या आधारे सुशासनाच्या दिशेने वाटचाल करीत आहे. सुशासन प्रक्रियेत नागरिक, शासन व प्रशासन है तिन्ही घटक सशक्त असणे गरजेचे आहे. जनता व प्रशासनामध्ये सुसंवाद होऊन सुशासन निर्माण होईल. नागरिकांना जास्तीत जास्त सहभागी करून घेणे गरजेचे आहे. त्यासाठी लोकाभिमुख प्रशासन अधिक व्हावे लागेल जेणे करून समाजातील सर्व घटकांचा विकास होईल.

संदर्भ :-

- १. डॉ. बी. एल. फाडिया 'लोकप्रशासन', साहित्यभवन पब्लिकेशन्स आगरा.
- २. डॉ. पारस बोरा, शाम शिरसाट 'लोकप्रशासनशास्त्र', ज्ञानसमिधा पिल्लिशिंग, औरंगाबाद.
- ३. डॉ. आनंद पाटील स्पर्धा परिक्षा नोकरी संदर्भ फेब्रुवारी २००५.
- ४. डॉ. प्रीती पोहेकर 'लोकप्रशासनातील नवप्रवाह', अरुणा प्रकाशन लातूर.
- डॉ. पी. ट्ही. भुताळे 'नोकप्रशासन', सह्याद्री प्रकाशन नांदेड.



डॉ. राममनोहर लोहियांचे सामाजिक कल्याणाविषयीचे विचार

अप्पासाहेब मल्लप्पा देशम्ख

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गोषवारा-

सामाजिक कल्याण या संकल्पनेचा विचार करताना भारतीय समाजातील जे शोषणाचे घटक आहेत. त्याच्या निर्मूलनाशिवाय सामाजिक कल्याण दृष्टिक्षेपातदेखील येणे शक्य नाही. जात, भाषा व लिंगभाव या सामाजिक शोषणाचे घटक आहेत. याविषयीचे लोहियाचे विचार आजच्या परिस्थितीत महत्वपूर्ण व उपयुक्त ठरतात.

प्रस्तावना-

डॉ. राममनोहर लोहिया हे एक कृतीप्रवण समाजवादी विचारवंत होते. ते समाजवादी चळवळीला भारतीय चौकटीत बसवण्याचा प्रयत्न केला आहे. लोहियांनी जात, भाषा व लिंगभाव या तीन सामाजिक घटकांचा परस्परसंबंधाचा एकाचवेळी विचार केला आहे. यात असमानता आणि शोषणाच्या संरचनेचा बहुआयामी, भिन्न आणि श्रेणीबद्ध दृष्टीकोन सादर करतात. त्यांच्या विश्लेषणाने एकता आणि सामूहिक कृतीतून समतावादी आणि पुर्नरूजजीवत सामाजिक व्यवस्था तयार करण्याची नवीन शक्यता व्यक्त करतात.

डॉ. लोहियांचे जाती विषयक विचार पाहणे महत्वाचे ठरेल. त्यांच्या मते, 'माणसात न्यूनगंड निर्माण करणारी आणि त्याचा दंभ कायम राखणारी जाती प्रथा ही एक भयंकर प्रतिक्रांतिकारी आणि स्थितिप्रिय शक्ती आहे. 'जाती प्रथेमुळे उद्भवलेली क्षुद्रता आणि असत्य यांचा समाजात असाच फैलाव होत राहिला तर सारी समाजघडी विस्कटण्याचे अमंगल भय आहे. अनेक दृष्टीनी स्वतंत्र हिंदुस्थान हा ब्रिटीश हिंदुस्थानच आहे. भारतीय जनता आजदेखील उपेक्षित आणि वंचित आहे. तिच्या भाषा पायदळी तुडविल्या जात आहेत. 'तिची भाकरी तोडली जात आहे आणि ते तत्वज्ञान जाती प्रथेशी निगडित आहे. मूठभर उच्चवर्णीय आणि बहुसंख्य किनष्ठवर्णीय यांच्यामध्ये त्या तत्वज्ञानांने भिंत उभी केली आहे. 'वरिष्ठ जाती आपले राजकीय, आर्थिक आणि अर्थातच धार्मिकदृष्टयाही आपले प्रभुत्व कायम राखू पाहत आहेत. केवळ बंदुकीच्या जोरावर त्यांना तसे करता येत नाही. ज्यांच्यावर ते सत्ता गाजवू इच्छितात आणि ज्यांचे ते शोषण करू पाहतात, त्या बहुजनांच्या मनात त्यांना हीन भावना निर्माण करावी लागते. आपण किनष्ठ जातीहृन श्रेष्ठ आहोत, हे दाखवून देऊनच वरिष्ठ जातीना प्रभावीपणे किनष्ठ जातीचे शोषण करणे आणि त्यांच्यावर सत्ता गाजविणे शक्य असते. आणि म्हणूनच किनष्ठ जातीना अलभ्य असलेली विशिष्ट 'भाषा, आचार आणि राहणीची पद्धत यांमार्फत वरिष्ठ जाती आपले श्रेष्ठत्व दाखवीत असतात. बहुसंख्य जनतेच्या मनात आत्महीनतेची भावना निर्माण करण्याकडेच राजकीय पक्षांचादेखील कल असतो, त्यामुळेच बहुजन समाजाच्या भाषा अविकसित राहिल्या, त्यांची बुद्धी अविकसित राहिली आणि त्यांचे जीवनमानही अविकसित राहिले. अशा

प्रकारे वरिष्ठ जातीनी एक भ्रामक जाळे विणले आहे व त्यात दुर्बल बह्जन समाज गुरफटला गेला आहे. हिंद्स्थानातील वर्तमान राजकीय विचार प्रणाली हे जाळे तोडण्याच्या दृष्टीने निरुपयोगी आहेत. कारण वरिष्ठ जातीच्या खोट्या आणि अस्वाभाविक हितसंबंधांचेच त्या प्रतिनिधित्व करीत असतात. (लोहिया, 1971a, पृ.89) देशातील व देशाबाहेरील बड्या बडया विदवानांना व समाजशास्त्रज्ञांना असे वाटते की, जसा जसा भारतीय माणूस पाश्चात्य संस्कृतीच्या, शिक्षणाच्या, आधुनिक जीवन पद्धतीच्या व स्धारणांच्या संपर्कात येईल तसतशी जाती व्यवस्था ढिली पडत जाईल. या शतकातील प्रख्यात समाजशास्त्रज्ञ मॅक्स वेबरनेही असाच अंदाज व्यक्त केला होता. पण तो साफ खोटा ठरला आहे. जातिव्यवस्थेम्ळे योग्यता व संधी विशिष्ट जातीप्रतीच मर्यादित झाली आहे. साहजिकच बह्जन समाजातील लोक योग्यता व संधी यापासून वंचित राहिले. जातिप्रथेचा आणखी एक अनिष्ट परि<u>णाम म्हणजे कोण</u>त्याही जातीचा अधिकारी व नेता आपल्याच जातीतील माणसांना वर आणण्याचा प्रयत्न करतो. लोहियांच्या मते, वरिष्ठ दर्जाचे काम करणा-या जाती वरिष्ठ समजल्या जातात, तर कनिष्ठ (हलक्या) दर्जाची कामे करणा-या जातींना कनिष्ठ मानले जाते. वरिष्ठ - कनिष्ठ जातींच्<mark>या या शिडीच्या पाय-या अंतहीन आहेत. कनिष्ठ जातीतील</mark> लोक निर्जीव, विकलांग बनलेले आहेत. अल्प परंतु उ<mark>च्च दर्जाच्या जातींकडे आपोआपच राष्ट्रा</mark>चे नेतृत्व<mark></mark> गेले आहे आणि ते टिकविण्यासाठी या <mark>जाती अनंत कपट, कारवाया करीत असतात. अशा प्रकारे</mark> जातिप्र<mark>थे</mark>मुळे बह्जन समाज निष्प्राण, अगतिक आणि संचित वर्ग हा कपटी बनलेला आहे. जातिप्रथेमुळे सारी मूल्ये आणि कल्पना निरर्थक ठरलेल्या आहेत. (पाटील, 2004, पृ. 248)

डॉ. राममनोहर लोहियांनी जातिप्रथेवर प्रखरपणे टीका करून जातीनिर्मूलनावर विधायक व पूरक विचार मांडलेले आहेत. त्यांच्या मते, जातिप्रथा हा लोकशाही समाजवादाच्या मार्गातील मोठा अडसर आहे. जात आणि दारिद्र्य या दोन गोष्टी परस्परावलंबी आहेत. जातिप्रथेचा जोपर्यंत अंत होत नाही तोपर्यंत सामाजिक कल्याण प्रत्यक्षात येऊ शकत नाही. ते जाती नष्ट करण्यासाठी सर्वप्रथम ते "समान संधी ऐवजी विशेष संधीचा आग्रह धरतात." त्यांच्या मते, भारताच्या लोकसंख्येच्या २० टक्के लोक विरष्ठ जातीचे आहेत, परंतु त्यांनी राज्यशासनात ८० टक्के जागा प्राप्त केलेल्या आहेत. याशिवाय सैन्य, व्यापार या क्षेत्रांतही विरष्ठ वर्गाचेच लोक आढळतात. तेव्हा उच्च जातीतील लोकाना विविध क्षेत्रांत जसे प्रतिनिधित्व दिलेले आहे तसे कनिष्ठ जातीतील लोकांना सर्व क्षेत्रांतील किमान ६० टक्के जागा देऊन विशेष संधी देण्याच्या तत्त्वाचे प्रामाणिकपणे पालन केले पाहिजे. (लोहिया, 1971b,पृ.89) समाजातील सर्व कनिष्ठ जातींची प्रगती केल्यानेच जातिप्रथा नष्ट होईल. डॉ. लोहियांच्या मते, जातिप्रथेमुळे छोट्या जाती अधिक गरीब झाल्या. तेव्हा हया मागासलेल्या छोट्या गरीब जातीच्या आर्थिक विकासासाठी काही ठोस उपाय योजणे आवश्यक आहे. लहान शेतकरी आणि शेतमजूर यांचे उत्पन्न वाढविणे आणि बडया शेतक-यांच्या उत्पन्नावर मर्यादा घालणे. त्यामुळे आर्थिक समता प्रस्थापित होईल. (ऑकार, 1969)

डॉ. लोहिया यांनी जाती निर्मूलनाचा सामाजिक दृष्टिकोणातून विचार केलेला आहे. जातिप्रथेमुळे समाजातील सौहार्दता, सहयोगिता आणि सामाजिकता लोप पावते. जातिभेदामुळ समाजाचे विघटन होते. समाजात विषमता वाढते. सहभोजन आणि आंतरजातीय विवाह यामुळे सामाजिक समीपता आणि सौहार्दता वाढते. तेव्हा या दोन उपायांचा स्वीकार करून जातीयतेचा नाश करता येईल. डॉ. लोहियांनी राजकीय

दृष्टिकोणातून जाती निर्मूलनाचे उपाय स्चिवले आहेत. त्यांच्या मते, कनिष्ठ जातीतील बह्तांश जनता राजकारणात सक्रिय भाग घेऊ शकत नाही. राजकीय ज्ञानाच्या अभावी त्यांना योग्य प्रतिनिधित्व आणि संधी प्राप्त होत नाही. तेव्हा कनिष्ठ जातीतील लोकांच्यामधून नेतृत्व निर्माण करण्यासाठी त्यांना राजकीयदृष्ट्या जागृत केले पाहिजे, त्यांच्यात राजकीय चैतन्य निर्माण केले पाहिजे म्हणजे त्यांच्यातील राजकीय उदासीनता कमी होईल. त्यासाठी डॉ. लोहियांनी प्रत्यक्ष निवड, मतांचा योग्य अधिकार आणि विशेष संधीच्या सिद्धांतावर अधिक भर दिला. डॉ. लोहिया मागास वर्गाला फक्त नेतृत्वच देऊ इच्छित नव्हते, तर त्यांना राजकीयदृष्ट्या जागृत करून त्यांना स्संस्कृत करू इच्छित होते; त्यांना त्यांच्या अधिकारांची जाणीव करून देऊ इच्छित होते. (वारूंगळे, 2002, पृ. 49-52) डॉ. लोहिया अस्पृश्यता निवारणाच्या संदर्भात असे उपाय स्चिवतात की; स्वाभिमान, निर्भयता, स्वास्थ्य, स्वच्छता, शिक्षण याची अस्पृश्य समाजाला नितांत गरज आहे. देशाचा विकास घडवून आण्<mark>ण्यासाठी प्रथम हरिजनांचा विकास, उत्</mark>कर्ष करणे गरजेचे आहे. त्यासाठी त्यांच्याशी मानवीय, सौहार्दाचा व्यवहार करणे आवश्यक आहे. याच हेतूने हरिजनांना मंदिर, शाळा, विहिरी, तलाव या ठिकाणी प्रवेश दिला पाहिजे. पूजा - अर्चा, प्रवेश इत्यादींचे समान अधिकार अस्पृश्यांना प्राप्त झाले आहेत. त्यांना मंदिरात प्रवेश नाकारला तर इतर कृणालाही मंदिरात जाता येणार नाही असे मत लोहियांनी स्पष्ट केलेले आहे. अस्पृश्य लोकांना साक्षर बनवून, सुसंस्कृत बनवून त्यांना कर्तव्याची जाणीव करून दिली पाहिजे. दलित, मा<mark>गासलेल्या लोकांना साक्षर, स्वावलंबी बनविले तर देश अधिक</mark> शक्तिशाली, बलवान होईल. अस्पृश्यांच्या पतनामुळेच देश अविकसित आहे. तेव्हा राष्ट्राचा विकास साधण्यास त्यांचा सर्वांगीण विकास करणे आवश्यक आहे. सहभोजन, आंतरजातीय विवाह या वरिष्ठ-कनिष्ठ जातीमधील विषमतेची दरी कमी करून जातिप्रथांचे समूळ उच्चाटन करणे नितांत गरजेचे आहे असे लोहिया यांचे स्पष्ट व आग्रही मत होते.

राष्ट्रीय एकात्मतेच्या दृष्टीने भाषा हे एक अत्यंत कळीचा मुद्दा आहे. एकात्मता निर्माण करण्याच्या दृष्टीने भारताची राष्ट्रभाषा हिंदी असावी की इंग्रजी याबाबतीत अजूनही वाद आहेत. भारतामध्ये प्रादेशिक पुनर्रचना भाषेच्या आधारावरच झालेले आहे. आजही भाषेचे भारतीय राजकारणातील महत्व अधोरेखीत करते. याबाबत लोहियांचे विचार अत्यंत मौलिक मार्गदर्शन करणारे आहेत.

व्यक्तीचा सर्वांगीण विकास घडवून आणण्यासाठी तिचा मानसिक व सांस्कितक विकास होणे आवश्यक असते. त्यासाठी भाषा हे माध्यम आवश्यक आहे. भाषेच्या माध्यमाद्वारे व्यक्ती दुस-या व्यक्तीपर्यंत पोहोच् शकते. भाषेमुळे ज्ञानाची देवाण-घेवाण होते. मातृभाषेचा आणि सर्वांना ज्ञात असणा-या भाषेचा उपयोग केल्याने व्यक्तीची सर्वांगीण प्रगती होते. त्यातूनच राष्ट्राची प्रगती होते. परंतु दुर्दैवाची गोष्ट अशी की भारतात लोकांच्या भाषेतून कामकाज होत नसून ते एका विदेशीभाषेतून - इंग्रजी भाषेतून चालते. इंग्रजी भाषेमुळे देशाचे भयंकर नुकसान होत आहे. (लोहिया,1979) मूठभर लोकांची भाषा (भारतातील लोकसंख्येच्या दोन वक्के लोकांची भाषा) बहुसंख्य जनसमुदायावर सत्ता गाजविण्याचे आणि त्यांचे शोषण करण्याचे कार्य करीत आहे. भाषा शिकलेले वीस लाख लोक चाळीस कोटी लोकांच्या छातीवर बसून त्यांचे सामाजिक व आर्थिक शोषण करतात. अल्पसंख्य शासक वर्ग बहुसंख्य शासितांवर केवळ बंदुकीच्या गोळीने राज्य चालवीत नाही, तर त्याहून अधिक इंग्रजी भाषेद्वारे चालवितो. इंग्रजी नसल्यामुळे कोणतेही सार्वजनिक काम करण्यास आपण लायक नाही या भावनेने देशात कोट्यवधी लोक उदासीन व विरक्त बनलेले दिसतात.

आपण कमी पडतो कारण आपणाला इंग्रजी येत नाही या न्यूनगंडाने ते पछाडलेले असतात. संपूर्ण राज्यकारभार आणि प्रशासन व्यवस्था इंग्रजी भाषेच्या प्रभावाखाली गेल्याम्ळे बह्संख्य जनता कायदा, स्व्यवस्था यांपासून वंचित होऊन भयभीत व क्रियाशून्य बनलेली दिसते.

डॉ. लोहियांचा इंग्रजी भाषेला विरोध होता. ते या अर्थाने की या भाषेच्या साधानांने मूठभर लोक वर्चस्व प्रस्थापित करीत आहेत. त्यामुळे बह्संख्य बह्जन समाज राजकीय स्वातंत्र्य उपभोगू शकत नाही.

भारतात जातीव्यवस्थेबरोबरच प्रूषसत्ताक व्यवस्था असून त्याच्यामुळे अनगिनत यातना स्त्रीयांच्या वाटेला आलेल्या आहेत. यासंदर्भात लोहियांचे विचार अत्यंत मौलिक आहेत. भारतातील अनिष्ठ रूढी, चाली-प्रथा, स्त्री-पुरूष विषमता, जातीभेद, वर्णभेद आणि अस्पृश्यता इत्यादीमुळेच भारत सर्वप्रकारे गुलाम झाला. जगाच्या त्लनेत भारतीय स्त्रियांचे परिस्थिती खूप बिकट आहे. लोहिया म्हणतात की, "हिंद्स्थानातील स्त्री ही जगातल्या दु:खी लोकांमधील सर्वात दु:खी, उपाशी, निस्तेज आणि रोगट आहे." (वर्मा, 1969, पृ. 27) त्यांची स्थिती सुधारल्याशिवाय समाजवादी आंदोलन देखील यशस्वी होणार नाही अशी डॉ. लोहियांची खात्री होती. लोहिया प्रकर्षाने ठासून सांगतात की जर स्त्रियांची दयनीय स्थिती सुधारण्यासाठी सर्वप्रथम त्यांना चूल-मूल यापासून मुक्<mark>त</mark> करणे <mark>आवश्यक आहे.</mark>

लोहियांच्या मते, भारतीय संस्कृतीत स्त्री-पुरूष जन्मातही फरक केला जातो. मुलगा म्हणजे आनंद तर मुलगी म्हणजे दुःख समजले जाते. <mark>याचे मुख्य कारण म्हणजे आपल्याकडील</mark> हुंडा प्रथा, वधूची योग्यता, शिक्षण आणि सौंदर्य इत्यादी बाबी गौण असतात. वरपक्ष हा हुंडा किती देणार याचाच फक्त विचार करत असतो. ज्या प्रकारे गाय ही दूध किती देते यापेक्षा तिचा वासरामुळे गाईचे मुल्य ठरत असते, त्याचप्रमाणे उपवर मुलीचा हा <mark>योग्यतेनुसार नव्हे, तर हुंड्याच्या किमतीनुसार चांगल्या घरात</mark> विवाह होतो. लोहिया एका ठिकाणी अगदी योग्यच म्ह<mark>णाले, 'हुंड्याविना मुलगी ही वासराशिवाय गा</mark>ईप्रमाणे आहे.' निमंत्रणपत्रिका, भेट दिल्या जाणा-या वस्तू, गळ्यातल्या माळेचे मूल्य आणि अन्य शानशौकी याच वधूवरांच्या आत्ममीलनापे<mark>क्षा</mark> जे प्राप्त <mark>करण्यासाठी नवदांपत्य प्रयत्न</mark>शिल असतात महत्त्वाच्या ठरतात. डॉ. लोहिया योग्यच म्हणाले की, 'यांच्या विवाहाचे वैभव आत्म्याच्या मूल्यापेक्षा वीस लाखांचा हार, पन्नास हजारांच्या साड्यांमध्येच अडकून पडले आहे. 'ह्ंड्याच्या या घृणात्मक प्रथेला नष्ट करण्यासाठी लोकांद्वारे आंदोलनाची आवश्यकता आहे आणि जे युवक हुंडा घेतात त्यांना समाजातून बहिष्कृत करायला हवे. महात्मा गांधींनीही म्हटले होते की, 'विवाहाचा सौदा केला जाऊ नये. 'हुंडा दे<mark>णाऱ्याला</mark> आणि घेणा-याला शिक्षा झालीच पाहिजे. मुल्ये बदलली पाहिजेत. अर्धवटपणाने काही साध्य होणार नाही. पूर्वीचा पुरुषार्थ देशात निर्माण झाला पाहिजे. थोडक्यात देश आध्निक बनला पाहिजे. (वारूग्ंळे, 2002) डॉ. लोहियांना या मताचे आग्रही होते की स्त्रियांना निवड व लैगिंक स्वातंत्र्य असावे. त्यांच्या मते, विवाह आणि प्रेम करण्यात प्रूषाला स्वातंत्र्य असेल,तर स्त्रीला देखील त्याबाबत स्वातंत्र्य असणे आवश्यक आहे. तसेच प्ढे ते म्हणतात की स्त्री-प्रूषांतील संबंध निष्ठेच्या आधारे प्रस्थापित झाले पाहिजेत. परंत् तसे झाले नाही तर, तो एक प्रश्नच आहे. जोवर जग आहे, तोवर मनुष्य राहणार आणि जोवर मनुष्य आहे, तोवर बलात्कार व व्याभिचार यापैकी कोणतेतरी एक निश्चितच राहणार. या दोन्ही गोष्टी नष्ट झाल्या पाहिजेत हे खरे आहे. परंत् मन्ष्यप्राणीच असा आहे की, काहीना काही गडबड चालूच राहणार म्हणून बलात्कार व व्याभिचार यापैकी काय चालेल? ज्या समाजात व्याभिचाराची पाप म्हणून संभवना केली जाते, त्या समाजात बलात्कार आधिकच बोकाळत असतो. लोहियांना व्याभिचार देखील निंद्यच वाटतो. परंतु मनुष्य प्राण्यातील दुबळेपणा लक्षात घेता त्यांना बलात्कारापेक्षा व्याभिचार बरा वाटतो. कारण तेथे दोघांची संमती असते, जुलूम नसतो. (उपासे, 2012, पृ. 91) व्याभिचाराबाबत पुरूषापेक्षा जास्त स्त्रीयांना निंदेला सामोरे जावे लागते असे सांगून समाजातील पुरूषी मानसिकता याकडे लक्ष वेधतात.

पुरूषसत्ताक समाजव्यवस्थेतील योनीशुचितेबाबत असलेली मतांवर ते कडाडून टीका करतात. ते म्हणतात, "जो पुरूष आपली पत्नी सावित्री असावी असे म्हणतो, तो स्वतः मात्र रोज अनेक स्त्रियांना भेटतो, त्यांच्याशी गप्पा मारतो, त्यांच्यावर प्रेम करतो आणि शरीर संबंधि ठेवतो. परंतु आपल्या पत्नीकडून मात्र पातिव्रत्याची अपेक्षा करतो. (वर्मा,1969, पृ. 21) अर्थात, नीती-अनितीच्या कल्पना स्त्री-पुरूष या दोहोंना समान असावे असे त्यांचे मत आहे. "मी अर्धा पुरूष व अर्धा स्त्री आहे" असे म्हणून ते भगवान शंकर यांच्या प्रतिकेतेचे वापर करून स्त्री-पुरूष समतेचे समर्थन करतात. ते म्हणतात की समाजवादाच्या स्थापनेसाठी समाजातील या निम्या घटकाला घरात ठेवणे, मागास बनविणे, बंधनात ठेवणे म्हणजे त्यांच्यावर अन्याय केल्यासारखे आहे. डॉ. लोहिया म्हणतात की स्त्रीच्या सहभागाशिवाय राजकारण अपूर्ण आहे. राजकारणात पुरूषांच्या बरोबरीन स्त्रियांना देखील संधी असावी. पुरुषाप्रमाणेच स्त्रीयांनीदेखील राष्ट्र जडणघडणीत वाटा उचलावा आणि तशी त्यांना संधी बहाल करावीत असे प्रतिपादन करतात. यासंदर्भात ते एकदा म्हणाले की "गांधीजी जीवंत असते तर त्यांना आपण सुचिवले असते की, तुम्ही तुमच्या राज्याला "राम-राज्य" या ऐवजी सीता-राम-राज्य असे नांव द्या." (लोहिया , 1966, पृ. 18)

अशाप्रकारे लोहियांनी जात, भाषा व लिंगभाव या तीन सामाजिक घटकांचा परस्परसंबंधाचा एकाचवेळी विचार करतात. यात असमानता आणि शोषणाच्या संरचनेचा बहुआयामी, भिन्न आणि श्रेणीबद्ध दृष्टीकोन सादर करतात. त्यांच्या विश्लेषणाने एकता आणि सामूहिक कृतीतून समतावादी आणि पुर्नरूजीवत सामाजिक व्यवस्था तयार करण्याची नवीन शक्यता देखील पुढे येते.

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भारतीय प्रजासत्ताकासमोरील आव्हाने...

डॉ. आण्णासाहेब हारदारे, शिवराज कॉलेज, गडहिंग्लज.

प्रस्तावना :

२६ नोव्हेंबर १९४९ रोजी डॉ. बाबासाहेब आंबेडकरांनी संविधान सभैत प्रधीर्ग भाषण करून संविधाना अंतर्गत स्थापीत होत असलेल्या भावी राजकीय व्यवस्थेचे स्वरूप, उद्दीष्टे आणी प्रयोजन यावर प्रकाश टाकून धर्मनिरपेक्ष, उदारमतवादी, आणी समाजवादी लोकशाहीचे प्रारूप संविधान सभैला अर्पण केले. देशात संविधानाच्या माध्यमातून २६ जानेवारी, १९५० रोजी प्रजासत्ताक लोकशाहीची स्थापना केली. पं. जवाहरलाल नेहरू यांनी २६ जानेवारी, १९३० रोजी काँग्रेसच्या लाहोर अधीवेशनात तिरंगा फडकावून पूर्ण स्वराज्याची (स्वातंत्र्याची) घोषणा केली होती. त्याची आठवण म्हणून २६ जानेवारी हा दिवस संविधान अंमलात आणण्यासाठी निवडण्यात आला. तेव्हापासून आजतागायत तब्बल सात दशके आपण प्रजासत्ताक लोकशाहीचे हे प्रतिमान राबवत आहोत. आज तब्बल ७० वर्षानंतर प्रजासत्ताकाचे सिंहावलोकन करताना संविधानिक तत्वज्ञानाला व त्यात समाविष्ट असलेल्या मुल्यांना अनुसरून आपल्या राजकीय व्यवस्थेची नीर्धोकपणे वाटचाल झाली आहे काय? असा प्रश्न व{चारला तर उत्तर नाही असे असेल. आज सत्तर वर्षानंतरही आव्हाने कायम आहेत. ती वस्तुस्तिती तपासली तर कोणाही सुजाण भारतीयांचे मन अभीमानाने भरून येणार नाही.

विषय विवेचन

संविधानाने सुरू केलेल्या लोकशाहीचा प्रयोग विनाव्यत्यय सुरू राहीला आहे ही बाब निःसंशय गौरवास्पद आहे. मतपेटीच्या माध्यामातून संघराज्याअंतर्गत केंद्रीय स्तरावर तसेच सर्व राज्यातही सतांतरे घडून आली. आतापर्यंत लोकसभेसाठी १७ निवडणूका झाल्या. निवडणूक प्रक्रिया मुक्त व न्याय स्वरूपाची असावी यासाठी घटनाकारांनी ज्या संरचना घटनेत तयार केल्या होत्या त्यांनी आपली जबाबदारी चोखपणे पार पाडली असून वेळोवेळी आवश्यक होत गेलेले बदल तत्परतेने स्विकारून त्यांनी आपली कार्यक्षमता वाढवत आणली आहे. वस्तुतः त्यांच्या समोरची आव्हाने प्रचंड होती. पण अपेक्षेप्रमाणे ही आव्हाने पेलण्यात निवडणूक आयोग यशस्वी झाला. भारतीय गणराज्याचे पहिले लोकनिर्वाचीत सरकार स्थापन करण्यापासून ते अनेकानेक विधानसभांच्या निवडणूका यशस्वीरीत्या पार पाडल्या. म्हणजेच देशातला लोकशाहीचा प्रयोग पहील्या पीढीपासून ते आजतागायत अखंड सुरू आहे. भारतीय लोकशाहीचा राजकीय सांगाडा म्हणजेच संविधानीक राजकीय व्यवस्था अभंग आहे. पण डॉ. बाबासाहेब आंबेडकरांनी ज्या सामाजीक , आर्थिक, क्रांतीची प्रक्रिया संविधानाव्दारे घडून येणे अभीप्रेत आहे ती मात्र गतीमान झाली आहे असे दिसत नाही. मूळ प्रश्न मात्र तसेच राहीले आहेत. तीच आपल्या प्रजासताकासमोर आव्हाने आहेत.

भारतीय प्रजासत्ताकांची पहीली पुर्वअट होती, समाजात कोणत्याही प्रकाराची विषमता नसावी. पण आज भारतीय समाजात मोठ्या प्रमाणात विषमता आहे. भारतातील सर्व प्रकारच्या विषमतांचे निराकरण करणे आणी सर्व नागरीकांना समान संधी उपलब्ध करून देणे ही दुहेरी जबाबदारी पार पाडण्यासाठी संविधानकर्त्यांनी मुलभूत हक्क आणी मार्गदर्शक तत्वे या तरतुदींचा समावेश केला. क्रमशील विषमतेच्या तत्त्वावर अधारीत असलेल्या भारतीय समाजाला नवे लोकशाही स्वरूप देण्याच्या दृष्टीने प्रत्येक व्यक्तीला कायद्यासमोर समानता किंवा कायद्याचे समान संरक्षण देण्यात आले. (अन् १४) धर्म, वंश, जाती, लिंग, आणी जन्मस्थळ इत्यादी कारणासाठी नागरीकामध्ये भेदभाव केला जाणार नाही. (अन्.१५) आणी समतेच्या हक्कान्सार अस्पृश्यता नष्ट करण्यात आली असून कोणत्याही स्वरूपाची अस्पृश्यता पाळण्यास मनाई करण्यात आली आहे. (अन्.१७) कोट्यावधी अस्पृश्यांना त्यांच्या युगायुगाच्या दास्यातून व सामाजीक गौणातूक मुक्त करणे हा हेतू पाठीशी असलेले हे कलम समतेच्या हक्कांचे हे 'सुवर्ण कलम" म्हटले जाते. पण या तरत्दींचे अपेक्षीत क्रांतीकारकरत्व अजून प्रत्यक्षात अनुभवास येताना आठवत नाही. कारण ग्रामिन जीवनात विशेष त्याने अस्पृश्यता पाळली जाते. अस्पृश्यांचा छळ करण्याचे किळसवाने प्रकार अनेक ठीकाणी होत आहेत उदा. उत्तरप्रदेश, ग्जरात, महाराष्ट्र राज्यामध्ये दलीतावरील अन्यायाची अनेक प्रकरणे आहेत. जनमानसात अद्यापही अस्पृश्<mark>यांबदलची प्रतीमा पूर्णपणे सन्मानाची बरोबरीची</mark> झालेली दिसत नाही. त्याला स्वर्ण आणी अस्पृश्य यां<mark>च्यातील आर्थीक विषयमतेची दरीच कारणीभूत</mark> आहे. आज थोड्या लोकांच्या हातात संपत्तीसंचय झाला आहे<mark>. ज्याच्याजवळ पैसा आहे ते पैशाचा वापर राजकीय स</mark>त्ता प्राप्<mark>त</mark> करण्यासाठी कामगार, दलीत , महिला यांच्यावर <mark>अन्याय अत्याचार करण्यासाठी वापरत आहेत. त्यामुळे जर</mark> एखाद्या दलीतावर किंवा स्त्रीवर अत्याचार झालेल्यावीरूध्द *न्यायालयात न्याय मागण्याचा अ*धीकार असला तरी प्रत्यक्षात त्याचा उपयोग श्रीमंत व वरीष्ट वर्गालाच होताना दिसतो. कोर्टाची पायरी चढण्यापेक्षा गरीब, दलीत आणी स्त्री अन्याय सहन करणेच पसंद करतात. परीणामी 'कायद्याची समानता' ही फक्त कागदोपत्रीच उरते. सामाजिकदृष्ट्या विषमतेवर <mark>आधारलेला हा समाज वास्तववाद जर समतेच्या पात</mark>ळीवर <mark>उ</mark>तरला नाही तर डॉ. आंबेडकर म्हणतात त्याप्रमाणे जर दिर्घकालीन ही समता, साध्य झाली नाही तर भारताची राजकीय लोकशाही संकटात आल्यावाचून <mark>राहणार <mark>नाही. विषमता लवकरात लवकर नष्ट</mark> केली पा<mark>ही</mark>जे. नाहीतर विषमतेने</mark> गांजलेले लोक या घटन<mark>ा समीतीने मोठ्या परीश्रमाने उभे केलेले हे</mark> राजकीय <mark>लो</mark>कशाहीचे मंदीर उदध्वस्त केल्यावाचून राहणार नाही.

अभीव्यक्ती स्वातंत्र्य घटनादत आहे. आपले विचार, संवेदना आणी भावना व्यक्त करणारे हे स्वातंत्र्य नैसर्गीकही आहे. माणूस, प्राणी याचबरोबर वनस्पतीही अभीव्यक्ती जोपासतात हे विज्ञानाने सिध्द केले आहे. भारतीय संस्कृती व तत्वज्ञानातही अभ{व्यक्ती स्वातंत्र्यांचे महत्त्व आधीरेखीत केलेले आहे त्यामध्ये व्यक्तीची प्रतीष्ठा, लोकशाही मूल्य अभीप्रेत आहे. आपल्याला न पटणारे विचार ऐकून घेण्याचा संमजसपणा, विवेकवादही त्यामध्ये गृहीत आहे. पण याच अभ{व्यक्ती स्वातंत्र्यावर सत्ताधांध्याकडून भ्याड हल्ला करणे, खोटी बदनामी करणे, भीती दाखवणे, गप्प बसायला लावणे आण{ देशद्रोही ठरवीणे असे प्रकार घडत आहेत. सत्य बोलण्यास बंदी घातली जात आहे. कोण काय खावे-प्यावे यावरून खून केले जात आहे. सत्तेविरोधात बोलू लागला कि त्याला देशद्रोही ठरविले जात आहे. त्यामुळे लीहिनार्याला व बोलणार्याला प्रत्येकाला खरे एवजी बरे लीहावे व बोलावे लागत आहे. विवेकवाद आणी सद्भावना संपल्याचे दिसून येत आहे. द इकॉनॉमीस्ट इंटलीजन्स युनीट (ईआययु) च्या वत्तीने २०१९ या वर्षातसाठी लोकशाही निर्देशांकाची क्रमवारी जारी करण्यात आली असून सध्य:स्थीतीत भारतीय लोकशाही निर्देशांकात भारताची १० अंकानी घसरण

झाली असून आता ५१ स्थानापर्यंत खाली आला आहे. निवडणूक प्रक्रिया, विविधता, सरकारची कामकाज पध्दती, राजकीय सहभाग, राजिकय संस्कृती व नागरी स्वातंत्र्य या घटकांचा विचार केला जातो. गेल्या वर्षामध्ये जनआंदोलने, नागरीकांचा सरकारी धोरणाप्रती असलेला विरोध यांच्यामुळे जगभरामध्ये भारताची प्रतीमा बदलत असल्याचे बोलले जाते. आणी भारताची लोकशाही निर्देशकातील घसरणीस 'नागरी स्वातंत्र्याचा संकोच; कारणीभूत आहे असे म्हटले आहे. नागरी स्वातंत्र्याचा संकोच हा भारतीय प्रजासत्ताकासमोरील मोठे आव्हान आहे. हे वास्तव आपण समजून घेण्याची गरज आहे.

सध्याचा सरकारचा असा समज आहे कि बह्मताचे राज्य म्हणजे लोकशाही, पण डॉ. बाबासाहेब आंबेडकरांचे असे मत होते कि खऱ्या लोकशाहीत/लोकशाही व्यवस्थेत सर्व निर्णय सहमतीने घेतले जावेत. प्रत्येक वेळी कोणत्याही निर्णयावरून एकमत झाले नाही. तर बह्मताने निर्णय घ्यावे. बह्मत हे ज्यावेळी एकमत होणे अशक्यच असेल त्यावेळी योग्य आहे पण प्रत्येक वेळी बह्मताने निर्णय घेणे घातक असते. ज्यादेशातील अल्पमतातील <mark>लोकांना व अल्पसंख्याकांना योग्यरीत्या राबवले जा</mark>त नाही त्या देशाला खरा लोकशाही देश म्हणता ये<mark>णार नाही. सध्याचे सरकार केवळ सभागृहातील</mark> संख्यात्मक बह्मतावर संवैधानिक प्रथा, परंपरा, राजिक<mark>य नैतीकता पायदळी तुडवत आहे. तसेच भारतातील लोकशाही ही केवळ बह्मताचीच</mark> लोकशाही नसून ती जातीय व धार्मिक लोकशाही आहे. जातीय किंवा धार्मिक लोकशाही म्हणजे अशी लोकशाही ज्यामध्ये निवडण<mark>ूकांत लोक इतर कोणताही विचार न करता आंधळेप</mark>णाने आपल्याच जातीच्या व धर्माच्या उमेदवाराला मत<mark>दान करतात त्यामध्ये उमेदवाराची गुणवत्ता व विचारसरणी</mark> महत्त्वाची नसते. भारतात बहुमतानी व जा<mark>तीय बहुसंख्याची दुहेरी हुकूमशाही कार्यरत आहे. ज</mark>नतेला गृहीत धरण्याचे व विरोधकांचे महत्त्व नाकारण्याचे प्रकार सर्रास सुरू आहेत. लोकशाहीचा तात्वीकअर्थ लोकांची संमती आणी सहमती हाच असतो. बह्मताचा आधार घेणे हे त्या संमतीची व्यवहारात आंमलबजावणी करण्याचे एक हत्यार झाले, पण म्हणून बह्<mark>मते = लोकशाही असे समीकरण मांडणे जरा जास्</mark>तच अतीशयोक्त होईल. त्यामुळे बह्मत हा लोकशाहीच्या <mark>मा</mark>र्गातील ए<mark>क टप्पा आहे ते अंतीम ध्येय</mark> नाही ह<mark>ी व</mark>स्त्स्थीती बह्मतवाल्या लोकशाहीचे/राजकारणाचे आव्हान संपुष्टात आणले पाहीजे. <mark>लोक</mark>शाही ही केवळ एक राजकीय प्रणाली नसून सामाजीक सहजीवनाची प्रक्रिया आहे हे गृहीत धरून राज्यकर्त्यांनी वाटचाल केली पाहीजे.

लोकशाहीत संविधानिक नैतीकता किंवा नितीमता महत्त्वाची असते व तीची पायाभरणी आपणास चांगली संस्कृती, चांगल्या परंपरा आणी राजकीय संकेत स्थापन करून करावी लागते. मानवी जीवनाच्या सर्वांगीन परीवर्तनात राजकीय ध्येय धोरणात योगदान फार मोठे असते राजकीय स्वार्थासाठी नैतीकतेत बळी देऊन संधीसाधू व संकुचीत राजकारण करणे यामध्ये बसत नाही. संविधानीक नैतीकतेत सध्याचे पक्षांतर बसत नाही. निवडून येण्यासाठी केलेले गैरप्रकार आणी धार्मिक व जातीय भावनेने केलेले मतदान बसत नाही. पण सध्याचे राजकारण हे सांस्कृतीक राष्ट्रवादाचा बीगुल वाजवून केले जात आहे. सर्व स्वायत्त संस्थाचे व्यक्तीगीकरण अनाकलनीय व लोक तुघलकी निर्णयप्रक्रिया या व अशा अनेक बाबतीत कमालीची असैविधानीकता दिसून येत आहे. कारण सरकारचे नोटाबंदीसारखे अनेक अनाकलनीय निर्णय ढासळता विकासदार, वाढती बेरोजगारी, वाढत्या आत्महत्या, स्वायंत्र्य संस्थांचे सरकारीकरण आण{ सरकारी संस्थांचे खाजगीकरण आणी सामूहीकरीत्या केल्या जाणाऱ्या हत्या अशा विविध कारणांनी सामाजीक, अर्थीक,

सांस्कृतीक परीस्थीती चिंताजनक असताना भावनीक आव्हाने व सांस्कृतीक राष्टवादाचा सतेच्या राजकारणासाठी वापर केला जात आहे. समतेच्या आथींक क्रांतीचे दिवस जवळ आले असताना त्याला बाजूला करून सांस्कृतीक आस्मीतेचे प्रश्न चर्चेत ठेवले जात आहेत. महारास्थतील घडामोडीने तर संविधानीक नैतीकतेला न्यायालयात उभे केले. महारासत्रच्या राज्यपालानी निर्णय घेत असताना कायदा व संविधानाला धरून आणी अस्थीर परीस्थीतीत सद्ववि वेक-ब्द्धीला अनुसरून निर्णय घेत अपेक्षीत असते. तसे न वागता राज्यपाल हे केंद्राचे हस्तक असल्यासारखे वागले. महाराष्टच्या प्रकरणामध्ये संविधानिक नैतीक मुल्ये बाजुला सारुन राष्टपती आणी राज्यपाल यांनी विशिष्ट राजकीय पक्षाचे हस्तक असल्याचा संदेश देशाला गेला आहे. संविधानिक मुल्ये नाकारण्याची विकृती वाढण्याचे आणी सभागृहातील चुकीचा अर्थ लावण्याचे प्रयत्न सत्ताधारी राजकीय पक्षाच्या उक्ती आणी कृतीतून दिस<mark>त आहे. समाजातील</mark> विषमता व्यक्तीला आपल्या अंत:प्रत्ययाची प्रामाणीक मांडणी करण्याचे अभी<mark>व्यक्ती स्वातंत्र्याची गळचेपी, संवि</mark> धानिक नैतीकता व सार्वजानीक नितीविवेक यांचा अभाव, परात्म भाव बद्दल असणारी असहीष्ण्ता आणी बहुमताच्या जोरावर आपले म्हणणे रेटून नेणे इत्यादी आव्<mark>हाने</mark> आपल्य<mark>ा प्रजासत्ताक लोकशाहीला प्रभावीत</mark> करीत आहेत. त्यामुळे असे म्हणता येईल की भारतीय स<mark>माजात आपण फक्त राजकीय लोकशाही प्रस्थापीत करू शकलो</mark> पण लोकशाहीचे खरे मूल्य अजून रूजलेले नाही.

समारोप :

थोडक्यात संव{धानाचे श{ल्पकार डॉ. बाबासाहेब आंबेडकरांनी भारतीय संव{धानाची अंमलबजावणी करताना ज्या लोकशाही राज्यव्यवस्थेच्या १) समाजात विषमता नसावी. २) कायद्यासमोर सर्व समान आहेत. 3) बहुमताचे राज्य म्हणजे लो<mark>कशाही नव्हे आणी ४) सार्वजनीक नैतीकता किं</mark>वा सार्वजनीक नीतीविवेक या पूर्व अटी सांगीतल्या होत्या तीच आज आपल्या प्रजासत्ताकासमोरील आव्हाने आहेत. त्यावर मात करणे हे आपणा भारतीयांचे परम कर्तव्य आहे.

ISIN 2349-6387

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