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ADVANCES IN SCIENCE AND HUMANITIES RESEARCH

Editors:

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Dr. Shakun Mishra

Dr. Sagar A. Vhanalakar

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SCAN ME

About Editors

Dr. R. Rajendran is working as an Assistant Professor of Sociology and Social Work in Annamalai University, Annamalai Nagar, Chidambaram, Tamilnadu, India, under regular stream. He has got more than 17 years of teaching experience. Hisarea of specialization in Ph.D., is Environmental Sociology. He has presented more than 75 Research papers in the National and International Conferences in various Colleges and Universities. Dr. R. Rajendran has published 3 Research articles in Books with ISBN and 25 Research articles in many International Peer Reviewed and Refereed Journals with ISSN.He has been Organized National level workshop on "Environmental and Social Impact Evaluation" in 2018 and also he has an organizing secretary in UGC - National Level seminar on "Globalization, Environment and Sustainable Development" in 2020. He has been an External Examiner and a Question Paper Setter for Examinations, member of Board of Studiesin more than 4 Universities in Tamilnadu and Pondicherry. He has received the "Young Sociologist Award" for being an Outstanding Sociologist in Sociology from Indian Sociological Society and "Life Member of Indian Sociological Society", and also Recipient of "Dr.R.Radhakrishnan Award of Best Teacher"Chennai, in 2014. He is also working in faculty expertin "Center for Atmospheric Research and Climate Change" Faculty of Engineering and Technology, Annamalai University, He has guided more than 15 M.Phil., scholars and now guiding 4 Ph.D Research scholars and more than 75 P.G. M.A., and M.S.W., guidance's.He has rendered his service to the community through Participate Rural Appraisal, Conducting Rural Health Camps, Swachh Bharat and Social Service League.

Dr. Shakun Mishra is working as Head Department of Botany, Govt. S. N.P.G.College, Khandwa (M.P.) INDIA. She is doing her research work for Ph. D. on the topic, "Ethnobotany of Korku, Gond and Nihal Tribes of East Nimar (M.P.)". She did her Ph. D. in the year 2011 from D.A.V.V. Indore (M.P.) India. She has 36 years of teaching experience at U. G. level and 26 years at P.G. level. She is actively engaged in research from two decades. Dr. Mishra published 56 research papers in various journals and proceedings (30 national and 26 international), 08 book chapters and associate editor for four books published by Bhumi Publishing, India. She attended and presented 45 research papers in various national and international conferences and also guest lecturer and chairperson in two national seminars. She is member of editorial board for two online journals namely, Journal of Science Research International (JSRI) and Asian Journal of Trandisciplinary Research (AJTR).

Presently, she is Fellow/Life Member of 10 National and International research societies such as Society of Life Sciences, Satna (M. P.), Indian Hydrobiology, Chennai and I.A.A.T., etc. She received some prestigious awards like F.I.C.C.E. in 2004, F.S.L.Sc. in 2005 and F.E.S. in 2013. She completed one M.R.P. funded by U.G.C. and Ex-Chairman of BOS in subject of Botany, Soil Sc., Seed Tech. and Horticulture in D.A.V.V.Indore and also same in Central University Bhopal. *Typhonium flagelliforme* (Lodd.) Blume(Araceae), is reported by Mishra for the first time for Burhanpur District from Madhya Pradesh forms an addition to the Araceae, Flora of Madhya Pradesh.

Dr. Sagar A. Vhanalakar is presently working as a Vice Principal and Head, Department of Zoology, Shri. Mouni Vidyapeeth's Karmaveer Hire Arts, Science, Commerce and Education College, Gargoti, Tal – Bhudargad, Dist – Kolhapur, 416209 M. S., INDIA. He did his Ph. D. in the year 2010 from Shivaji University, Kolhapur (M.S.) India. Dr. Vhanalakar has 10 years of teaching experience and 14 years of research experience. The main area of his research is aquaculture and fisheries, limnology and biodiversity.

There are 50 research papers, 12 book chapters and two books on the name of Dr. Vhanalakar. He also edited 10 books published by Bhumi Publishing, India. He attended and presented research papers in more than 50 national and international research conferences. He published more than 50 science awareness and agricultural articles in newspapers. Presently he is working as a principal investigator of one research project funded by University Grants Commission, New Delhi.

He worked as an organizing secretary for two international, one national and 08 university level conferences and seminars. He is presently working as a managing editor for Bhumi Publication, Kolhapur, M.S., India. Dr. Vhanalakar is enganded in various social activities like Awareness campaingn during Ganesh festival regarding water pollution, establishment and guaidance to Self Help Group (SHG) of womens, their accounting and daily working.

PREFACE

*We are delighted to publish our book entitled "**Advances in Science and Humanities Research ".** This book is the compilation of esteemed articles of acknowledged experts in the various fields of basic and applied sciences, humanities, commerce, management and sociology providing a sufficient depth of the subject to satisfy the need of a level which will be comprehensive and interesting. It is an assemblage of variety of information about rapid advances and developments in various subjects. With its application oriented and interdisciplinary approach, we hope that the students, teachers, researchers, scientists and policy makers in India and abroad will find this book much more useful.*

The articles in the book have been contributed by eminent scientists, academicians. Our special thanks and appreciation goes to experts and research workers whose contributions have enriched this book. We thank our publisher Bhumi Publishing, India for taking pains in bringing out the book.

Finally, we will always remain a debtor to all our well-wishers for their blessings, without which this book would not have come into existence.

- Editorial Team

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CONTENTS

COVID-19 AND ACADEMIA: IMPLICATIONS AND ADAPTIVE MEASURES FOR LEARNING SUSTENANCE

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SCAN ME

Abstract:

The new respiratory pandemic disease known as COVID-19 or the Severe Acute Respiratory Coronavirus 2 (SAR-CoV-2) has caused disruptions in the lives and customs of people with significant impact on the economies of nations. The outbreak of the disease is a global health emergency and of international interest. Governments adopted and enforced measures such as lockdown and social distancing, proven to be effective in times of flu-like pandemics to guarantee reduction in circulation of the disease. Great is the impact on the international academic system. Academic activities such as lecturing, conferences, seminars, workshops, and so on, which involves social gathering have been put on hold by academic institutions. The closure of academic institutions to prevent the spread of the disease on the vulnerable part of the society, the students, has numerous implications on the students, faculty, parents, administrators, governments, and society at large. This paper aims to examine comprehensively through review the implications of the coronavirus pandemic on the academia, the adaptive measures taken by academic administrators to cushion the effects and ensure the continuance of learning, and the possible challenges faced with the adaptive measures.

Keywords: COVID-19, Coronavirus, Academia, School Closure, Learning Sustenance, Adaptive Measure

Introduction:

The COVID-19 disease, originating in the Wuhan Province, China in late 2019 and perceived to be zoogenic has largely affected the lives and acceptable living cultures of people. The disease is basically transmitted through physical close touch with an infected person and through droplets from an infected person when coughing, talking, and sneezing(Carlson, 2020). Its alarming rapid rate of spread to many other countries made the World Health Organization (WHO) (World Health Organization, 2020) to declare it a pandemic as it became an emergency of international concern. This global health challenge leads to the infection, morbidity and mortality of many people. The statistics of people infected with the disease as of 20th May, 2020 is 4,801,202 with 318,935 deaths and spanning across 216 countries in the world, out of which United States, Russia, Brazil, United Kingdom and Spain are the worst hit on the list(World Health Organisation, 2020).

Governments of various nations adopted restrictive measures involving both within the countries and at international borders as effective response to the coronavirus pandemic. These measures includes confinements of workers and order to work from home, banning of social and religious gatherings, closure of market places, closure of workplaces including airports, building or creation of testing and isolation centers, quarantining/isolation of suspected persons, self-imposed isolations, and the use of face masks whether surgical or cloth type in situations where there is a cogent reason to defy the restriction. Academic communities were not left out as institutions of learning were requested to close in many countries since it is very easy to spread the virus among students and youths in tertiary institutions where socialization is an essential part of their lives (Sahu, 2020).

The lockdown measures have immensely affected the education system. The effect covers psychological, social, intellectual, financial, and emotional aspects of students' lives. A lot of academic institutions had to reschedule or totally cancel their scheduled programs such as conferences, examinations, workshops, seminars, and so on(Carlson, 2020; Sahu, 2020). This closure opened the door to a lot of challenges in the system especially in developing nations, although many schools in the western world have had to adopt digital means: to cope with the stress of the pandemic on the academic community, ensure learning continuity, and guarantee intellectual growth. According to (Reimers, Schleicher, Saavedra, & Tuominen, 2020), there is possibility of prolonging the confinement and school closures pending when a cure is discovered. This work examined the implications of the

COVID-19 pandemic on the academia and the supportive measures utilized for knowledge development continuity in such a time.

Negative effects of Coronavirus disease pandemic on the academia:

The novel coronavirus disease has affected the education system greatly. The closure of schools as a safe way of reducing human-to-human contact and prevention of the spread of the virus on the vulnerable students has led to some challenges. Some of these were stated by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in (UNESCO, 2020) and they include: loss of educational opportunities to learn, loss of the privilege to proper nutrition or consequently, malnutrition since most schools have nutrition programs, emotional pressures on the lecturers/tutors on how best to maintain connections and provide learning services to students, strain on some parents having little or no formal training or those without the necessary learning material to assist in home lessons, technical and human issues involved in embracing distance learning, increase in the rate of student-dropout as some who had taken to fending for themselves in the pandemic due to loss of finances may not return to school, rise in youth delinquencies and unwanted pregnancies in young exploited girls, lack of physical socialization among youths, and so on.

School closures could adversely affect the calendared yearly academic enrollment of students into academic institutions as there have been disruptions in the academic calendars. In (Sahu, 2020), it was highlighted the effect of the pandemic on foreign students. This concerns the issues of admission, accommodation, feeding, and protection offered by the academic administrators. Many foreign students are worried about finances to pay for the longer period that they had to stay as a result of the lockdown and postponements due to COVID-19. Also, the pandemic has adversely affected some international students offered admission to commence in April, 2020 such that they had to reschedule their commencement date to either September or October, 2020 since some international airports are yet to reopen and they may be exposing themselves to the risk of infection. Additionally, some funding bodies that usually assist the international students had to cancel their funding for the current session and postpone it to the next session. This affects the emotional and mental wellbeing of these foreign students. In the area of international academic activities such as conferences, workshops or trainings, there have been cancellations, postponements or the shift to online mode of such programs. This has affected both the organizers and their participants as some of them have made financial commitments in that regard. Moreover, those academic events to be carried out online do not give the participants the same enthusiasm as that conducted physically and face-to-face.

In a study carried out by Bao et al (Bao, Qu, Zhang, & Hogan, 2020), the level of loss in literacy in children due to COVID-19 was shown to be 67%, signifying a huge negative effect on children's literary abilities. The authors worked on the assumption that the closure of schools in summer is comparable to the current closure of schools due to the COVID-19 pandemic. This confirms the fear of many academicians of their students in this pandemic. Students who had no ways of maintaining or updating their academic knowledge, courtesy to the lockdown during the school closures, have high possibilities of dropping in their knowledge levels.

The effects of the COVID-19 pandemic on the academia would not be complete without mentioning the mental well-being of students and faculty members in this time. In (Cao et al., 2020; Lee, 2020; Sahu, 2020; Wang, Zhang, Zhao, Zhang, & Jiang, 2020), the mental effects of the pandemic on the students were studied. Many foreign students are anxious of their safety, studies, well-being, the health of their families left behind, and the possibility of returning to their studies if they were able to travel(Sahu, 2020). Students with special needs or mental health disorders, due to the interruptions of their normal day-to-day routines, may be more difficult to manage(Lee, 2020). Boredom, health issues due to disruptions in daily routines, phobia of being infected, lack of privacy at home, anxiety of financial stress on parents, inability to connect with friends and classmates face-to-face(Wang et al., 2020), anxiety for a family or friend suffering from COVID-19, and interruptions and postponements of academics (Cao et al., 2020) are some of the psychological effects of the COVID-19 pandemic. The anxiety for the fear of contacting the disease could even make some students develop false symptoms and be sick unnecessarily.

Moreover, there is great potential of abusing the use of the internet by students due to the stay-at-home order and school closure during the coronavirus pandemic causing damage to the psychological well-being of students(Király et al., 2020).

Supportive measures for enhancement of learning in the pandemic:

The confinement of students at home to effectively hinder the spread of the disease resulted in the increase of the use of the internet to provide online learning(Bao et al., 2020)(Favale, Soro, Trevisan, Drago, & Mellia, 2020). The study in (Favale et al., 2020) discovered that the school closure resulted in increased influx of information going out in their network because the schools had to upload learning materials and hold online classes, surge in online and remote cooperation among staffs through the Microsoft Teams application or Zoom (Carlson, 2020), rise in the adoption of distance learning and working, and extension in the working periods and time such as working in the weekends. It further opined that embracing distance learning, remote working, and online cooperation among staffs could effectively deal with the lockdown of schools while ensuring social distancing measure due to COVID-19. Moreover, in order for schools to finish their established syllabus already affected by the COVID-19, Haleem et al (Haleem, Javaid, Vaishya, & Deshmukh, 2020) suggested that the activities of learning and tutoring by teachers be moved online and students have their classes from home when connected on the internet.

The idea to move classes and learning online is one good way of adapting to the lockdown of academic institutions and its activities. This is in addition to the ability of student to access digital libraries, take up online courses related to their studies, and learn skills to be positively engaged and useful throughout the period of school closure. Governments of students in the developing world having no easy access to the internet but have electronic devices like radio and television could be educationally engaged using those devices. A particular channel or radio station could be dedicated to teaching students of various levels at different times.

Concerns of digital learning adopted in COVID-19 pandemic:

Despite the fact that some academic communities embraced online and digital methods of learning, a lot of concerns have been raised as to the effectiveness of such transition.

Sahu (Sahu, 2020) expressed worry in the transitioning of teaching and learning modes from physical method to an online one. The author stated that for the faculty members, it may be difficult for some not to adapt easily to the transition especially those that do not know how to make use of some technological tools or could not get technologies needed to work from home given the current rise in the need for them , for the administration, they may not have the technological requirements or tools to quickly move to digital learning or maintain it, for the students, it may be disadvantaging for the category of students without availability of internet access and computer devices or those that study courses that couldn't be transitioned online, and for the academic programs or activities offered by institutions, some of them could not be handled online. The work also highlighted that an area of concern is in the evaluation of students, though, lecturing and learning may take place online. This is particularly an important issue since one cannot ascertain that the evaluation when conducted online from the student's home is free of malpractice, not to mention that some evaluations such as lab practical or tests are difficult to be handled online, or that some students may never be evaluated due to unavailability of internet access.

Additionally, the online learning process of the digitalized learning and teaching may be passive instead of the activeness required(Carlson, 2020). The teacher may not be able to monitor the full participation or signs of comprehension because a lazy student may pre-record a video of himself participating in a class and then use the same video as often as he wants to be absent from class, the teacher having no idea that the student is not live with him in the online class.

Conclusion:

Covid-19 has impacted the lives of people in different parts of the globe. Its huge negative impacts on the academia has been shown and should be considered by all concerned to ensure that the academic community would not be so stressed from the consequences of the disease pandemic. Although some academic institutions have adopted or transitioned to the online mode of study, there is still need to address some of the challenges involved in such transition and find a way to accommodate all categories of students (such as the underprivileged, less privileged, etc,) reading various types of courses. The suggestions for the academic institutions in developing nations that may find it difficult at the moment to quickly adopt online learning should also be taken into account to save the students from diminishing in their knowledge levels.

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TRIPLE NEGATIVE BREAST CANCER (TNBC)

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SCAN ME

Introduction:

Triple-negative breast cancers are defined as tumors that lack expression of estrogen receptor (ER), progesterone receptor (PR), and HER2. Basal-like breast cancers constitute one of five intrinsic subgroups of breast cancer, the existence of which was revealed by microarray-based expression profiling studies. This subgroup is characterized by an absence or low levels of expression of ER, an absence of HER2 over expression, and expression of genes usually found in basal or myoepithelial cells of the normal breast. Many cancers meet the definitions of both triple-negative breast cancers and basal-like breast cancers (Willams *et al.,* 2010).

Cell receptors are special proteins found inside and on the surface of cells. These receptor proteins are the "eyes" and "ears" of the cells, receiving messages from distances in the blood stream and then telling the cells what to do.

Hormone receptors inside and on the surface of healthy breast cells receive messages from the hormones estrogen and progesterone. The hormones attach to the receptors and provide instructions that help the cells continue to grow and function well. Most, but not all, breast cancer cells also have these hormone receptors. Roughly two of these Breast cancer test positive for one or both of these hormone receptors.

A smaller percentage of Breast cancer-about 20% make too much of the HER2 protein. In normal, healthy beast cells, the HER2 stimulates cell growth. When breast cancer cells grow and have too much of the HER2 protein, however, the cells grow and divide too quickly. Hormonal therapies and HER2 – targeted therapies disrupt the effects of estrogen, progesterone and the HER2 protein on breast cancer, which can help slow or even stop the growth of beast cancer cells.

About 10-20% of breast cancer test negative for both hormone receptors and excess HER2 in the Lab, which means they are triple-negative. Since hormones aren't fuelling the cancer's growth, the cancer is unlikely to respond to hormonal therapy medicines, including tamoxifen and aromatase inhibitors. Triple- negative breast cancer also is unlikely to respond to medicines that target the HER2 protein, such as Herceptin, Kadcyla, Nerlynx, Perjeta or Tykerb.

Triple- negative breast cancer (sometimes abbreviated TNBC) refers to any breast cancer that does not express the genes for estrogen receptor and HER2/neu. This makes it more difficult to treat since most hormone therapies target one of the three receptors, so triple negative some times used as a surrogate term for basal-like; however, more detailed classification may provide better guidance for treatment and better estimates for prognosis.

Triple-negative breast cancer comprises a very heterogynous group of cancers. There is conflicting information over prognosis for the various subtypes, but it appears that the Nottingham prognostic index is valid and hence general prognosis is rather similar with other breast cancer of same stage, except that more aggressive treatment is required. Some types of triple - negative breast cancer negative are known to be more aggressive, with poor prognosis, while other types have very similar or better prognosis than cancer patients, 15-20% of women have been diagnosed as triple – negative, while the majority of TNBC patients have been found to be BRCA1 gene. Pooled data of all triple – negative subtypes suggests that, with optimal treatment, 20 year survival rates are very close to those of hormone positive cancer.

Triple – negative breast cancer have a relapse pattern that is very different from hormone – positive breast cancers after words this relapse pattern has been recognised for all types of triple – negative cancers for which sufficient data exist although the absolute relapse and survival rates differ across subtypes.

Cause:

One known cause of triple negative breast cancer is germ line mutations. These are alterations within the offspring. 15% of TNBC can be treated back to germline mutations that are within the BRCA1 and BRCA2 genes. Due to their high disposition for cancers of the breast, ovaries, pancreas, and prostate, the BRCA1 and BRCA2 genes were identified as high risk for triple – negative. Changes or mutations in 19 p 13.1 and MDM4 Ioci have also been associated with triple negative breast cancer, but not other forms of breast cancer. Thus triple negative tumours may be distinguished from other breast cancer subtypes by a unique pattern of common and rare germline alteration.

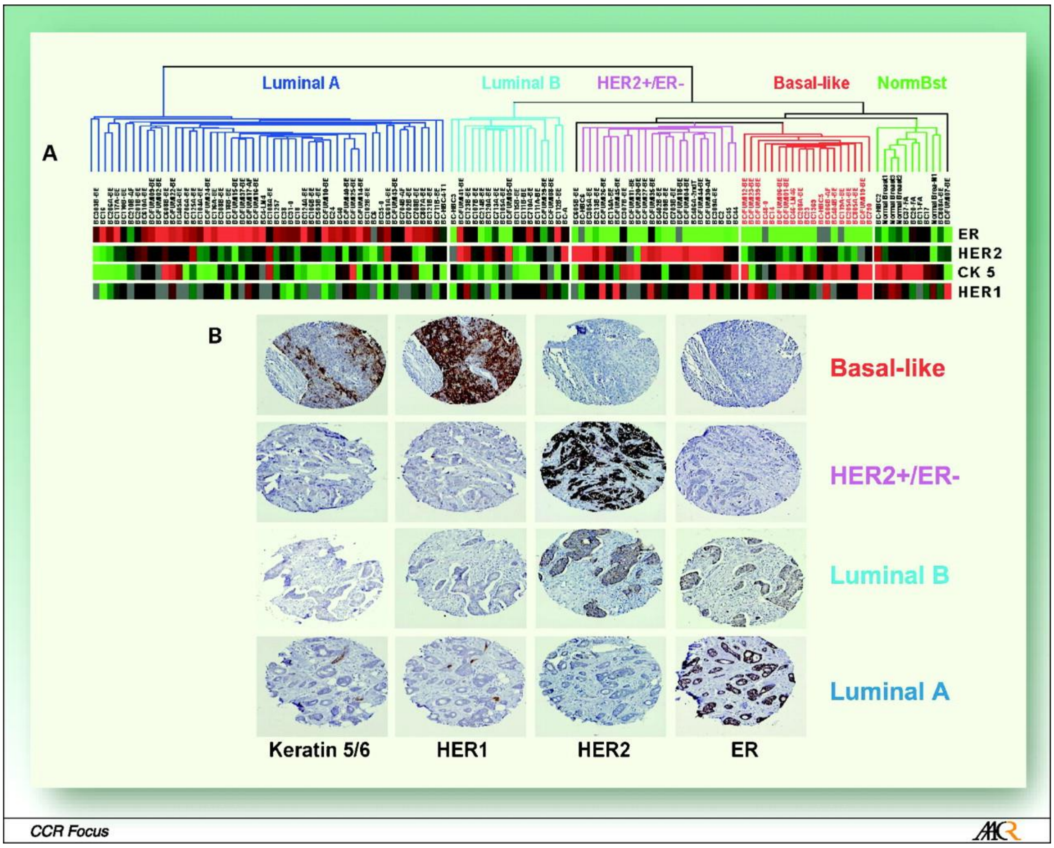

Figure 1: Immunohistochemical surrogate assay for intrinsic subtypes of breast cancer. A, hierarchical cluster dendrogram taken from Carey *et al.* (2) and color-coded according to subtype, showing the gene expression data for the four genes/proteins used for immunohistochemical classification

Symptoms:

The signs and symptoms of triple negative breast cancer are often the same as those of other breast cancer are often the same as those of other breast cancer types, and include.

- A lump or mass in the beast.
- Breast pain or redness.
- A nipple that turns inward or has discharge.

Risk factors for triple – negative breast cancer:

Doctors aren't sure what makes more likely to get triple – negative breast cancer. Not may women do it only affects up to 20% of those who have breast cancer. Most at risk for triple – negative breast cancer in.

- African – American or Latina
- Under 40 age group
- Have what doctor will call a BRCA mutation (change in a gene), especially the gene BRCA1

Diagnosing Triple - Negative Breast Cancer:

There's no way to know which type you have until you're tested by a doctor. When doctors find an area in your breast that isn't normal, they will cut out a little bit of the tissue to test the cells. This is called a biopsy.

A doctor called a pathologist will look at your biopsied tissue under a microscope. The structure will tell him if the cells are normal, precancerous, or cancerous. If it's cancer, he will do more tests to figure out the exact kind. If your cells don't test positive for estrogen, progesterone, or HER2 receptors, then it's diagnosed as triple negative breast cancer. It might take a couple of weeks to get biopsy results.

The doctor will also "stage" your cancer. That's when they figure out how much of it there is and where it's located in your body.

Treatment:

Triple - negative breast cancer is typically treated with a combination of surgersy, radiation, and chemotherapy.

Chemotherapy:

A medicine that killed cancer cells, will likely be the first thing doctor tries. Can get it by a needle into a vein or in a pill. When its caught early, this type of cancer may respond better to chemo than others do doctor can use chemo in one of two ways.

Neoabjuvanttherapy:

Is when you get chemo before surgery to help shrink the tumour and make the operation easier. That makes it the proffered approach if doesn't feel that your breast can be saved.

Adjuvant therapy:

Is used after surgery. You might get it if you have a large tumour or if your lymph nodes are involved. You're more at risk for relapse and other types of adjuvant therapy, like hormone treatments, won't work with triple - negative breast cancer.

Surgery:

Can be one of two types, many doctors think that because triple - negative breast cancer is aggressive, it's best to do a mastectomy to remove the entire breast. This tended to happen if.

- You have several tumours.
- The cancer is in skin.
- Have a cancer in nipple.
- Already had cancer in that breast.
- The tumour is large.
- There are calcium deposits or other abnormal cells in breast.

But there hasn't been a lot of research on the subject. Your doctor may decide it's ok to do a lumpectomy and remove only the Tumour and the tissue around it.

Radiation:

Is often used after surgery to kill any cancer cells still in the area. The goal is to stop the cancer from coming back. It's more common after a lumpectomy.

Think about a clinical trial:

With so much research no new treatments, it's a good idea to ask your doctor if this might be right for you. Clinical trials helps scientists test New drugs to see if they are safe and if they work. It's often a good way to get a new medicine that isn't available to every one.

Taking care of yourself:

After your treatment is over your doctor will want to see you ofter to make sure the cancer doesn't return for the fist 3 years. You"ll likely see him every 3 to 6 months. For 2 years after that, you'll probably visit every 6 to 12 months. One you"vebeen cancer – free for 6 years, you"llprobably go back only once a year. Tell the doctor right away if you get any new symptoms or if you have pain or other problems that relate to your breasts.

Prognosis and survival Rates:

Treatment may make triple - negative breast cancer go away. It depends on the size of your tumour, how quickly your cancer grows, and whether the cancer has spread to the lump nodes or other parts of your body. The treatments may cause side effects like nausea, vomiting, pain, fatigue or mental fuzziness (which is sometimes called "chemo brain"). It's hard to say exactly what the odds are, because cancer and how well you responded to treatment. In general, about 90% of all women with breast cancer are still alive 5 years diagnosis. While there isn't much data for specific types of breast cancer, 5 year survival rates are tracked by stage at diagnosis or how for the cancer has spread;

- Regional (cancer has spread to lymph nodes near the breast) : 85.3%
- Distant (cancer has metastasized) : 27%

Recurrence:

Although triple - negative breast cancer is more likely to return to another part of your body than other forms, the risk that this will happen drops over time. The risk peaks around 3 years of treatment and falls quickly after that.

Getting support:

No one will understand what you're going through better than someone else who has this type of breast cancer. In addition to information about the disease, organisations like the American cancer Society (www.cancer.ory) and Triple – Negative Breast cancer Foundation (www.tnbcfoundation.ory) can connect you with support groups you can also check online for groups that meet locally, either through a church or community Centre. Don't forget to tell the people around you what’s going on and to ask for help when you need it. It's up to you who you tell and when, but the more you share with family and friends, the better equipped they”ll be to lend a hand when you need it.

Prevalence of TNBC in World At a glance:

Estimated New Cases in 2019 – 268,600

% of All New cancer cases – 15.2%

Estimated Deaths in 2019 – 41,760

% of All Cancer Deaths –6.2%

Percent surviving 5 years (2009 – 2015) – 89.9%

Some medical terminologies:

Basal-like breast cancer:

A subtype of breast cancer defined by unsupervised analysis of microarray gene-expression data. This subtype comprises a heterogeneous group of tumors characterized by the absence of or low levels of expression of estrogen receptors, very low prevalence of HER2 over expression, and expression of genes usually found in the basal or myoepithelial cells of the human breast.

BRCA1-related breast cancer:

A breast cancer occurring in a woman who carries a deleterious germline mutation in the breast-cancer susceptibility gene BRCA1. These tumors usually show a loss of heterozygosity of the wild-type allele and possess a triple-negative and a basal-like phenotype.

Breast-cancer subtypes:

A way of classifying breast cancers according to the similarities in their gene-expression profiles, as defined by hierarchical clustering analysis based on an "intrinsic gene list" (i.e., a list of genes that vary more when comparing samples of distinct tumors than when repeated samples of the same tumor are compared). This is a working classification, which is likely to undergo further refinement.

Epithelial-to-mesenchymal transition:

Loss of epithelial characteristics and acquisition of mesenchymal features. This process has been well documented in embryogenesis, wound healing and regeneration, and models of cancer. Definitions of epithelial-to-mesenchymal transition in cancer remain controversial; however, examples of this phenomenon in human cancers have been documented.

Human epidermal growth factor receptor type 2 (HER2):

A member of a family of cell-membrane–bound receptor tyrosine kinases (HER1 through HER4). HER2 is amplified in 15 to 20% of breast cancers and when overexpressed is the target of the humanized monoclonal antibody trastuzumab.

Medullary breast cancer:

A rare subtype of breast cancer accounting for less than 1% of invasive breast neoplasms that is usually manifested as a well-circumscribed mass. Histologically, typical medullary carcinomas are composed of high-grade, poorly differentiated cells arranged in coalescing sheets. The tumors have scant stroma, pushing borders (the edge of the tumor appears to be pushing into normal tissue), and brisk lymphocytic infiltrate. Prognosis is usually good.

Metaplastic breast cancer:

An umbrella term that refers to a heterogeneous group of breast cancers composed of an admixture of adenocarcinoma, with dominant areas of spindle cells, squamous cells, or malignant mesenchymal differentiation.

Special histologic type of breast cancer:

A tumor characterized by histologic features consistent with those of one of the 17 histopathological types of breast cancer classified by the World Health Organization as a distinct entity in more than 90% of its area.

Triple-negative breast cancer:

A tumor characterized by lack of estrogen receptor (ER), progesterone receptor (PR), and HER2 expression. Some investigators accept tumors as being negative for expression of ER or PR only if less than 1% of the cells are positive for ER or PR expression; others consider tumors to be negative for ER and PR when up to 10% of cells are positive for expression. Different definitions of HER2-negativity have been used. The two most frequently adopted include tumors with immunohistochemical scores of 0/1+ or tumors with scores of 0/1+ or 2+ that are lacking HER2 gene amplification after in situ hybridization.

Unsupervised hierarchical clustering analysis:

A statistical term from the field of machine learning that refers to a computer program that searches for similarities and differences in observations. In unsupervised learning, no attempt is made to guide the analysis in any particular direction. Clustering is a form of unsupervised learning in which observations are clustered in subsets such that observations within each subset resemble each other to a greater degree than observations in other subsets. Such clustering is referred to as hierarchical when new clusters are found in previously established clusters. This hierarchy is usually represented as a tree structure, or dendrogram.

X-chromosome inactivation:

During the embryonic development of female mammals, the repression of one of the two X chromosomes takes place in order to compensate for this extra chromosome. As a result of this random process, an inactive X chromosome, or Barr body, is present in every nucleus. All female mammals are therefore mosaics in that some cells express only the paternal X chromosome and others only the maternal X chromosome.

Conclusion:

Heterogeneity of TNBC is widely acknowledged and is evident in both molecular and clinical studies. The large amount of information evolving from high-through put molecular analyses including sequencing, represents an even more detailed basis for understanding the molecular biology of TNBC, but at the same time emphasizes the tumor heterogeneity and the continuous alterations associated with tumor evolution. A diagnosis of triple-negative disease has currently important implications for the choice of systemic therapies. Given the lack of an internationally accepted definition of basal-like breast cancer, it is not surprising that this diagnosis has no clinical implications — especially since a substantive portion of these cancers may be ER-positive or may over express HER2. It could be argued that instead of identifying descriptive and prognostic molecular subgroups (e.g., basal-like and claudin-low) within the triple-negative group, it would be more clinically relevant to identify those patients whose triple-negative tumors are sensitive to specific chemotherapy agents (or combinations thereof) and targeted therapies. The expressions "triple-negative" and "basal-like" are essentially operational rather than diagnostic. In time, they will probably be replaced by other, more specific terminology.

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IMPACT OF SOCIO-ECONOMIC DETERMINANTS ON THE BREAKFAST CONSUMPTION PATTERN AMONG SCHOOL GOING CHILDREN: A REVIEW

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Abstract:

Children are the wealth of any nation as they constitute one of the important segments of the population. Children in the age group of 5-14 years are often considered as school age.School-age children grow significantly, but at slower rate, whilst being very physically active in general. As a result, their nutritional needs are high and critical.During their growing period, care should be taken to include all the nutrients in their diet.Eating breakfast improves the overall quality andnutrient intake of the diet. The omission of breakfast and/or consumptionof an inadequate breakfast may be factors contributing todietary inadequacies, and that the accompanying nutritional losses are rarely made up by other meals during theremainder of the day. Despite the recommendations encouraging breakfast consumption, breakfast skipping by children was noted consistently across all regions. Among the various factors, socio-economic status of the family plays a pivotal role in breakfast consumption pattern. Therefore, an effort has been made to review the effect of socio-economic determinants on breakfast consumption pattern among children.

Keywords: Breakfast consumption; Socio-economic status; School children

Introduction:

Children are the wealth of any nation as they constitute one of the important segments of the population. Children in the age group of 5-14 years are often considered as school age. United Nations Educational Scientific and Cultural Organization (UNESCO) since 1972, for the purpose of statistics considered 6-11 years as primary school age and 12-17 years as secondary school age. It is recorded that in India one fifth population comprises of children between 5-14 years, the age group covering primary and secondary school age (Suvarna, 2007).In India, approximately 31 per cent of the growing population comprises children in the age group of 0-14 years of whom 26.7 per cent currently reside in urban India. A significant and increasing number of these children belong to middle and high socio-economic groups(NIPCCD: National Institute of Public Cooperation and Child Development, 2012).

School-age children grow significantly, but at slower rate, whilst being very physically active in general. As a result, their nutritional needs are high and critical. Additionally, genetic background, gender, body size and shape are all important determinants of nutrient requirements (Westenhoefer, 2001). The school age period has been called the latent time of growth. The rate of growth slows and body changes occur gradually. Girls usually out distance boys by the latter part of this period. The slower rate of growth during this period results in a gradual decline in the food requirements per unit of body weight (Srilakshmi, 2003).

Both nutrition and diet are vital determinants of the health and nutritional profile of children. The nutritional status of a child is often the result of many interrelated factors and is influenced by food intake, its quantity and quality, and physical health.An increasing scientific evidence, obtained in several Countries with different dietary habits, shows that regular breakfast consumption is associated with better health status at any age. Notwithstanding this evidence, both systematic reviews of the literature and statistical investigations on population samples support the notion that the first meal of the day is the most underestimated, and often completely neglected (Marangoni*et al.,* 2009).

Eating breakfast has been suggested to potentially prevent snacking and the consumption of energy rich foods. Moreover, regular breakfast consumption has been associated with overall dietary quality and nutritional profiles in school aged children and with improved cognitive performance (Van Lippevelde*et al*., 2013).

Despite the recommendations encouraging breakfast consumption, breakfast skipping by children was noted consistently across all regions. In only four countries (Netherlands, Portugal, Denmark, and Sweden), 70 per cent or more children reported eating breakfast daily (Vereecken*et al.,* 2009).In India, the proportion of children skipping breakfast regularly was even higher (over 50%) (Chitra and Reddy, 2006). In children of all ages, the prevalence of skipping breakfast has increased as they grow older (Deshmukh-Taskar et al., 2010).

Parental breakfast eating is the most significant factor associated with adolescent breakfast eating (Pearson et al., 2009), suggesting that parents may play a pivotal role in influencing breakfast choices, likely via establishing norms around breakfast eating as well as controlling the availability and preparation of food. Similarly, irregular breakfast consumption was associated with family structure (single *vs.* both parents) (Levin and Kirby, 2012), increased number siblings, and having a mother who worked. The frequency of family meals in general has also been positively associated with healthier food choices in adolescence

Most family-related variables (parental breakfastbehaviour, automaticity of having breakfast, availability of breakfast products, encouragement, attentiveness, permissiveness, parental self-efficacy, and eating breakfast together) were significantly associated with breakfast intake (Van Lippevelde*et al.,* 2013).

The main body of literature on the association between socioeconomic status (SES) and breakfast habits almost consistently concludes that being a child or adolescent of low SES is associated with irregular breakfast habits and this relationship exists for a range of different SES indicators (e. g. parental education, parental occupation, and area level indicators) (Vereecken et al., 2009). Further, recognized barriers to eating breakfast include a lack of time, not feeling hungry in the morning and weight concerns.

Definition of breakfast:

Since there is no universal definition for the term "breakfast", individual studies have developed their own definitions depending on their study objectives. According to Rampersaud (2008), there are three key considerations for defining the breakfast eating occasion, namely the type of food consumed, the amount of food consumed and the time of day when the food is consumed. These considerations are outlined in Fig. 1.

Breakfast consumption and breakfast skippingare defined differently across research studies, such as by weekly frequency, time of day, timing in relation to waking and daily activities, types of food or beverage consumed, or amount of energy provided. Belowsummarizes the definitions of breakfast used in a handful of studies assessing breakfast intake (Table 1 and 2). The table clearly shows the variety in the types of definitions which can exist across studies.

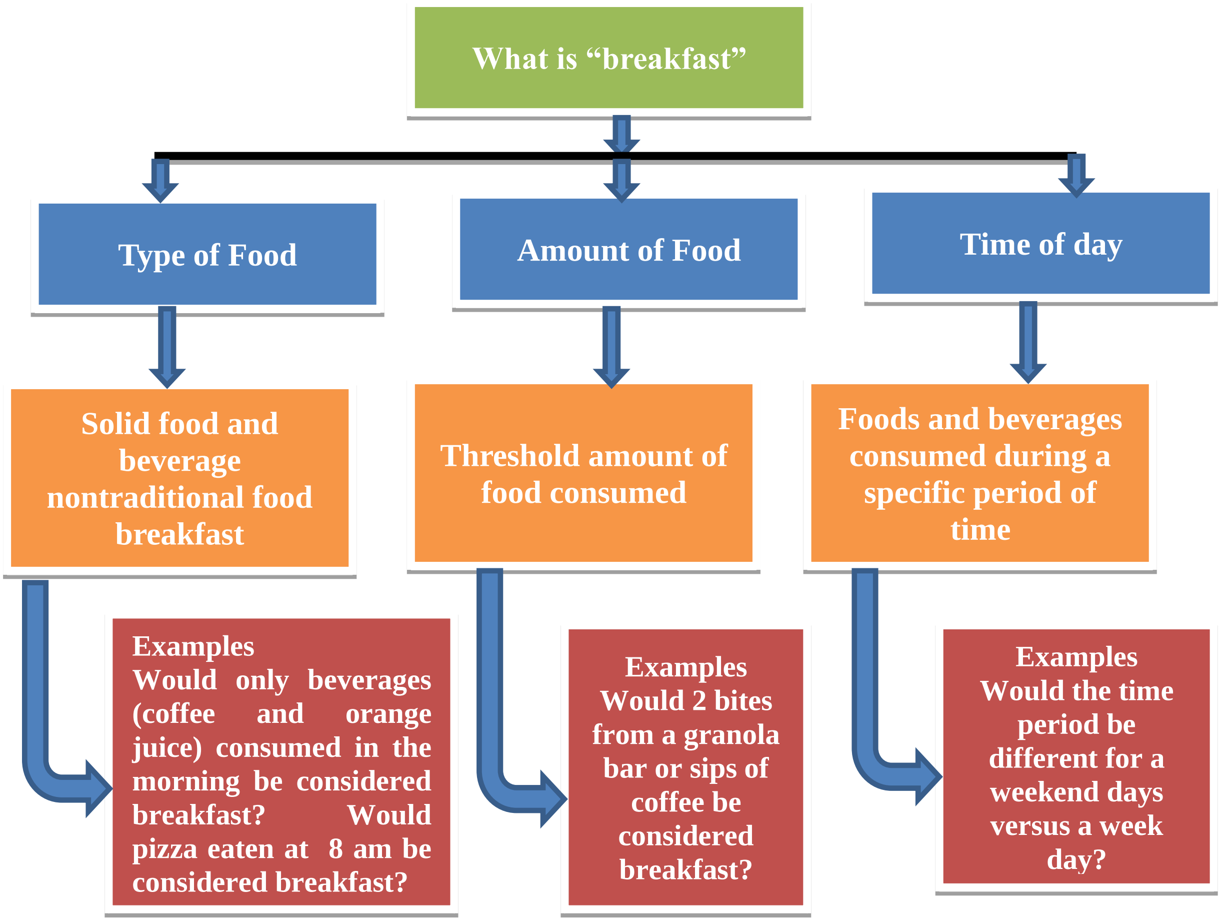

Figure 1: Considerations for how breakfast is defined (Rampersaud, 2008)

The definitions used most often were "what the study participant perceived to be their breakfast" and "consumption between 5 am and 11 am in the morning". Some studiesdistinguished between whether a solid, beverage or both constituted breakfast, and others allowed slightly different definitions for breakfast intake between weekdays and weekends. Certain studies also included a minimum energy requirement from the breakfast meal in order to be classified as a breakfast. It is also seen that some studies do not take time into account time of consumption at all, but defined breakfast as the first meal consumed after waking. Given that no universal definition for breakfast exists, researchers would need to create their own definition depending on the objectives of their research.

Table 1: Various definitions of breakfast

Reference	Definition of breakfast
Deshmukh-Taskar*et al.* (2010)	Consumption of any food or beverage at a meal occasion named by the respondent as "breakfast"
Smith *et al.* (2010)	Eating a snack, small meal or large meal between 6 am and 9 am.
Alexander *et al.* (2009)	Any food or beverage consumed between 05:00 and 10:00 hours with a combined total energy ≥100 kcal
Affenito (2005) and Albertson *et al.* (2007)	Any eating that occurred between 5:00 and 10:00 am on weekdays or between 5:00 and 11:00 am during weekends
Matthys*et al.* (2007)	The first eating occasion involving a solid food or a beverage that occurred after waking
Aranceta*et al.*(2001)	Any intake of food or beverage between 6 am and 10 am during weekdays and between 6 am and 11 am for the weekends and holidays
Nicklas*et al.*(2000)	An eating occasion which the student considered to be his or her breakfast

Table 2: Breakfast skipping definitions

Reference	Definition of breakfast skipping
Smith*et al.* (2013)	"Rarely/never" eat breakfast, or eat breakfast ≤ 2 days per week.
Deshmukh-Taskar*et al.* (2010)	No breakfast on the day of the survey, dietary recall, or food record.
Dubois*et al.* (2009)	Skip breakfast at least one time per week.
Timlin*et al.* (2008)	Skip breakfast at least six times per week.
Berkey*et al.* (2003)	Usually skip breakfast, or never or almost never eat breakfast.
Keski-Rahkonen*et al.* (2003)	Not eating a morning meal at home and outside.

Breakfast consumption pattern in India:

Skipping breakfast has become the norm in modern day India because of changes in family life style. Several children attend school daily without having breakfast in both rural and urban areas. Studies on breakfast behaviour in India are very meagre.

Vijayapushpam *et al.* (2003) studied the breakfast preferences of the school children of different socio-economic status (SES) (High income/high SES and low income/low SES) in twin cities of Hyderabad and Secunderabad, India and reported that the majority of children preferred traditional breakfast preparations like *idly* and *dosa* (a fermented preparation made from rice and legumes). The intake of traditional food was similar in both high- and low-income groups. A small percentage of the children (22%) from the high-SES group preferred fast food items to traditional food items for breakfast.Breakfast behaviour of 802 urban school children (10-15 years) of Secunderabad, Andhra Pradesh was assessed by Chitra and Reddy (2006). Results revealed that only 42.80 per cent of the children consumed breakfast regularly. Over half of the children skipped breakfast, ranging from daily to once in two weeks.Arora*et al.* (2012) assessed the frequency of breakfast consumption among school going adolescents in eight schools (private and government) of Delhi. The results reported that significantly more government school (lower SES) students consumed breakfast daily as compared to private school (higher SES) students (73.8% vs. 66.3%, p<0.001).

In Karnataka, 34 per cent of children go to school without breakfast. A study was conducted to assess the opinion of beneficiaries, beneficiary mothers and teachers on AksharaDasoha program (universalization of elementary education) among 900 mothers of school children in Hubli. Purposively two Non-Government Organizations, religious and non-religious who supplied school lunch to children were selected for the study. A sub sample of beneficiary mothers (n=90) were interviewed over telephone to collect opinion regarding school lunch programme and information regarding breakfast was elicited using pre-tested structured schedule. About 64.44 per cent of beneficiary mothers of religious institution reported that their child does not consume breakfast before going to school. This indicates that majority of children were completely dependent on school meal. Hence, there was a need to educate children and mothers with respect to importance of breakfast in classroom attention and concentration, as long time fasting would deprive seriously the learning abilities of children (Bellary *et al.,* 2013).

In another study, Garg *et al.* (2014) reported that the prevalence ofbreakfast skipping among school going children of age 10-16years old is 23.50 per cent in selected areas of Udupi district.Most common reason for skipping breakfast among breakfast skippers and non-skippers was lack of time. A cross sectional study carried out to assess the difference in eating pattern among children with behavior problems and those of normal children revealed that skipping breakfast was most common in all girls wherein 26.2 per cent normal and 32.0 per cent with behavior problem consumed breakfast 0-2times in a week and 17 and 19 per cent consumed 3-5 times respectively during the reporting week (Sushma and Begum, 2015).

Mishra (2016) investigated the breakfast consumption pattern in undernourished (n=26) and well-nourished student (n=18) from four different primary school of semiurban area of Allahabad district and reported that skipping breakfast was found more in undernourished children (32%) than in well-nourished children (18%).

Further, result of diet survey of undernourished students reported 32 per cent of the children were sent to school without breakfast, 20 per cent were sent to school with feeding breakfast sometimes and only 48 per cent were regularly eat breakfast. Whereas diet survey of nourished children's shows 18 per cent student comes without breakfast, 24 per cent sometimes eat breakfast and 58 per cent student regularly eat breakfast before arriving in school.

Above studies showed that breakfast skipping is increasing in India, because of lack of time, getting up late in the morning and weight consciousness.

Socio-economic status and breakfast consumption:

Socio-economic status is one of many terms used to characterize social stratification, and it is often used synonymously with socio-economic position and social class. The body of evidence linking socio-economic status with health outcomes is large and invariably suggests that higher socio-economic status levels are almost always positively associated with health-protective behaviours and negatively associated with health-impeding behaviours (Viswanath and Bond, 2007).

The nutritional status of the children has been found to be associated with the educational levels of the parents, per capita income of the family, family size, parity and feeding pattern (with or without supplementation). Food consumption is closely related to economic position of an individual or his family, with low-income families' consumption being low (Viswanath and Bond, 2007).

Pearson *et al.* (2009) conducted a systematic review of correlates of breakfast consumption among adolescents. Of the 13 studies included which investigated adolescent breakfast consumption, seven studies found to have positive associationbetween socio-economic status and breakfast consumption. The remaining six study samples reviewed found no association between these variables. While studies have shown the inverse relationship between SES and breakfast consumption among adolescents, others have argued that the influence of peers, schools and the environment outweigh the influence of SES on breakfast intake.

A cross sectional survey conducted among primary schools from public and private sectors to assess the nutritional status of primary school going children age 5–11 years belonging to different socio-economic classes of the societyat Lahore revealed that the children from lower socio economic class had poor nutritional status as compared to their counter parts in upper socio economic class. Children with BMI <5th percentile were 41 per cent in lower class while in upper class it was 19.28 per cent. Prevalence of malnutrition was found to be 42.3 per cent among children of illiterate mothers as compare to 20 per cent in those of literate mothers.Poverty, low literacy rate, large families, food insecurity, food safety, women's education appears to be the important underlying factors responsible for poor healthstatus of children from low socio-economic class (Babar*et al.* 2010).

Levin and Kirby (2012) analysed the data from 2002, 2006 and 2010 Scottish Health Behaviour in School-aged Children (HBSC) surveys and found that irregular breakfast consumption (IBC) prevalence in Scotland was higher among young people from reconstituted and single parentfamilies, and particularly single father families. Family characteristics such as number of siblings, perceived parenting, parental involvement andfamily affluence found to be associated with breakfast consumption. Greater number of siblings and lower family affluence were associated with higher odds of IBC in single mother and both parent families.

The socio-economic factors influencing the nutritional status of the school going children (from 1000 households) among Bangalore's Urban poor were documented by D'Souza *et al.* (2013). The three anthropometric measures namely wasting, stunting and underweight were used to understand the level of malnutrition in children. The results revealed a moderate level of stunting in 49.79 per cent of the households and are more prevalent among the medium (52.53%) and low income groups (48.86%). Vast majority of the medium income households face moderate level of wasting.

Associations of family-related factors with children's breakfast consumption were studied by Van Lippevelde*et al.* (2013). Ten- to twelve-year-old children (n=6374) and one of their parents (n=6374) were selected from schools in eight European countries (Belgium, Greece, Hungary, the Netherlands, Norway, Slovenia, Spain, and Switzerland). The six variables such as parental breakfast behaviour (p<0.001), automaticity (p<0.05), availability (p<0.05), encouragement (p<0.01), paying attention (p<0.01), and eating breakfast together (p<0.001)) were positively associated with children's breakfast consumption whereas two variables (allowing skipping breakfast, and parental self-efficacy) were negatively associated with children's breakfast consumption (p<0.001).

A study conducted in 31 countries regarding daily breakfast consumption (DBC) among adolescents showed an increased DBC in children with two-parent families and is associated with family affluences in all countries(Lazzeri *et al.*2016).

From the literature studies, it is evident that the socio-economic determinants such as Poverty, low literacy rate, large families, food insecurity, food safety and women's education werethe influencing factors for the breakfast consumption among children.

Conclusion:

Taken together the findings from the various studies, it is been observed that the breakfast skipping among children in India is high. Socio-economic inequalities prevalent in the country are the major factor attributed to the variations observed in the breakfast consumption pattern among children. Promotion of breakfast consumption among children is encouraged as much as possible to build healthy nation. Awareness progammesdirected towards importance of breakfast consumption pattern among parents should be promoted. To overcome the effects of socio-economic inequalities on daily breakfast consumption, school breakfast programmes similar to mid-day meal programme should be started and this could yield positive health benefits to the children.

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TRANSFORMATION FROM SCHEDULED CASTE TO SUSTAINABLE COMMUNITY – A CASE STUDY

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SCAN ME

Abstract:

Day by day, the atrocities to the schedule caste people get veered steadily.If about 25% of the people belonging to the scheduled caste live under unsustainable way, how can our nation become a super power. Even now the people in metro towns enjoy high-fi life, but it does not reach the scheduled caste community. They are still homeless, landless and income less. Nobody cares for his own life. The only misfortune is that they never bother about their own unfortunate life. In this background, this work has been undertaken to promote the rural downtrodden scheduled caste community to become a sustainable community. Remote villages by name Nedumbur Panchayat (NP) Villages, Cuddalore District, Tamilnadu, were chosen as the study villages.

Keywords: sustainable development, scheduled caste, SPR house.

Introduction:

India is the largest democracy in the world, with about 16% of the world's population. India's population growth remains around 2%. India has one-third the size of America with a total land area of 2,973,190 km^2. The country remains predominantly rural, with just 26% of its people living in cities,according to recent census. The percentage decadal change of population in Tamil Nadu during 2001-2011 census is about 6.6% and 27.0% with respect to rural and urban respectively. The percentage decadal change of SC population in Tamil Nadu is around 14.0% and 39.9% for SC and 19.8% and 34.2% for ST with respect to rural and urban respectively. The Population of scheduled caste to total Population in Tamil Nadu during 2001 and 2011 is 23.8%, 12.9% and 25.5 %, 14.2% with respect to rural and urban respectively. As per census 2011, the decadal change by residence of scheduled caste population is about 14.0% and 39.9% with respect to rural and urban respectively.

The 25% of the scheduled caste people in Tamil Nadu lead their life in a substandard living conditions. Many of us know how the scheduled caste brothers and sisters are ill-treated. A scheduled caste brother is not a cause for his own birth in a scheduled caste family means "Why can't he be treated like others?"Many of them believed that the practice of untouchability is abolished. But the fact is that it gets new severe dimension. The mercy killing of lovers in Tamil Nadu is the best example for the newer dimension of untouchability. Day by day, the atrocities to the schedule caste people get veered steadily.If about 25% of the people belonging to the scheduled caste live under unsustainable way, how can our nation become a super power. Even now the people in metro towns enjoy high-fi life, but it does not reach the scheduled caste community. They are still homeless, landless and income less. Nobody cares for his own life. The only misfortune is that they never bother about their own unfortunate life.

In this background, this work has been undertaken to promote the rural downtrodden scheduled caste community to become a sustainable community. Remote villages by name Nedumbur Panchayat (NP) Villages, Cuddalore District, Tamilnadu, have been chosen as the study villages.

Methodological approach:

In order to meet the objectives of this study, the researcher used methods based upon case study research, qualitative analysis and rapid opinion assessment. This research is descriptive in nature. Observational data were recorded weekly twice by the researcher during his visits to the community, and around 300 individual visits happened with not less than three hours per visit. During this time, the researcher visited homes and toured around the streets of the Scheduled Caste, including the site of KVVT house, Passumaiveedu, Amma House and Thane house under construction, the MahaMayaa Temple and Sustainable Community Hall of Observational Learning (SCHOOL) in the Nedumbur Panchayat (NP) Villages that were a part of SUCCESS work in the study area. Conversations with SUCCESS staff recorded in a journal were also used as the observation data. These data were helpful in providing the context for understanding the local living standards of the scheduled caste community, culture and landscape, which contributed to reflective insights of the researcher presented in the NP village case study. The ROA exercise, developed in a study of Phillips (2015), used different applications regarding the scheduled caste community moving towards sustainability (e.g., Spangenberg, et al 2004; and Phillips, et al 2015). In this study, the ROA serves as a way to assess what is the existing living status of the Scheduled caste community and what are all the factors which are responsible for preventing them to move towards sustainability and meet the needs of community and provide strategies for providing scheduled caste to become a sustainable community. The ROA results in a visual depiction of relative strengths and weaknesses in a "spider web" illustration of the Scheduled caste community as determined by the community members. NedumburPanjayat an under privileged village Panjayat of Kumaratchi Union in Kattumannarkoil Taluk of Cuddalore District was chosen as the study area. The NedumburPanjayat is situated about 15-Km south west of Annamalai Nagar, near Chidambaram Town of Cuddalore District, Tamilnadu, India.

Figure 1: The Research Associate Standing at Extreme Left along with the SUCCESS Team Members

The findings of the Reconnaissance Survey reveal that the majority of the rural houses are 'kutcha' with walls made of unburnt bricks, mud and bio-mass. Only a small portion could be categorized as pucca. As per another estimate, about 75% of houses, in the study area belonged to the category of semi or non-permanent construction. Besides, 85% of the rural houses do not have sanitation and adequate supply of drinking water and electricity.

In the year 2007, none of the scheduled caste people had a permanent home and the majority of the scheduled caste people in the study area lived below the poverty line. This alone speaks of the poor affordability of the rural population. As a result of their inability to generate the needed resources, the rural poor are compelled to live in conditions of squalor. Simultaneously, the number of kutcha construction has increased, testifying the fact that the rich become richer and the poor remain poorer in the country. Hence, the study has chosen the villages of the scheduled caste.

Sustainable Permanent Rural (SPR) House:

The Solar paneled Pyramidal shaped ferrocement Roof SPR house is a low-cost sustainable green house constructed by using ferrocement roofing components and 60% economy could be achieved in the cost of the SPR house construction. Figure -2 shows the SPR model test house atVilathur- Thirupaniyapuram village. The total land area for the proposed house construction including frontage, side and rear side opening for ventilation is 58 sq.m. The plinth area of the house is 26.2 sq.m. (5.18 m x 5.18 m). Six windows are fitted to have good ventilation inside the house with a size of 0.9m x 0.9m.As this house has pyramidal shaped roofing, the height of the wall is designed up to 1.52m and the height of the pyramidal portion of the roof is 1.52 m with an inclination angle of 38º. The topmost portion of the pyramidal roof has a 1.22 m x 1.22m flat portion to accommodate the solar panel.

Figure 2: SPR test house

செய்திக்கதிர்

அக்டோபர் - 09 3

சூர்யசக்தியுடன் கூடிய குறைந்த மதிப்பீட்டு ஊரக குடியிருப்பு

நெடும்பூர் ஊராட்சியில் உருவாக்கப்பட்டுள்ள மாதிரி வீடு

2001 மக்கள் தொகை கணக்குப்படி, இந்திய திருநாட்டின் மக்கள் தொகையானது 1028.6 மில்லியன் ஆகும். இவற்றில் 72% (742.5 மில்லியன்) மக்கள் கிராமபுறத்தில் வசித்து வருகிறார்கள். இந்தியாவின் மொத்த குடியிருப்பு தேவையானது சுமார் 22.2 மில்லியன் ஆகும். இத்தேவையை நிவர்த்தி செய்வதென்பது ஓர் சவாலான விஷயமாகும். இப்பிரச்சனையை ஓரளவு ஈடு செய்யும் பொருட்டு குறைந்த விலையிலான மாதிரி குடியிருப்பு ஒன்றை கிராமப்புறத்ததில் நிறுவி அதன் கட்டுமான தொழில்நுட்பத்தை ஊரக வாசிகளிடையே அறிமுகப்படுத்துவதன் மூலம் நிலைபெறும் சமூகமாக பரிணாமவளர்ச்சி பெறும் என்ற நோக்கில் முனைவர் பட்டத்திற்கு பின் மேற்கொள்ளும் ஆய்வான "Design a sustainable community and planning strategies to south India" என்ற தலைப்பில் பல்கலைக்கழக மானியகுழுவின் நிதி உதவியுடன் அண்ணாமலைப் பல்கலைக்கழக குடிமுறை பணி பொறியியல் துறை இணை பேராசிரியர் முனைவர். S.பழனிவேல்ராஜாவால் நெடும்பூர் ஊராட்சிக்கு உட்பட்ட கிராமங்களில் இவ்வாய்வானது மேற்கொள்ளப்பட்டு வருகிறது.

கிராமபுறத்தில் வாழும் இல்லத்தரசிகள் எளிதில் சுவாச நோய்க்கு ஆளாக்கப்படுகிறார்கள். காரணம் அவர்கள் அதிக நேரம் செலவிடுவது விறகு அடுப்பில் சமைக்கும்போது, மண்ணெண்னெய் விளக்கு வீடுகளில் எரியும் போதும், அவ்விறகு அடுப்பிலிருந்தும் மண்ணெண்னெய் விளக்கிலிருந்தும் வெளிப்படும் விஷவாய்வை இல்லதரசிகள் அதிக அளவில் சுவாசிக்க நேருவதால் அவர்களுக்கு சுவாச நோய் ஏற்பட அதிகளவில் வாய்ப்பு உள்ளது.

மின்சாரம் இன்று அறிதான சக்தியாய் ஆகிவிட்ட நிலையில், அவற்றினை சிக்கனமாய் பயன்படுத்தவேண்டியது இத்தலைமுறையின் தலையாய கடமையாகும். மேற்கண்ட சுவாச நோய்களில் இருந்து இல்லத்தரிசிகளை மீட்டெடுக்கம் பொருட்டும், மின்சார தேவையினை குறைக்கும் பொருட்டும், குறைந்த மதிப்பீட்டு குடியிருப்பு கட்டமான தொழில்நுட்பம் மற்றும் சூரிய சக்தியின் பயன்பாடு குறித்து உரக வாசிகளிடையே விழிப்பு ஏற்படுத்தும் வகையில் ரூ. 38,000/- ல் குறைந்த மதிப்பீட்டிலான குடியிருப்பு கட்டுமான தொழில்நுட்பம் மற்றும் சூரிய சக்தியின் பயன்பாடு குறித்து ஊரக வாசிகளிடையே விழிப்பு ஏற்படுத்தும் வகையில் ரூ. 38,000/- ல் குறைந்த மதிப்பீட்டிலான குடியிருப்பு ஒன்றை திருப்பணியாபுரத்தில் கட்டப்பட்டுள்ளது. இவற்றின் மதிப்பீடு கீழ்வருமாறு.

குறைந்த மதிப்பீட்டு குடியிருப்பு

சாம்பல் கல், 2600 எண்ணிக்கை ரூ. 6500, சிமெண்ட் 30 மூட்டை ரூ.6,300, கம்பி 8 mm & 6 mm (150kg) ரூ.5100, மணல் 4 யூனிட் ரூ.4,000, மெட்டல் சிப்ஸ் ரூ.4,000, ஜன்னல் 4 எண்ணிக்கை ரூ.3000, கதவு 1 எண்ணிக்கை ரூ.2,000 சுண்ணாம்பு ரூ.700, வேலையாட்கள் கூலி ரூ.5,900 மொத்தம் ரூ.38,000

சூரிய சக்தி கொண்ட குறைந்த மதிப்பீட்டு குடியிருப்பு

குறைந்த மதிப்பீட்டு குடியிருப்பு ரூ.38,000, சூரிய ஒளி விளக்கு ரூ.20,000 சூரிய சக்தி அடுப்பு ரூ.2,000 மொத்தம் ரூ.60,000

இந்த சூரிய சக்தியால் விளக்கு மற்றும் அடுப்பு கொண்ட குறைந்த மதிப்பீட்டு குடியிருப்பு ஒன்றை ரூ. 60,000/ மட்டில் கட்டமைப்பதன் வாயிலாக விஷவாயுக்கள் வெளியேற்றத்தை ஒட்டுமொத்தமாக தடுப்பதன் மூலம் ஆரோக்கியமான குடியிருப்பை நிறுவி ஊரக பகுதிகளை சுகாதாரம் நிறைந்ததாகவும் மற்றும் நிலைபெறும் சமூகமாய் மாற்ற இயலும் என இதன் மூலம் கண்டறியப்படுகிறது. தொடர்புக்கு : 9865047612

Figure 3: Paper News about the SPR House in the Study Area

Influence of the SPR test house:

The model test house at the study village sensitizes the rural community a lot. Before the model test house, many people had fear in their mind to build scheme house even though the state and central governments allocate houses such as IAY, KVVT, etc. This model SPR test house stands as a living legendary for them for building houses by their own or by using government subsidies. This test house broke the old belief of the people that they would face financial crisis if they built a house. It is a success note of the study that 80% of the people came forward to utilize the housing subsidy for building house at the time of completion of the research study.

Rapid opinion assessment:

In this ROA study, 25 members from each village were invited. The various essential indicators, required for achieving a downtrodden scheduled caste community to become a sustainable community such as house ownership, education, Political power, Land holding capacity, inter-caste marriage and religious conversion, were explained to them. Every member participated in this ROA study and gave his opinion. Totally 11% of the members gave their opinion that the scheduled caste community will achieve sustainable community through house ownership. A total of 14% of the members gave their opinion that the scheduled caste community will achieve sustainable community through education. Another 12% of the members stated their opinion that through political power, they could become a sustainable community; only 9% of the members stated that through the land holding capacity, they could become a sustainable community. Totally 19% of the members stated that through inter-caste marriage, they could become sustainable community. But the remaining 35% of the members stated that the scheduled caste community could achieve sustainable community only through religious conversion. Figure -4 clearly indicates the opinion assessment of the members from the scheduled caste community. This study firmly believed, in the beginning, that the economic status of the scheduled caste community alone can promote the scheduled caste to become a sustainable community. Hence, many attempts have been made to sensitize the low-cost construction technique in this study area. But the opinion of the members makes the researcher rethink about his ideology. Many of the members had their opinion that after attaining economic independence, they may not get proper social status. Now, they all have own house, land and education; still untouchability prevails in a new dimension. All of them recorded their opinion that the caste was the only barrier for attaining the status of sustainable community. So, conversion to other religion was the only solution for fighting the newer dimension of untouchability.

Dr. Ambedkar's Code of Living:

The code of living is a set of laws of rules arranged in a system, that is, a set of moral principles accepted by a society or a group of people, and it is applicable only for the members of the activists working in a movement for some purpose or aims to achieve. The code of living is applied to those who want to make their life sustainable.

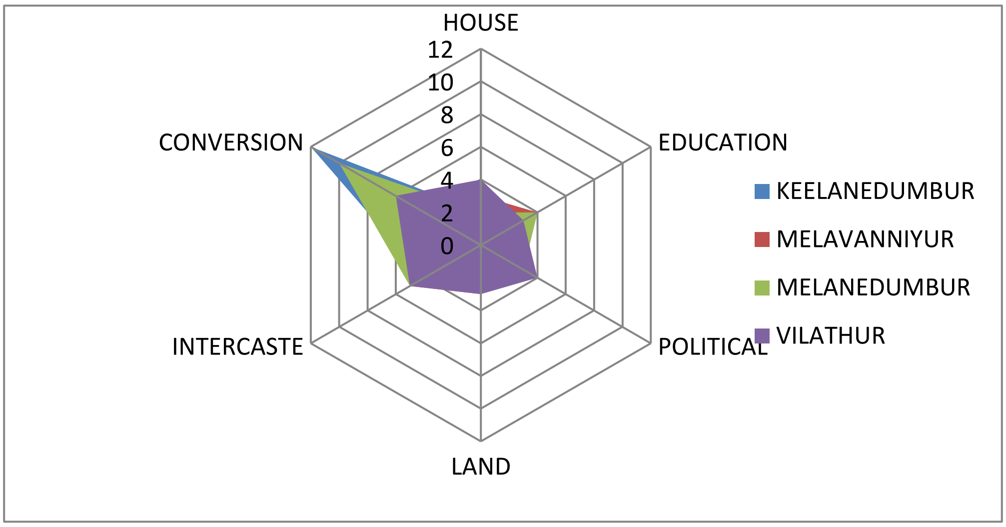

Figure 4: Rapid Opinion Assessment

The meaning of the code of living, in relation to the AmbedkarDhamma, is to emancipate and enlighten the poor, dalits (oppressed) and the exploited masses of Indian society to the level of dignified, equal and respectful socio- economic welfare and moral regeneration.

Code of Living for sustainable community:

Birth ceremony:

As birth of a child as male or female is beyond the scope of human being as well as there will be a scope for the child to attain enlightenment, the parents and relatives first pray the newborn child which enters into the living sphere. Every parent must take a promise to provide favourable safe ambience for the new coming. The parents must remain in their mind that every newborn child as seems to be a Buddha. Hence, all must pray the newborn child. The mother milk alone feed to the newborn child. The relatives would avoid presenting any form of gift to the child. The relatives, the members of the community and the sangha may support the family by the way of providing basic amenities to them during the time of delivering a newborn child.The sangha must remain that every newborn child as an asset to the community. Hence, the sangha would take an effort to identify Female Pregnancy Assistance at each locality and train them for ensuring normal delivery.

Naming ceremony:

On the eighth day of the birth of the child, a suitable name will be given to the child in presence of the relatives, members of the community and monk from the sangha. It is highly appreciated if the name will be chosen from the name of the monks, leaders, scientist, educationist and ancestors.

Child development:

The child development is an art. Every parent should excel in the child care development. The sangha should act as a lead role to educate the parents regarding child care and development. With the advice of Physicians as arranged by Sangha, periodical vaccines will be injected to the child without fail. Education is the one of the weapon one to become elevated from the depressed state. Hence, parents must send their children to nearby schools once the children attain minimum age. Every Sunday and all other auspicious days, the parents must take their children to Mahamaaya Temple or Buddha Vihar for offering the mass prayer. The sangha must take initiatives to organize the mass prayer where the Buddha and His Dhamma will be taught and demonstrated by the Monks in the vihar or Temple. Every parent must read or listen to Buddha and his Dhamma as authored by DrAmbedkar and motivate their child to listen it. Moreover, the children will be taught and trained the Anapanasati- a simple mindfulness meditation. The parents must tell the scientific stories of Buddha to their children and they are the role model to them for following the Noble eight fold paths and panchasila. The parents must teach the loveliness of reading to their children. Otherwise the community or otherwise the sangha will take necessary steps to impart the reading habits to the students by the way of initiating library at every Vihar and temple in their locality.The training on importance of keeping our environment clean and green will be given to the parents. The parents in turn educate their children regarding the clean and green environment. The sangha teach and train the parents about the noble paths and panchasila and code of conduct as forwarded by DrAmbedkar and the parents must in turn teach and train their children.The parents must support their children to achieve the goal of their life and at the same time to provide necessary feed for growing the children with social responsibility.The sangha will teach casteless, humanistic thought to the parents and the parents in turn seed the casteless thoughts among their children. Moreover, the parents must remove the unscientific misbelieves such as Ghosts, devil etc., in the mind of their children through replacing it by the right thoughts.

Youth development:

Once the children attain the age of eighteen years, they must enroll themselves in the sangha. They should strictly abide by the rules and regulations of the sangha. They must respect the monks of the vihar/ temple and elders of their locality. The youth must concentrate on their study and avoid diversion if any. The youth must not spoil their life by involving themselves in any anti-social activities. They must not take any intoxicants.

Everyone must lead a simple elegant and peaceful life. The sangha must teach the importance of the savings to the young minds and also make them contribute a minimum of 10 percent of their earnings to the charities work of the sangha. The sangha will take up the responsibility of eradicating the dropouts from schools and colleges by promoting awareness among students regarding mindful reading. The sangha will teach sex education to the students and parents to avoid love affairs at the school and college level. The virtue of virgin will be common for all the three genders. The parents and sangha will take joint efforts to maintain virgin among the genders. The youths will safeguard their parents till their last. The one who attained awakening must awaken the unawake youth. The youth must take Buddha as their Teacher and Ambedkar as their guide for attaining a higher dimension of their life and consider Buddha and His Dhamma as a holy book. The youth will equip their skill on par with forward community and get employment. If they wish to become entrepreneurs, they will start business after undertaking proper training.

Marriage ceremony:

The eligible male and female for marriage will enroll their names in the respective sangha they belong to. Every Sunday the general marriage assembling will be undertaken by the monk after the mass prayer. If anyone wishes to participate the general marriage assembling undertaken by the Monk at taluk level, he will be entertained only after getting consent from the local monk they basically belong to. The same will be applicable to regional and state levels. During the time of General marriage assembling, the marriage will be ascertained in the presence of monk after conducting the personal interview between the two families and ensure not to ask any dowry. Finally the marriage will be conducted in the vihar/ temple they originally belong to.During the marriage, the bride should offer garland to bridegroom and vice versa. By symbol of marriage, both of them will wear the Dhamma wheel which is twined in the yellow twine. The marriage will be finally concluded after conducting the mass prayer and felicitations.

Family:

Both husband and wife will adjust to each other. The husband will be behind all the endeavors of wife and vice versa. Both will share their joy, sorrow and job equally. It is better both of them become employees. Both of them will lead their life beyond the scope of their physical needs because they are the sons and daughters of Dhamma. They will conquer huddles because they are grown by Dhamma.

Generation:

Now the children of dhamma become parents after they will have their children. They develop their children accordingly.

Death ceremony:

As per the code of Dhamma, death is inevitable. The children of dhamma will acquire knowledge about death. The death ceremony of any one will be undertaken by the concerned monk of the vihar / temple they belong to. The body will be washed by good quality of water and then white clothe will be spread over it. Now the body will be placed in the freezer for paying homage by relatives and publics. The mass chanting will be undertaken by the monk before the final rites.

Conclusion:

To conclude, it is the scheduled caste community people who have to decide whether the life of the present and future generations of the community will attain a casteless sustainable community through AmbedkarDhamma. It is, therefore, concluded that the success of AmbedkarDhamma depends on the right understanding of the code of conduct, and then, acting upon its rules, ideals, norms or principles with all responsibilities required for moving ahead as its relevance is immensely specific, peculiar and unique.Every individual of the scheduled caste community will follow in the foot prints of DrAmbedkar and become a sustainable community by the way of attaining the state of Buddhahood. He had a desire to promote everyone as Buddha. It is scientifically possible to promote everyone as Buddha by awakening themselves through understanding of power of now. Once the underprivileged people will attain awakening, they will conquer poverty, disparity, social inequality, etc.

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ROAD DEVELOPMENT IN MAHARASHTRA

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Abstract:

Maharashtra state third one largest state in India, due to geographically wide area, it is not easy to provide transport facility like Rail, Water and Air transport. Therefore, there is a great need to focus on road development throughout Maharashtra. It is primary need of good road network in the State. Roads are playing a crucial role in the development of Maharashtra State. For socio-economical enhancement, required trunk, good quality and smooth, fast speed roads with good qualities road sides ammonites. Government had selected target for this plan 3, 36, 994 km of roads. This plan has completed more than targeted road in end of 2017-18 financial years. Under this plan largest roads was completed that is village roads and lowest length of roads have been completed that is National Highways. In short, these types of twenty year road development policy have been working effectively in the state of Maharashtra.

Introduction:

Maharashtra state has its own cultural heritage; Mumbai is the capital city of Maharashtra. Bilingual Mumbai state had been established on 1st November 1956 including Gujarat and Maharashtra. After that Marathawada from Hyderabad State and Vidarbha from central province were merged in Maharashtra and a new Maharashtra State came into existence on 1st May 1960; it is extended between 15.8 north to 22.1 north latitude and 72.66 east to 80.90 east longitudes.

After Rajasthan and Madhya Pradesh, Maharashtra is the third geographically biggest state in India. This state has 3,07,713 sq.km area, East west length of Maharashtra is 800 km and North south length of 700 km. costal length of Maharashtra is

720 km. According to 2011 census total population of Maharashtra is 11, 23,72,972 that is second largest population in the country after Uttar-Pradesh.

Road Development in Maharashtra:

The roads are important basic infrastructure, playing a crucial role in the development of Maharashtra State. For socio-economical enhancement, required trunk, good quality and smooth, fast speed roads with good qualities road sides ammonites. However, especially important the wide network of arteries for better connectivity to take the developmental performance to the village areas. The Maharashtra State Government has took some steps to construction of roads and bridges on a large scale to keeping with its resolution of connecting the state capital with the outside areas to cover the distance within a minimum time.

For the socio-economic development of rural economy, there is an urgent need of good road connectivity in rural areas. Socio-economic development fully depends upon the availability of infrastructure facilities, like education, health, marketing, banking, transportation, communication etc.

Many reports have been remarked that; it is enormous requirements of road constructions in village areas. It will help for up-lifting life of village peoples. The evidence also indicates that as the rural road connectivity improves. The road infrastructure included all types of roads categories, facilities, structures, marketing, electricity system, bypass roads, health centres, restaurants, emergency services needed to provided for safe, trouble free and efficient traffic.

Research Methodology:

The present research study is mainly based on secondary data i.e. published Books, Research Journals, various Reports and some data is collected from the Public Works Department (PWD) of the State Government, Socio-economic Survey of Maharashtra from 2001 to 2017 and other departments of Government of Maharashtra. I have used statistical tools like average, percentage, and simple growth rate.

Statement of the Research Problem:

Maharashtra is the industrially and agriculturally progressive state in India. It is blessed with enough rainfall, fertile land, forest as well as mines. In spite, the state has big regional economic imbalance due to lack of well infrastructure facilities. In this state, city town and villages are not attached with healthy and strengthen road networks and not good transport system. Numbers of habitations are not provided with all season roads in the state. In the entire districts not increase similarly road infrastructure facility. Because of disparity in road progress state has highest numbers of road accidents and largest part of the state socio-economically backward. Taking into consideration the road development in Maharashtra state, this research study has been undertaken.

Objectives of the Study:

1. To study the progress of roads facilities in Maharashtra State.
2. To study the district-wise road development of Maharashtra.
3. To study the problems of road network in the state.
4. To study Characteristics of roads in the state.

Road Network in Maharashtra:

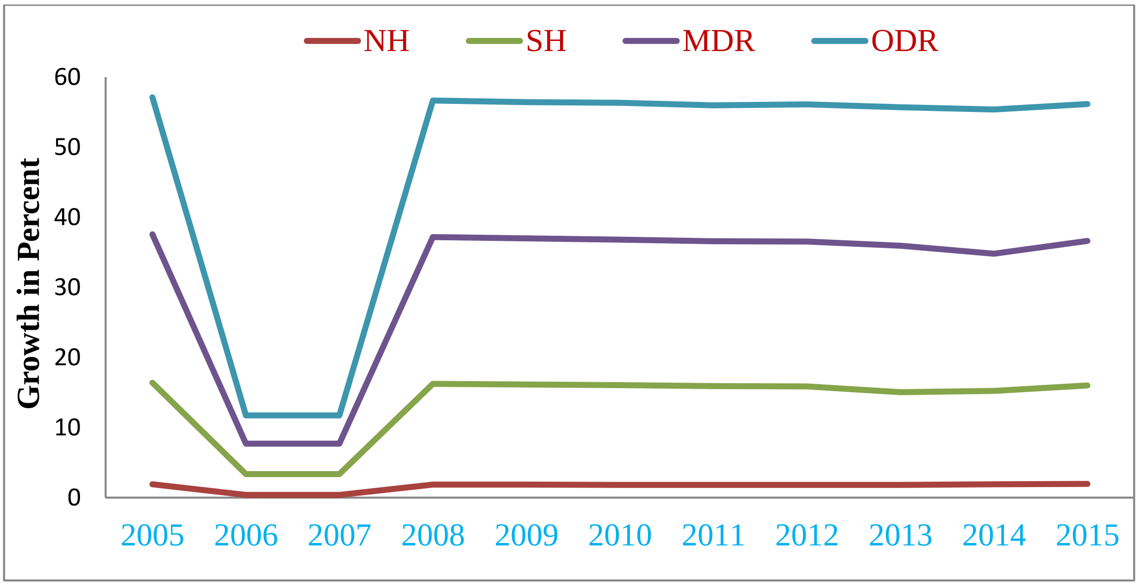
Road and transport are important parts of infrastructure. Indian roads are classified into four types i.e. National Highways, State Highways, District Roads and Rural/ Village Roads. The road development plan of Maharashtra: 2001-2021 is being implemented in the State with a target to provide superior road network. All road network of Maharashtra maintained by PWD and ZP (excluding road length maintained by other agencies) at the end of January 2019, it was recorded 5,903,293 kilometre length of roads. In the year of 2015, it was recorded only 2.99 lakh kilometres length of roads, out of that only 2.45 lakh km (81.9 per cent) roads were recorded surfaced roads. As on 31st March 2015, about 99 percent villages were connected by roads (fair-weather roads). During the year of 2014-15, Government of Maharashtra was approved 3,820 corer out of that 2,677 crore spend on road work.

This table 1 indicates that various types of roads, length of roads, mainly these roads are maintained by Zillah Perished and PWD department Government of Maharashtra. National Highways carried 60% of good transport and length of National Highways to total length of road in the state that is only 1.91percent. That is averagely recorded 4,700 km in last ten years, but it is uppermost mentioned in the year of 2017, with 12,275 km. State Highways connecting capital cites of the states, these SH length is more than length of National Highways. Above table mentioned that in last ten year there is no great extent or improvements in State Highways. Average length of roads shows only 34,178 km.

Table 1: Road Length Maintained by PWD and ZP in State of Maharashtra (in km)

Year	National Highways	State Highways	Major District Roads	Other District Roads	Village Roads	Total	Average Growth of Roads
2005	4,367	33,571	48,987	45,226	99,279	2,31,430	**46,286**
2006	4,367	33,675	49,147	45,674	1,00,801	2,33,664	**46,733**
2007	4,367	33,675	49,147	45,674	1,00,801	2,33,664	**46,733**
2008	4,367	33,800	49,393	45,886	1,02,149	2,35,595	**47,119**
2009	4,367	33,933	49,621	46,143	1,03,604	2,37,668	**47,534**
2010	4,376	34,102	49,901	46,817	1,04,844	2,40,040	**48,008**
2011	4,376	34,103	49,936	46,897	1,06,400	2,41,712	**48,342**
2012	4,376	34,157	50,256	47,529	1,06,601	2,42,919	**48,584**
2013	4,376	31,894	50,256	47,573	1,06,745	2,40,844	**48,175**
2014	4,858	34,222	50,232	52,761	1,14557	2,57,630	**51,326**
2015	4,766	34,222	50,256	47,573	1,06,745	2,43,172	**48,698**
2016	7,438	38,510	50,844	58,116	1,45,881	3,00,789	**60,158**
2017	12,275	34,450	52,637	58,116	1,45,881	3,03,359	**101,120**
Mean	**5,283**	**34,178**	**50,047**	**48,768**	**1,19,906**	**3,03,359**	

Source: Socio-Economic Sauvé of Maharashtra, 2005 to 2015



Graph 1: Types of roads in percent

Major District Roads playing major role in the district transport with connecting district level cities of the state. This road averagely recorded 49,831 km length in last ten years. Other District Roads are connecting internal roads in the district. These roads are having more use to connect towns and talukas of the districts. Largest numbers of roads have been recorded in the state of Maharashtra that is Village Roads. These roads are recorded more than 1,19,906 km. length in the state. Here, share of village roads is more than 43.6 percent; this is recorded in the year of 2017. From above table and graph it is notice that the number of roads has been increasing frequently in the state.

Characteristics of roads in Maharashtra state:

Maharashtra State is one of the economically developed states in India. Roads are life lines of new Indian economy, they help to create new employment opportunities in that area, improve economic growth, provide health facilities, education services, industrial growth, agricultural development, improves transport capacity and mainly changes in culture of societies. These are direct impact of good roads and roads are indirectly benefits to growth of economy. Therefore, it is necessary to study characteristics of road network. Generally, it is known as the quality of the roads; following table shows these characteristics of roads in the state.

Table 2: Characteristics of Roads in Maharashtra State (in km)

Characteristics of Road	2009-10	2010 -11	2011-12	2012-13	Average
Per 100 sq. km of area	78	79	79	79	**78.75**
Per lakh population	216	215	214	213	**214.5**
No. of motor vehicles per lakh population	14,272	15,560	17,293	18,819	**16,486**
No. of vehicles per km. road length	66	72	80	88	**76.05**

Source: Infrastructure Statistic of Maharashtra 2012-13. P-12

Above table 2 shows that characteristic of roads in Maharashtra State. This table highlights that from 2009 to 2013 between these periods per 100 sq. km of areas numbers of roads has been same for selected period. But compare to per lakh population number of roads decreasing in the State. At the same time numbers of vehicles behind per lakh population increasing constantly. Finally, the table shows that per km number of vehicles on roads increased regularly, it is good sign of road development and socio-economic progress of the state.

Table 3: Growth of roads connectivity in Maharashtra state

Roads Connectivity (In numbers)	2009-10	2010 -11	2011-12	2012-13	Average
Total no. of villages	40,412	40,412	40,862	41,126	40703
Villages connected by All weather road	39,388	39,541	39,800	40,158	39,721.75
Villages connected by Fair weather road	788	644	771	690	723.25
Villages not connected by roads	236	227	291	278	258

Source: Infrastructure Statistics 2011-12 & 2012-13, P-10.

Above table 2 shows that roads connectivity in Maharashtra from 2009 to 2013. It is mentioned that average 40,703 villages were recorded out of that, in the year 2012-13 more than 397121.75 villages were connected with all-whether roads. In short, 97.75 percent villages connected with roads. State government has fail to provided better road network to all villages. Numbers of villages are still disconnected in rainy seasons, it is on an average 258 numbers of villages are unconnected in the year of 2013 in the State of Maharashtra.

District-wise road length in Maharashtra state:

Table 3 indicates that districts-wise road length in Maharashtra State. These states have 36 districts and these districts are divided in to six administrative divisions i.e. Kokan, Nashik, Pune, Aurangabad, Amravati and Nagpur. It is very helpful to government for proper control and communicates and implements various polices and development plan in the state.

First division mentioned in above table that is Kokan division (Mumbai Division). This division includes five districts i.e. Mumbai, Thane, Raigad, Ratnagiri and Sindhudurg. These districts are very popular for tourism. Over all infrastructural development of these division is not well. Raigad district has recorded lowest road network in Kokan division. Ratnagiri district has pointed out highest total road length. In this division total length is

26,159 km out of this lowest length of NH that is only 9,37 km and Village roads are highest that is 12,631 km.

Table 4: District -wise road length in Maharashtra state

(Maintained by Public Works Department and Zillah Parishad)

Sr. No	Name of District	National Highways	State Highways	Major District Roads	Other District Roads	Village Roads	Total Roads
1	Mumbai	-----	49	----	-----	----	49
2	Thane	322	1,147	938	1,215	3,540	7,162
3	Raigad	232	1,265	669	796	2,437	5,399
4	Ratnagiri	275	902	1,423	1,384	3,384	7,368
5	Sindhudurg	108	719	1,007	1,007	3,270	6,181
A	**Kankan Division**	**937**	**4082**	**4037**	**4,472**	**12,631**	**26,159**
1	Nashik	235	1,690	2,265	2,400	7,594	14,184
2	Dhule	250	707	886	935	2,660	5,438
3	Nandurbar	45	666	1,095	693	2,173	4,672
4	Jalgaon	187	1,360	1,797	1,863	4,875	10,082
5	Ahmadnagar	201	1,875	2,890	3,350	4,572	12,888
B	**Nashik Division**	**918**	**6,298**	**8,933**	**9,241**	**21,874**	**47,264**
1	Pune	427	1,372	2,975	2,611	6,691	14,076
2	Satara	113	1,015	2,232	1,890	4,797	10,047
3	Sangli	30	968	2,199	2,810	3,045	9,052
4	Solapur	163	1,572	3,068	2,135	6,447	13,385
5	Kolhapur	110	893	1,632	2,140	2,675	7,450
C	**Pune Division**	**843**	**5,820**	**12,106**	**11,586**	**23,655**	**54,010**
1	Aurangabad	136	1,258	2,900	1,313	4,230	9,837
2	Jalna	22	1,287	1,339	817	1,209	4,674
3	Parbhani	77	653	1,238	740	2,107	4,815
4	Hingoli	30	527	872	514	1,281	3,224

5	Beed	193	1,197	1,644	1,443	4,973	9,450
6	Nanded	130	1,339	2,802	1,334	4,597	10,202
7	Osmanabad	207	926	1,432	1,270	1,968	5,803
8	Latur	0	886	1,548	1,348	1,950	5,732
D	**Aurangabad Divn.**	**795**	**8,073**	**13,775**	**8,779**	**22,315**	**53,737**
1	Buldhana	86	984	1,227	1,163	1,297	4,757
2	Akola	100	561	640	555	970	2,826
3	Washim	0	631	649	600	1,290	3,170
4	Amravati	76	1,459	1,539	1,219	2,466	6,759
5	Yavatmal	65	1,427	1,341	1,697	2,796	7,326
E	**Amravati Division**	**327**	**5,062**	**5,396**	**5,234**	**8,819**	**24,838**
1	Wardha	108	663	706	809	1,857	4,143
2	Nagpur	289	1,094	1,131	1,641	3,831	7,986
3	Bhandara	68	440	639	1,055	2,548	4,750
4	Gondiya	34	406	777	1,563	3,025	5,805
5	Chandrapur	0	877	1,566	1,743	3,460	7,646
6	Gadchiroli	57	1,342	1,190	1,406	2,586	6,581
F	**Nagpur Division**	**556**	**4,822**	**6,009**	**8,217**	**17,307**	**36,911**
	Total of All Divisions Roads	**4376**	**34,157**	**50,256**	**47,529**	**1,06,601**	**2,42,91**

Source - Infrastructure Statistics 2011-12 & 2012-13 p13.15.

Nashik division has also known as Khandesh; it is the largest division in the State of Maharashtra. This division includes Nashik, Dhule, Nandurbar, Jalgon and Ahmadnagar districts. It is observed that lowest road network recorded in Nandurbar district i.e.4,762 km and highest total length of roads reported in Nashik district i.e.14,184 km. Total road network of this division is 47,264 km. out of that largest road length recorded that is village roads and lowest roads are NH.

Pune Division is one of the six administrative divisions in Maharashtra. This division includes Pune, Satara, Sangli, and Solapur and Kolhapur districts. Pune Division recorded 54,010 km of roads out of that largest length of roads is village road that is 23,655 km and lowest length of NH that is only 843 km. Here, Pune division mentioned largest roads length recorded in Solapur district and Kolhapur district has recorded lowest length of roads.

Aurangabad Division is famous with another name as Marathwada Region. This division has Jalna, Parbhani, Hingoli, Beed, Osmanabad and Latur districts. This division has second largest road network division in Maharashtra with 53,737 km of total length. Out of that Hingoli district has recorded only 3,224 km of all roads and Nanded has recorded largest roads network with 10,202 km of length.

Amravati Division has five districts i.e. Buldhana, Akola, Washim, Amravati and Yavatmal. This division has recorded only 24,838 km. length of total roads network, that is lowest roads length mentioned in all division. Akola has recorded lowest length of total roads and Yavatmal has recorded largest roads length. Washim District has showing zero km of NH and on the contrary Akola district has 100 km NH.

Here, Nagpur Division includes six districts i.e. Wardha, Nagpur, Bhandara, Gondiya, Chandrapur and Gadchiroli. This division is recorded 36,911 km of road length. Out of that largest network recorded in Nagpur district and Wardha has only 4,143 km of roads network. In this division Chandrapur district has shown zero km of NH. Nagpur district has mentioned 289 km of NH that is largest length of NH in this division.

Table 5: Target and achievement of roads in Maharashtra as per govt. road plan 2001-2021

Types of roads	2001-2021 Target in (km)	Achievement as on March, 2015 in (km)	Black top road length in (km)
National Highways	4,509.09	4,766	4,705
Major State Highways	7,846.89	6,163	6,031
State Highways	35,754.68	33,859	32,828
Major Districts Roads	51,993.71	50,585	44,821
Other District Roads	61,158.56	58,8116	38,951
Village Roads	1,75,731.48	1,45,879	54,953
Total Road Length	**3,36,994.40**	**2,99,368**	**1,82,289**

Source: Zillah Perished report and government of Maharashtra report.

Above table no.5 highlights that type's wise road development, selected target and achievements by Government of Maharashtra as on March, 2015. Government had selected target for this plan 3, 36, 994 km of roads. This plan has completed more than targeted road in end of 2017-18 financial years. Under this plan largest roads was completed that is village roads and lowest length of roads has completed that is National Highways. In short, these types of twenty year road development policy have been working effectively in the state of Maharashtra.

Concluding remark:

Maharashtra state third one largest state in India, due to geographically wide area, it is not easy to provide transport facility like Rail, Water and Air transport. Therefore, there is a great need to focus on road development throughout Maharashtra. It is primary need of good road network in the state. Since 1960, state government has been trying its level best for the development of road infrastructure. As the result of hard efforts of government; road length and road density has been increased significantly. Today, 98 percent villages in Maharashtra state have been connected with all weather roads. As on 31st march 2017, there were 2.99 lakh km. surface roads in Maharashtra state. However, the state has some road problems.

Finding:

1. Length of National highways in Maharashtra is only 4,376 km. and share of this in the total length of roads that is only 1.81 percent. Which is very less as compared other type's roads in the whole state.
2. The average length of State Highways that is 33,799 km. and its share in total roads only14 percent.
3. The lengths of Major district roads are 49,401 km. its share in total roads is 20.65 percent, the second highest in Maharashtra State ranks second position in case of MDR in the country.
4. There is significant growth in other district roads which connect internal part of districts is increasing rapidly. Its share in total roads is 19.40 percent.
5. The network of Village roads is the largest in the state. The length of village road is 98,596 km. Share of these roads are 40.79 percent.

6. Maharashtra State has six administrative divisions, but the road development in these all divisions is not similar. Therefore, there is significant disparity in agricultural, industrial, service sector and socio-economic development among the divisions.
7. There is heavy rainfall in Kokan division; therefore most of the roads are facing problems of pothole.
8. Amravati division has the lowest length of roads in the State.
9. In the year 2013-14 highest numbers of villages (40,158) were connected with good roads at the same time 278 villages were not connected with all whether roads.
10. 690 numbers of villages are connected with rough roads therefore; these villages are disconnected in flood time.
11. NH is not connected in all districts is State of Maharashtra; therefore numbers of district are socio-economically backward in Maharashtra State.
12. The road density in Vidarbha region is only 63 km., in Marthawada it is 82 km and in the rest of Maharashtra is 88 km. Vidarbha region is far behind than other regions in Maharashtra.

Suggestions:

1. Government should focus on road infrastructure development with good co-ordination between Central Government, State Governments and Local Governments.
2. Government must control the serious problems of roads accidents by doing amendment in rules and regulation. At the same time traffic rules should be implemented very strictly.
3. Government should focus on road safety and maintenance (minimum once in a year). Road construction and repair work is to be repeatedly done by government.
4. Corruption and interference of politicians in road development work should be reduced.
5. Involvement of public for monitoring of roads construction and, social responsibility is needed. It improves quality of road network.
6. Proper and scientific road network plans must be used before construction of NH, SH, ODR, MDR, PWD Roads and Village Roads.

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DIGITAL WALLET MARKET: A REVIEW BASED STUDY

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Abstract:

With the revolutionary step of Indian Government to demonetize Rs. 500 and Rs. 1000 old currency notes there was a large hue and cry among the public regarding availability of ready cash in hand. This scenario has brought a change in India and people began to look for alternative modes of payment. Because of which amongst all the available modes there has been a substantial increase in the users of digital wallet and there has been significant growth in the popularity of digital wallet. Accompanied by Government's 'Cashless Economy' initiative and introduction of 'Unified Payment Interface' has further fuelled the growth of digital wallet in India. The study attempts to examine the different factors that impact the digital wallet market by reviewing the prior studies and incorporating the findings of the literature into a research framework.

Keywords: Digital wallet, Cahless Economy, Unified Payment Interface

Introduction:

The developing countries have been passing through tremendous transition phase towards development of mobile communication technology in the last few years. Telecom companies have made huge investments for the development of better quality service as well as sophisticated connectivity, so that general mass can have access to high quality and upgraded communication network. It isaccompanied by low rate of tariffs and mass penetration of affordable handsets, which evolvedthe whole mobile ecosystem as one of the most successful technological segments of present era.Millions of people have reaped the benefit of mobile phones. Now it plays a role of a catalyst in the social, economic and inclusive development of a nation. This process has opened a path ofopportunities for the emergence of mobile technology based innovative business solutions. Suchtechnology convergence has a significant impact on the holistic development and growth indeveloping countries.

Mobile phone has emerged as a necessity in present day.In the mean time the needs ofconsumers are also getting complex, cost of connecting with consumers through traditionalmethod are also growing and the growing need for customer-centric business solutions haveforced the business houses to build mobile technology based alternative business solutions.Those kind of service initiatives are known by various names like mobile payment, mobiletransfer, mobile commerce, mobile banking, digital wallet, electronic wallet and mobile wallet.Combined together, they offer a sophisticated business model to business firms who are willing toget connected with significant portion of population who are excluded from the financialmainstream. This business model also opens up the path of potentiality in generating additionalrevenues for telecom operators.There exists abundance of methods for making payment through electronic mode, like Plasticcards, net banking, RTGS, NEFT, etc. Digital wallet is the newest addition to the list and it is alsogetting significant popularity within a short span of time. The emergences of digital wallet can bedated back to 1996, when Sam Pitroda filed the patent for digital wallet in USA. He professed that " a digital wallet would consist of a liquid crystal display not much bigger than a regularplastic bank card, which preferably a touch sensitive screen and simple user interface that lets theuser flip through the digital wallet in the same manner he/she flips through a leather wallet".(Pitroda, S., Desai, M., 2010). In other words, digital wallet refers to an electronicplatform that allows an individual to make electronic transactions. It can be used to store moneyonline as well. The users can make payments using the money that has been stored in the walletwithout resorting to plastic cards or net banking. For adding money into the wallet the bankaccount of the user needs to be accessed.

When digital wallet is accessed with the help of mobile device it is called mobile wallet. Alternatively, it can be said that when smart phone acts as aphysical wallet it is called a mobile wallet. Mobile wallet service allows users to download anapplication in their mobile device and using it for various online transactions.Digital wallets make use of various latest technologies like Near Field Communication (NFC) ,Quick Response Code (QR Code), Sound waves etc to connect the device with physical world.Thus they provide a very convenient payment mechanism. The digital wallets are alsoaccompanied with high security protocol for the safety of transactions. Because when it comes toacceptance of a technology based solution users are always concerned about the efficiency of itssecurity.

Types of Digital wallet:

Open wallet:

It allows users to purchase goods and services, withdraw money at ATM or bank and remit funds e.g. M-pesa by Vodafone.

Semi open wallet:

It allows users to transact with merchants having a contract with thatparticular digital wallet company. The users cannot withdraw cash, instead they have to spendthe money they have loaded in the wallet in various transactions with the merchant only e.g.Airtel Money.

Closed Wallet:

This type of wallets are quite popular with Electronic Commerce companies and it's a way of gaining client's faith by way of providing reward based cash back and also bycrediting money for cancelled or rejected orders etc. These wallets are provided by companiesto customers for procuring goods and services from that company only e.g. Jabong Wallet.

Semi Closed Wallet:

In this type of wallet, the users can shop and transfer virtual fund to otherusers in the same wallet network. It also allows remittance of funds to bank accounts and enablesconversion of wallet balance into bank balance. Semi closed wallet makes online shopping easyand provides wide range of services e.g. Paytm, Phonepe.

Some of the mostly preferred Digital Wallets in operation in India are: Paytm, Phonepe, BHIM, Mobikwik, Googlepay, Olamoney, Amazon Pay, Jiomoney, Airtel Money, Freecharge and Oxigen Wallet

Context of the study - Digital wallet market:

Rapid expansion of mobile network and wide penetration and increasing popularity of smart phones has created ample opportunities as well as challenges for traditional paymentsystem. Non cash transactions conducted via mobile wallet or digital wallet were estimated to beof total $41.8 Billion globally during 2016 (World Payments Report 2018). In India the volumeof mobile payment transactions is expected to grow to 460 billion from mere 3 billiontransactions during the period 2016-2022.One of the main driving force in promoting digitalwallet transactions in India is Unified Payment Interface (UPI), which is regarded as a gamechanger in the space of digital payments. After the demonetization and resultant cash crunchthere was an exponential growth in the number of digital wallet users in India. This kind ofinitiative is a stepping stone for transition of cash reliant economy to cashless economy.

Additionally this significant growth can be attributed to the fact that most of the people who arefinancially excluded can be included under the financial system with the help of mobile phones. Citizens who are residing at remote places and do not have any formal relation with bank andother financial institutions are also now have full access to internet and they can make use of thesame for bringing themselves under the coverage of plethora of financial services.Therefore, the adoption of digital wallet by citizens is a significant element in determining thetransformation of society to the next level. There are numerous factors that influence people toadopt digital wallets. Factors like ease of use, convenience, location free access, easy alternativeto cash payments, time saving, timely contact with the financial resources, myriad of rewardsand offers and its capability to bring people under the coverage of variety of financial services have a positive impact on people's adoption. While there are certain inherent factors that have anegative impact on the adoption of digital wallet. Factors like intentions and attitude of people touse, security concerns over the reliability of the mechanism of digital wallet, poor telecomnetwork infrastructure, and complexity in use have negative impact on the adoption of digital wallet.

This study attempts to explore the scenario of adoption of digital wallet by people. The study will try to identify and understand the various key elements that influence people'sintention and behaviour that determines their adoption of digital wallet.In the development of a research field the role of review is of utmost important. This study seeks to summarize the findings of previous researches pertaining to the field of adoption of digital wallet by exploring and analysing the existing base of knowledge on digital wallet and its adoption among various strata of population hailing from both developed and developing countries. The study can also act as a torch bearer for future research.

Many contingency and competitive factors impact the mobile payment services market. To be successful, mobile payment services need to have competitive edge over other payment services in all scenarios (Dahlberg, et al. 2008). Because of these reasons a framework is needed to better describe and understand themobile payment services market and research in this filed.

Research Framework:

Numerous factors impact the implementation and success of a mobile payment service as discussed in the context of the study part.Digital wallet being one of such services is also get impacted by these factors. Therefore, to exhibit the relation between these factors and adoption of digital wallet, the study will use the framework (Dahlberg, T. *et al.,* 2006) as shown in the figure 1.

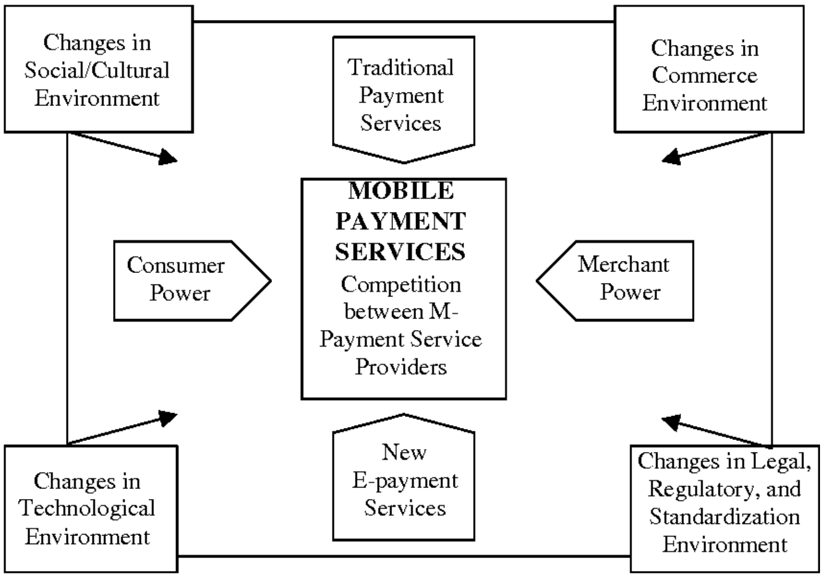

Figure 1: Framework of factors impacting the mobile payment market

The above figure shows the framework factors, four of them namely changes in technological, social / cultural, commercial and legal / regulatory / standardization / environment are not within the control of individual market participants. They are called contingency factors. On the other hand, the rest of the five factors which are describing the main competitive forces of the mobile payment market are called the competitive factors (Dahlberg *et al.,* 2008).

The framework will be used as a meta-model for enhancement of the knowledge regarding the digital wallet market and for obtaining an overall view of the literature. The usage of the framework is useful as it is based on the review ofprevious studies and it clearly exhibits various factors which impact the digital wallet market and its adoption.

Research Methodology:

For understanding the state of digital wallet in the present era and for mapping the path for future studies a thorough search of existing literature has been conducted. For identifying research papers on digital wallet the literature search involved various online academic databases namely Emerald, Science Direct, Wiley, Google Scholar and ResearchGate along with key terms like 'digital wallet', 'e-wallet' and 'mobile payment'. Out of the databases Google scholar was mainly used as various papers were easily available at Google Scholar, which are not traceable elsewhere. The papers where digital wallet is not the main topic but a supplementary are excluded from the study. Total of 62 research papers matching the criteria of the study were found published between 2004-2019. Out of the papers reviewed majority of them belong to scientific journals, which are followed by management and banking journals. Below is the table and figure depicting the number of research papers published in different years.

Table 1: Number of research papers on digital wallet published during 2004-2019

Year	No. of Research Papers
2004-05	03
2006-08	05
2009-11	09
2012-14	14
2014-19	31

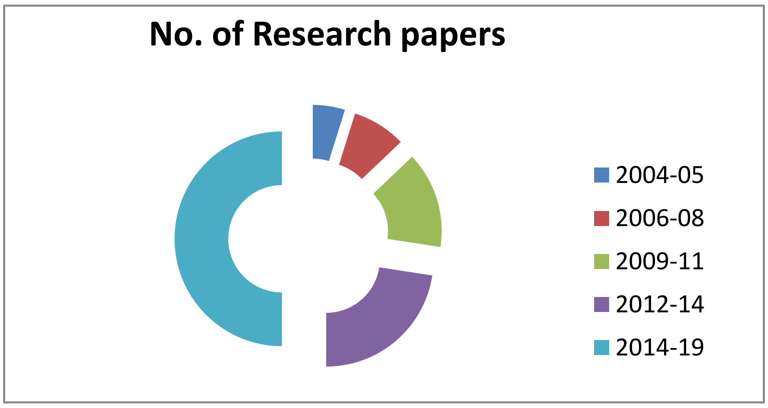

Figure 2: Number of research papers on digital wallet published during 2006-2019

It can be easily drawn from the table 1 and Figure 2 that the number of papers on the topic of digital wallet has been increasing year after year. The majority of the papers published belong to the year bracket of 2014-2019 due to the emergence of contactless payment.

Findings:

Table 2: Number of Research Papers by the framework factors

Framework factors	No. of papers
Contingency Factors: Changes in social/cultural environment	**03**
Changes in commercial environmnet	**07**
Changes in technological environment	**21**
Changes in legal, regulatory and standardisation environment	**09**
Competitive Factors: Consumer power	**29**
Merchant power	**17**
Traditional payment services	**24**
New e-payment services	**02**
Competition among mobile payment service providers	**19**

The findings derived from the review of various literatures are categorised into the framework factors and described below.

Contingency factors:

a. Changes in social/cultural environment:

The change in social and cultural environment has a significant impact on the people buying behaviour and it can lead to alternative mode of payment like digital wallet instead of existing traditional payment systems. From the reviews it is found that changes like new investment habit, new payment cultures, rapid emergence of online shopping, easy access and mobility and contactless payment initiatives undertaken by Governments have a strong impact on the overall digital wallet market and its adoption.The reviews also revealed that men intention to use digital wallet is highly influenced by the usefulness of the digital wallet system compared to the women users. Again some studies also highlighted cultural factors like frequency of usage of mobile devices and availability of digital wallet as a preferred payment option during online purchase or traditional purchase also has a significant impact on the usage and adoption of digital wallet.

b. Changes in commercial environment:

With the advent of commercialisation of sophisticated technology, the need for alternative sophisticated and efficient payment mechanism also arises. The studies on this dimension revealed that the various stakeholders of the mobile payment ecosystem namely merchants, financial institutions, network operators can affect the development of new mobile payment mechanism like digital wallet. Therefore, a strong cooperation is needed between the key stakeholders for the successful development of new system. For example flipkart being a merchant allows customers to make payment via Phonepe and other digital wallets in addition to other modes of payment. Which ultimately results in customers opting for adoption of digital wallets for having a hassle free online purchase.

c. Changes in technological environment:

Technology changes day by day and with the rapid expansion of internet, the opportunity for the development of digital wallet also expands. The various studies on this dimension analyses the various technologies that can enable the development of an efficient digital wallet along with the issues and challenges therein. Near Field Communication (NFC),bluetooth, wireless connectivity are the main technologies which the previous researchers have put their bet on for the development of a better digital wallet. However, the studies highlighted the security and privacy concerns can be acting as a hindrance on the adoption of such technology based digital wallet.

d. Changes in legal, regulatory and standardisation environment:

The various studies on this dimension of the framework are of the view that changes occurring in the field of regulatory norms, legal environment may act as a catalyst in the development of a mobile payment solution like digital wallet. Such studies revealed that during the post demonetization period there is an increased push by the Government of India for cashless transactions. As a result the Unified Payment Interface (UPI) has been launched. This move has given the digital wallet service providers an additional weapon in their armoury and it has increased the use of digital wallet manifold.

Competitive Factors:

a. Consumer Power:

Consumers determine the success and failure of mobile payment solutions like digital wallet. Extensive previous studies have been found on this dimension. The adoption quantity and usage rate along with volume of transactions carried on via digital wallet by consumers is the yardstick of its success and failure. Various models have been used for studying the adoption of digital wallet in previous studies. Out of them Technology Acceptance Model(TAM), Innovation Diffusion Theory (IDT) and Unified Theory Of Acceptance and Use of Technology (UTAUT) has been mostly used. A number of researchhas been conducted to identify the factors influence the consumers for adoption of this system. This research were mostly done by using aforementioned models with additional constructs namely subjective norm, perceived compatibility with lifestyle, promotional benefits, previous experience with mobile payment, security, cost, trust, , expressiveness, convenience, speed of transaction, facilitating condition, attractiveness of alternative, privacy, system quality, mobility and technology anxiety.

b. Merchant power:

The role of merchants in the development and implementation of a mobile payment solution like digital wallet is very crucial. The previous studies have revealed that they provide the market and determines acceptance of digital wallet by customers by offering their customers the option to pay using digital wallet. In the mobile payment ecosystem their active participation with financial institutions and digital wallet service providers is essential for its success as highlighted by previous studies. Some of the literature have also examined the risk of merchants providing their customers with their own digital wallets. For example, Ola Cabs have their own Ola Money digital wallet for convenient cashless transactions. Apart from it some studies have identifiedvarious factors like suitabilty, ancillary benefits, enhancement of business opportunities are crucial for the adoption of digital wallet by merchants.

c. Traditional payment services:

The mostly used mode of payment still is hard cash, plastic cards and cheques. They are known as the traditional modes of payment services.As suggested by some studies in the last few years, due to the mass penetration of affordable smart phones and wide expansion of internet services has given rise to usage and adoption of digital wallet. The literature reviewed brought to notice that in India after the demonetisation in the year 2016, an extensive impetus for cashless payment has spurred the usage of digital wallets. Again rapid emergence of e-commerce has also acted as a driving force in promoting digital wallets. The most important point highlighted in few studies is the co-existence of traditional modes of payment with the digital wallets. However, majority of the studies revealed that digital wallet has not been able to replace the existing traditional modes yet.

d. New E-payment services:

The electronic payment service ecosystem is mostly pre dominated by card and account based products of financial institutions. Like debit card, credit card, Real Time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT), Society ForWorlwide Interbank Financial Telecommunication, etc. Digital wallet is the new entrant in this field. Very few studies have found on this dimension. The literature depicted a picture of co-existence rather than replacement of digital wallet with existing e-payment services. The role of UPI and IMPS is significant here.

e. Competition among mobile payment service providers:

The mobile payment service ecosystem has numerous participants. The studies on this dimension of the framework revealed that survival of the service providers is dependent on their capability to cater to the customer demands and coping with the changing regulatory framework of different geographies. The findings of some other studies have proposed the service providers to opt for collaboration rather than competition. The literature review also identified factors like 24/7 transaction monitoring, fraud prevention, secure encryption technology are essential for gaining customer confidence and sustainability.

Conclusion:

The basic objective of the paper is to review previous studies to identify the factors which impact the digital wallet market and to pave the way for future research on this filed. The study used a framework for categorising the literature review. The study has highlighted the emergence of digital wallet as a preferred mode of payment in the present era of technological advancement with the passage of time.It is evident from the study that there has been very limited research on the usage and adoption of digital wallet in the developing economies of the world. India being one of them, whatever research have been conducted till date are mostly confined to tier-I and tier-II cities. From the reviewed literature it is also observed that very few studies has been conducted in small towns but none in the entire North Eastern Region of the country. In the present era of digitization where cashless transactions are increasing rapidly there might be possibility of usage of digital wallet as a key tool in the field of financial inclusion in a country like India, where still a large size of population is excluded from the umbrella of financial services. No studies have found in this regard.

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AGING INDIA

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SCAN ME

Today, India's population has reached 135 crores. Today, every sixth person in the world is Indian. In the near future, by 2024, India will overtake China in terms of population and become the most populous country in the world. But if you look at India's population growth rate, it has been declining since the seventies. The population growth rate has declined from 2.5% per annum in 1971-81 to 1.3% per annum in 2011-16. The decline was due to various schemes at the government level (family planning, literacy campaigns, etc.) as well as the spread of education, especially among women in rural areas. All these measures resulted in a reduction in the Total Fertility Rate. Prior to 1950, the fertility rate was very high but the population growth was low due to the high mortality rate. However, the discovery of the antibiotic penicillin in 1928 and its availability in India in the 1950s increased the life expectancy and had a visible effect on the population. Until the second half of the twentieth century and the beginning of the twenty-first century, very high fertility rates and low mortality rates led to rapid population growth.

The overall fertility rate is an important factor in increasing or decreasing the population growth rate. The total fertility rate is the number of children born per woman. The rate has come down from 4.5 in 1984 to 2.3 in 2016 (this means that in 1984 there were 450 children for every 100 women, compared to 230 children for every 100 women in 2016). That means the fertility rate has halved in about thirty years. The fertility rate for any population is balanced by the mortality rate. If the fertility rate is higher than the mortality rate, the population increases. And if the fertility rate is lower than the mortality rate, the population decreases. If the two rates are the same then the population remains constant (i.e. decreases at the same rate as the population increases).

Balancing the fertility rate with this mortality rate is called Replacement Level Fertility. The replacement fertility is 2.1 considering the birth rate and mortality rate of the Indian population. According to the Central Economic Survey Report (2018-19), by 2021, the fertility rate will be declining and (1.8) will be less than the replacement fertility. In 13 of the 22 most populous states, the fertility rate has already fallen below the reproductive capacity (e.g. southern states, Delhi, West Bengal, Jharkhand, Himachal Pradesh, Punjab, Maharashtra, Uttarakhand, Orissa). And the remaining states will have a fertility rate of less than 2.1 by 2031. Considering all these factors, India's population will be 144 crore by 2031 and 151 crore by 2041. After that the population will start to stabilize.

A few years ago, news of India's becoming a world superpower was coming from newspapers or discussions. The basis of that news was the growing population. The United Nations Population Fund introduced the concept of the first Demographic Dividend for India. Accordingly, the growing population can open the door to economic progress without burdening the nation. To understand this concept, one must first understand the composition of the different age groups of India's population. Once this structure is understood, future population fluctuations according to population estimates will also be noticed.

Although the population is growing at the end of two decades of the twenty-first century, changes are seen in different age groups of the population. The population between the ages of 20 and 59 is called the productive class or the working class. People in this age group work to earn a living for their families. The rest of the population, aged 0 to 19 and over 60, depends on the working class. Hence they are called dependent groups. The productive class, which is in the age group of 20 to 59 years, is currently ahead of 50 per cent of the population which will go up to 60 per cent by 2041.

According to a study by the United Nations Population Fund, the productive class in the Indian population has been increasing since 2018. This ratio will continue till 2055 and after that it will decrease. This means that for a total of 37 years, the productive class in India will outnumber other age groups. According to a 2004 study by Bloom and Cunningham, there is a direct relationship between productivity and growth rates. The higher the quantity, the more manpower will be available for production. This will have a direct effect on Gross Domestic Product (GDP). Some other countries in Asia have gone through the same transition, according to a study by the Population Fund. E.g. In Japan, the years 1964 to 2004 were population dividends. Japan's economic growth rate (GDP) has remained very high over the years.

But not only is the number of productive citizens high and the growth rate cannot be achieved, but this population needs to be given opportunities to develop their potential to the maximum. In addition, health, high quality education, skills development, employment opportunities, etc. must be provided. Only then will it be possible to reap the benefits of this increased productive class, the population dividend. In 2002, according to the vision of the late former President Abdul Kalam, the then Planning Commission had created a program called VISION 2020. Accordingly, the future must move forward.

The declining fertility rate is going to have another effect on the population. The proportion of the population between the ages of 0 and 19, which was 41% in 2011, will decline to 25.2% by 2041. This means that the growth of new babies in the population will decrease. The same age group will gradually join the productive class over the next twenty years. The result will be that the number of the productive class in the population will go to a higher level and from there it will have to decrease. According to a United Nations study, the productive class in the Indian population will increase by 2041 to 59% of the total population and then decrease. This productive class will be gradually added to the next age group (60 years and above). This means that the number of elderly people will increase from 2055 onwards. After that the population will remain stable for two decades and then the population will decrease.

In view of this population change, necessary changes will have to be made in the policies at the central and state levels as well. For this, it may be useful to study the policies of countries that have gone through such a transition. E.g. Korea, Japan, China, Singapore, Canada etc. These countries have paid special attention to education and health. In the history of a country, the sum of population dividends comes only once in thousands. The right far-sighted policies and planned programs free from political interference can give us the fruits of population dividends.

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अल्पसंख्यांक समाजाच्या समस्या

किशोरकुमार मनोहरराव इंगळे

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संक्षिप्त :-

आज भारतामध्ये वेगवेगळया प्रकारचे अल्पसंख्यांक समाज गुण्यागोविंदाने राहत असला तरी प्रत्येक अल्प संख्यांक समाजाच्या समस्या वेगवेगळया आहेत.प्रामुख्याने मुस्लिम,अनुसूचित जाती,जमाती, शीख, पारसी, जैन, यांच्या समस्या इतर बहुसंख्यांक समाजापासून भिन्न आहेत. या अल्पसंख्यांक जाती सामाजिक, शैक्षणिक , आर्थिक, राजकीय दृष्टया आजही दुर्बल असल्याचे दिसून येते. यांच्या विकासासाठी विविध प्रकारचे प्रयत्न करण्यात आले आहेत. राजकीय व प्रशासकीय अकार्यक्षमता व जातीची सामाजिक परिस्थिती यामुळे अल्पसंख्यांक समाजाचा म्हणावा तसा विकास आजही झाला नाही हे दिसून येते.

मुख्य शब्द (Key Note):-अल्पसंख्यांक प्रकार, समस्या,तरतुदी व सद्यस्थिती

प्रस्तावना :-

जगातील सर्वच अल्पसंख्याकांची समस्या अस्तित्वात असल्याचे दिसते. त्यामुळे त्यांची समस्या ही वैश्विक स्वरूपाची असल्याचे दिसून येते. अल्पसंख्याकांच्या समस्यांचे स्वरूप देशानुसार बदलत जाते. इतिहासाच्या विविध काळात यांच्या सुरक्षिततेसाठी राष्ट्रीय व आंतरराष्ट्रीय तह व समझोता झाला आहे. 18 व्या शतकाच्या शेवटी लोकशाही विकासाबरोबर अल्पसंख्याकांची समस्या ही राजकीय समस्या बनली आहे. प्रोफेसर हुमायूँ कबीर यांच्या मते ‘‘ लोकशाही व्यवस्थेच्या व्यतिरिक्त अन्य व्यवस्थेमध्ये याचा प्रश्नच निर्माण होत नाही.’’ लोकशाही अशी व्यवस्था आहे जिच्या अंतर्गत विविध प्रकारच्या अल्पसंख्याकांना ओळखले जाते व समान रूपात त्यांच्या सोबत व्यवहार करण्यास बाध्य केले जाते.

प्रस्तुत शोध निबंधात अल्पसंख्यांक व त्यांच्या समस्या आणि प्रकार या अनुषंगाने लेखन केले जाईल. शेवटी निष्कर्ष व उपाय सुचविले जातील. या शोधनिबंधासाठी चर्चात्मक व वर्णनात्मक पध्दतीचा अवलंब केला जाईल. माहिती संकलनासाठी प्राथमिक व दुय्यम साधनांचा वापर केला जाईल.

'Encycolpedia Britanica' मध्ये अल्पसंख्याकांच्या बाबतीत विस्तृत विवरण देणारा लेख 1953 मध्ये प्रकाशित झाला आहे.

जे.ए.लैपोन्स,''अल्पसंख्याक हा असा समूह आहे की, जो प्रजाती, भाषा वा धर्माच्या संदर्भात बहुसंख्याक समुहापेक्षा भिन्न असतो.''

याचा अर्थ असा की एका विशिष्ट देशात भाषा प्रजाती, धर्म व संस्कृतीच्या आधारावर जो समूह बहुसंख्यांकांच्या तुलनेत अल्पसंख्य असतो. तो समूह अल्पसंख्याक होय. भारतात मुसलमान, बौध्द, ख्रिश्चन, पारसी, जैन या धर्माच्या लोकसंख्येच्या तुलनेत कमी आहेत म्हणून ते अल्पसंख्याक होय.

भारतातील अल्पसंख्याक :-

संविधान निर्मीच्या वेळेस अल्पसंख्याकाची व्याख्या करण्याची समस्या निर्माण झाली. संविधानामध्ये अल्पसंख्याकांची संक्षिप्त रूपात व वस्तूनिष्ठ दृष्टीकोनातून व्याख्या करण्यात आली नाही. मा. टी.टी. कृष्णमाचारी यांनी दिलेल्या सूचनेला विरोध न होता प्रारूप समितीने ती स्विकारली व संविधानाच्या 16 व्या भागात अल्पसंख्याक या शब्दा ऐवजी 'विशिष्ट वर्ग' असा शब्द वापरण्यात आला. भारतीय संविधानात अनुच्छेद 29 व 30 मध्ये अल्पसंख्यांक हा शब्द वापरला आहे. यामध्ये अल्पसंख्याकाच्या सांस्कृतिक व शैक्षणिक अधिकाराची हमी देण्यात आली आहे.

भारतीय संविधानाचे शिल्पकार डॉ. बाबासाहेब आंबेडकर यांनी संविधान सभेत अल्पसंख्याकांची संकल्पना स्पष्ट करतांना म्हटले आहे की, ''अल्पसंख्याक शब्द अल्पसंख्यांकांच्या तांत्रिक तथ्यांनाच प्रस्तुत करीत नाहीत तर अशा अल्पसंख्यांकांना देखील प्रस्तुत केले जाते की जे सांस्कृतिक आणि भाषिक दृष्टीकोनातून सुध्दा अल्पसंख्यांक आहेत.''

अल्पसंख्यांक आणि मूलभूत अधिकार सल्लागार समितीचे अध्यक्ष सरदार पटेल यांनी अपल्या अहवालात लोकसंख्येच्या आधारावर अल्पसंख्यांकांना प्रस्तूत केले व मुसलमान आणि अनुसूचित जाती यांना सोबत ठेवले.

माजी उपराष्ट्रपती पाठक यांनी ''भारत अल्पसंख्याक'' या विषयावर भाषण देतांना म्हटले की, भारतीय संविधान विशिष्टरूपाज धार्मिक अल्पसंख्यांक, भाषिक अल्पसंख्यांक,सांस्कृतिक अल्पसंख्याक, विशिष्ट लिपी बोलणारे अल्पसंख्यांक, सामाजिक व शैक्षणिक दृष्टया मागासलेल्या वर्गाचे लोक अनुसूचित जाती आणि अनुसूचित जमाती यांना मान्यता प्रदान करते.

अल्पसंख्यांकाचे प्रकार :-

भारतीय अल्पसंख्यांकांचा विचार करतांना प्रामुख्याने भाषा व धर्म यांचा आधार घेतला जातो. या आधारावर याचे दोन प्रकार पडतात.

1.भाषिक अल्पसंख्यांक :-

भारतात विविध भाषा बोलल्या जातात. भारतीय संविधानात 8 व्या अनुसूचित 18 भाषांचा समावेश करण्यात आला आहे. भाषिक अल्पसंख्याक समूह हा असा समूह आहे की, ज्याची भाषा ही राज्याच्या भाषेपेक्षा वेगळी असते. ब्रिटीश काळातच

भारतातील प्रातांना भाषेच्या आधारावर विभाजित करण्याचा प्रयत्न करण्यात आला. भारतीय स्वातंत्रानंतर राज्यपुर्नरचना आयोगाने भाषिक आधारावरच राज्याच्या सीमा निश्चित करण्यात याव्या अशी शिफारस केली, या आधारावरच 1956 मध्ये भाषेच्या आधारावर राज्यांची पुनर्रचना करण्यात आली. यामुळे एक भाषिकक राज्य स्थापन झाले. एक भाषावार राज्य रचनेमुळे भाषिक अल्पसंख्यांकांच्या संख्येत वाढ होत आहे.

धार्मिक अल्पसंख्याक :-

भारत, हिंदू, मुस्लिम, बौध्द, ख्रिश्चन, शीख, पारसी, जैन इत्यादी धर्माचे लोक राहतात. 2001 च्या जनगणनेनुसार देशात 80 टक्के हिंदू तर उर्वरित 20 टक्के लोक हे मुस्लीम, बौध्द, ख्रिश्चन, शीख, जैन, पारशी धर्माचे आहेत. यावरून स्पष्ट होते की, वरील धर्मीयांची लोकसंख्या हिंदू धर्मीयांच्या तुलनेत कमी आहे. म्हणून या सर्वधर्माचे लोक अल्पसंख्याक आहेत. धार्मिक अल्पसंख्याकांच्या समस्येमुळे राष्ट्रीय एकतेची समस्या निर्माण झाली आहे.

अल्पसंख्यांक समूहाच्या निर्मितीची कारणे :-

अल्पसंख्याक समूह निर्माण होण्यासाठी बाबी कारणीभूत ठरताना दिसतात.

1. सत्ताधारी गटाने केलेली दडपशाही व संघर्ष यापासून बचावण्यासाठी स्थलांतर केलेला समूह (उदा.ज्यू, जर्मनी)
2. आक्रमण किंवा युध्दाच्या भितीने इतरत्र केलेले स्थलांतर
3. विविध कारणांनी केलेले धर्मातर व स्थलांतर यामुळे निर्माण होणारा समुह
4. विशिष्ट लोकांना देश सोडण्यास बाध्य करणे
5. मर्यादित लोकसंख्या व तिची मंद वाढ (उदा. पारसी व जैन समूह)
6. वरील कारणामुळे अल्प संख्याक समूहाची निर्मिती होताना दिसून येते.

अल्पसंख्यांकांच्या समाजाच्या समस्या :-

भारताने भाषिक व धार्मिक अल्पसंख्यांक आहेत. प्रत्येक अल्पसंख्यांक समुहाच्या समस्या या वेगवेगळया आहेत परंतु सर्वसामान्यपणे विचार केल्यास काही समस्या जवळ जवळ सारख्याच आहेत असे दिसून येते. त्या खालील प्रमाणे विशद करता येईल.

1.अल्पसंख्यांकांविषयी वेगळेपणाची भावना :-

बहुसंख्यांक लोक हे अल्पसंख्यांक समुहावर वर्चस्व प्रस्थापित करण्याचा सतत प्रयत्न करतात. त्यांना दबावाखाली ठेवून आपल्या हुकूमाप्रमाणे वागावे यासाठी सतत प्रयत्नशील राहतात. यामुळे दोन्ही समूहात भिन्नतेची भावना निर्माण होवून संघर्ष होतो. हा टाळण्यासाठी अल्पसंख्यांक समाज दबून राहतो. व आपण यांच्यापेक्षा वेगळे आहेत. आपला कोणी वाली नाही या

भितीपोटी ते चूप चाप सर्व अत्याचार सहन करतात. या वेगळेपणाच्या भावनेमुळे बहुसंख्यांक लोक अल्पसंख्यांक लोकांवर अन्याय, अत्याचार करतात.

2. अधिकार व हक्क यापासून वंचित :-

बहुसंख्यांक लोक अल्पसंख्यांकाना अधिकार व हक्कापासून वंचित ठेवण्याचा सतत प्रयत्न करतात. हक्क व अधिकार हिरावून घेतले जातात. त्यांना गुलाम बनविण्याचा प्रयत्न केला जातो.

3. अन्याय व अत्याचारग्रस्त :-

अल्पसंख्यांक समाजावर बहुसंख्यांक समाज वेगवेगळया प्रकारचे अन्याय व अत्याचार करुन त्यांना भयभीत करतात. यामध्ये त्यांच्या घरांना, धार्मिक स्थळांना आगी लावणे यासारख्या घटनांचा समावेश होतो. संख्येने अल्प असल्याने हा समाज अन्याय व अत्याचार निमूटपणे सहन करीत असतो. उदा. गुजरातमध्ये गोध्रा प्रकरणानंतर मुस्लिमांवर अत्याचार, इंदिरा गांधी हत्यनंतर शीखांवर हल्ले इत्यादी.

4.दहशत निर्मिती :-

बहुसंख्यांक लोक दहशत निर्माण करुन अल्पसंख्यांकांना सतत आपल्या दबावाखाली ठेवण्याचा प्रयत्न करतात. यामुळे यांचे मानसिक खच्चीकरण होते. ते सतत दहशतीच्या वातावरततणाखाली जगत असतात.

5.विकासाची समस्या :-

बहुसंख्यांकांचा दबाव, दहशत यामुळे अल्पसंख्यांक आपला अधिकार व हक्क याचा वापर करू शकत नाही. यामुळे त्यांच्या प्रगतीला, विकासाला चालना मिळत नाही. आर्थिकदृष्टया हा समाज प्रगत होवू शकत नाही.

6.संस्कृती संरक्षणाची समस्या :-

अल्पसंख्यांक लोकांनी बहुसंख्यांकांच्या संस्कृतीनुसार आचरण करावे अशी अपेक्षा बहुसंख्यांक समाजाची असते यामुळे यांच्या संस्कृतीचे सर्वधन होत नाही.त्यांना आपल्या संस्कृतीचे सरंक्षण सुध्दा करता येत नाही.

अशा विविध समस्यांना अल्पसंख्यांक समााजाला सामना करावा लागत आहे. या सर्व समस्यांची दखल घेवून भारतीय संविधानाच्या निर्माल्याने संविधानात अल्पसंख्यांकांच्या सांस्कृतिक, शैक्षणिक, सामाजिक, आर्थिक विककासासाठी काही घटनात्मक कलमाची तरतुद केल्याचे जाणवते.

अनुच्छेद 29 (1) **नुसार समुहालाा, व्यक्तीला, आपली भाषा, लिपी, संस्कृती जतन करण्याचा अधिकार, राज्याच्या , पैशातून चालणाऱ्या शैक्षणिक संस्थेत कोणत्याही नागरीकास केवळ धर्म, वंश, जात, भाषा, याकारणावरून प्रवेश नाकारला जाणार नाही.**

अनुच्छेद 30 (1)**धर्म व भाषा यानुसार अल्पसंख्यांक असलेल्या सर्व समाजांना आपल्या संपत्तीच्या शैक्षणिक संस्था स्थापण्याचा अधिकार असेल.**

अल्पसंख्यांक समाजाच्या विकासासाठी करण्यात आलेले प्रयत्न :-

1.राष्ट्रीय एकता परिषद :-

भारतातील धार्मिक संघर्षाची कारणे व उपाय योजना करण्यासाठी 1962 **मध्ये राष्ट्रीय एकता परिषदेची स्थापना केली. चीनी आक्रमणामुळे काही काळ भारतीयांमध्ये एकता निर्माण झाली. युध्द समाप्तीनंतर अनेक धार्मिक हिंसाचार घडून आले. यावर उपाय करण्यासाठी** 1968 **मध्ये या परिषदेची पुर्ननिर्मिती करण्यात आली. यामध्ये सांप्रदायिकता, प्रादेशिक व शैक्षणिक समस्यांवर विशेष भर देण्यात आला होता. यानंतर**1990 **मध्ये या परीषदेत पंजाब, काश्मिर, अयोध्या या विषयी चर्चा करण्यात आली.** 1991 **व** 1993 **मध्ये सुध्दा या परिषदेच्या बैठकी घेण्यात आल्या. परंतु ही परिषद म्हणावी तशी प्रभावीरित्या कार्य करू शकली नाही.**

2. अल्पसंख्यांक मंत्रालयाची निर्मिती :-

अल्पसंख्यांक समुहाच्या कल्याण आणि विकासासाठी व रक्षणासाठी वेगवेगळया योजना राबविण्यासाठी केंद्र सरकारने 26 **जानेवारी** 2006 **ला अल्पसंख्यांक मंत्राालयाची स्वतंत्ररित्या स्थापना करण्यात आली. मंत्री, सचिव, उपसचिव, मुख्यलेखा नियंत्रक यांच्या माध्यमातून हे मंत्रालय कार्य करते. प्रशासनाच्या सुविधेसाठी या मंत्रालयाचे चार विभाग करण्यात आले. ते खालील प्रमाणे** 1. **प्रशासन विभाग** 2. **नीती व आयोजन विभाग** 3.**संस्था आणि प्रसारण विभाग** 4. **वित्त आणि लेखा या विभागामार्फत अल्पसंख्यांक मंत्रालयाचे कार्य चालविले जाते.**

अल्पसंख्यांक मंत्रालय अल्पसंख्याकांच्या विकासासाठी खालील प्रकारचे कार्य राबविताना दिसते.

1. **अल्पसंख्यांकाच्या जीवन व मालमत्तेचे सरंक्षण करणे, नोकरीमध्ये प्रतिनिधीत्व देणे**
2. **दंग्यापासून सरंक्षण आणि पुर्नवर्सन करणे शैक्षणिक विकास करणे, विकासात्मक योजना आखणे.**
3. **स्पर्धा परीक्षा कोचिंग योजना, कर्ज योजना, स्वयंरोजगार निर्माण करणे, यासारखी विविध कार्ये या मंत्रालयाद्वारे पार पाडली जातात.**

3.अल्पसंख्याकांच्या समस्या निराकरणासाठी नेमण्यात आलेले आयोग:-

अल्पसंख्याकांच्या हिताची रक्षा करण्यासाठी राष्ट्रीय अल्पसंख्यांक आयोग अधिनियम 1992 तयार करण्यात आला. या कायद्यानुसार अल्पसंख्यांक आयोगामध्ये एक अध्यक्ष व सहा सदस्य असतात हे सर्व अल्पसंख्याक समाजाचे प्रतिनिधीत्व करतात. आयोगाचा कालावधी 3 वर्षे एवढा असतो. खालील 14 राज्यामध्ये अल्पसंख्यांक आयोगाची निर्मिती करण्यात आल्याचे दिसून येते. या आयोगाला सिविल न्यायालयाची शक्ती प्रदान करण्यात आलेली आहे. 1. आंध्रप्रदेश 2.आसाम 3.बिहार 4.गुजरात 5.हरियाना 6. कर्नाटक 7. मध्यप्रदेश 8.राजस्थान 9.तामिळनाडु 10. उत्तरप्रदेश 11.महाराष्ट्र 12.पश्चिम बंगाल 13. छत्तीसगढ 14. दिल्ली.

सच्चर समिती :-

मुस्लिम समाजाची सामाजिक, आर्थिक आणि शैक्षणिक परिस्थितीचा अभ्यास करण्यासाठी एक उच्च स्तरीय समिती स्थापन करण्यात आली.2005 या समितीचे अध्यक्ष न्यायमुर्ती राजेंद्र सिंह सच्चर हे होते तर इतर सभासदांमध्ये श्री.सय्यद हामिद , डॉ.टी.के. अमन, श्री. , डॉ. एम.ए. बासिथ डॉ.राकेश वसंत, डॉ. अख्तर मजीद व डॉ. अबु सालेह शरीफ इतके लोक होते. या समितीला काही राज्यांनी विरोध केला. या समितीने 17 नोव्हेंबर 2006 ला आपला अहवाल पंतप्रधानांना सादर केला.

समितीच्या शिफारशी पुढीलप्रमाणे आहेत :-

1. मुस्लिम समाजातील काही हलक्या जातींना अनुसूचित जाती व जमाती व ओ.बी.सी. या जातीमध्ये समाविष्ट करण्यात यावा.
2. शासन व प्रशासनामध्ये मुस्लिम समाजाला योग्य प्रतिनिधीत्व देण्यात यावे.
3. अल्पसंख्यांक समाजाच्या तक्रारीचा लवकरच निपटारा करण्यात यावा.
4. मुस्लिम बहुल क्षेत्रामध्ये एक मुस्लिम इन्स्पेक्टर ची नियुक्ती करण्यात यावी.

5.अल्पसंख्याक शैक्षणिक संस्था राष्ट्रीय आयोग :-

27 ऑगस्ट 2004 ला या बैठकीत वरील विषयाच्या अनुषंगाने साधक बाधक चर्चा होवून काही उपाय योजना सुचविण्यात आल्या. याच अनुषंगाने 11 नोव्हेंबर 2004 च्या अधिनियमानुसार अल्पसंख्याक शैक्षणिक संस्था हेतु राष्ट्रीय आयोगाची स्थापना करण्यात आली. 6 जानेवारी 2005 मध्ये राजपत्रामध्ये या अनुषंगाने माहिती प्रसारीत करण्यात आली. या आगोगाद्वारे गठीत करण्यात आलेली माहिती केंद्र सरकारला सादर केली जाते व केंद्रसरकारद्वारे ही माहिती संसदेमध्ये ठेवली जाते. या अनुषंगाने 1980 मध्ये गोपालसिंह समितीने या विषयाच्या अनुषंगाने आपले मत मांडले होते.

अल्पसंख्यांक कल्याणासाठीचा 15 सुत्री कार्यक्रम :-

1983 मध्ये पहिल्यांदा अल्पसंख्याकांच्या कल्याणासाठी प्रधानमंत्रीद्वारे 15 सूत्री कार्यकमाची निर्मिती करण्यात आली. वेळोवेळी यामध्ये संशोधन करण्यात येऊन शेवटी 2006 मध्ये 15 सुत्री कार्यक्रम तयार करण्यात आला. यामध्ये प्रामुख्याने मुख्य मुद्यांचा उल्लेख खालील प्रमाणे करता येईल.

1. शिक्षणाच्या संधी उपलब्ध करून देणे
2. आर्थिक गतीविधीचा आणि रोजगारामध्ये समान संधी
3. अल्पसंख्यांकाच्या जीवनशैलीमध्ये सुधारणा करणे,
4. सांप्रदायिक दंग्यावर नियंत्रण करणे

6. भारतीय राज्यघटनेतील अल्पसंख्यांकासाठी केलेली तरतुद :-

1. घटनेतील कलम 14 नुसार देशामधील सर्व नागरीक समान.
2. कलम 15 नुसार धर्म,वंश, जात, जन्मस्थान, लिंग या कारणावरुन राज्य कोणाताही भेदभाव करणार नाही.
3. कलम 16 नुसार नौकरी आणि इतर पदावर नियुक्ती करीत असताना राज्य कोणत्याही प्रकारचा भेदभाव करणार नाही.
4. कलम 29(1)नुसार स्वत:ची भाषा, लिपी, संस्कृती जतन करण्याचा हक्क.
5. कलम 29(2)नुसार राज्यातील अनुदानावर चालणाऱ्या शिक्षण संस्थेत धर्म, वंश, जाती भाषा यावरुन वंचित ठेवता येणार नाही.
6. कलम 30(2)नुसार अल्पसंख्यांकाना शिक्षण संस्था स्थापन करण्याचा अधिकार असेल.
7. कलम 325, 326 नुसार धर्म, भाषा, वंश प्रदेश या कारणांवरुन मतदानाचा अधिकार नाकारता येणार नाही.
8. कलम 44 नुसार एक समान नागरी तयार करण्यात आला आहे. (परंतु याची अंमलबजावणी अजूनपर्यंत झालेली नाही.)

वरील बाबी वरून हे स्पष्ट होते की अल्पसंख्यांकाच्या संरक्षणसाठी घटनेभध्ये वरील प्रकारच्या तरतूदी केल्या आहेत.

भारतीय अल्पसंख्यांकांची आजची स्थिती :-

अल्पसंख्यांक समाजाच्या भाषा, धर्म व संस्कृतीचे संरक्षण करण्चाची हमी भारतीय संविधानाने दिली आहे. परंतु बहुसंख्यांक समाज आजही अल्पसंख्यांक समाजाविषयी भेदभाव पाळताना दिसून येतो. त्यांच्या हिताचे संरक्षण केल्या जात नाही. त्यांच्यावर अन्याय अत्याचार होताना दिसतात. धार्मिक दंगली आजही होताना दिसत आहे . एकमेकांच्या धर्माविषयी तिखट प्रतिक्रिया फेसबुकच्या माध्यमातून आढळतात अल्पसंख्यांक समाजाच्या वस्त्या आजही मोठया शहरात स्वतंत्ररित्या आढळून येतात. याचा अर्थ असा की आज ही त्यांच्या मनात दहशत ठासून भरली आहे. नोकऱ्यांमध्ये त्यांना स्थान नाही. काही विशिष्ट सेवा तर

त्यांना नाकारली जाते. त्यांच्या शिक्षणाच्या समस्या सुध्दा कमी होत नाही. हलक्या दर्जाचे व्यवसाय मात्र आही ही त्यांच्या ताब्यात आहे. महिलांची परिस्थिती हलाखीची आहे. घर आणि चूल व मूल यातच गुरफटलेल्या दिसतात.

निष्कर्ष :-

अल्पसंख्यांक समाजाची परिस्थिती इतर बहुसंख्यांक समाजाच्या मानाने विकास पावली नाही. निरक्षरता, अज्ञानता, धार्मिकता त्यांच्यामध्ये आजही दिसते. बालकामगारांची संख्या याच समाजात जास्त आहे. स्त्रिया सद्यस्थितीत नोकरी करतांना दिसतात. परंतु त्यांचे प्रमाण अत्यंत कमी आहे. बहुसंख्यांकाना प्रत्युत्तर देण्यासाठी त्यांच्यामध्ये काही कट्टर पंथीयांची निर्मिती होत आहे. बेरोजगारीमुळे गुन्हेगारीकडे अल्पसंख्यांक वर्ग वळतांना दिसून येतो. शिक्षणा अभावी त्यांना त्यांच्या धार्मिक, सामाजिक, आर्थिक, विकासाच्या संधीची माहिती मिळत नाही. घटनात्मक हक्कांची जाणीव नाही. राष्ट्रीय प्रवाहात आजही त्यांना सामावून घेतले जात नाही.

उपाय :-

1. सामाजिक , शैक्षणिक, आर्थिक विकासाच्या कार्यक्रमाची निर्मिती करून त्यांची अंमलबजावणी करावी व या विषयीची जागरूकता निर्माण करण्यासाठी शासनाने व स्वयंसेवी संस्थानी विशेष प्रयत्न करावे.
2. अल्पसंख्यांक स्वयंसेवी संघटनेला योग्य ती मदत करावी.

संदर्भ ग्रंथ :-

1. डॉ. सुरेंद्र कटारिया- सामाजिक प्रशासन, आर.बी. , एस.ए., पब्लिशर्स, जयपुर, 2010 पान नं. 109,111,217.
2. डॉ. प्रदीप आगलावे. समाजशास्त्र श्री साईनाथ प्रकाशन नागपूर जुलै 2008 पान नं.224.
3. के. सागर, (संपादित)- 'भारतीय प्रशासन' के सागर पब्लिकेशन पुणे, 2009 पान नं.532,543, 544.
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6. डॉ. भा.कि.खडसे, भारतीय समाज संरचना आणि सामाजिक समस्या , हिमालया पब्लिशिंग हाऊस मुंबई 2005 पेज नं. 47 ते 54.

महेश एलकुंचवार यांच्या नाटकातील आधुनिकता आणि वेगळेपण

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महेश एलकुंचवार हे मराठीत प्रयोगशील नाटककार म्हणून परिचित असलेले नाटककार आहेत. साठोत्तरी मराठी साहित्यात प्रस्थापित व्यवस्थेला कलात्मकतेने अवघड प्रश्न विचारणारे जे साहित्यिक झाले त्यामध्ये एलकुंचवार अग्रक्रमाने पुढे आहेत. विजय तेंडुलकरांची नाटके पाहून आपल्याला प्रेरणा मिळाल्याचे ते म्हणतात. विजय तेंडुलकर व सतीश आळेकर यांच्याशी त्यांचे लेखन विषय संदर्भात सख्य मानवी संबंधाच्या अनुषंगाने अधिक आहे. वास्तव जीवन आणि पात्रांची वृत्ती यामध्ये भेद न दाखवता मानवी जीवनाच्या संदर्भातील संबंधातील अनाकलनीयता नाट्यविषयातून ते उभी करतात विशिष्ट परिस्थितीतील पात्र वर्तन प्रेक्षकास वेगळे वाटते. कारण त्या परिस्थितीशी तो अनभिज्ञ असतो सामान्यांच्या जीवनातल्या अशा विशिष्ट परिस्थितीजन्य जागा शोधून मानवी नातेसंबंधांचा शोध, मूल्यांची चिकित्सा आणि व्यवस्थेवर प्रश्नचिन्ह उभा करणारी नाट्य वस्तू एलकुंचवारांनी उभी केली आहे. आपली नाट्यसृष्टी मध्यमवर्गीय असल्याची जाणीव त्यांना आहे, त्यामुळे त्यांच्या विषय वस्तुत पात्रांच्या —त्याचा जाब विचारणारी प्रसंगी त्यांचे यथोचित प्रायश्चित भोगायला लावणारी व्यवस्था येते. त्यांचे नाटक व्यवस्थेवर भाष्य करत नाही तर विचार करायला लावते. विशिष्ट संदेश देण्यासाठी सामाजिक विषय घेऊन त्यांनी नाटक लिहिले नाही. त्यांना माणूस आणि मानवी जीवन यात स्वारस्य असल्याचे त्यांनी माणसाबद्दल नाटक लिहिले.1 1967 ला ‘सुलतान‘ पासून सुरू असलेला त्यांचा नाट्यप्रवास अलीकडच्या ‘वासांसिजिर्णानि‘ पर्यंत येऊन पोहोचला आहे मध्यमवर्गीय जीवन पद्धतीच्या पार्श्वभूमीवर बेतलेली त्यांची नाट्यवस्तू कोणत्याही टोकदार भाष्या शिवाय व्यवस्थेतील अंतर्विरोध दाखवून देते –श्य पातळीवर सामान्य जीवन जगणाऱ्या पात्रांच्या अंतर्मनातील सुप्त भावना आणि पात्रांची होणारी घुसमट यांच्या वाचक-प्रेक्षकांस येणाऱ्या अनुभूतीकडे त्यांचा प्रवास नाट्य वस्तू द्वारा अत्यंत कलासक्ततेतून होत असतो. महेश एलकुंचवार यांची ‘रुद्रवर्षा‘, ‘गार्बो‘, ‘वासनाकांड‘, ‘पार्टी‘, ‘वाडा चिरेबंदी‘, ‘मग्न तळयाकाठी‘, ‘युगांत‘ ही नाटके ‘सुलतान‘ व ‘यातनाघर‘ या एकांकिका ‘प्रतिबिंब‘ ही लघुनाटिका आणि ‘क्षितिजापर्यंत समुद्र‘ हे काव्यनाटय अशी वैविध्यपूर्ण नाट्यनिर्मिती आहे.

कोणत्याही पार्श्वभूमीवर मानवी जीवनाचा अस्तित्वसंदर्भात विचार मांडणारे साहित्य आधुनिक आणि समकालीन मानले जाते. परंपरानिष्ठता टाळून व्यवस्थेचा विचार करायला लावणारे साहित्य अनेक प्रवृत्तीतून साकार होते. व्यवस्थे विरोधात थेट दंड थोपटणारे, विरोध दर्शवणारे आक्रमकपण जसे दलित, स्त्रीवादी साहित्यात दिसते तितका आक्रमकपणा ग्रामीण साहित्यात दिसत नाही. तिन्ही वाङ्मयीन प्रवाह चळवळीतून आलेले असले तरी त्यांच्या अनुभवविश्वातील अनुभूती नुसार त्यांच्या प्रवृत्ती बनल्या आहेत आक्रमक न होता, व्यवस्थेवर भाष्य न करता व्यवस्थेतील दुभंगलेपण निर्देशीत करण्याचा कलात्मक मार्ग मराठीतील काही

मोजक्या साहित्यिकांनी चोखपणे हाताळला आहे गंगाधर गाडगीळ, जी. ए. कुलकर्णी, कमल देसाई. गौरी देशपांडे (कथा), भालचंद्र नेमाडे, रा.रं. बोराडे (कादंबरी), दया पवार (आत्मकथन) अशा मंडळींनी फारसे आकांडतांडव न करता व्यवस्थेतील न्यून दर्शवले आहे. नाटकात विजय तेंडुलकर (घाशीराम कोतवाल), सतीश आळेकर (महानिर्वाण) यांनी मानवी अस्तित्व संघर्ष वर्तन आणि अंतर्मन अशा दोन्ही पातळीवर अत्यंत तरलतेने रेखाटला आहे. विजय तेंडुलकरांची प्रेरणा आणि स्ट्रिंगबर्ग व चेकॉव्ह यांचा प्रभाव यातून एलकुंचवारांची वाङ्मयीन जाणीव प्रगल्भ झाली आहे. त्यांची नाट्य वस्तू सामान्य जीवनाच्या पार्श्वभूमीवर मानवी संबंधांची चिकित्सा करणारी नवीन नाट्य सूत्रे उभी करते. रूढ जीवनाच्या आणि नाट्य संकेतांच्या चाकोरीत ही नाट्यसूत्रे वेगळा विचार करायला भाग पाडतात. संवेदनशील वाचकाला प्रेक्षकाला नाट्य वस्तूतील बंदिस्तपणातून बाजूला होत सामान्य पातळीवर च्या संघर्षाची जाणीव करून देतात. साहित्य आणि समाजातील संकेतबध्दतेला आव्हान देतानाही ही नाट्य सूत्रे आपली संयत कलात्मकता सोडत नाहीत, ही महेश एलकुंचवारांच्या रचनेची विशेषता आहे. याबाबतीत 'वाडा चिरेबंदी' नाटकातील 'आई' या पात्राचे चित्रण उदाहरणादाखल घेता येईल. समोर येईल ते सोसताना या पात्राची प्रचंड घालमेल होते. मात्र त्याबाबत हे पात्र कोणाला दुषणे देत नाही क्वचितप्रसंगी त्रागा करणारे हे पात्र एकंदरीत सर्व परिस्थितीला सामोरे जाण्या इतके सर्वसमावेशक आहे. एलकुंचवारांनी आपल्या नाटकातून विविध प्रकारच्या स्त्री प्रतिमा लीलू (रक्तपुष्प), ललिता (वासनाकांड), बेबी (यातनाघर), रूपा (कैफियत) सोना (पार्टी), प्रभा (वाडा चिरेबंदी), गार्बो (गार्बो), मिसेस राणे व मोहिनी (पार्टी) यांच्या रूपाने रेखाटताना या सर्वातून एक परिपूर्ण स्त्री प्रतिमा साकारली आहे. या सर्व प्रतिमा मूल्य संघर्षातून उभ्या राहिल्या आहेत त्यांच्या इच्छा, आकांक्षा आणि समाज वास्तवातील संघर्ष एलकुंचवारांनी उभा करताना मानवी मूल्यांची पडझड निर्देशीत केले आहे वाडा चिरेबंदी तील आईच्या रूपाने परंपरेची वाहक स्त्रीप्रतिमा त्यांनी साकारली आहे.3 स्त्रीचा माणूस म्हणून विचार करता सांस्—तिक मूल्यांची पडझड आणि तिच्या अस्तित्व या दोन बिंदूवर आंदोलणारा वाचक तिच्या मूलभूत अधिकार आकडे संवेदनशीलतेने पाहू लागतो एलकुंचवार समाज व्यवस्था परंपरा किंवा पात्र याबाबतीत कोणाचाच कैवार न घेता आपली आशय सूत्रे तटस्थ कलात्मकतेने नाट्य वस्तूतून गोवतात नाटककार कोणते भाष्य अथवा संदेश याद्वारा कला—तीवर मर्यादा आणत नसल्याने तिचा समकालीन ताजेपणा टिकून राहतो. जसे स्त्री प्रतिमा निर्माण करताना त्यांनी स्वतःचे संकेत निर्माण केले आणि जपलेत तसेच इतरही नाट्य आणि वाङ्मयीन संकेत याबाबत ते सजग असल्याचे दिसून येते व्यक्ती अथवा एकांतातील मोजक्या पात्रांच्या विचार आवेगातून निर्माण —ती व्यापक स्तरावर येते तेव्हा ती संघर्षाचा केंद्रबिंदू होते. एलकुंचवार हा संघर्ष टोकदारपणे उभा न करता तणावाचे अनेक धागे गुंतवतात. क्वचित वासना कांड सारख्या नाटकात हिंसक जमाव येतो इतरत्र पात्रांचा मानसिक संघर्ष ते सक्षम पणे उभा करतात. पारंपरिक नाट्य संकेतातील संघर्ष हा घटना वाद-विवाद, अर्वाच्य शब्द प्रयोग, आव्हान-प्रतिआव्हान असा शब्दबंबाळ रूपात रेखाटला जातो. ऐतिहासिक पौराणिक नाटकांबरोबरच कौटुंबिक मेलोड्रामा टाईप नाटकातही त्याचा वारेमाप अवलंब दिसून येतो एलकुंचवारांच्या नाटकात अपवादाने असा संघर्ष येतो, मात्र त्यांचा हातखंडा आहे तो मानसिक संघर्ष उभा करण्यात. इण्टूक (गार्बो), हेमकांत (वासनाकांड), अनंतराव राज्याध्यक्ष (आत्मकथा), दिवाकर बर्वे (पार्टी), राजेश्वर (कैफियत) या पात्रांची हवे ते करण्याच्या नादात नेमके फलदायी ते न जमता, आपण भरकटत गेल्याची भावना त्यांना बोचत राहते. इण्टूकला एकही ओळ अस्सल न लिहू शकल्याची खंत विमनस्क बनवते. 'पाषाणामध्ये आपली स्वप्ने फुलतात' असा गर्व बाळगणारा हेमकांत आपल्या कलेच्या अंतिमतः हिणकस रूपाच्या दर्शनाने खंतावतो, त्याहून तो गावकऱ्यांच्या विध्वंसावेळी भेकडपणे पळून जावेसे वाटल्याने स्वतःच्याच नजरेतून पडतो. स्वतःच्या नजरेतून उतरण्याचे दुर्भाग्य आणि त्याची मनमोकळी कबुली हा करूणेच्या स्तरावरचा सर्वोच्च संघर्ष आहे. यानंतर व्यक्तीला कोणत्याही भावना उरत नाहीत. जीवन अनुभवाच्या दुःखाशी, यातनांशी वेदनांची अटल व साक्षात संबंध

प्रस्थापित होऊन कलावंत ज्यावेळी करूणेच्या महास्त्रोताशी पोहोचतो तेव्हाच खर्‍या अर्थाने कला साकार होते. आयुष्य जाळून कला अवतरते. शिल्प कलावंत हेमकांत च्या या संघर्षाहून विदीर्ण करणारा मानसिक संघर्ष रुद्रवर्षातील सर्जनशील डॉक्टर्स राजीवचा आहे. रुग्णांच्या वेदनावर उपचार शोधणारा आनंददायी जीवनाचा निर्मिक डॉक्टर स्वतःच्या कुटुंबातील वेदनाबाबत अपयशी ठरण्याच्या दैवदुर्विलास हताशपणे अनुभवत राहतो. फसव्या लेखन प्रेरणात गुरफटलेल्या अनंतराव राज्याध्यक्ष (आत्मकथा) आणि दिवाकर बर्वे (पार्टी) यांची त्या जाणीवेनंतरची जागृत अवस्था तर त्याहून अधिक त्रासाची ठरते.

एकंदरीत एलकुंचवारांनी आपल्या नाटकातून उभा केलेल्या नाट्य संघर्षातून संयतपणे रेखाटलेले मानसिक व्दंद अधिक प्रकर्षाने प्रत्ययाला येते. त्यांच्या नाटकाची रचना पारंपरिक समाजव्यवस्था आणि नाटकातील संकेतास छेद देणारी असून कोणत्याही प्रत्यक्ष पटलावरील हिंसेपेक्षा ती आशयातून विचारास प्रवृत्त करते त्यांच्या नाटकाचा आरंभ बिंदू आणि अंतिम बिंदू यामध्ये प्रेक्षकाच्या विचाराची दिशा चिंतनपरतेकडे झुकावे अशी नाटयसूत्रांची परिणामकारक मांडणी अनुभवास येते. मोजक्या पात्रांच्या नेमक्या व आटोपशीर —तीतून ते प्रदीर्घ परंपरेतील रूढी विचार आणि भावनांना विचारांच्या केंद्रस्थानी ते आणतात मानवी स्वातंर्त्य, चिरंतन अस्तित्व विचार यांना प्रमाणभूत आशयसूत्रांच्या आधाराने प्रयोगशील चाकोरी मोडणार्या नाटयसंकेतांच्या साथीने ते नाट्य साकारत जातात. मानवी मूल्यांच्या चिरंतन शोधात कोणत्याही प्रभावाला नाकारणारी आधुनिकता हे त्यांच्या नाट्य रचनेचे मूलभूत वेगळेपण आहे.

संदर्भ -

1½ मुलाखत डॉ. अनिल सकपाळ, नवाक्षर दर्शन (महेश एलकुंचवार विशेषांक), संपादक- गोविंद काजरेकर, सावंतवाडी, 2015, पृष्ठ 5.

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IMPACT OF COVID – 19 ON WOMEN: A REVIEW

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Abstract:

In the weeks since the World Health Organization manifest the corona virus (COVID – 19) episode a worldwide unstipulated wellbeing crisis, the COVID-19 pandemic has influenced 212 nations and forfeit increasingly than 400,000 lives. Still today there is no successful remedy to lockup the spreading of this infection. The pandemic is developing prior disparities, uncovering vulnerabilities in social, political and financial frameworks which are thusly intensifying the effects of the pandemic. Over each circle, from wellbeing to the economy, security to social assurance, the effects of COVID-19 are intensified for women in India and all over the world.

Keywords: COVID – 19, Effect, Women

Review:

Women are playing an outsized role responding to COVID-19, including as frontline healthcare workers, caregivers at home, and as mobilizers in their communities. As the crisis intensifies around the world, it is clear that if we truly want to deliver health, wellbeing, and dignity for all, girls and women must be front and center in the emergency responses, in social and economic recovery efforts, and in how we strengthen our health systems post-pandemic. And we must safeguard the progress we've made towards gender equality, including hard won gains for sexual and reproductive health and rights.

Apart from the fact, there are several personal to social, health to wealth problems faced by women now due to this pandemic. The gendered and intersectional impact of any natural or human-made calamity, including COVID-19 plays out plane in middle-class homes considering ‘working from home’ is not the same for men and women. With domestic workers stuff laid off, women are relegated to unending household chores considering everyone is home all the time. In the meanwhile, physical distancing has little meaning for the laid off working matriculation woman, who has to fill water at the crowded worldwide tap, use public latrines or sell vegetables to make ends meet.

Caring responsibilities:

The women who work as domestic help are now taking on bigger responsibilities. Since women are considered primary caregivers, the physical or emotional complaints of other family members become women's responsibility. Loss of wages, jobs, boredom, as well as lack of access to uninterrupted treatment of diseases or psycho-social illnesses would have far-reaching consequences for the patient as well as for the women in the household. Physical distancing within the home cannot be ensured by women alone, because of the limitations influenced by other family members. A nurse, frontline health worker, policewoman and waste picker returning home from work is expected to cook, clean, and bathe the children, with little concern for her own rest or recreation, while simultaneously facing resentment for 'putting the family at risk'.

The sudden lockdown has also temporarily separated families across districts. The return of the husband results in relief and rejoicing, whereas a wife who has lived on her own faces suspicion, and in dire cases, desertion. Men who are frustrated by the worsened financial situation could also leave the family and settle down elsewhere, thereby increasing the number of single mothers left to fend for their children.

Psychological wellbeing:

Lockdowns and self-quarantine measures across the world have increased women's workload as more people are home-bound for a continued period of time and caregiving tasks have increased. Data from the Organisation for Economic Cooperation and Development (OECD) shows that Indian women do nearly six hours or unpaid care work each day. Indian men, on the other hand, spend less than an hour on an average doing the same. This is not to say that women must not engage in caregiving work. In fact many women cherish and prefer caregiving activities when it comes to children and other close dependents. However, the fact is that a woman asking openly for rest or support with domestic responsibilities, is viewed with disapproval at best, and faces emotional or physical abuse at worst. A lack of domestic and emotional support can have long term consequences on their mental health.

The sudden, unnatural situation of staying home all day, every day with no visitors and more free time than usual, may in itself cause some psychological issues. Add to this, the fear of the deadly virus, and uncertainty about work and financial security. As we go down the rungs of the social ladder, there is stress even around meeting basic needs in the absence of daily wage and access to regular supplies.

Economic consequences:

Due to the Covid-19 lockdown many women are working at home and also working from home. The virus outbreak has brought women's economic insecurity to the forefront. Under normal circumstances women already face a significant wage gap. A 2016 study from Columbia University shows that women who have lower income than male counterparts (when matched across age, education, industry, marital status and other factors) are twice more likely to be depressed and six times more likely to suffer from anxiety. Women in leadership positions are more likely to suffer from "depression, social tension and isolation" due to negative perceptions around women in power. This is significant again because people in leadership positions have better income control and better socio-economic status. Yet in case of women, these factors are more likely to make them more stressed.

Employment and Income Generation:

In rural areas, women's involvement on farms may go up in regions where there is shortage of labour due to a decrease in the number of migrant labourers. For instance in India, during this year's harvest season (March-April), many migrants have moved back to their homes. This may result in higher agricultural wages for women in the short-run. Therefore, the demand for women's time both within and outside the household may rise in rural India. The net effect on women's time allocation will depend on the relative net benefits of time at home and outside.

In urban areas, due to the greater proportion of nuclear families, women may be needed to support the family by being at home to take care of the sick and/or due to loss of jobs/earnings in the immediate future. In the long-run, however, if working from home becomes the norm, more work opportunities may become available to women who often prefer home-based work.

Moreover, in many countries, women's participation in the labour market is often in the form of temporary employment.

Domestic Situation (Staying Home, Staying Unsafe?):

The National Commission for Women has observed a recent spike in complaints of domestic violence in the country, having received 123 such 'emails' between 23 March and 10 April. State governments and women commissions such as that of Kerala and Punjab have also taken cognizance of this alarming trend. Lockdown conditions may not only intensify the abuse suffered by existing victims but can also create new victims. Crime against women has an under-reporting problem even in normal times. Besides social stigma, a key reason for this is fear of retaliation by the perpetrator. Incidents and evidence are increasingly reported showing that the policy of isolation and confinement leads to increased levels of domestic, sexual and gender-based violence – and therefore to a heightened need of protection against this.

Women's Rights:

Attention needs to be paid also to the possible longer-term effects of the pandemic on the balance between professional and personal life and on women's economic independence, since it may force many of them to make difficult choices and to move to unpaid work.

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TRENDS IN WILDLIFE SPECIES CONSERVATION

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Abstract:

Animal fauna are categorized into ecological groups depending on how they obtain or consume organic material. Interactions between animals form complex food webs in the ecosystem. Studies have shown that animal fauna play a significant role in the stability of the environment, ecosystem, and our lives. But, during the last two centuries the world witnessed accelerated rates of animal extinction and endangerment which took place alongside industrialization progress and rapid growth in human population. Some main fundamental causes of animal extinction noted in most recent times has been, *human demand*, either for animal resources directly, or for natural resources constituting the animal's habitats. Extinction of animals from the ecosystem means termination of the species. The leading cause of extinction has been loss in habitat, so animals finding their habitat are destroyed to the point at which their survival is no longer possible. Habitat fragmentation will remain the sole cause of species endangerment and extinction. This review paper highlights the major issues about wildlife extinction, endangerment and conservation.

Keywords: Extinction, Wildlife, Conservation, Endangerment, Trends

Introduction:

Wildlife conservation is the way of protecting plant and animal species and their habitat where they live. As a part of ecosystems, wildlife provides balance and stability to nature's processes. Wildlife conservation is to ensure the survival of species, and to educate people on living sustainably with other species. In the current scenario conservation of biodiversity is a great challenge. It requires collaborative Global efforts for success in the modern changing world (Sanam&Mubashara, 2016). National and international organizations like the World Wildlife Fund, Conservation International, the Wildlife Conservation Society, and the United Nations work to support global animal and habitat conservation efforts on many different fronts. They work with the government to establish and protect public lands, like national parks and wildlife refuges (Society). Wildlife conservation is an activity in which humans make conscious efforts to protect species and their habitats and it plays an important role in maintaining the ecological balance and contributing to human quality life (Keith, 2014). Forests originally covered 40 percent of Earths' terrestrial surface (Olson et al., 2001). But extensive deforestation over the past 300 years has reduced this area substantially (Keenan *et al.,* 2015). On the other hand, forestation is also common globally, and reflects both the passive regeneration of vegetation and the active restoration and planting of new forests (FAO, 2016). Around the globe forests play many important ecological roles. From helping to mitigate climate change; providing shelter for many species of plants and animals, these essential ecological powerhouses are irreplaceable and at risk (Lauren, 2017). Trade in wildlife, and their parts, is well-recognized for a few key species that occur globally. Scheffers, (2010) noted across tens of thousands of vertebrate species and found that one in every five species is affected by trade of some sort.

Discussions:

Main causes of extinction and endangerment of fauna

Extinction is the termination of a kind of fauna from any species. The movement of extinction is generally considered to be the death of the last individual of the species. Studies show that any species presumed extinct abruptly *reappears* after a period of apparent absence. More than 99 percent of all species that ever lived on Earth, amounting to over five billion species, are estimated to have died out (McKinney, 1997). More recently, habitat destruction and degradation have become the primary causes of extinction and endangerment of animals and plants. Invasive species, pollution, and diseases are also major threats, while overexploitation of animals continues (Daniel, 2013). It is estimated that there are currently around 8.7 million species of eukaryote globally and possibly many times more if microorganisms, like bacteria are included.Some main causes of extinction and endangerment are:

1) Loss of habitat & fragmentation

2) Wildlife trades at International and National concerns

3) Pets trade

4) Body parts trade

5) Introduction of invasive change

6) Pollution

7) Global warming / Climate

8) Poaching / Hunting

Loss of habitat and fragmentation

Habitat loss generally refers to the decrease in the spatial extent of natural habitat, including forest, whereas habitat fragmentation per se is the breaking apart of habitat after controlling for habitat loss. Humans contribute to habitat loss and fragmentation in a variety of ways. Worldwide growth in human population and demand for food, land-use, urban development, humans alter the landscape matrix in ways that affect density, diversity, and quality of wildlife (Radeloff *et al.,* 2005). Studies have shown that habitat fragmentation and loss affect wildlife in a variety of ways. The changes in habitat quality and composition occurs naturally, human manipulation of landscapes creates negative effects to wildlife. Urbanization results in habitat loss and habitat fragmentation concurrently, both influencing biodiversity and ecological processes (Zhifen *et al.,* 2016). Habitat loss and fragmentation usually occur concurrently and are interrelated, both influencing biodiversity and ecological processes and being widely concerned (Fahrig, 1997).

Biodiversity conservation forest designed as protective area

Globally, 14.6 percent of land is designated as a protected area. Nearly 16 percent of global forests fall within a legally established protected area and 46 percent of important sites for terrestrial biodiversity were protected in 2017 (Our World Data). In India the network of protected act currently covers 8.1 million ha, encompassing about 14 percent of the country's forest area and 4.61 percent of its land mass. The Indian Forest Act, 1927, The Wildlife Act, 1972, The National Forest Policy, 1988, The Environment Protection Act, 1986 and Biodiversity Act, 2002 provided legal basis for conservation and management. The biodiversity Act, 2002 and Biodiversity Rules, 2004 focus on conservation and sustainable use of components of biodiversity (Deeptirekha). India is one among the 17 megadiverse countries of the world. But many plants and animals are facing the threat of extinction. To protect the critically endangered and other threatened animal and plant species, the Government of India has adopted many steps, laws and policy initiatives (UPVAN).

Body part trade

Wildlife trade is big business, animals and products made from them sold around the globe, legally or illegally. Studies shown that it is a leading cause of the planet's accelerating biodiversity crisis and resultant ecosystem collapse. A recent study found that 958 species listed as at risk by the International Union for Conservation of Nature (IUCN) were in danger of extinction because they are being traded international (NRDC). Illegal wildlife trade has emerged as a form of Organized Transnational Crime that has threatened the existence of many wild species across the globe. India has a strong legal and policy framework to regulate and restrict wildlife trade. Trade in over 1800 species of wild animals, plants and their derivative are prohibited under the Wildlife (Protection) Act, 1972 (WWF).

Introduction of invasive species

The invasive species / alien species are nonnative species that significantly modifies or disrupts the ecosystems it colonizes. Such species may do all sorts of damage to an existing ecosystem, including changing habitats and starving native animals of food and resources. The introduction of invasive species, which often differ functionally from the components of the recipient community, generates ecological impacts that propagate along the food web (Belinda *et al.,* 2015). Invasive species threaten natural habitats worldwide, and active human management is required to prevent invasion, contain spread, or remediate ecosystems (Mark, 2014). Petr (2010) noted that invasive species are a major element of global change and are contributing to biodiversity loss, ecosystem degradation, and impairment of ecosystem services worldwide. The harmful effects of invasions are now widely recognized, and multiscale programs are in place in many parts of the world to reduce current and future impacts.

Poaching / Hunting problem

Poaching and hunting problem is one of the leading drivers of biodiversity loss. Globally noted that hunting has been one of the main threats to wildlife and driving many species to extinction. Birds are the most-traded group of species. Illegal hunting is a persistent problem in many protected areas throughout the world. Wildlife poaching has received substantial interest from criminologists in recent years. Wildlife poaching presents a significant threat to large-bodied animal species. It is one major driver of the population declines of key wildlife species such as tigers, elephants, and rhinos, which are crucial to the functioning of natural ecosystems as well as local and national economies (Montesh, 2013). Wildlife is often poorly managed; poaching is part of such a problem. In times of globalization, international demands can easily put huge pressures on endemic species (Ganesh *et al.,* 2020).

Other causes of extinction and endangerment of fauna

The biggest threats to our global species are human beings. World's population is increasing continuously by millions each year. All these peoples are using more and more resources, and leaving fewer resources for Earth's other species. Over 99 percent of all the species that lived on Earth amounting to over five billion species are estimated to be extinct. Beside poaching some other causes of species' extinction and endangerment are:

Pollution problem

Globally, the rate of extinction is occurring 1000 to 10000 times faster due to human activity. Air and water pollution poisoning the wildlife causes extinction and degradation of habitat. Pollution problems bring disruption of endocrine functioning, stress, diseases, lower reproductive rate and possible death. Research showed that the chemicals were entering the food chains and being stored in the fat of the animals' bodies (ypte). Scientists predict that more than 1 million species are on track for extinction in the coming decades. Climate change and pollution continue to rise as threats, with severe weather, changing ecosystems and rising temperatures responsible for 33 animal extinctions, while pollution is responsible for 37 extinctions to date, new data shows (Ecologist, 2019). Anthropogenic greenhouse gas emissions, which drive both climate change and ocean acidification, increasingly threaten the viability and resilience of natural ecosystems, and the human societies that depend upon them (Yadvinder *et al.,* 2020).

Diseases

Infectious diseases among animals are a strong force that can affect individual organisms, populations, communities, and ecosystems. The infectious diseases are caused by parasites and pathogens which can even kill its host. Research has shown that parasites and pathogens are a common and integral part of healthy ecosystems. Infectious disease, especially virulent infectious disease, is commonly regarded as a cause of fluctuation or decline in biological populations (Ross & Alex, 2012). Recent studies suggest that infectious diseases in wildlife populations are emerging at unusually high rates (Harvell *et al.,* 2002). Emerging infectious diseases (EIDs) are those caused by parasites and pathogens that have recently increased in incidence, occupied host species or geographic extent; have been newly discovered; or are caused by a newly evolved agent (Daszak *et al.,* 2000).

Global warming / Climate change

Climate change has typically led to extinctions and declines in the species. As species go extinct, they are taken out of the food chain. It affects the unbalancing species population in the ecosystem. Anthropogenic climate change is predicted to be a major cause of species extinctions in the next 100 years (Cahill *et al.,* 2013). Climate change poses a potential threat to the Earth's biodiversity. In comparison to threats by other human-induced environmental changes (Dale, 1997). Changes in climate influence the size of populations, which in turn affects the distribution and abundance of species, and ultimately ecosystem structure and function (Camille, 2010).

Role forests in conservation of wildlife

Worldwide, forests provide shelter to a wide range of animals. Forests play an important role in the carbon cycle by absorbing carbon dioxide from animals. They are essential for the conservation of the environment and ecological balance. Forests are the most diverse ecosystems on land, because they hold the vast majority of the world's terrestrial species. Timber, pulpwood, firewood, fodder, meat, cash crops, fish and medicinal plants from the forest provide livelihoods for hundreds of millions of people worldwide. Forest biodiversity benefits much of humanity as a whole through its role in the carbon, water, and nutrient cycles and through its links with food production, including seed dispersal and crop pollination (IISD). But studies have shown that forests and their biodiversity are under threatened conditions from deforestation and degradation processes, which still continue at alarming rates around the world.

In-situ and Ex-setu

Both are very much the same thing. Animals kept in captivity for a particular purpose. It is actually preferred as a wildlife centre to a zoo when in reality the only thing that has changed the name. ***In-situ*** conservation maintains the ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings. Biodiversity conservation aims to maintain the diversity of species, habitats and interrelationships in ecosystems including ecosystem services (Rosa *et al.,* 2020). It is important to define and understand processes involved in biodiversity conservation in order to implement the best conservation strategies. There are two major conservation strategies (*in-situ & ex-situ*) with various possible techniques to be adopted. The convention on Biological Diversity (CBD) identifies a set of objectives for biodiversity conservation and determines that in-situ conservation is essential to achieve these goals. This refers to the preservation of areas with considerable local biodiversity, known protected areas (Lopez *et al.,* 2017). The protected areas will be priority areas for conservation and sustainable development.

Ex-situ conservation will seek the protection, conservation, sustainable use and survival of wildlife species, in order to enhance opportunities for environmental education, scientific research and development, biotechnology development and commercialization of the components of biodiversity and their synthesized products. *Ex-situ* conservation should also serve as a supplementary tool to *in-situ* conservation, and as an opportunity for public awareness of wildlife species (Gollespie, 2020). In province biodiversity can be protected or conserved by adopting the two strategies that are in-situ and ex-situ conservation. The main aim of these both strategies are to recover and maintain the population of endangered species. In India about 4 percent of the total geographical area is used for *in situ* conservation. The following methods are presently used for *in situ* conservation methods.

Conclusion:

The human population has grown exponentially over the past 200 years, and it continues to rapidly grow which affects natural resources. This growth endangers the habitats and existence of wildlife around the world. Other threats to wildlife include the introduction of invasive species, trade, poaching, disease, climate change. Impacts of trade tend to have potential for long-term causes on certain lineages. Climate change issue disturbing different biodiversity, and one of the important factors causing extinction of species. Now, it's time to take initiatives for conservation of biodiversity through organizations, collaboratively develop an environmental education and awareness programme about natural resources conservation.

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ECONOMIC AND POLITICAL EMPOWERMENT OF WOMEN IN TRIBAL COMMUNITIES

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SCAN ME

Abstract:

This book chapter examines the economic and political empowerment of women in tribal communities, with a focus on the challenges they face and strategies for addressing them. Women in these communities face significant barriers to participation in economic and political activities, including limited access to education, training, credit, and representation in decision-making processes. Addressing these challenges requires sustained efforts and strategies that are sensitive to the local context and prioritize the needs and aspirations of the women involved. Successful initiatives include affirmative action policies, leadership development programs, and awareness-raising campaigns. Additionally, addressing social and cultural norms that reinforce gender inequality is a critical component of efforts to empower women in tribal communities. By promoting the economic and political empowerment of women in these communities, it is possible to build more equitable and just societies.

Introduction:

Tribal communities around the world have historically been marginalized and excluded from mainstream society. Within these communities, women face additional layers of discrimination and oppression, based on their gender, caste, and ethnicity. However, empowering women in these communities is essential for their overall development and well-being. This chapter explores the economic and political empowerment of women in tribal communities, the barriers they face, and the strategies and initiatives that can be implemented to overcome these barriers. Additionally, the chapter examines the role of social and cultural norms in limiting the participation of women in economic and political activities, and explores approaches to challenge and change these norms. Ultimately, this chapter highlights the importance of continued efforts to empower women in tribal communities, and offers recommendations for future research and policy initiatives.

Economic Empowerment of Women in Tribal Communities:

Economic empowerment is a critical aspect of the overall development and well-being of women in tribal communities. Women in these communities often face significant barriers to economic participation, including limited access to education, training, and credit. However, economic empowerment can enable women to become financially independent, improve their status within the household and community, and contribute to the economic growth of their communities.

The economic status of women in tribal communities varies depending on the context, but they generally face greater levels of poverty and economic insecurity than men in the same communities. Women in tribal communities are often engaged in subsistence agriculture and informal work, which is generally undervalued and not remunerated adequately. Moreover, they often lack access to education and training, which limits their ability to acquire marketable skills and access better-paying jobs.

Strategies for economic empowerment of women in tribal communities include education and skill development, entrepreneurship, and financial inclusion. Education and skill development can provide women with the knowledge and tools necessary to participate in the formal economy and access better-paying jobs. Entrepreneurship can provide women with the opportunity to start their own businesses and generate income, thereby becoming financially independent. Financial inclusion initiatives can provide women with access to credit and financial services, which can help them start and grow their businesses.

Successful initiatives for economic empowerment of women in tribal communities include the creation of women's self-help groups, which provide support, training, and access to credit and savings schemes. These groups have been successful in helping women start and grow small businesses, and have contributed to the economic development of their communities. Additionally, microfinance initiatives have been successful in providing women with access to credit and financial services, which can help them start and grow their businesses.

Overall, economic empowerment is critical for the overall development and well-being of women in tribal communities. Strategies for economic empowerment must be context-specific and take into account the unique challenges faced by women in these communities. Additionally, they must be developed in consultation with the communities themselves, and must prioritize the needs and aspirations of the women involved.

Political Empowerment of Women in Tribal Communities:

Political empowerment is another critical aspect of the overall development and well-being of women in tribal communities. Women in these communities often face significant barriers to political participation, including limited representation and opportunities for leadership. However, political empowerment can enable women to become active citizens, participate in decision-making processes, and advocate for their rights and interests.

The political status of women in tribal communities varies depending on the context, but they generally face greater levels of marginalization and exclusion than men in the same communities. Women often lack representation in local and national government bodies, and their voices are often not heard in decision-making processes. Additionally, cultural and social norms often limit their opportunities for leadership and political participation.

Strategies for political empowerment of women in tribal communities include affirmative action, leadership development, and awareness-raising campaigns. Affirmative action policies can provide women with greater representation in political bodies, and can ensure that their voices are heard in decision-making processes. Leadership development initiatives can provide women with the skills and confidence necessary to take on leadership roles and participate in political activities. Awareness-raising campaigns can help to challenge and change social and cultural norms that limit the political participation of women.

Successful initiatives for political empowerment of women in tribal communities include the reservation of seats for women in local and national government bodies. In India, for example, the Panchayati Raj system reserves one-third of all seats for women in local government bodies, which has resulted in greater representation and participation of women in decision-making processes. Additionally, women's leadership development programs have been successful in providing women with the skills and confidence necessary to participate in political activities and take on leadership roles.

Overall, political empowerment is critical for the overall development and well-being of women in tribal communities. Strategies for political empowerment must be developed in consultation with the communities themselves, and must prioritize the needs and aspirations of the women involved. Additionally, they must be sensitive to the cultural and social norms that shape the political participation of women in these communities.

Addressing Social and Cultural Norms to Empower Tribal Women:

Addressing social and cultural norms is a critical component of the economic and political empowerment of women in tribal communities. These norms often reinforce gender roles and stereotypes, and limit the opportunities and freedoms of women in these communities. Moreover, these norms are often deeply ingrained and difficult to change, requiring sustained efforts and strategies that are sensitive to the local context.

Social and cultural norms can limit the economic empowerment of women by restricting their access to education, training, and credit. For example, in some communities, it is believed that educating girls is a waste of resources since they will eventually marry and leave the community. Additionally, women may face restrictions on their mobility and interaction with men, which can limit their ability to participate in economic activities. To address these challenges, efforts to promote education and training for women must be coupled with community awareness campaigns that challenge gender stereotypes and emphasize the importance of investing in girls' education.

Social and cultural norms can also limit the political empowerment of women by reinforcing gender stereotypes and restricting women's participation in decision-making processes. For example, in some communities, it is believed that women are not suited for leadership roles and that their place is in the home. Additionally, women may face restrictions on their mobility and interaction with men, which can limit their ability to participate in political activities. To address these challenges, efforts to promote women's political participation must be coupled with community awareness campaigns that challenge gender stereotypes and emphasize the importance of women's voices in decision-making processes.

Successful initiatives for addressing social and cultural norms in tribal communities include community awareness campaigns, gender sensitization training, and the involvement of community leaders and elders. Community awareness campaigns can help to challenge and change social and cultural norms by providing information and education on issues related to gender and women's rights. Gender sensitization training can help to build the capacity of community members to identify and address gender-based discrimination and inequality. Additionally, involving community leaders and elders in initiatives for the empowerment of women can help to ensure that these efforts are sensitive to the local context and receive support from the broader community.

Overall, addressing social and cultural norms is critical for the economic and political empowerment of women in tribal communities. Strategies for addressing these norms must be developed in consultation with the communities themselves, and must prioritize the needs and aspirations of the women involved. Additionally, they must be sustained over the long-term and must be coupled with efforts to promote education, training, and leadership development for women.

Conclusion:

The economic and political empowerment of women in tribal communities is critical for their overall development and well-being. Women in these communities face significant barriers to participation in economic and political activities, including limited access to education, training, credit, and representation in decision-making processes.

To address these challenges, strategies must be developed that prioritize the needs and aspirations of the women involved and are sensitive to the local context. Efforts to promote education and training for women must be coupled with community awareness campaigns that challenge gender stereotypes and emphasize the importance of investing in girls' education. Additionally, efforts to promote women's political participation must be coupled with community awareness campaigns that challenge gender stereotypes and emphasize the importance of women's voices in decision-making processes.

Successful initiatives for the economic and political empowerment of women in tribal communities include affirmative action policies, leadership development programs, and awareness-raising campaigns. However, addressing social and cultural norms is a critical component of these efforts, as these norms often reinforce gender roles and stereotypes and limit the opportunities and freedoms of women in these communities.

Overall, the economic and political empowerment of women in tribal communities is a complex and multifaceted issue that requires sustained efforts and strategies that are sensitive to the local context. By prioritizing the needs and aspirations of the women involved and addressing social and cultural norms that reinforce gender inequality, it is possible to promote the empowerment of women and build more equitable and just societies.

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THE LEGAL INFORMATION SYSTEM IN INDIA: AN ANALYSIS

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Introduction:

Law is a body of rules and regulations that the government imposes to ensure social fairness and wellbeing. The social, political, economic, and cultural aspects of society are reflected in India's legal system. Through India's legal history, the common law system developed its foundations. The Constitution, legislation, common law, and court rulings from higher courts are the primary sources of law in India. While laws approved by state legislatures often only apply within the borders of the states involved, laws passed by parliament may apply throughout all or part of India.

History of Indian legal system

1. Judicial system during the Ancient Hindu Period

The Indian legal and judicial systems were influenced by the Vedic, Bronze, and Indus Valley civilizations. Classical Hindu law was the country of India's first recognised source of law. "Dharma" refers to moral and spiritual obligations. Veda, Smriti, and Aâchâra are the primary sources of Hindu law, often known as "Dharma".

The four Vedas are the Rigveda, Yajurveda, Samaveda, and Atharvaveda. The Vedas contained songs, admonitions, traditions, and religious duties.

Smritis outlined the duties, customs, and religious precepts that each person in society is required to follow. Dharmashastra, a Smriti and one of the earliest legal writings published in Sanskrit, contains details about legal principles, the king's obligations, the rules for proof, and eyewitnesses. The king was in charge and received advice from his ministers.

Under Hindu law, the legal process was called Vyavahra. The plaint, the reply, the trial, and the decision were the stages of the legal process. Some of the well-known Smritis from Dharmashastra texts that were utilised as precedents include Manusmriti (200 BC - 200 CE), Yajnavalkya Smriti (200 - 500 CE), Naradasmriti (100 BC - 400 CE), Vishnu Smriti (700 - 1000 CE), Brhaspatismriti (200 - 400 CE), and Katyayanasmriti (300 - 600 CE). The traditional code known as "Manusmriti" connects a person to particular duties and commitments. Throughout the dynastic era, the court system's foundation was built to address a variety of civil and criminal challenges.

The "achâra" was the accepted standard in that community. Where the Vedas and Smritis were silent, Achâra was utilised.

2. Law and judicial system during the Mughal Empire

Mahakuma-e Adalat, who served as a judge under the Mughal Empire, was famous for delivering justice to the populace. The most important sources of Muslim law were the Quran, Sunna and Hadis, Ijma, and Qiyas. The rules controlling the judicial process were the Fiqh-e-Firoz Shahi and the Fatwa-i-Alamgiri. The judicial system's hierarchy was divided into:

At capital level

The emperor served as the head of the capital's highest court, the Emperor's Court. It had a Chief Court, a Chief Revenue Court, and subordinate courts. The Chief Court handled the initial, appellate, and criminal proceedings, while the Chief Revenue Court handled cases involving revenue-related issues. There are two different sorts of chief courts: the Qazi-e-Askar Court and the Delhi Qazi Court. Local civil and criminal proceedings were governed by the Court of Qazi of Delhi, and the capital's military cases were governed by the Court of Qazi-e-Askar.

At state level

The Chief Appellate Court and Chief Revenue Court hear cases at the state level in the Governor's Court and Bench, or Adalat-e-Nazim. The state's civil and criminal cases were handled by the Chief Appellate Court, and its revenue affairs were handled by the Chief Revenue Court.

At district level

Chief Civil and Criminal Court was in charge of overseeing and managing district-level operations. District Qazi Court was given control over civil and criminal matters, Faujdari Adalat was given control over state security, Kotwali was given control over petty criminal crimes, and Amalguzari Kachari was given control over tax cases.

In the village

The panchayat handled both civil and criminal cases at the village level. Sarpanch served as the village panchayat's president, and the other members were chosen by the residents.

Indian legal system during the British reign

By establishing Mayor's Courts at Madras, Bombay, and Calcutta that were constituted in accordance with the Charter of 1726 and controlled by the common law, the East India Company established the legal system in India throughout the British era. Certain restrictions were found during the Mayor's Court's regulation. It was vague about the kind of laws it would govern, and while English law served as the primary source of law in some cases, it overlooked personal and customary rules. Mayor courts were reinstated and placed under the control of the Governor and the Council by the Charter of 1753. The highest court of appeals was the Council of Privy.

Introduction to the Government of India Act, 1935

The United Kingdom Parliament passed the Government of India Act in 1935. The terms "unitary" and "federal" were used to describe the attributes of the government. To prevent any conflicts, powers were divided between the centre and the states. The Federal Court was formed in 1937 and was given appellate, original, and advisory jurisdictions. While the Advisory Jurisdiction was expanded to include the ability for the Federal Court to advise the Governor-General on matters of public opinion, the Appellate Jurisdiction only applied to civil and criminal proceedings. Over the course of its 12-year existence, the Federal Court heard about 151 cases. The Supreme Court of India, which now serves as India's highest court, replaced the Federal Court.

Types of laws in the Indian legal system

The Constitution of India, 1950 is the foremost law that deals with the framework of the codes, procedures, fundamental rights and duties of citizens and powers, and duties of government.

Criminal Law

Crimes against the rule of law or other wrongdoings against the public are covered by criminal law. The Indian Penal Code, 1860, and the Criminal Procedure Code, 1973, both govern criminal law. The Criminal method Code of 1973 outlines an extensive method and the punishments of the crimes, whereas the Indian Penal Code of 1860 defines the crime, its nature, and its consequences.

Assault, theft, rape, and murder are all considered criminal crimes under the law.

Civil Law

Civil law is used to resolve conflicts between individuals or institutions. Through the filing of a civil lawsuit, civil courts hold parties accountable when their rights and obligations are violated. Instead of emphasising punishment, civil law generally focuses on conflict resolution. The Code of Civil Procedure, 1908, governs the act of procedure and the execution of civil law. Tort law, family law, property law, and contract law are other subcategories of civil law.

Defamation, breach of contract, and a disagreement between a landlord and a tenant are some examples of civil law.

Common Law

Common law is established by case law or judicial precedent. According to Article 141 of the Indian Constitution, a law issued by the Supreme Court would be binding on all courts and within the boundaries of India. Natural justice, also referred to as "Jus Natural," is a common law philosophy that includes statutory measures for justice. The principles of natural justice are nemo judex in causa sua (against Prejudice), audi alteram partem (fair Hearing), and reasoned conclusion. The common law is based on the "Stare Decisis" idea. Its direct translation from Latin is "to stand by that which is decided." According to the Stare Decisis theory, when deciding a case with comparable circumstances, courts must apply the same standard of review or conclusion made by earlier rulings. A common law can be overruled or changed by a ruling, whereas a statute cannot be overruled or changed.

Statutory Law

Any written law that has been passed by a legislative body to control how its citizens behave is referred to as statutory legislation. Laws are enacted by the federal government through the Parliament, the state through the Vidhan Sabha, and the local government through local governments. When a bill is introduced in the legislature, it needs the president's approval to become an act that can be approved by the members of both chambers. His assent is subject to the veto of the Indian President.

Structure of the Indian Judicial System

The judiciary system of India regulates the interpretation of the acts and codes, and dispute resolution, and promotes fairness among the citizens of the land. In the hierarchy of courts, the Supreme Court is at the top, followed by the High Courts and district courts.

Supreme Court

The Supreme Court is the highest court in the legal system. It was founded on January 26, 1950. Chapter IV of Part V of the Indian Constitution contains the provisions establishing the Supreme Court of India. The formation of the Supreme Court Rules, 1966 is enshrined in Article 145 of the Indian Constitution. The three categories of cases that fall under the Supreme Court's purview are original (Article 131), appellate (Articles 133 and 134), and advisory (Article 143).

The highest official appointed in accordance with Article 126 is the Chief Justice of India. The Chief Justice of India was one of the seven members of the Supreme Court's main bench.

Due to an increase in the number of cases and workload, the number is now 34, including the Chief Justice of India. It is against the law for a Supreme Court justice to preside over cases in any other court of law.

An individual may file a writ petition under Article 32 to request constitutional remedies before the Supreme Court. According to Article 141 of the Indian Constitution, a law issued by the Supreme Court would be binding on all courts and within the boundaries of India.

High court

The High Court is each state's and union territory's highest court of appeals. There must be a High Court in every state, according to Article 214 of the Indian Constitution. The High Court is authorised to hear appeals and to exercise original and supervisory jurisdiction. However, a High Court's supervisory authority is constrained by Article 227 of the Indian Constitution. Articles 214 to 231 cover the Constitution and a High Court's authority. Each state and union territory in India has its own High Court, making a total of twenty-five in the country. a single High Court that serves six states. Calcutta High Court, which was founded on 2 July 1862, is the nation's oldest high court.

District courts

District Courts regulate matters of justice in a particular area or district chaired by a District judge. There are 672 district courts all over India. The appellate jurisdiction of the High court governs the ruling of the district court.

The district courts are divided into the Court of District Judge and the Court of Sessions Judge.

Court of District Judge

A Court of District judge deals with cases of civil nature. It vests and exercises its powers from the Code of Civil Procedure, 1908. It has original and appellate jurisdiction. The district courts have appellate jurisdiction over subordinate courts. Section 9 states that the courts have the power to try any case unless barred from doing it. Section 51 to 54 of the Code of Civil Procedure, 1908 deals with procedure in execution. The civil district courts are categorised in ascending order, Junior Civil Judge, Principal Junior Civil Judge Court, Senior Civil Judge Court. The appeal is filed under territorial jurisdiction, pecuniary jurisdiction, and Appellate Jurisdiction. Additional District Judge or Assistant District Judge is appointed depending upon the case and workload and has the same powers as a District Court Judge.

Under the pecuniary jurisdiction, a civil judge can try suits of valuation not more than Rupees two crore.

Under territorial jurisdiction, Section 16 to 20 of the Code of Civil Procedure, 1908 deals with the territorial jurisdiction of courts. Cases are decided based on the nature of the property and within the local limits of the jurisdiction.

Munsiff Courts

Munsiff courts are the lowest rank of courts in a district. It is usually under the control of the District Court of that region. The pecuniary and territorial jurisdiction limits are defined by the State Government.

Court of Session

The highest authority in the district for criminal affairs is a Court of Sessions judge, who handles with criminal cases. It receives and uses its authority from the 1973 Code of Criminal Procedure. The trial process by a Public Prosecutor before a Court of Session is covered in Sections 225 to 237. The punishments handed down by the Chief Judicial Magistrate, the Court of a Magistrate of the First Class, and the Court of a Magistrate of the Second Class are covered by Section 29.

The Session Court, which is classified as the Chief Judicial Magistrate's court, hears cases that carry sentences of imprisonment exceeding seven years but not the death penalty. An Additional Sessions Judge or Assistant Sessions Judge is appointed depending upon the case and workload and has the same powers as a Session Court Judge. An Assistant Session Judge cannot give imprisonment of more than 10 years as per Section 28(3). The Additional Session judge can exercise the powers of a Sessions Judge vested into him by any general or special order of the Sessions Judge according to Section 400.

A Session Court is not permitted to inflict the death penalty without first consulting the High Court, according to Section 366(1) of the Code of Criminal Procedure, 1973.

Metropolitan courts are constituted in metropolitan areas where there are 10 lakh or more people in collaboration with the High Court, according to Section 16 of the Constitution. According to Section 29, the Chief Metropolitan Magistrate has the same authority as the Chief Judicial Magistrate and the Metropolitan Magistrate has the same authority as the First Class Magistrate Court.

The Indian Constitution's format

The Indian Constitution is quasi-federal in nature and combines elements of both unitary and federal constitutions.

The federal features of the Indian Constitution are:

Division of Powers

The federal system of the Indian Constitution decentralises powers between the state and the centre. Article 246 under the Seventh Schedule of the Indian Constitution lays down three lists describing jurisdiction at each level:

Union List: The power to make laws is vested in the Parliament of India. It comprises of legislation pertaining to important matters for the country, such as defence, diplomacy, the military, and the navy.

State List: These laws may be passed by the state legislature. It comprises of regulations pertaining to transportation, agriculture, public health, cleanliness, and order.

Concurrent List: Under this list, laws may be passed by both the state government and the Indian government collectively. It consists of laws governing criminal proceedings, labour and industrial disputes, education, and trade unions.

The repugnancy doctrine is outlined in Article 254. If there is a conflict between a state's Concurrent List law and a law of Parliament, the laws of Parliament will take precedence.

Supremacy of the Indian Constitution

Regarding the Indian Constitution, laws ought to be made. The High Court and Supreme Court have the authority to evaluate laws and declare them unconstitutional if there is any contradiction with the Indian Constitution.

The Hon'ble Supreme Court established the concept of basic structure and ruled that the Indian Constitution's basic structure cannot be altered in the landmark case of Kesavananda Bharati v. State of Kerala (1973).

Unbiased judicial system

In order to guarantee the supremacy of the Indian Constitution, the Supreme Court of India was founded as the head of the independent judiciary. It sets the parameters for issues including the separation of federal and state powers, basic rights and obligations, and guiding principles for public policy.

Written Constitution

Constitution as written

The rest of the acts are supported by the Indian Constitution. It has a Preamble, 470 Articles split into 25 Parts, 12 Schedules, and is the longest written constitution.

Rigid Constitution

The provisions outlined in the Indian Constitution are strict. A special majority in the Parliament and the consent of at least half of the state legislatures are required in order to change the provisions.

Governmental Duality

By establishing a Central and State Government, the Indian Constitution created a dual government polity. While state governments concentrate on controlling local and regional issues, the Union government regulates the protection of national issues.

Bicameralism

Bicameralism was established by the Indian Constitution. The Lok Sabha (House of the People) and Rajya Sabha (Council of States) are the two chambers of the legislative body. While Rajya Sabha, or the upper house, is a permanent body that cannot be dissolved and is elected by the legislative members of the state, Lok Sabha, or the lower house, is made up of representatives of people elected by a universal adult franchise.

The Indian Constitution's unifying elements are:

Individual citizenship

Regardless matter where they live, all Indians have a same citizenship. This helped to bring the Indian people together as a whole. Part II of the Indian Constitution deals with citizenship in Articles 5 to 11.

Strong centre

The Central Government has authority over the state governments and also possesses residual authority. The laws of the Central Government are binding on the state government.

Individual Constitution

The Indian Constitution is a unified document that governs the entire country. It is a set of responsibilities and authority that governs all of India, including the central and state governments, as well as the fundamental rights and responsibilities of all people.

Selection of a governor

According to Section 155, the governor of India is chosen with the President's approval. According to Section 156, the governor must notify the President of his resignation.

Emergency powers

Part XVIII, which includes Articles 352 to 360, grants the President the authority to declare an emergency. When there is a threat to a state's security, sovereignty, unanimity, or integrity, the term "emergency" is used to describe the situation.

Conclusion:

India's legal system has seen numerous changes over the years. The Indian Constitution, which has created the operation of the entire justice system in India, is the utmost pillar and foundation. The country's quick development necessitates substantial judicial reforms as well. The Indian government is making an effort to clear the obstacles and backlog. However, additional development still has to be made.

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Advances in Science and Humanities Research

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