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Editorial Note

SAJMR is an open-access, peer-reviewed journal committed to the propagation of theory, research, and practice in the field of management. Reflecting on the SAJMR's journey from 2009, this editorial note acknowledges the valuable contributions of all the researchers who have contributed to date. The current issue is a blend of research reports showcasing: a review of industrial labor and the COVID-19 pandemic, the environmental and economic impact of organic farming, the impact of personal stressors on advocate's behavior, a crisis among employee and employer job satisfaction, the threat of female foeticide on women's health and society, cluster analysis of COVID-19 growth curve, COVID-19 vaccine administration analysis, a review of rural development schemes and programs in India, an overview of endangered life of tribes due to development and resettlement, and study of passenger satisfaction towards public road transport. A final tip of the hat to all the authors who have submitted their research to the current issue of SAJMAR for publication. A special thanks to SAJMR's loyal readers.

Dr. R. S. Kamath
Editor

Industrial Labour And Covid-19 Pandemic: A Review Of Recent Studies

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Abstract : The Covid-19 pandemic disrupted the world economy. The world came to a stand still and the economic slowdown, which started a in the previous years, picked-up its speed during this period in India. The migrant workforce was identified as the most vulnerable section to be affected by this unexpected disruption. Number of researchers attempted to document the effects of the pandemic on different groups of industrial workers. The effort and the effectiveness of the governments to deal with this unprecedented situation is also documented in the studies by various researchers in journals, reports and press reports. In the present article we attempt to review and understand the nature and content of the research studies published on this theme. Based on the review observations are made regarding the new learning about the effects of the pandemic especially on the migrant labour and the new policies to support this vulnerable class of workers.

Keywords: Pandemic, Migrant workers, Industrial Labour, Recession

1.0 INTRODUCTION

COVID-19 has overpowered the ability to earn a living for many people, rendering the world economy to a standstill, and bringing a myriad of social and economic changes. The situation in India is no different. And as we know, soon after the incidence of COVID-19 cases started picking up, a most stringent lockdown was imposed on the country on 24th March 2020, at 8 p.m, at a notice of 4 hours. The most significant fallout of this measure was the disappearance of millions of jobs, and the particularly heart-wrenching aspect of it was the distress of migrant workers; by end of March 2020, the country and the world at large was witnessing the brutal and grotesque spectacle of precarity on India's roads,

railway tracks, et cetera as hundreds of thousands of workers were forced to trudge along to get back to their distant homes.

During the lockdown, unemployment increased from 8% to 24.3% between March and May. According to the Ministry of Statistics and Programme Implementation, India's Industrial Production fell by 16.7% year-on-year in March 2020. It is the steepest decline since 1994. A plausible reason could be that the lockdown has closed many businesses either temporarily or permanently eventually exposing many workers to job loss.

Companies categorically need to revamp their leave structures and employee benefit structures to incorporate disruptions

caused by pandemics; however, governments must ensure that informal labourers that are not protected by these measures are not adversely affected by the pandemic's damage to the economy. Possibly, these were the most dramatic spectacles of the vulnerability and precarity of workers (and their families), anywhere in the world, who had lost not only their jobs but also their hearth and temporary homes in their destination areas, with no hope of support and succour from their employers, the government or any other quarter; many died on the way, of hunger, exhaustion and accidents. These were ultimate images of livelihood and employment precarity in India since Independence, reminiscent, in many ways, of the trauma of forced mobility during the partition in 1947; 'citizens' had been turned into 'outsiders'. It seemed as if, at least for a few weeks, the government at the centre was in denial mode, or in a state of paralysis, with respect to this massive mass of humanity. With this overwhelming proportion of the workforce already facing issues of lack of job security and employment benefits, governments need to include pandemic-

pursue 'with unrelenting vigor its [ILO] constitutional mandate for social justice by further developing its human centred approach to the future of work'. It called for putting workers' rights and the needs, aspirations and rights of all people at the heart of economic, social and environmental policies. The international community and ILO's constituents have engaged in a collective endeavour to tackle the devastating human impact of the pandemic, but more is needed.

iii) Aditi Rao (2020) observed that, Companies categorically need to revamp their leave structures and employee benefit structures to incorporate disruptions caused by pandemics; however, governments must ensure that informal labourers that are not protected by these

related clauses into social protection schemes.

2.0 Review of literature

i) Rosa Abraham and Amit Basole (2021) in their report noted that the first wave and its associated containment measures caused large-scale job losses, a sharp rise in inequality and poverty, and an increase in indebtedness and hunger. For particularly vulnerable groups such as migrant workers and the homeless, it was nothing short of a humanitarian disaster. Their report, State of Working India 2021 – One year of Covid-19, documents the experience of households and workers in the last year, beginning with the aftermath of the national lockdown of 2020. The lockdown increased inequality dramatically because incomes were wiped out almost completely at the bottom of the distribution.

ii) Dagmar Walter(2020) stated that, the COVID-19 pandemic has pushed the world into an unprecedented crisis and uncertainty, calling to expedite the implementation of the Centenary Declaration. It called upon constituents to measures are not adversely affected by the pandemic's damage to the economy. With this overwhelming proportion of the workforce already facing issues of lack of job security and employment benefits, governments need to include pandemic-related clauses into social protection schemes. These trying times have catapulted us into a here-to-fore distant digital age, where companies and governments must adopt pandemic related social security measures as part of contracts, leave structures, and human resource management.

iv) Vinay Vaish , Sulekha Kaul and Tushar Shah (2020) in their report state that the migrant workers are required to be paid wages without any deduction. In light of the nationwide lockdown implemented

for the containment of spread of COVID-19 and to mitigate the economic hardship of the migrant workers, the Ministry of Home Affairs vide its Order dated 29th March 2020 (*supra*) directed all employers in the industry or in the shops and commercial establishments to pay wages to their workers, on the due date, without any deduction, for the period their establishments are under closure during lock down. Further the report says, the employees working in establishments where the nature of work is such that it cannot be performed from home, are required to be paid salary for the duration of lockdown. The Ministry of Labour and Employment, Government of India through a formal communication dated 20th March 2020 (*supra*) clearly specified that if a place of employment is made non-operational due to COVID-19, the employees of such unit will be deemed to be on duty.

v) **Praveen Jha, Manish Kumar(2021)** in this research article state that labour in India, in the context of the COVID-19 pandemic, has been trapped in an unprecedented crisis, in living memory, is widely acknowledged. The employment and livelihoods of the overwhelming majority of workers have taken huge hits, and a massive uncertainly continues to loom over their immediate foreseeable future. This article focuses on how the world of work in India has been impacted by the pandemic, and it seeks to investigate the ongoing challenges.

vi) **Debdulal Saha & Anamitra Roy Choudhary(2021)** in this article have observed that in the absence of a holistic approach, both demand and supply sides of the labour market were swept away, exposing hidden vulnerabilities of a large section of urban workers who did not have the resources to withstand even three weeks of lockdown, thereby leading to catastrophic consequences. Despite the fact that deep fragility of Indian society

was exposed due to unplanned lockdown, it is imperative to focus sharply on the consequences of 'prioritizing lives over livelihoods' approach. Now, it should be immediately clear that the impact on livelihoods and ability to cope with it vastly differ across various participants given the hierarchical nature and structural inequalities that characterize the Indian labour market. On the other hand, they have given data from quarterly Periodic Labour Force Survey (PLFS) shows acute crisis in urban job market. Within a period of just three months, between January–March 2020 and April–June 2020, Labour Force Participation Rate (LFPR) of persons aged 15 years and above declined from 48.1% to 45.9%.

vii) **Radhicka Kapoor(2020)** in this paper attempts to understand the effect of the COVID-19 shock on the labour market in India by examining the vulnerabilities of the workforce using data from the Periodic Labor Force Survey (2018-19). With simply 24 % of the workforce engaged in regular wage salaried jobs offering a steady flow of income and a mere 2.2% in regular salaried jobs with a written job contract for a period of more than three years and access to all social security benefits, a disproportionately large share of the workforce is likely to face job and income losses as a consequence of the dual shock of the pandemic and lockdown. Further, they expect to see the widening disparity in the labour market between the relatively less educated workers who predominantly work in informal work arrangements in sectors such as agriculture, manufacturing, construction, trade& hotels which have been most vulnerable to the first wave effects of the pandemic and lockdown, on the one hand, and the small proportion of better educated who have regular formal jobs in sectors that are more amenable to remote work. While direct income support is the principal means of providing immediate support to the vulnerable and displaced,

there is also a need to provide wage support to enterprises to prevent further job losses. Given that the COVID-19 crisis comes on the back of pre-existing high unemployment and underemployment, there is a need to put in place a clear and comprehensive plan of productive employment generation. Creating well paying good jobs is not just an end in itself but is also a means of boosting aggregate demand and enabling economic recovery. The strengthening and expansion of employment guarantee programmes and adoption of an industrial policy which focuses on construction and labour intensive manufacturing are important elements of such a strategy. They explained that there is a need to extend social security to informal workers to make labour markets more secure.

viii) International Labour Organization (2020) in this report observed that, India even before the Covid-19 crisis, India had been experiencing slower economic growth and rising unemployment – problems that were dramatically worsened by the pandemic and the ensuing lockdown. The number of workers vulnerable to the lockdown could reach 364 million or more, including those in casual work, self-employment and unprotected regular jobs (lacking social protection coverage). These workers could face cuts in working hours, layoffs, furloughs and reductions in incomes, and for some, this could continue beyond the lockdown. Building on the stimulus packages and other policy responses, economic recovery will require a strategy that restores jobs and supports incomes of both enterprises and workers – re-establishing supply lines and building back demand, while protecting the health, rights and incomes of workers and their families, especially for migrant workers and those in the informal economy. The report shows that, prior to the COVID-19 crisis, the Indian economy had entered a period of slower growth.

According to the IMF, over the period 2015-2019 growth fell from 8.0 to 4.0 percent.² By 2018, the unemployment rate exceeded 6 per cent, while from 2012 to 2018, the youth unemployment rate more than doubled from 10 to 23 per cent. ³ India faces longer-term labour market challenge, including slow and uncertain structural transformation. In 2017-18, 85 per cent of workers were in the informal sector and a further 5 per cent were employed in the formal sector but under informal conditions in that they lacked social protection or other employment-related benefits. Further they explained that there are also many gender disparities: women are less likely than men to participate in the labour force and young women have a higher unemployment rate than young men.

ix) Nilim Baruah, Jonathan Chaloff, Philippe Hervé Book, Shabari Nair (2021) in this joint publication of the ADBI, OECD, and ILO focuss on trends and the future of labour migration in light of the disruptions and developments related to the COVID-19 pandemic and provides useful policy guidance and statistical reference to practitioners, authorities, and policy makers. This edition, gives a report on labor migration in Asia, gives detailed report on a world where mobility has been sharply constrained. Trends in labor migration are usually defined mainly by the economic conditions and policy orientation in destination countries. This was the case in 2019, where labor migration in Asia continued to respond to labor demand in destination countries and policy developments. However, in 2020, the usual drivers of migration were disrupted by the global pandemic caused by the novel coronavirus disease, COVID-19. The pandemic influenced most migration movements and corridors in the world, driving down movements. In Asia, migration corridors which are normally very busy, suddenly closed for several

months. Origin and destination countries applied strict entry and/or exit rules, to control the pandemic within their borders. The challenge for any portrait of labor migration trends in Asia in 2020 is to work with limited statistical information available. This chapter begins with an overview of the impact of the COVID-19 pandemic and the latest data available on migration trends within and from Asia during 2020, as well as the impact on employment conditions and the health situation of migrant workers

x) World Health Organization (WHO,2021) mentions that, all workers should be protected from acquiring COVID-19 because of their work. The prevention of COVID-19 in work settings should be combined with measures for protecting physical and mental health, safety and wellbeing of workers from other occupational hazards in the operation, closures and reopening of workplaces. This joint WHO/ILO policy brief provides a summary of the evidence for transmission of COVID-19 in general workplaces and an overview of WHO and ILO recommendations for prevention and mitigation of COVID-19 and for protecting health and safety at work in the context of the pandemic.

The document is intended for public health and labour authorities, workers, businesses, employers & their representatives at the national, local and workplace levels to facilitate the implementation of public health and social measures for COVID-19 while maintaining full and productive employment and decent work during the pandemic.

xi) Mrityunjay Bose(2022) in this article mentions that last two years of the Covid-19 pandemic, and the ensuing lockdowns, deeply affected the education and overall well-being of children in rural, as well as urban, areas of Maharashtra. Further they said the number of children who started

working as petty laborers or in the agriculture sector is said to have risen since 2020.

xii) Ministry of Labour & Employment (2021) reiterated India's commitment towards making all possible efforts to counter the impact of the pandemic, and emerge stronger. The virtual Non-Aligned Movement Labour Ministers Meeting under 109th Session of the ILC mentions that, the world has witnessed loss of lives and livelihood, slowdown of economies, adverse impact on the entire sections of the society and especially, the weaker ones more unsafe. There is need to ensure better support to the health-care systems, social protection and employment generation. The Governments are required to deal with the pandemic and provide an effective response at policy levels, to balance business continuity, income security and above everything, well-being of all, the report added.

xiii) PressTrust of India (2021) in the article added that, imposition of stricter lockdown in Maharashtra will help slow the transmission of corona virus but it will have a deep impact on the state's economy. The Maharashtra government initially announced a 15-day statewide curfew amid the spike in coronavirus cases in the state. The curfew exempted essential services. Industry body FICCI said it has interactions with the Maharashtra government and the chamber has shared inputs from its members both on policy and operational issues. It is said, that the closure of retail would impact the demand side, she said expressing hope that the lockdown should not be extended. Industry body Assocham also worked with the Maharashtra government to mitigate the economic impact of its 15-day curfew, and urged all states to reach out to the most vulnerable sections of the industry, particularly in the informal sectors, with the best possible relief.

xiv) Alok Deshpande(2022) observes that the economy of Maharashtra that suffered from pandemic-induced lockdowns has taken a big jump and is expected to grow at a rate of 12.1% in 2021-22. The Indian economy is also expected to grow by 8.9 % during the same period. During 2021-22, the agriculture & allied activities, industry and services sectors are expected to grow by 4.4%, 11.9% and 13.5% respectively. The manufacturing and the construction sectors which were hit the hardest in the previous fiscal are expected to grow at 9.5% and 17.5% respectively, due to which industry sector's growth is expected to be 11.9%. Subsequent lifting of curbs and beginning of businesses in trade, repairs, hotels & restaurants and transport sectors, has led to the highest growth in services sector with 13.5%, the report has said.

xv) JoshyJasline and John Romate (2020) in the article state that, the migrants were found to be one of the most vulnerable groups in this lockdown, as their very livelihood came to a complete standstill. This review-paper aims to investigate in detail the migrants went through in India during the lockdown and the socio-psychological impact of migration.

3.0 General Observations:

i) Due to Covid-19, pandemic, there are concerns on both supply and demand side. On the supply side, many companies operating were selling their products all over the country and extended disruption in their operation has created a negative impact on their customers.

ii) We can find a strong impact of the national lockdown on India's electricity consumption. It dropped on average 28.5 percent in the week after the implementation of the lockdown and was on average still 25.8 percent below normal throughout April. When some restrictions

were eased in May, electricity consumption recovered, but it remained 14 percent below normal levels.

iii) In the post-independence period, India's national income has declined only four times before 2020 – in 1958, 1966, 1973 and 1980 – with the largest drop being in 1980 (5.2%). This means that 2020-21 is the worst year in terms of economic contraction in the country's history, and much worse than the overall contraction in the world.

iv) During India's first stringent national lockdown between April and May 2020, individual income dropped by approximately 40%. The bottom decile of households lost three months' worth of income.

v) Per capita consumption spending dropped by more than GDP, and did not return to pre-lockdown levels during periods of reduced social distancing. Average per capita consumption spending continued to be over 20% lower after the first lockdown (in August 2020 compared with August 2019), and remained 15% lower year-on-year by the end of 2020.

vi) The rural poverty increased by 9.3 percentage points and urban poverty by over 11.7 percentage year-on-year from December 2019 to December 2020. Earlier months of the CPHS show that rural poverty increased by 14.2 percentage points and urban poverty by 18.1 percentage points. Yet the actual increase in poverty due to Covid-19 is likely to be higher than what the CPHS data suggest.

vii) The pandemic has brought severe economic hardship, especially to young individuals who are over-represented in informal work. India has a large share of young people in its workforce and the pandemic has put them at heightened risk of long-term unemployment. This has negative impacts on lifelong earnings and employment prospects.

viii) The urban workers aged 18-40, during the first lockdown quarter, finding that a majority of them who had work before the pandemic were left with no work or no pay. After the first lockdown in April to June 2020, 20% of those were out of work, another 9% were employed but had zero hours of work and 81% had no work or pay at all.

ix) The world of work has been profoundly affected by the global virus pandemic. In addition to the threat to public health, the economic and social disruption threatens the long-term livelihoods and wellbeing of millions.

x) The government exempted agriculture sector from the COVID-19 lockdown. Various measures regarding transport and distribution of agriculture inputs, transport and sale of produce, online renewal of licenses, coordination among the state departments, use of modern technology benefited in giving support to agriculture and allied activities sector during the lockdown.

xi) The manufacturing and construction sectors were hit the hardest with negative growth of 11.8 and 14.6 per cent respectively, due to which the industry sector's growth is expected to be a negative 11.3 per cent.

xii) Due to impact of the pandemic situation on trade, repair, hotels and restaurants, and transport sectors, the services sector showed a negative growth of nine per cent.

xiii) It is stated that 32 (10)% of non-farm workers in rural (urban) areas are vulnerable and face higher risk of job loss during a lockdown.

xiv) The first channel of impact is through direct job loss on account of reduced aggregate demand in the economy and reduction or closure of production

activities. The economic downturn leads to longer durations of unemployment. Falling revenues and rising costs of firms leads to job loss for workers

xv) Unlike regular times, when a business fails during recession, many firms simultaneously lose demand, making it difficult for former employees to be rehired.

xvi) Manufacturing and construction sectors are more cyclical and most affected during the recession, whereas services and government sector remain less exposed to cyclical fluctuations, the skills and jobs that would be affected by the slowdown and crisis. Recession or slowdown may lead to huge churning in the labour market in the favour of highly skilled workers and non-routine jobs.

4.0 Summary:

Covid-19 lead to the first increase in global poverty in the 21st century. A large share of this is from India. Low skilled workers, who typically lost their jobs during the lockdown, are particularly vulnerable to falling back into the poverty. Estimates suggest that close to ten million people returned from their workplace to their village during or just after the lockdown. Due to any crisis, labour markets across nations experience direct, indirect and long-term consequences . Following the global financial crisis in 2008, labour markets in advanced countries are yet to recover fully. However, financial crisis did not hit MICs as adversely as developed nations. COVID-19 crisis has hit labour markets of low- and middle-income countries harder than advanced countries. This created inequalities in the labour market with long-term effects. This is mainly because labour markets in MICs, including India, have a large number of workers in the informal sector falling outside the purview of law and having no access to safety nets.

Women and youth are worst affected. After the pandemic, countries across the Global South need to rethink development strategies to build economic resilience and automatic stabilizers, create strong institutions, provide regulatory and budgetary support, formulate comprehensive employment policies to safeguard workers and create more sustainable employment opportunities.

REFERENCES:

Rosa Abraham and Amit Basole(2021) Here's What We Know About COVID's Impact on India's Workers – and What We Can Do About it

Dagmar Walter(2020): Implications of Covid-19 for Labour and Employment in India, THE INDIAN JOURNAL OF LABOUR ECONOMICS

Aditi Rato(2020), Effects of Covid-19 on Maharashtra and India’s business and labour, Observer Research Foundation (ORF)

Vinay Vaish , Sulekha Kaul and Tushar Shah, (2020): Impact Of COVID-19 On Labor And Workforce

Praveen Jha, Manish Kumar,(2021), Labour in India and the COVID-19 Pandemic Debdulal Saha and Anamitra

RoyChoudhary, (2020) Indian Labour Market in the Time of COVID-19 Pandemic: Issues, Experience and Policy, The Indian Economic Journal

Radhicka Kapoor(2020) COVID -19 and the State of India’s Labour Market, Indian council for research on international Economic relations ILO Report (2020) International Labour Organisation (ILO) ADBI, OECD and ILO joint publication(2021) Labor migration in Asia: Impacts of the COVID-19 crisis and the post-pandemic future.

WHO policy brief (2021) Preventing and mitigating COVID-19 at work Mrityunjay Bose, (JUN 15 2022), Maharashtra sees rise in number of working children during Covid years, Deccan Herald news paper Press Release (05 JUN 2021), Ministry of Labour & Employment, PIB Delhi Press Trust of India (April 14, 2021)Lockdown to have deep impact on Maharashtra economy

Alok Deshpande (2022) SHARED ARTICLE Post COVID, Maharashtra economy on path of recovery’

JoshyaJasline& John Romate (2020) The plight of migrants during COVID-19 and the impact of circular migration in India: a systematic review, The Journal of Humanities and social sciences communications



Environmental and Economical Impact Of Organic Farming on Rural Area Of Kolhapur District

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Abstract: Organic farming is providing various types of benefits to human but it's also protecting Environment. Organic farming plays important role in economy. It helps to increase Economic Growth Rate. Organic farming provides long term effect to environment and economy. Its maintained biodiversity, soil fertility, water conservation, livestock productivity for long term and provide long term stability. Organic farming avoids the use of chemical fertilizer, pesticides. Organic farming practice more traditional method of fertilization and pest control, such as crop rotation, mulching, natural pest and insect control method.

Keywords: Organic farming, Environmental impact, Economical impact.

1.0 INTRODUCTION

1.1 CONCEPTUAL BACKGROUND OF ORGANIC FARMING

Organic agriculture is defined formally by governments. Farmers must be certified for their produce and products to be labeled "Organic" and there is specific organic standard for crops, animal and wild-craft products and for the processing of agriculture products. Organic farming agriculture system that uses ecological fertilizer derived largely from animal and plant wastes and nitrogen-fixing cover crop. Modern organic farming was developed as a response to the environment harm caused by the use of chemical pesticides and synthetic fertilizer in conventional Agriculture and it has numerous ecological benefits. (shi-ming MA, Saureborn Joachim March 2006) Compared with conventional agriculture, organic farming uses fewer pesticides, reduces soil erosion, decreases nitrate leaching into groundwater and surface water, and recycles animal wastes back into the farm. These benefits are counterbalanced by higher food cost for

consumers and generally lower yields. The challenge for future organic agriculture will be to maintain its environment benefits, increase yield and reduce price while meeting the challenges of climate change and an increasing world population.

1.2 CHARACTERISTICS OF ORGANIC FARMING INCLUDE:

1. Organic farming helps to protect soil fertility, soil structure and also help to encourage biodiversity. (SmrutiSohani 2019)
2. Organic farming provides more nutritional product. Organic fruit, vegetable is free from chemical.
3. In organic farming different methods are used like biological nitrogen fixation, livestock, and manures. (Me. Elayaraja, Dr,C.Vijai 2020)
4. For control weed, pest, and diseases use the crop rotation method organic manure and resistance free varieties.

1.3 Scope of organic farming

Organic farming provides more benefits than conventional farming. Large scale farming provides employment opportunity and economic benefits to local communities. It helps to increase economic growth rate and protect environment, animal welfare. Its free from

2. Soil Management : In agriculture practices the crops are affect the soil structure and soil nutrients. Organic farming is help to increase soil structure, soil fertility, soil nutrients.000
3. Weed Management : In agriculture for control weed, pest, diseases use different type of chemical, fertilizer and pesticides it is harmful for the Soil, Human, and Animal. Organic farming product is fully free from chemical and pesticides use compost and fertilizer, vermicompost for required good soil structure. Organic products are more nutritional value and maintain good health. (Madhusudhan L. J 2016)
4. Livestock : In organic farming livestock method is most importantit helps to improve soil fertility and increase diversity of the farm system.
5. Genetic Modification : Organic farming is using the organic components like compost, vermicompost for control weed, pest and diseases it helpful for soil, plant, Human, Animal also, in organic farming different method are used like crop rotation, weed management, soil management.

1.5 ADVANTAGES OF ORGANIC FARMING

synthetic and chemical fertilizer. (Mr.Sunil Kumar, 2019)

1.4 ORGANIC FARMING METHODS

1. Crop Diversity : In organic agriculture crop diversity means a various type of verities of crop can be cultivated for increasing the demand of crop in market.
1. Economical: In organic farming use homemade fertilizer it helpful for minimize fertilizer cost and not need to required high yield verities for more production. (Food and Agriculture organization of the united Nation)
2. Good return on investment: In organic farming not need the more costly equipment use the cheaper and low inputs for cultivation of organic farming.
3. High Demand: Organic products are more demanded it is grow naturally its more nutritional values and protect the human health.
4. Nutritional: Comparison of agriculture products organic products are more nutritional value because it is free from insecticides and pesticides.

1.6 Organic farming effect on environment

Organic agriculture is applied a long-term effect on eco-system. Its provide protective approach towards the environment. (TizianoGomiero, David Pimentel and Maurizio G. Paoletti, 2011).Some of the environmental area which gets impact by use of chemical fertilizer is follow.

1. Soil : Highly usage of chemical fertilizer and pesticides affect the soil fertility, soil structure and reduce soil

nutrition capacity. For this organic farming help to practices of soil building like crop rotation, intercropping, use of homemade fertilizer.

2. Water : Use of chemical fertilizer, pesticides is create bad effect on pollution of groundwater in organic farming use a fertilizer like earthworm, green manure, animal west it helps to maintain soil biodiversity and water infiltration is significant enhanced.
3. Biodiversity : Nitrogen is a major ingredient in inorganic fertilizer its affect on biodiversity. In Organic farming fertilizer no use any harmful substance than organic farming provide safe haven to wildlife, local ecosystems to maintain environment. (UrsNiggli 2014)
4. Long term Sustainability : Organic farming provide a positive and protective approach towards the environment it helpful for maintain long term sustainability for production of food.
5. Air and climate change : Inorganic fertilizer is a toxic substance it's not good for human and environment. In organic farming homemade fertilizer and different organic farming method like crop rotation is practiced. It enhances the return of carbon in the soil mains it does provide good potential of agriculture against climate change.

2.0 OBJECTIVES

1. To evaluate the environmental impact of organic farming.
2. To Analysis the impact of organic farming on rural economy.

3.0 METHODOLOGY

SECONDARY DATA

1. The internet was accessed for related valuable information on the subject matter.
2. Literature such as related thesis and journals was reviewed on impact organic farming

PRIMARY DATA

1. Questionnaires containing close and open-ended questions was prepared and administered in the study area to obtain facts opinions views of respondents (farmers)

1.1 SAMPLING DESIGN:

There are 12 Talukas in Kolhapur district the researcher will be select four talukas (Panhala, Shahuwadi, Kagal, GaganBavada) for research study in organic farming is maximum in the four Talukas. PanhalaTaluka there are 131 villages, in Shahuwaditaluka 146 villages, Kagalataluka 86 villages and GaganBavada 45 villages. The researcher selected 5 villages in each Taluka selected for research study. 10 Farmers were selected by convenience sampling from each village.

District: Kolhapur, Talukas:12

Selected Talukas	Villages	Number of farmers selected
Panhala	Kotoli	10
	Malwadi	10
	Wayoli	10
	Majnal	10
	Asurleporle	10
Shahuwadi	Kekatwadi	10
	Ghungur	10
	Thamkewadi	10
	Bambawade	10

	Pushire	10
Kagal	Tembli	10
	Bachni	10
	Vanali	10
	Vadkshivale	10
	Beldvde	10
Gaganbavada	Kerve	10
	Asandole	10
	Tesange	10
	Salvan	10
	Mhalunge	10
Total		200

Hence number of villages studied was 20
Total number of farmers' studies was 200

4.0 DATA ANALYSIS

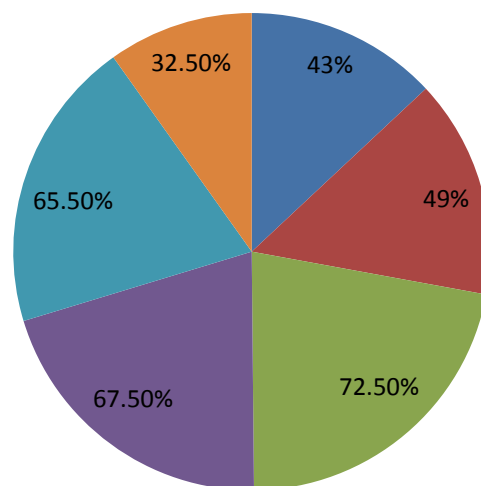
Organic farming is protecting environmental and maintains long term stability. This table shows that the majority of farmers is Agree and strongly agrees for organic farming impact of environment and economy.

Table Number: 4.1

Particulars	Response	Number of farmers	Percentage
Organic farming improve soil fertility and soil structure	Agree	86	43%
Organic farming protect animal welfare	Strongly agree	68	49%
Protect environment	Strongly agree	145	72.5%
Fights again global warming	Strongly agree	135	67.5%
Encourage biodiversity	Strongly agree	131	65.5%

Minimize all forms of pollutants and bring sustainability	Agree	65	32.5%
Total		200	

Graph Number: 4.1



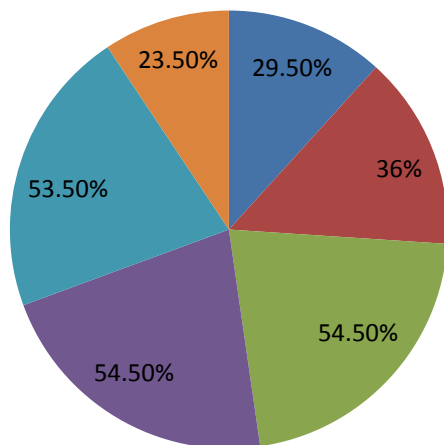
- Organic Framing Improve Soil Fertility and Soil Structure
- Organic farming protect animal welfare
- Protect environment
- Fights again global warming

Table Number: 4.2

Particulars	Response	Number of farmers	Percentage
Organic farming helps to solve money problem if you grow	Neither Agree nor disagree	59	29.5%

organic plant			
Save production cost	Strongly agree	72	36%
Receive higher pries	Agree	109	54.5%
Improve crop production and livestock production	Strongly agree	108	54.5%
Increase cropping intensity	Agree	107	53.5%
Provide good opportunity to rich other market	Agree	47	23.5%
Total		200	100

Graph Number: 4.2



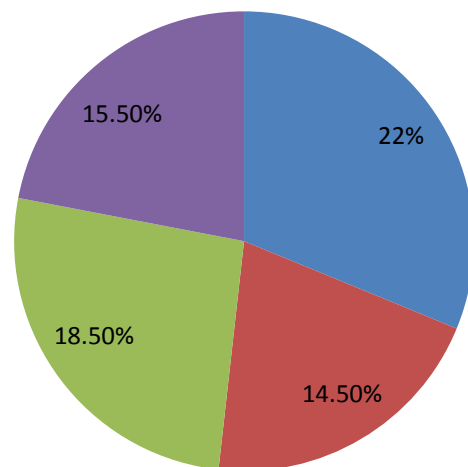
- Organic Framing helps to solve money problem if you grow organic plant
- Save production cost
- Receive higher pries
- improve crop production and livestock production
- increase cropping intensity

Table Number: 4.3

How to help organic farming saving money if you grow your own organic plant

Particulars	Number of farmers	Percentage
Use compost for fertilizer	44	22%
Use different irrigation method	29	14.5%
Less cultivation cost	37	18.5%
Use mulching than required less quantity of labour	59	15.5%
Total	200	100

Graph number: 4.3

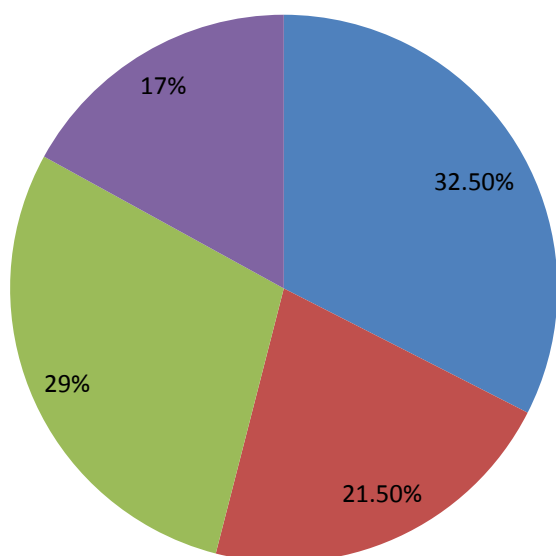


- Use compost for Fertilizer
- Use Different Irrigation
- Less Cultivation Cost
- Use mulching than required less quantity of labour

Table number: 4.4
Organic farming can protect the environment

Particulars	Number of farmers	Percentage
Free from pesticide	65	32.5%
Maintain soil fertility	43	21.5%
Water conservation	58	29%
Free from insecticides	34	17%
Total	200	100

Graph number: 4.4



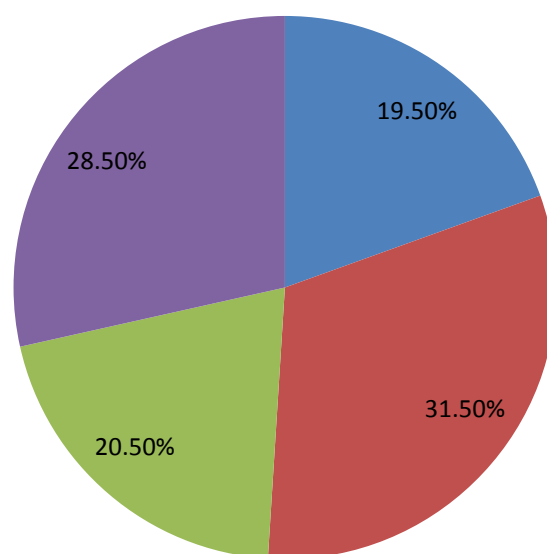
- Free from pesticide
- Maintaining soil fertility
- Water conservation
- Free from insecticides

Table Number: 4.5
Organic farming Fights against Global Warming

Particulars	Number of farmers	Percentage
Build farmer knowledge to maintain climatic changes	39	19.5%

Help to adopt to climate change through strengthening Agro ecosystem	63	31.5%
Maintain soil fertility	41	20.5%
Maintain ecosystem	57	28.5%
Total	200	100

Graph Number: 4.5



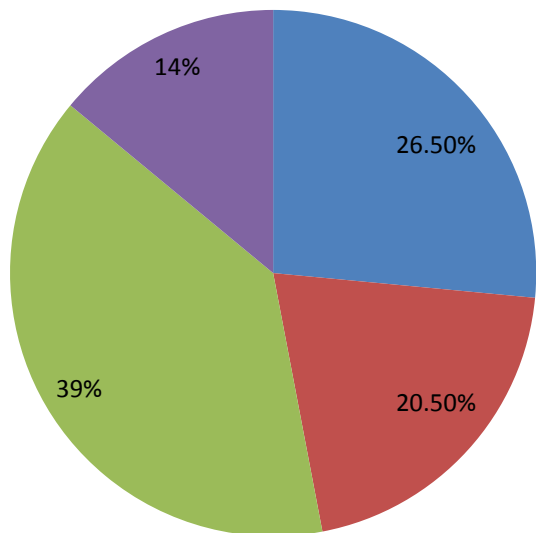
- Build farmer knowledge to maintain climatic changes
- Help to adopt to climate change through strengthening Agro ecosystem
- Maintain soil fertility
- Maintain Ecosystem

Table Number: 4.6
Organic farming saves production cost

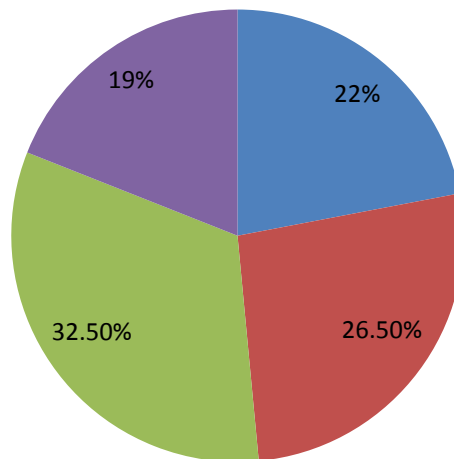
Particulars	Number of farmers	Percentage
No use of chemical fertilizer to save production cost	53	26.5%
Use different method	41	20.5%

Use homemade compost	78	39%
Use mulching	28	14%
Total	200	100

Graph number: 4.6



- On use of Chemical Fertilizer to save production cost
- Use different method
- Use home made compost
- Use Mulching



- Use Compost
- Use different irrigation method
- Use different cultivation
- Earthworm Fertilizer

5.0 CONCLUSION

Organic farming is good scenario for environment and animal is protecting the human life and encourage farmers to grow organic. It's providing good employee opportunity for rural people. Organic farming is protecting environment, maintain biodiversity and livestock productivity helps to increase economic growth rate for long term. Hence organic farming method is providing good opportunity for farmers.

REFERENCE

Basic concept and key characteristics of organic farming. SmrutiSohani , March 2019. <https://www.researchgate.net>

Environmental impact of Different Agriculture Management Practices: Conventional vs. Organic Agriculture Tiziano Gomiero, David Pimentel and Maurizio G. Paoletti, Pages 95-124 Publish 29 April 2011, Volume 30. 2011, Issue 1-2 Towards a more sustainable Agriculture

Table Number: 4.7
Usefulness of organic farming in improvement of crop productivity and livestock productivity of rural economy

Particulars	Number of farmers	Percentage
Use Compost	44	22%
Use different irrigation method	53	26.5%
Use different cultivation method	65	32.5%
Earthworm Fertilizer	38	19%
Total	200	100

Graph Number: 4.7

<https://doi.org/10.1080/07352689.2011.554355>

Economic Impact of Organic Farming in
Maine's Food System, 2011

[https://digitalcommons.library.umaine.edu/
mpr](https://digitalcommons.library.umaine.edu/mpr)

Sustainability of Organic food Production:
Challenges and Innovations Urs Niggli
Volume 22 issue 1 15 September 2014.

Organic farming – Eco-friendly
Agriculture Madhusudhan L J
Ecosyst. Health and Management 6:209. Doi: 10.4172/
2157-7625.1000209, August 31, 2016
Organic farming in India: Benefits and
Challenges

Me. MEIataraja, Dr. C. Vijai European
journal of molecular and clinical medicine
ISSN 2515-8260 Volume 7, Issue 11, 2020

Review of History and Recent
Development of Organic Farming
Worldwide Shi-ming, MA, Saurbon
Jaachim Volume 5, issue 3, March 2006,
Pages 169-178, DOI: 10.1016/s1671-
2927(06)60035-7

Trends of Organic Farming in Indian
Economy Mr. Sunil Kumar (Department
of Economy) IJRAR March 2019, Volume
6, Issue 1 www.ijrar.org

What are the environment benefits of
organic farming Agriculture?
Food and Agriculture organization of the
United Nations



Impact Of Personal Stressors On Behaviour Of Advocates With Special Reference To Solapur District

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&

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Abstract: Work stress affects the behaviour of advocates. The examination of its characteristics in the legal profession is relevant. The purpose of this investigation is to study the impact of work stress on behaviour of advocates in Solapur District. The data for the investigation was gathered from the 400 respondents through the questionnaire.

Keywords: Work stress, Advocates, Legal profession, Behaviour

1.0 Introduction

Advocates are the legal officers authorized by the state to promote and uphold justice. To this end, they are entrusted with the task of extracting the truth from conflicting sources of information by cross examining suspects, plaintiffs and defendants each day. Although they enjoy a high level of social respect, their working environment is psychologically challenging, leading to stress which can in turn adversely affect their health. Advocates may encounter different levels of occupational stress due to the differing nature of their jobs; similarly judges also preside over court hearings, read indictments, and write verdicts. As and when a client brings his case to the court, the case is assigned to a judge. The judge must review evidence presented by both parties through their pleaders and make a ruling. The immense weight of responsibility associated with passing a lasting, and possibly life-changing, judgment may induce psychological stress from the judge. On the other hand, lawyers launch an investigation when they become aware of a crime. They examine crime scenes with the cops and worked as

prosecutors in cases of public prosecution. Lawyers sometimes investigate high profile cases under the limelight of public opinion, such as cases involving election bribery, corruption, insider trading, fraudulent bankruptcy. All this would lead to stress which is caused by something bad. Stress among lawyers can be reflected in the forms of fatigability, depression, difficulty to concentrate, irritability and many more. Stress puts a negative impact on the physical as well as psychological health of lawyers and makes them unfit for work. Such stress is associated with cardiovascular disease events, hypertension, type 2 diabetes neurological disorders, lifestyle cancer risk factors, and many more. Therefore, high level of stress among lawyers affects the well-being and cases related to human lives whose properties are at stake.

Key Terminologies

1. Advocate : Sec. 2 renumbered as subsection (1) of the Sec. 2 thereof by Act 60 of 1973 w.e.f. 31.07.1974, an “**advocate**” means an advocate entered in any roll under the provisions of this Act;

2. Work Stress : The stress due to workload can be defined as reluctance to come to work and a feeling of constant pressure associated with general physiological, psychological and behavioural stress symptoms.

3. Bar Council of India : “Bar Council of India” means the Bar Council constituted under section 4 for the territories to which this Act extends;

Statement of Problem : Lawyers handle a number of cases for their clients. Dignity, honor, and liberty of the client is in the hands of an efficient lawyer. Because of one mistake of a lawyer, someone can go to jail, or lose money, property, or a criminal who deserves to go to jail may be released on the road to commit more crimes. Therefore, lawyers are under huge pressure which come up with the job. They are not robots, they are pretty much made of flesh, blood, and nerves. The soldier is trained on how to handle pressure situation, cricketers have mentors, physios, coaches who work with them in order to ensure that they can perform well in high pressure situations. Perhaps it is the time to think if lawyers also need the same. Therefore, keeping in view the above facts, the present paper has been aimed to investigate the impact of work stress on the health of advocates.

2.0 Review of Literature

1. Amir Shani and others (2009) in their research article entitled, “**Work-Related Depression among Hotel Employees**” conducted a study on the depression of work among hotel employees in Central Florida. They have confirmed the incidence of depression among workers in the hospitality industry by evaluating the relationship between the occupational stress and work characteristics.

2. Li fang Zhang (2009) in his research article entitled “**Occupational stress and teaching approaches among Chinese**

academics” conducted a study. He suggested that to control the self-rating abilities of the participants, the conducive conceptual change in teaching approach and their role insufficiency predicted that the conceptual change in teaching strategy is negative.

3. Roland (2014) in his research paper entitled, “**Occupational Stress among Mauritian Nurses**” has carried out the research on the objective of identifying the novel interventions to prevent the condition of occupational stress. For the research purpose the author has taken a sample size of 414 patients. The result of the investigation stated that too much occupational stress may affect the physical as well as mental health of human beings by affecting one’s performance.

4. Abhishek Y. Dikshit and others (2014) in their research article entitled, “**A Study of Job Stress Level among Engineering Professionals Working In Manufacturing Sector in India**” have carried out the research on the objective of examining the effects of job stress on the engineering professionals among the manufacturing sector. For the investigation, a sample size of 236 respondents was taken. The results of the investigation revealed that stress reduction programs and strategies are inevitable due to the high job stress levels.

Significance of the Study : Lawyers’ daily work is marked by the constant pressure of deadlines. increasing complexity of laws and legal procedures; the need for constant updates about the jurisprudence, doctrine and laws; the high level of demands from clients; increasing competition in judiciary, long working hours, constant contact with conflicts, aggression, and accusations may lead to stress among the lawyers. It is because when all else fails, one can still take recourse to legal system. Without a well-organized profession of law, the courts would not be in a position to manage

justice successfully as the indication in favor or against the parties to suit cannot be properly organized, facts cannot be properly expressed and the best opinion in support or against the case of the parties cannot be put forth before the court. Today an increasing number of lawyers are experiencing burnouts, Insomnia, low productivity and stress related illness due to lack of balance between personal and professional life. So, when stress is high, it can have ill effect on health. Therefore, present study has been conducted among the lawyers working in Solapur district as well as sessions court.

3.0 Scope of the Study

1. Topical Scope : The topical scope of the study has been confined to the title, “**Impact of Personal Stressors on Behaviour of Advocates with Special Reference to Solapur District**”

2. Geographical Scope : There are 11 talukas in Solapur district. of which only in 9 talukas the district and sessions courts are situated. Therefore, the lawyers in the Solapur district are practicing in 9 courts situated in these 9 talukas. The lawyers from the remaining 2 talukas where the courts are not situated are practicing in their nearest court.

3. Analytical Scope : The analytical scope of the study has been confined to the use of relevant statistical tools such as SPSS, MS Excel to interpret the data. The collected data has been analyzed by applying chi square test.

4.0 Objective of the Study

1. To study the impact of personal stressors on behaviour of advocates

5.0 Hypothesis of the Study

1. H₀: There is no significant relationship between personal stressors and behaviour of advocates.

2. H₁: There is a significant relationship between personal stressors and behaviour of advocates.

6.0 Methodology

In order to understand the work stress, exploratory research has been carried out using secondary data such as **reference books, past dissertations, law journals, bar association reports, and Advocate’s Act, 1961**. Variables of the work stress were identified through exploratory study. The questionnaire has been developed for the advocates in Solapur district. For the purpose of investigation, 400 lawyers from Solapur district were considered through stratified random sampling. The criteria used for the selection of sample is according to their area of specialization.

7.0 Data Collection

The primary data for the investigation has been gathered through questionnaire.

Personal Stressors

Personal Stressors covers Personality, Unstable Mind, Relationship Difficulties, Loss of a job, Death of a beloved one, Chronic Illness or Injury, Hostility, Reluctant to Accept, Negative Self Talk, Procrastinating or Neglecting Responsibilities, Using Alcohol, Cigarettes, or caffeine to relax.

8.0 Data Analysis

The collected data has been analyzed using SPSS and MS Excel. Chi square test has been used to analyze the data.

Table No. I
Observed and Expected values

Respondents	Observed Value			Expected Value		
	Agree	Disagree	Total	Agree	Disagree	Total
Personal stressors	270	108	378	244	134	378
Behaviour of Advocate	233	167	400	259	141	400
Total	503	275	778	503	275	778

Source: Field Survey

Table No. II
Chi-Square test value

Respondents	Agree	Disagree
Personal stressors	2.68	4.91
Behaviour of Advocate	2.54	4.64

Source: Field Survey

Chi Square Test	14.77
Significance Level	0.05
Degree of Freedom	1.00
Chi Square criticalvalue	3.84

The estimated chi-square test value (14.77) is found to be greater than chi-square critical table value (3.84) at 5 percent significance level. **Hence H_0 is rejected and H_1 is accepted. Thus, there is a significant relationship between personal stressors and behaviour of advocates.**

9.0 Findings

It has been found that while driving open and honest dialogue, emphasize that the purpose of getting together is to discuss, not to debate or disagree. Setting up discussion rules is important so that conversations don't take a turn for the worse. It is also important that discussing matters too deeply can result in feelings of indignation and invalidation, which is not acceptable. The best course is listening to people's varying perspectives and finding ways to shape future actions.

10.0 Conclusion

From the above details, it has been suggested that arranging small group interactions where colleagues can get to know each other on an individual level. This will be effective when combined with training as well as team building activities. Constructive interaction with each other helps to cultivate meaningful relationships.

It is also suggested to provide opportunities for social interactions outside of work. Meeting in a less official manner may give people a chance to laugh together because humor is a great way to cope with depression and stress. A good chuckle can help everyone. Trust is the foundation of a positive work environment, and it can be a valuable buffer against the negative effects of stress, such as depression. Feeling respected and respecting others may lead to unity in the workplace and build relationships of trust, as trust is the basis of a positive work environment and can be a

valuable buffer against the negative effects of stress, such as depression.

References

Research Methodology: Methods and Techniques, Second Revised Edition, New Age International Publishers, 2nd Revised Edition, 1990 Advocates Act, 1961

Organizational Behaviour, Wiley India Edition, Reprint 2008, ISBN: 978-81-265-0865-5

Amir Shani and Others (2009), “Work-Related Depression among Hotel Employees”, Cornell Hospitality Quarterly, P.P. 1-14

Li Fang Zang (2009), “Occupational stress and teaching approaches among Chinese academics”, International

Journal of Experimental Educational Psychology, Volume 29, Issue 2, P.P. 203-2019

Roland (2014), “Occupational Stress Among Mauritian Nurses”, International journal of Emerging Trends in Science and Technology, IJETST- Volume- 01, Issue – 04, PP 463-476, June, ISSN 2348-9480

Abhishek Y. Dikshit and others (2014), “A Study of Job Stress Level Among Engineering Professionals Working in Manufacturing Sector in India”, International Journal of scientific research and management (IJSRM), Volume 2, Issue 2, PP 559-564, ISSN (e): 2321-3418

Organizational Behavior: An Evidence-Based Approach, McGraw Hill, Twelfth Edition, ISBN: 978-0-07-353035-2



Crisis Among Employee And Employer Job Satisfaction In Organization

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Abstract: The revision of employee satisfaction is an exciting topic to each; that adds value to societies, software, technical company, and public activity. The literature review can examine relevant theories, discuss, an outline of technical worker and its satisfaction connected with a job with lots of additional facts. Reviewed vital articles focused on the problems of satisfaction in organizations. This analysis is accessible here for wrapping up the needs of the study of employee satisfaction. The revision of connected review of literature is helpful for the subject worry data and conjointly application of the effective approach to unravel the mysterious glitches. The review of literature provides proof for forthcoming studies. This paper shows the Crisis of job Satisfaction with the referring of various articles. The author noted Crisis among Employee and Employer Job Satisfaction.

Keywords: Job Satisfaction Crisis

1.0 Introduction:

Human Resources Management is essentially an art to manage the folks at the work or job place. Worker satisfaction is in respect to one's feelings or state of mind on the subject of the character of their work or work. Happiness will be influenced by several factors. Gentleman of discipline explained regarding satisfaction of worker is however the folks feel regarding their job and winning worker expectation. Job assigners can be concerned on completely different aspects of their jobs. Employee's inner satisfaction is an indispensable part of any business. Essentially within the skilled areas, job satisfaction of employees is incredibly necessary for the growth of the company. The current segment has conversed the review of literature that arrangements a basis and standing of the popular study. It's treaties with the views of the sensible role created by many authors, from all plump with the rendered of various documents, books, net articles. It will show the crisis of Employee and employer job Satisfaction.

2.0 Review of literature:

1. Deeply reviewed M D Mohite, Dr. Kulkarni (Dec 2017) article we're told that associate worker feedback was a most significant supply of knowledge; which will facilitate in up company's product and services. The author was reviewed twenty different articles, thesis, blogs, etc were told on the reviewed article of Sahukar, Pailoor, Pradhan (2017) there have been less ill-health occurs in Yoga that guise was active skilled. Reviewed Ashley's (2017) article studied on remuneration and advantages deliberation of that worker. Age and length of tenure incorporation was a very important variable in satisfaction. Reviewed Daily News Analysis (2016) shown that recompense, work structure, work facts on Indian staff found results were increasing worker satisfaction. The research Writer was reviewed Manisha, Sheta, Auukool, Ranjana's (2016) articles explained the thought of job fulfillment workers and his expectation from their job. The author told that they concerning multi-dimensional

concepts: beliefs, worth system, attitudes, and individual skills. Abdulwahab's (2016) article was written person in charge had been specializing in upstream of satisfaction; worker engagement for fulfilment was significant. Man of discipline reviewed inventor junior college (2016) was conducted a worker Satisfaction Survey. It was utterly shown that worker participation was vital in his detailed study, and; a work commitment was imperative for undergo staff. Within the article Janell (2016) shows that excessive amounts of source in it. Stress involved in the IT skilled staff. Mark, Varun, James, Nancy (2015) told that there was a cagy choice of the CASE instrument which was used gets appealing outcome. Friska, johnwelly's (2014) was mentioned that worker works for cash, the worker wants more cash to full fill their daily needs, an honest remuneration with compensation was the most key factors for increasing the worker job satisfaction. With the Author reference of Asian country that days (2014) article told that, the age range of years was thrilled with their work. Happiness and joy was can't expire it depended on the state of affairs. Renuka & Dr. Anil (2014) bloke of skill wrote on the Impression of labor Satisfaction and Demographic Aspects on structure Obligation among Girls' school, a man of discipline ended that age girls of ladies or women, the legal status of his or her, and Gender of its individual person was vital for job happiness. Man of knowledge was referred article Dr. Mini, Jitendra (2013) organization was developing methods in work setting so useful to an organization. Mr. Mohite & Kulkarni was referred article of Rosanna (2013) gentleman of discipline wrote thesis on individual aspects associated with employment life stability on job satisfaction in data ability staff, in step with him Work-Life Balance had been progressively vital for each employee; and elastic operating periods, alternative work schedules, leave rules and advantages to

domestic carefulness policy affect on job satisfaction. Sujata Bolake's (June 2013) was analyzed a paper on worker Job Satisfaction in I.T. Industry, Pune. She was told that it was vital to encouraging and positive work setting for workers for satisfaction. Referred article of Nanjamari K. (2013) author was ended that job gratification was effected on cash, advancements, operating type, and workmates and therefore the work lifecycle balance itself. Reddy's (2012) paper told work happiness middle the library professionals operating in Govt. engineering academies have high job satisfaction whereas the work satisfaction is a smaller amount middle the occupied privately engineering academies. It was shown that facility providing to staff from the organization was result on Job satisfactions. Analysis author Sharma (2011) wrote the thesis on girls in data Technology was examined effects of job satisfaction among IT women's by considering gender relationships, structure experiences, and demographic characteristics: structure climate, structure commitment, career success outcomes, job-hopping and ratio that vital. Women in IT firms face the downside of Job satisfaction. Married Women has cared her family and work. With the reference of Zhengdan (2010) article told that there have been satisfaction level varies in between Domestic and overseas Company. The Author ended that verbal description, performance appraisal, and compensation were vital to people's satisfaction. Menon and Nutankumar (2009) reviewed an article by the author that told temperament and job factors were vital in a rough economic patch. It directly had an effect on satisfaction. The author was reviewed Kaushik, Rajendra (2007) told that a worker was a lot of drawn to organizations giving work/life advantages there was required implementation of effective strategy for managing IT skilled in our practices. Finally, author was referred Jashua (July 2007) article that

shows QWL was essential for satisfy each structure objectives & worker wants of the staff, there was want QWL. Finally, the author was ended by reviewed numerous articles that staff are glad or displeas in data Technology trade by numerous factors. There was need of two ways positive communications; which was vital for locating the best resolution of Job gratification of staff. Writers were discovered from the journals of the literature the foremost analysis of the authors was cantered on that trade remuneration, technology modification and performance. Fewer researchers cantered studied specific a unit of IT trade. According to researcher observation; authors were analyzed from totally different places of a geographic area not from a western geographic area. Imran's (2017) article step with his study there was found high cash and job safety was vital prospects of staff.

2. Mr. Maheshkumar D Mohite (23 Feb 2020) article shown that Client satisfaction and happiness were all concerning though individual or group-wise like on the company's business, product, and services. Happy and happy client and shopper open area measure most need to any concern. Satisfaction was important to the come to an end well on any industrial. Satisfaction was a decent life to gauge employ angle to the qualified activity of originates. It additionally expresses the tier of happiness of a client in his / her skilled, inner, and outer surroundings connected with social relations with business and individual/cluster. Satisfaction of client yet as a shopper may be a key a part of fortunate business, growing business and win the mind of the editor. This analysis is specializing in aggregation or obtaining the client, 'satisfaction happiness' or 'satisfied with happy' info towards product yet as services, gets general, 'user experience' of the client. Here, 'User expertise' was thought of on the premise of individual yet as the festival of 'his/ her

opinion from his connecting folks or festival of listening to user experience. Finally, they were ended that knowing the client desires and achieving satisfaction happiness area unit the premise for fortunate business activities, and also the worker, client and shopper feedback is the most vital supply of knowledge for up product and services. Happy and convinced client/shopper make sure the company's success within the long run. Nowadays maybe an exosphere of computation and businesses have to be compelled to apprehend satisfaction and happiness of the client. Client happiness and satisfaction is adorableness or unfavourableness with that his her views his work. It expresses the number of agreement between one's expectation, and also rewards, that the merchandise and repair provides. Client or shopper is also a celebration that receives or consumes product (goods or services) and has the pliability to decide on between fully totally different products and suppliers. Happiness and Satisfaction may be a part of business growth. Business holder should specialize in developing client or shopper Service Communities, supply Proactive client or shopper Service, frequently Study on Complaints and Compliments, Treat Customers like you'd have to be compelled to Be Treated, Hold Daily arise conferences together with your Team, provide Multichannel Support, Slash Wait Times, raise but Your shoppers would adore to be capable, build employee Satisfaction a Priority, place a Social Medium organize in the state of affairs, provide any edges, Encourage Agents to need possession of problems, Rethink the Approach in Doing Business & Building Relationships, provide Free Product work and Support, flip client or shopper survey information into Action, Demonstrate Product info, Press Reset once every call, compute What the client or shopper very needs, Benchmark client or shopper Satisfaction, kindle extra Feedback, target Company Culture, Set Clear Expectations

and Exceed Them, Empower Your Agents and keep Current on consumer or client or shopper Reviews. A manager was a most essential bear on staff for the satisfaction of job. The corporeal operating circumstances and extra opportunities offered by the banking sector and wages were found the lowest scores. Younger staff got enough feedback than the feedback of older age. Ros Safinas Munira, Ramlee Rahman (2015), in an article, told that workers' revenue was ordinarily connected with employees' disappointment and condemnation indicate poorer output, pressure, and clash in work. In step with his welfare and financial gain, society social support as well as co-workers and social control support, and at work conditions that support employees' career progress, increase the work that is imperative job fulfilment in employees. In step with M D Mohite and R V Kulkarni completing the literature that the most researchers were studied on data Technology trade, studied on special department of IT firms and not specific IT connect the previous son. Previous gentleman of discipline wasn't answered concerning that factors affects on job satisfaction on the code comp, The previous investigator's investigator was studied on that trade issue, salary, turnover, change, technology, demand, and life. Organizations need the latest data, results, suggestions concerning worker Jobs and their happiness. Particularly code/ software/ IT Industries was hungry for brand new updated data. Job satisfaction among IT staff analysis wasn't initiated in the Western geographic area of IT trade. conducting research from firms from Western geographic areas on worker satisfaction. It's discovered from the literature and survey study of job satisfaction of code company staff has not ads initiated in the western geographic area. Analysis gap occur in the Review of literature, they have a tendency to might gain the subsequent conclusion that's explaining as; among the studies' variety

of them have examined work-related hazards among IT professionals. Data Technology firms face numerous issues in staff, work, assignment jobs; etc issues. This result has an effect directly and indirectly on data Technology staff, business output. Higher than the analysis study was the worker Job satisfaction analysis result's variable. A worker was functioning totally different firms, platform, level, and space or town thus it results on satisfaction. There is chop increasing analysis demands on 'Job satisfaction of employee'. Most researchers were prompt that there has been a need for any study and deep study. It can help to know every worker. Researchers further as an organization are attention-grabbing with this subject for locating new or right conclusion concerning job satisfaction of worker. There were requiring a lot of detail in finding the conclusion of job satisfaction. The author would love to review job satisfaction among staff of IT trade in a western geographic area. Particularly code/ IT/ Software firms from the western geographic region a lot of want of such analysis can help to develop IT trade therein area.

3. Mr. Maheshkumar Mohite, Dr. R V Kulkarni, (November 2019) article shown that workers from IT corporations were facing numerous issues in his or her job that's an impression on job satisfaction. Technical corporations were troubled to secure his or her workers' happiness and own professional lives. Workers were the backbone of any organization. Employers were continually pondering the worker. The current analysis paper highlighted factors influenced on Job satisfaction of workers and understand level of job satisfaction of workers. Correlation analysis methods were used for information analysis. This analysis targeting gender-wise issue that is influenced by job satisfaction. Worker means that respondents' operating in data

Technology corporations. The research worker has been selected 370 respondents from selected IT corporations of Kolhapur town as a sample for the study with Adopted Convenience and easy sampling technique; Primary information and secondary information used for this analysis. They were complete that glad within the job can get a lot of advantages to workers and employers. Job satisfaction depends on numerous factors. Gender-wise analysis study has been shown that satisfaction in jobs numerous, completely different from by considering all workers. Treating workers by conducting individual data relating to discontent towards job then it helps to extend worker enhancing strategy. Correlate degree IT worker has been a medium level of job satisfaction. It's been clearing that below area element bound factors influenced by Job Satisfaction. His Study was clearly seen that issues influenced job satisfaction in Male workers from IT corporations that component was difficult to add wonderful Physical operating Condition, Promotion of Learning, ability Activity in Business Climate, Accurately Fault Finding and designation, Meditation, Positive Work-Life Policy, division management, Healthcare, and Social Media is an incredibly vital role in job satisfaction. Just in case of feminine / female workers from IT corporations study clearly seen that issue influenced on job satisfaction that was appropriate Work Location, attain question, Positive Work-Life Policy, Guidance, Hope of higher Position, Salary, Wages, Pay & advantages, difficult Work, Work Stress, and coaching supplier is an incredibly vital role in job satisfaction. Mind and human ability area units were completely different in Male, workers, and feminine workers. Each it's trained and taking numerous roles and responsibility to complete client and company's technology demands. Job satisfaction role affects business. Structure studies area unit specializing in worker satisfaction for companies has higher future. Fastidiously

understanding the assorted Job satisfaction issue gender-wise can facilitate overall growth. Each worker wants a cheerful operating life.

4. Deeply reviewed M D Mohite (Feb 2019) article on Human Resources Management in media and Entertainment. There were many centers of M & E in an Asian country, manufacturing in many languages. There were countless competitors. Author aforesaid that the component of the moment was the management of individuals at intervals organizations, specializing in policies and on systems. More units of time departments have varied responsibilities. Costello, Oliver's (2018) article was mentioned on Strategic Human Resource Management SHRM that was facing problems in media corporations. They admit 'adapt or die' believes. However, the different author was suggesting that there was would like word 'invest'. In line with him, there have been would like of investment in additional technologically. Archana Verma (2018) company was adding an off-the-cuff manner, operating closely with the actors, musicians, singers, producers, and administrators. Corporations were used varied methods for worker engagements. The industry was caring for native sensitivity's, maintained versatile rules, develop art activity, therefore, it helps for maximizing performance level of the worker. They planned for compensation for workers and it'll help happy with work. Gautam Gupta (April 2018) article told that rising cheerfulness there have been necessary straightforward exercises like Chant a 'Mantra helps refresh your body and mind, concentrate on your respiration helps relaxation, by taking a soothing lunch break and Writing a feeling note can increase mental strength. In line with him, helpfulness will play a decisive role in HRM. Sandeep Kaur (Jan 2017) article was known trends that were, changes in hands Diversity, expectations of or from

the worker, upgrade talent necessities, company graph, enhancements, new work processes, Mass Customization, technology, involvement of worker, Health, work-life balance of family and Confidentiality area unit necessary in Recent HRM. Sayed, Charles (2017), the paper recommended that maintain engagement with M & E internal worker expertise, modification to new technologies, change business processes can get rising productivity, secure your information that helps in company's growth. This survey told that rummage around for increasing for attracting, develop and retain the correct talent. Unit of time organizations should need to develop, align the folks' strategy which may suit your company overall objectives. Harrish's (2017) article hiring and holding the talent is of was important to any firm. It'll win market power. Media and show business was perpetually targeted on making and implementing talent management strategy. Author complete that development program, long retention through engaging schemes, educational program, reward & recognition program can help for attract smart talent and retain their prime proficient staff. Marta, André (Jan. Mar. 2017). In analysis, there was necessary half in inventive trade, required to know the method of it. In line with the case study 'Management of individuals in tiny corporations and therefore the cases studied' the pliability to prepare the workday, the sense of accomplishment and therefore the bigger participation within the bigger selections of satisfying. It completes that the retention of staff in these corporations was associated with their identification with the activity itself instead of for gratifications, like remuneration or different edges. Stanley Chibuzo Opara (May 2016), in thesis, was studied from varied trade advertising, design, design, fashion, film, galleries, photography, wider culture industries, etc. The inventive industries were created of differing kinds of staff operating within

the varied sectors. Employment within the inventive industries was that found employment statistics fail to account for the number the rows of part-time and freelance employees. In line with his finding stack holders was struggled for funding, money insecurity, restricted resources, personnel prefer to still work among the humanities sector and holding a variety of jobs, generally as staff, freelance contractors. This may tough on HRM practices. Structure size is very important to take care of all the activities. He was complete that a personnel management approach characterized by short-run, reactive, ad hoc, and chiefly body and compliance-based HRM practices. The situational constraints that get within the approach the adoption of HRM within the sector were necessary. This text helps for raising the HRM during this sector. Pankaj Tiwari (Jan 2012) in analysis article shown that there were internal factors: organization size, org structure, business strategy, unit of time strategy, past practices, prime & administration, politics and; External factors economic changes, technology changes, national culture, characteristics of trade, regulation, actions of a competitor, action of union, globalization effects on HRM practices. Therefore, in any trade am found of it, film there's would like of innovative HRM practices. Volker, Axel (May 2011), in paper shown that require of specific accomplishment, learning and coaching want in project-based industries. There was found 3 ideas with reference to author studies that were inter-organizational nature of project networks, the useful equivalent logic of employment systems, and therefore the entangled org structure overlap of project. The author was mentioned the multilayered structure context of Visual Effects (VFX) production. Nguyen Hoai Anh, Brian H. Kleiner (2005), in an article were suggesting to prime level management that there have been must reward and acknowledge staff by checking the

performance of terribly within the space of guest service. There's necessary of individuals during this trade.

5. Deeply reviewed M D Mohite, Dr. Kulkarni (March 2019) articles told that in progress procedure and technological surroundings workers were added virtual place. Because of a tight labor market, Employers, the worker & the user need work flexibility thus, corporations taking interest in flexibility in work & place by victimization technology. Virtual work could be work that's not settled in anyone's physical house. Technology developed such workers can simply work from a remote location. By victimization hardware device (e.g. PC, functional phone, modem,) and software package for accessing the network. Work-connected travel will be replaced by the use of IT, telecommunications. Work refers to a full or half-time versatile work arrangement. A versatile work arrangement suggests that adjustment operating times and locations for an improved work-life balance. A non-telecommuter is a worker who performs job duties at the structure facility. Telecommuter's area unit those workers allowed acting structure duties from home or different locations victimization technology. The prefix 'tale suggests that 'distance'. Work refers to acting from a distance. Work refers specifically to the elimination of a daily commute. Reviewed article Smith, Patmos, Pitts (2018) told teleworkers has been larger levels of job satisfaction than others. Grater satisfaction found who used line example was e-mail, video technologies. Brian Hill (2018) factors like operating condition, chance, workload, respect from the different, relationship and money reward unbroken happiness at works. provincial capital (2016) focussed on Work, place, Life Balance, Training, Technical Support, Communication, and suppleness were have an effect on the satisfaction of Job. Kelley (2015) versatile Work Schedule Policy, virtual communication, Policy, and quality

of life is vital for virtual workers. Farah, Abdul, Mohd Zin (2012) replied factors like Personal and unit, Work-related, Travel-related was necessary for work adoption. Dawn H. Coveyduck (April 1997) was told Work team, organization support is vital for the satisfaction of workers among Telecommuters. Reviewed Allied telecom (2015) article mentioned advantage of Virtual Workforces for business that's workers feel happy in virtual work, they were less absent in job, workers was work tougher, manage simple, etc. Sneha, Shailaja (2014) Overall job satisfaction was higher in virtual team workers than ancient team workers.

6. M D Mohite (April 2019) M. D. Mohite told in his analysis paper that there are a unit necessary Job satisfaction Factors of a worker who add virtual work that's Place, Work, Time, Stress, Gender, Age, Experience, Immediate superior, Relationship, Communication, Technology, Payment, Policy, Security, Responsibility, Personal, dependency, Guidance, action, Travelling, Social, Status, Trust, Feedback, Help, scientific discipline and Law. consistent with the review of literature of M. D. Mohite, roaring HRM practices in Media and diversion and different industry; there should be want to take care in enlisting, selection, give additional compensation, use new technology, should be Team operating and versatile job style, enhancing the new chance of learning. Consistent with Dr. Kale told that management while not stress can get a positive end in HRM practices. Author Kaur Sandeep told that the time unit should increase receive attention in roles and responsibilities. Tiwari Pankaj external and internal factors affect HRM apply. Author Subhash C. Kundu, Divya Malhan, Pradeep Kumar eight told that there's an issue in winning satisfaction within today's competitive surroundings. Tushar Bhatia told in his article that if wish attains your structure goals in HRM

apply then there should be necessary safe, healthy and happy work, open-book management vogue, performance joined bonuses, 360-degree performance management feedback system, honest analysis system, information sharing, highlight performers, party discussions and feedback mechanism, rewards and delight staff with the sudden. Author Teresia Kavoo-Linge has counseled authorization of ladies should fill the gaps of Management talent & information through coaching or the support of consultants. Mohite was told that Human Resources is assignment folks for work or different purposes. they will attain on an individual basis or cluster Wise objective, goals, mission for or in organizations, personal, at intervals organization. It did by victimization unidirectional, two-way, multi-way assignment” fashionable Human Resources was transferral clarity, simplicity, enhancing, maintaining, capturing, assignment & caring human in personal, organization and at intervals organization. M-HR's aim is attempting to full fill the demand of workers, employers, coming candidates, and unselected candidates. “Modern Human Resources Management may be a method of transferral folks, employee, employer, unselected candidate, organizations and aside from organizations along in order that the goals, mission, and objectives of every four-sided figure measure met. M-HRM focusing consistently, effectively manages, maintain, control, develop human”. it had been designed to maximize worker performance for organizations and countries “Modern White Collar worker & fashionable Blue Collar worker each have advanced, multi-talent, multi-work doing ability folks. they're mentally yet as physical strong”

3.0 Findings:

The researcher noted important finding from reviewed literature that listed below,

1. Major researchers were studied on information Technology trade, not studied on the special department of IT companies and not specific division on IT. Investigator was shown that reviews writer study on the trade issue, salary, turnover, change, technology, demand, and life and performance cause of satisfaction. Upcoming Researcher and organization want the latest information, results, and suggestion regarding of employee, Job, satisfaction and its happiness; (Ref. M D Mohite, Kulkarni, Dec 2017 article).

2. The company's product and service should meet user needs, want, and desires. It's clearly shown that there's necessary once the client can get or purchase a product; and focus to share correct the “Price or cost, Specification, Presentation, Place, available Package, Human Support, Non-Human Support, Advertisements, Quality, Brand, Recommendation, and Reviews.” (Ref. Mr. M D Mohite, Feb 2020 article).

3. “Male employee has been found eight factors influenced in job satisfaction that was (a) Challenging Work in Excellent Physical Working Condition (b) Promotion of Learning, Creativity Activity in Business Climate (c) Accurately Fault Finding and Diagnosis (d) Meditation (e) Positive Work-Life Policy (f) Departmental Supervision (g) Healthcare (h) Social Media; and Female employee has been found nine factors influenced on job satisfaction that was (a) Suitable Work Location (b) Attain Query (c) Positive Work-Life Policy (d) Guidance (e) Hope of Better Position (f) Salary, Wages, Pay & Benefits (g) Challenging Work (h) Work Stress (i) Training Provider” (Ref. Mr. M D Mohite, Dr. R V Kulkarni, Nov 2019 article).

4. Consistently manage staff can increase the productivity of the business. Wining Human Resources management in Media and amusement there'll want careful

enlisting, selection, further compensation, new technology use, Team operating and versatile job style, care about enhancing the new chance of learning like coaching, involvement of worker, social responsibility, Performance appraisals, trust and securing data can turn advantages to such Media & entertainment industry. (Ref. Mr. M D Mohite, Feb 2019 article)

5. Job satisfaction factors of workers who are adding a virtual geographic point. They were noted vital Factors that influenced job satisfaction. that are Place, Work, Time, Stress, Gender, Age, Experience, Immediate superior, Relationship, Communication, Technology, Payment, Policy, Security, Responsibility, Personal, dependency, Guidance, action, Travelling, Social, Status, Trust, Feedback, Help, scientific discipline and Law. There could also be a positive relationship between demographic characteristics/variables with job satisfaction of workers in the virtual geographic point. Job satisfaction depends on workers and Employers' proportion of involvements between them. Here spoken communication that Satisfaction is an inner feeling which can be variable that depends on the state of affairs, facts, and tense. (Ref. M D Mohite, Dr. Kulkarni, March 2019 article.)

6. Regular HRM centered on Recruiting and staffing, compensation, benefits, training, learning, Labour, worker relations, Organization development and involves strategic still as comprehensive approaches. Within the fashionable Human Resources Management ought to add and implement new fashionable technique can secure fashionable creature is present. It helps to develop individual, structure, and country growth. (Ref. M D Mohite, April 2019, article)

7. According to the above paper it was seen that satisfaction problems occur in an employee some of reason. Employees are facing lots of problems; the most of

researchers found various factors related to job satisfaction. Employee job satisfaction issues were occurring for a long year. Organizations are facing to judge employee and inner satisfaction of humans.

4.0 Suggestion:

1. Business holders should understand the entire loyalty, happiness, and satisfaction of product, customer, employee, and service. Establish closely user personal and listening expertise on the product, services, employee, and business. Increase advantages choice to the user from the business. There ought to perceive the commonest issue for client satisfaction and happiness as well as focus on employee satisfaction. Companies should focus on employee-based product and solve problems which should meet user needs.

2. There should improve Satisfaction with giving staff larger management; autonomy and responsibility for his or her own time at intervals the geographical point as well as externally which will be dominant. The employer must focus on the rising quality of work with life balance on worker demand and receipt to employees for value returning inside; and reduce deed earlier or later conjointly addresses the strain of the daily commute, life, and new strategy must be needful.

3. The organization should prop up focus executives in achieving a balance between supporting their groups and stepping over into the hurtful territory of micro-level management. Leading towards near to the ground confidence, lack of novelty, extrication, and ultimately, high worker turnover. Communication ought to even be a two-way process that like adopt an associate trade policy to ask feedback queries and encourage a cooperative culture. Organizations should support staff by educating them on health problems through seminars, making certain

employees will take regular breaks, annual leave, providing room facilities and healthier food selections in-office, etc that will help security staff.

4. Support your staff in strain for additional and drive their career development. Investment in staff by providing coaching, up-skilling, mentoring, or coaching job is well-trying to reinforce their satisfaction and engagement with the business. As an association leader, you not solely enjoy the happier staff, however the extra skills and experience they're later on able to provide. Organized social activities outside of labor hours will add benefits to organizations. They will encourage to be needed by birthday celebrations or attend events along demonstrate larger engagement and stay focus on happiness in the work environment.

5.0 Conclusion:

Employee satisfaction cares with positive feelings a private will get from his job or Work. With the growing competition in the knowledgeable era, the subject of job satisfaction contains a lot of importance as a result of success or growth is completely rely upon staff significance and it'll come back only if a worker is absolutely glad about operating atmosphere and the other way around. If a worker isn't glad about operating conditions, then each the standard and amount of results can suffer and affected, while, on the opposite hand, if a worker is glad, then overall performance can improve at its best level. Employee satisfaction, there is a need to look inside elements like work expertise, career prospects, skilled motivation, Outside elements like leadership, governance, work setting, client satisfaction, and preventive factors like workers role, verbal description, company policies, pay, and advantages. It's seen that there's vital once the client can obtain or purchase product and service relay on

employee satisfaction. One of the foremost moneymaking ways in which to reinforce your business is to attract your competitor's customers to your business. There is a need to upgrade employee satisfaction that will create a new way of business. Customers, employees, and employers trust always switch brands and businesses. Avoid switching ways, it will feel safe. You'd wish to convey to them a fairly smart reason to choose your business over your competitors. This research will help to overcome such crises in organization.

Reference:

Research Paper:

M. D. Mohite & Dr Kulkarni (2017), '*Job Satisfaction of Employees in Information Technology Industry: A Review*', Published in Swatidhan International Publication, 'Research Journey', International Multidisciplinary E-Research Journal, ISSN: 2348-7143, Oct-Nov-Dec 2017. UGC Approved No. 40705 & 44117

Mr. Maheshkumar D Mohite (23 Feb 2020) '*A Survey on Customer Satisfaction Happiness towards Selected Products as well as Services*' Published in Aayushi International Interdisciplinary Research Journal, ISSN 2349-638x, Special Issue No.68, P. 293-304.

Mr Maheshkumar Mohite, Dr R V Kulkarni (November 2019) '*Application Of Factor Analysis In Job Satisfaction Of Employees In IT Companies*' Published in International Journal of Scientific & Engineering Research, Volume 10, Issue 11, November-2019 P. 749- 759 ISSN 2229-5518

M. D. Mohite (Feb 2019) "*Human Resources Management In Media & Entertainment: Review*", Published in Aayushi International Interdisciplinary

Research Journal, Vol 5 Issue No 49, P. 1381 to 1385, ISSN 2349-638x.

M D Mohite, Dr. Kulkarni (2/3/2019) 'Job Satisfaction Factors of Employee in Virtual Workplace: Review', Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456- 6470, Conference Issue, March 2019, p.38-42,

M. D. Mohite (04/04/2019) 'Human Resources Management Practices in Modern World' published in International Journal of Innovative Knowledge Concepts, 7(4) April, 2019ISSN : 2454-2415 Vol. 7, Issue 4, April, 2019

Books

C.R. Kothari, Gaurav Garg (2015), *Research Methodology: Methods And Techniques*, New age International publication.

McDaniel (2008), *Keys to Job Satisfaction Rick, High Impact Living*, Audio book – Unabridged

C. J. Cranny, Patricia Cain Smith, and Eugene F. Stone (01-Jan-1992), *Job Satisfaction: How People Feel about Their Jobs and how it affects Their Performance*, Lexington Books

Blogs:

<https://awardedarticles.blogspot.com/>



Threat of Female Foeticide on Women's Health and Society

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Abstract: Female Foeticide and infanticide are not the only issues with girl children in India. At every stage of their life, she is discriminated against and neglected for basic nutrition, education, and living standard. When she was in the womb, she was forced to miss the movement when she was supposed to enter the world. At the time of birth, her relatives pulled her back and wrung her neck. After killing her she was thrown into a trash can. The nation of mothers still follows a culture where people idolizes son and mourns daughters. UN figures out that about 750,000 girls are aborted every year in India.

In the present global scenario some of the worst gender ratios, indicating gross violation of women's rights, are found in South and East Asian countries such as India and China. The determination of the sex of the foetus by ultrasound scanning, amniocentesis, and in vitro fertilization has aggravated this situation. No moral or ethical principle supports such a procedure for gender identification. The situation is further worsened by a lack of awareness of women's rights and the indifferent attitude of governments and medical professionals towards the issue.

The present study helped to understand the extent of Female Foeticide which disturbs not only the natural sex ratio in society by reducing the number of women as compared to men but also effect the Health of existing women in our society. And from asocial perspective in a couple of decades, such sex-selective abortions will lead to a worsening of the situation where men would not have a wife, a sister, a daughter, and above all their very existence would be a threat. This could also lead to an-increase in crime rates like women trafficking, and brutal violence against women.

Keywords: Female Foeticide, Sex Ratio, Sex Selection Abortion.

1.0 Introduction:

In our Indian culture, the girl child represents beauty, auspiciousness and prosperity. Throughout the ages, parents have loved their daughters as much, and sometimes more than their sons. It was natural for the Vedic Aryans to have this preference because a pastoral society of a warrior needed men for the protection of the race and survival in new country. Yet, Vedic literature does not bemoan the birth of a girl child. In fact, special mantras exist in the Rug-Veda, the recitation of which is supposed to lead to the birth of a girl child who will grow up to be a learned lady. Accordingly, Namkaran (Naming

ceremony) was conducted for a girl child and there are instances of Yajnopavit being performed for them.

Selection Of Topic: Female Foeticide refers to sex-selective abortion, conducted to avoid the birth of a girl child. Female Foeticide begins with the illegal determination sex of the fetus. This is followed by illegal termination of pregnancy. Thus, there is aviolation of two laws regarding female Foeticide. First, there is the illegal determination of the sex of the fetus. Second, there is illegal termination of pregnancy. Female Foeticide disturbs the natural sex ratio in society and reduces the number of women

as compared to men in society. Clearly, in a couple of decades, sex-selective abortions could lead to a situation where men may not find brides to marry. This could lead to the trafficking of women; or worse violence against women.

Combating female Foeticide is challenging. Though there is a law against sex determination and illegal abortions, there is widespread tolerance if not acceptance of female Foeticide. Moreover, there is widespread corruption, both in the availability of medical professionals, willing to violate the law and corruption among law enforcement authorities.

2.0 Objective Of The Study

- To study and identify the extent and incidence of female Foeticide in Kolhapur
- To study the causes of female Foeticide, legal, awareness and its impact on women's health and society
- To suggest social work interventions in curbing this issue.

3.0 Research Methodology Adopted:

This is an **Exploratory Research Design** as no study has been done in Kolhapur to the best of the researcher's knowledge from a social work perspective. The **universe** for the present study consisted of the adult population in 20 years group and above in Kolhapur city. The researcher has applied the **Stratified Sampling Method** in selecting the respondents from various strata of the universe like lawyers, doctors, police, reporters, counsellors, Matrimonial service providers, Social Workers etc. The researcher selected a sample size of 200 respondents using the Simple **Random Sampling Method** from the strata. The sample size varied due to the availability of the respondents from the selected strata. 25 respondents each from lawyers,

Doctors, Police, Social workers, press reporters, and Matrimonial service providers, and 10 each from a counsellor, etc. were selected as a sample.

The **geographical scope** of the study covered all the professional and non-professional populations residing in Kolhapur City. The **topical scope** covered the threat of Female Foeticide on women's health and society. The **analytical scope** covered the fulfillment of objectives set out for the study. The **functional scope** is confined to rendering a set of appropriate suggestions for ensuring control of female Foeticide and protecting the health of the pregnant mother and their child.

To elicit the relevant data from the selected respondents, A '5-point scale' Questionnaire as a tool was opted for the collection of primary data in the form of 1.-Strongly agree, 2.-Agree, 3.-Neutral, 4.-Disagree and 5.-Strongly disagree. Apart from this Interview technique, Observation and general discussion methods were also applied to elicit data as and when it was required from the respondents.

4.0 Major Findings:

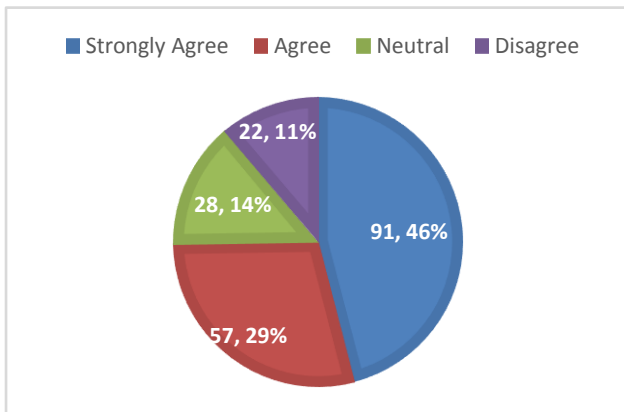
- The majority of respondents 81% were in age group of 35 and above years and had knowledge about this issue as well the awareness of PCPNDT Act.
- 87% of respondents are aware about sex ratio information of population and that sex ratio Sex determination is an illegal crime, 79.5% of respondents are aware of the punishment of sex determination testing and the incidence is largely dependent on the family's attitude
- 95.5% of respondents strongly agreed that Female Foeticide is a big threat to future generations
- 95% strongly agreed that parents think a girl child is big responsibility of their

life and don't want to take responsibility of the girl child. This is attributed to multiple reasons like dowry, safety etc., in bringing up a Female Child. Additionally, a belief that a Male child would be the backbone for old age and the one who would execute the final rites for the souls of late parents and ancestors creates a lean towards Male children.

- 96% strongly agreed that Many of parents have a negative attitude about nurturing a girl child as they feel she cannot protect herself and the girl child is not safe in our society.

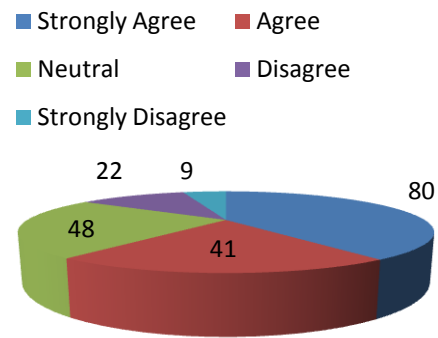
Female Foeticide effect on the mother's Health

	Frequency	Percentage
Strongly Agree	91	45.5
Agree	57	28.5
Neutral	28	14.0
Disagree	22	11.0
Total	200	100.0



Women Coerce Women to Accept Female Foeticide

	Frequency	Percentage
Strongly Agree	80	40.0
Agree	41	20.5
Neutral	48	24.0
Disagree	22	11.0
Strongly Disagree	9	4.5
Total	200	100.0



Female Foeticide causes poor physical & mental health in women

	Frequency	Percentage
Strongly Agree	89	44.5 %
Agree	63	31.5 %
Neutral	32	16 %
Disagree	15	7.5 %
Strongly Disagree	1	0.5 %
Total	200	100



Insights of Exploratory Data Analysis (EDA) of Covid-19 Vaccine Administration in India

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Abstract: The goal of the study is to analyze the vaccination administration in India with a keen interest in finding meaningful insights using exploratory data analysis. In this study dataset from Kaggle comprising of covid-19 vaccination records of 8 months from January 2021 to August 2021 is used. Vaccination details of all 36 the states and Union Territories are recorded in the dataset, and Python libraries including *Pandas*, *Matplotlib*, and *Seaborn* packages are used to compare state-wise vaccination progress, analyze the share of covaxin and covishield in total dosage administered and to find the acceptance rate of covid-19 vaccination in India. The finding of the analysis identified that Uttar Pradesh, Maharashtra, Rajasthan, and Gujarat are the top 4 states that administered the highest number of Covid-19 vaccine doses. The study also confirms that for all the states in India the proportion of Covishield vaccine dosage administered is higher as compared to Covaxin vaccine

Keywords: exploratory data analysis, Covid-19, vaccination, visualization, python

1.0 INTRODUCTION

The COVID-19 cases upsurge, officially known as the coronavirus disease epidemic, would be a continuing global public health problem of coronavirus disease 2019 (COVID-19). The outburst happened in Wuhan, China, in December 2019. The World Health Organization (WHO) classified COVID-19 as a Public Health Emergency of International Concern on January 30, 2020, and a pandemic on March 11, 2020. 79 231 893 cases globally, 10,207,871 cases in India had occurred as of 29th December 2020, with 1,754,574 fatalities globally and 147 901 in India caused due to COVID-19. By December 2021 globally the confirmed cases raised upto 280,119,931 and 5,403,662 deaths and in India 34,799,691 confirmed cases and 480,290 total deaths, making it one of the worst pandemics in history.

A big step taken by WHO and supported by various countries in combating the COVID-19 pandemic was the acceptance of a vaccination campaign for SARS-CoV-2. The upsurge in various vaccines

developed by different pharmaceutical companies spurred curiosity about learning more about ongoing vaccination administration.

Many researchers and statisticians have carried out different statistical and visual data analyses on vaccination data. Kamaraj, M. et. al. [1], studied types of covid vaccines available in India and the analyzed process of vaccination drive in India. They collected secondary data from the COWIN dashboard. They concluded that one must continue vaccination even if the vaccinations are less successful against new variants. Chakraborty, C. et. al. [2], have discussed the different parameters that lead to an increase in the Covid-19 second wave. They also illustrated barriers affecting covid vaccination drives in India. Padma T. V. [3], stated that though India is one of the biggest suppliers of covid vaccine, it is struggling with lots of crises regarding covid vaccination. The author also stated that surging cases and vaccine

demand in India are leading to regional shortages

V.M. Kumar et al[4], discussed numerous aspects like, various vaccines available in India, and COVID-19 VACCINE DISTRIBUTION, The author emphasized the overall crux of vaccine development and vaccination strategies used during a pandemic in a densely populated country (India). Panda, D. S et. Al. [5], presented a survey on covid-19 vaccine acceptance and safety concerns from a public perspective for Odisha, India., They concluded that, some safety concerns in adults as well as in children like side effects of a vaccine, and effectiveness, the spectrum of activity and cost are irrespective of age, gender, marital status, and occupation.

With a keen interest in finding meaningful insights an exploratory data analysis on the scraped data from the Kaggle website using Python libraries including *Pandas*, *Matplotlib*, and *Seaborn packages* is carried out in this study. We have analyzed the vaccine administration data in India with the prime objectives of this study is to compare state-wise vaccination progress, analyze the share of covaxin and covishield in total dosage administered, and the acceptance rate of covid-19 vaccination in India

2.0 MATERIALS AND METHODS

In the previous Section, the authors reviewed several recent studies concerning covid vaccination in India, and it is interpreted that there is a need for proper analysis of Covid Vaccination status in India.

In this study data set used is Secondary data, collected from <https://www.kaggle.com/> and the tools used for analysis are MS-Excel 2013, Google Python Collaboratory

Dataset Description: .csv format dataset comprising of State-wise Covid vaccination details in India incorporating 7633 records with 24 features is used for the analysis.

Dataset features: ['Updated On', 'State', 'Total Doses Administered', 'Sessions', 'Sites', 'First Dose Administered', 'Second Dose Administered', 'Male (Doses Administered)', 'Female (Doses Administered)', 'Transgender (Doses Administered)', 'Covaxin (Doses Administered)', 'CoviShield (Doses Administered)', 'Sputnik V (Doses Administered)', 'AEFT', '18-44 Years (Doses Administered)', '45-60 Years (Doses Administered)', '60+ Years (Doses Administered)', '18-44 Years (Individuals Vaccinated)', '45-60 Years (Individuals Vaccinated)', '60+ Years (Individuals Vaccinated)', 'Total Individuals Vaccinated']

This dataset contains covid-19 vaccination records for 8 months from January 2021 to August 2021. Vaccination details of all 36 the states and Union Territories are recorded

The study is conducted in 3 phases, First phase is the Data Extraction phase in which the dataset from Kaggle.com was pulled and mounted on Google Colab using Panda libraries, followed by Data Wrangling Phase, carrying out different data preprocessing techniques to make data ready for EDA. The third phase is the Exploratory Data Analysis to attain the objectives of the study using python matplotlib and seaborn libraries.

3.0 RESULTS AND DISCUSSION

Data Extraction Secondary dataset downloaded from Kaggle.com is stored on google drive and the drive is mounted in google colab, snapshot of it is shown in Figure 1.


```

{x}
  ▾ Mounting Google Drive

  ▶ from google.colab import drive
    drive.mount('/content/drive')

  ↗ Drive already mounted at /content/drive; to attempt to forcibly remount,

```

Figure 1: Google Colab Drive Mount

Pandas library is used to load a dataset, in Figure 2 shows the data set records

Loading Dataset

```

[3] covid_data = pd.read_csv('/content/drive/MyDrive/Dataset/covid_vaccine_statewise.csv')

```

covid_data

	Updated On	State	Total Doses Administered	Sessions	Sites	First Dose Administered	Second Dose Administered	Male (Doses Administered)	Female (Doses Administered)	Transgender (Doses Administered)	...	Admi
0	16-01-2021	Andaman and Nicobar Islands	23.0	2.0	2.0	23.0	0.0	12.0	11.0	0.0	...	
1	17-01-2021	Andaman and Nicobar Islands	23.0	2.0	2.0	23.0	0.0	12.0	11.0	0.0	...	
2	18-01-	Andaman and	42.0	0.0	2.0	42.0	0.0	20.0	12.0	0.0	...	

Figure 2: Snapshot of Covid vaccine statewise dataset loaded

Data Wrangling

The phase of Data wrangling contains numerous data pre-processing activities such as

- Checking Dataset for missing values
- Handling missing data
- Feature Selection

Checking Dataset for missing values: check for missing values in the dataset is done by `isnull()` method.

```

[22] covid_data.isnull()

```

	Updated On	State	Total Doses Administered	Sessions	Sites	First Dose Administered	Second Dose Administered	Male (Doses Administered)	Female (Doses Administered)	Transgender (Doses Administered)	...	18 Admi
0	False	False	False	False	False	False	False	False	False	False	...	
1	False	False	False	False	False	False	False	False	False	False	...	
2	False	False	False	False	False	False	False	False	False	False	...	
3	False	False	False	False	False	False	False	False	False	False	...	
4	False	False	False	False	False	False	False	False	False	False	...	
...	
7630	False	False	True	True	True	True	True	True	True	True	...	
7631	False	False	True	True	True	True	True	True	True	True	...	
7632	False	False	True	True	True	True	True	True	True	True	...	
7633	True	True	True	True	True	True	True	True	True	True	...	

Figure 3: Output of missing values check

The results in Figure 3 indicate that the dataset contains some null values. Records with missing values may lead to false data analysis

Handling missing data: In this study, the authors have attempted to omit all the

rows containing the Null value and followed by omitting the columns containing the Null value. The resultant dataframe is the “Clean_Data1” as shown in Figure 4. And Figure 5 with no missing value. This pre-processed dataframe has 7633 records with 19 features

```
[5] # Removing Null Records
Clean_Data = covid_data.dropna(axis=0, how="all", thresh=None, subset=None, inplace=False)
print(Clean_Data)
```

	Updated On	State	Total Doses Administered
0	16-01-2021	Andaman and Nicobar Islands	23.0
1	17-01-2021	Andaman and Nicobar Islands	23.0
2	18-01-2021	Andaman and Nicobar Islands	42.0
3	19-01-2021	Andaman and Nicobar Islands	89.0
4	20-01-2021	Andaman and Nicobar Islands	124.0
...
7628	08-11-2021	West Bengal	NaN
7629	08-12-2021	West Bengal	NaN
7630	13-08-2021	West Bengal	NaN
7631	14-08-2021	West Bengal	NaN
7632	15-08-2021	West Bengal	NaN

Figure 4: Dataframe with all missing row data omitted

```
[6] Clean_Data1 = Clean_Data.dropna(axis=1, how="all", thresh=None, subset=None, inplace=False)
Clean_Data1
```

	Updated On	State	Total Doses Administered	Sessions	Sites	First Dose Administered	Second Dose Administered	Male (Doses Administered)	Female (Doses Administered)	Transgender (Doses Administered)
0	16-01-2021	Andaman and Nicobar Islands	23.0	2.0	2.0	23.0	0.0	12.0	11.0	0.0
1	17-01-2021	Andaman and Nicobar Islands	23.0	2.0	2.0	23.0	0.0	12.0	11.0	0.0
2	18-01-2021	Andaman and Nicobar Islands	42.0	9.0	2.0	42.0	0.0	29.0	13.0	0.0

Figure 5: Dataframe with all missing column data omitted

Feature Selection

For desired data analysis some features are selected manually as below:

```
[9] # Feature Selection
Final_Data = Clean_Data1[['Updated On', 'State', 'Total Doses Administered', 'Male (Doses Administered)', 'Female (Doses Administered)',
'Transgender (Doses Administered)', 'Covaxin (Doses Administered)', 'CoviShield (Doses Administered)', 'Total Individuals Vaccinated']]
```

4.0 Exploratory Data Analysis

In the previous phase, the authors have selected 9 features manually for further Exploratory Data Analysis. The current phase of Exploratory Data Analysis is divided into the following analysis activities:

- **State-wise vaccination details**

- **Share of Covaxin and Covishield in total dosage administered**
- **The acceptance rate of covid-19 vaccination in India**

State-wise vaccination details groupby() functionality is applied on Final_Data Dataframe. For this grouping, the ‘State’ feature is used as a grouping key, and sum() is used as the aggregation function shown in figure 6.

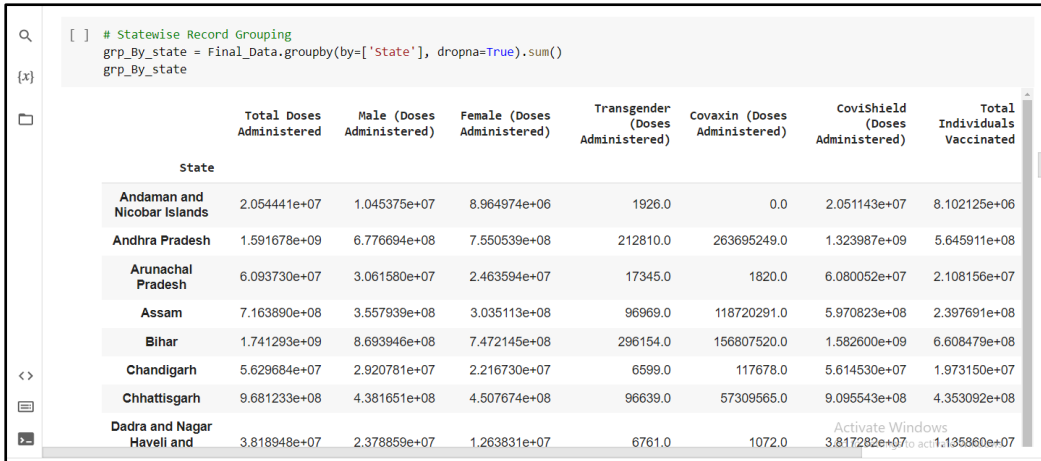


Figure 6: groupby () functionality is applied on Final_Data Dataframe

It was observed that all the data values are of float type, so it is required to convert these values to the integer type. Figure 7 and figure 8 show the conversion of float to integer and its results respectively

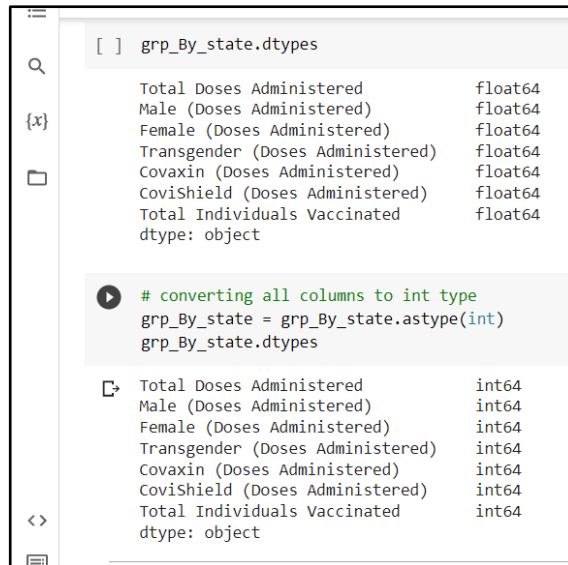


Figure 7 : Conversion of data frame values from float to integer

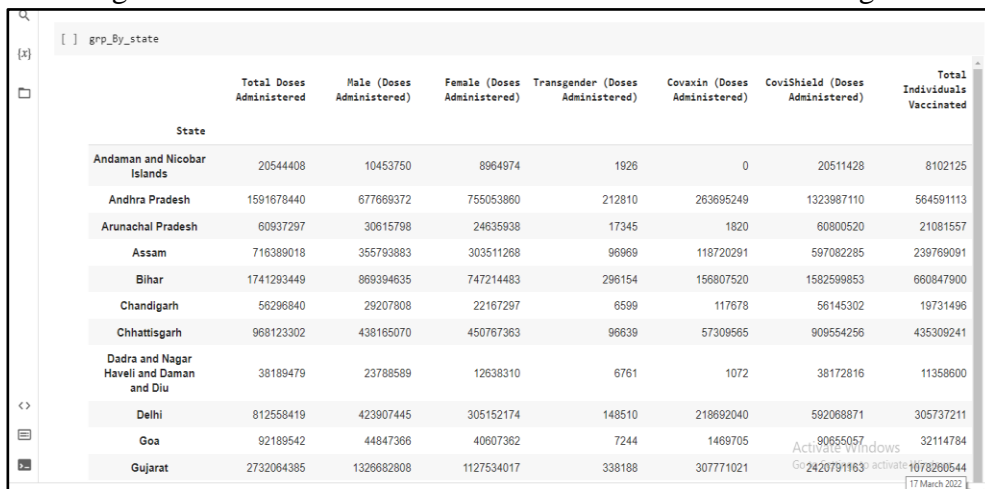


Figure 8: Data frame values after conversion

Based on the above-mentioned outcome, visualization of State-wise vaccination details is presented by using a barplot as shown in figure 9. pyplot module of the Matplotlib package is used for the aforementioned visualization



Figure 9: State-wise vaccination visualization

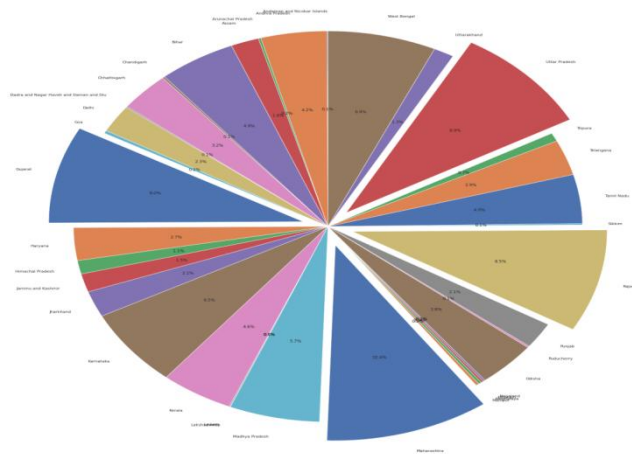


Figure 10: Pieplot visualization of state-wise vaccines administered

From a foreknown Exploratory Data Analysis, it is interpreted that, Maharashtra, Gujarat, Uttar Pradesh, and Rajasthan are the top 4 states that administered the highest number of Covid-19 vaccine doses from January 2021 to August 2021 shown in Figure 10.

Share of Covaxin and Covishield in total dosage administered

Most of the populace from India preferred either Covishield or Covaxin to fight against the plight of Covid-19. So, in the current phase, it is estimated that these two vaccines are the most chosen. A Scatter

plot is used to present the state-wise proportion of Covaxin and Covishield in

the total dosage administered

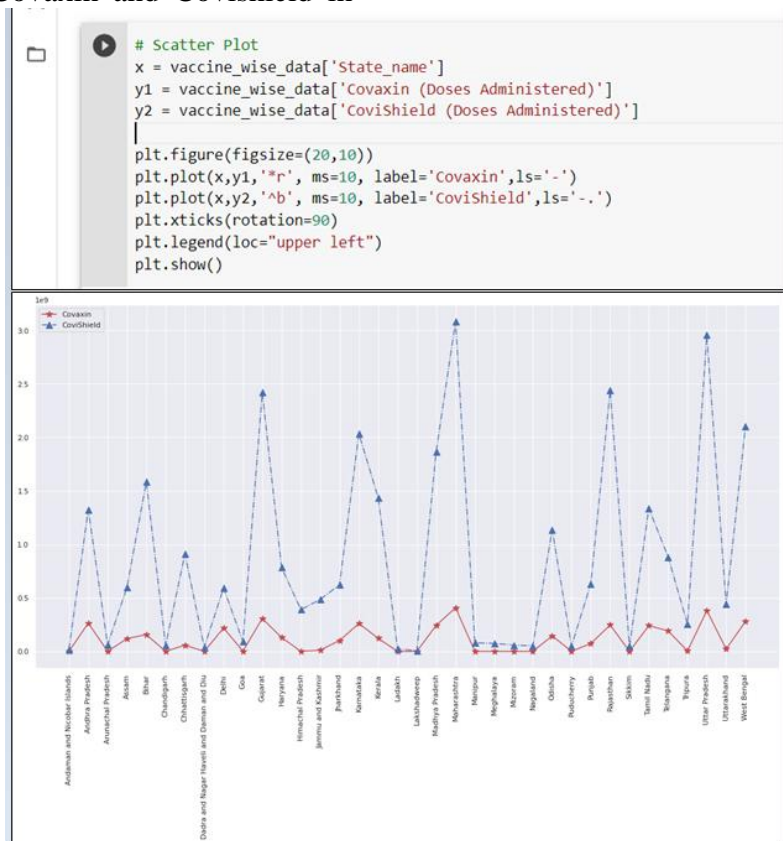


Figure 11: Scatterplot to visualize the state-wise proportion of Covaxin and Covishield in total dosage administered

It is observed from figure 11 that in almost all the states proportion of Covishield dosage administered is higher as compared to Covaxin

vaccination, But the main challenge was acceptance of these vaccines among people.

The acceptance rate of covid-19 vaccination in India

The rapid development of the covid-19 vaccine has given some hope to health practitioners around the world. The safety of the populace was dependent on

To show the acceptance rate authors have plotted individuals vaccinated against time, the plot in Figure 12. plots x-axis (Date) and Y-axis (total individuals vaccinated), from the plot it is observed that there is a positive correlation. i.e. Vaccination rate is increasing day by day

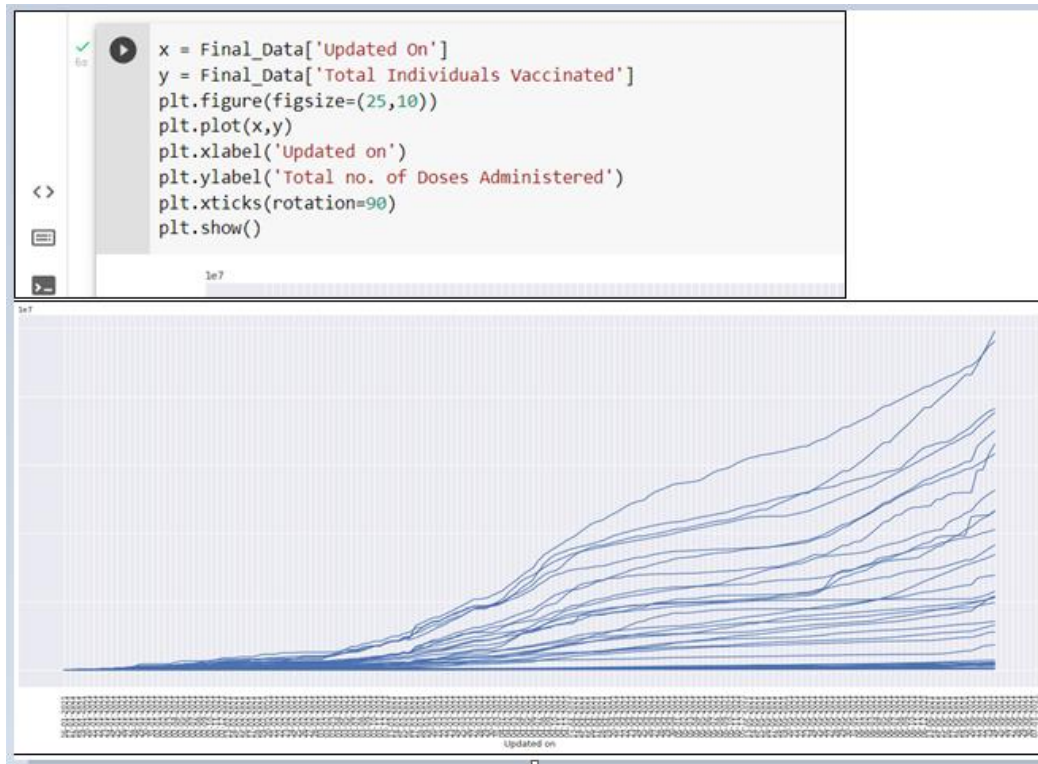


Figure 12: Line plot of date wise individuals vaccinated

5.0 CONCLUSION

In this article, the authors have visualized and debated the COVID-19 vaccination in India in terms of everyday vaccinations as per state, cumulative vaccinations per state, and share of Covaxin and Covishield in total dosage administered. The finding of the analysis identified that Uttar Pradesh, Maharashtra, Rajasthan, and Gujarat are the top 4 states that administered the highest number of Covid-19 vaccine doses. The study also confirms that for all the states in India the proportion of Covishield vaccine dosage administered is higher as compared to the Covaxin vaccine. The acceptance rate of vaccines is observed to be increasing.

6.0 REFERENCES

Kamraju, M., Ali, M. A., Mohd, *, & Ali, A. (2021). A Study on Covid-19 Vaccination Drive in India. *BRICS Journal of Educational Research*, 11(2), 76–79.

<https://www.researchgate.net/publication/352903714>

Chakraborty, C., Sharma, A. R., Bhattacharya, M., Agoramoorthy, G., & Lee, S. S. (2021). The current second wave and COVID-19 vaccination status in India. In *Brain, Behavior, and Immunity* (Vol. 96, pp. 1–4). Academic Press Inc. <https://doi.org/10.1016/j.bbi.2021.05.018>

Padma T. V. (2021). India's Vaccine Crunch.

Kumar, V. M., Pandi-Perumal, S. R., Trakht, I., & Thyagarajan, S. P. (2021). Strategy for COVID-19 vaccination in India: the country with the second highest population and number of cases. In *npj Vaccines* (Vol. 6, Issue 1). Nature Research. <https://doi.org/10.1038/s41541-021-00327-2>

Panda, D. S., Giri, R. K., Nagarajappa, A. K., & Basha, S. (2021). Covid-19 vaccine, acceptance, and concern of safety

from public perspective in the state of Odisha, India. *Human Vaccines and Immunotherapeutics*, 17(10), 3333–3337. <https://doi.org/10.1080/21645515.2021.1924017>

Kamath, Rajani & Jamsandekar, Shruti & Kharade, Kabir & Kamat, Rajanish. (2019). *Data Analytics in R: A Case Study Based Approach*.

Muthusami Rathinasamy Saritha Kandhasamy, An exploratory analysis of COVID-19 vaccination administration, *Proceedings of the Indian National Science Academy Springer Publications* (2022) 88:43–52 <https://doi.org/10.1007/s43538-022-00064-7>



Time Series And Cluster Analysis Of Covid-19 Growth Curve In India

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Abstract: The study is an exploratory data analysis and cataloguing of regions from India based on the varieties of COVID-19 infected cases using unsupervised learning approach, World Health Organization's COVID-19 Situation Reports are refereed for this study. These reports provide worldwide details of the current COVID-19 epidemiological situation, present official case, death counts, and transmission classifications and so on. It is observed from the dataset that the highest number of active cases i.e. 10,17,754 on 18th September 2020. In this context, we model the trajectory of the cumulative confirmed cases and deaths of COVID-19 via a piecewise time series model. We analyze the trajectory of the cumulative COVID-19 cases and deaths for major regions of India and discover interesting patterns with potentially relevant implications of the pandemic responses by different regions. We further have applied k-means clustering approach for the visualization of Indian regions. The clusters of the regions are formed based on the parameters such as Confirmed cases, Active cases, Cured cases, and Total deaths. This work exhibits the performance of the unsupervised learning technique by experimenting with several iterations and clusters. The sum of square errors is considered from each cluster to measure the performance of the k-means clustering.

Keywords: clustering; kmeans; time series; exploratory analysis;

1.0 Introduction

Artificial Intelligence and Machine Learning are playing vital role in resolving outbreak of the COVID-19. Researchers Wongvibulsinet al have designed machine learning calculator that provides the COVID-19 hospitalized patients predictions of severe illness or death [3]. A team of scientists at the University of Liverpool, UK, has used a combination of fundamental biology and machine learning for the prediction of new virus strains [4]. This finding could help to target the surveillance for new diseases. BECKER'S HEALTH IT journal has reported Artificial Intelligence tool by Los Angeles-based University of Southern California to remove uncertainty from medical diagnosis [5].

Pandemic time series forecasting strategy using Recurrent Neural Networks (RNN)

for prediction of the future number of confirmed cases of COVID-19 based on several factors such as transmission rate, temperature, and humidity has been proposed in [9]. Such time series analysis and visualization can give better insights of the covid 19 spread out over a tie period.

In this context, authors have presented the cluster analysis and visualization of Indian regions based on COVID-19 metrics. The dataset for the present study is retrieved from an open access data platform [1]. The cluster analysis is carried out by applying K-means clustering approach. It is observed from the dataset that the highest number of active cases i.e. 10,17,754 on 18th September 2020 [2]. Hence the region wise infected cases as on 18th September was considered for the analysis. The clusters of the regions are formed based on the parameters such as Confirmed cases, Active cases, Cured cases, and Total

deaths. In this division regions are clustered into five groups of size 10,18, 3, 1 and 3.

2.0 Methods and Materials

In continuation to the scenario mentioned in the introduction, Indian regions COVID-19 metrics are taken into account to analyse similarities of the regions and assigned them to the clusters. The parameters such as Confirmed cases, Active cases, Cured cases, and Total deaths of these regions as on 18th September 2021

taken from COVID-19 Situation report. The screenshot of the partial dataset is shown in the figure 1. It has found that the infected cases were 0 for Lakshadweep, so it is excluded from the dataset. The basic statistical analysis of this dataset is shown in the figure 2. It's observed that Confirmed cases, Active cases, Cured cases, and Total deaths are highest in Maharashtra. Where as the Confirmed cases and Total deaths are minimum in Mizoram.

Region	Confirmed Cases	Active Cases	Cured/Discharged	Death
Andaman and Nicobar	3604	174	3378	52
Andhra Pradesh	601462	88197	508088	5177
Arunachal Pradesh	6851	1871	4967	13
Assam	150349	28208	121613	528
Bihar	164051	13156	150040	855
Chandigarh	9256	3085	6062	109
Chhattisgarh	77775	36036	41111	628
Dadra and Nagar Have	2831	221	2608	2
Delhi	234701	31721	198103	4877
Goa	26783	5612	20844	327
Gujarat	118926	15975	99681	3270
Haryana	103773	21014	81690	1069
Himachal Pradesh	11190	4146	6946	98
Jammu and Kashmir	59711	20239	38521	951
Jharkhand	67100	13703	52807	590
Karnataka	494356	103650	383077	7629
Kerala	122214	34380	87345	489
Ladakh	3576	972	2558	46
Lakshadweep	0	0	0	0
Madhya Pradesh	97906	21631	74398	1877
Maharashtra	1145840	302135	812354	31351
Manipur	8430	1841	6538	51
Meghalaya	4356	1983	2342	31
Mizoram	1534	585	949	0
Nagaland	5306	1193	4098	15
Odisha	167161	33026	133466	669
Puducherry	21428	4744	16253	431
Punjab	90032	21568	65818	2646
Rajasthan	109473	17495	90685	1293

Figure 1: Screenshot of the partial dataset

Confirmed.Cases	Active.Cases	Cured.Discharged	Death
Min. : 1534	Min. : 174	Min. : 949	Min. : 0
1st Qu.: 8843	1st Qu.: 2534	1st Qu.: 6300	1st Qu.: 75
Median : 77775	Median : 15975	Median : 52807	Median : 590
Mean : 148991	Mean : 29079	Mean : 117502	Mean : 2411
3rd Qu.: 165549	3rd Qu.: 31197	3rd Qu.: 134412	3rd Qu.: 2262
Max. : 1145840	Max. : 302135	Max. : 812354	Max. : 31351

Figure 2: Basic Statistical Summary of COVID-19 as on 18th September 2021

The K-means clustering, an unsupervised classification technique is applied for the present study [3]. The K-means technique derives a collection of k clusters using a heuristic search starting with a selection of k randomly chosen cluster search of which in the beginning represents a cluster mean. Further the clustering depends on estimating likeness between regions by figuring the separation between each pair. The similarity is estimated concerning the mean estimation of the regions in a group.

3.0 K-means Clustering for COVID-19 Metrics Analysis

The region wise metrics of COVID-19 cases are analysed and clusters are formed in R platform, an opensource data mining platform. State wise COVID-19 records are

clustered based on four parameters. A single record C_i represented as multidimensional data vector and is defined as:

$$C_i = [\text{Confirmed cases}_i, \text{Active cases}_i, \text{Cured cases}_i, \text{and Total deaths}_i]$$

Where $i = 1$ to 35

It is required to specify the number of clusters in K-means clustering. Figure 3 shows the plot for “Number of clusters” against “within groups total of squares”. This parameter should be minimized for the selection of number of clusters [4]. Plot shows that “within groups sum of squares” decreases to a certain point 5, and afterward there is no much significant decrease in value. Hence it’s decided to design 5 clusters.

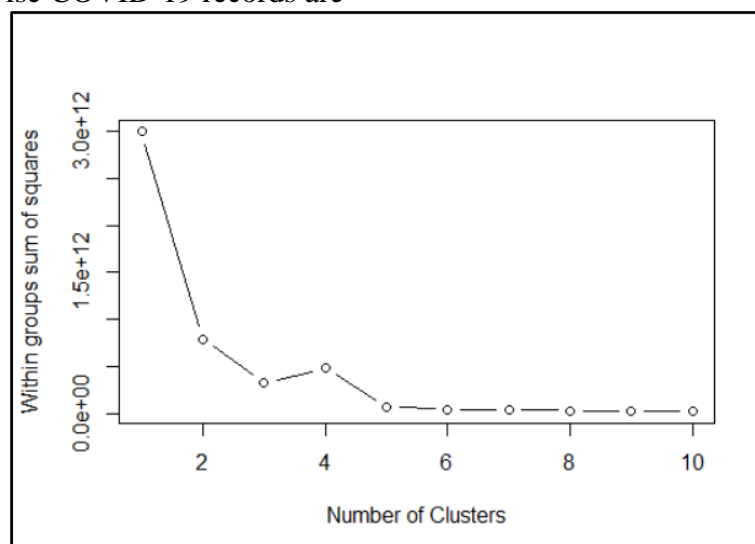


Figure 3: Number of clusters against within clusters sum of squares

The R function `kmeans()` is applied to get clusters of Indian regions based on COVID-19 metrics. The k-means analysis is experimented by changing number of

clusters by keeping number of iterations 15, as constant. The experiment is evaluated using within clusters sum of square errors and `BetweenSS/TotalSS` [5].

The ideal value for BSS/TSS i.e. the properties of internal cohesion and external separation should approach 1. The summary of k-means clustering shown in

the figure 4. The ratio BSS/TSS 98% shows the accuracy of the clustering. K-means forms 5 clusters of size 10, 18, 3, 1, and 3 based on COVID-19 metrics.

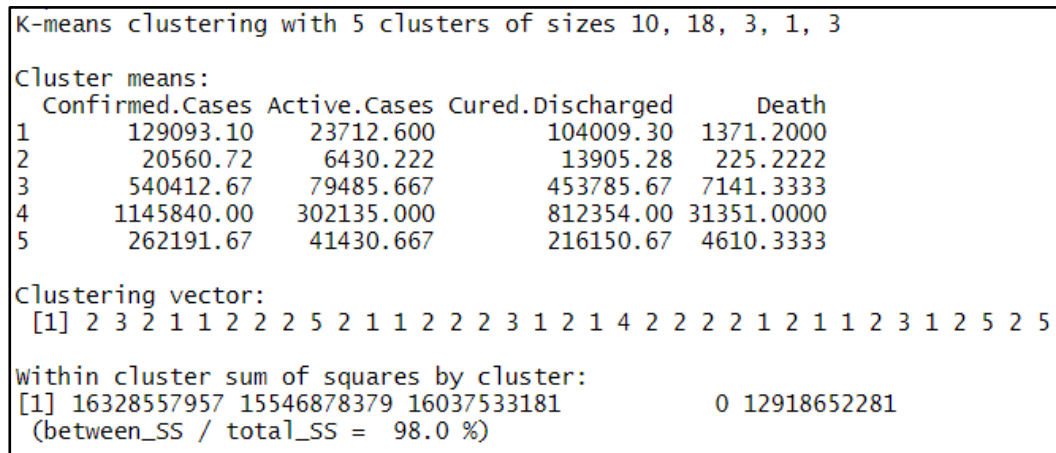


Figure 4: K-means clustering summary for Indian regions based on COVID-19 metrics

4.0 Time Series Analysis

In extension to cluster analysis, authors have carried out time series analysis and visualization of covid 19 virus outbreak in different regions of India to study the trajectory of covid 19 growth curve from March 2020 to Feb 2021.

are compared in different regions of India, this visualization presents a snapshot indicating the trend of spread over time.

In current analysis month wise the average number of confirmed cases and deaths

Figure 5. shows the R script for averaging the confirmed cases, active case and deaths in each region grouped by month is computed and then visualized the growth using ggplot with facet wrap.

```
1 library(ggplot2)
2 library(dplyr)
3 library(hrbrthemes)
4
5 library(lubridate)
6 set.seed(2017)
7 options(digits=4)
8
9 covid_data <- read.csv("E:/covid_19_data_set/covid_19.csv")
10 covid_data$S..No.=NULL
11 covid_data
12
13
14 region<- unique(covid_data$Region)
15 region
16
17 no_region<-length(region)
18 no_region
19
20 # declare and initialize empty covid_region_month dataframe
21 covid_region_month <- data.frame( Region = "X", year = 2020, month = 0, Confirmed_cases= 0, Active_cases=0, Cured_cases=0, Deaths=0,stringsAsFactors=FALSE)
22
23
24 #
25 for(j in 1:no_region)
26 {
27   covid_region1<-subset(covid_data, Region== region[j])
28   covid_region1<-covid_region1
29
30   for(i in 1: nrow(covid_region1))
31   {
32     date_str= covid_region1[i,1]
33     dy= substr(date_str,1,2)
34     mm= substr(date_str,4,5)
35     yr= substr(date_str,7,10)
36     new_dt<- paste(yr, mm, dy, sep = "-")
37     covid_region1[i,7]<-new_dt
```

```

38 }
39
40 as.Date(covid_region[,7])
41 # replace values in date column
42 covid_region$date<-covid_region[,7]
43 # delete column 7
44 covid_region[,7]=NULL
45
46 covid_month<- covid_region %>% mutate(year = year(as.Date(date)), month = month(as.Date(date))) %>%
47   group_by(Region, year, month) %>%
48   summarise(Confirmed_cases= mean(Confirmed.Cases), Active_cases= mean(Active.Cases), Cured_cases= mean(Cured.Discharged), Deaths= mean(Death))
49
50 covid_region_month = rbind(covid_region_month, data.frame( covid_month))
51
52 }
53
54
55 covid_region_month <- covid_region_month[-1,]
56 # plot of region wise all months covid 19 confirmed cases
57
58 covid_region_month %>%
59   na.omit() %>%
60   ggplot(aes(x = month, y = Confirmed_cases)) +
61     geom_point(color = "darkorchid4") +
62     facet_wrap(~ Region) +
63     labs(title = "covid 19 confirmed cases ",
64          subtitle = "Use facets to plot by a variable - region in this case",
65          y = "confirmed cases",
66          x = "month") + theme_bw(base_size = 10)+
67     # adjust the x axis breaks
68     scale_x_continuous(breaks = c(1,2,3,4,5,6,7,8,9,10,11,12))
69 #scale_x_date(date_breaks = "months", date_labels = "%m")
70
71
72 # plot of region wise all months covid 19 confirmed cases and Cured cases
73
74
75 p = ggplot() +
76   geom_point(data = covid_region_month, aes(x = month, y = Confirmed_cases), color = "blue") +
77   geom_point(data = covid_region_month, aes(x = month, y = Cured_cases), color = "green") +
78   facet_wrap(~ Region) +
79   labs(title = "covid 19 confirmed cases and Cured cases ",
80        subtitle = "Use facets to plot by a variable - region in this case",
81        y = "confirmed cases and deaths",
82        x = "month") + theme_bw(base_size = 10)+
83     # adjust the x axis breaks
84     scale_x_continuous(breaks = c(1,2,3,4,5,6,7,8,9,10,11,12))
85
86 print(p)
87
88 # plot of region wise all months covid 19 confirmed cases, Active cases and deaths
89 q = ggplot() +
90   geom_point(data = covid_region_month, aes(x = month, y = Confirmed_cases), color = "blue") +
91   geom_point(data = covid_region_month, aes(x = month, y = Cured_cases), color = "green") +
92   geom_point(data = covid_region_month, aes(x = month, y = Deaths), color = "red") +
93   facet_wrap(~ Region) +
94   labs(title = "covid 19 confirmed cases, cured cases and deaths ",
95        subtitle = "Use facets to plot by a variable - region in this case",
96        y = "confirmed cases and deaths",
97        x = "month") + theme_bw(base_size = 10)+
98     # adjust the x axis breaks
99     scale_x_continuous(breaks = c(1,2,3,4,5,6,7,8,9,10,11,12))
100
101 print(q)
102

```

Figure 5: R script of Time series analysis and visualization

5.0 Results and Discussions

The Indian regions as on 18th September 2021 are clustered into five groups based on COVID-19 metrics. The K-means clustering technique employed for this purpose. The clusters and the participating regions are tabulated in table 1. Analysing the cluster means, we can relate each group with each of the 5 classes of regions:

- Only Maharashtra in Cluster 4 with maximum number of Confirmed cases, Active cases, Cured cases, and Total deaths
- The regions falls under cluster 2 have minimum count Confirmed cases, Active cases, Cured cases, and Total deaths
- Cluster 3 formed by Andhra Pradesh, Karnataka and Tamil Nadu is second highest
- The regions Delhi, Uttar Pradesh and West Bengal forms Cluster 5 falls at 3rd position

Table 1: Clusters and participating regions from India

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Assam	Andaman and	Andhra Pradesh	Maharashtra	Delhi
Bihar	Nicobar Islands	Karnataka		Uttar Pradesh
Gujarat	Arunachal Pradesh	Tamil Nadu		West Bengal
Haryana	Chandigarh			
Kerala	Chhattisgarh			
Madhya Pradesh	Dadra and Nagar			
Odisha	Haveli and Daman			
Punjab	and Diu			
Rajasthan	Goa			
Telangana	Himachal Pradesh			

	Jammu and Kashmir Jharkhand Ladakh Manipur Meghalaya Mizoram Nagaland Pondicherry Sikkim Tripura Uttarakhand			
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Figure 6 shows cluster plot for 1st and 2nd principle components. Plot reveals that cluster 2 is dense and some of the data points of cluster 2 are closer to cluster 1.

There is no overlapping of cluster 3 and 5 with others. Cluster 4 with single data point away from the other clusters.

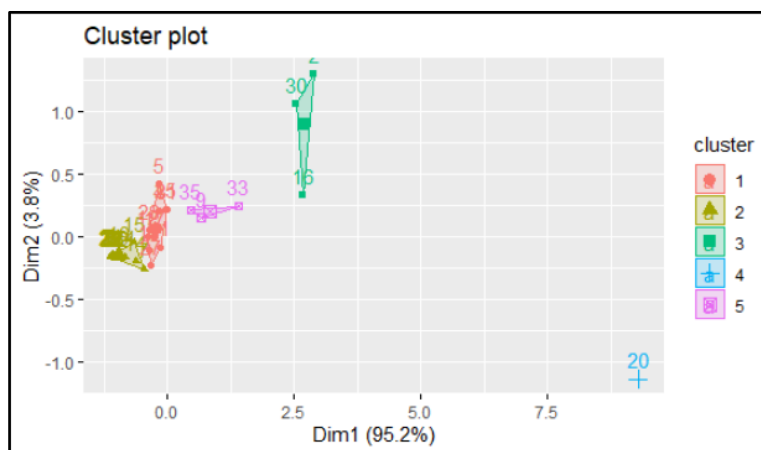


Figure 6: Cluster plot for 1st and 2nd principle components

As per the Time series analysis done the average covid confirmed cases and its growth curve are shown in Figure 7

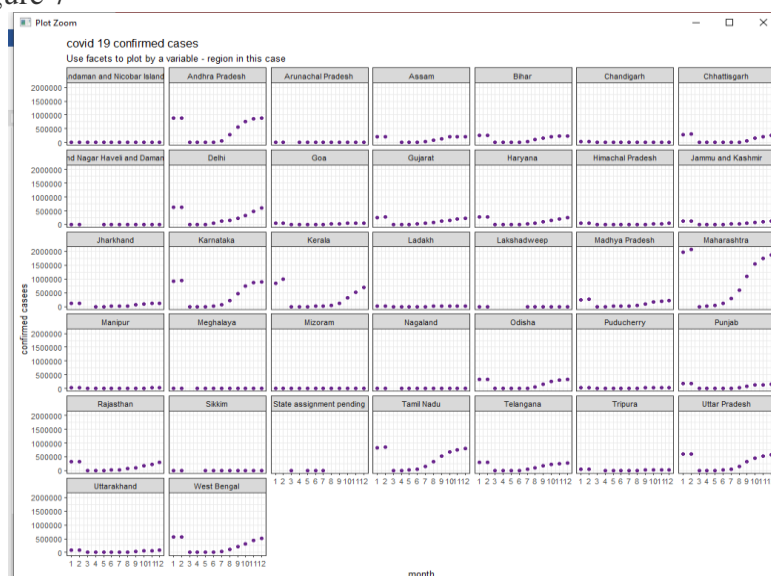


Figure 7: Region wise growth curve of covid 19 confirmed cases

Plot in Figure 7 shows change in the rate of spread from Feb 2020 to March 2021 in different Indian states/ regions. Maharashtra state showed an exponential growth curve between period July to Nov whereas region like Andhra Pradesh, Delhi, Karnataka , Uttar Pradesh , Tamil Nadu, West Bengal shows a logarithmic growth curve from month of July 2020 onwards, It is also observed that growth rate remains same in Gujarat, Goa,

Madhya Pradesh Rajasthan, Odisha, Telegana from July 2020.

Figure 8 shows month wise plot of average number of confirmed cases and cured cases grouped by region, Blue colour indicates confirmed cases and Green colour for cured cases. It is observed that number of cured cases are inline with the number of confirmed cases.

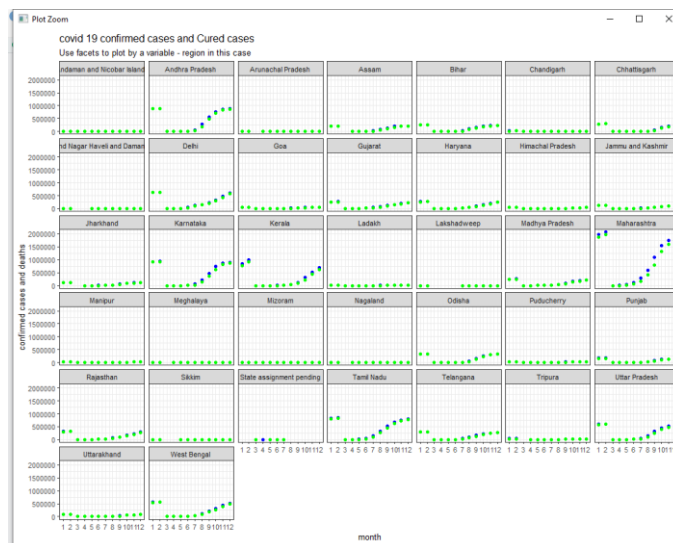


Figure 8: Average confirmed cases and cured cases grouped by region

Plot in Figure 9 shows month wise average confirmed cases, cured cases, deaths grouped by region, this plot clearly indicates that even in regions with

exponential growth of confirmed cases like Maharashtra, Delhi, Karnataka, Andhra Pradesh the death rate is steady compared with confirmed cases.

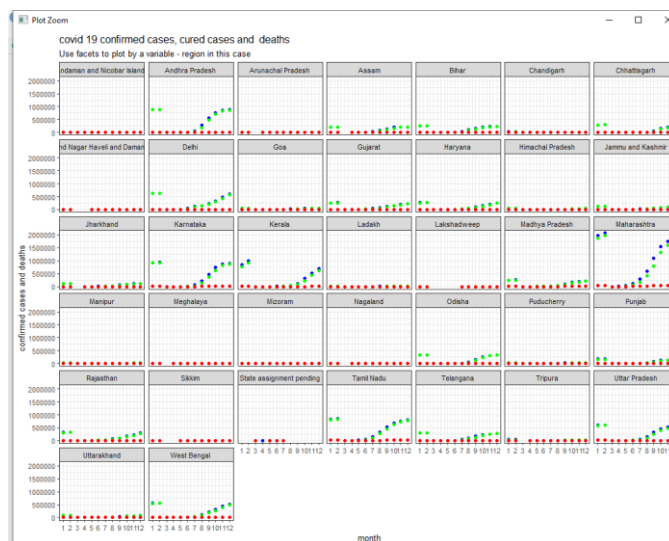


Figure 9: Region wise comparative plot of covid 19 confirmed case, cured cases and deaths

6.0 Conclusion

This study has demonstrated the K-means clustering as tool for analysing Indian regions based on COVID-19 metrics. The dataset for the present analysis retrieved from COVID-19 situation report on 18th September 2021. The 35 Indian regions are clustered into five groups based on the status of infected as on 18th September 2021. This analysis has illustrated cluster formation and visualization by modulating number of clusters. Thus unsupervised learning technique results into 5 groups of regions of sizes 10, 18, 3, 1 and 3. It's observed that Confirmed cases, Active cases, Cured cases, and Total deaths are highest in Maharashtra. Where as the regions falls under cluster 2 have minimum count for these parameters. The result

7.0 References

COVID-19 State wise data, <https://prsindia.org/covid-19/cases>, retrieved on 27th Feb 2021

Coronavirus Disease (COVID-19) Situation Reports, <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>, retrieved on 27th Feb 2021

Shannon Wongvibulsin, Brian T. Garibaldi, Annukka A.R. Antar, Jiyang Wen, Mei-Cheng Wang, Amita Gupta, Robert Bollinger, Yanxun Xu, Kunbo Wang, Joshua F. Betz, John Muschelli, Karen Bandeen-Roche, Scott L. Zeger, Matthew L. Robinson, Development of Severe COVID-19 Adaptive Risk Predictor (SCARP), a Calculator to Predict Severe Disease or Death in Hospitalized Patients With COVID-19, *Annals of Internal Medicine*, <https://www.acpjournals.org/doi/pdf/10.7326/M20-6754>, retrieved on 20th March 2021

Sudhir Chowdhary, Tech tactics: How Artificial Intelligence is aiding the fight

depicts that k-means has the potential for Indian regions clustering based on COVID-19 metrics. The time series analysis and its visualization has shown an interesting trend of number of confirmed cases and deaths. The case fatality rate or CFR, which measures deaths among Covid-19 patients is comparatively very low as compared to confirmed cases. Even in badly-hit state like Maharashtra the death rates have kept low all along, even as cases rose. There are many attributes which could contribute to this relatively low fatality rate like immunity deriving from previous infections but moreover high demographic of younger population in India could be one of the factor as elderly are typically more vulnerable.

against Covid-19, <https://www.financialexpress.com/industry/technology/tech-tactics-how-artificial-intelligence-is-aiding-the-fight-against-covid-19/2214094/>, retrieved on 20th March 2021

Hannah Mitchell, AI tool uses EHR data mining to support diagnostic decision-making, <https://www.beckershospitalreview.com/artificial-intelligence/ai-tool-uses-ehr-data-mining-to-support-diagnostic-decision-making.html>, retrieved on 20th March 2021

R.S. Kamath, S.S. Jamsandekar, K.G. Kharade, R.K. Kamat, *Data Analytics in R: A Case Study Based Approach*, Himalaya Publishing House Pvt. Ltd, For MHRD-PMMMNTT FDC in Cyber Security and Data Science, Shivaji University, Kolhapur, 2019, ISBN: 978-93-5367-791-6

R.S. Kamath, R.K. Kamat, Visualization of University Clusters based on NIRF and NAAC Scores: K-means Algorithm Approach, *University News, A Weekly Journal of Higher Education*, Vol. 57, No. 03, Jan 21-27, 2019, ISSN: 05662257

R.K. Kamat, R.S. Kamath, Visualization of Earthquake Clusters over Space: K-Means Approach, Journal of Chemical and Pharmaceutical Sciences (JCHPS), Volume 10, Issue 1, Jan-March 2017, Page 250-53, ISSN: 0974-2115

Mohsen Mousavi, RohitSalgotra, Damien Holloway, Amir H. Gandomi, “COVID-19 Time Series Forecast Using Transmission Rate and Meteorological Parameters as Features”, IEEE Computational Intelligence Magazine · October 2020 , DOI: 10.1109/MCI.2020.3019895



Rural Development Schemes And Program In India

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Abstract: Rural development generally refers to the process of improving the quality of life and economic well-being of people living in relatively isolated and sparsely populated areas. In this paper, an attempt has been made to comprehensively understand the development efforts to rebuild rural life and livelihoods, based on various secondary data and also reviewed the Government of India plans and programs created for the development of rural area.

Keywords: Rural development, Yojana, Rural development programs, IRDP

1.0 Introduction-

Rural development is recognized as an integral part of socio-economic development of a country. Rural development means enriching the quality of human life in rural areas and reducing the rural-urban gap through the provision of all amenities. National policies and programs for successful rural development work aim at diversifying economic activities, reducing the dependence of rural households on agriculture and related activities, rural industries, business and employment both in production and employment. If this is not pursued, rural development remains only agricultural development and cannot solve the problem of rural employment and poverty or equitable distribution of resources and income-producing assets. This article takes a comprehensive look at the initiatives, programs and achievements of the Government to accelerate the process of rural development of Integrated Rural Development and Swarnajayanti Gram Swarajgar Yojana and suggests improving the effectiveness of the National Rural Livelihoods Mission currently being implemented

2.0 Initiatives-

Rural development has been given top priority in the planning process of the country. A start in this direction was made in the early 1950s with the launch of the Community Development Program, which was instrumental in establishing a network of basic national extension services for grassroots development in villages to create awareness among rural communities of the potential as well as means of development. In fact, this basic institutional infrastructure at the village level helped farmers to adopt major technological advances in agriculture in the mid-1960s and strengthened the process of eliminating middlemen and improving land tenure. Investments in successive Five Year Plans have created the necessary physical and institutional infrastructure to bring about socio-economic transformation in remote rural areas. Later realized that there are various benefits development programs were being taken by those better endowed with land resources, programs specifically designed for the development of the small and marginal farmers as well as landless.

3.0 Integrated Rural Development Program-

Since independence, the government has allocated significant resources to eradicate poverty in rural areas. Realizing that meager efforts in the field of rural development were not achieving the targeted goals, the concept of Integrated Rural Development Program [IRDP] was first introduced in the Union Budget of 1976-77 to provide self-employment opportunities to the rural poor through provision. Capital subsidies and bank credit to help the rural poor acquire productive income-generating assets and provide training to improve their skills.

The innovation of directly attacking rural poverty under IRDP can help rural households below the poverty line to cross the poverty line on a sustainable basis. The program initially covered 2300 blocks with some revisions in 1978-79 and focused on the family as a unit rather than the individual. 300 blocks were added during 1979-80, covering 2600 blocks identifying 53 lakh families for assistance by 31 March 1980. From October 2, 1980, IRDP was extended to all blocks in the country, targeting SC/ST and women beneficiaries & emphasis on primary, secondary and tertiary sectors of rural economy. District Rural Development Agencies were specifically set up to plan and implement the IRDP and review performance in terms of number of target beneficiaries crossing the poverty line, among others. Thus, IRDP basically tried to attack rural poverty directly with the objective of eradicating poverty and unemployment in rural areas, aiming at self-employment by accepting the family as an element of planning and providing technically feasible and bankable schemes.

IRDP was conceptualized as a focused program for the development of a given sector rather than the development of a specific sector. It was designed to alleviate

poverty through local level planning, keeping in mind the development of local resources including human resources by preparing projects on scientific lines. To identify the poorest of the poor families in the target group and provide them with all necessary assistance and services to undertake economic activities which have the potential to generate such significant incremental income that the beneficiary will have sufficient surplus & by then raise the standard of living to a level above the poverty line.

- i. The concept and methodology of IRDP and its integrated approach
- ii. Lacked the desired appreciation of scientific planning exercise at the grassroots level, the program failed to achieve its objectives.
- iii. Developing results oriented strategies and action plans
- iv. Effective coordination and support of other institutions and agencies.

Assets and their maintenance, DRDA and banks were interested in achieving their physical and financial targets. Lack of scientific planning, monitoring of the implementation process and concurrent evaluation to obtain feedback for further improvement of the program also contributed to the unsatisfactory performance.

4.0 Schemes And Programs Of Rural Development India-

- **AdarshgaonSankalp Project :**
_AdarshgaonSankalp and Project Plan Program based on the concept of "Village Development through People's Participation and Government Participation in Public Programs" is an exemplary initiative for the overall development of a village.

- **Aam Aadmi Bima Yojana :**
Aam Aadmi Bima Yojana is a scheme that provides insurance cover to the main earner of landless families in rural areas and also provides monthly scholarship to the children who are studying.
- **Indira Awas Yojana**
Indira Awas Yojana was implemented from 1989 till the end of December, 1995 as a sub-scheme of Jawahar Rozgar Yojana.
- **Village Development Building Project**
The Gram Vikas Bhavan project is being implemented in Navi Mumbai for the state level meetings of officials, officials and employees of Panchayati Raj institutions in the state, to provide residential facilities during the training period, and to facilitate the sale of items in the self-help savings group of the state.
- **Special grant to Gram Panchayats**
A new District Annual Scheme “Special Grant to Gram Panchayats for Public Amenities” was launched in the state.
- **Gram Sabha Award**
“Gram Sabha” is the highest village level mechanism in rural democratic management. Gram Sabhas need to be strengthened for real development of the country.
- **Rural Housing Scheme**
Addressing the housing shortage is one of the strategies to eradicate poverty in India.
- **Unnat Maharashtra Abhiyan Yojana for rural development**
Taking the next step on the lines of the central government for the development of rural areas, the state government has come up with the scheme 'Unnat Maharashtra Abhiyan'.
- **Rural Self Employment Training**
A rural self-employment training institute to inspire self-employment among rural youth
- **Deendayal Upadhyay Rural Skill Development**
Deen Dayal Upadhyay - Rural Skills Scheme is an ambitious scheme launched by the Central Government as a part of the National Rural Livelihood Mission itself.
- **Panchayat Raj - Capacity Building**
The government has decided to build the capacity of officers and staff in the Zilla Parishad, Panchayat Samiti and Gram Panchayat under the Panchayat Raj system.
- **Pradhan Mantri Gram Sadak Yojana**
Pradhan Mantri Gram Sadak Yojana is a 100% centrally sponsored scheme and is being implemented in the state since the year 2000.
- **Pramod Mahajan Skills and Entrepreneurship Development Mission**
Pramod Mahajan Skill and Entrepreneurship Development Mission which provides employment through skills.
- **MGNREGA**
Estimating the annual unskilled employment needs of each village by the Gram Panchayat through the Gram Sabha. Fulfilling the unskilled employment, providing long-term lasting works and thereby raising the standard of living of the rural people by providing social infrastructure. Approve budget by competent technical officer. Auto release of

information. Vigilance Committee. Inspections by Vigilance Team, 10 percent higher wages if employment is provided at a distance of more than 5 km from the village through the State Govt. Unemployment allowance of 25 per cent of daily wages if unskilled employment is not available. Maharashtra is the only state in the country to guarantee unskilled employment to rural laborers by law since 1977. Mahatma Gandhi National Rural Employment Guarantee Scheme – Right to unskilled employment for every adult registered in a rural household under Maharashtra. card.

- **YashwantraoChavanMuktaVashat Yojana**
YashwantraoChavanMuktaVashatYojana has started to be implemented in the state for the categories of free castes and nomadic tribes in the rural areas.
- **Chief Minister's Gram Sadak Yojana**
The Chief Minister's Gram SadakYojana is being implemented in the state through the Village Development Department to connect the unconnected villages and improve the quality of the existing but dilapidated roads in the state.
- **Chief Minister's Rural Drinking Water Program (MRDWP)**
State Sponsored Scheme “MukhyaMantri Rural Drinking Water Program” to provide adequate and clean drinking water to the rural people of the state.
- **Yashwant Gram SamruddhiYojana**
The main objective of Yashwant Gram SamrudhiYojana is to increase the participation of the villagers in the village scheme and make them active in the decision making process.
- **National Rural Development Mission NRLM**
The central government has decided to convert Swarnjayanti Gram SwarojgarYojana into National Rural Livelihoods Mission (NRLM).
- **National RurbanAbhiyan**
It has been decided to implement the Shyama Prasad Mukherjee RurbanAbhiyan in the state to provide economic, social and physical development to the villages in the rural areas and to provide them with urban infrastructure.
- **Skills development lessons from Rohyo**
The Employment Guarantee Scheme was born during the drought of 1972 in the state. Today, however, this scheme has taken a major form at the national level. It has been popularized all over India under the name of Mahatma Gandhi GraminRojgarHamiYojana.
- **Samruddh Gram VikasYojana**
This development will be expected with the economic, technical and administrative support of the government and the initiative of the people in the three areas of biological, social and means of income.
- **SansadAdarsh GramYojana**
The Prime Minister of India in his speech on August 15, 2014 mentioned the 'SansadAdarsh Gram Yojana'.
- **Installation of solar street lights**
The scheme of setting up solar energy street lights on the roads of Gram Panchayats is to be implemented with the participation of the State Government, Central Government and Gram Panchayats.
- **Smart Village Scheme**
The government has brought the scheme in a new form by

discontinuing the 'Eco Village' scheme.

- **SwarnaJayanti Village Self Employment Scheme**
Swarnajayanti Gram SwarojgarYojana (Swagraswayo) is a major self-employment scheme implemented to assist families below the poverty line (self-employed families).
- **'AamchaGaon-AamchaVikas'** is a public participation initiative for the development of villages. The state government has taken up the ambitious initiative 'AamchaGaon-AamchaVikas' to prepare a public participation Gram Panchayat Development Plan of each Gram Panchayat for the overall development of the village.

6.0 REFERNCES –

D. Gangopadhyay, A.K. Mukhopadhyay & Pushpa Singh (2008), 'Rural Development: A Strategy for Poverty Alleviation in India', S & T for Rural Development and Inclusive Growth, India, Science and Technology.

Dr. C. Chandramouli (2011), 'Rural Urban Distribution of Population', Ministry of Home Affairs, Census of India 2011, New Delhi, 15th July, 2011.

Dey, S., & Bedi, A. (2010), 'The National Rural Employment Guarantee Scheme in

Birbhum', Economic and Political Weekly, Vol-XLV, Issue - 41, pp-19-25.

Farooq Ahmad Ganee (2014), 'Transforming Rural India (2018-19), Ministry of Rural Development, Government of India',

Nandini Francis (2015), 'Sustainable Rural Development through Agriculture: An Answer to Economic Development in India',

Shah, M. (2004), 'National Rural Employment Guarantee Act: A Historic opportunity', Economic and Political Weekly, Vol-XXX, Issue - 39, PP-5287-5291

SurbhiAgrawal (2016), 'Pre- Post Rural Development', International Journal of Socio – Legal Analysis and Rural Development, Vol-2, Issue – 1, PP-97-106.

Ministry of rural development, Govt. of India, Chapter VII- Rural Development, pp. 88-99.

Planning Commission, Govt. of India, Eleventh five year plan (2007-2012) Vol.I, Inclusive growth.

Overview of the National Conference of Ministers of State Governments of Rural Development, Panchayati Raj and Rural Roads, 27-28 January, 2003, New Delhi.

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Endangered Life Of Tribes Due To Development, Displacement And Resettlement

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Abstract: The tribals in India are the most adversely affected ethnic group due to development in post Independence India. Tribals are scarified at the altar of God named 'Development' that has failed. But the National conscience is not disturbed at all by the refuges of development. Forceful displacement of tribals from their lands and natural habitats due to various developmental activities has for long been a serious problem. The present study was conducted among the displaced tribes of Sardar Sarovar project in Nandurbar district and found that these tribes are affected personally, socially and economically and totally dissatisfied with quality of rehabilitation and resettlement made. Inadequate rehabilitation of the displaced tribals compounds their woes making them asset-less and unemployed, trapped in debt bondage.

Keywords: Tribal's, dam, displacement, social problems etc.

1.0 Background:

India is a country with the largest tribal population in the World. These tribes are considered original settlers, they are still living in rural, forest and mountain areas and prove that they have been living here from very ancient times. The Scheduled tribes population of the country, according to 2001 Census, was 8,43,26,000 and constitutes 8.20% to the total Indian population. But about 40% of them are displaced persons due to modern development projects. Truly, they are victims of and refugees of development.

The land of tribes is taken away for developmental projects. From food gathers, Craftsman and Farmer, today they have become agriculture labors, landless labors, bonded labors, seasonal laborers (sugar cane cutters), wage earners and unskilled labors. In rehabilitation sites the problems of backwardness, exploitations, underdevelopment, illiteracy, malnutrition, alcoholism, indebtedness, conversion and poor human development has been

challenge for Government and NGOs till today.

2.0 Development and Displacement

According to Government of India estimate, between 1981-85 the coal mine alone had displaced 1,80,000 persons and had provided one job per family to only 36 percent. In Jharkhand the tribal land alienation and displacement have been going on from 1907 with the establishment of Tata Iron Steel Company. The magnitude of land and number of displaced persons has been increasing since then (Singh, A.K. 1996). It has been estimated that about at least 185 lakh persons have been displaced by the development projects during 1951 to 1990 (Fernandes, 1995)

3.0 Dam and Displacement:

India now boasts of being the World's third largest dam builder. According to

Central water commission, the country has 3600 dams that qualify as big dams, 3300 of them build after Independence. 1,000 more are under construction. Yet one fifth of our population, 200 million people does not have safe drinking water and two third, 600 million lack basic sanitation.

During the inauguration of Panchet hill dam across Damodhar River in 1959, Nehru said, "Dams are the temples of Modern India." Dam building is equated with Nation building. While speaking to villagers displaced by Hirakund dam, Nehru expressed, "If you are to suffer, you should suffer in the interest of country."

Moraji Desai speaking at a public meeting in the submergence zone of the Pong dam in 1961 said, "We will request you to move from your houses after the dam comes up, if you move it will be good,

otherwise we shall release water down on you all" The above statements of the Great leaders reveal the intensity that have been cherished by the power centers towards the people, who are negatively affected by the project. (Roy, 1999)

According to a detailed study of 54 large dams conducted by Indian Institute of Public Administration, the average number of people displaced by large dams is 44,182. If 10,000 people are displaced per dam as compared to 3300 dams, thirty million people are displaced by the dams alone in the last fifty years only. According to secretary of planning commission N.C. Sexena, 50 million people are displaced in this region of which 40 million were displaced by the dams only. 50 million is more than a population of states like Gujarat.

Dams and Displacement of Tribal People

No.	Name of the Project (*)	State	Population facing Displacement	Tribal people as percentage of displaced
1	Karjan	Gujarat	11,600	100%
2	Sardar Sarovar	Gujarat	2,00,000	57.6%
3	Ukai reservoir	Gujarat	52,000	18.92%
4	Maheshwar	Madhya Pradesh	20,000	60%
5	Koel Karol	Bihar	66,000	88%
6	Mahi bajaj sagar	Rajasthan	38,400	76.28%
7	Upper Indrawati	Orrisa	18,500	89.20%
8	Pong	Himachal Pradesh	80,000	56.25%
9	Inchampalli	A.P.- Maharashtra	38,100	76.28%
10	Tultuli	Maharashtra	13,600	51.61%

(*) Projects are either under construction or have been planned.

Source: Satyajit Singh, taming waters OUP, 1997 and Govt. figures.

Huge percentage of displaced in the above projects are the tribal people. If we consider tribal people account for only 8% of the India's population, it opens up whole other dimensions of a story. India's poorest people are subsidizing the life style of her richest. Displacement affected the total livelihood of tribes.

Adivasi's believes, "The soul of their fore fathers lives in the forest." They cannot fulfill life and culture without forest. The socio-economic life of tribes was depended on, 'Water, forest and land.' The tribes are forcefully displaced from generation to generation for various reasons under the name of development.

The self sufficient life of tribal was always introduced by selfish and ambitious people.

Former Commissioner of Scheduled Castes and Tribes Commission, Dr. B.D. Sharma noticed in his report that, “The 10-15% of Adivasi are displaced and deserted by various causes.” To build Nation, one is ruined for one’s development. And it comes to the share of poor adivasi.

4.0 Rehabilitation/ Resettlement:

The rehabilitation of project affected people has always been recognized as storm of conflict. The projects have created various problems like displacement, resettlement, socio-economic exploitation and environmental disasters to tribal life. The developmental project submerged the tribal houses, fields, villages, forest not only ruined present status, but given pain for many generations.

It is very true that the rehabilitation of displaced person will never be satisfied. The resettlement created disharmonious relation among local tribals, was never in the history of tribes. Due to improper rehabilitation facilities, many displaced persons have lost economic status and many other problems come out.

In view of the above, the present study was conducted to understand the problems of displaced tribals due to Sardar Sarovar project in Nandurbar district of Maharashtra with the following objectives.

5.0 Objectives:

1. To study the nature of acceptance of displacement and resettlement.
2. To study the problems of displacement and resettlement of Tribals.
3. To study the causes of dissatisfaction.

4. To study the problems faced by respondents after resettlement.

6.0 Methodology:

This paper is based on primary data collected on the problems faced by the tribal community at rehabilitated site with help of an Interview schedule. The respondents selected for study was affected by Sardar Sarovar project on Narmada River rehabilitated at Maharashtra site. According to Maharashtra State Government report on Sardar Sarovar project rehabilitation department, there are 1168 families rehabilitated at various sites. For the study 100 families were selected using Simple random lottery method.

The interview schedule covers the information on nature of acceptance of displacement, satisfaction with quality of remuneration and rehabilitation, causes of dissatisfaction, personal, social and economical problems faced by the respondents. The responses were recorded in schedule.

7.0 Results and Discussion:

Table No. 1: Acceptance of displacement

No.	Nature of Acceptance of Changes in Life	Total
1	Pressure from Govt. officials	81
2	Don't have any choice other than acceptance	19
	Total	100

Table No.1 shows the nature of acceptance of displacement, due to various forces. Regarding the nature of acceptance of displacement, majority i.e. 81% of respondents expressed that they are pressurized by Government officials and 19 % did not have any choice other than

accepting it showing their helplessness and vulnerability.

Table No. 2: Satisfaction with the Quality of Remuneration & Rehabilitation against Displacement

No.	Level of Satisfaction	Total
1	Fully Satisfied	38
2	Not satisfied	62
	Total	100

The table no.2 highlights that in general good majorities (62%) of the respondents are not satisfied with the quality of remuneration and rehabilitation against displacement. The satisfaction is found to be as less as 38%.

Table No. 3: Causes for Dissatisfaction

No.	Causes For Dissatisfaction (*)	Total (N=100)
1	Subsistence Allowance is not given	25
2	Agriculture land is not given	19
3	Agriculture land is not transferred legally	14
4	Lack of irrigation	31
5	Lack of community facilities	88

(*) Multiple Responses

The table no.3 reveals the causes of dissatisfaction. Majority (88%) of the respondents did not receive community facilities like community hall, bus stand toilet etc, 31% had lack of irrigation, 25% were not paid subsistence allowance, 19% did not receive agricultural land and 14%

Table No. 4: Major Personal Problems faced

No.	Major Personal Problems faced (*)	Total (N=100)
1	Experience psychological pressure by non-tribal	64

2	Received ill treatment by Government officials	78
3	Unaware of schemes due to Illiteracy	54
4	Unaware of Constitutional measures and Protective Acts	69
5	Feeling of backwardness and inferiority	57

(*) Multiple Responses

The table no.4 discloses the major personal problems faced by respondents due to displacement and resettlement when 78% of the respondents received ill treatment by government officials, 69% of them claimed that they are unaware of Constitutional measures and Protective Acts, 64% experienced psychological pressure by non-tribal, 57% had feeling of backwardness and inferiority, 54% said that they are unaware of schemes due to illiteracy.

Table No. 5: Major Social Problems faced

No.	Major Social Problems faced (*)	Total (N=100)
1	Exploitation by non-tribals	25
2	Ignorance by Government officials	39
3	Lack of social support from non-tribals	59
4	Lack of active leadership to enjoy rights and privileges	69
5	Feeling of hopelessness, disadvantages	45

(*) Multiple Responses

The table no.5 discloses the major social problems faced by respondents due to displacement and resettlement .Nearly 70% said that they lack active leadership to enjoy rights and privileges, 59% of the respondents do not get any support from non-tribals, 45% had feeling of hopelessness and disadvantages,

39% feel ignored by Government officials and 25% are exploited by non-tribals.

Table No. 6: Major Economic Problems faced

No.	Major Economic Problems faced (*)	Total (N=100)
1	Insufficient Income due to unproductive agriculture	85
2	Indebtedness	19
3	Seasonal unemployment	39
4	Incapable for secondary and tertiary occupations	35
5	Lack of exposure to outside areas for skills and capacity development	28

(*) Multiple Responses

Table no.6 reveals the major economic problems faced by the respondents **due to displacement and resettlement**. Insufficient Income due to unproductive agriculture was the most cited problem for a great majority (85%) of them. When seasonal unemployment and incapability to enter into secondary and tertiary occupations accounts for nearly one third of them, a quarter of them lack exposure to outside areas for skills and capacity development. Another major obstacle like indebtedness seems to be a problem for 19% of the respondents.

8.0 Conclusions:

Forceful displacement agitated the tribes, broke their attachment with Land, Forest and River (Goddess of their civilization) to accept wishless migration into the trap of resettlement.

Issues regarding displacement and resettlement have created tensions among tribals and administrators. Tribes have fallen into trap of ignorance, ill treatment,

psychological pressure and exploitation by non-tribal and government officials.

Though resettlement has taken place, it covered only shifting of houses and live stocks, allotment of agricultural land with or without irrigation etc; but completely ignored personal, social, economical and psychological distress due to displacement.

The status of tribals at resettled colonies is deplorably low due to insufficient income, indebtedness, unemployment, adoption of primary occupations and inactive institutional setup. This has further resulted to raise problems like illiteracy, poverty, malnutrition, poor technology and lack of leadership.

The analysis shows that though government has taken all the care for resettlement of tribal community, many are still facing problems due to faulty strategy, failures of schemes and programs, and inappropriate efforts to bring tribal resettlement.

References:

Fernandes, W. (1995), Planned development and tribal deprivation. In Deogaonkar S.G. (Ed): Tribal panorama in India, Inter-India, New Delhi

Gare Govind, Tribal Culture, Problem and Development in Maharashtra

Ram, R.N. (NBA) Sardar Sarovar : Sachai aur Dave

Roy, Arundhati (1999) The Common Gods, Frontline

Singh, A.K. and Jabbi, M.K. (1996), (Eds) Status of tribals in India: Health, Education and employment, Har Anand, New Delhi.



A Study Of Passenger Satisfaction Towards Public Road Transport With Reference To Kolhapur Municipal Transport (KMT) Kolhapur.

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Abstract: For a developing nation like India to advance economically in the future, its transportation system must be in good working order. In accordance with the organization's policies and rules, providing public services entails attending to the demands of people or organisations that have an interest in the organisation. Satisfaction and passenger perception are related to one another. A user's perception of a service is an evaluation made after using it in comparison to his expectations and prior experiences. People select, arrange, and interpret data to create a meaningful impression of the outside world. Different persons can interpret the same input in diverse ways. Additionally, customer perception of public transportation services affects satisfaction. The major components of the study perception, expectation, service quality, and passenger satisfaction-were the focus of this article's literature review. The guiding principle emphasises SERVQUAL theory, related studies on customer satisfaction and service quality, service quality, customer expectations, and customer satisfaction. The study employed a descriptive methodology and reviewed some of the research on customer perception and satisfaction as well as strategies for improving the calibre of service in public transportation.

Keywords: Satisfaction, Service Quality, SERVQUAL.

1.0 INTRODUCTION

Quality of human existence and the economic health of any nation depend heavily .on transportation. It is essential to the survival of business, agriculture, and the service sector. It facilitates the transfer of people and things from one place to another. For a developing nation like India to advance economically in the future, its transportation system must be in good working order. In accordance with the organization's policies and rules, providing public services entails attending to the demands of people or organisations that have an interest in the organisation.

Customer perception is a user's evaluation of a service after using it and contrasting it

with what he had previously anticipated and experienced. People select, arrange, and interpret data to create a meaningful impression of the outside world. Numerous academics and researchers have examined consumer perceptions of service quality, finding that they are positively related to satisfaction and brand perception. (Barber, et al., 2011; Marinkovic, et al., 2014; Truong, et al., 2017).

According to one definition, "the customer's fulfilling response" is satisfaction. It's an assessment of whether a feature of a good or service, or the service product itself, gave (or still gives) a pleasurable level of consumption-related

satisfaction, including levels of under- or over-fulfilment (1997, Oliver).

The three key areas of the study that this paper examined were service quality, customer perception, and expectation. The following key factors were particularly emphasised: 1. Service Excellence, 2. Expectations of the consumer, 3. Customer Contentment, 4. Consumer satisfaction and service quality metrics connected to the SERVQUAL Model.

Service Quality: The performance, or profitability, of the service sector is thought to be significantly influenced by service quality. Service excellence both lures new clients away from rival businesses and encourages clients to make repeat purchases (Venetis & Ghauri, 2002; Wantara, 2015).

2..0 LITERATURE REVIEW:

2.1 Customer Satisfaction towards Services Quality of Public Transportation By Thian Wan Jun:

In his article, he examines consumer satisfaction with reference to the calibre of the public transportation service. On five dimensions, SERVQUAL was utilised as a measure of customer satisfaction. The most crucial elements that contribute to exceptional service quality are identified by this study. 200 sets of questionnaires were given out to participants in this study, and 80% of them were returned. The data in this study were analysed using descriptive statistics, Pearson correlation, and multiple linear regressions. According to Pearson Correlation, the five SERVQUAL components in this study show a favourable relationship with customer satisfaction. On the other hand, multiple linear regressions are used to foresee how the independent variable would affect the dependent variable.

2.2 Measuring the Satisfaction of Multimodal Travellers for Local Transit Services in Different Urban Contexts: Marco Diana:

It goes without saying that a public transportation service needs to evaluate customer satisfaction, even beyond more immediate marketing objectives. This study aims to show how satisfaction measurements can be applied to obtain understanding of the relationship between individual attitudes, transportation use, and the urban environment. Nine metrics of urban transportation system satisfaction were found in a representative sample of Italian multimodal travellers (i.e. users of both private cars and public transport). Correlations and correspondence studies were utilised by researchers to show whether and how each feature is related to levels of usage of public transportation, as well as how the relationship is affected by the urban environment.

2.3 What Influences Satisfaction and Loyalty In Public Transport? A Review Of The Literature: Dea van Lierop, Madhav G. Badami & Ahmed M. El-Geneidy

Retaining users of public transit is a challenge for many municipalities. It is essential to comprehend the elements of public transportation that affect users' adherence to the system in order to create complete policies aimed at retaining riders. This essay summarises the literature on the variables that affect patronage and satisfaction with public transportation. According to research findings, the service factors most closely associated with satisfaction include on-board comfort and cleanliness, operator courtesy and helpfulness, safety, punctuality, and frequency of service. Loyalty is correlated with passengers' opinions of value for money, on-board safety and cleanliness, interactions with staff, and their

perceptions of public transportation's reputation and commitment.

2.4 Perception Of Public Transport Quality Of Service Among Regular Private Vehicle Users In Madrid, Spain: Juan de Ona, Esperanza Estevez, Rocio de Ona:

Utilizing public transportation instead of a personal vehicle helps reduce city traffic congestion. Limiting the use of personal vehicles or implementing measures that increase people's satisfaction with public transportation are two ways to achieve this modal shift. Numerous studies have indicated that the quality of a service affects customer satisfaction, which affects behaviour toward the service; nevertheless, the majority of these studies have mostly focused on users of public transportation. This study's objective is to identify the critical variables that affect how private vehicle owners see Madrid's public transportation systems (Spain). The ordinal logit models were tested using an online panel survey with a sample size of 500 frequent private vehicle users. The results demonstrate that Madrid people are satisfied with public transportation, with regularity, speed, and intra-modality being the most important aspects for users of private vehicles. All segments require high frequency, but the majority also require high speed and inter modality. A segment study has shown characteristics that, while not usually noteworthy, are significant for particular segments. Two criteria (accessibility and individual space) were not found to be significant in any segment, which was an additional noteworthy finding. The results of this study can be used to develop strategies and recommendations for persuading more individuals to take the bus or train instead of their cars.

2.5 Modeling The Satisfaction Of Bus Traffic Transfer Service Quality At A High-Speed Railway Station: Xiaoyun

Cheng,' Yu Cao,' Kun Huang,' and Yuejiao Wang'

Bus transit is one of the most often used modes of transportation at high-speed railway (HSR) stations. To enhance the effectiveness of the high-speed railway and boost system utilisation, it is essential to conduct a rational and scientific assessment of the current bus traffic transfer service. This article 'examines the experience of passengers transferring between' buses and provides a framework for evaluating the current bus traffic transfer service. According to the viewpoints of passengers, elements that affect passenger satisfaction during the bus transfer process at high-speed train stations include convenience, comfort, safety, service, and economy.

A structural equation model is used to look into the relationships between bus transfer service, passenger perceived value, and passenger satisfaction. At the Xi'anbei Railway Station, a questionnaire survey of passengers boarding buses was conducted to calibrate the model. This study looks at how observable variables and latent variables are related in the measured model, how exogenous variables affect endogenous variables in the structural model, and how passengers' socioeconomic features affect their pleasure. The results of the structural equation model study indicate that cost and convenience, with bus ticket preference policy and transfer distance being the most significant, are the factors most strongly influencing customer contentment.

3.0 Data and Method:

The current study is both descriptive and diagnostic in character. A well-structured questionnaire was created to gauge the passengers' perceptions of and satisfaction with the KMT bus services in order to get the fullest possible first-hand information

on the research problem. More efforts were made to determine whether the transportation services offered by KMT Bus Service Kolhapur were adequate or lacking.

The public transportation bus service is provided by Kolhapur Municipal Transport (KMT). Which mostly serve the Kolhapur city, the neighboring suburbs, and the villages within 15 kilometers. The universe consists of passengers who used to take KMT buses frequently, seldom, and sporadically for various purposes within the boundaries of the company's operational routes. Results and Discussion:

4.1 Socio-economic characteristics of the passengers :

Passengers' socioeconomic characteristics, such as age, place of residence, gender, level of education, occupation, frequency of use, and total household income, were examined. 39.00% of respondents in the 15-25 year old age group and 26.00% of respondents in the 26-35 year old age group made up the entire sample of respondents. According to this data, the first two age groups account for 65.0% of the entire sample population. A factor in determining how passengers view KMT's service quality is where they live. Additionally, it will determine whether a public transportation system is required for daily activities. Two types, namely urban and rural, have been taken into consideration in this study. The table shows that 32.19 percent of respondents were from rural areas, and 67.81 percent of respondents were from urban areas.

The table I shows that 63.00 percent of the respondents are male, and the remaining 37.00 percent of the respondents are female. It is clear from the table that the majority of the respondents are male who has been using the KMT bus service. But there is always a misconception that females always prefer to travel by public

transport than males. Therefore this observation under study utterly opposite to the general belief. Educational qualification of selected sample passengers from Kolhapur for the KMT bus service. Table indicates that 28.35 percent of respondents are PostGraduate, 26.80 percent of respondents are Graduates, 20.88 percent of respondents are Under Graduate, 11.06 percent of the respondents who are H.S.C qualification, and the remaining 6.44percent of the respondents are up to S.S.C. qualified. It is clear from the table that most of the respondents who belong to graduate and postgraduate qualifications have been using the KMT Bus service. This study's outcome rejects the' misconception that highly qualified people will least prefer to travel by public transport like KMT. This outcome will boost up the confidence level of KMT management, and they can design the strategies accordingly.

Table I shows the annual personal income distribution of the selected sample of Kolhapur passengers regarding KMT commuters. The table shows that 32.43 percent of respondents belonging to the personal yearly income Up to Rs.1 lakh, 15.97 percent of respondents belonging to no income, 1 0.81 % of respondents belonging to the annual personal income up to Rs.2 lakhs, 13.02 percent of respondents who are members of the annual personal income up to Rs.3 lakhs and the remaining 27.76 percent of respondents who are members of the annual personal income of Rs.4 lakhs and above. It is clear from the table that the majority of respondents who are members of the annual personal income up to Rs. 1 lakh are using the KMT bus service.

Table I indicates that out of 388 survey respondents, 29.00 percent of respondents are regular travelers of the KMT public transport. There is 16.00 percent of the survey respondents belong to the rare usage category, 9.00 percent of the

respondents belong to once in month category, and 13.02 percent of respondents belong to once in the week category. There is 33.00 percent of respondents who use it occasionally. This implies that only 29.00 percent of respondent passengers on regular mode use the public transport facility and 16.00 percent of the survey respondents prefer to travel by KMT rarely. Therefore management of KMT should focus on these two segments for attracting and converting rare usage groups of passengers to regular user groups with the help of marketing strategy.

Table: 1 Demographic Characteristics of the Respondents

Characteristics	Frequency
1 Gender	Male (63 %) Female (37%)
2 Age	>35= 66 %, 36 to 55= 30 %, 56<=4 %
3 Education	Primary = 18 %, Secondary =21 %, Territory 40%
4 Income	1 Lakh: 32.43 %, 2 Lakh: 10.81 % , 3 Lakh: 13.02 % , 4 < : 27.76 % , No income: 15.97
5 Occupation	Student: 39 %, Employed : 45 %, Other 16 %
6 Area	Urban = 63 %, Rural = 37 %
7 Frequency of Usage	Daily: 28.01 %, Occasionally 55 %, Rare 16.46%

4.2 Descriptive Analysis:

The analysis focuses on the expectations and perceptions of different personal profile factors of passengers toward the Kolhapur Municipal Transport (KMT) Bus Service's tangibility, responsiveness, reliability, assurance, and empathy.

Passenger Views The main surveys were conducted to find out what passengers thought about key parameters. Five

dimensions have been used to categorise forty-one traits, and the levels of relevance, expectations, and perception for each have been noted. Additionally, the passengers' opinions on KMT's general level of service were recorded. The data from the main surveys underwent a thorough analysis, which is detailed in the section that follows.

Table 2.0 Tangibles Satisfaction:

Sr No		Mean	Max	Min	Std Deviation	Rank
1	Ambianceofthe Bus	3.49	5	1	1.080201	I
2	Seatsreservedfo rwomen/physic ally challengedpers onsandseniorcit izens.	3.38	5	1	1.189244	II
3	The dress of staff is neat and thoughtful.	3.38	5	1	1.050693	III
4	Leg-space in buses.	3.32	5	1	1.127481	IV
5	Buses are well maintained.	3.06	5	1	1.176222	V
6	Buses are well cleaned.	3.04	5	1	1.19458	VI
7	Availability of seats.	3.00	5	1	1.132804	VII
8	Bus shelters.'	2.91	5	1	1.143428	VIII

9	Seating facilities at the bus stand	2.90	5	1	1.156757	IX
10	Bus time table at the bus stand	2.87	5	1	1.177955	X
11	The environment is clean and hygienic.	2.79	5	1	1.147565	XI
12	Equipped with modern technology.	2.63	5	1	1.125666	XII
13	Composite Variable Score	3.07	5	1	0.839201	

Table 2 indicates 12 attributes are associated with the quality of public transport service towards passenger satisfaction. Bus ambiance ceiling height (3.49) followed by the reservation of the seats for women and old age passenger second highest mean score (3.38) and bus stands are equipped with modern technology has the lowest mean score of 2.63. The overall mean score of the composite variable tangible satisfaction was 3.07.

Table 3 Reliability Satisfaction

Sr.	Item	Mean	Max	Min	Std deviation	Rank
1	Easily book a ticket	3.39	5	1	1.128082	I
2	The buses rarely break down on the road	3.17	5	1	1.112639	II

3	Seats reserved for women/physically challenged persons, senior citizens are occupied by the deserving Passenger.	3.12	5	1	1.2341	III
4	The timetable error-free.	3.07	5	1	1.128377	IV
5	Reach the destination on a Schedule.	3.04	5	1	1.152606	V
6	KMT buses follow the Time (Punctuality)	2.99	5	1	1.190002	VI
7	Composite Variable Score	3.13	5	1	0.907161	

Source: Analysis of the Survey data

As indicated in Table 3, among the six items in the reliability satisfaction dimension of facilities and services attributes of public transport regarding KMT, the mean score of existing ticket booking system mean score (3.39) and buses rarely break down mean score (3.17). Punctuality, timetable, and travel time had the lowest three mean scores, 2.99, 3.04, and 3.07, respectively. The overall mean score of the composite variable Reliability satisfaction was 3.13.

Table 4.0 Responsiveness Satisfaction

Sr.	Item	Mean	Max	Min	Std Deviation	Rank
1	The staff is always willing to help passengers	3.33	5	1	1.100311	I
2	Satisfy passenger's requests right the first time	3.22	5	1	1.082892	II

3	Prompt and accurately responsive to passengers	3.22	5	1	1.078334	III
4	Announcement inside the bus is effective & guide the passengers	3.22	5	1	1.138336	IV
5	Clarity of announcement	3.2	5	1	1.112933	V
6	Timely and efficient service.	3.19	5	1	1.131355	VI
7	Inform people about the change in prices in advance	3.09	5	1	1.212431	VII
8	Inform people about a change in the timetable in advance	2.89	5	1	1.210383	VIII
	Composite variable score	3.17	5	1	0.92419	

Table 5 indicates 08 responsiveness satisfaction attributes are associated with the quality of public transport service towards passenger satisfaction. Staff willingness to help passengers has the highest mean score (3.33) followed by satisfying the passengers request at the first time with a second highest mean score (3.22) and timely and efficient service, communication of the changes in the time table has the lowest mean scores 3.19, 3.09 and 2.89 respectively. The overall mean score of the composite variable responsiveness satisfaction was 3.17.

Table 5 : Assurance Satisfaction

Sr	Item	Mean	Max	Min	Std deviation	Rank
1	The travel fare reasonably.	3.47	5	1	1.104516	I
2	In-depth occupational knowledge of their jobs.	3.36	5	1	1.080397	II
3	Safe in their transactions with Staff in the bus stand.	3.35	5	1	1.060668	III
4	KMT bus drivers operate the Buses safely.	3.34	5	1	1.110723	IV
5	KMT gives priority to passenger safety.	3.3	5	1	1.060046	V
6	The staff of KMT in stills Confidence in the Passengers.	3.29	5	1	1.100119	VI
7	shorttraveltime	3.19	5	1	1.139367	VII
8	KMT runs as sufficient number of buses in the city	3.16	5	1	1.110429	VIII
9	Not afraid of being pick-pocketed on the bus.	3.14	5	1	1.117502	IX
	Composite variable score	3.19	5	1	0.878527	X

A summary of the mean scores of attributes in the assurance satisfaction variable is shown in Table 5.61. The overall mean score for assurance satisfaction was 3.19. KMT's existing travel fare had a slightly higher mean score (3.47) than employee occupation knowledge (3.36), safety driving of the bus

drivers (3.34), and not afraid of pickpockets on the bus (3.14) while traveling and good no of buses in the city (3.16).

Table: 6.0 Empathy Satisfaction

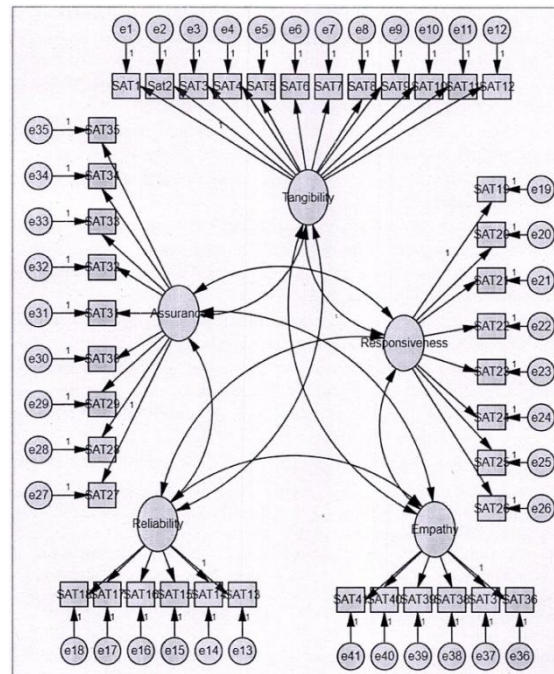
Sr	Item	Mean	Max	Min	Std deviation	Rank
1	Itiseasytofind andaccessthebus Stand.	3.47	5	1	1.061444	I
2	Bus drivers and conductors are Willing to help passengers.	3.41	5	1	1.02512	II
3	Bus drivers and conductor shows courtesy to the passengers	3.36	5	1	1.052357	III
4	KMT operating hours are convenient to all their customers.	3.23	5	1	1.121691	IV
5	Getting information about the facilities and services of bus companies is easy.	3.19	5	1	1.126321	V
6	KMT always looks after the best interests of its passengers.	3.18	5	1	1.037688	VI
	Composite Score of the empathy variable	3.31	5	1	0.910813	

Source: Analysis of the Survey data

Table 6:0 indicates six empathy satisfaction attributes are associated with public transport service quality towards passenger satisfaction. Easy to find bus stop has a highest mean score (3.47) followed by a bus conductor and driver are willing to help a passenger with the second highest mean score (3.41), and they show courtesy to the passenger, KMT always look after the best interest of the passengers has the lowest mean scores 3.19, 3.18 respectively. The overall mean

score of the composite variable empathy satisfaction was 3.31.

Figure 1.0: Confirmatory Factor Analysis (Model Fit)



Source: Primary Data Analysis

Conclusion:

The CF A result reveals scale prepared to assess the passengers' expectation and satisfaction is reliable and valid.

4.4 Findings based on Confirmatory Factor Analysis (CFA):

The confirmatory factor analysis results showed a marginal fit between the model and the data with regard to the studied data table because all threshold values are inside or nearly nearer to the cutoff value. Furthermore, statistical significance was revealed for each and every factor loading. Therefore, it can be said that the variables employed to evaluate perceived passenger expectations are appropriate for measuring the suggested concept.

Regarding percepti<;>n, the confirmatory factor analysis results showed that the mo~del and the data only barely fit together

because all of the threshold values were within or very close to the cutoff value in the studied data table. Furthermore, statistical significance was revealed for each and every factor loading.

Additionally, there is a correlation between the passenger's age and the responsiveness and reliability dimensions. Punctuality, or the buses arriving and departing on time, is one of the key characteristics that influence passengers' decisions about the mode of transportation they will use. Under the reliability dimension, safety and security are also included.

How you interact with consumers and your propensity for problem-solving fall under the responsiveness dimension, both of which are related to passenger age. It can be seen from the table that expectations and education are related. Conclusion: Expectations vary as one's education progresses. The table above shows the relationship between education and the tangibility, reliability, and responsiveness dimensions. The expectations of educated and unskilled passengers are different.

5.0 Conclusion and recommendations:

With regard to Kolhapur, the current study aims to assess how customers perceive the quality of service provided by Kolhapur Municipal Transport (KMT). Conclusion: Kolhapur Municipal Transport (KMT) customers have the greatest expectations in terms of reliability, which includes KMT buses being on schedule, having few breakdowns, and being in good mechanical condition. Additionally, it takes into account the lowest expectations in terms of the empathy dimension, which includes the behaviour and helpfulness of the crew on board, simple access to information, and convenient bus schedules.

Clean & Hygiene: Since hygiene is important for everyone, KMT management should maintain cleanliness at bus stops and on board. KMT buses should also be tidy and clean. To maintain cleanliness and raise awareness, the Indian government is also putting it into practise through various projects like the Swatch Bharat Abhiyan, Clean India Green India, etc. KMT needs to improve on keeping the buses and bus stops tidily and spick-and-span. According to the results of the current study (see table 5.14), the level of satisfaction among passengers with the cleanliness of bus stops and noticeboards was extremely low. Therefore, KMT management must prioritise it for improved service.

Intervention of Modern Technology: Modern technology's intervention has become a necessity for every industry and service in the twenty-first century, including public transportation. The passengers consistently anticipate that they should board the bus with the least amount of effort and the most amount of technology. With relation to the current investigation, the researcher has discovered that KMT daily activities use modern technology to a limited extent. [In order to give better service, KMT bus management can use current technology, just like other service providers. This includes online ticket purchasing, mobile texting for arrival and departure notifications, and Android applications. All buses might have a radio station, a music system, or a video playing option to make the ride for the passenger stress-free and enjoyable.

Frequency & Maintenance: Buses should run consistently at set intervals. In order for public transportation companies to survive over the long term, it is imperative that buses be kept in good condition and equipped with all the essential amenities, emergency exits, enough seating, sanitary restrooms, and water facilities.

First aid facilities have to be made both in bus stations and in buses. The timetable boards showing timings of arrivals and departures of buses should be prominently displayed.

As we are living in the digital world, it is recommended that the KMT management should initiate online notification of services with respect of timings and exact location through mobile application, messaging so that passengers can plan their journey accordingly.

Kolhapur Bus Transport (KMT) management should inform and create awareness about the services and facilities of KMT through print media, electronic media on regular basis as researcher has found that few people are aware about the services of KMT. Also it should focus on organizing campaign at school and college level regarding their schemes and benefits of usage of public transport. Which will help them in long run.

KMT should utilize the mileage of the virtues of public transport in young generation which will save our environment by reducing carbon dioxide emissions from personal vehicles. Carbon foot prints.

For frequent users of their transportation services, several foreign nations offer free wi-fi, free e-book reading, and a set percentage of monthly savings. We are confident that if KMT operates on these principles, it will draw a sizable portion of passengers from the younger generation. And if this young individual opts for the KMT rather than a personal vehicle, it will unquestionably lower the number of fatalities and near fatalities in road accidents brought on by speeding motorcycles and cars. Many innocent lives will be saved as a result of this.

The functional factor has a strong influence on "customer satisfaction. Public

bus transport decision maker and provider could start to pay attention to increase public bus transport supply due to high number of travel demand especially in peak hour, shorter travel time of public bus transport with giving special line in order to avoid high congested road, and giving more value to the price that customer pays for their public bus transport service.

The most common and efficient technique to determine what the needs of the client are and how to meet those needs is to listen to their voice. Customers' satisfaction is already measured yearly in a number of locations across Europe. The United Kingdom likewise carried out a survey to determine what the public transportation users' needs were. The goal of research is to create a marketable and appealing public transportation. KMT management should establish friendly relationships with passengers by setting up meetings and doing frequent customer surveys.

References:

Khurshid, R., Naeem, H., Ejaz, S., Mukhtar, F., & Batool, T. (2012). Service Quality and Customer Satisfaction in Hyderabad. *International Journal of Economics and Management Sciences*, 1(9), 24-30.

Quality, S., Affecting, A., & Bus, H. C. (2010). Service quality attributes affecting passengers' satisfaction with HIGER city bus. *Ethiopian Journal of Business and Economics (The)*, 1(2), 70-98.

Yaya, L. H. P., Fortia, M. F., Canals, C. S., & Marimon, F. (20p). Service quality assessment of public transport and the implication role of demographic characteristics. *Public Transport*, 7(3), 409-428. <https://doi.org/10.1007/Is12469-014-0099-7>

Singh, S. K. (2017). State Transport Undertakings in India: Status and Issues.

International Journal of Applied Business and Economic Research, 15(January), 279-297. Sachs, G. (2020). CHAPTER - III DEVELOPMENT OF RQAD TRANSPORT IN INDIA AND KERALA. 52-78.

Sustainable Mobility for All Initiative. (2017). Global Mobility Report 2017. In Global Mobility Report 2017. <https://sum4all.org/publications/global-mobility-report-2017> Ubbels, B., Rodenburg, C., & Nijkamp, P. (2020). Different Perspectives on the Global Development of Transport.

Paper, C., & Shah, M. N. (2016). Measuring Customer Satisfaction Using Service Quality Parameters in Mumbai Metro Transport. January.

Wojuaden, C. A., & Badiora, A. I. (2017). Users' satisfaction with public transport operations in Ibadan, Nigeria. *Journal of Social Sciences Research*, 3(9), 88-96.

Rasyida, D. R., Mujiya Ulkhaq, M., Setiowati, P. R., & Setyorini, N. A. (2016). Assessing Service Quality: A Combination of SERVPERF and ImportancePerformance Analysis. *MA TEC Web of Conferences*, 68, 6-10. <https://doi.org/10.1051/mateconf/20166806003>

Hermen Jan Van, R. (2009). Service Quality [ndicators for Business Support Services. *MIS*

Quarterly Executive, 5(1), 43-53. <http://eprints.ucl.ac.uk/19902/>

Saadon, M. S. I. bin. (2012). The Effectiveness of Integrating Kano Model and Servqual Into Quality Function Deployment (Qfd) for Developing. *Journal of WEI Business and Economics-December 2012*, 1(1), 1-8.

Amponsah, C. T., & Adams, S. (2016). Service quality and customer satisfaction in public transport operations. *International Journal of Services and Operations Management*, 25(4), 531-549. <https://doi.org/10.1504/IJSOM.2016.080279>

Adil, M., Falah, O., Al, M., & Albkour, A. M. (2013). SERVQUAL and SERVPERF: A Review of Measures in ServicesMarketing Research. 13(6).

Perez Sanchez, M., Gazquez Abad, J.C., Marin Carrillo, G. M., & Sanchez Fernandez, R. (2007). Effects of service quality dimensions on behavioural purchase intentions: A study in public-sector transport.

Managing Service Quality, . 17(2), 134-151. https://doi.org/10.1108/09604520710735164.

Jain, S. K., & Gupta, G. (2004). Measuring Service Quality: Servqual vs. Servperf Scales. *Vikalpa*, 29(2), 25-38. <https://doi.org/10.1177/0256090920040203>.



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Instructions to Authors

South Asian Journal of Management Research (SAJMR) is planned to be an archival journal of research pertaining to managerial aspects in various areas of human activities. This journal is a publication of Chhatrapathi Shahu Institute of Business Education and Research (CSIBER) Kolhapur, India. CSIBER is a unique institute of its kind in the entire Indian subcontinent imparting postgraduate professional education in the fields of business management, social work administration, environmental studies and computer application. Management thoughts and managerial research are the common factors that link these otherwise diverse fields. Having completed three decades, the institute now desires to cater to the international community by creating a platform for sharing the outputs of managerial research in these as well as other areas of human activities. We believe that the socio-economic and political environments in South Asian countries are more or less similar that we will be able to share the same media for this purpose. SAJMR is the realization of this vision.

Scope of the Journal

The Journal publishes original research papers pertaining to the managerial aspects of (but not limited to) Business, Industry, Information Technology, Environmental Studies, Public Administration and Social Work Administration. The journal will also consider publishing full-fledged review papers in some of these areas.

Content blend

The journal prefers to publish rigorous papers with sound methodology leading to advanced body of knowledge. Conceptual and empirical research paper, review papers, theoretical studies, case studies, simulation studies and model building will be considered for publication.

Frequency

Biannual (January and July)

Editorial Policy

SAJMR is a referred research journal. Only original articles will be accepted for publication. The nature of the article should confine to the specification given in content blend. The manuscript submitted for publication would be screened by the editorial board for its relevance. Appropriate manuscripts would be put through blindfold reviews by two experts. On the basis of reviewers reports the editor will take a decision. Published manuscripts will be the exclusive copyright of SAJMR. The copyright includes electronic distribution as well. Accepted or otherwise the review reports will be made available to the authors of all reviewed articles.

Instructions to Authors

1. We expect the papers to have word length between 3000 and 7000.
2. First page of the manuscript should contain only the title of the paper, name(s) of author(s), name(s) and full address(es) of organization(s) (along with phone, fax and e-mail) where the work has been carried out. The corresponding author should be marked with an asterisk (*).
3. An abstract of 150 words should be included at the beginning of the paper.
4. Abstract should be followed by relevant key words.
5. The paper must be typed on MS Word with Times New Roman font, 1.5 line spacing. A4 size paper. 1.5" margin on left side and 1" margin on all other sides. The main heading should be of 16 font size and it should appear in bold characters. The rest of the paper including the sub heading and sub-sub headings should be of 12 font size.
6. Tables, Sketches and graphs can be included.
7. Section headings should be numbered serially as 1,2,.. and it should be in bold characters. Sub sections headings should be numbered 1.1,1.2,.. and it should appear in italics. If sub-sub sections are there they should be numbered 1.1.1,1.1.2,... and it should appear in italics.
8. All headings should appear in title case.
9. A short biography (one paragraph per author) of the author(s) should appear at the end of the paper.
10. Reference must be written in the following model.

Journal reference

Starbuck, W.H. & Mezas, J.M. (1996) Opening Pandora's box: Studying the accuracy of managers' perceptions. *Journal of Organizational Behaviour*, 17:99-117.

Book reference

Cummins, Thomas G. & Huse, Edgar E. (1998) Organizational Development and Change. West Publishing Company, St. Paul, New York.

Submission of Papers

1. The manuscript should be submitted through email as an attachment file in MS Word to the Editor Dr. T.V.G. Sarma (E-mail: sajmr@siberindia.co.in, sibersajmr@gmail.com).
2. The author(s) of the research paper should give an undertaking while submitting the paper that the manuscript submitted to the journal has not been published or submitted simultaneously elsewhere and the manuscript is their original work. The duly signed undertaking should be sent to the editor by post.
3. If asked to revise, the authors have to resubmit the articles within a period of 30 days.
4. Each author will get a soft copy of the paper and a free journal copy in which their paper is published.

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