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Prospects of Manufacturing and Service Sector Growth in India

Role and Impact of Social Protection Programmes

Emerging Features of Trade and Trade Policy

Growth and its Drivers in Uttar Pradesh and Uttarakhand

Environment, Climate Change and Sustainable Development



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FROM SECRETARY'S DESK

The Uttar Pradesh-Uttarakhand Economic Association (UPUEA), founded in 2005, has seen impressive growth in its short tenure. Membership has exploded tenfold in less than fifteen years to about 1800 life members, showcasing the association's increasing significance. The UPUEA, Society for Promotion of Economics in both states, is a premier society of economists. It actively contributes to the field of economics by publishing its research findings. It further promotes economic exploration through annual conferences, providing a platform for economists to share research and collaborate. These conferences are experiencing a rise in participation, with growing numbers of delegates, paper presenters, and esteemed resource persons. Overall, UPUEA's dedication to organizing high-quality events and fostering research collaboration makes it a key player in advancing economic understanding within Uttar Pradesh and Uttarakhand.

The Uttar Pradesh-Uttarakhand Economic Association (UPUEA) is gearing up for its 19th Annual National Conference, a three-day event scheduled for April 13th-15th, 2024. We have received more than Three Hundred Sixty (360) Research papers under the broad theme of the conference: **Sustaining Growth with Equity: Sectoral Growth, Trade and Social Protection in the 21st Century**. A pre-Conference research workshop for the young researchers has been organized on 13th April 2024 to acquaint the researchers with various nuances of the research. This year's conference delves into the dynamic forces shaping the Indian economy, with a particular focus on the state of Uttar Pradesh and Uttarakhand. Researchers and economists have a great opportunity to contribute their expertise by submitting papers on five key sub-themes.

- ***Growth Prospects of Manufacturing and Service Sectors in India,***
- ***The Impact of Social Protection Programs,***

- *Emerging Trends in Trade and Trade Policy,*
- *The Drivers of Economic Growth in Uttar Pradesh and Uttarakhand*
- *Environment, Climate and Sustainable Development.*

All accepted papers will be published within the conference proceedings, creating a valuable record of scholarly contributions. However, the organizers have encountered a recurring challenge: ***delayed paper submissions***. This has resulted in last-minute scrambling and potential disruptions to the conference schedule. Despite persistent and frequent reminder to the members to contribute their papers as per schedule, we continue to receive the late response under the pretext of late information, leading to accomplishment of further steps in haste. While we've disseminated information about the conference and deadlines, we understand that occasionally, important details might require reiteration. To ensure a well-organized event and allow ample time for the publication of full papers in the conference proceedings, we kindly request all interested members to reach out to the General Secretary or Organizing Secretary in March for any clarifications or updates. By adhering to the specified page limits, members can contribute to a well-organized and informative conference. We appreciate your understanding and look forward to receiving your valuable research contributions. The Uttar Pradesh-Uttarakhand Economic Association (UPUEA), a well-established organization for over a decade, recognizes the need to adapt with the time. With the national economy rapidly evolving, the association acknowledges new challenges facing the economies of Uttar Pradesh and Uttarakhand, particularly in agriculture and rural development. To address these challenges, the UPUEA sees the current times, as an opportune moment for critical reflection. The association proposes an objective discussion to analyze both the successes and failures of past development efforts. This analysis aims to identify crucial strategies with the potential to unlock growth across all sectors.

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(Vinod Kumar Srivastava)
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THEME 2

Role and Impact of Social Protection Programmes

Which Measure is more Important over Time in the Context of Asia's Population-Based Countries: GDP per Capita or HDI?

Shrabana Tripathi

Abstract

The topic of general well-being is fascinating and significant from a societal perspective, but measuring it is currently a challenging task. Taking into account population size, the GDP per capita is a measure of a country's economic output. It is not, however, a comprehensive indicator of economic well-being. Over the past two decades, there has been much discussion about the limitations of GDP as a gauge of a nation's standard of living or social well-being. The finding is that despite a high GDP growth rate, the quality of life for a huge portion of the population has not improved. This has led to the idea that the GDP metric needs to be expanded to include human well-being and quality of life into account. The human development index (HDI), which is multidimensional in contrast to GDP growth, confirmed the widespread belief that well-being is a concept that cannot be assessed solely by GDP. In this study, we use our sample to compare how well these two indicators performed. Based on different population densities at the three-time points of 1990, 2005, and 2017, scatter plots demonstrate that there is a strong correlation between countries with high populations and a weak relationship between countries with lower populations. Furthermore, we note that although the relationship between GDP per capita and HDI is largely constant for the entire sample, it frequently varies for sub-samples. The countries with lower populations exhibited the largest association over time, followed by those with higher population densities.

Keywords: GDP, HDI, Asia

1. Introduction

Economic development encompasses various aspects to enhance a country's population's economic security and standard of living. While economic growth focuses solely on increasing GDP, economic development considers poverty reduction, healthcare access, education, gender equality, and environmental sustainability. It is essential for sustaining higher levels of human

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development and improving living standards. GDP per capita measures economic growth by calculating the average income per person, while the Human Development Index (HDI) considers multiple factors beyond income, such as life expectancy and education. HDI helps understand differences in quality of life between nations with similar GDP per capita. However, as individuals may prioritize different aspects of development, it's crucial to choose indicators that align with overall well-being. GDP, though widely used, doesn't fully capture human progress, leading to the emergence of alternative measures like HDI. HDI values range from 0 to 1, with higher values indicating higher human development. Countries with high GDP may rank lower on HDI due to its broader scope. Understanding the disparity between GDP and HDI is essential for assessing true development progress.

If we can't measure progress, what is it even? If we obtain various outcomes when we use different indicators, how can we tell if we are doing better or worse than the prior year? Achieving a college degree or keeping good health may be more significant to one individual than increasing their monetary wealth, which is how they measure development. These are just a few of the many issues that demonstrate the need for us to understand which indicators work best for our study. Gross domestic product, which calculates the size of an economy by summing the values of goods and services produced within a nation over a given period, was created by economist Simon Kuznet at the beginning of the 1930s. When using the expenditure method $GDP = C + I + G + (X - M)$. Because of its advantages, which are regularly and widely used, and because its statistics are easily accessible, the GDP is employed as a gauge of a country's economic health in the majority of countries.

Although the top-ranked nations in terms of GDP lead in terms of overall economic activity, this does not necessarily imply that their population is more fortunate than people in other countries. As an illustration, consider China, the leading emitter of harmful carbon dioxide due to its extensive industrial and business-related activities. While this helped China achieve a high GDP, many Chinese citizens suffer from having to live and work in a filthy environment. The illustration demonstrates how some actions that are harmful to people's welfare could wind up being counted as positive GDP contributions. These factors have led to the emergence of various methods for assessing development. HDI is one of them. It accounts for GDP as well as other facets of human progress, such as wisdom, longevity, and a desirable level of living. HDI index values are between 0 and 1. High human development nations are those with an HDI over 0.800, medium human development countries are those with an HDI between 0.800 and 0.500, and low human development countries are those with an HDI below 0.500.

Since HDI is a more thorough measure than GDP, countries with high GDP rankings are placed lower on the HDI index. We may therefore obtain a different conclusion from the HDI index if we evaluate development status based on GDP. This is the main focus of this essay. It clarifies this disparity between the outcomes provided by the two most significant development indices, GDP and HDI.

1.1 Theoretical background

Gross Domestic Product (GDP) measures the total income from products and services produced within a nation's borders over a given period, typically a year. GDP growth rate is crucial for assessing economic growth, and it can be measured through three methods: the Output Method, Expenditure Method, and Income Method. The Human Development Index (HDI) is a statistical tool used to evaluate a nation's overall progress in social and economic spheres, focusing on well-being, education, and standard of living. Developed by Pakistani economist Mahbub-ul-Haq in 1990, from 0 (no development) to 1 (complete development), HDI has a scale of a three-part index with equal weights for each component considering life expectancy, adult literacy, and GDP per capita. While there's generally a positive association between GDP per capita and HDI, this correlation varies among nations based on population density. The study presented in this paper explores this relationship across 18 nations over different periods, analyzing how GDP rankings differ from HDI rankings. The paper proceeds with a literature review, followed by a data and methodology section, empirical findings, and concluding remarks with recommendations.

2. Literature Review

Gross domestic product, which gauges the size of an economy by adding up the values of goods and services generated within a nation over time, was created by economist Simon Kuznet at the beginning of the 1930s. Thus, the GDP is implicitly and frequently explicitly associated with social welfare—as evidenced by the frequently used replacement term “standard of life.” Since the 1960s, there has been a lot of opposition to the implied use of GDP (per capita) as a measure of social welfare. Kuznets (1941), Hicks (1948), Samuelson (1961), Dasgupta and Mäler (2000), Dasgupta (2000), Ng (2003), as well as Kahneman, Kruger, Schkade, and Stone (2004), are significant contributors.

The human development index was developed to highlight the fact that, in addition to economic progress, people's capabilities might serve as the primary criterion for assessing a nation's level of development. Economists also attack HDI while it is in operation. Some criticisms assert that it employs the incorrect variable and that the concept of human growth is not correctly reflected (Lind (1992), Dasgupta and Weale (1992), Srinivasan, (1994), Sagar & Nagam (1998)), Chibber & Laajaj (2007). The HDI has drawn criticism for portraying an overly simplistic perspective of human progress by focusing on a small number of metrics that are frequently generated from low-quality data (Murray (1993), Srinivasan (1994)). According to Sagar & Najam (1998), “HDI presents a misleading vision of the universe.”

Even though there are certain drawbacks to both GDP and HDI, they are the finest measures of the state of development. Dr. Akbar Khodabakshi (2010) asserts that there is a relationship between GDP and HDI, while Surajit Deb (2015) investigated whether there is a substantial difference between GDP rankings and HDI rankings. He examines 140 low, medium, and high-income economies to better understand the discrepancy between GDP and HDI.

This study clarifies whether a nation with a high population density or one with a lower population has the same GDP and HDI ranking. It calculates the effect of population on GDP per capita and demonstrates whether a high GDP per capita is associated with a healthy, educated life or not.

Following a review of the literature, it was discovered that using GDP instead of the HDI index to determine development status can produce different results. The focus of this study is on this. This discrepancy between the outcomes provided by the two most significant development metrics, GDP and HDI, is clarified. It ought to make policymakers more aware of the need of economic development or growth for emerging nations.

Therefore, the objective of the present study is to examine the association between the two development indicators, HDI and GDP per capita, in the context of Asia's highly, moderately, and sparsely populated nations.

3. Data and Research Methodology

Basic scientific techniques like comparing and generalizing are used in the study. To examine the relationship between HDI and GDP per capita, we used correlation. First, scatter plots of various populous nations over three times in time—1990, 2005, and 2017—are used to analyze the ranking gap. For the entire sample as well as subsamples, we have estimated the correlation coefficient between HDI and GDP per capita.

Table 1 shows a moderate increase in GDP per capita across all nations. Yemen has the lowest GDP per capita among the countries in 2017, whereas Qatar, which is a low-population country, has the highest (belonging to middle-population countries).

Table-1- GDP per capita among the countries

Country	GDP per capita US\$		
	1990	2005	2017
China	1526	5719	15309
India	1755	3179	6427
Indonesia	4625	6825	11189
Pakistan	3055	4013	5035
Bangladesh	1288	1930	3524
Japan	30582	35658	39002
Nepal	1198	1684	2443
Yemen	3327	4155	1479
Korea	11633	25517	35938
Sri Lanka	3612	6476	11669
Kazakhstan	13050	16014	24056
Syria	988	1577	2684
Qatar	15548	109802	116936
Bahrain	35113	43202	43291
Cyprus	23301	33663	32415
Bhutan	2325	4522	8709
Maldives	963	9274	15184
Brunei	84672	82967	71809

*Data Source: World Bank national accounts data

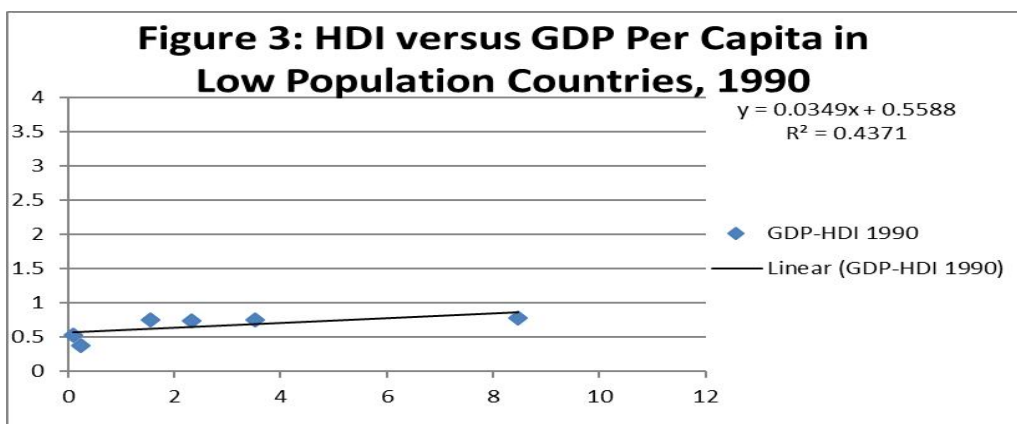
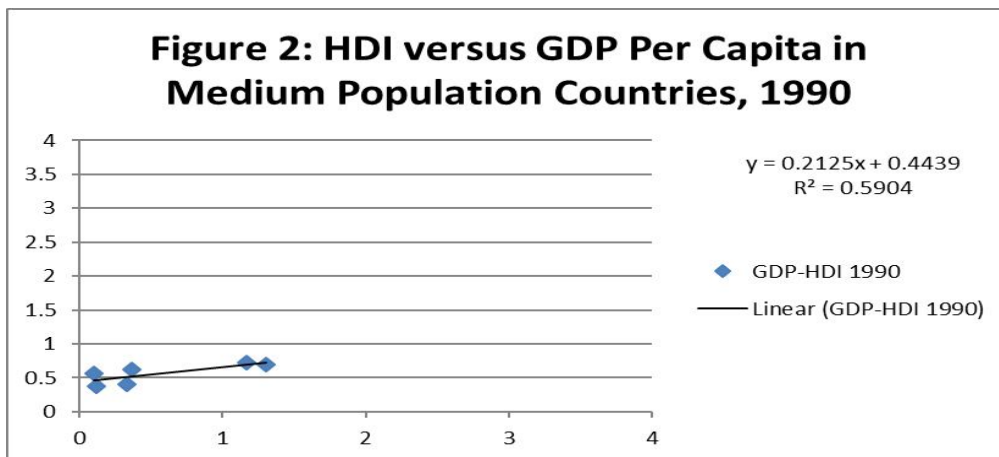
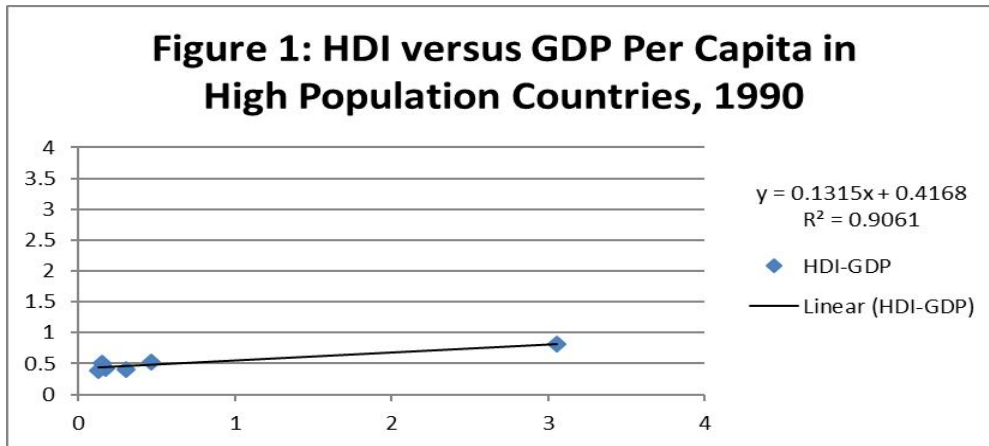
Table 2 displays the HDI values for selected nations for the years 1990, 2005, and 2017. Japan has the greatest HDI among the nations, while Nepal has the lowest. Yemen has the lowest HDI holder both in 2005 and 2017, whereas Japan has the highest HDI. It can be observed that each country's overall HDI is rising, which suggests that the standard of living, literacy rate, and life expectancy of its citizens have all grown.

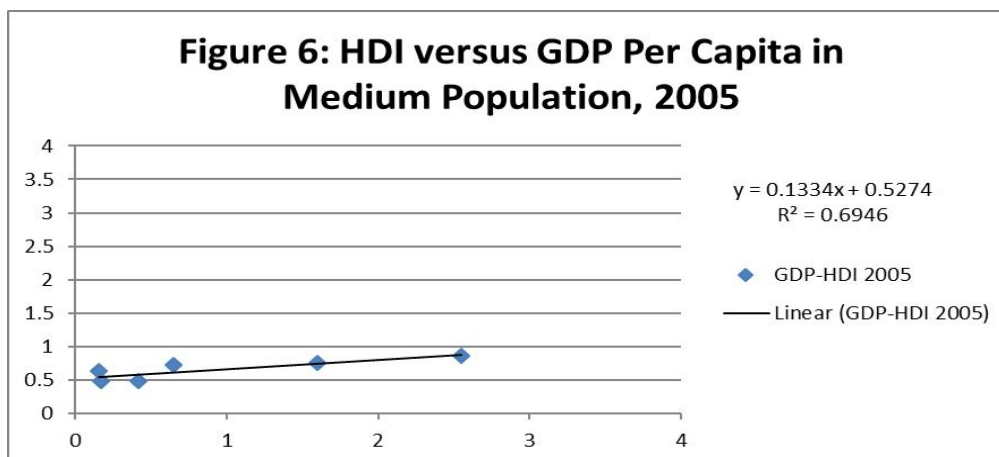
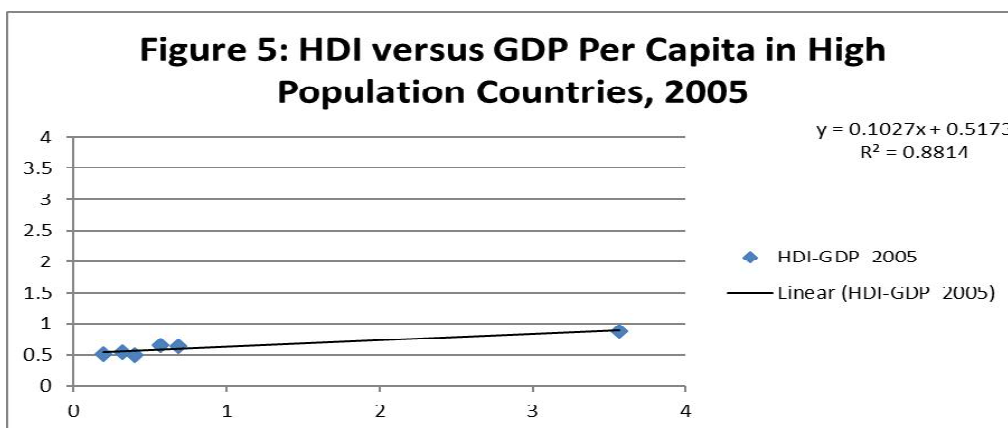
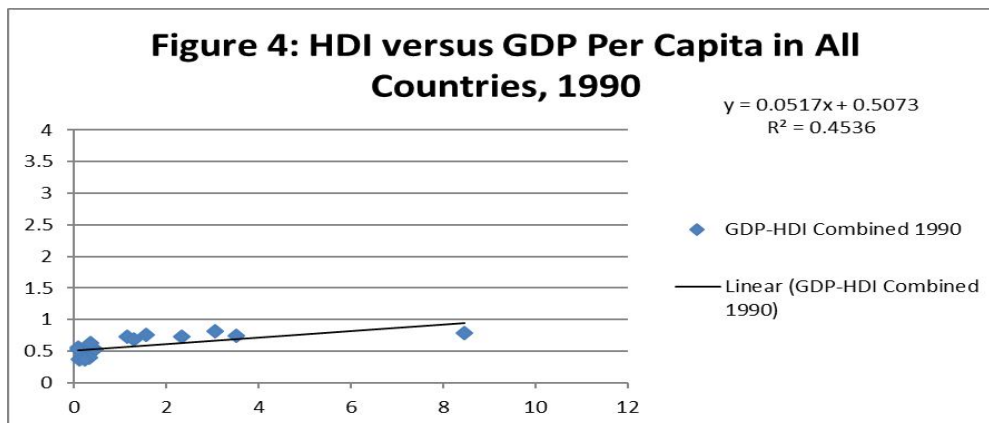
Table-2- HDI among the countries

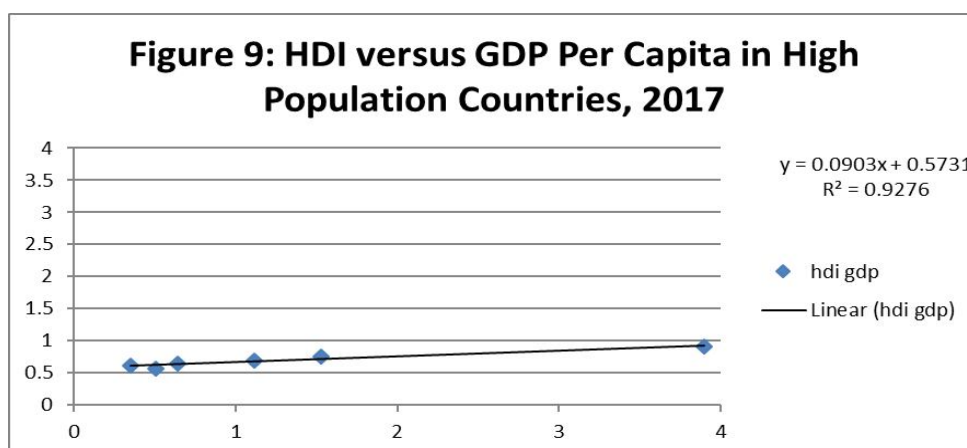
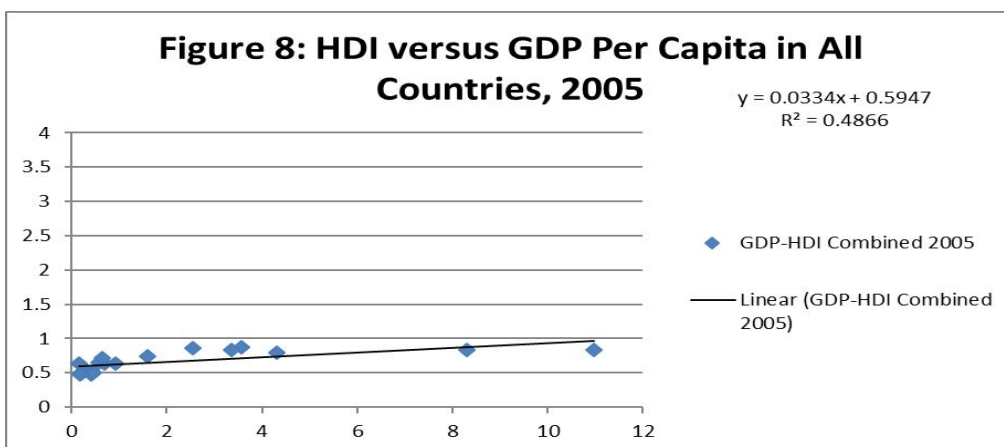
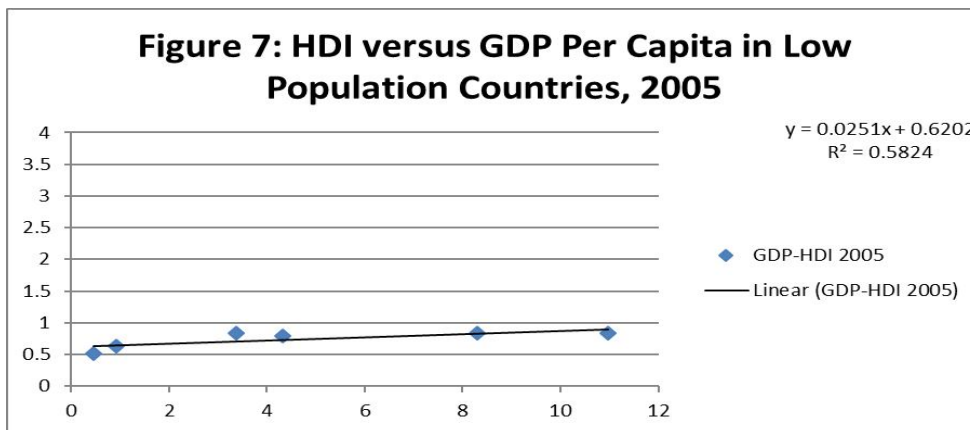
Country	HDI		
	1990	2005	2017
China	0.502	0.647	0.752
India	0.427	0.535	0.64
Indonesia	0.528	0.632	0.694
Pakistan	0.404	0.5	0.562
Bangladesh	0.387	0.505	0.608
Japan	0.816	0.873	0.909
Nepal	0.378	0.475	0.574
Yemen	0.399	0.474	0.452
Korea	0.728	0.855	0.903
Sri Lanka	0.625	0.718	0.77
Kazakhstan	0.69	0.747	0.8
Syria	0.562	0.635	0.536
Qatar	0.754	0.831	0.856
Bahrain	0.746	0.791	0.846
Cyprus	0.732	0.831	0.869
Bhutan	0.375	0.51	0.612
Maldives	0.529	0.631	0.717
Brunei	0.782	0.838	0.853

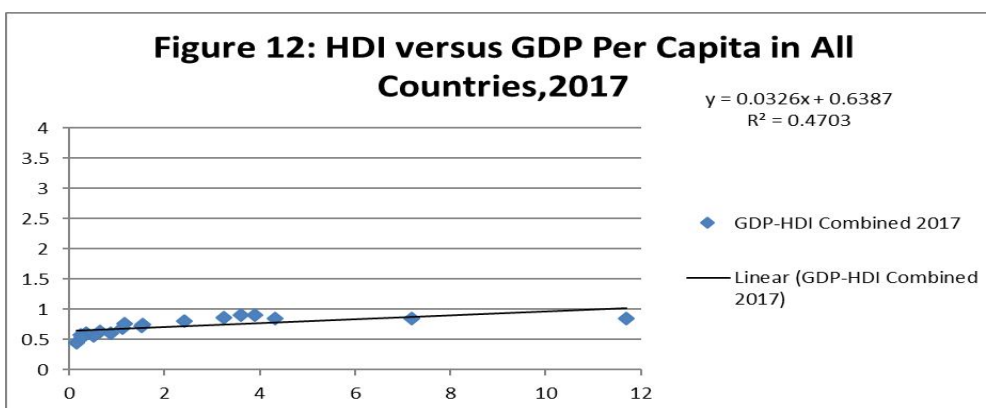
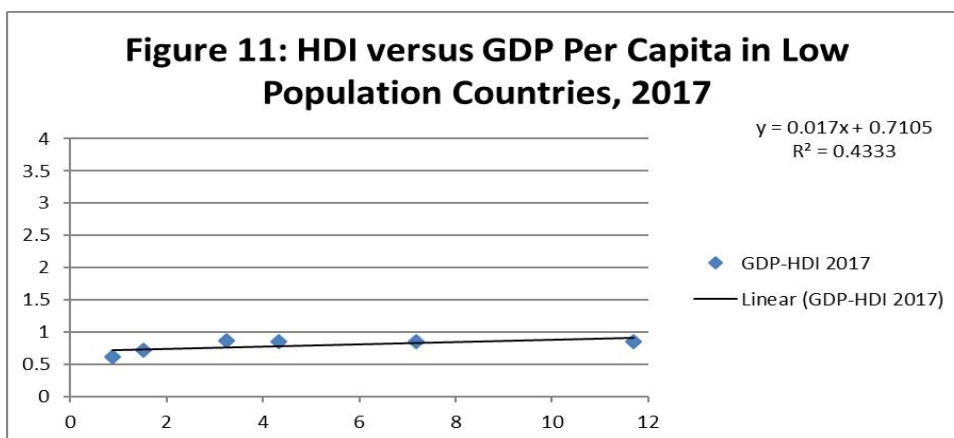
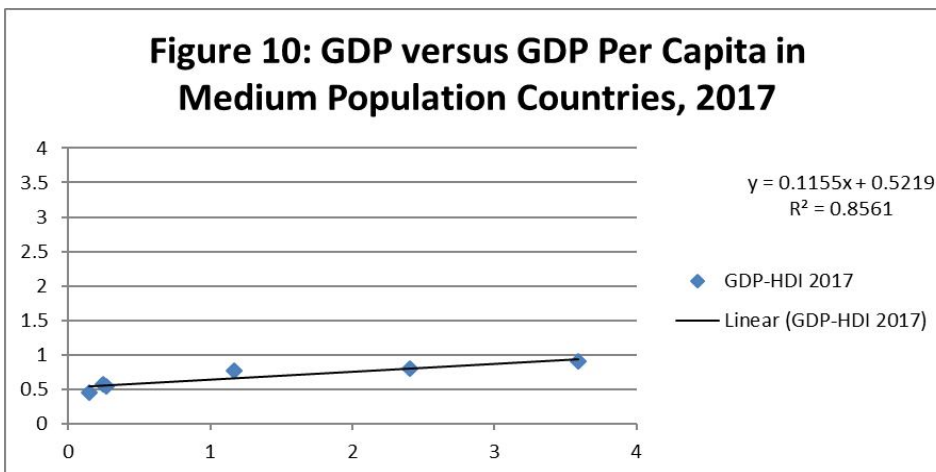
*Data source: UNDP: Human Development Reports

We will now use a scatter diagram to analyze the link between GDP per capita and HDI.









4. Empirical Findings

4.1 Scatter plots and Regression

This analysis is carried out by charting GDP per capita in the horizontal axis and HDI in the vertical axis continuously over three points in time, 1990, 2005, and 2017. The association between GDP per capita and HDI of high, medium, and less populated countries is shown in the first three figures (1, 2, and 3), whereas fig. 4 shows the correlation for all countries. For all 18 of the participating nations, there has been found to be a strong positive association between GDP per capita and HDI. However, for each situation, high population countries have the most positive high correlation, followed by medium-population countries. Less populous nations have the lowest correlation. Thus, for high, the fitted regression line has an upward slope.

The association between the years 2005 and 2017 is similarly depicted using scatter diagrams. All 18 of the fitted regression lines have an upward slope, however, the slopes vary greatly depending on the country's population. For countries with a high population density, the positive association is stronger; for countries with a lower density, it is rather weak.

Overall, it is clear that the link is highest for highly populated countries over the three points in time and lowest for less populated nations. These findings also show that while the results for subsamples of nations with diverse populations still show significant variances, the HDI Ranking of countries is not significantly different from the GDP per capita ranking.

4.2 Correlation analysis

In basic statistics, a correlation coefficient is a number that quantifies various types of correlation and dependency, or statistical links between two or more values. The correlation coefficient, abbreviated as r , gauges how strongly two variables are related linearly. The interpretations of the values, which range from -1 to +1, including

- 1) A value of +1 denotes a perfect positive linear relationship, meaning that as one variable's value rises, the other variable also rises according to a precise linear rule.
- 2) Zero means there is no linear relationship.
- 3) A value of -1 denotes a complete negative linear relationship, in which the value of one variable declines as the other grows.
- 4) A value in the range of 0 and 0.3 (or 0 and -0.3) denotes a weakly positive (negative) linear connection.
- 5) A moderately positive (negative) linear connection is indicated by values between +0.3 and +0.7 (-0.3 and -0.7).
- 6) A significant positive (negative) linear relationship is indicated by values between +0.7 and +1.0 (-0.7 and -1.0).

Table-3- Correlational Analysis

Category	Correlation		
	1990	2005	2017
High Population Countries	<i>0.951915</i>	<i>0.938815</i>	<i>0.963103</i>
Medium Population Countries	<i>0.768402</i>	<i>0.833429</i>	<i>0.925282</i>
Low Population Countries	<i>0.661163</i>	<i>0.763138</i>	<i>0.658257</i>

We can observe from the previous statistics that for high-population countries, the correlation coefficient between GDP per capita and HDI remained rather strong. It ranges from 0.768402 to 0.925282 for countries with a medium population and from 0.658257 to 0.661163 for nations with a lower population. These findings imply that HDI and GDP per capita are comparable across all 18 nations, but that there are important variances within subsamples.

5. Conclusion

At the aggregate level of 18 nations throughout the three points in time, 1990, 2005, and 2017, we observe a strong positive association between GDP per capita and HDI. Based on various population densities, scatter plots show that there is a strong association between countries with high populations and a weak relationship between nations with lower populations. Additionally, we observe that while the correlation between GDP per capita and HDI is essentially constant for the whole sample, it fluctuates sometimes for sub-samples. Less populous countries followed by those with a high population density showed the strongest correlation over time.

With the conclusion that more populous nations increased their HDI more successfully than less populated countries, the data provide evidence in favor of the convergence hypothesis.

Overall, this study's findings suggest that, despite a clear association between the two, it may not be suitable to quantify human progress just by GDP per capita or HDI. While HDI is a gauge of social and economic advancement, GDP measures a nation's economic performance. Finding a tool that can measure both with regard to a country is therefore important. Finding an index that can assess both the nation's economic health and its population growth is required.

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Where do they want to Work? Agriculture or Public Works: Case of Female Workers in Bihar

Dr. Sangita Kumari

ABSTRACT

The recent restructuring of rural economy away from agriculture to construction (after the return of migrant labor in rural Bihar aftermath the lockdown imposed) has been addressed by the MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) for the benefit of unskilled female and male workers. Context of the paper is that why the female labourers are withdrawing from farm sector. The paper attempts to enquire the reasons of apathy of female wage workers in agriculture against the backdrop of MGNREGS and other public works programme. The methodology used for the study is based on 100 wage workers of Jehanabad district of Bihar and reports of PLFS and NSSO. MGNREGS is demand-driven and the demand for wage workers in the construction sector increased. Share of female person-days in total employment generated in rural Bihar has made strides over the last 14 years since its inception. Their better destination is to work as construction worker because of high opportunity cost.

Keywords: *Public Works; Agriculture; Wage Workers; Female.*

1. INTRODUCTION:

To provide livelihood security and wage employment on demand, the Government of India in 2005-06 implemented MGNREGA. It was initiated in 200 districts and later extended to all over India. The demand for work has increased considerably by the migrant workers who returned to rural parts of Bihar in the aftermath of the lockdown imposed in the wake of COVID pandemic. So, how the job opportunities will be created for male and female migrant workers returning to their home is a real challenge. At present, 9 lakh job card holders are engaged in various MGNREGA schemes in the state.

During the lockdown days, this central scheme is proving as a windfall for the entire rural regions of India and particularly Bihar, which is the second populous state of the country. The

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destination village has to reengineer and reconfigure its economic setup for further diversification of employment structure to adjust the migrant labour. The lockdown has caused severe and irreversible damage to the prospect of the female workforce across the class who want to work but unable because of the heightened level of unpaid domestic and care responsibilities.

Through the process of priorities to a few sectors, a chain of stimulus starts pushing other sector and growth sets in. The state government has undertaken the mammoth task of creating work opportunities for migrant workers in different sectors like water resources, road construction, building construction, rural road works and minor irrigation. Besides, there are works under the government's ambitious schemes like Mukhyamantri Gramin Gali Nali Puccikaran Nishchay Yojna, Jal Jeevan Haryanaali (JJH) campaign, construction of lanes and laying of drinking water pipes in villages. Adding work opportunities have also been created through self-help groups (SHGs) under the jeevika (BRLPS) programme.

Major skill development programmes such as Deen Dayal Upadhyay Gramin Kaushal Yojna (DDUGKY) with 60 per cent and 40 per cent centre and state share respectively and Dashrath Manjhi Kaushal Vikas Yojna (DMKVY) with 100% state share for SC/ST welfare has been started. Their main objective is to increase the employability of youth. Accredited Social Health Activists (ASHA), a component of National Rural Health Mission, Anganwaadi sevika, Sahaaika, Mid-day Meal workers are other few jobs that have come up in rural Bihar post-2000.

By April 2020, there has been an increase in the number of workers in agriculture by over 5 million as reported by CMIE. After 15 years, this is the first time that workers engaged in agriculture have risen significantly, virtually resulting in conglomeration in the agriculture sector. The management of the surplus labour force largely depends on the statesmanship of government as to how they are reconfigured and redesigned in the present situation. The possibility of more females joining the workforce to eke out their family's sustenance cannot be ruled out.

1. Declining Numbers of Female wage labours in Agriculture in rural India:

There is one striking change noticed in the rural economy of India that the absolute number of wage workers in agriculture has been falling since 1983, which draws the attention of researchers and academicians. The falling nature of female casual paid workers seems the common issue in rural India, including rural Bihar. It is seen that across all states, almost all saw a decline in principal status employment at the national level. There were a few exceptions such as Assam, Haryana and Himachal Pradesh which saw a slight increase in female's principal status employment.

Table: 1. Rural Employment (up+ss) of women in Agriculture (in million)

Status	1999-2000	2004-2005	2009-2010	2011-2012	2017-2018
own account worker & employer	12.2	13.7	11.3	11.7	9.1
unpaid family worker	38.9	53.5	37.4	37.3	27.3
Wage workers (regular and casual)	39.4	37.0	34.2	27.3	19.8
Total	90.6 (85)	104.3 (83)	83.0 (79)	76.3 (75)	56.3 (73.1)

Source: Computed from various NSSO (EUS) and PLFS reports.

Note: Figure in the bracket shows the percentage share of total female workers.

Table 1 reflects that between 1999-00 and 2017-18, not only the relative share (from 43 per cent to 35.2 per cent) but also the absolute number of female wage workers in agriculture kept declining from 39.4 million to 19.8 million in rural India. The number of female wage workers has become half (about 20 million decline) between the period 1999 and 2018. Over the last eighteen years, there is a consistent decline in the absolute number of female wage labourers in rural India. And the relative share (of the total female workforce) declined for the corresponding period but with fluctuation. As the status of unpaid family workers, 38.9 million female were involved in agriculture in 1999-00.

Between 1999-00 and 2004-05, there was a sudden jump of 14.6 million female workers in the status of unpaid family workers. Conversely, 16.1 million family female workers left the agriculture sector between 2004-05 and 2009-10. There was another decline of 10 million unpaid female family workers between 2012 and 2018 in rural India.

The lowest number (9.1 million) of rural female workers is involved in agriculture as the status of own-account workers and employers during 2017-18. There is 3.1 million decline in the absolute number of rural female workers in this status in India between 1999 and 2018. However, female workers as the status of wage labourers registered the maximum decline in the agriculture sector over this period in rural India.

2. COMPARISON OF AGRICULTURE AND NON- AGRICULTURE OPTIONS:

To corroborate the narrative, these are the list of employees who are busy outside agriculture. It is quite evident that any person outside the agriculture either daily or monthly is earning more. Therefore, the relative income outside agriculture is also making more money and fetching money transaction in the rural economy. Following is the list of wages of workers outside agriculture on a daily and monthly basis. Apart from agriculture, females were busy in public works other than MGNREGA like PMGSY, Mukhyamantri Gram Sampark Yojna, Mukhyamantri Pakki Gali- Nali Pakkikaran Nishchay Yojna etc., and also public works under MGNREGA. Women workers were more interested in doing work in the latter.

Table: 2 Farm and Non-Farm options of Work with Payment (Based on Village survey)

Type of work	Payment on a daily/monthly basis (in Rs)	
	Female	Male
Incense Stick	100/day	200/day
Vegetable shop vendor	300/day	500/day
Construction	300/day	500/day
Agriculture Casual Labour	4kg/day	5kg/day
Mid-day meal workers	1500/month	NA

Source: Primary study from the field (village in Bihar).

Table 2 shows the options of work available for illiterate and unskilled female/male wage workers in agriculture and non-agriculture. In non-agriculture work, male and female workers were getting the payment in the mode of cash whereas in agriculture the method of payment was in kind (4 kg and 5 kg respectively).

Relatively as a construction worker and vegetable shop vendor wherein the nature of the job was of unskilled manual work, they were earning more compared to agriculture labour. A job outside agriculture in surveyed villages is slightly more remunerating and doesn't contain a kind component in wage payment, unlike agriculture. The other option of work for illiterate women are as mid-day meal workers who work for 6 to 8 hours. Usually, only female workers, mainly from weaker sections, are chosen for Mid-day meal workers.

Though the nominal wage rate in the agriculture sector in Bihar is gradually going up, the real wage rate is rigid, static and stagnant as compared to other unskilled jobs of casual nature in MNREGA and other construction work. Though at the time of the sowing period, the employers are ready to pay more than the double of existing rate to attract them from the labour market, and then labourers supply their hours of work.

Being asked to a casual worker who comes from a far-off village that takes her one hour for just a meagre amount of Rs 100, why don't you work as domestic help, where she can earn at least Rs 7,000 in a month? Their response in a collective way was negative as if they presume the work of domestic help doesn't follow the law of recognition and acceptance in their society. This limited option of work makes them either active or dormant like the peak and lean season of agricultural activities. The inhibition to work as domestic help or other near alternatives makes them inert and made activated only when demand increases. The labour market of casual labours is affected by the seasonal demand and supply and so flexible.

Table: 3 Percentage share of Women in Agriculture and Non-agriculture in Rural Bihar

	2004-05	2018-19
Agriculture	86.4	75.84
Non-agriculture	14.6	24.16
Manufacturing	8.1	3.23
Construction	0	1.49
Wholesale & Retail Trade	2.6	2.56
Accommodation & food services	0	0.8
Public administration, education & other services	2.8	16.08

Source: EUS, 2004-05 and PLFS, 2018-19.

Table 3 shows that between 2004-05 and 2018-19, the share of females busy in agriculture declined by 10.5 per cent, and there was a commensurate increase in non-agriculture employment. For the corresponding years, 2.8 per cent women who were busy in public administration, education and other services increased to 16.08 per cent of woman workforce. Over the period, manufacturing has been stagnant, and the percentage share of women engaged in manufacturing declined by 4.87 per cent among female workers of rural Bihar. The number of women willing to work has gone up due to ease in social restrictions and receding social stigma in non-farm sectors (female unemployment rate has increased, referring chapter 2). After attaining even secondary education, women are searching for job opportunities within and outside the village. There are two sectors where employment has considerably increased, that is education and health.

3. Occupational Segregation of Rural Women:

Though the share of women employed in agriculture and allied sector has been decreasing and their corresponding share in the service sector has been increasing (15 per cent). Their share in the secondary sector is very low, only around 4 per cent. But the most robust nature of female's employment is that there are few limited sub-sectors where females are crowded more and reveals the low quality of work in terms of pay and social security. As per PLFS NSO data, there are sectors where women share is nil. In the secondary sector, their presence is only in manufacturing (3.2 per cent) and construction (2.8 per cent). Apart from these two sub-sectors that account for 6 per cent, the share of women in other sub-sectors is nil.

In the village, there are non-agriculture options such as construction in MGNREGA and other public works; education and health sectors have remarkably increased over the last 20 years. There are agro-processing mills to remove husk and bran layers and produce white rice; 'usna' (boiled rice) through paddy parboiling; flour making of wheat, oil etc.

Women were busy in tailoring shops and other petty groceries, tea and beedi shops in the early times. Over past few years, a growing number of private schools, hospitals, shops of electronic goods, mobiles, banking and communication are the options in rural areas which is not only generating new possibilities in the job market but also signalling bright prospect for newly educated young girls to pursue further studies. Girls of rural areas are becoming security guard and constables, which is the new face of women empowerment in the villages of Bihar.

Demand for labour by the employer farmer is not the same all over the year and depends on the peak and lean season, and supply gets affected by the outflow and influx of short-term migrant labourer. Nevertheless, supply gets intervened only when short term migrants come back to join the increased agricultural activities. Agricultural Wages in rural Bihar is usually a combination of cash and kind. Payment in cash is also in practice in a few villages. On the contrary wage rate in rural Bihar is diverse and varied across the region in the agriculture sector. Moreover, the wage rate is not subject to timely revision. As the spillover effect of MGNREGA is felt in agriculture only for last few years but still, the wage rate (both the cash and kind component) is meagre in comparison to revised government rates in other rural schemes of public works. But it is rising steadily 2006-07 afterwards.

4. PERFORMANCE OF MGNREGA FOR RURAL WOMEN IN BIHAR:

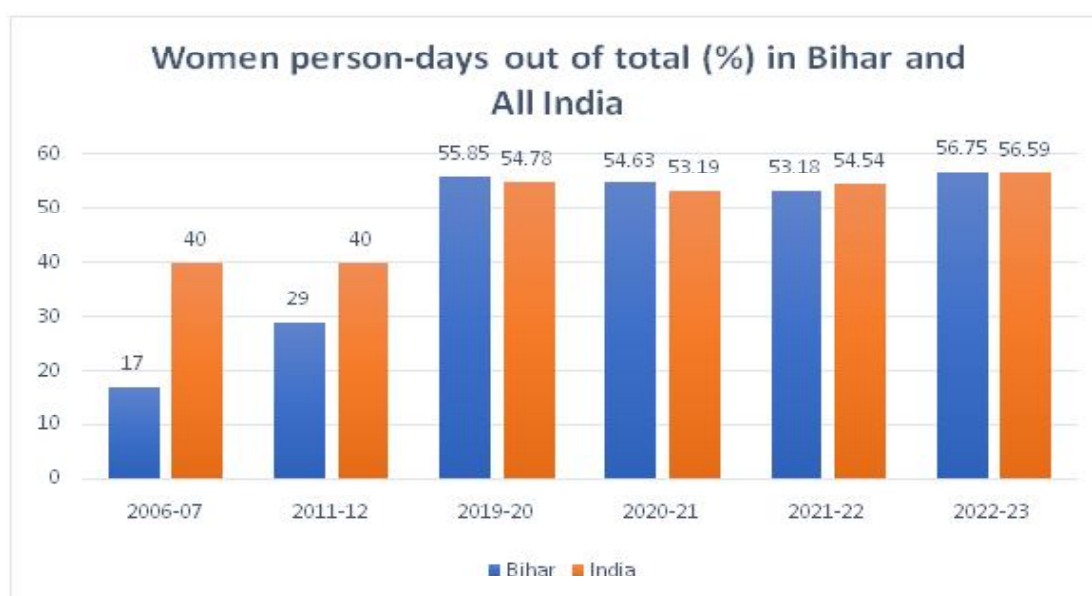
The substantial number of women work in the programme as the Act prescribes that a minimum of 33% of all wage workers must be females. There is entitlement to at least 100 days of employment for each household below the poverty line. The performance of MGNREGA in rural Bihar in generating employment to rural female can be measured on the following grounds.

4.1 Women Person days out of total (%):

So far as the progress of the scheme is concerned in terms of women person-days out of total work, the data registers spectacular and reinforces the feminization of the total work force firmly not only in India but also in Bihar.

The most recent data on the allocation of work under MGNREGA registers that the national average for women beneficiaries reflect that the share of women person-days out of a total job in the year 2019-20 is 57.2 per cent. Whereas during 2006-07, the all-India average of women’s share of whole work under the scheme stood at just 40 per cent.

Figure: 1



Source: Compiled from [www. Nrega.ac.in](http://www.Nrega.ac.in) (MIS).

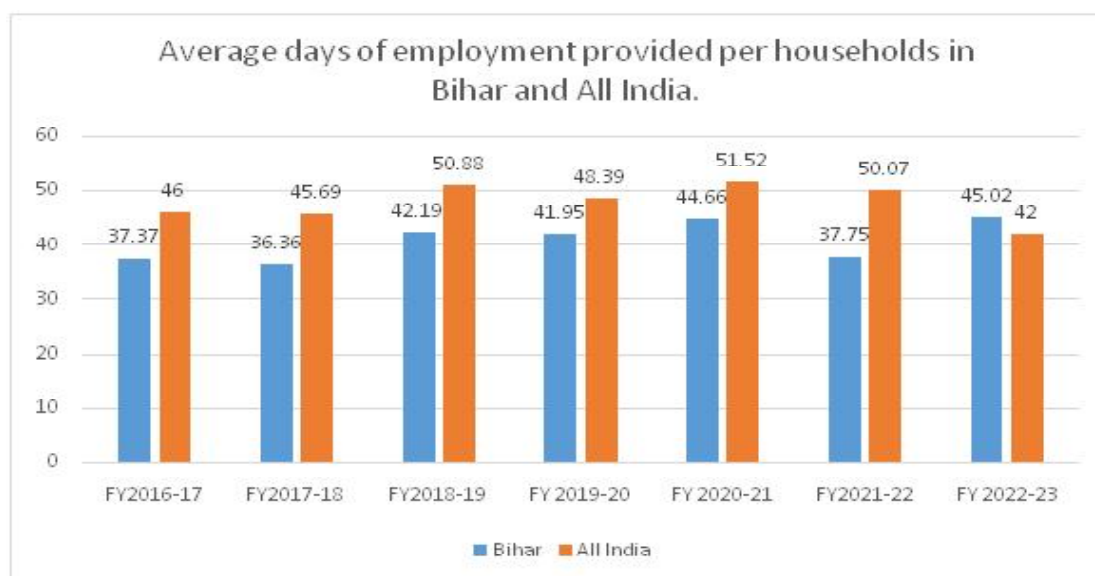
Figure 1, shows that the progress in this regard in rural Bihar has been overwhelming in comparison to the nation’s performance. The year 2006-07, the inception of MGNREGA, the share of women’s person-days was 17 per cent (against the national average of 40 per cent) increased to 29 per cent (against the nation’s average of 47 per cent) during 2011-12 and subsequently around 56 per cent (less only by 1.2 per cent) against all India average 57.2 per cent during 2019-20.

Rural women of Kerala and Tamilnadu have bagged a bulk of the work under this job guarantee scheme, and their share of work is 89 per cent and 86 per cent respectively for the period 2019-20. It shows feminization of work under the scheme as more than half the work in terms of person-days job generation to females in both the rural regions of Bihar and India.

4.2. Average Days of employment provided per household:

As the scheme provides 100 days of wage employment to every rural household. Bihar has been an underperformer on this parameter.

Figure: 2



Source: www.nrega.ac.in

Figure 2, shows that the national average days of employment provided per household under MGNREGA between FY 16 to FY 19 stand at 47, which is not even half of the 100 days of the guaranteed job to each household. Person days of employment generated per household for the year 2016-17: 37.37; 2017-18: 36.36; 2018-19:42.19; 2019-20:41.95. The numbers are below the national average. The data reflects the average days of employment provided per household is not satisfactory for all India and relatively worse in Bihar.

Thus, overall Bihar has been a bad performer in taking advantage of 100 days of livelihood security in a financial year. But of course, the share of female person-days in total employment generated in rural Bihar has made strides over the last 14 years since its inception. Moreover, the delayed wages with no proper revision and local level political interference and influence in allocation of job cards and providing jobs are other issues for the implementation failure in underachievement in delivering the necessary 100 days of employment.

Average days of employment provided per household is 45 (better than nation). in rural Bihar against the national average of 42. Further, women person-days out of total work (56.75 per cent) is almost same as the national average (56.59) per cent during 2022-23. So, the

average days of employment for women in MGNREGA is about 25.6 days, which is even less than the criteria of the workforce as per the usual subsidiary status of 30 days laid out by NSO.

In this case, very few women might be qualifying the criteria of the workforce of at least 30 days to work throughout the reference period of 365 days as per the subsidiary economic activity status. The recent restructuring of rural economy away from agriculture to construction to a limited extent has been reinforced by MGNREGA for the benefit of unskilled female and male workers. Therefore, the MGNREGA initiative does not explain fully the reason for fall in female's participation in agriculture in rural Bihar.

Summing-up:

In the casual labour category, there are three types of workers. These are Works other than Public Works, Other Public Works and Public Works under MGNREGA. There are three noticeable features of wages in the Casual labour category:

- a) Urban wages are higher than rural wages.
- b) In rural areas of Bihar, the wages for agriculture activities are low vis-à-vis MGNREGA. This is the reason why the female casual workers are keen to work in the project of public works under the umbrella of MGNREGA and other public works.
- c) Male workers earn more than female workers. The gender wage differential is more in agriculture and public works other than MGNREGA.

If we rank the wages of casual labours in rural areas, the agriculture workers will be lowest in the rung.

Wages in Agriculture < MGNREGA Wage Rate < Other Public Works.

As the spillover effect of MGNREGA is felt in agriculture, only post 2006 that wages have been continuously rising gradually. However, the open market agriculture wage rate (both the cash and kind component) is low in comparison to the MGNREGA rates. Cash value for the wage labourers in agriculture ranges between Rs100 to Rs 150 across the region (based on villages surveyed). The average wage rate in MGNREGA is Rs 193 during 2019-20 (Wage rate for MGNREGS workers is Rs 204/- for the year 2022-23) and minimum wages rate is Rs 268 (April 2019). In comparison, the wage rate varies from Rs 250 to Rs 300 in other public works concerning construction and road building in rural areas of Bihar. They prefer to work in construction as the wage rate is highest. Therefore, they forgo the alternatives like wageworker in agriculture and MGNREGS because of low opportunity cost and work as construction worker. Paradoxically, agriculture is feeding the whole country, without which even the existence of human being is in danger but in such a pathetic state that wherein wages of workers is the lowest.

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Developmental Role of Internal Migration in Urbanization

Sanjeev Kumar & Prof. Atvir Singh

Abstract

Migration is a universal phenomenon that not only fills the gaps between the demand and supply of laborers for development but is an instrument for the livelihood of poor people. In rural areas, agriculture suffers from low productivity per worker, as a result, workers are shifting from the agriculture to the non-agriculture sector. This structural change of the workforce from the agricultural to the non-agricultural sector has characterized economic development. Apart from economic development, internal migration carries a positive role in overall human development. The controversy of push-pull factors revealed that both factors influenced the migration process to generate more income, savings, and investment. It also influences the mobility, size, structure, and circulation of the population. This paper precisely theoretical understanding of factors responsible for migration and development of urban areas.

Keywords: *Productivity, Migration, Labour, Urbanization, Development, etc.*

Introduction

In developing economies, internal migration from less developed to more developed sections are determined by push and pull factors. Population mobility is a major issue and has a significant value in the process of development. It plays an important role in balancing socio-economic development inclusion of social amalgamation. Due to industrial growth, urban growth does not provide any new economic dimensions but is due to population pressure and sluggish growth in agriculture. In the globalization era, developing economies have also adopted advanced skills and knowledge in production to capture more revenue from the global markets. To fulfill the additional demand, there is a need to generate more production, as a result, additional demand for labours has increased rapidly. Industrialization and economic growth polarized the rural-urban sector by shifting the labour from agriculture to the non-agriculture sector. This movement of the workforce affects dynamics of labour markets and the socioeconomic

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impact on the migrants and their families not only at the destination but also at the origin. On the one hand, migrants' earnings positively affect income, expenditure, and investment patterns and change relations at the household and community level, the other hand, migrants often suffer social isolation, distressed conditions of work, longer working hours, and poor basic facilities.

Population mobility and urbanization are closely associated with their mutual interdependence. Studies about trends and patterns of migration are incomplete without going through the emerging patterns of urbanization. Thirty-one percent of the population lives in urban areas, although over the globe this average is nearly 50 percent. Urbanization in India is based on four factors (i) net rural-urban migration (ii) reclassification and declassification of urban areas (iii) natural increase (iv) change in the urban boundaries. Out of these, net rural-urban migration is more accountable for developing urban areas and their growth. The developing economies have practiced a sluggish growth rate of urbanization but due to natural increase in population get speedy urban growth. In developing countries, urbanization is not simply a movement of people towards urban areas but a complex process of change in human settlements. In India, most labourers are uneducated and unskilled and engaged in unorganized divisions of the urban sector.

The movement of these people can be categorized in subsequent ways i.e., temporary, permanent, seasonal, voluntary, and forced. Researchers are enthusiastic about the mobility of people and they have conducted a lot of investigations to solve the problem of migration and its impact on development. Although a lot of studies have been done on mobilities, no serious attempts have been made by researchers to formulate migration theories that coherently explain the migration process. Associated scholars have generally focused their research on the push-pull factors and how to utilize remittances in the consumption expenditure and poverty alleviation of rural people. Although most of the literature is substantive and provides a realistic picture of the migration process and flows, some significant characteristics of migration remained unexplored or purposely evaded. So, it is necessary to conduct some more intensive research based on data collected directly from field surveys. The new work should be focused on producing theoretical knowledge about many unexplored aspects of migration.

Migration and Development

Migration-development-nexus is complex and is linked with many factors e.g., the level of education, and skill of rural people, living costs in urban areas, and the lack of squatting places for the poor. Poverty is the major cause behind the movement of laborers from one region to another. According to Bhagat, there are insignificant relationship between rural poverty and rural outmigration, which shows that only push factors were not responsible for the accelerated migration from rural to urban areas. To eradicate poverty, most people rely on internal and international migration to improve their income, health, and education. The remittances received in developing countries through internal and international migration alleviate poverty. In some developing countries China, Pakistan, Bangladesh, India, Ethiopia, and Nigeria, the

important role of remittances, capital formation, education, health has contributed highly. In India, highly educated and well-off people migrate from less prosperous areas to highly prosperous ones. Thus, the gap generated by such migration is generally filled with poor and lower-caste rural laborers. The surplus laborers carry the efficiency and potential to reduce poverty at the destination as well as the origin. People generally adopt circular, seasonal, and temporary migration for their livelihood. Internal and international migration both are crucial for development, and internal migration offers more opportunities as compared to international like increasing income and welfare.

The literature also reveals that migrants have the same challenges at their destination in the case of internal and international migration. These challenges have been discussed on various public platforms about migration and its relation to development. On this issue of migration and its impact on urbanization, scholars are divided into groups based on different ideologies. The pessimistic and optimistic thoughts create a wave of confusion among young readers and researchers. One set of scholars was very enthusiastic about relating remittances and return as the guided force behind migration and development, although other sets of scholars often speculated the opposite relation or no relation between migration and development. According to them, migration occurs due to conditions of underdeveloped and were concerned about the idea of brain drain and dependency. Their thoughts and ideologies are continuously debated in the present discourse on migration and development to develop new conceptual and theoretical frameworks.

Objectives, Data Sources, and Methodology

Migration in urban areas needs basic structure for livelihood, thus they form a permanent or semi-permanent dwelling. This phenomenon leads to a cluster of workforces contributing to the development of infrastructure for better living standards and further economic activities. This process of urbanization has many issues and problems in the way of development. To solve the problem coming across the development path a lot of research has been conducted to achieve the desired objectives. The study is based on the already published secondary data source and descriptive and analytical tools have been adopted to achieve the goals. The secondary data for the study have been collected from the various published works, the census of India, various rounds of National Sample surveys, and research journals and periodicals. The data have been analyzed and the interpretations made to reveal the following objectives. First, to analyze the trends and patterns of internal migration across Indian states. Second, the significant contribution of the rural-to-urban migration from Uttar Pradesh in urbanization and generating employment.

Trends of Internal Migration

Although there are two main data sources of migration in India, the census is better than the national sample survey. The census started during the colonial period with a question of place of birth and later a question of place of last residence. The various round of census

reveals the census databased on last residence. This method of data collection captures the size of migration either permanent or semi-permanent, which is important and tells us the addition and subtraction of the population of destination and origin. The national sample organization captures the migration data based on staying away from their home in search of employment. Such type of migration is determined based on the place of origin and not the destination. It is hardly relevant in assessing the demographic change or growth in the urban population. The data collected in the census is more relevant than the sample survey organization for the study of migration.

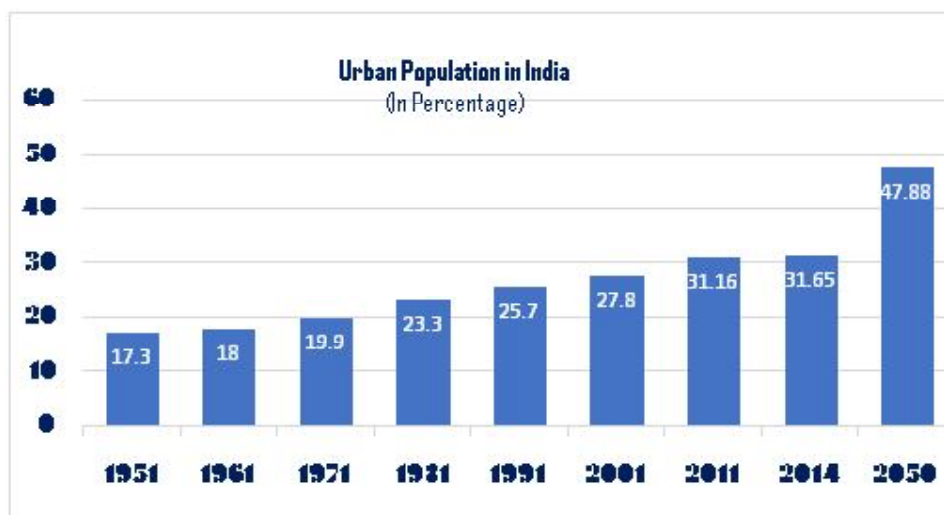
Urbanization depends upon the population movement and their permanent settlement in urban areas. The characteristics of migration are important for the development and growth of a destination or urban area. The migration decisions in developing countries are taken not only due to economic factors, but sociocultural factors are also responsible. According to the census 2011, internal migrants increase by 64 percent during the census period from 2001 to 2011. As per the census data, the volume of rural migrants is just double as compared to urban migrants. Overall, the growth of urban migrants has increased rapidly over the intercensal period. From almost 1971 to 2001, the migrants remained stagnant at around 30 percent except for the year 1991, when it declined to 27 percent out of the total population. The economic crisis of 1991 was a result of increased unemployment and sluggish growth in the economy and its adverse impact on population mobility.

Migration and Urbanization

According to the census of India, the population of urban areas has increased faster than the rural population. In India, many factors are responsible for population growth, out of these, rural-to-urban is the most responsible factor for the rapid increase in the population of urban areas. To understand the macro picture of the urban population, we have presented the data from the census 2001 and 2011 as given in the table.

Indian Population in crores			
	2001	2011	Difference
India	102.9	121.0	18.1
Rural	74.3	83.3	9.0
Urban	74.3	83.3	9.0
	28.6	37.7	9.1
The growth rate of the population in percentage			
	1991-2001	2001-2011	Difference
India	21.5	17.6	-3.9
Rural	18.1	12.2	-5.9
Urban	31.5	31.8	+0.3
Urban Population in Percentage to Total			
	2001	2011	Difference
India	27.8	31.2	3.4

The urban population growth was 2.32 % during the period 1951-61 and further improved to 3.79 % during 1971-81. During this period urban sector reported the highest growth rate since independence. The urban growth rate slowed down to 3.09 percent during 1981-91 and further decelerated to 2.75 during the period 1991-2001. Population growth in urban increased rapidly from 1951 and is expected to increase by 47.88 percent by 2050. There is a need in the future to expand additional structures to accommodate the improved urban population.

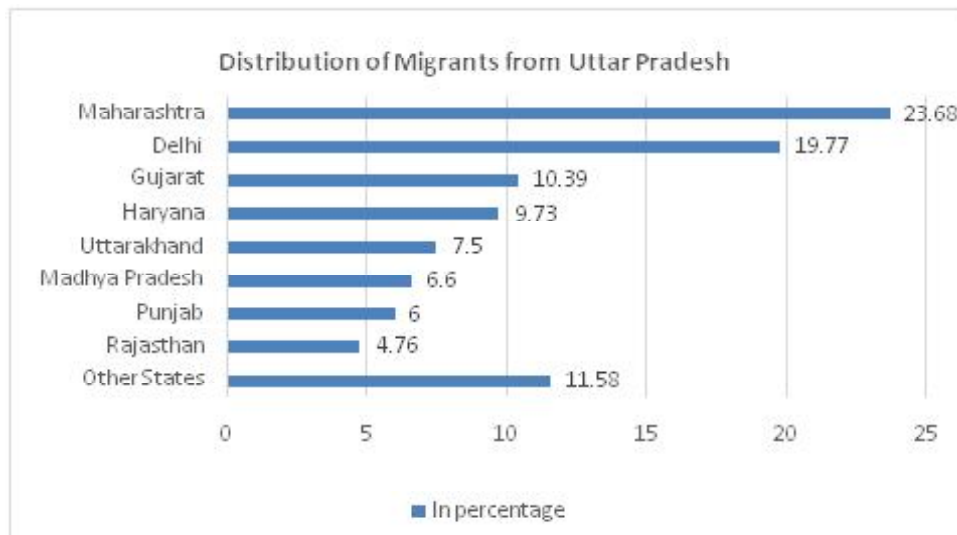


States	1991-2001			2001-11		
	<i>Net urban pop. absolute change</i>	<i>Net rural-urban migration</i>	<i>Share of migration in urbanization (%)</i>	<i>Net urban pop. absolute change</i>	<i>Net rural-urban migration</i>	<i>Share of migration in urbanization (%)</i>
Chandigarh	232,686	107,527	46.2	217,944	137,636	63.2
Daman & Diu	9,805	-2,591	-26.4	125,503	77,396	61.7
Dadra & Nagar Haveli	38,738	7,944	20.5	110,132	56,607	51.4
Andaman & Nicobar	41,243	5,172	12.5	27,290	13,483	49.4
NCT of Delhi	134,564	12,825	9.5	3,463,119	1,478,630	42.7
Arunachal Pradesh	117,253	31,934	27.2	89,488	35,591	39.8
Gujarat	190,825	16,281	8.5	6,814,833	2,433,225	35.7
Maharashtra	3,668,308	857,606	23.4	9,717,279	3,451,179	35.5
Mizoram	124,064	10,965	8.8	130,765	43,040	32.9
Odisha	1,282,255	454,536	35.5	1,486,418	487,297	32.8
Himachal Pradesh	2,060,560	543,696	26.4	92,971	29,450	31.7
Haryana	4,684,189	1,645,305	35.1	2,726,799	839,232	30.8
Jharkhand	676,638	89,020	13.2	1,939,320	545,246	28.1
Assam	951,445	181,973	19.1	959,302	258,872	27.0
Uttarakhand	599,074	152,990	25.5	870,264	226,817	26.1
Chhattisgarh	1,145,747	286,022	25	1,751,490	439,498	25.1
Madhya Pradesh	-2,147	-1,229	57.2	4,102,260	955,515	23.3
Goa	4,434,155	1,318,867	29.7	236,237	49,699	21.0
Karnataka	1,473,741	330,750	22.4	5,664,433	1,183,436	20.9
Punjab	2,269,286	483,493	21.3	2,136,635	424,696	19.9
Andhra Pradesh	2,921,814	734,158	25.1	7,410,135	1,454,059	19.6
Uttar Pradesh	8,513,667	997,554	11.7	9,955,481	1,838,306	18.5
Rajasthan	3,147,262	501,972	16	3,833,710	705,726	18.4
Tripura	124,029	31,533	25.4	415,703	68,667	16.5
Meghalaya	70,323	5,230	7.4	141,339	21,548	15.2
Tamil Nadu	8,406,406	459,074	5.5	7,433,442	1,041,145	14.0
West Bengal	3,719,650	652,730	17.6	6,665,751	913,675	13.7
Bihar	1,848,788	366,553	19.8	3,076,216	407,741	13.3
Jammu & Kashmir	146,385	54,583	37.3	916,604	120,338	13.1
Kerala	4,053,741	830,450	20.5	7,668,001	909,853	11.9
Sikkim	22,864	-2,020	-8.8	93,708	11,085	11.8
Manipur	10,559,394	3,144,036	29.8	258,186	18,314	7.8
Puducherry	131,634	16,909	12.9	204,134	11,834	5.8
Nagaland	123,060	34,508	28	228,179	13,010	5.7
Lakshadweep	586,631	104,719	17.9	23,365	369	1.6
India	70,348,077	14,465,075	20.6	90,986,436	702,215	22.8

Based on the social and economic status of migrants from rural areas, the census divided migration into seven categories. These main categories are education, business, and employment, move with household, move after birth, etc.,. Out of these seven categories, business and employment indicate the economic aspects of migration although other categories are associated with social migration. The census of India has categorized migration into four groups. (i) Rural to rural (ii) Rural to urban (iii) Urban to rural (iv) Urban to urban. To excavate migration issues and their impacts on urbanization, out of four only the first two categories are important. The table shows the share of migration in urbanization with the help of net migration and demographic change in urban during a specific period. During the census 1991-2001, the change in urban population was 70.3 million, and during the census 2001-11 it increased to 90.9 million. The contribution of net migration increases from 14.5 to 20.7 million during the period 1991-2001 and 2001-2011. This indicates that the population urban population has increased by approximately six million due to net rural-urban migration. Some states have reduced their share of migration in urbanization although others have increased their share of migration in urbanization. States like Bihar, Madhya Pradesh, Kerala, Nagaland, Andhra, Manipur, Tripura, and Goa reduced share of migration in urbanization although states like Assam, Jharkhand, Gujrat, Uttar Pradesh, Maharashtra, Delhi, Mizoram, Arunachal Pradesh, Himachal Pradesh, Chandigarh, Andaman, and Nicobar Islands increased their share of migration in urbanization.

Internal Migration from Uttar Pradesh

According to the census 2011, Uttar Pradesh is the most populous state having 16.52 percent population of India. Uttar Pradesh has a higher density of population as equated to the nationwide average. Due to high unemployment, poverty, and regional imbalance, large numbers of migrants come from Uttar Pradesh. Male migration is induced by employment opportunities, whereas female migration happens due to the both effects of marriage and employment. The national average of male migrants is 24 percent due to employment, on the other hand, the average male migrants from Uttar Pradesh are 56 percent. But on the issue of business, the national and state of Uttar Pradesh both have the same percentage approximately two percent. After employment and marriage, education is the third main reason behind the migration from Uttar Pradesh. Uttar Pradesh has almost half the figure of the national average in case of education migration. It indicates the less addition in the skilled workforce in Uttar Pradesh as compared to the national level. The marriage migration in the state of UP is also lesser than the national average. Lower marriage-led migration contributes a higher share of female migration in the categories of 'move with household'.



The migration from Uttar Pradesh is mainly male-dominated with the motive of employment and income generation. The bar diagram shows that migration from Uttar Pradesh flows towards states having more employment and income opportunities, high industrialization, and urbanization. The census data characterized male migration for economic reasons and female migration for marriage, and the combined migration may give ambiguous results. The most favorite destination for male migrants is Maharashtra followed by Delhi and Gujarat. Sarkar conducted a reasonable study on out-migration between identical socio-economic characteristics of states. He found that the same characteristics of states have different magnitudes and intensities of migrants. The favorite destinations for the Bihar migrants are Delhi, Maharashtra, and West Bengal, though for the migrants from Uttar Pradesh, the favorite destination states are Maharashtra, Delhi, and Gujarat. Thus, it is very difficult to generalize the trends of migration from the states having similar characteristics as in the case of UP and Bihar, UP has the highest contribution to migration and urbanization in India.

Concluding Remarks and Policy Implications

Findings revealed that spatial mobility has increased extremely high in India. This mobility ultimately puts significant pressure on the available infrastructure and creates serious problems for employment in urban areas. Migration in urban areas is responsible for clustering slums, housing, sanitation, urban congestion, etc. Migrants are also often responsible for the deteriorating civic services and for destroying the environment of the cities. In the absence of appropriate employment, they are involved in crime for money and thus create problems in maintaining law and order. The comprehensive policy for urban development should be formulated to tackle the emerging problems of migration, rather than merely to solve labour issues. Especially for the small towns, there must be an inclusive urban development policy to generate more

employment opportunities and housing. Rural-urban migration happens due to unemployment in the primary sector and more employment opportunities in the modern sector. Thus, a comprehensive policy for rural development should be implemented to reduce rural outmigration.

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A Study of the Gender Disparity in the Indian Economy after 75 Years of Independence.

Ruchi Kumari & Dr. Karimullah

Abstract:

In this paper, we review the condition of women in the Indian economy after 75 years of independence. A glance analysis of women's positions in Indian society from different time to time i.e. from ancient to medieval to today. We also consider some facts and figures from different authentic sources and try to know what initiatives are taken by government and international authorities. After that, we review some available literature and report. This paper is based on the secondary data. We have three variables to know the participation of women in an economy based on worker participation ratio, unemployment rate, and working time per day with comparison to males and females in both areas urban as well as rural. After analyzing these data, we finally concluded this paper by mentioning references.

Keywords: *Gender disparity, women empowerment, employment, education.*

Introduction:

M.K. Gandhi "The day a woman can walk freely on the road at night, that day we can say that India has achieved independence"

In Indian culture, women are immense to respect and honor. Even women's prosperity is mentioned in Vedas and Upanishads. In the ancient time, women have a respected place in Indian society. With time, during the medieval era in Indian history, some practices were introduced against the half-world like the purdah system, and satipratha. With time these practices are prohibited but some serious practices are continued like infanticide, dowry, etc. The result of the practice of female infanticide sex ratio is worse. Kerala has highest sex ratio is 1084 females per 1000 males. At the same time, Haryana has worsened its sex ratio 877 women per 1000 men. Crimes against women are a measure problem in the 21st century like early marriages, domestic violence, sexual harassment rape, molestation, and forced prostitution. Dominant **patriarchal society** and **stereotypical thoughts** gave more privileges to men in

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comparison to women in India. India's performance in the gender equality index is so poor. **SDG GOAL -5** - "Achieve Gender Equality and Empower All Women and Girls". In the case of sustainable growth India's performance is poor despite of this some states are doing well like Sikkim and Kerala moreover through the implementation of specific programmes like "Mission Indradhanush" (for covering partially and unvaccinated children) and "Beti Bachao Beti Padhao" (for saving and educating girls in India), there are better changes in areas like lowering child marriages, raising health standards, and reducing the number of deaths for girl children.

Facts and figures:

- According to the report of NITI AYOJ (think tank) "The SDG index score for the goal of gender equality ranges between 24 and 50 for states and between 27 and 58 for UTs. Kerala and Sikkim among the states, Andaman and Nicobar Islands, and Chandigarh among the UTs are in the performer category (with index scores greater than/equal to 50 and less than 65). Barring these, none of the States/UTs have achieved an index score above 50."
- The child (0-6 years) sex ratio declined from 927 in 2001 to 919 females per 1,000 males in 2011. (NITI AYOJ)
- Women continue to lag in education as is reflected in the literacy rate for women being 65 percent, compared to 82 percent for males in 2011. (THINK TANK, NITI AYOJ)
- Compared to 79 percent of men, only 27% of adult Indian women had a job or were actively looking for one in 2012. In addition, between 2005 and 2012, nearly 20 million women left the labour. This is the same as Sri Lanka's entire population. (The world bank).
- In 2019, before the pandemic of covid-19, female labour force participation in India was 23.5. %. (ILO estimates).
- According to the World Economic Forum's gender gap report 2022, the rank of labour participation of women in India is 135th out of 146 countries. India had a poorer performance than Nepal and Bhutan. Bangladesh and Sri Lanka.
- In 2022, the contribution of women to Indian GDP remains at 18 %. (a report by McKinsey Global Institute).
- According to the report of the mobile gender gap report 2022, women use mobile phones 7% less and internet 16% less likely than men.
- Women are 70% of the total health workforce but only 25% in senior roles. (UNICEF).

Some success story:

- The **Shri Mahila Griha Udyog Lijjat Papad (1959)** is among the most well-known examples of a successful female entrepreneur. It is an Indian women's worker cooperative involved in manufacturing. The main objective of this foundation is to empower women by providing them employment opportunities.
- The ICICI Bank is led by **Lalita Gupte and Kalpana Morparia**, the only two businesswomen from India to appear on Forbes' list of the world's most powerful women.
- The indisputable corporate queen of India is **Kiran Majumdar Shaw**. She is India's richest entrepreneur. The richest woman in India in 2006 was Kiran Mazumdar-Shaw, founder of Biocon, one of the country's earliest biotech enterprises. Kiran wanted to be a doctor but was unable to enroll in medical schools. Despite this setback, Kiran didn't lose heart and went on to become India's first female "**Brew Master**" and later a business powerhouse. Sullaijja Firodia Motwani, Mallika Srinivasan, Naina Lal Kidwai, Vice Chairperson and Managing Director of HSBC Securities and Capital Market, and Vidya Mohan Chhabaria, Chairperson of Jumbo Group, are more names on this list.
- CEO of **beauty and lifestyle retail company Nykaa Falguni Sanjay Nayar** is an Indian billionaire businesswoman. She is one of two self-made female Indian billionaires.

Women empowerment and constitutional provisions:

Article 14- The constitution of India guarantees equal rights and opportunities for women.

Article 15(1) - No discrimination by the state based on gender.

Article 16- equal access to opportunities.

Article 39(d)-equal pay for equal work under the Indian Territory.

Article 15(3)-permits the State to make specific arrangements in support of women.

(Article 42)-permits the State to make provisions for maternity leave and reasonable and humane working conditions

Some local, national, and international initiatives:

With a focus on gender equality, the abolition of sexual harassment in the workplace, and women's empowerment at the local level, the **Confederation of Indian Industry (CII) National Committee on Women Empowerment (1991)** collaborates with business to increase women's role and participation in the economic world and communal affairs. For women who have contributed to development projects in the areas of education and literacy, health, and microenterprises, CII has established the annual CII Woman Exemplar Award.

BETI BACHAO BETI PADHAO. The objective of this scheme is to ensure the survival and protection of the girl child, to ensure the education of the girl child, and to prevent gender-biased sex selective eliminations. The main goal of this scheme is '*Girl Child and Enable Her Education*'. It is also addressing the child sex ratio.

Pradhan Mantri Matru Vandana Yojana Pregnant women and nursing mothers are intended beneficiaries of the Pradhan Mantri Matru Vandana Yojana. The Program went into effect on January 1st, 2017. For the first live child in the family, the Scheme offers Pregnant Women and Lactating Mothers (PW&LM) a reward of Rs. 5000 payables in three payments.

Pradhan Mantri Ujjwala Yojana (PMYY). The Ministry of Petroleum and Natural Gas launched the Pradhan Mantri Ujjwala Yojana (PMYY) in May 2016 to ensure the availability of clean cooking fuel, such as LPG, in rural and underprivileged households that were formerly using conventional cooking fuels like firewood, cow-dung cakes, coal, etc. The program offers free LPG cylinders to empower women and safeguard their health.

The Women Entrepreneurship Platform (WEP), an initiative of NITI Aayog, seeks to advance women's entrepreneurship in India by promoting and assisting both prospective and experienced female entrepreneurs. Helping and supporting female business owners as they grow and scale their companies from the beginning. Three pillars serve as the foundation for this special, first-of-its-kind enabling platform: **Ichha Shakti** stands for inspiring prospective business owners to launch their ventures. **Gyaan Shakti** stands for empowering women entrepreneurs through knowledge sharing and ecosystem assistance. **Karma Shakti** refers to offering entrepreneurs practical assistance with starting and growing their businesses.

Literature of reviews:

Verick S (2014) the main aim of his study is to know the Women's labor force participation in India: Why is it so low? His paper was published by the International Labor Organization. He found that various economic and social factors that interact in a complicated way at both the home and macro levels influence whether and how women choose to join in the workforce. According to studies from around the world, some of the most significant causes are urbanization, economic growth/cyclical effects, fertility rates, and the age of marriage. In addition to these problems, outcomes are still influenced by social norms governing women's roles in public life.

Panda P. (2016) in his research identifies that A Review on Role of Gender Equality and Women Empowerment in Economic Growth in India. According to him Significant progress in decision-making ability in the face of pervasive stereotypes against women's ability and women's empowerment leads to improvement in some aspects of children's welfare (health and nutrition, in particular), but at the expense of others. Economic development alone is insufficient to ensure significant progress in important dimensions of women's empowerment (education). This suggests that, contrary to what is commonly claimed, neither economic growth nor women's emancipation are the panaceas. Only by sustaining policies that benefit

women at the expense of males, possibly for a very long period, is equity between men and women likely to be attained.

Batra R. and Reio T.H. (2016). They highlight the Gender Inequality Issues in India. Their finding is beyond only equitable economic growth and access to educational resources, India faces problems with gender inequality. In India, gender inequality is present in the form of socially created, predetermined gender roles that are deeply ingrained in the country's socio-cultural fabric and its long history. The organizational personnel, as well as the social and political surroundings, are all affected by socio-cultural forces. The cultural and familial periphery still accepts this indisputable impact as the norm.

Amutha D. (2017) reveals the root of gender inequality in India. Both men and women are on an equal footing and are vital to the formation and advancement of both their families specifically and society generally. Indeed, one of the main issues facing the women's movement around the world has been the fight for equality. There is no indication of a status distinction based on differences in sex and appearance. The woman is not inferior to the man; rather, she completes him. Women have long been neglected in India since they have always been seen as an oppressed group in society. While the birth of a girl is painful, the birth of a son is joyfully celebrated. Girls are taught to stay at home and be reserved, while boys are encouraged to be tough and social.

Dixton A. (2018). The objective of her study is the role of women in India's economic growth. She was vice president of World Bank South Asia. In Tamil Nadu, she observed the positive impact a secure workplace can have on bringing women into the workforce. She observed young ladies working in the garment industry there, distant from their rural villages. They had developed into their families' primary breadwinners, as they were frequently poor. Many girls were now lending a hand with family members' expenses for education and other things. Their lives would have been considerably different if they had stayed at home. Because there were secure hostel facilities close by, these girls' lives were changed, and their families' financial situation improved.

Cemilietti E. (2020) analyzes the Social Protection and Its Effects on Gender Equality. An overview of the most recent research on the impact of social protection on gender equality is given in this paper. It begins by examining how risks and vulnerabilities are gendered and the effects of this gendered nature on boys' and girls', men's and women's, and all other groups of people's well-being throughout their lives. The evidence regarding the design elements of four different types of social protection programs—contributory programs, non-contributory programs, labor market programs, and social care services—and their effects on gender equality is then reviewed and discussed, illuminating which design elements are most crucial to achieving gender equality. The article comes to a close with recommendations for a future research agenda on gender and social protection.

A report on **economic empowerment: fact and figures** published by **United nation women in 2022**. The report mentions the benefits of economic empowerment in the economy. Some of them are when more women work, economic growth, and empowering women will close the gender gap and be key to achieving the 2030 agenda of sustainable development, women's equality is good for business, Women's economic empowerment and more inclusive economic growth are influenced by increasing women's and girls' educational achievement etc.

A report on **the role of women in India's economic growth story** was published by **the Confederation of Indian Industry (CII) in 2022**. The conclusion of this report is with a focus on gender equality, the abolition of sexual harassment in the workplace, and women's empowerment at the local level, the CII National Committee on Women Empowerment collaborates with businesses to increase women's role and participation in the economic world and communal affairs, for women who have contributed to development projects in the areas of education and literacy, health, and microenterprises.

A report on **how India's female labor force fared since Independence**. Published by **initiatives for what work to advance women and girls in the economy in 2022**. This report concluded that Under-reporting is the final justification offered for the appallingly reduced labor force participation of women in India. There are several arguments on what constitutes "women's work," how to account for the hours that women work unpaid, and why the traditional methods of determining who belongs in the labor market might overlook women who perform a few hours per day of unpaid labor on family farms or businesses.

Objective:

The sole objective of this paper is to know the role of women in the Indian economy after 75 years of independence.

Methodology :

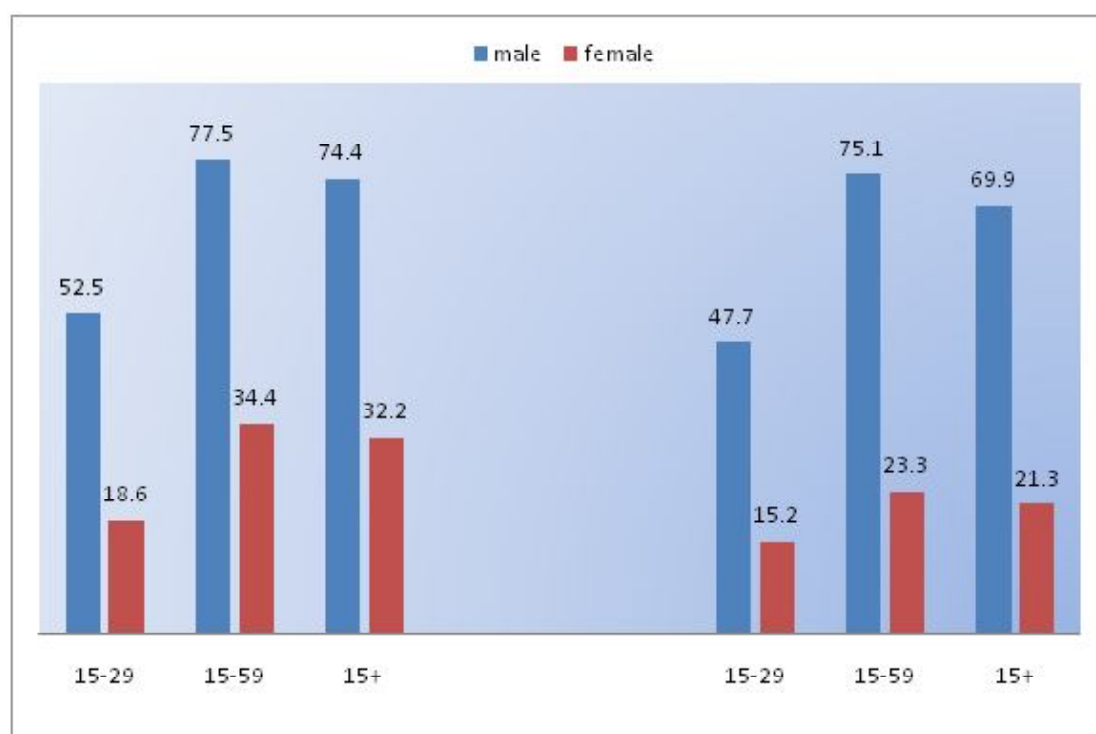
We took the secondary data. The source of data is the Periodic Labour Force Survey (PLFS), NSO (national sample organization), MoSPI. We study the graphical representation of the data. There are three variables on which basis we try to find the gender disparity in India. The first one is the work participation or employment status of men and women in both areas rural as well as urban (age-wise). The second one is Age Wise Unemployment Rates (in the labor force) according to usual status (2019-20) and the last is the Average time (in minutes) spent in a day per person in type of activities (2019).

Data and Findings:

Gender disparity based on employment:

Chart 1

Age Group Wise Worker Population Ratio (WPR) (in %) According To Usual Status (ps+ss) (2019-2020)



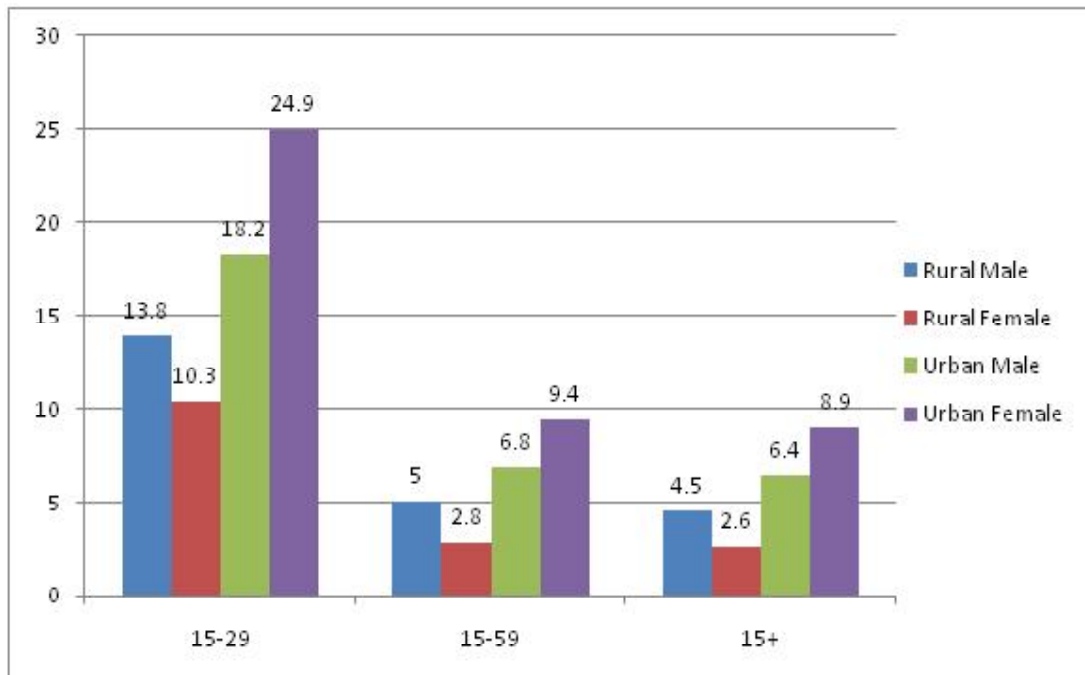
RURAL

URBAN

Source:Periodic Labour Force Survey(PLFS, July 2019-june 2020) NSO, MoSPI.

We can analyse from the above figure that,worker population ratio of female is lesser than men in both rural as well as urban areas to all age groups. In the working age 15-59, in rural areas in total worker population ratio 77.5% are men whereas 34.4% are women which is nearly half of the total male workers moreover in the urban areas condition of women workers are worse than in rural women. In the urban area when we see the working-age population percentage of men and women is 75.1% and 23.3% respectively.

Chart 2
Age Wise Unemployment Rates (in the labor force) according to usual status (2019-20)

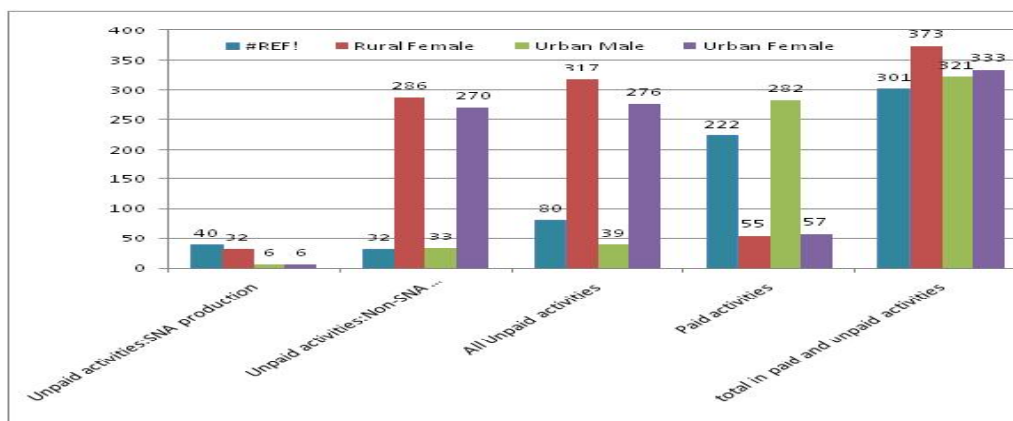


Source:Periodic Labour Force Survey(PLFS,July2019-June 2020),NSO,MoSPI.

The result is very surprising in this figure is unemployment rate of rural females is lower than rural men whereasthe unemployment rate of urban females is higher than men concerning all categories of age groups. In the working age 15-59, we can see that the unemployment rate of rural women is 2.8% which is lesser than rural men who have a 5% unemployment rate. In the urban areas with working age, we can see that urban males have less unemployment rate which is 6.8% in comparison to urban femaleswho have a 9.4% unemployment rate.

Chart 3

Average time (in minutes) spent in a day per person in type of activities(2019).



Source: TUS report 2019, MoSPI.

This figure shows that men spend their major time of the day in paid activities and women in unpaid household activities in both rural and urban India. Most of the women are comfortable with their role which is a major challenge to bring the women population in active economy. Overall working time of rural women is 373 minutes per day is highest among the rural men, urban men, and urban women.

Suggestions:

- To reduce gender disparity there should be inclusion of women encouraged at every level of governance.
- The cause of gender disparity is more societal backwardness rather than economic or legal reasons so behavioral change and cultural shift are required to reduce gender disparity.
- Encourage E-learning, technology and awareness should be promoted.
- Inclusion of women can be increased by optimizing resources at ground level.
- Proper implementation of scheme and government policies required to achieve the objective of women's empowerment.
- Collaboration of NGOs, central government, state government, and local government should be required to make awareness, empower them, and appreciate them.

Conclusion:

Great intellectual wise men truly said once upon a time, "The best measure of a nation's progress is the way it treats its women". Women are nearly half of the total population in the

world as well as India. In the 21st century, they live as a secondary person in their home and their country. The condition of women in India is so poor in comparison to most of the world countries. In the gender inequality index, India's position is 135 out of 146 countries. In this paper, we try to understand the economic condition of women in Indian territories based on three economic inclusion variables, which are working time per day, unemployment rate, and their working category paid and unpaid category. It found that women are involved mostly in the unpaid salary category of work whereas mostly men are working for paid salary. The unemployment rate is a huge difference between men and women. The condition of women has improved from the time of independence but the journey of women's empowerment and gender equality is continuing.

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Fueling Inclusion: An Analysis of the Impact of Social Protection Programs with emphasis on the Pradhan Mantri Ujjwala Yojana

Anup Kumar Mishra & Siddharth Singh

I. Introduction

The relationship between social protection programs and inclusive growth is at the forefront of global efforts to create equitable and sustainable societies. Social protection initiatives play a pivotal role in fostering inclusive growth by addressing the diverse needs of vulnerable populations and providing a foundation for their participation in economic development. This connection is vividly exemplified in the case of the Pradhan Mantri Ujjwala Yojana (PMUY) in India, a transformative program that transcends traditional boundaries by not only alleviating energy poverty but also contributing to broader dimensions of inclusive growth.

Social protection programs are designed to shield individuals and families from economic shocks, enhance their well-being, and mitigate disparities. Inclusive growth, on the other hand, envisions economic development that benefits all segments of society, ensuring that no one is left behind. The interplay between social protection and inclusive growth becomes particularly evident when examining PMUY, a flagship initiative launched in 2016 to provide clean cooking fuel to impoverished households in India.

PMUY extends beyond the immediate goal of ensuring access to liquefied petroleum gas (LPG) and stoves. It illustrates the interconnectedness between social protection and inclusive growth by addressing multifaceted challenges faced by vulnerable communities. This program not only improves health and environmental outcomes but also empowers women, enhances their economic participation, and contributes to overall economic development.

As we delve into the case of Pradhan Mantri Ujjwala Yojana, we unravel the intricate web of relationships between social protection programs and inclusive growth, shedding light on how targeted interventions can catalyze a more comprehensive and sustainable development trajectory for nations facing challenges related to energy poverty and socio-economic disparities.

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II. Literature Review

The intersection between social protection programs and inclusive growth has garnered increasing attention in scholarly discourse, reflecting a growing awareness of the intricate dynamics shaping development outcomes. A compelling case study that exemplifies this nexus is the Pradhan Mantri Ujjwala Yojana (PMUY) in India, where the transformative impact of social protection initiatives on inclusive growth is evident. A review of existing literature underscores the nuanced relationship between these two dimensions, offering insights into the complexities and potential synergies. Numerous studies emphasize the role of social protection programs in poverty alleviation. Sen (2019) highlights how social protection programs can serve as catalysts for gender equality, with a specific focus on enhancing women's agency and economic participation. The relationship between social protection and inclusive growth is explored through the lens of broader economic development. Barrientos and Scott (2009) argue that well-designed social protection policies not only alleviate poverty but also foster human capital development, laying the groundwork for sustained economic growth. Several scholars have delved into the impact of PMUY as a case study. Ghatak et al. (2020) assess the program's outcomes, emphasizing its potential to enhance energy access, improve health indicators, and empower women by reducing their drudgery associated with traditional cooking methods. A specific focus on energy poverty and its link to inclusive growth is explored by Sovacool and Dworkin (2015). They argue that access to clean energy, as facilitated by initiatives like PMUY, contributes to broader economic development by improving health, productivity, and overall well-being. Analysis by Kapoor and Ahuja (2018) sheds light on challenges faced during the implementation of PMUY and underscores the importance of addressing socio-cultural factors to ensure the inclusivity of such programs. In the Multidimensional Poverty Index (MPI), which is used to measure multiple dimensions of poverty, including health, education, and standard of living, the lack of access to cooking fuel is indeed considered an indicator of poverty. The choice of indicators in the standard of living dimension reflects aspects of material well-being and basic living conditions (Mishra and Singh, 2023).

III. Social Protection Programs

Social protection programs are initiatives implemented by governments or other organizations to provide support and assistance to individuals and families in need. These programs aim to alleviate poverty, reduce inequality, and promote the well-being of vulnerable populations. Cash Transfer Programs provide direct financial assistance to eligible individuals or households. Social insurance programs provide protection against specific risks, such as unemployment, disability, or old age. Food assistance programs aim to address food insecurity by providing subsidized or free food items to individuals or families in need. This can include school meal programs, food banks, or targeted nutrition interventions. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in India is an example, offering 100 days of guaranteed wage employment in rural areas. Programs like health insurance, free medical services, or subsidized medication aim to provide access to healthcare services, especially for low-income individuals and families.

These social protection programs play a crucial role in promoting inclusive growth, reducing poverty, and ensuring a basic standard of living for all members of society. The specific design and focus of these programs may vary based on the country's economic context, social priorities, and the needs of the target population.

IV. Social Protection Programs and Inclusive Growth

The relationship between social protection programs and inclusive growth is integral to the broader discourse on sustainable development. Social protection programs, designed to provide support and assistance to vulnerable populations, play a crucial role in fostering inclusive growth by addressing the multifaceted challenges faced by individuals and communities. Social protection programs, including cash transfers, food assistance, and employment guarantee schemes, contribute directly to poverty alleviation. Social protection initiatives often invest in human capital development through education and healthcare components. By ensuring access to education and healthcare services, these programs contribute to building a skilled and healthy workforce, fostering inclusive growth through increased productivity and economic participation. Social protection programs aim to reduce inequality by targeting vulnerable groups, such as the poor, elderly, and disabled.

V. A Case Study: Pradhan Mantri Ujjwala Yojana

The Ujjwala Yojana, launched in 2016, is a significant social protection program in India with the primary aim of providing clean cooking fuel to rural households. The main objectives of the Ujjwala Yojana are as follows:

- **Empowerment of Women and Protection of their Health:**

By providing LPG cylinders and stoves, the program aims to empower women by relieving them from the burden of traditional cooking methods, often involving biomass or kerosene.

Access to clean cooking fuel can contribute to improved health outcomes for women, as they are less exposed to the harmful effects of indoor air pollution associated with traditional cooking methods.

- **Reduction of Serious Health Hazards:**

One of the primary goals is to reduce serious health hazards linked to the use of fossil fuels for cooking. The shift to cleaner fuels like LPG is expected to decrease the health risks associated with exposure to indoor air pollution, leading to a healthier population.

- **Reduction in Deaths Due to Unclean Cooking Fuels:**

The program targets a reduction in the number of deaths in India attributed to the use of unclean cooking fuels. Traditional fuels release harmful pollutants that can lead to respiratory diseases and other health issues, contributing to premature deaths.

- **Prevention of Young Children from Acute Respiratory Illness:**

Children, particularly in rural households, are vulnerable to respiratory issues due to exposure to pollutants from traditional cooking methods. The Ujjwala Yojana intends to create a cleaner and safer cooking environment for young children.

Analyzing the impact of the Ujjwala Yojana on inclusive growth is crucial, as it addresses not only health and environmental concerns but also aims to empower women and improve overall well-being in rural households.

VI. Objective

1. To analyze the relationship between social protection programs and inclusive growth (a case of Ujjawala Scheme).

VII. Research Question

1. What is the relationship between social protection programs and inclusive growth? (a case of Ujjawala Scheme)

VIII. The Methodology

The dual approach of combining theoretical insights with a rich array of external secondary data sources provides a solid foundation for the study. It not only ensures a rigorous empirical basis but also allows for a multifaceted exploration of the research topic, drawing on diverse perspectives and sources to enhance the overall quality and validity of the research. The use of external secondary data sources enhances the empirical basis of the study. By drawing on real-world information, the research is grounded in concrete data, providing a more objective and evidence-based foundation for the study's findings and conclusions. The study utilizes a diverse range of data sources, including government statistics, market research reports, and data from international organizations like the IMF, World Bank, UN, and WHO. This diversity ensures a comprehensive coverage of information, allowing for a more holistic understanding of the topic under investigation. The inclusion of data with both global and national perspectives broadens the scope of the study. It enables the researchers to analyze trends and patterns at different levels, providing insights into both overarching global dynamics and specific national contexts. The incorporation of academic journals, publications, and publicly accessible databases as additional external sources further strengthens the research. This demonstrates a commitment to utilizing peer-reviewed literature and authoritative databases, enhancing the credibility and reliability of the study.

IX. The Need of PMUY

The study conducted by Mishra in 2019 focused on the unequal distribution of unpaid work between men and women in rural areas of India, specifically in Uttar Pradesh (UP), Bihar, and Jharkhand. The study utilized the time use method, involving personal interviews

and observational studies, to analyze the engagement of men and women in unpaid economic activities. The key findings suggest significant disparities, with women being considerably more involved in unpaid economic activities, particularly domestic tasks, compared to men in rural India. The study indicates that, on average, women spend 8-9 hours daily on various unpaid economic activities, while men dedicate only 2-3 hours to similar activities.

The study’s specific insights into daily tasks, such as the 3.6 hours spent on cooking, serving, and collecting firewood, provide a detailed understanding of the distribution of women’s time and labor. Additionally, the caste-wise breakdown of average time spent on the top five economic works per day offers valuable information, allowing for a nuanced analysis of how time allocation varies across different castes within the study area.

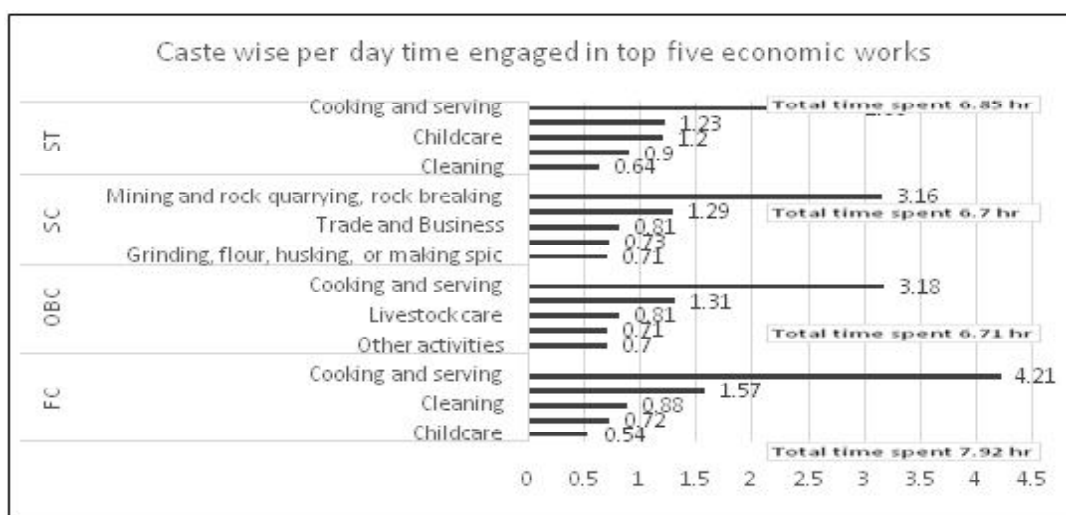


Fig.1: Caste wise per day time engaged in top five economic works

The Ujjwala Yojana’s impact extends beyond the immediate time saved on fuel collection, encompassing various dimensions of poverty reduction, including health, income, empowerment, and food security. The scheme demonstrates the potential to create positive ripple effects that contribute to overall well-being and economic upliftment in households and communities.

X. The Pradhan Mantri Ujjwala Yojana and its Impact: An Analysis

The data on Pradhan Mantri Ujjwala Yojana (PMUY) connections distributed until April 1, 2023, reveals a notable regional variation in the number of connections provided. The highest number of connections, 32,084,941, has been distributed in the eastern region, while the lowest number, 5,303,710, is reported in the northeast region. It is essential to recognize that direct comparisons between regions may not be straightforward due to the inherent heterogeneity within and across these groups.

State-wise PMUY connections(as on 1.04.2023)	
STATE/UT	01-Apr-23
CHANDIGARH	659
DELHI	142164
HARYANA	767322
HIMACHAL PRADESH	140822
JAMMU & KASHMIR	1245438
LADAKH	11090
PUNJAB	1283976
RAJASTHAN	6927163
UTTAR PRADESH	17503067
UTTARAKHAND	496450
SUB TOTAL NORTH	28518151
ARUNACHAL PRADESH	49247
ASSAM	4414806
MANIPUR	202029
MEGHALAYA	214928
MIZORAM	33595
NAGALAND	91807
SIKKIM	13795
TRIPURA	283503
SUB TOTAL NORTH-EAST	5303710
ANDAMAN & NICOBAR ISLANDS	13447
BIHAR	10733364
JHARKHAND	3646220
ODISHA	5319685
WEST BENGAL	12372225
SUB TOTAL EAST	32084941
CHHATTISGARH	3492221
DADRA & NAGAR HAVELI AND DAMAN & DIU	15033
GOA	1265
GUJARAT	3843237
MADHYA PRADESH	8227427
MAHARASHTRA	4890055
SUB TOTAL WEST	20469238
ANDHRA PRADESH	512437
KARNATAKA	3757704
KERALA	341187
LAKSHADWEEP	309
PUDUCHERRY	14833
TAMILNADU	3704058
TELANGANA	1152850
SUB TOTAL SOUTH	9483378
ALL INDIA	95859418

Table 1: State-wise PMUY connectionsSource: <https://ppac.gov.in/consumption/state-wise-pmuy-data>

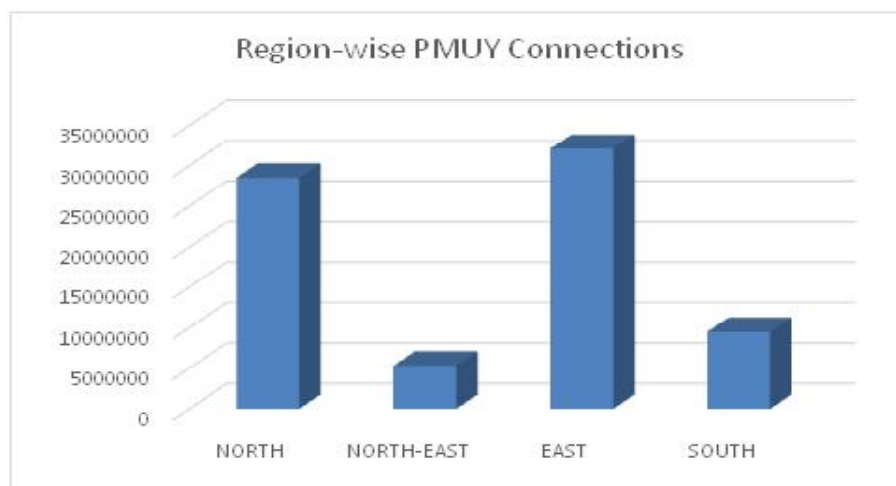


Fig. 2: Region-wise PMUY Connections

Total Connections Released under Pradhan Mantri Ujjwala Yojana* as of 15th February, 2024 (1,02,228,333)				
Connections released under Ujjwala 2.0* as on 15th February, 2024 (22,371,674)				
				Growth
1	Total LPG Sales	17696 TMT (F.Y. 2014-15)	29339 TMT (F.Y. 2022-13)	65.79%
2	Domestic LPG Sales	16041 TMT (F.Y. 2014-15)	25381 TMT (F.Y. 2022-13)	58.23%
3	Improving Trend In Customer Base	as on 1.04.2014	as on 1.04.2023	
	• Domestic Customer	14.52Cr	31.40Cr	116.25%
	• PMUY Customer	0Cr	9.59Cr	
4	Bottling Infrastructure	as on 1.04.2014	as on 1.04.2023	
	• Number of Bottling Plants	186Nos	208 Nos	11.83%
	• Bottling Capacity	13535TMT/PA	22225TMT/PA	64.20%
5	Distributor Network Augmented	as on 1.04.2014	as on 1.04.2023	
	• Total Distributor	13896Nos	25386Nos	82.69%
	• Distributor Related to Rural Areas	6724Nos	17461Nos	159.68%

Table 2: Number of Connections and other facilities

Source: <https://ppac.gov.in/consumption/state-wise-pmuy-data>

The data on the Pradhan Mantri Ujjwala Yojana (PMUY) and its subsequent version, Ujjwala 2.0, reveals significant achievements and positive impacts on LPG sales and domestic customer

growth. As of February 15, 2024, the total number of connections released under PMUY stands at 102,228,333, while Ujjwala 2.0 has contributed an additional 22,371,674 connections. The growth in LPG sales, particularly in domestic households, highlights the success of these initiatives in promoting clean cooking practices and benefiting women in particular.

The overall LPG sales have witnessed a substantial growth of 65.79%. This indicates a significant increase in the adoption of LPG for cooking purposes. The growth in domestic LPG sales at 58.23% underscores the preference for clean cooking solutions in households. The domestic customer base has experienced remarkable growth, expanding by 116.25% from April 1, 2014, to April 1, 2023. PMUY has played a pivotal role in this growth, contributing to an increase of 9.59 crore customers. This indicates the program's effectiveness in reaching and benefiting households, especially those previously reliant on traditional cooking methods. The shift from traditional cooking methods to LPG directly benefits women in these households, enhancing their health, safety, and overall well-being. The focus on empowering women aligns with broader gender-inclusive development goals. PMUY has spurred indirect positive effects on bottling infrastructure, including the expansion of bottling plants and capacity. This indicates the broader economic impact and job creation within the LPG supply chain. The distributor network has witnessed substantial growth, with an increase in the total number of distributors. The phenomenal 160% increase in distributors related to rural areas highlights the program's success in reaching remote and underserved regions.

The comprehensive growth figures underscore the success of PMUY and Ujjwala 2.0 in achieving their objectives of providing clean cooking solutions, reducing indoor air pollution, and empowering women. The program's indirect effects on infrastructure and distributor networks also contribute to economic development and enhanced accessibility. The continued momentum of these initiatives is essential for sustaining and expanding the positive impacts on households across India.

XI. Conclusions

The relationship between social protection programs and inclusive growth is intricate and dynamic, with the impact of initiatives such as the Pradhan Mantri Ujjwala Yojana (PMUY) playing a crucial role in shaping the trajectory of inclusive development. Social protection programs are designed to address disparities, promote economic empowerment, and improve the overall well-being of vulnerable populations. The PMUY, focused on providing clean cooking fuel to women below the poverty line, exemplifies the transformative potential of such initiatives.

The Pradhan Mantri Ujjwala Yojana has demonstrated a multifaceted impact on inclusive growth. The provision of LPG connections to households previously reliant on traditional and often detrimental cooking fuels has not only resulted in significant time savings, especially for women who are traditionally responsible for fuel collection, but it has also contributed to improved health outcomes. Reduced exposure to indoor air pollution has led to fewer respiratory illnesses, resulting in lower healthcare costs for beneficiary families.

The PMUY has had a positive influence on income-generating activities and entrepreneurship, particularly for women. The time saved from fuel collection can be redirected towards education or engaging in income-generating ventures, thereby contributing to increased productivity and economic well-being. The entrepreneurial opportunities created by LPG access, such as starting food businesses, have the potential to uplift households economically and empower women, fostering a more inclusive and equitable society.

The scheme has addressed issues related to food security by promoting efficient cooking practices and reducing food waste. The improved cooking methods associated with LPG usage contribute to better food preparation and resource utilization, positively impacting the nutritional outcomes and overall food security of beneficiary households.

In essence, the Pradhan Mantri Ujjwala Yojana serves as a noteworthy example of how targeted social protection programs can catalyse inclusive growth by addressing immediate needs while fostering long-term positive outcomes. By addressing energy poverty and its associated challenges, the PMUY not only enhances the quality of life for marginalized communities but also contributes to broader socioeconomic development goals, ultimately fostering a more inclusive and sustainable path towards growth.

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Role of Public-private Partnership in Agricultural Transformation:75 Years of the Indian Economy

Abhishek Maurya & Dr. Dharm Nath Uraon

Abstract

Agriculture is the main source of livelihood in developing countries. Two-thirds of developing countries depend on agriculture for their bread directly or indirectly. About 54.6% of the population is engaged in agriculture and allied activities. In recent times (PPP) in agriculture provides agriculture for conducting advanced research, developing new technologies, and deploying new products for the benefit of small-scale, resource-poor farmers and other marginalized social groups in developing countries. A private-public partnership and collaborative arrangement between two or more public and private sectors, typically of long-term nature. A public-private partnership is a contractual agreement between a public agency (federal, state, or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or a facility for the use of the general public. In addition to sharing resources, each party shares risks and rewards potential in delivering the facility. The PPP approach supplements scarce public resources creates a more competitive environment and helps to improve efficiencies and reduce costs. The rationale for public sector involvement differs between different services and influences the type of involvement required. The Planning Commission of India has defined the PPP in a generic term as "a mode of implementing government programs/schemes in partnership with the private sector. It also has some limitations as agriculture suffers due to problems linked with the supply of raw materials, mode of procurement, and rate fixing there by affecting cooperation and coordination between the partners. This paper presented a stern review of all the aspects of Public Private Partnership in agriculture, its concept, and meaning, different models, dimensions, impact, and limitations.

Keywords- *Public-private partnership, agricultural production, trend analysis*

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Introduction

A public-private partnership is a contractual agreement between a public agency (federal, state, or local) and a private sector entity. Through this agreement, the skills, and assets of the sector (public and private) are shared in delivering a service or a facility for the use of the general public. In addition to the sharing of the resources, each party shares risks and rewards potential in the delivery of the service and/or the facility.

PPP involves a contract between public and private sector entities wherein the private entity provides a public service or project and assumes the substantial financial, technical, and operational risk in the project with specified roles and responsibilities. The PPP approach supplements scarce public resources creates a more competitive environment and helps to improve efficiencies and reduce costs

Agriculture in the current competitive environment needs more focus to improve the quality and quantity of produce. Global climate change and land and water scarcity are emerging as the major challenges to agricultural sustainability, which need to be addressed through multidisciplinary and multi-institutional efforts with the use of cutting-edge technologies and forging partnerships across institutions and sectors. Few private institutes are working for the development to develop agriculture and uplift India's expenditure on agricultural R&D and education, which is currently about 0.6 percent of the GDP from agriculture and allied activities that needs to be raised by at least 1.0 percent (Planning Commission 2011)

SOME EXAMPLES OF PPPs IN AGRICULTURE VALUE CHAIN

i) PPP for crop diversification and contract farming: The Punjab state government promoted Punjab Agro Food grains Corporation (PAFC) had an aggressive target of bringing a fourth of its acreage under non-grains. The Government has taken the support of private players through the contract farming route to achievement targets. The government of Punjab through reimbursed extension costs to the CF agencies/facilitators at the rate of Rs 150 per acre for three years, to facilitate contract farming to achieve crop diversification.

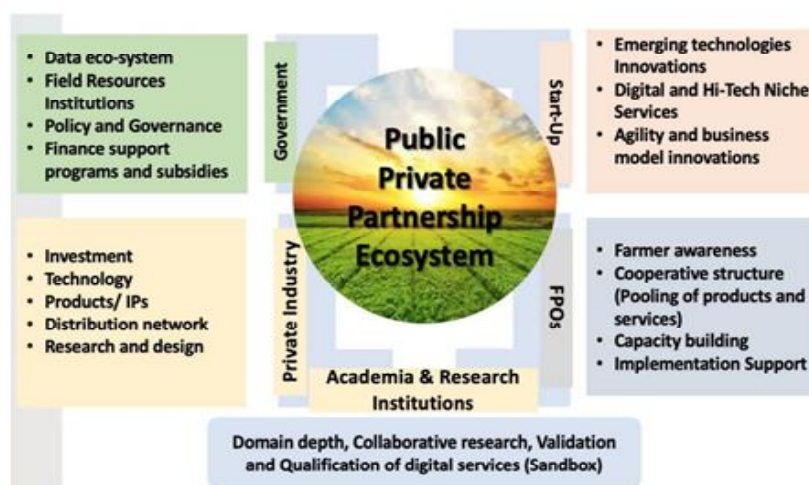
ii) Creating producer bodies through PPP: Another outstanding case of PPPs is the creation of Mahagrapes by the Maharashtra State Agricultural Marketing Board (MSAMB), the Department of Cooperation, Government of Maharashtra, the National Horticulture Board (NHB), the National Cooperative Development Corporation (NCDC), the Agricultural Products Export Development Authority (APEDA) and the grape growers themselves for the benefit of grape growers. The objective was to promote the marketing of grapes globally and to attend to the problems of quality and rejection in the global market faced by the growers' produce.

iii) PPP for agricultural extension: In Madhya Pradesh (MP), there was a PPP in agricultural extension involving the National Institute of agricultural extension management (MANAGE) based in Hyderabad, the Department of Agriculture (DoA), the Government of MP and the Dhanuka Agritech Group, which markets plant protection chemicals including eco-friendly products. The partnership was intended to foster increased productivity on farms and improve the standards of living, of farmers, providing services, cyber dhabas (country side/highway eateries in India serving local ethnic food), exhibitions,

and market linkages for agricultural produce (Singh, 2011). iv) PPP for organic production: In Uttarakhand, Kohinoor Food Ltd (KFL), one of India’s leading companies in the organized marketing of rice including Basmati rice attempted a PPP in organic basmati rice. To increase its supplies, KFL tried to identify farmers for the organic program, and to this end with the help of Uttarakhand Organic Commodity Board (UOCB), a state government agency, KFL made contact with a Basmati farmers federation in Dehradun district. v) PPP for marketing infrastructure: Terminal markets is a public-private partnership model that links the product to the consumption center. The Government of India is looking to promote terminal markets in the cities of Mumbai, Nashik, Nagpur, Chandigarh, Rai Patna, Bhopal, and Kolkata as well as Ahmedabad and Surat in Gujarat. These markets will operate on a hub-spoke format, wherein the market (hub) would be linked to several collection centers(spokes), which in turn would be located at key production centers for the convenience of farmers.vi) PPP for agricultural services: To improve the condition and benefiting the tribal farmers, the government of Gujarat and Deere and Company (Global Leader in the field of agricultural equipment) are working together towards a Public Private Partnership model, which is the first of its kind. Deere and Company opened small agricultural implement resource centers across Gujarat, making more than 500 tractors available for use by local farmers and providing the farmer’s access to a set of 13 different implements for various operations

Private-Public Partnership-Potentials: Public-private sector partnership (PPP) is a new institutional arrangement to bring in synergy, mobilize resources, generate, validate, and transfer technologies. Therefore, Public-private partnership provides opportunities to address the following:-

Reduces public capital investment, Improves efficiency due to strong profit incentive, Private entity is more accountable than government, specializes expertise, Relieves government from staffing issues, Shares risk/ responsibility. The government can still step in when private entities are not performing.



LITERATURE REVIEW

Public-private partnerships for service delivery have revealed significant opportunities for women entrepreneurs and groups in delivering local services and creating conditions for empowerment at the grassroots level. The PPP between Cadbury India, Kerala Agricultural University, and DBT during the past 23 years trained 250 women and established 28 cocoa chocolate units in different parts of Kerala. Thirumadhuram Pineapple project through PPP involving Kudumbhasree Project Mission, Department of Agriculture, women SHGs, and Nadukkora Agro-processing center could produce 25000 tonnes of pineapple in 500 ha and directly employed 12500 women. (Rajendran et al. 2010)

PPPs cover a wide range of areas including extension services which could enhance technology adoption for sustainable development. Agricultural Technology Management Agency (ATMA) facilitated commodity-based groups to partner with private agencies in the production and marketing of basmati rice and medicinal plants in Bihar, maize in Andhra Pradesh, and mango in Maharashtra (Srinath and Ponnusamy 2011).

PPP has the potential to reduce risks and uncertainties related to crop failure, pests and diseases, natural calamities, and natural resource management. The PPP approach for green beans in Kenya and grapes in India addressed food safety-related barriers in the export context. Insurance against drought was made truly affordable in 2009 through PPP between Syngenta East Africa Limited, MEA (a fertilizer company), Kilimo Salama's agribusiness partners, and Kilimo Salama's telecommunications partner Safaricom using weather station data resulting in faster payments through phone and reduction in the cost of insurance (Narrod et al. 2007). John Deere, a leading farm implements manufacturing company helped to promote mechanized farming in the tribal region of Gujarat by establishing 8 Agricultural Implements Resource Centers each covering 600 acres of cultivated land through PPP (Reddy and Rao 2011)

OBJECTIVES OF THE STUDY-

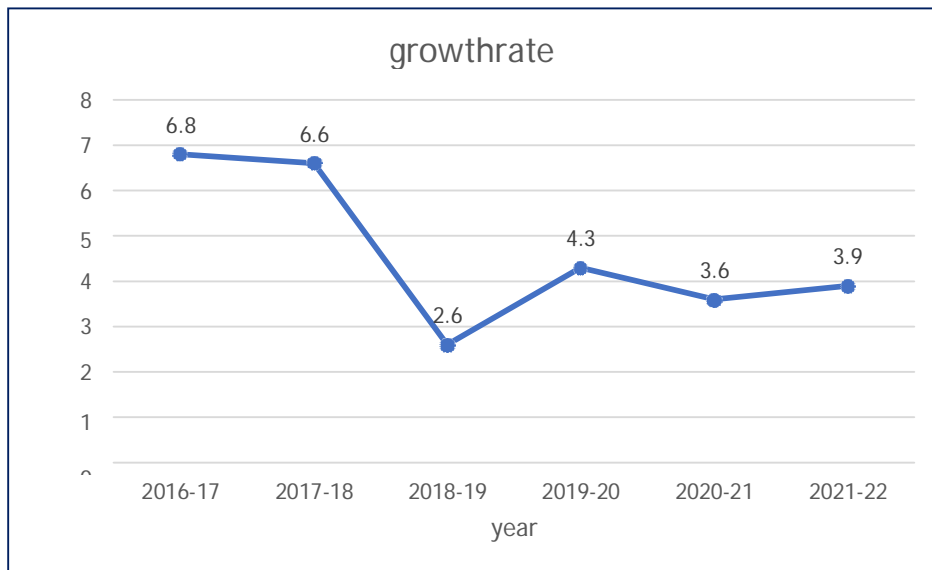
- To know the impact of public-private partnerships in the agriculture sector
- To study the reason behind growth disparities in the different regions and agricultural production
- To study the growth trends of food grain production in the agriculture sector.

ANALYSIS OF THE INDIAN AGRICULTURE SECTOR AND PUBLIC PRIVATE PARTNERSHIP MODEL

Indian agriculture sector scenario-

The growth rate of the agricultural and allied sectors (percent)

Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Grow thrate	6.8	6.6	2.6	4.3	3.6	3.9

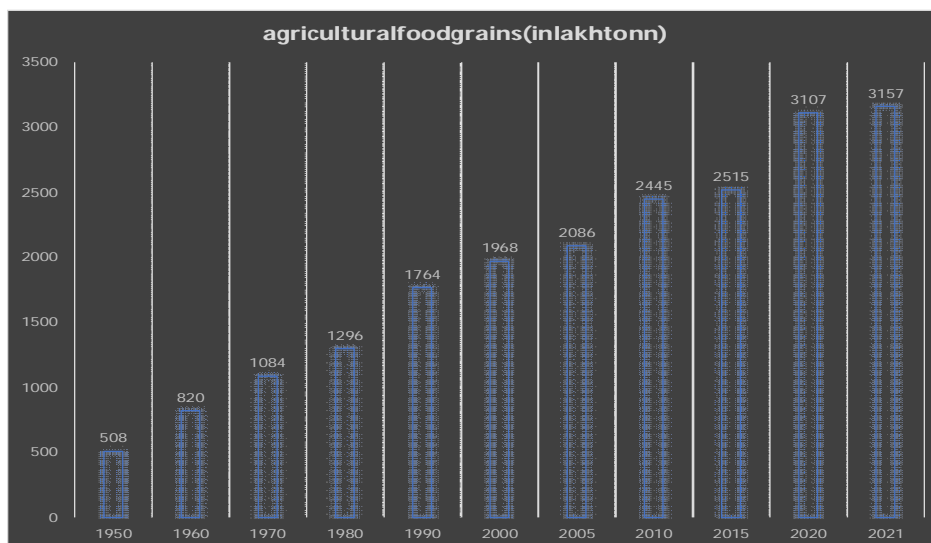


Source-RBI

The declining growth rate from 2019 to 2022 shows the impact of COVID-19 on agriculture.

TRENDS OF AGRICULTURAL FOOD GRAINS FROM INDEPENDENCE TO THE PRESENT-

Year	Agricultural food grains (in lakh tons)
1950	508
1960	820
1970	1084
1980	1296
1990	1764
2000	1968
2005	2086
2010	2445
2015	2515
2020	3107
2021	3157



Source-RBI

In 1950 when the total food grains production was 508 lakh tons in India, we saw the impact of the green revolution in the sector but in the 21st century from 2000 to 2021 the production has increased many times like in 2000 the total production was 1764 and in 2021 the total production is 3157 which is the result of a systematic agricultural policy which has included private-public partnership in the sector state like Panjab and Haryana has benefitted

most with the help of PPP model and Uttar Pradesh rapidly moving towards agricultural growth with the help of private-public partnership.

Conclusion

PPPs could be a useful tool to accelerate development in various areas of agribusiness and infrastructure. Currently, there are PPPs in the areas of contract farming, drip irrigation projects, and terminal markets among others.

In Punjab, which produces more food than any other state in India (22 percent of the national total), the problem is particularly acute, with a shortage in storage capacity of seven million tons. In response, the state government launched a pilot public-private partnership to allow a private firm to build, own, and operate a 50,000 metric-ton storage facility, using modern technology and inventory management methods. PUNGRA IN is responsible for grain procurement, payment of guaranteed storage service charges, and regulation of private sector operations.

The Food Ministry said surplus government land has been identified for building wheat silos in public-private partnership mode at 331 locations in Punjab, Madhya Pradesh, Uttar Pradesh, and Gujarat. Construction of modern storage facilities like wheat silos is to be built on public-private partnership mode under a new 'hub and spoke' model. The ministry aims to create a 11.12 lakh tonne capacity of silos at 249 locations across the country.

With the help of the public-private partnership agricultural production could be increased. States like PANJAB, HARYANA, KARNATAKA, and TAMILNADU have made more development and progress in the irrigated lands.

The Uttar Pradesh government has made some improvements in the field which are creating milestones in the agricultural sector but many changes are remaining to achieve.

Potential areas of Public-Private Partnership in the Agricultural Sector:

i. Post-Harvest Management: To provide post-harvest infrastructure facilities like Pack Houses/ Central Sorting, Grading, and Packaging Centers with pre-cooling and Cool Chain facilities at the production centers. Cold storage in the terminal markets can be established.

ii. Food Processing Facilities: To provide supporting infrastructure to meet the need for quality and safe food products facilities like quality testing laboratories can be established.

iii. Agriculture marketing setup: To strengthen the state, the agriculture marketing setup has been accorded the top priority. The partnership for the establishment of infrastructures such as link roads, transport, cold storage, cool chains, and processing units for perishable agricultural produce will be the viable area. To store the produce in the storage at mandis, sub-mandis, in the anticipation of getting remunerative prices, facilities for credit on easy terms and conditions will be made so that the farmers may bear the cost of storage.

iv. Agricultural Research and Extension: This may be made to strengthen the agricultural innovation systems like research, education, extension, and infrastructure through Private distribution of Public Technologies. Private Purchase of Public Research and Technologies and Public-Private Collaborative Research Partnership.

Suggestions

- The central government should adopt the model of the USA, MEXICO, and RUSSIA where contract forming has enhanced agricultural productivity many fold
- Consolidation of lands should be introduced comprehensively in the agriculture sector
- The agricultural law which has been abolished should be introduced in a modified way
- The government should provide more subsidies for commercial crops
- The government should provide a developed infrastructure and facilities to attract private investment. this move will bring a huge improvement in agricultural production
- Agricultural authorities should provide a policy for the PPP model by which farmers and private entrepreneurs could attract more to the sector.
- Risk and uncertainty should be minimized through various schemes that will attract investors to the sector.

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Emerging Trends in Rural Marketing 'State Extension Work Programme'

Dr. Sharad Dixit & Harshita Gaur

Abstract

Agricultural Sector is the mainstay of the rural Indian economy around which socio-economic privileges and deprivations revolve and any change in its structure is likely to have a corresponding impact on the existing pattern of Social equity. Sustainable Agricultural production depends on the judicious use of natural resources (soil, water, livestock, plant genetic, fisheries, forest, climate, rainfall, and topography) in an acceptable technology management under the prevailing socio-economic infrastructure. The Indian Agricultural sector faces resource constraints, infrastructure constraints, institutional constraints, technology constraints, and policy induced limitations. To achieve sustainable agricultural development, it is essential to combine natural resources, capital resources, institutional resources, and human resources (i.e. to optimally utilize the agricultural resources).

Agriculture is the life blood of our country. The key to our prosperity – and the prosperity of the entire nation - depends critically on transforming and rejuvenating Indian agriculture. The importance of agriculture has many dimensions to it. Not only is it a major segment of our economy, contributing almost a quarter of our GDP, but is also the provider of gainful employment and incomes to the maximum number of people. Given the state of our economy, agriculture and the rural economy act as the only social safety net available in rural areas, particularly for those who have no other employable skills.

Key words: sustainable agriculture, natural resources, rural economy, rural market, urban market.

Introduction-

It is often said that India lives in two different worlds separated; it seems some times by centuries. The reality of a globalised, industrialized India is as true as the reality of the bullock cart and the uneducated farmer. We are today both a developed and a developing nation at

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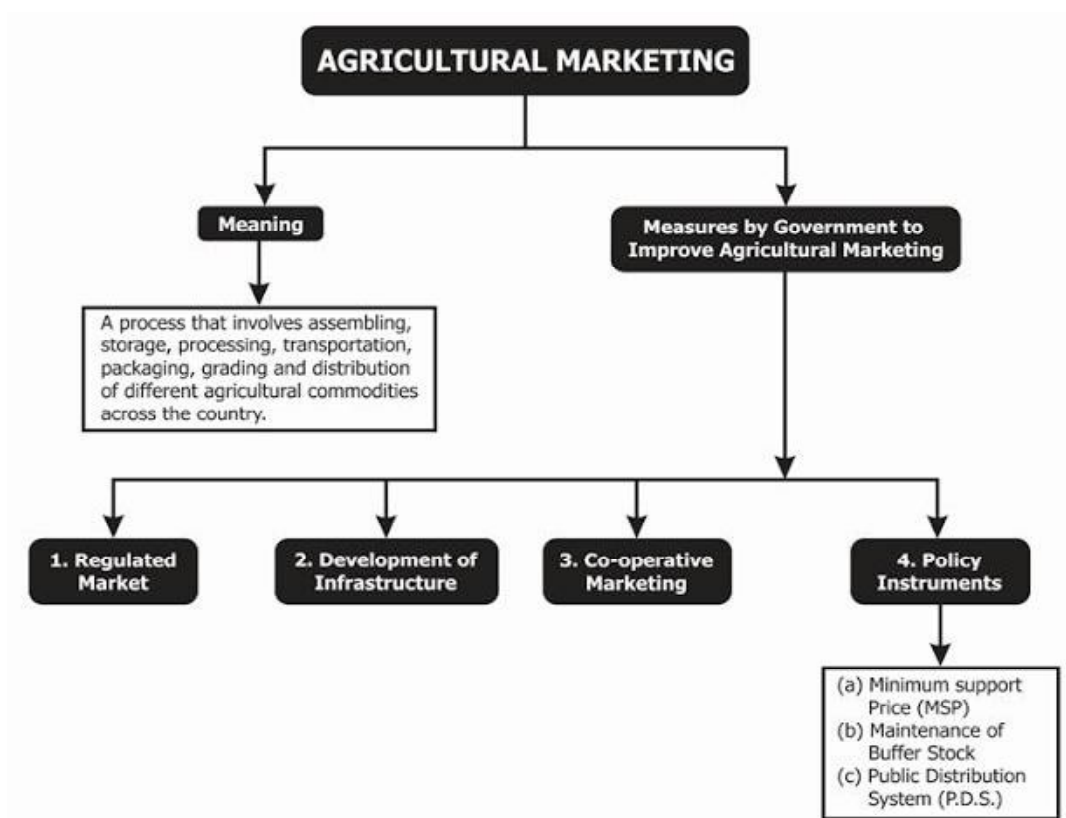
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the same time. What is alarming, however, is that there seems to have been a neglect of agriculture in the past decade. There is an agricultural crisis, at least in some regions of the country, and no one can deny the fact that Indian agriculture has been performing much below its potential in recent years. If we want to step up the rate of growth of the economy to 7 to 8%, we have to accelerate the rate of growth in agriculture. Unfortunately, there has, in fact, been a deceleration in the past decade. While the Tenth Plan assumed that agricultural production would grow at the rate of 4.0%, the reality is that in the first three years of the Plan we have not been able to ensure even 1.5% rate of growth. It is to reverse this neglect that our Government stated at the very outset that our priority would be to give a “New Deal To Rural India”.

The agriculture sector in our country has flourished over the years due to Government’s constant thrust on increasing agriculture production. Still the benefits are not percolating down to the farming community. In general, the farmers continue to live in poverty. More than 75 per cent agricultural producers are small and marginal farmers. The liberalized trade environment has added another dimension to the poverty of farmers, as the resource poor farmers are now uncertain about their future also.

The untapped opportunities that our country possesses reveals that there are several internal and external challenges that inhibit the growth of the Indian agriculture sector and need to be addressed urgently. Extremely advanced forms of agriculture and industry coexist with other forms from a past era. Bridging this gap is the ultimate development challenge of the 21st century. Domestic policies relating to production, **procurement, pricing and distribution, the agricultural marketing system**, inadequate pre- and post-harvest infrastructure facilities; poor quality standards; fragmented land holdings; and, ad hoc export policies are some of the domestic factors that often hamper the growth of the agriculture sector. Similarly, there are external challenges in the form of agricultural markets distorted by subsidies and protectionism in the developed countries.

Rural marketing facilitate flow of goods and service from rural producers to urban consumers at possible time with reasonable prices, and agriculture inputs/ consumer goods from urban to rural. Marketing as a function has started much earlier when civilization started but not recognized as marketing. All economy goods are marketed in terms of goods and services (Barter system). Now money is being practiced as a good exchanging medium. The market may be a street, or a small town/ metropolitan city, Developments in infrastructure, transport, and communication Rural population has been increased about 74% of the total population; the demand for products and services has increased a lot in rural areas. Green revolution in the North and white revolution in the West has brought about a new prosperity in the lives of rural people. Government emphasis on rural development has caused significant changes in the rural scenario. Moreover, the special attention given for infrastructure development through the successive Five-year plans has improved the buying and consumption pattern of rural people.



Indian agriculture is characterized by lack of strong linkages between production and marketing strategies and inadequate marketing infrastructure. The imbalance caused by this has resulted in marketed surplus in case of many crops. The challenges posed by the surplus crop production and most importantly by the liberalized trade environment globally, can be met only by having a sound agricultural marketing system in our country. It has been realized that agriculture development in our country has to be market driven and responsive to the changed world trade environment. The Government has initiated the process of removing the weaknesses in the prevailing system thereby creating an environment for benefiting from the emerging opportunities to access markets of commodities worldwide. The Ministry of Agriculture, Government of India has reviewed the present system of agricultural marketing in the country and several reforms are being taken in the agriculture-marketing sector.

The main problem that the farmers face is related to the marketing of their produce. Most of the States have 'Agricultural Marketing Act' which forces the individual farmers to sell their produce only to designated agencies and do not allow them to sell in the open market. The marketing in Indian Agriculture is something that has been neglected all this while. For

want of proper infrastructure, right kind of processing and grading facilities and backward and forward linkages, the Indian farming community is not able to reach the consumers.

There are many ways by which the farmer may dispose his produce:

- To sell away his produce to the village money-lender-cum-trader, who may buy it either on his or as an agent of a bigger merchant of the neighboring town.
- To dispose of his produce in the weekly village markets
- To sell off the produce through the mandis in small and large towns. These mandis may be located at a distance of several miles and, thus the farmer has to make soecial efforts to carry his produce to the mandi, there are 'Dalals' who help the farmers to dispose of their produce to the wholesalers known as 'arhatiyas'. The wholesalers then dispose the produce to the retailers.

Objectives of the study:

The present study mainly attempts to examine the following issues

1. To examine the rural marketing scenario,
2. To examine the challenges faced in rural agriculture marketing,
3. To study government suggested measures
4. To suggest effective strategies for marketing in rural areas.

Research Methodology:

The present paper is to assess the potential and dynamics of rural markets in India. Magazines, books, magazines, secondary data from various sources like the Census of India, government reports and websites have been taken to support points. The study is mostly of descriptive analysis. The objective of the study is to weigh the factors that influence the rural demand of India and the growing potentials of this market.

Defects of Agricultural Marketing in India:

The position of agricultural marketing in India is deplorable. The Indian farmer is very poor, illiterate and ignorant.

- First of all he does not have facilities for storing his produce. The storage facilities which are available at present are so poor that 10 to 20 per cent of the produce is eaten away by rats.
- The average farmer is so poor and indebted that he does not have holding capacity and is forced to sell his output to the moneylender or to the trader to clear his debts.
- The number of intermediaries and middlemen between the farmer and the consumer is too many and the margin is too large.

- The farmers do not get information about the ruling prices in the big markets.

To make the agricultural marketing system more vibrant and competitive, Government of India had taken the initiative in this regard by setting up of an Inter Ministerial Task Force on Agricultural Marketing Reforms which recommended amendment to the State APMC Act for promotion of direct marketing and contract farming, development of agricultural markets in private and cooperative sectors, stepping up of pledge financing, expansion of future trading to cover all agricultural markets, introduction of negotiable warehouse receipt system and use of information technology to provide market led extension services to the farmers. In order to guide the States in the implementation of suggested reforms, Central Government had now drafted a Model Act on Agricultural Marketing which inter-alia provided for the **establishment of direct purchase centers and farmers' markets for direct sale to consumers**, complete transparency in the pricing system, and payment to farmers on the same day, public private partnership for professional management of existing markets and setting up of Market Standards Bureau for promotion of standardization, grading and quality certification of produce. The Model Act and the suggested reforms were discussed at the national conference of State Agriculture Ministers held on 7th January 2004 at New Delhi and on 19th November 2004 at Bangalore.



Agriculture Extension Reforms

Agriculture Extension has scarcely made any significant impact on our agriculture, since not more than 25 per cent of Agriculture technology is reaching the farmers. Though increased Mass Media Support to Agriculture Extension is being provided, there is still a need for revamping the extension machinery to make it more farmer-oriented and accessible to them. The village- level workers and community block based extension system should be revitalised and strengthened and made more responsive to the changing needs of the times. Village Panchayats / Farmers' organizations should be made to play a critical role in the effective transfer of agricultural technology.

State Extension Works Programmes

This new Scheme has been approved on 29th March 2005. The scheme aims at making extension system farmer driven and farmer accountable by way of new institutional arrangements for technology dissemination in the form of an Agricultural Technology Management Agency (ATMA) at district level to operationalise the extension reforms. The release of funds will be based on State Extension Work Plans (SEWPs) prepared by the State Governments. It is proposed to cover 252 districts across all the States/UTs in the country.

Mass Media Support to Agriculture Extension

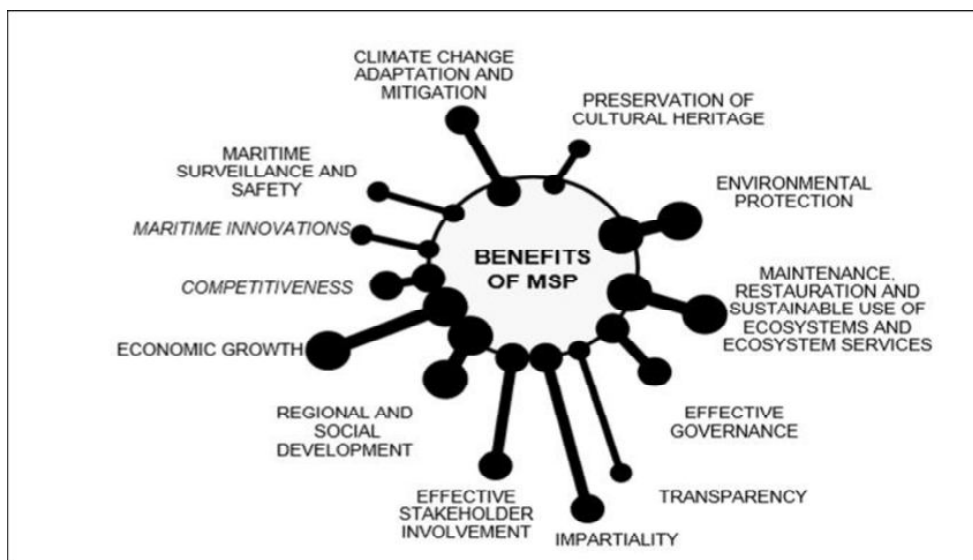
Mass Media Support to Agriculture Extension is focusing on two initiatives. The first is use of Doordarshan infrastructure for providing agriculture related information and knowledge to the farming community. 180 Narrow casting Centres, 18 Regional Centres and 1 National Centre of Doordarshan Kendras would telecast agricultural programmes during specific hours. The second component of the mass media initiative is use of 96 FM Transmitter of AIR to broadcast area specific agricultural programme.

Price Support for farmers

In order to provide remunerative prices to farmers, the Government of India, on the recommendation of the Commission on Agricultural Cost and Prices (CACP), which is an autonomous body, announces the **Minimum Support Price (MSP)** for each crop season for 25 major agricultural commodities.

The Government should ensure that the MSP is fixed slightly higher than the cost price recommended by the State Governments, which in turn is based on the actual experience of agriculturists as well as the considered views of universities and experts so that the farming community, which gives employment to 60 per cent of the people of this country gets a fair deal.

The Committee further recommends that more agricultural commodities, particularly those recommended by the State Governments, should be brought within the fold of MSP. The Committee also desires that the procurement centers should start functioning by the time crop is ready.



Hariyali Kisaan Bazaar

Hariyali Kisaan Bazaar” is a pioneering micro level effort, which is creating a far-reaching positive impact in bringing a qualitative change and revolutionizing the farming sector in India. It is also an example of how well meaning corporates can contribute to development of agriculture by building sustainable business models. The key constraints of the Indian farming sector, being addressed by “Hariyali” are:

- Lack of last mile delivery mechanism of modern agriculture know-how & practices.
- Lack of availability of critical good quality agri-inputs.
- “Middlemen” driven farmer interface.
- High cost credit.
- Lack of direct access to buyers of varied & high value crops.

The “Hariyali Kisaan Bazaar” chain, seeks to empower the farmer by setting up centres, which provide all encompassing solutions to the farmers under one roof. Each “Hariyali Kisaan Bazaar” centre operates in a catchment of about 20 kms. A typical centre caters to agricultural land of about 50000-70000 acres and impacts the life of approx. 15000 farmers. Each centre is engaged in:

- **Bridging the last mile:** Provides handholding to improve the quality of agriculture in the area. Provides support through a team of qualified agronomists based at the centre.

- **Quality Agri-Inputs:** Provides a complete range of good quality, multi-brand agri inputs like fertilizers, seeds, pesticides, farm implements & tools, veterinary products, animal feed, irrigation items and other key inputs like diesel, petrol at fair prices.
- **Financial Services:** Provides access to modern retail banking & farm credit at reasonable rates of interest, through simplified and transparent processes as also other financial services like insurance etc.
- **Farm Output Services:** Farm produce buyback opportunities, access to new markets & output related services.

In the near future, Hariyali Kisaan Bazaars plan to move beyond agriculture to meet the other needs of farmers as customers.

Farmer Response

So far, 33 “Hariyali” Stores have been set up in different states across North India. Farmer response has been extremely encouraging. The centres are attracting 150 - 200 farmers a day. Wherever the centres have come up, farmers are already calling Hariyali their most ‘trusted’ and ‘reliable’ partner in agriculture. Farmers love the freedom of choice and the various avenues of cropping opened for them by these centres. The ground-level agri-support is already yielding results in the farmer’s fields. Whether it is adoption rate of high yielding seeds, right doses of fertilization, productivity of cattle-feed, moisture conservation measures, adoption of new crops/allied occupations or adoption of new technologies like zero tillage, the farmers in catchment of Hariyali centres are already way ahead of the national averages.

Future Plans

Hariyali Kisaan Bazaar has plans to rapidly scale up the operations & create a national footprint covering all the major agricultural markets of the country. This would mean catering to cultivable land of over 30 million acres and touching the lives of over 10 million farmers

Kisan Call Centre:-

These Centres operate through toll free lines throughout the country and provide expert advise to the farmers. A country wide common four digit number 1551 has been allocated to these Centers. 13 such centers located at different places cover farmer’s queries from all over the country. Around 8 lakh calls have been received in these centers since inception of these Centres operate through toll free lines throughout the country and provide expert scheme in January 2004.

Farm Information Support Programmes

Farm Information Support is provided to supplement States/Agricultural Universities efforts. These include organizations of regional fairs and exhibitions, support to State Agricultural

Universities for print media and Kisan Melas and support to National Productivity Council for productivity awards to agricultural and allied sectors.

Private Sector new initiatives in Agricultural Marketing & Distribution

- _ ITC 'e-chaupal'
- _ Haryali Kisaan Bazaar
- _ Mahindra Shubh Labh
- _ Cargill Farm Gate Business
- _ Tata Kisan Sansar

In spite of these initiatives, yet a lot have to be done, in the sphere of agricultural marketing. Marketing societies need to be more closely intertwined with other societies dealing with farming etc. There is a need to further diversify the activities of marketing societies. It is required that all the operations collections and storage of produce, transportation, grading, sale, etc. should be taken by the marketing societies themselves. To strengthen these societies they should be provided with larger financial resources and more societies should be established in the remote areas. This would be of great help to the producer as well as to the consumers.

Suggestions:

- Indian government has to be proactive in the establishment of modern infrastructure facilities in rural areas.
- Proper infrastructure of markets and warehouses which results in fair prices.
- Roads in rural areas must coordinate with railways, nearest ports and airports. Cooperatives must be given the power of general insurance.
- Development of proper communication systems which is suitable for rural markets. For storage facilities the government should not depend on private agencies to store food grain.
- Rural areas need more no godowns, ancillary platforms for packaging cum information cell , banks and post offices for proper functioning.
- Rural communication must be in regional language and dialects.
- Enough sales force must be deployed by the companies and should be given proper training to them.

Conclusion:

It is a known fact that lots of untapped potential is available in rural areas. There is lot of resources available but the bottlenecks remove carefully. The companies entered in the

rural markets must design innovative marketing strategy to attract rural buyers and capture market share at large. Successful business enterprise would be one utilize optimum available resources like time, money etc and also formulate innovative idea to capture the rural market effectively and efficiently. In simple words, rural market is untapped potential market of new millennium era and rural area have tremendous growth opportunities offered in rural market as well.

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Women's Participation in Agricultural Employment in India

Asha Pasi & Dr. Ved Prakash Mishra

ABSTRACT

Agriculture is the prime engine of growth and backbone of developing nations. In India, a Developing economy, nearly 60% of the working population find agriculture as their main Source of income/livelihood. Rural women perform numerous labour intensive jobs such as weeding, housing, grass cutting, cotton stick collection, separation of seeds form fibre keeping at livestock and its other associated activity like , milk processing, preparation of ghee etc. The Indian Council of Agricultural Research(ICAR) research revealed that the participation of women is 75% in the production major crops, 79% in Horticultures, 51% in post harvesting work and 95% in animal husbandry and fisheries. Yet only about 13% engaged in their own land. So it is very important to know the Socio-economic and working conditions of these women working in various fields. Because of female Illiteracy, more poverty starvation and un- employment, women agricultural labourers need more Assistance for sustainable agricultural development and gender equity.

India surpasses China as the world most populous country and has changing socio-political demographic patterns that have been drawing global attention in recent years. Despite several growth orientated policies adopted by the government, the widening economic, regional and gender disparities are posing serious challenges for rural society mainly depend on wage employment in agriculture. To undertaken reform and to gain equal rights to economic resources the women agricultural labourers should provide equal access to land, Inputs, knowledge, financial support, markets and opportunities.

Key word: Agriculture, Female Work Participation, Labour Force, Agricultural Employment, Women Education.

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INTRODUCTION

Agriculture in India remains an important sector because of its positioning in the country's economy and social fabric. Even though, agriculture's share in the Indian economy declined to 18.1% in 2022-23, it still employs more than 50% of the Indian population.

Women are the backbone of the rural area and agriculture in particular. The agriculture sector employs 80% of all economically active women in India, which breaks down into 33% of them being part of the agriculture labour force and the remaining being part of the self-employed farmers. However, even after such high participation rates, only 12.8% of operational holdings are owned by women. Moreover, there is concentration of operational holdings (25.7%) by women in the marginal and small holdings categories.

According to agricultural scientist-economist, M Swami Nathan, "some historians believe that it was women who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fibre and fuel." Women is an important part of the labour force, they make significant contributions to agriculture and the rural economy of the country. It is the transformation of the economic and social aspects of agriculture, the role of the women has become diverse. In addition to managing the household, they also pursue different types of livelihood strategies.

REVIEW OF LITERATURE

Shiva (1991) discussed active involvement of women in agricultural activities in rural economy in India. However, there is variation in extent and nature of their participation in agro production system. The forms of female contribution in agriculture production differ with the landowning status of farm households.

World Development Report (2008) identified the changing roles and growing contributions of women in agriculture and rural livelihoods and also identified changing gender role and division of labour in demography and household structure as a result of migration.

Sudaeshan & Bhattacharya, (2009) conducted a study on the work participation of women from urban Delhi and estimated that WPR is much more than that of the NSSO survey. This paper explores key factors affecting the decision, desire, constraints, benefits, and cost of involvement in paid work outside by females. The decisions of marital household and childbirth have influenced labour decisions of a woman. Thus, the women's workforce participation rates appear to be affected by higher education, reduction in time spent on housework (domestic technology, water, and electricity, childcare arrangements), and safety in public spaces (transport, lighting).

The State of Food and Agriculture (2011) stated to Free women's time for more productive activities And to facilitate women's participation in flexible, Efficient, and fair rural labour markets. There is an Urgent need to fill the gender gap.

Ghosh and Ghosh (2014) analysed the women Participation in agriculture across diverse Indian States. He found that, women participation in Agriculture was increased but discrimination of Wages and in working status still triumphs for women labour. The World Development Report 2012) stressed that gender equality and empowering Women as economically, socially, and politically can improve level of their decision making power.

Swamikannan&Jeyalakshmi, (2015) identify the trend of women's participation in Agriculture across various Indian states. The secondary data had been used to analysed growth Trends of the agricultural workers from 1961-2001. The study briefed that women has been Facing discrimination in our agrarian society where their status in all aspects is below to Their male workforce. Steps have been taken by the government through amending laws to Reset their status.

Rao, (2016) examined the trends and pattern Of women's employment in IndiaUsing secondary Data for the time period from Census 1981 to Census 2011. All states and union territories of India as Population and seven states from high per capita Income states and seven states from low per capita Income states were selected as sample states for the study. Result indicated that high variation in Percentage of female workers to total worker ratio Across the states.

Mahata, Kumar, & Kumar, (2017) had analysed the regional disparity of, literacyRate, sex Ratio, and women' work participation and the improvement of women empowerment in the And state of Haryana. This paper suggests that the enhancement of social and educational Status can be achieved only byProgressive interventions at social and government levels.

OBJECTIVE

- To find out the role of women in agriculture and its Allied fields.
- To study the trends in the participation of women and Men in the agricultural sector.
- To analyse the impact of education on the participation Of women in agriculture.

METHODOLOGY

The study is mainly based on secondary data Obtained from the Government of India reports. The main sources of the data are Statistical Profile On Women labour, Labour Bureau, Government Of India and participation in economy, men and Women in India 2016, Ministry of Statistics and Programme implementation, Government of India. The time period we consider for our study is from 1991 to 2011 census years. Thus statistical data from SSO, International Labour Organization and World Bank have been used for this study. The study

uses both descriptive and analytical methods to Interpret the data. Trend analysis has been used to evaluate Time series data from 2000 -2017.

DISCUSSION

- **Women’s Participation in Agriculture and Literacy Rates**

Table 1 provides a comparison of women’s literacy rates and Their participation in agriculture. It appears from the table That women’s participation in Agriculture is continuously Decreasing due to increase in literacy rate, that is, there is an Inverse relationship between literacy rate and women’s Participation in agriculture. In conclusion, it can be said that With the increase in the literacy rate of women, their participation in the second and third sectors increases and at the same time the migration of women to the cities becomes more.

Table 1: Comparison of Women’s participation in Agriculture and Literacy rates

Year% of female employed Literacy Rates				
	In agriculture	Male	Female	Gender Gap
1991	75.7	64.1	39.3	24.8
2001	74.9	75.3	53.7	21.6
2011	63.1	82.1	65.5	16.7

Source: Census of India.

- **Trends in Percentage of Female and Male Employed In Agriculture inIndia.**

Table 2 shows the percentage trend of male and female Employees in agriculture. It is clear from the table that the Employment rate in agriculture has been higher among Females than males. If we compare the employment rate in Agriculture of women and men separately, then we find that The employment rate in agriculture has been decreasing till 2017 in comparison to2000 in women and men. The Employment rate in agriculture was 74.9% among females As compared to 55.9% among males in 2000 which steadily Declined to54.2% and 39.3 % respectively in 2017.

Table 2: Trends in percentage of female and male employed in agriculture in India (2000-2017)

Year	Employment in Agriculture (% of female employed)	Employment in Agriculture (% of male employed)
2000	74.9	54.2
2001	74.9	54.9
2002	74.1	53.5
2003	73.5	52.8
2004	72.0	50.7
2005	71.1	49.5
2006	69.5	49.0
2007	68.3	47.9
2008	67.6	47.1
2009	66.6	46.8
2010	65.4	46.2
2011	63.1	42.6
2012	62.3	42.4
2013	62.5	42.4
2014	62.0	41.7
2015	61.6	41.0
2016	60.6	40.1
2017	59.9	39.3

Source: ILO, ILO STATS Database (March,2017)

Major challenges

(1) Women do all the non-mechanized agricultural work And do many jobs which put more burden on them due To lack of equipment and suitableTechnology.

(2) Women have little rights in the process of making Economic decisions insideOr outside their home. Women do not have the ability to make capital orHousehold decisions, due to which they lack the Resources which are necessary For their labour stability And stability of their households.

(3) Women do not have equal rights to agricultural land, They rarely enjoy theRights of land ownership in their Own name. Women's limited rights or access toArable Land further limits livelihood options and increases the Financial strain On women, especially in households Headed by women.

(4) Lack of adequate market knowledgeof agricultural Commodities has also putWomen farmers in an Unfavourable condition.

(5) Women earn less than men, especially in the combined, Informal andprivate sectors.

(6) Most of the poor women farmers are less able to purchase climate change- friendly technology due to Lack of access to credit and agricultural service. It isBecause of the inability to invest in good fertile seeds and to maintain theFertility of the soil that women have the disadvantage of low productivity.

CONCLUSION

Agriculture is increasingly becoming the preserve of women has importantImplications for policy. Based on the above analysis we may draw the following conclusion. The female agricultural labour households belonged to the sociallyAnd Economically backward communities in the society. The wage income is the main source of income and the income from non-agricultural activities is small. Majority of female labourers are illiterate or having an educational level up to primary. It Is one the primary objects of the five year plan to ensure fuller opportunities. For work and better living to all the sections of the rural community and in particular, to assist agricultural labourers backward classes to come to the level of the rest. One of the most Distinguishing features of the rural economy of India has been the growth in the number of agricultural workers, cultivators and agricultural labourers engaged in crop production. The phenomena of underemployment, under-development and surplus population areSimultaneously manifested in the daily lives and living of the agricultural labourers are likely to be the worst hit, through adverse impacts on wages andemployment opportunities directly in agriculture, and through multiplier effects, indirectly in non-agricultural as well. Due to low income the households are forced to borrow Money from all available sources and are in debt. Almost all The households are poor or BPL households and enjoying the Benefits under BPL categories The subsidized distribution of food grains through ration shops, agricultural workers Pension,old age pension, financial support given for construction of the

hoses have considerably helped the Households to maintain a better level of living. The study found that the consumption of food items are poor and not sufficient to provide the required calories.

SUGGESTIONS

- (1) The women in rural areas should be educated.
- (2) Minimum and equal wages should be fixed by state Government for Agricultural labour and the rates should Be reviewed periodically.
- (3) Conscious efforts are needed for training of female work Force in the rural Areas in alternative skills.
- (4) There is need to make available cheap credit to needy Agricultural women to start self – employment and as a Result of that our rural women may get Additional Opportunity for gainful employment.
- (5) There is need to bring about some attitudinal and Institutional changes to remove the prejudices, against Women and to remove the general feeling that women are good just for house and unskilled work.

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Status of Food Security in India: A Demand Side Analysis

Pragti Yadav & Prof. Aloka Kumar Goyal

Abstract

Ensuring food security is very important for a country like India where poverty is one of the major economic concerns. Food security requires not just availability of food grains but also it is necessary to ensure food accessibility to the poor households. It has been well established that India has become self-sufficient in food availability(the actual stock of food grains procured by Food Corporation of India is more than the minimum buffer norms)but the fact is that there are millions of people below poverty line, who are unable to get even a meal per day. Accessibility of food grains can be ensured either by raising the purchasing power of these poor household or by providing them food grain at subsidized price. In this regard Public Distribution system (PDS) is a means of distribution of essential commodities to a large number of people through as network of fair price shops on a recurring basis. PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through Food Corporation of India (FCI), has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments. The operational responsibilities including allocation within the State, identification of eligible families, issue of Ration Cards and supervision of the functioning of Fair Price Shops (FPSs) etc., rest with the State Governments.

The present paper deals with the status of food security with special reference to availability of food grains, performance of States and UTs in distribution of food grains and the role of PDS in eradicating poverty in India in 21st century on basis of secondary data compiled from the various government portals like Food Corporation of India, Ministry of Consumer Affairs, Department of Food and Public Distribution.

Keywords: *Public Distribution system, Food Corporation of India, ration card, fair price shops.*

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Introduction

Food security has been a deep rooted concern for India as ensuring access to safe and nutritious food is regarded as an essential entitlement for every individual. Food and Agricultural Organization (FAO) states that food security emerges when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Agriculture production in India has increased over the year from just 79.7 million tonnes in the 1960 to 330.5 million tonnes in 2023 (www.downtoearth.org.in). Despite of the high food production India has still a severe level of Hunger with score of 28.7 in 2023. Food and Agriculture Organization states that 233.9 million (24 crs) people are undernourished in India (SOFI-2023 report).

For the purpose of food security there are four major components known as the “four pillars of food security.” These are Availability, Access, Utilization and Stability. Food availability addresses the ‘supply side’ of food security and is determined by the level of food production, stock levels and net trade. Accessibility of food means that food is within reach of every person. Food utilization is defined as the ability of the human body to ingest and metabolize food through adequate diet. Food stability means that food access, availability, and consumption remain relatively stable overtime. So, Food security requires not just adequate supply (availability) of food at the aggregate level but also enough purchasing Power capacity (access) with the individual household to demand adequate level of food.

In India food grains availability even in adverse conditions has been ensured by the government by maintaining a buffer stock of food grains. The FCI supply these stocks to people through Public Distribution system (PDS), which is jointly managed by the Central and State Governments. The Central Government, facilitated by the Food Corporation of India (FCI), handles procurement, storage, transportation of food grains. On the other hand, the State Governments oversee operations, including the allocation of supplies, identification of eligible households, issuance of ration cards, and supervision of fair price shop activities. The actual stock of food grains procured by Food Corporation of India is more than the minimum buffer norms, so the issue lies with demand (distribution) side, not supply side. Therefore, it is crucial to examine both the performances and issues encountered by India in distribution of food grains.

Literature Review:

Numerous Studies have been conducted related to Food Security in India, some of them are reviewed here- A study titled ‘Public Distribution system in India: Key Issues and Challenges (2016)’ by Mahima Gopal Ghabru, Ganga Devi and Nilam Rthod states that performance of PDS in certain States has been praiseworthy as it has provided assured food supply to the needy and it has been effective in reducing poverty, hunger as well as been effective in strengthening income basis of weaker sections. In the article titled ‘Food Security in India: Evolution, Efforts and Problems’ (2019) author D.P.K.Pillay and T.K.Manoj Kumar examines

India's efforts to achieve food security . It traces the problem, from the inadequate production of food grains during colonial times, to the challenges of procurement, storage and distribution of cereals in post-independence India, after achieving self-sufficiency in food production .A critical analysis of India's food security system is made in light of present day problems. Another scholarly article Author Gayatri Munappy and Zevisanuo Khate in article,' A Study on Impact of food Security on Poverty Alleviation in India' states that the poor households are more vulnerable to food insecurity whenever there is problem of production or Distribution. NFSA has improved the general functioning of TPDS. On the basis of above literature review it can be said that their no study of demand side analysis of food security with special reference to performance of States and UTs is available.

Objectives:

The objectives of the study are:

- To check the availability of food grains in India.
- To analyse the performance of public distribution system in the States and Union territories of India in 21st century.
- To evaluate the effectiveness of public distribution system in eradicating poverty.

Methodology and Data sources:

The study is mainly and analytical and descriptive research in nature. It is based upon the secondary data .The data has been collected from various sources: Food Grain Bulletin, Food Corporation of India, Ministry of Consumer Affairs Food and Public Distribution, Ministry of statistics and program implementation, national food security portal.

In this study all the states and union territories (Andhra Pradesh, Arunachal Pradesh, Assam ,Bihar , Chhattisgarh , Delhi ,Goa, Gujarat, Haryana ,Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur ,Meghalaya ,Mizoram ,Nagaland, Odisha , Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana , Tripura, Uttrakhand, Uttar Pradesh, West Bengal ,A&N island, Chandigarh , D&N Haveli and Daman & Diu ,Jammu & Kashmir , Ladakh , Lakshadweep, Pudducherry) of India have been taken for analysis. The points of time taken for the study are 2001-02, 2005-06, 2012-13, 2020-21, 2023-24.Many statistical tools have been used for measurement of mean (average), Standard Deviation and Coefficient of variation for the analysis of data.

Analysis: The analysis of the study have been done in following manner-

Supply Side Analysis of Food Security:

Table 1: Central Food grains (wheat + rice) Actual stock and Minimum Buffer norms

Date	Buffer Norms	Actual Stock		Buffer Norms	Actual Stock	Buffer Norms	Actual Stock		
		2001	2003				2015	2015	2021
	001	2001	2003	2005	2005	2015	2015	2021	2023
-Jan	68	457.4	482.02	68	216.94	214.10	368.56	529.59	297.05
-Apr	58	446.95	328.02	62	174.07	210.1	343.15	900.45	332.05
-Jul	43	616.71	351.68	69	245.25	411.2	545.75	72.78	554.95
-Oct	81	582.78	236.68	62	151.39	307.7	450.28	553.87	461.82

Source: Food Grain Bulletin, Department of Food and Public Distribution, GOI.

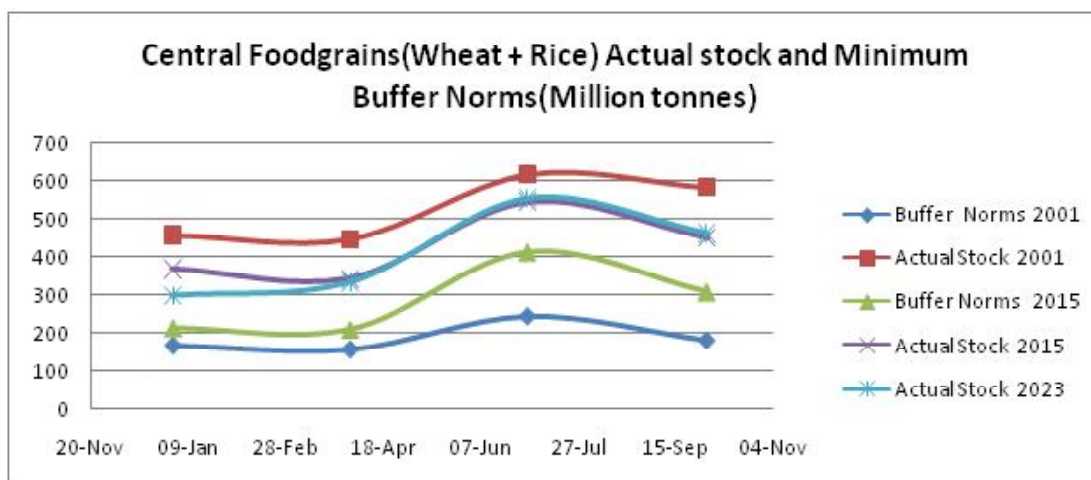


Figure 1: Based on Table 1

In this study, the availability of food grain in India is evaluated by comparing the actual stock of food grain to the minimum buffer norms established by the Food Corporation of India. Undoubtedly it is clear that the actual stock of food grain in India exceeds the minimum buffer norms (table 1), which indicates a positive situation in term of food availability. Having surplus stock also signifies that there is stability in food supply in India.

Demand Side Analysis of Food Security: The demand side analysis has been done in following manner-

Table 2: State wise Offtake Percentage of Food grains.

State/ UTs	2001-02	2005-	2012-1	2020-	20
Andhra Pradesh	53.41	80.98	81.9	109.3	90
Arunachal Pradesh	48.95	72.96	96.9	93.49	10
Assam	58.65	69.56	97	91.11	8
Bihar	22.73	22.69	71 .3	82.58	84
Chhattisgarh	46.12	44.63	94.7	99.29	103
Delhi	16.48	40.23	94.6	88.9	99
Goa	13.29	9.2	99.8	100.0	57
Gujarat	33.63	22.97	60 .7	81.31	87
Haryana	43.02	21.61	61.6	80.82	98
Himachal Pradesh	44.52	62.56	99.4	99.1	99
Jharkhand	41.3	56.04	72	96.22	8
Karnataka	91.95	64.22	82. 1	84.91	74
Kerala	24.29	39.07	100	99.97	94
Madhya Pradesh	56.49	44.07	129.8	90.11	93
Maharashtra	44.76	33.73	77.3	0	8
Manipur	28.51	58.62	101	92.27	106
Meghalaya	32.7	82.07	100.5	99.35	106
Mizoram	41.55	82.97	94.9	95.98	98
Nagaland	31.24	94.97	107.2	97.31	101
Odisha	56.48	47.6	96 .6	99.28	113
Punjab	34.72	5.88	74 .2	69.42	63
Rajasthan	47.06	26.35	98.6	96.95	92

Sikkim	38.78	95.27	101.7	83.92	99
Tamil Nadu	57.68	63.66	97.6	103.6	74
Telangana	NA	NA	NA	92.29	99
Tripura	44.14	62.1	94.9	85.93	84
Uttarakhand	0	46.84	90.4	104.3	92
Uttar Pradesh	47.16	36.79	96.5	91.01	95
West Bengal	33.86	45.55	93.8	99.28	104
A&N island	39.84	39.77	43.8	55.01	7
Chandigarh	2.15	0	90.9	0	0
D&N Hav and Daman & Diu	24.85	16.38	100.3	91.98	97
J & K	83.06	85.34	100.5	98.42	76
Ladakh	NA	NA	NA	99.71	111
Lakshadweep	41.99	96.92	86.2	83.13	76
Pudducherry	35.77	53.07	88.4	0	0
Total	45.21	43.43	88.9	91.67	90
Average	39.51	48.91	92.426	83.57	86
	7576	3939	696	5714	8056
S. D	18.54	26.14	15.991	26.99	24
	8178	472	49	7185	7369
C. V	0.469	0.534	0.1730	0.322	0.1
	0273	3885	842	1725	3652

Source: Food Grains Bulletin, Department of Food and Public Distribution,GOI.

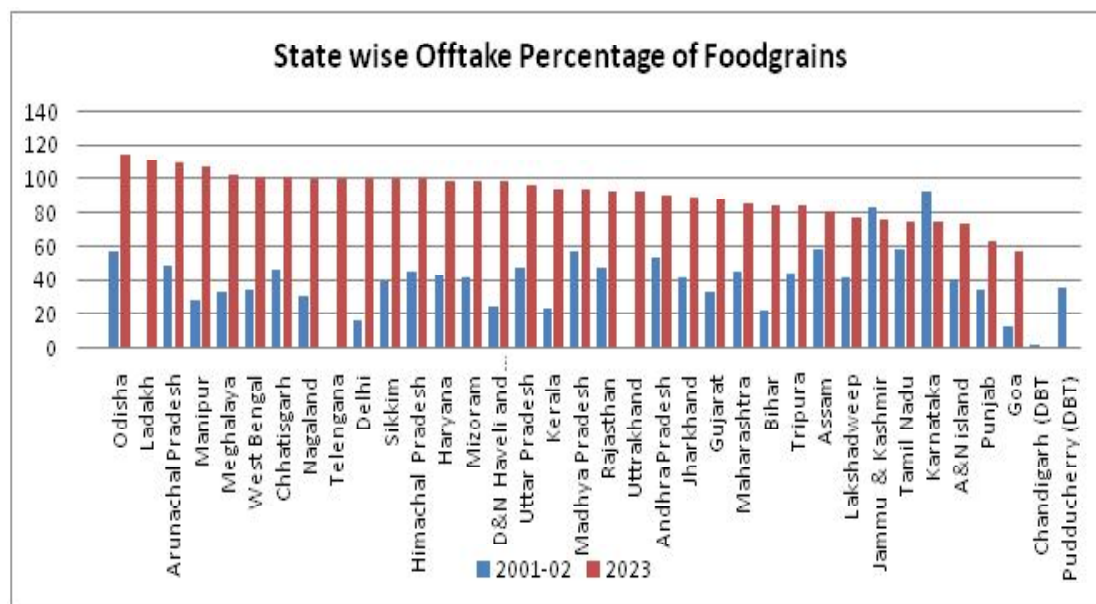


Figure 2: Based on Table 2

In this study, Demand Side Analysis of food security in India have been done by checking the total offtake percentage of food grains against the allocation for all the States and Union Territories(Annexure 1) at five point of times during 21st century i.e. 2001-02,2005-06,2012-13,2020-21 and 2023.It can be clearly seen that the offtake percentage food grains for most of the States and UTs have increased significantly over the last two decades from 45.21 percent in 2001-02 to 48.9 in 2006-07 to 88.9 in 2012-13 to 90.6 percent in 2023.The States like Odisha, Arunachal Pradesh ,West Bengal, Chhattisgarh , Manipur and UTs like Ladakh have outstanding performance with more than hundred percent of offtake of food grains in 2023 with even less than sixty percent offtake of food grains in 2001.The performance of states such as Himachal Pradesh, Haryana, Kerala ,Uttar Pradesh etc is also praiseworthy with more than 90 percent of offtake in 2023.But offtake in states and UTs such as Punjab, Tamil Nadu, Karnataka, Goa and Andaman and Nicobar Island is not very satisfactory (Annexure 2). There is no consistency in offtake percentage of food grains among states and UTs because coefficient of variance has no clear trend during the study period. So, it can be said that the offtake of food grains have increased for most of the States and UTs over 21st century it means the distribution chain of food grains has become more effective due to good effort of State governments and it has a positive impact on poverty alleviation but some of the state governments still needs a huge improvement in distribution of food grains by minimizing the gap of offtake and allocation.

Table 3: Number of Beneficiaries (Ration Cards) and Fair Price Shops under PDS in India (in lakh) and Poverty rate

Categories	2015	2020	2023
AAY	615.31	915.66	892.46
Priority HH	4756.98	7027.23	7157.49
Total	5372.29	7943.19	8049.9
No. of FPSs	5.47	5.38	5.43
Poverty Rate (%)	24.85	14.96	11.28

Source: Food Grains Bulletin, Department of Food and Public Distribution and Niti Aayog,GOI.

When we look at the Figure,we find that the Public Distribution System has a huge impact on alleviating poverty in India.In 2015, the poverty rate was 24.85 percent and total number of beneficieries of PDS were 5372.29 lakh to which foodgrains were distributed through5.47 lakh fair price shops. The coverage of PDS has increased to 7943.19 people in 2020 to 7157.49 people in 2023 decreasing poverty rate from 14.96 percent in 2020 to 11.28 percent in 2023 .Thus, it can be said that Public Distribution System has positive impact on alleviating poverty in India but we can not draw a clear cut conclusion that reduction in poverty is due to PDS.It should also be noted that this is not a permanent solution to solve the problem of poverty in India.

Conclusion:

The study presents an analysis of availability of food grains in India, performance of States and Union Territories in food grains distribution and the role of PDS in alleviating poverty in India .It can be concluded that the availability of food grains in India is not a problem, here exists a excess stock of food grains against the minimum buffer norms. The performance of PDS in distribution of food grains in most of the States and UTs has improved over the year in 21st century it means the role of state government in distribution of food grains through PDS has became more effective but some of the States still needs improvement in distribution of food grains as their offtake percentage of food grains are very low .PDS has been effective in reducing poverty as well as effective in increasing income of poor people by increasing access to it but it is not a permanent solution to the solve the problem of poverty. The government should explore other permanent ways to address the issue of poverty in India.

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Poverty Eradication Through Financial Inclusion In India

Kriti Dwivedi & Dr. Harsh Mani Singh

ABSTRACT

Financial inclusion is a key element of social inclusion, particularly useful in combating poverty and income inequality by opening blocked advancement opportunities for disadvantaged segments of the population. This study intends to investigate the impact of financial inclusion on reducing poverty and income inequality, and the determinants and conditional effects. The Financial sector has witnessed many changes over the last few decades. The economic development of the country is co related with the Financial Sector. At the threshold of the new millennium, 872.3 million people are below poverty line of which 179.6 million people live in India. Out of which 29.5% of people are from rural India. Such high incidence of poverty is a matter of concern in view of the fact that poverty alleviation has one of the major objectives in the 21st century. Financial Inclusion serves the purpose to a greater extent. For this purpose, we construct a novel index of financial inclusion using a broad set of financial sector outreach indicators, finding that per capita income, ratio of internet users, age dependency ratio, inflation, and income inequality significantly influence the level of financial inclusion in developing countries. Furthermore, the results provide robust evidence that financial inclusion significantly reduces poverty rates and income inequality in developing countries

The findings are in favor of further promoting access to and usage of formal financial services by marginalized segments of the population in order to maximize society's overall welfare. This study is explanatory in nature covering the need for financial Inclusion in India. Financial Inclusion (FI) offers incremental and complementary solutions to tackle poverty, to promote inclusive development and to address the MDGs. The secondary data have been used. This study depicts that Financial Inclusion plays a major role in reduction of Poverty. In this paper we have made an attempt to highlight the poverty situation in India in comparison with the rest of the world since its independence. The Indian government has been serious about the poverty alleviation and continuously designing the strategies and practices for the same. Further, the various attempts made by the government in this regard have been explored

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and their effectiveness is analyzed. Finally the financial inclusion as the poverty alleviation mechanism to maintain living standards of poor people and providing them entrepreneurial environment for their upliftment and need of financial inclusion has been explored, followed by the analytical study with reference to India, for alleviating the poverty from the grass root level is assessed.

Keywords: *Financial Inclusion, Financial Sector, Poverty Alleviation, Economic Development, Financial Services.*

INTRODUCTION

Financial inclusion denotes delivery of financial services at an affordable cost to the vast sections of the disadvantaged and low-income groups. The various financial services include credit, savings, insurance and payments and remittance facilities.

The objective of financial inclusion is to extend the scope of activities of the organized financial system to the needy people of low incomes. Financial Inclusion is the delivery of services at affordable cost to the vast section of disadvantaged and low-income groups. Access to financial services such as loans, savings, deposits, health insurance etc. by the population living in the rural and deep rural segments has been limited and been the major deterrent of growth in these segments. Access to such services will help in improving the standard of living, health and hygiene through empowering the under privileged, thereby helping in social, political and economic stability. Delivering banking services in an affordable manner to the rural areas requires a secure transaction processing platform that can be deployed cost-effectively. Financial inclusion is aimed at providing banking / financial services to all people in a fair, transparent and equitable manner at affordable cost.

Financial Inclusion: Current Evidence from India:

Financial inclusion also offers resilience from shock events like the COVID-19 pandemic, which highlighted the need for ensuring that the poorest populations have access to formal financial services. For people, financial inclusion is an indispensable goal. Research indicates that financial inclusion has a positive impact on women's control over household resources by increasing their savings. Yet globally, women continue to face barriers to accessing financial services. Indeed, financial inclusion is considered a critical indicator of development and is identified as an enabler for at least eight of the 17 Sustainable Development Goals (SDGs). The imperative is for these gaps to be filled, as financial inclusion is recognized as a key driver of economic growth and poverty alleviation. It ensures universal access to useful and affordable financial services delivered in a responsible and sustainable manner.

DISCUSSION

The major causes of poverty among India's rural people both individuals & communities are as follows:

• **Lack of access to Productive Assets & Financial Resources:** Many times people of many areas especially in rural areas are lacking of access to productive assets and financial resources due to many circumstances, this pings the major cause of poverty in India between individuals and communities.

• **High Level of Financial Illiteracy:** Due to illiteracy among people there might be high chances that people of urban side specially is unable to understand the mechanism of financial inclusion and the different schemes which government provides to poor section people to uplift them and increase the welfare.

• **Inadequate Health Care:** Due to lack of savings people are unable to access the proper health facilities in society. They mostly avoid consulting any doctor due to the high fees either because of the stereotypes thinking for women especially.

• **Limited access to Social Services:** Basically people are not so much aware about the different facilities which is providing by government as social services like transfer payments by government like - subsidies on gas cylinders.

In the Annual Policy Statement of 2005-06, RBI urged banks to review their existing practices to achieve the objective of Financial Inclusion. Financial Inclusion was introduced by K. C. Chakraborty, Chairman, Indian Bank, in 2005. Mangalam in Tamil Nadu became the first village in India where all households were provided with banking facilities. The following initiatives were taken by RBI to promote Financial Inclusion:

- 'No frills' bank accounts;
- Use of local language in the application forms;
- Simplifying KYC norms for the small accounts (balance not exceeding Rs.50000);
- Appointment of Rural Intermediaries;
- Adoption of Information and Communication Technology (ICT)

Banks have been mandated to allocate at least 25% of the total number of new branches to rural areas, with population up to 9999 each. Recently Government has launched Jana Dhan Joyana where customers can open Bank Account with zero balance. The Reserve Bank of India has undertaken a project entitled "Project Financial Literacy". The objective of the project is to disseminate information regarding the Central Bank and general banking concepts to various target groups including school and college going students, women, rural and urban poor, defence personnel and senior citizens. As an outcome of the campaign **Pondicherry, Tamil Nadu, Himachal Pradesh** and **Kerala** were declared 100% financial inclusion in all their districts. Reserve Bank of India's visualization for current years is to open nearly 600 million new customers' accounts and service them through a diversity of channels by leveraging on information technology. On the map of poverty in India, the most affected and poorest areas are part of **Rajasthan, Madhya Pradesh, Uttar Pradesh, and Bihar**.

State wise account opening Report obtained as on 05/04/2023, Pradhan Mantri Jan Dhan Yojana, Department of Financial Services, Ministry of Finance, GOI

S.No	State Name	Beneficiaries at rural/semi-urban centre bank branches	Beneficiaries at urban/metro centre bank branches	Total Beneficiaries	Balance in beneficiary accounts (in crore)	No. of RuPay cards issued to beneficiaries
1	Himachal Pradesh	1,589,951	139,110	1,729,061	1,286.17	1,204,584
2	Pondicherry	92,723	96,478	189,201	95.71	127,903
3	Kerala	3,139,225	2,392,933	5,532,158	2,604.54	3,063,087
4	Tamil Nadu	7,255,821	6,530,261	13,786,082	4,908.67	9,683,989
5	Rajasthan	21,792,425	11,547,680	33,340,105	16,190.71	24,792,134
6	Madhya Pradesh	24,484,438	16,031,952	40,516,390	11,201.19	30,291,879
7	Uttar Pradesh	62,544,982	24,226,116	86,771,098	42,637.01	56,262,093
8	Bihar	38,996,841	15,741,625	54,738,466	20,740.38	40,019,022
9	Jharkhand	14,422,890	2,999,717	17,422,607	7,576.88	11,655,053
10	Odisha	15,677,220	4,333,278	20,010,498	9,027.38	14,433,560
11	Chhattisgarh	11,675,204	5,040,381	16,715,585	6,040.58	10,524,254
12	West Bengal	35,639,800	12,360,031	47,999,831	19,174.83	29,637,102

Source: PMJDY, Department of Financial Services, Ministry of Finance, GOI

CONCLUSION

Banks are at the heart of any growing economy. As banks grow, the economy grows, and as the economy grows, the banks grow. It's a mutually reinforcing relationship. So, the question is how have Indian banks performed in this context. In this piece we try to answer this question. The results are surprising to some extent, including the fact that lending and borrowing of commercial banks has stagnated for more than 10 years now. Along with this, Indian banks are getting more interested in giving out retail loans than industrial loans. Further, private banks have been gradually gaining market share. The following flowchart describes that financial inclusion includes the following things:



Need for Financial Inclusion for Poverty Reduction:

RBI Policy Initiative & Recent Measures -

1. Opening of BSBD (Basic Savings Bank Deposit) with minimum ordinary facilities such as zero balance account deposit, withdrawal of cash at bank branches & ATMS credit of money through electronic payment channels.
2. Use of simplified KYC norms for opening of account.
3. RBI has simplified branch authorization to tackle the issue of uneven spread bank branches schedule commercial bank are permitted to freely open branches in the Tier 2 to Tier 6 centers with population of less than 1 lakh.
4. Banks are directed to allocate at least 25% of total number of branches to be opened during the year in unbanked rural sector.
5. Redress of customer grievances and close supervision of BC operations
6. All rural branches of schedule commercial banks should scale up Financial Literacy efforts through conduct of Financial Literacy Camp at least once a month to facilitate Financial Inclusion.

Financial Inclusion becomes a major pre-requisite to poverty alleviation. RBI's vision for 2020 is to open nearly 600 million new customer accounts and services by then through variety of channels. Hence, the biggest challenge the world is facing is to ensure the financial services reach the unreached sections to provide an impetus to the process of inclusive economic growth. The Government should encourage the banking system of India to adopt Financial Inclusion by means of financial assistance, advertisement, and various programs to achieve inclusive growth in the coming years. The role of banking should be imminent to bring a large number of people in a single umbrella of Financial Inclusion. This will also result in Poverty Reduction. AS OF end-March 2001, the total outstanding loans of Indian banks stood at ¹ 5.1 trillion, or 23.9% of the country's annual gross domestic product (GDP) of the time. By September 2022, the figure had grown to ¹ 130.4 trillion, or 50.3% of GDP.

Financial Inclusion can be a key driver of economic growth & development and poverty alleviation as access to finance can boast job creation, reduce vulnerabilities to stocks and increase in human capital. Half of the world adult's population does not have an account at formal financial institutions. Extreme disparities in access to and usage of formal financial services have paved the way for growth of financial inclusion in India. By providing suitable cost effective financial products to low income families will transform informal unbanked sectors into formal financial sector. Due to lack of Financial Literacy and practically no access to financial services, the substantially weaker section of the society is unaware of financial services and has to depend upon informal sector. To eradicate this problem the growth of Financial Inclusion started. It is widely believed that financial inclusion aids inclusive growth, economic development, and financial deepening. More specifically, it expands poor people's access to financial services, increasing their economic opportunities and improving their lives. This is largely because definitions of financial inclusion seem to vary. As no single conceptual definition of financial inclusion exists, there is no standard measure of the concept that is universally accepted. A second reason is that many factors can affect financial inclusion, poverty and income inequality and do so simultaneously rather than through causal connections. Awareness about financial inclusion to eradicate poverty in India is the key indicator to achieve the pace of growth and development in the world. From a policy point of view, we need a solid measure to assess financial inclusion and to establish which factors contribute to cross-country variations. Such a measure would help us understand how financial inclusion helps to achieve inclusive growth. Financial inclusion impacts both poverty and income inequality. We find robust evidence that economies with high financial inclusion have significantly lower poverty rates.

SUGGESTIONS

The results show that financial inclusion and deepening have statistically significant negative relationships with the poverty ratio for public sector banks, but not for private sector banks. In addition, the coefficients of the interaction term between financial inclusion and deepening are estimated to be negative and statistically significant in most cases of public sector banks.

Considering the positive impacts of financial inclusion and deepening on poverty reduction, this result implies that promoting breadth and depth of public sector banks could have a synergistic effect on poverty reduction in India.

The COVID-19 pandemic highlighted the need for strengthened consolidation, coordination and increased financing for expanded coverage of national and state social protection programmes while simultaneously increasing access to migrant families; and ensuring that social protection programmes are child and gender-responsive, climate-adaptable, and shock-responsive.

In my opinion, one of the critical challenges is the lack of awareness and access to some significant social protection schemes, especially among the most vulnerable families, female-headed households, and the urban poor. All of this speaks to the need for significant and durable investments in social services, shock responsive and inclusive social protection measures and effective local governance that is child and gender friendly.

The Government initiated the National Mission for Financial Inclusion (NMFII), namely, Pradhan Mantri Jan Dhan Yojana (PMJDY) in August, 2014 to provide universal banking services for every unbaked household, based on the guiding principles of banking the unbanked, securing the unsecured, funding the unfunded and serving unserved and underserved areas. A digital pipeline has been laid for the implementation of PMJDY through linking of Jan-Dhan account with mobile and Aadhaar [Jan Dhan-Aadhaar-Mobile (JAM)].

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Microeconomic Empowerment: Assessing the Impact of Self-Help Groups on Women's Economic Well-being

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Abstract: -

This research paper investigates the impact of Self-Help Groups (SHGs) on the microeconomic empowerment of women, focusing on their economic well-being in developing regions. Employing a mixed-methods research design, this study integrates quantitative data analysis with qualitative insights from interviews and case studies to evaluate how SHGs influence women's access to financial resources, income generation, savings habits, and empowerment in financial decision-making. The analysis draws from a diverse sample of SHGs, examining the mechanisms through which these groups facilitate economic opportunities for women who traditionally face barriers to financial inclusion and economic participation. Findings indicate that SHGs play a pivotal role in improving women's economic outcomes by providing access to credit, fostering entrepreneurial skills, and creating platforms for peer learning and support. Additionally, participation in SHGs enhances women's self-confidence and agency, contributing to a broader sense of empowerment. However, the study also identifies challenges in scaling SHG initiatives and ensuring their sustainability. The implications of this research extend to policymakers and development practitioners, highlighting the effectiveness of SHGs in advancing gender equality and economic development. Recommendations include enhancing support for SHGs through policy reforms, targeted financial services, and capacity-building programs. This study contributes to the understanding of microeconomic empowerment as a vital component of sustainable development, advocating for increased investment in women-led SHGs as a means to empower women economically and socially.

Keywords: -Self-Help Group, Economic Empowerment, Financial Institutions, Microeconomics.

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Introduction

Economic empowerment stands as a cornerstone for achieving gender equality and fostering sustainable development. Within this context, Self-Help Groups (SHGs) have emerged as a significant vehicle for driving women's economic empowerment, particularly in developing countries. These grassroots-level collectives not only facilitate financial inclusion but also serve as platforms for social and educational upliftment. This paper aims to dissect the working model of SHGs, assessing their effectiveness in promoting economic autonomy among women and identifying the mechanisms through which these groups operate to achieve their objectives. The concept of economic empowerment encapsulates more than mere income generation; it involves gaining access to the resources and skills needed to participate fully in economic life and to influence the economic and social order. Women's economic empowerment is particularly critical, as it contributes to a range of positive outcomes, including poverty reduction, economic growth, and improvements in health and education outcomes. SHGs, typically composed of 10-20 women who pool their resources to meet collective financial needs, have been instrumental in this regard. Through savings and credit operations, capacity building, and income-generating activities, SHGs have provided women with the tools to break the cycle of poverty and empower themselves economically and socially.

This study is guided by several key objectives:

- To explore the structure and operational mechanisms of SHGs, including their formation, governance, financial management, and capacity-building initiatives.
- To assess the impact of SHG membership on women's economic empowerment, including changes in income, savings behavior, and access to credit.
- To understand the broader social impacts of SHGs, such as changes in gender norms, increased social capital, and community engagement.
- To identify the challenges and limitations faced by SHGs and propose strategies to enhance their effectiveness and sustainability.

Literature Review

The concept of Self-Help Groups (SHGs) as a conduit for women's economic empowerment has gained substantial attention in development discourse. This section reviews the theoretical underpinnings and empirical studies that explore the multifaceted impacts of SHGs, providing a comprehensive overview of existing knowledge and identifying gaps for further research.

Significance of the Study

The significance of this research lies in its comprehensive examination of SHGs as a model for women's economic empowerment. By providing empirical evidence of the impacts and challenges of SHGs, the study offers valuable insights for policymakers, development practitioners, and SHG facilitators. Moreover, by highlighting successful strategies and areas

for improvement, the paper contributes to the ongoing efforts to optimize SHG models for greater inclusivity and impact. Ultimately, this research seeks to inform the development of more effective interventions that can empower women economically and contribute to broader societal benefits.

In doing so, the paper not only adds to the academic literature on gender and development but also provides a practical guide for leveraging SHGs as a tool for economic and social empowerment. The findings and recommendations presented herein aim to facilitate the replication and scaling of successful SHG models, thereby amplifying their positive impacts on women's lives and communities. A significant body of literature focuses on the role of SHGs in promoting financial inclusion. Studies (Mayoux, 2000; Nair, 2005) have documented how SHGs enhance access to credit and savings facilities in regions where formal banking services are scarce, particularly benefiting women by enabling them to engage in income-generating activities and improve their households' economic status. Ghosh (2013) found that membership in SHGs led to increased savings and investment behaviors among women, contributing to their financial autonomy.

Research has also highlighted the importance of capacity building and skill development within SHGs. According to Swain and Wallentin (2009), training provided to SHG members in areas such as financial literacy, entrepreneurship, and leadership significantly impacts their confidence and competence in managing businesses and participating in economic activities. These findings suggest that SHGs serve as important platforms for skill enhancement, directly correlating with the economic empowerment of women. Beyond financial empowerment, SHGs have been shown to have broader socio-economic impacts. Kumar (2011) and Panda (2014) emphasize the role of SHGs in improving women's social status, self-esteem, and decision-making power within their families and communities. Furthermore, participation in SHGs has been linked to increased awareness and action on social issues, including education, health, and gender-based violence, showcasing the potential of SHGs to contribute to societal change (Das, 2016).

Despite the positive outcomes associated with SHGs, the literature also points to challenges and limitations. These include issues related to the sustainability of SHGs, the quality of training and support services, access to markets for products and services, and the replication of successful models across different socio-cultural contexts (Khan, 2017). Moreover, there is a need for more rigorous, longitudinal studies to understand the long-term impacts of SHG participation on women's economic empowerment (Allen et al., 2018).

While existing studies provide valuable insights into the functioning and impacts of SHGs, there are notable gaps. There is a need for more comparative studies that examine the effectiveness of different SHG models and the factors contributing to their success or failure. Additionally, the role of technology in enhancing the efficiency and reach of SHGs remains underexplored. Finally, the literature would benefit from more intersectional analyses that consider how variables such as caste, religion, and age influence women's experiences and

outcomes within SHGs. The review of literature underscores the significant role of SHGs in promoting women's economic empowerment, while also highlighting the complexity of their impacts and the challenges they face. This sets the stage for the current study, which seeks to build on this foundation by providing new empirical evidence and insights into the working model of SHGs, their effectiveness, and strategies for overcoming obstacles to maximize their empowerment potential.

3. Methodology

This section outlines the research design, data collection methods, sample selection criteria, and data analysis techniques employed in this study to investigate the working model of Self-Help Groups (SHGs) and their role in promoting women's economic empowerment. The study adopts a mixed-methods approach, integrating quantitative and qualitative research methodologies to provide a comprehensive understanding of the impact of SHGs on women's economic empowerment. This design allows for the triangulation of data, enhancing the validity and reliability of the findings. Quantitative data provides measurable evidence of the economic and social changes experienced by SHG members, while qualitative data offers deeper insights into the processes, experiences, and perceptions that underlie these changes.

Semi-structured interviews and focus group discussions (FGDs) will be conducted with SHG members, facilitators, and local stakeholders. These qualitative tools are designed to explore the experiences of SHG members, the challenges they face, and the strategies they employ to overcome these challenges. Additionally, case studies of successful SHGs will be documented to capture detailed narratives of their journeys towards economic empowerment. A structured questionnaire will be developed to collect data on key indicators of economic empowerment, including income levels, savings, access to credit, and investment activities. This questionnaire will be administered to a sample of SHG members across various regions. The sample will consist of SHG members from diverse socio-economic and geographical backgrounds to ensure the findings are representative of a range of experiences and contexts. Purposive sampling will be used to select SHGs that have been operational for at least two years, ensuring that they have sufficient experience and data to reflect on their impacts. The study will aim for a balanced representation of different types of SHGs (e.g., those focused on entrepreneurship, agriculture, crafts, etc.) to compare and contrast their effectiveness in promoting economic empowerment.

Data Analysis

Qualitative Data Analysis: Thematic analysis will be applied to the qualitative data to identify recurring themes, patterns, and narratives. This analysis will be facilitated by qualitative data analysis software, such as NVivo, which allows for the organization and systematic examination of interview transcripts and FGD notes. For the quantitative analysis statistical analysis will be performed on the collected data, using software such as SPSS. Descriptive statistics will be used to summarize the data, while inferential statistics, such as regression analysis, will be employed to identify significant relationships and trends.

4. The Working Model of SHGs

The working model of Self-Help Groups (SHGs) plays a pivotal role in promoting women's economic empowerment through a structured approach that encompasses formation, governance, financial operations, capacity building, and engagement in income-generating activities. This model not only facilitates financial inclusion but also fosters social cohesion, skill development, and collective action among marginalized women. This section delves into the key components of the SHG model and their impact on women's economic empowerment.

Formation and Governance

SHGs are typically formed with 10-20 women from similar socio-economic backgrounds, aiming to create a supportive environment for mutual financial aid and social empowerment. The formation process often involves facilitation by NGOs, government agencies, or community leaders who guide the initial steps, including member selection, group norms establishment, and governance structure development.

Member Selection: Criteria for membership usually focus on socio-economic factors, ensuring inclusiveness and homogeneity in terms of financial needs and objectives.

Group Norms and Governance: SHGs establish their own rules regarding savings contributions, meeting frequency, loan disbursement, and conflict resolution. Leadership roles, such as chairperson and treasurer, are rotated among members to promote equality and build leadership skills.

Savings and Credit Mechanisms

A core aspect of the SHG model is its emphasis on savings and internal lending, promoting financial discipline and independence among members.

Savings Contributions: Regular savings contributions are mandated for all members, creating a collective fund from which loans can be disbursed. This practice instills financial discipline and creates a safety net for members.

Credit Operations: Loans from the collective savings are provided to members for various purposes, including business ventures, education, health, and emergencies. Interest rates and repayment terms are decided democratically by the group, ensuring affordability and accountability.

Capacity Building and Skill Development

Capacity building is integral to the SHG model, enhancing members' abilities to manage their finances, run businesses, and engage effectively in community affairs.

Financial Literacy and Management: Training sessions on financial literacy, bookkeeping, and financial management equip members with the skills needed to manage their savings, loans, and income-generating activities efficiently.

Entrepreneurship and Skill Development: SHGs often facilitate access to skill development programs and entrepreneurship training, helping members to start or expand their own businesses. These programs cover a range of topics, from product development to marketing strategies.

Income-Generating Activities

Engagement in income-generating activities is a critical outcome of SHG participation, enabling women to contribute to their household income and gain economic independence.

Business Ventures: Members are encouraged to use loans for starting or expanding small businesses. SHGs provide a platform for sharing business ideas, pooling resources, and accessing markets.

Collective Enterprises: Some SHGs establish collective enterprises, leveraging the group's combined resources and skills to engage in larger scale business activities. This approach can lead to greater economic benefits and social impact.

Impact on Economic Empowerment

The SHG model has shown significant impact on women's economic empowerment, evidenced by increased savings, access to credit, income levels, and asset ownership among members. Beyond financial gains, participation in SHGs enhances women's self-confidence, decision-making capacity, and social status.

Challenges and Strategies for Enhancement

Despite its successes, the SHG model faces challenges such as sustaining member engagement, accessing external markets, and ensuring the financial sustainability of group activities. Addressing these challenges requires innovative strategies, including leveraging technology for market access, enhancing partnerships with financial institutions, and continuous capacity building.

This exploration of the SHG model underscores its multifaceted approach to women's economic empowerment, highlighting the importance of structured group formation, financial discipline, capacity building, and collective action. By addressing the operational challenges and leveraging opportunities for growth, SHGs can continue to be a powerful tool for empowering women economically and socially.

5. Impact Analysis

The impact of Self-Help Groups (SHGs) on women's economic empowerment is profound and multi-dimensional, affecting various aspects of members' lives and their communities. This section evaluates the outcomes of SHG participation, focusing on economic empowerment, social and cultural impacts, and the challenges encountered. The analysis is grounded in data collected through the mixed-methods approach detailed in the methodology section, incorporating both quantitative results and qualitative insights.

Economic Empowerment

Increased Access to Financial Resources: One of the most direct impacts of SHG membership is improved access to financial resources. Women, who traditionally have limited access to formal banking services, benefit from the group's savings and credit mechanisms. This access enables them to engage in income-generating activities, invest in their businesses, and meet their personal and family needs more effectively.

Income Generation and Livelihood Enhancement: Many studies and participant testimonials highlight the role of SHGs in facilitating new livelihood opportunities or enhancing existing ones. The financial independence gained through these ventures contributes significantly to women's economic empowerment, with members reporting increased income levels and enhanced ability to contribute to household expenses.

Asset Building: Participation in SHGs has also been linked to increased asset ownership among women. These assets range from livestock and agricultural land to business equipment and housing improvements, contributing to enhanced economic security and stability.

Social and Cultural Impacts

Improved Social Status and Empowerment: Beyond economic benefits, SHG membership fosters a sense of self-worth and empowerment among women. Engaging in collective decision-making processes and managing financial transactions enhance their social status both within their families and communities.

Enhanced Social Capital: SHGs serve as a platform for building social networks and solidarity among women, which is a valuable resource for personal and collective action. The support system created through these networks provides members with the confidence to address personal and community issues, including negotiating better terms in economic transactions and advocating for social changes.

Gender Norms and Relations: The empowerment experienced by women through SHG participation has broader implications for gender norms and relations. With increased economic contributions, women often gain more respect and decision-making power within their households, challenging traditional gender roles and dynamics.

Challenges and Limitations

Despite the positive impacts, SHGs face several challenges that can limit their effectiveness in promoting women's economic empowerment:

- **Sustainability of SHGs:** The long-term sustainability of SHGs can be threatened by issues such as member turnover, leadership challenges, and financial mismanagement. Ensuring the sustainability of SHGs requires continuous capacity building and effective governance structures.
- **Access to Markets:** For SHGs involved in income-generating activities, accessing broader markets remains a significant challenge. This limits the potential for business expansion

and income growth, underscoring the need for better market linkage strategies and support.

- **Socio-cultural Barriers:** In some contexts, prevailing socio-cultural norms can restrict women's participation in SHGs or limit the scope of their economic activities. Overcoming these barriers requires targeted community sensitization efforts and advocacy.

The impact analysis of SHGs on women's economic empowerment reveals a complex interplay of economic, social, and cultural factors. While SHGs have demonstrated significant potential in empowering women economically and fostering social change, addressing the challenges they face is crucial for maximizing their impact. Strategies for enhancement should focus on strengthening the sustainability of SHGs, improving market access for their products and services, and addressing socio-cultural barriers to women's full participation and empowerment.

6. Case Studies

To illustrate the practical implications and outcomes of Self-Help Groups (SHGs) in promoting women's economic empowerment, this section presents detailed case studies. These narratives provide insights into the mechanisms through which SHGs operate, the challenges they encounter, and the strategies they employ to achieve success. Each case study highlights a unique aspect of SHGs, showcasing the diversity of their impacts across different contexts.

Case Study 1: Sunita's Journey to Entrepreneurship

Background: Sunita, a member of an SHG in rural India, transformed her life from a daily wage laborer to a successful entrepreneur. With minimal initial savings and limited access to credit, Sunita's economic prospects were bleak.

SHG Intervention: Through her SHG, Sunita accessed microcredit to start a small poultry farming business. The group provided not only financial support but also training in financial management and business skills.

Outcomes: Sunita's business grew over time, enabling her to employ others in her community and contribute significantly to her family's income. Her story exemplifies how SHGs can catalyze entrepreneurship, leading to sustainable livelihoods and economic independence.

Case Study 2: Enhancing Agricultural Productivity through Collective Action

Background: A group of women farmers in India formed an SHG to address their common challenges in agriculture, particularly the lack of access to high-quality seeds and fertilizers.

SHG Intervention: The SHG pooled resources to purchase agricultural inputs in bulk, reducing costs and improving access. They also shared knowledge on sustainable farming practices and collaborated on marketing their produce.

Outcomes: Members experienced increased crop yields and income. The collective action fostered by the SHG not only improved their economic conditions but also strengthened community bonds and women's positions in the agricultural sector.

Case Study 3: Overcoming Social Barriers in a Conservative Community

Background: In a conservative community where women's mobility and economic participation were restricted, an SHG was formed to empower local women.

SHG Intervention: The SHG focused on building confidence among its members through regular meetings and workshops on rights and leadership. They initiated small, home-based enterprises that were culturally acceptable.

Outcomes: The SHG members gradually gained economic independence and respect within their families and community. Their success challenged traditional gender norms, leading to greater acceptance of women's economic and social roles.

Case Study 4: Leveraging Technology for Market Access

Background: An SHG in Southeast Asia struggled with marketing their handicraft products due to limited local demand and lack of access to broader markets.

SHG Intervention: With the assistance of a local NGO, the SHG received training in digital marketing and e-commerce platforms, enabling them to sell their products online.

Outcomes: The SHG accessed national and international markets, significantly increasing their sales and income. This case highlights the potential of technology in enhancing SHGs' market access and economic empowerment.

Lessons Learned

These case studies underscore several key lessons for the successful operation and scaling of SHGs:

- **Access to Credit:** Microcredit is vital for enabling members to initiate and expand economic activities.
- **Capacity Building:** Training in financial management, entrepreneurship, and technical skills is crucial for the success of members' enterprises.
- **Collective Action:** Pooling resources and knowledge can significantly enhance members' economic outcomes.
- **Adaptability and Innovation:** SHGs that adapt to their members' needs and leverage innovative approaches, such as technology, can overcome significant barriers to market access and growth.
- **Community Engagement:** Addressing socio-cultural barriers and engaging the wider community are essential for the full realization of SHGs' potential in empowering women.

These narratives not only highlight the transformative impact of SHGs on individual members and their communities but also offer valuable insights into the factors contributing to their success. By learning from these experiences, SHGs, policymakers, and development practitioners can better harness the power of collective action for women's economic empowerment.

7. Discussion

The analysis of the working model of Self-Help Groups (SHGs) in promoting women's economic empowerment, complemented by case studies, offers a multifaceted understanding of their impact. This discussion synthesizes the findings, comparing them against the backdrop of existing literature, and explores the implications for policy, practice, and further research.

Synthesis of Findings

The findings from this study affirm the significant role of SHGs in facilitating women's access to financial resources, enhancing their entrepreneurial capacities, and fostering socio-economic empowerment. Consistent with the literature, SHGs have been shown to improve members' savings habits, access to credit, and income levels, thereby contributing to their economic autonomy and resilience. Furthermore, the social empowerment aspects, including improved self-esteem, leadership skills, and collective action capabilities, align with the empowerment theory's emphasis on gaining control over one's life.

The case studies highlighted the diversity of SHG impacts across different contexts, showcasing success stories in entrepreneurship, agriculture, overcoming social barriers, and leveraging technology for market access. These narratives underscore the adaptability of the SHG model to local needs and challenges, a crucial factor in its effectiveness.

Implications for Policy and Practice

Policy Recommendations:

- **Supportive Frameworks:** Governments and policymakers should create supportive legal and financial frameworks that recognize and facilitate the work of SHGs. This includes simplifying banking regulations for microcredit and providing grants or subsidies for entrepreneurial ventures initiated by SHG members.
- **Capacity Building Programs:** Investment in capacity building and skill development programs tailored to the needs of SHG members can enhance their economic outcomes. Public-private partnerships could be instrumental in delivering these programs effectively.
- **Market Access:** Policies to improve market access for products and services developed by SHG members are essential. This could involve infrastructure development, e-commerce platform support, and marketing assistance.

Practice Recommendations:

- **Sustainability Focus:** SHGs and facilitating organizations should prioritize the sustainability of groups through continuous training, effective governance, and diversification of income-generating activities.

- **Leveraging Technology:** Embracing digital tools for financial management, market access, and networking can significantly enhance the efficiency and reach of SHGs.
- **Community Engagement:** Efforts to address socio-cultural barriers and enhance community support for women's economic activities are crucial for the long-term success of SHGs.

Directions for Further Research

While this study has provided valuable insights, several areas warrant further investigation:

- **Longitudinal Impact Studies:** Long-term studies are needed to understand the sustained impacts of SHG participation on women's economic and social empowerment.
- **Comparative Analysis:** Research comparing different models of SHGs within various cultural and economic contexts can identify best practices and factors contributing to success.
- **Role of Technology:** Further exploration into how digital technologies can be optimally utilized by SHGs for financial inclusion, training, and market linkage would be beneficial.
- **Intersectional Analysis:** Studies examining how intersecting identities (e.g., caste, ethnicity, age) affect participation and outcomes in SHGs can provide deeper insights into inclusivity and equity issues.

The evidence underscores the transformative potential of SHGs in empowering women economically and socially. By addressing the identified challenges and leveraging the lessons learned, stakeholders can enhance the effectiveness of SHGs, contributing to broader goals of gender equality and sustainable development. The recommendations provided offer a roadmap for policymakers, practitioners, and researchers to support and scale the impact of SHGs, ensuring their contributions to women's empowerment are fully realized.

8. Conclusion

This study has extensively examined the working model of Self-Help Groups (SHGs) and their significant role in promoting women's economic empowerment. Through a comprehensive methodology that integrated both quantitative and qualitative analyses, including impactful case studies, the research has highlighted the multifaceted ways in which SHGs contribute to improving the economic autonomy and social status of women, particularly in marginalized communities.

The findings underscore that SHGs are not just financial intermediaries but also crucial platforms for social change, skill development, and collective empowerment. They facilitate access to financial resources, promote entrepreneurial endeavors, and enhance members' capacities through targeted training and support. Moreover, SHGs play a pivotal role in fostering a sense of solidarity among women, challenging traditional gender norms, and advocating for community-level changes.

However, the journey of SHGs is not devoid of challenges. Issues related to sustainability, market access, and the need for continuous capacity building are evident. Additionally, socio-cultural barriers continue to restrict the full potential of SHGs in certain contexts. Addressing these challenges requires concerted efforts from various stakeholders, including governments, NGOs, financial institutions, and the SHGs themselves.

Recommendations

Based on the study's findings, several recommendations have been put forth to enhance the effectiveness and sustainability of SHGs:

- **Strengthening Institutional Support:** Enhanced support from governmental and non-governmental organizations can provide SHGs with the necessary resources, training, and market access opportunities.
- **Incorporating Technology:** Leveraging digital technologies for financial transactions, training, and market linkages can significantly enhance the operational efficiency and reach of SHGs.
- **Fostering Community Engagement:** Initiatives aimed at sensitizing communities about gender equality and the economic empowerment of women can help mitigate socio-cultural barriers.
- **Encouraging Policy Reforms:** Advocacy for policy reforms that recognize and support the role of SHGs in economic development and women's empowerment is crucial.

Limitations and Future scope of study

The study acknowledges potential limitations, including the variability in SHG models, the influence of local contexts on SHG functioning and outcomes, and the challenges of attributing changes directly to SHG participation. These limitations will be carefully considered in the analysis and interpretation of the findings. This methodology provides a robust framework for exploring the complex dynamics of SHGs and their contribution to women's economic empowerment, aiming to generate insights that can inform policy, practice, and future research in this field. The study also opens avenues for further research, particularly in exploring the long-term impacts of SHG participation on women's lives and livelihoods, the effectiveness of different SHG models, and the role of technology in scaling their impact. An intersectional approach to understanding the experiences of SHG members can also provide deeper insights into how various social identities affect participation and outcomes.

In conclusion, SHGs represent a powerful mechanism for advancing women's economic empowerment and fostering social change. By building on the strengths of the SHG model and addressing its challenges, there is significant potential to enhance the impact of these groups on a larger scale. This study contributes to the growing body of knowledge on SHGs, offering insights that can inform future initiatives aimed at leveraging the power of collective action for women's empowerment and broader societal development.

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The Nexus Between Food Security and Climate Change in India

Dr. Debesh Bhowmik

Abstract

The paper tried to examine the relationships between the determinants of climate change such as temperature change, emissions from land use, emissions from rice and cereals and emissions from CO₂ and the food security indicator (i.e., food supply in kilo calorie per capita per day) in India from 2000 to 2021 by applying multiple regression, cointegration and vector error correction models. The paper found that climate change has negative impact on the food security. The relationship is stable. Johansen cointegration concludes that there is long run association among the variables having at least one cointegrating equation which successfully converges to equilibrium showing negative causalities from the increments of temperature change, emission from cereals and rice and emissions from CO₂ while there is significant positive long run causality from the increment of emission from land use on the increment of supply of food in kilo calorie per capita per day. There are significant short run causalities from climate indicators on the food supply. The VECM is stable, nonstationary, and normally distributed with no heteroscedasticity problem.

Key words: *food supply, CO₂ emission, temperature change, emission from land use, emission from rice and cereals, regression, cointegration*

JEL Classification Codes: C22, O13, Q18, Q54

Prologue

In India, undernourished people stood at 197.2 million in 2000-2002 which catapulted to 233.9 million in 2020-2022. Total Number of stunted children under 5 years of age were 65.2 million in 2000 which decreased to 36.1 million in 2022. In 2000, per capita food supply variability (kcal/cap/day) in India was 58 which decreased to 11 in 2021. Value of food imports of India in total merchandise exports (percent) (3-year average) was 5% in 2000-2002 which increased to 6% in 2019-2021. India's food supply in rice in kg/per man per year was only 102.91 kg in 2010 which marginally rose to 104.78kg in 2021 only. India's food price

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inflation rate was 2.99% in 2001 which reached its peak level in 2020 at 11.71% which now stood at 6.189% in January 2023 which is too high (FAO). So, the situation of food security of India is at grave. The loss of agriculture due to flood, drought, cyclone, earthquake and other natural disaster was estimated as crops of 5.04 million hectares in 2021 (Shagun, 2021). George and Daga (2000) concluded that 57% citizens in India have been living under food insecurity when calorie consumption is treated as indicator for food security. On the contrary, food insecurity in urban area was found in the range of 51% to 77% (McKay et al., 2023). It was estimated that about 40.6% of India's population in 2019-21 are moderate or severe food insecure. The severely food insecure population has risen from 20.3% in 2018-20 to 22.3% in 2019-21 (Bansal, 2022). According to food security environment index in India 2022, the sustainability and adaptation index is 51.2, affordability index is 59.3, quality and safety index is 62.1 and availability index is 62.3 respectively (<https://www.statista.com/statistics/1239292/india-overall-food-security-environment-index-by-category/>).

Sova, Flowers and Man (2019) examined that every 1°C rise in mean temperature is associated with a 10 percent decline in crop yields. An increase in 1–2°C temperature led to a significant negative impact on the yield of major food crops in low-altitude countries like India (Bhat & Pandit, 2020) that has inverse impact on the nutritional status of the Indian population (Mahapatra et al., 2021).

Inverse impact of climate change on agricultural production is well known which have long run effects on food security to the general and marginalised population in India where emissions from CO₂, CH₄, and N₂O on agriculture are especially to be verified through future research. In this paper, the impact of climate indicators such as emissions from CO₂, emissions from land use, emissions from rice and cereals and temperature change on the food supply per capita per day in kilo calorie in India from 2000 to 2021 has been examined through econometric analysis.

Literature review

There is huge availability of the research materials of the impact of climate change on the food security in context of the world, regions and a case study of a single country. The paper has included a few important studies for reviews.

Vedeld et al (2014) surveyed 9 drought-prone villages in Maharashtra and found that crop yield and farmers income had decreased by 60% during 2012-13 as a result of drought which had huge inverse impact on child nutrition.

Kaur and Kaur (2018) verified the impact of climate change on food security by using linear regression during 1990 – 2014 in India and found that a rise in average minimum temperature led to reduce agricultural food index and employment in agriculture. Besides, a rise of rainfall led to reduce agricultural production index and depth of food deficit significantly.

FAO et al. (2018) verified that there is negative impact of the climate change on the four pillars of food security such as availability, access, utilisation and stability – and their interactions.

Even, FAO (2020) exemplified that the people who are related with agricultural production and value chain suffer from food insecurity as an impact of climate change.

Hussain (2019) examined that mean temperature will increase by 0.6°C during 1901-2018 and is expected to rise by 3-5°C by 2100 for which the major crop yield will decline by 25% while in India yield of rice may decrease by 7% within 2050 and 10% by 2080 in the irrigated areas and Maize will decrease by 18% within 2020.

Bhuyan, Mohanty and Patra (2023) examined the influence of climate change on food security in India during 1994-2019 applying Autoregressive Distributed Lag method and found that a 1% increase in area under cultivation led to a 2.4% increase in food security in the short run and a 3.2% increase in the long run or, 1% increase in population growth will decline food security by 3.8% in the short run and 7.8% in the long run. Besides, 1% temperature increase leads to a decrease of food security by 1.2% in the short run and 1.7% in the long run.

Arivelarasan et al.(2023) studied in Tamil Nadu on the impact of food security by climate change and found from the integrated approach that in Cauvery delta future rice productivity will reduce by 35% between 2021-2040 and by 16% between 2041-2050 as an impact of climate change.

Objective

The paper examined the impact of climate change on the food security in India from 2000 to 2021 where the temperature change, emissions from land use, emissions from rice and cereals crops and emissions from CO₂ were considered as indicators of climate change and the food supply per capita per day in kilo calorie was treated as food security in case of India. The paper has applied the traditional multiple regression analysis and the cointegration and vector error correction model to scrutinise the short run and long run causalities among the variables.

Methodology and sources of data

The conventional multiple regression analysis is being represented by the following model:

$$x = \alpha + \beta_i y_i + u_i$$

Where x = dependent variable, y_i = independent variables for $i=1,2,\dots,n$; α = intercept, $\hat{\alpha}_i$ = slopes to be estimated for $i=1,2,\dots,n$ and u_i = random errors. Brown et al(1975) model was applied to use CUSUM statistic.

Johansen(1988) model was used for cointegration and vector error correction analysis.

Wald test (1943) was fitted for checking short run causality in VECM.

The data on the temperature change in °C, emissions from land use in kilo ton per hectare, emissions from rice and cereals crops in kilo ton and the food supply per capita per day in kilo calorie of India were collected from the website of FAO and the emissions from CO₂ in kilo ton were collected from the World Bank during 2000 - 2021.

Results and observations

[1] Conventional regression

The conventional regression analysis states that the temperature change, emissions from land use and emissions from CO₂ have positive impact on the supply of food in kilo calorie per capita per day and negative impact of emissions from rice and cereals on the supply of food in kilo calorie per capita per day in India significantly during 2000-2021 in India. The relationship is highly acceptable since its R² is high of 0.95, F=85.44*, DW=1.09, AIC=9.76, SC=10.01, n=22, *=significant at 5% level respectively.

$$x = 1502.46 + 26.182y_1 - 168.05y_2 + 0.00757y_3 + 0.00019y_4 + u_1$$

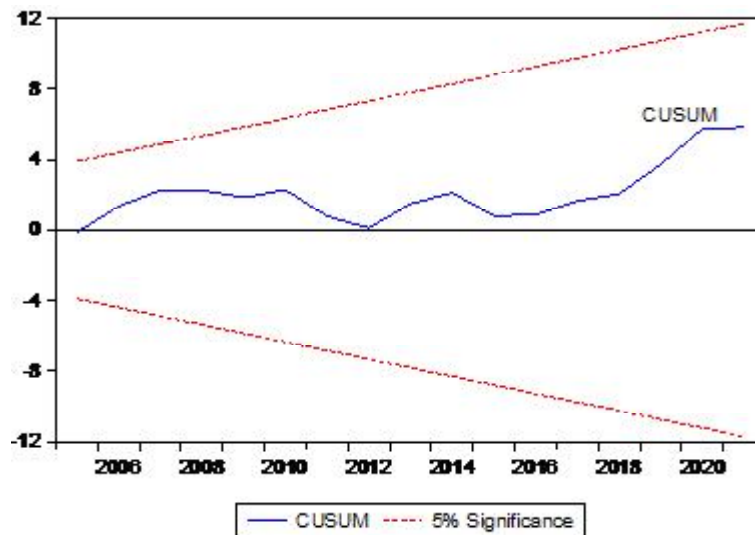
(6.90)* (2.03)* (-2.35)* (4.94)* (5.85)*

Where x = supply of food in kilo calorie per capita per day, y₁ = temperature change in °C, y₂ = emissions from land use in kilo ton, y₃ = emissions from rice and cereals in kilo ton, y₄ = CO₂ emissions in kilo ton.

The positive relation between the temperature change and the supply of food in kilo calorie per capita per day is significant at 10% level while other relations are significant at 5% level.

The regression model is stable since the residual test for cumulative sum (CUSUM) passes through ±5% significant level which is plotted in Figure 1 below.

Figure 1: Stability of regression model.



Source: Plotted by author

[2] Cointegration and VECM

The level series of supply of food in kilo calorie per capita per day(x) has no unit root, temperature change(y_1), emission from land use(y_2) emission from cereals and rice(y_3) and emission from CO₂(y_4) have unit root but their first difference series have no unit root except dy_4 . The Dickey-Fuller (1981) unit root test results are given in Table 1 below.

Table 1:Unit root test

	ADF	Prob	H0=has unit root
x	-5.2322	0.0029	rejected
d(x)	-3.32039	0.093	accepted
y_1	-3.5889	0.0555	accepted
dy_1	-5.8836	0.0006	rejected
y_2	-3.407041	0.0787	accepted
dy_2	-3.5889	0.0555	accepted
y_3	-3.4790	0.0679	accepted
dy_3	-6.2525	0.0003	rejected
y_4	-0.27999	0.9855	accepted
dy_4	0.39987	0.9973	accepted

Source: Calculated by author

The long run association among the determinants of climatechange (y_1, y_2, y_3, y_4) and the indicator of food security(x)in India from 2000-2021 can be examined by Johansen cointegration test (1988) taking all the first difference series and the summary of test revealed that there is minimum 3 significant cointegrating equations as per Trace statistic and 1 significant cointegrating equation in Max Eigen statistic in 5 categories of tests which is given below in Table 2.

Table 2: Summary of cointegration test

Data Trend:	None	None	Linear	Linear	Quadratic
Test Type	No Intercept & No Trend	Intercept & No Trend	Intercept & No Trend	Intercept & Trend	Intercept & Trend
Trace statistic	4	4	5	3	5
Max-Eigen statistic	2	1	1	1	1

Source-Calculated by author

We have taken the assumption of linear intercept and trend to run the Johansen cointegration test for the first difference series of temperature change(y_1), emissions from land use(y_2) and emissions from CO₂(y_4) emissions from rice and cereals (y_3) and the supply of food in kilo calorie per capita per day(x) in India during 2000-2021. The test confirmed that Trace statistic has 3 cointegrating equations and Max Eigen statistics has 1 cointegrating equation whose critical values are accepted at more than 5% level of probabilities. The values have been given in Table 3 below.

Table 3: Cointegration test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.976349	146.2041	88.80380	0.0000
At most 1 *	0.751010	75.06158	63.87610	0.0043
At most 2 *	0.712949	48.64505	42.91525	0.0121
At most 3	0.587785	24.93121	25.87211	0.0651
At most 4	0.346856	8.093197	12.51798	0.2442
		Max-Eigen Statistics		
None *	0.976349	71.14253	38.33101	0.0000
At most 1	0.751010	26.41654	32.11832	0.2118
At most 2	0.712949	23.71384	25.82321	0.0926
At most 3	0.587785	16.83801	19.38704	0.1129
At most 4	0.346856	8.093197	12.51798	0.2442

Source: Calculated by author

Thus, the estimated vector error correction equations with its cointegrating equations, the t values of the coefficients have been given below in Table 4.

Table 4: Vector error correction

Error Correction:	dx_t	dy_{1t}	dy_{2t}	dy_{3t}	dy_{4t}
CointEq1	-1.536997	-0.011833	-0.001064	13.25418	630.0264
t value	[-4.19704]*	[-1.08143]	[-0.52830]	[0.12510]	[0.40933]
dx_{t-1}	0.914680	-0.004756	-0.000582	85.22431	574.3380
t value	[3.16469]*	[-0.55074]	[-0.36607]	[1.01919]	[0.47279]
dy_{1t-1}	-36.54350	-0.482070	0.038743	-2830.125	42744.56
t value	[-3.45247]*	[-1.52432]	[0.66579]	[-0.92417]	[0.96082]
dy_{2t-1}	128.7577	0.075789	-0.156771	7398.453	-109953.6
t value	[2.57845]*	[0.05080]	[-0.57105]	[0.51210]	[-0.52389]
dy_{3t-1}	-0.008624	1.22E-05	-2.91E-06	-1.108605	6.288357
t value	[-5.02673]*	[0.23867]	[-0.30886]	[-2.23339]*	[0.87205]
dy_{4t-1}	-0.000349	-4.70E-06	-2.16E-07	-0.013109	-0.239715
t value	[-4.44887]*	[-2.00296]*	[-0.49934]	[-0.57705]	[-0.72638]
C	-0.397194	-0.004805	0.004050	947.8503	-10563.55
t value	[-0.07197]	[-0.02914]	[0.13348]	[0.59364]	[-0.45542]
R-squared	0.740930	0.678261	0.411389	0.619855	0.381259
F-statistic	5.719916	4.216226	1.397830	3.261149	1.232370
Akaike AIC	9.427378	2.406129	-0.979479	20.76241	26.11448
Schwarz SC	9.775329	2.754080	-0.631528	21.11036	26.46243

Source: Calculated by author (d=first difference,*=significant at 5% level)

The estimated VECM implies that the increment of food supply in kilo calorie per capita per day has negative impact from the increments of temperature change, emission from land use, emission from cereals and rice and emissions from CO₂ respectively and positive impact from the increment of emission from land use significantly during 2000-2021. All other relationships are insignificant.

The vector error correction model consists of 4-unit roots, 4 imaginary roots and other two roots are positive and negative each of which is less than one which implies that the model is nonstationary. The values of roots are given in Table 5.

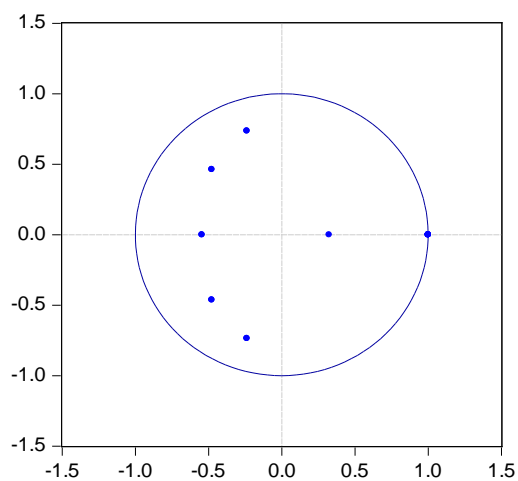
Table-5: Values of roots

root	modulus
1.000000	1.000000
1.000000	1.000000
1.000000 - 2.36e-16i	1.000000
1.000000 + 2.36e-16i	1.000000
-0.237668 - 0.735949i	0.773374
-0.237668 + 0.735949i	0.773374
-0.477459 - 0.463423i	0.665378
-0.477459 + 0.463423i	0.665378
-0.544076	0.544076
0.323871	0.323871

Source-Calculated by author.

Therefore, the values of roots lie on or inside the unit circle which proves that the model is stable.

It is seen in Figure 1 below.

Figure 1: Unit circle

Source: Plotted by author

The vector error correction serial correlation LM test at lag 1 during 2000-2021 assures that there is no serial correlation because at H0=no serial correlation is accepted at 32% on the Rao F statistic at 20% on LRE statistic where LRE statistic(df=25)=30.629 and Rao F statistic(df=25)=1.2927 at n=19.

Vector error correction heteroscedasticity test during 2000-2021 confirmed that $\div 2(180)=189.0337$ whose probability equals 0.3073 where n=19 and df=180 at H0= no heteroscedasticity is accepted.

The residuals of vector error correction model are multivariate normal at H0 which is accepted at more than 5% level of probabilities of Chi-squares of skewness and kurtosis and Jarque-Bera, according to Doornik-Hansen method which is given below in Table 5.

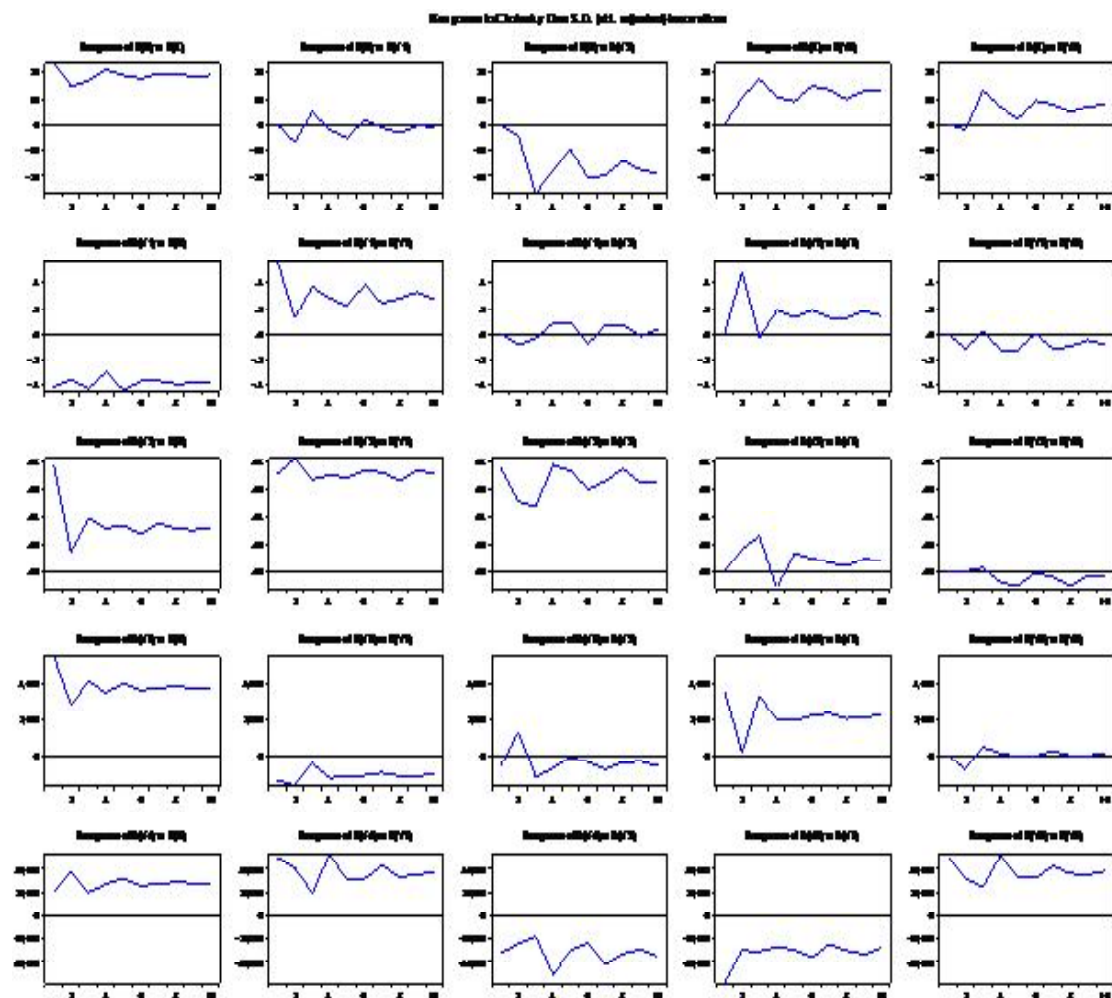
Table 6: Normality test

Component	Skewness	Chi-square	df	Prob.*
1	-0.429777	0.869150	1	0.3512
2	-0.781985	2.680710	1	0.1016
3	-0.751190	2.491942	1	0.1144
4	0.084521	0.034741	1	0.8521
5	-0.656235	1.942883	1	0.1634
joint		8.019427	5	0.1552
	Kurtosis			
1	2.175732	0.706195	1	0.4007
2	3.933174	1.366313	1	0.2424
3	2.968516	0.085905	1	0.7694
4	3.349888	2.859451	1	0.0908
5	2.982590	0.010128	1	0.9198
joint		5.027992	5	0.4125
Component	Jarque-Bera	df	Prob.	
1	1.575345	2	0.4549	
2	4.047023	2	0.1322	
3	2.577847	2	0.2756	
4	2.894193	2	0.2353	
5	1.953011	2	0.3766	
Joint	13.04742	10	0.2210	

Source-Calculated by author,n=19

The impulse response functions state that the response of $d(x)$ to $d(y_1)$ reached equilibrium after 2, 3, 5, 6 and 9 years and then departed narrowly. The response of $d(y_1)$ to $d(y_2)$ reached equilibrium after 2.5, 5, 6 and 8.5 years then diverged away. The response of $d(y_1)$ to $d(y_4)$ reached equilibrium after 3 and 5.5 years then departed away. The response of $d(y_2)$ to $d(y_3)$ reached equilibrium after 3 and 4 years then diverged and the response to $d(y_4)$ reached equilibrium after 2 and 6 years then moved away. Moreover, the response of $d(y_3)$ to $d(y_4)$ reached equilibrium after 2.5, 4, 6 and 8 years and then diverged away. All the responses are shown in Figure 2 below.

Figure 2: The impulse response functions



Source-Plotted by author (d=first difference or increment)

From the Wald test (1943) and the system equations of the VECM, it was found that there are significant short run causalities from the increment of temperature change, emission from land use, emission from cereals and rice and emissions from CO₂ significantly to incremental food supply in kilo calorie per capita per day respectively since the probabilities of Chi-square(1) are less than 5% at H0=no causality which are rejected. All the values of Chi-squares and probabilities have been given in Table 6.

Table 6: Short run causalities

Short run causality from... to...	Chi-square(1)	prob	H0=no causality
From increment of temperature change [d(y ₁)] to incremental food supply[d(x)]	11.919	0.0006	rejected
From incremental emission from land use [d(y ₂)] to incremental food supply [d(x)]	6.648	0.0099	rejected
From incremental emission from rice and cereals [d(y ₃)] to incremental food supply [d(x)]	25.267	0.0000	rejected
From incremental CO ₂ emissions [d(y ₄)] to incremental food supply [d(x)]	19.792	0.0000	rejected

Source: Calculated by author.

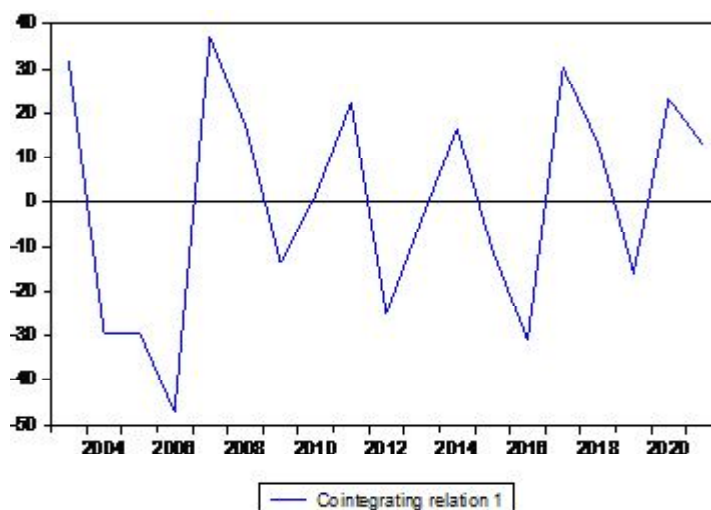
The cointegrating equation was observed as below.

$$Z_{t-1} = -1.536dx_{t-1} - 26.082dy_{1t-1} + 120.508dy_{2t-1} - 0.00706dy_{3t-1} - 0.000203dy_{4t-1} - 0.2525t + 3.6617$$

(-4.197)* (-10.09)* (9.311)* (-27.77)* (-13.49)* (-1.77)

The cointegrating equation states that there is long run causality on supply of food in kilo calorie per capita per day in India during 2000-2021 from the increments of temperature change, emission from land use, emission from cereals and rice and emissions from CO₂ significantly. There are significant negative impacts from the increments of temperature change, emission from cereals and rice and emissions from CO₂ while there is significant positive impact from the increment of emission from land use on the increment of supply of food in kilo calorie per capita per day and the trend relationship is negative and insignificant. The cointegrating equation converges towards equilibrium significantly since the coefficient of dx_{t-1} is negative and its t value is significant at 5% level. The speed of adjustment towards equilibrium was found as 153.6% per year. Since, the t value of coefficient of trend is insignificant therefore the cointegrating equation finally has departed away from equilibrium which is shown in Figure 4 below.

Figure 4: Cointegrating equation



Source: Plotted by author

Discussions and policies

The observations of the model need climate change mitigation and adaptation policies along with green land management, water management, methane emission reduction, and crop diversification so that emissions may decline while control of deforestation and introduction of REDD are urgently needed in India.

Sinha, Rao and Swaminathan (1988) emphasized to maintain adequate food reserves to improve food security by improving transportation and distribution network and suggested for greater importance on land and water management, crop management and post-harvest management. Policies need to maintain the methodology of climate impact assessment.

Das et al (2023) in the WFP and ICRISAT working paper suggested to proceed for future research especially on[i] the effect of climate change on crop productivity, traditional crops, and their nutritional value,[ii] on the long-term effects of climate change on soil fertility, nutrient availability, and the sustainability of agricultural systems in India,[iii] effect of climate change on indigenous food systems,[iv] on the effects of climate change on food distribution systems, its access and the potential for food price volatility and food insecurity,[v] on the social, economic, and political dimensions of climate change and food security and nutrition in India,[vi] on the effect of climate change on food waste and loss and the potential for reducing food waste through climate smart agriculture.

Chakrabarty (2023) cited recent policy of Niti Aayog which took step to transfer a minimum specified sum of cash to affected farmers and landless workers as an instant relief

in which a separate commercially viable crop insurance programme for richer farmers was initiated.

Conclusion and limitations

The paper concludes that the impact on the supply of food in kilo calorie per capita per day from the temperature change, emissions from land use and emissions from CO₂ were positive and the emissions from rice and cereals was negative during 2000-2021 in India which was found from the regression analysis and the model assured its stability. Johansen cointegration results revealed that there is at least one significant cointegrating equation in Trace statistic and Max Eigen statistic under intercept and trend assumption in the first difference series which assured long run association among the variables. There are significant short run causalities from the increments of temperature change, emission from land use, emission from cereals and rice and emissions from CO₂ significantly to incremental food supply in kilo calorie per capita per day respectively. Besides, there are significant long run negative causalities from the increments of temperature change, emission from cereals and rice and emissions from CO₂ while there is significant positive long run causality from the increment of emission from land use on the increment of supply of food in kilo calorie per capita per day. The cointegrating equation has been converging towards equilibrium with the speed of adjustment 153.6% per year. The impulse response of increment of supply of food in kilo calorie per capita per day to increment of temperature change converges towards equilibrium. The model has no serial correlation and heteroscedasticity problems and the variables are multivariate normal.

The observations and results of the paper will be more effective if the time series data might contain more additional years. If food price inflation rate, value added in agriculture, agricultural production index and average rain fall were taken as independent variables then the research paper might be improved.

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There is no conflict of interest in the publication of the paper.

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Problem of Agricultural Marketing in India

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Abstract:-

Agricultural marketing plays a crucial role in the economic development of India, primarily because agriculture is a significant contributor to the country's economy and employs a large portion of its workforce. Agricultural sector continues to be mainstay of life for majority of the Indian population. It contributes around 15% of the GDP. The share of agriculture in India's GDP declined to 15% in last fiscal year. and employs 47.76% of the workforce in the country. The Government of the India under the ministry of agriculture has also set up specific commodity Boards and export promotion council for monitoring and boosting the production, consumption, marketing and export of various agriculture commodities. Some of this organization /Board are Cotton Corporation of India(CCI),Jute Corporation of India(JCI),Tea Board, Coffee Board, Spice Board, National Horticulture Board(NHB),National Agricultural Marketing Federation, Agricultural product Export Development Authority(APEDA).Most agricultural commodity markets generally operates under the normal force of demand and supply. However with a view to protect farmer's interest and to encourage increased production, the government also fixes minimum support price(MSP) for some crops like paddy, wheat, jute etc as public policy implement.

The government also promotes organized marketing of agricultural commodities in the country through a network of regulated markets. There are 7161 Wholesale Regulated Markets in the country, besides there are also 7293 wholesale markets and 27,294 rural periodic. This paper throws light on importance of agricultural marketing in India and problem of agricultural marketing in India .

Keywords:-*PMKSY,APMC,eNAM*

Introduction:-

Agricultural marketing comprises of all the operations involved in the movement of food and raw materials from the place of production to consumption. It includes handling of production to the place of consumption .It includes handing of products at the farm , initial processing, grading and packing in order to maintain enhance the quality and avoid wastage

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.It is the study of all activities agencies and policies involved in the movement of agriculture produce from the farms to the consumers.

India is an agricultural country and one third population depends upon the agriculture sector directly or indirectly. Agriculture remains as the main occupation of Indian Economy since independence. Indian agriculture sector contribution to the national gross domestic product is about 15%. Food being the need of mankind emphasize has been given to commercialization of agriculture production. Agricultural commodities have special characteristics and therefore marketing of agricultural commodities is different from marketing of manufactured goods.

Agricultural marketing is mainly the buying and selling of agricultural products. In earlier days when village economy was more or less self sufficient the marketing of agricultural product did not have difficulty as the farmer sold his produce to the consumer on cash or barter basis, but recently the trends in agricultural marketing affect the farmers. The end user or consumer and public at large. Marketing efforts change both cost and benefits. There is increasing concern with cost and benefit of agricultural commodities. Good marketing of food grains play a crucial role in solving the problem of hunger and malnutrition in developing countries like India.

Marketing is an economic link between producer and consumer. The marketing triggers process of development. An efficient marketing system can arrange equitable distribution or scarce and essential commodities. A good marketing system plays a vital role to achieve price stability, equitable distribution of commodities and services and thereby achieve economic growth.

Commodities in Agricultural Marketing

Items of agricultural marketing or rural marketing out items can be classified into seven group

- i) Horticulture produce
- ii) Food grain items
- iii) Oilseed produce
- iv) Fibre produce
- v) Beverage items
- vi) Cash items and
- vii) Animal produce

The horticulture items in class (i) above are sub-classified as flowers ,spices ,vegetables and fruits.

Importance of Agricultural Marketing in Economic Development

There are basically two sides of agricultural marketing. The marketing, economic and social theories are used to analyze the situation. Analyze is also made as to how good the system is working to contribute to the public interest and serving all sections of society or stakeholders in the process. Macro marketing also views at how the agricultural systems are organized and how good it contributes to its social and economic goals and how agricultural system is adapting and changing over time.

The second side is micro marketing or commonly known as business marketing. Micro marketing consists of demand stimulation, competition, new product development, market research, pricing and distribution strategies, customer service and other marketing inputs. Micro marketing view is taken by an individual decision maker in the agriculture industry. This could be villager who produces, a business manager, a consumer who is making decision about how, when and where to buy or sell. The marketing channels develop marketing strategies to satisfy customers at a profit by using the tools and principles of marketing management. Both the macro and micro marketing views affect agricultural marketing.

The agricultural marketing helps in accelerating the pace of economic development by stimulating demand and production. Due to the green revolution, India is able to feed its large population and minimize starvation related deaths. The development of high yielding seeds, use of chemical fertilizers, use of plant protection methods and use of modern agricultural implements are reasonable in increasing food production and generate large marketable surplus. A good marketing system only can guarantee the tempo of development and good prices to farmers for their produce. With larger resources, India can leverage its plus point to make India the next economic power house. The Indian farmers have shifted from traditional agricultural methods to modern farming. The development of agricultural economy has led to increase in demands for related products. Since 1970-71, the Indian population has doubled and food grains production has matched the demands. Agricultural marketing helps in the development and specialization crops which yield large profits. A good marketing system helps in giving price signals and development of agricultural sectors in the economy. Agricultural production and marketing must develop hand in hand. They are partners in progress.

The active government participation in the development of agriculture in planned economy and policies in 4th to 9th five year plans have turned agriculture to market orientation. The plant outlays for agriculture in the 11th five year plan are high and lays emphasize on agro-sector growth. Some of the sectors where agricultural marketing plays its important role in the Indian economy

- i) Contributor to National GDP Growth
- ii) Increase in agricultural produce and incomes
- iii) Reduce middle men
- iv) Optimizer of resources

- v) Stabilizer of prices
- vi) Demand Developer
- vii) Infrastructure Developer
- viii) Earn Valuable foreign exchange
- ix) Meeting emergency
- x) Developer of new technology

The first commission on development of agriculture in India after independence called the National Commission on Agriculture noted that “ There is an increasing awareness that is not enough to produce a crop or animal product, it must be marketed well .Increased production resulting in greater percentage increase in marketable surplus accompanied by increase in demand from urban population, calls for a rapid improvement in existing marketing system with emphasis on the importance of agricultural marketing.

Problem of Agricultural Marketing in India

Agricultural marketing in India faces several challenges, which can hinder the efficient functioning of the sector:

1.Fragmented Market Structure: -

The agricultural market in India is highly fragmented with a large number of intermediaries between farmers and consumers. This results in inefficiencies increased transaction costs and reduced profits of the farmers.

2.Lack of Infrastructure: -The agricultural market in India is highly fragmented with a large number of intermediaries between farmers and consumers. This results in inefficiencies, increased transaction costs,and reduced profits for farmers.

3.Information Asymmetry: -Farmers often lack access to timely and accurate information regarding market prices, demand trends, and quality standards. This information asymmetry puts them at a disadvantage during negotiation with traders and middlemen.

4.Regulatory Constraints: -Complex regulatory frameworks governing agricultural marketing vary across states and can create barriers to interstate trade.Additionally, restrictions on the movement of agricultural commodities can hinder market.

5.Limited Access to Credit and Finance: -Many smallholder farmers in India face challenges in accessing credit and finance to invest in modern agricultural practices and marketing infrastructure.This limits their ability to improve productivity and access higher-value markets.

6.Low Value Addition: -The predominance of traditional farming practices and limited value addition activities result in lower returns for farmers. Encouraging investment in agro-

processing and value addition industries could enhance farmers' incomes and create employment opportunities.

7.Price Volatility: -Fluctuations in market prices due to factors such as weather conditions, global market trends, and policy changes can expose farmers to significant income risks. Risk mitigation measures such as crop insurance and futures markets need to be strengthened.

8.Inadequate Market Intelligence: -Lack of reliable market intelligence systems make it difficult for farmers to make informed decisions about what crops to grow and when to sell. Developing robust market information systems could help address this challenge.

Addressing these challenges requires comprehensive reforms aimed at improving market infrastructure, promoting value addition, enhancing market access, and providing better support services to farmers. Government interventions, private sector investments, and community initiatives can all play a role in transforming agricultural marketing in India.

Measures Taken by the Government

1.Government Initiatives: -The Indian government has been implementing various initiatives to improve agricultural marketing in the country. The Electronic National Agriculture Market (eNAM) platform, launched in 2016, aims to create a unified national market for agricultural commodities by linking existing APMC (Agricultural Produce Market Committee) mandis electronically. Additionally, the Pradhan Mantri Kisan Sampada Yojana (PMKSY) focuses on creating modern infrastructure for food processing, which indirectly impacts agricultural marketing.

2.Market Infrastructure: -Despite efforts to modernize agricultural markets through initiatives like eNAM, challenges remain in improving market infrastructure. Many farmers still rely on traditional mandis, which often lack adequate facilities such as storage, grading, and transportation infrastructure.

3.Market Integration: -Inter-state barriers and fragmented markets continue to hinder the seamless flow of agricultural commodities across regions. While eNAM aims to address some of these issues, further reforms are needed to promote market integration and reduce transaction costs for farmers.

4.Price Discovery and Transparency: -Information asymmetry and lack of price transparency are persistent issues in agricultural marketing. Farmers often lack access to real-time market information, leading to exploitation by middlemen. Efforts to improve price discovery mechanisms and provide farmers with better market information are crucial for addressing this challenge.

5.Value Addition and Export: -There is growing recognition of the importance of value addition and agricultural exports for enhancing farmer incomes and promoting economic growth. Initiatives such as the Agricultural Export Policy aim to promote value addition and boost agricultural exports, requiring improvements in marketing infrastructure and quality standards.

4. Technology Adoption: -Technology plays an increasingly important role in agricultural marketing, enabling farmers to access market information, engage in online trading platforms, and adopt efficient post-harvest management practices. Encouraging technology adoption among farmers and strengthening digital infrastructure are key priorities.

5. Supply Chain Resilience:-The COVID-19 pandemic highlighted vulnerabilities in agricultural supply chains, underscoring the importance of building resilience and flexibility in marketing systems. Efforts to strengthen supply chain infrastructure, reduce bottlenecks, and promote alternative marketing channels are essential for mitigating future disruptions.

Conclusion:-The problem of agricultural marketing in India persists due to various systematic challenges that hinder the efficiency and effectiveness of the sector. The challenges include fragmented market structures, inadequate infrastructure, information asymmetry, regulatory constraints, limited access to credit and finance, low value addition, price volatility and inadequate market intelligence.

These issues not only affect the profitability and competitiveness of farmers but also pose significant barriers to economic development, rural livelihoods and food security in India. Moreover, they impede efforts to integrate Indian agriculture into global value chains and capitalize on export promotion.

Addressing the problem of agricultural marketing requires comprehensive reforms aimed at improving market structure, promoting value addition, enhancing market access and providing better price support services to farmers. Government interventions, private sector investments and community initiatives all have a role to play in transforming agricultural marketing in India. Efforts to modernize agricultural markets, promote digitalization, strengthen value chains, streamline regulations and improve market information systems are essential for overcoming these challenges and unlocking the full potential of Indian agriculture. By addressing these issues, India can foster sustainable agricultural growth, enhance farmer incomes, stimulate rural development and ensure food security for its growing population.

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MPI (Deprivation) Scores and Poverty Removal Programmes A Perennial Shift or an Eyewash

Diwaker Singh Tomer, Dr. Manan Koshal & Dr. Vikas Pradhan

Abstract:

Multi dimensional poverty index (MPI), has emerged as touchstone to measure poverty and in order to depict success of poverty removal programmes a nation has to perform better in MPI (deprivation) count. As world is looking at poverty from the goggles of the MPI, which connotes that if a nation needs to score high on poverty eradication, the nation has to score high in terms of MPI report card. There is fierce competition among nations to outshine others. In tackling this menace, planners have devised many techniques and adopted multitudes of approaches. In its recent report entitled, “2023 Global MPI, Unstaking global poverty: Data for high impact action”, UNDP reported that 25 nations have halved their poverty in last 15 years. In India, 415 million people have come out of poverty in corresponding period. Scoring high in MPI terms can in its impact be ad-hoc, temporary or with sustainable effect. This paper through its exploratory method, endeavors to analysis the viability of the some of the poverty removal programmes adopted by the GOI from point of view of the sustainability and long term viability. The measures having short term advantage and which are not sustainable without repetitive dose of state assistance have been categorized as “eyewash” with aim of artificially improving MPI count. As has rightly been pointed out by Fanni Kovesdi, research analyst in OPHI in 2021 in a paper “going beyond the global MPI: a new international measure for moderate poverty” that, “this requires governments to go beyond reducing acute deprivation and work to guarantee enhanced livelihood for all.” Present paper aims at identifying the approach to be adopted so that the poor attain substantial escape i.e. without reverting back to the poverty trap, by generating self-propelling capabilities and with such infrastructure, which enables escaped poor to remain APL, even though external assistance and the state bounties has been removed.

Keywords: Poverty, MPI, Programme, Eradication, Deprivation, Sustainability, Nations

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Introduction:

Towards the poverty eradication, various strategies have been adopted. India was left scarred after the nearly two decades of colonial rule. Even though some work of modernization like railway, telegraph, lopsided industrial centers, irrigation network in some parts of India were undertaken but predominantly India was a rural, agricultural based, under industrialized, low in literacy, intensely poor, low on health parameters and with barely any sign of modernization or development. (Corbridge S, 1991)¹ has rightly summarized the state of Indian economy as ,” the period of arrested development”. At the time of Indian independence, majority of its population was in the grip of poverty. (Dandekar and Rath, 1971)² have estimated that in 1960 the ratio of population under poverty being 40 and 50 percent in rural and urban places respectively. In order to fight the menace of poverty socialistic pattern of the society was adopted and a plethora of poverty reduction programmes like IRDP, NREP, RLEGP, JRY, Jawahar Gram Smaridhi Yojna, Sampoorna Gram Rozgar Yojna, Indira Awaas Yojna, Food for work programme, National Social Assistance Programme (NSAP) consisted of national old age pension scheme (NOAPS), national family benefit scheme (NFBS) and national maternity benefit scheme (NMBS), Rural employment generation programme (REGP), PMRY, Prime minister employment generation programme (PMEGP) by merging REGP and PMRY, Swarn Jayanti Shahri Rozgar Yojna (SJSRY), Swarnjayanti Gram Swarozgar Yojna (SGSY), Mahatma Gandhi National Rural Employment Guarantee act (MGNREGA) were undertaken.

In recent years, thanks to the efforts of the government and targeted programmes like Pradhan Mantri Jan Dhan Yojana (2014), Swachh Bharat Mission (2014), Pradhan Mantri Awas Yojana (2015), Pradhan Mantri Ujjwala Yojana (2016), PM Sahaj Bijli Har Ghar Yojna - Saubhagya (2017), Samagra Shiksha (2018), Poshan Abhiyan (2018), Anaemia Mukh Bharat (2018), Jal Jeevan Mission (2019) and a host of initiatives, that India has performed extensively better in all 12 MPI parameters.

There has been an impressive outcome of these efforts in poverty reduction as envisaged by NITI Aayog’s Report, ‘National Multidimensional Poverty Index: A Progress Review 2023’³. The finding of the report are based on National Family Health Survey [NFHS-5 (2019-21)] and claims that 13.5 crore Indians have been brought out of poverty and MPI score have improved from 24.85 % to 14.96 % from 2015 - 16 to 2019 - 21.

The multifaceted strategy, which incorporates a targeted approach to improving the conditions that contribute to an enhanced MPI score, has yielded impressive results. However, the key concern is whether this approach is sustainable and if its outcomes are durable over time. Many of the efforts aimed at improving the MPI scorecard have relied on state support and handouts. The more pressing issue, beyond simply achieving temporary gains in poverty reduction through government bounties, is whether these improvements will be permanent or merely transitory - leaving those who experience them vulnerable to falling back into poverty once state subsidies are withdrawn.

The aim of this paper is to analyze poverty elimination efforts according to their potential for permanency and consistency; distinguishing between ad-hoc measures and initiatives aimed at building sustainable capacity. The goal is also to categorize such efforts as either effective in the long run or mere artificial enhancements that place a perennial burden on state coffers.

Review of prevailing thoughts

(Gamboa et al, 2020)⁴ have in their article expressed views that though most of the economist agree that poverty has multidimensional traits but when it comes to poverty removal programmes it is lopsided and covers only one or few sides of the poverty angles leaving others either untouched or hidden. He maintains that with the philosophy of Sen there has been a paradigm shift in the looking at poverty and emphasis is more on capacity building. Three approaches have been practised in developing nations viz, micro finance with special thrust on poverty and social inclusion, agricultural and allied farm activities and good governance, these being the epitome of whole paraphernalia. (Kumari L, 2013)⁵ states that Poverty essentially consists of two elements, narrowly defined “income” poverty and a broader concept of “human” poverty. Income poverty is defined as in-capacities of earnings to match with national poverty line while human poverty being broader concept connoting denial of choices and opportunities for a tolerable life in all economic and social aspects. While exploring the experience of Latin American and Caribbean countries (Abramo et al, 2019)⁶states that blaming poor and citing ‘non-effort’ on their part to fight poverty is only a prejudice against them, fact being that multitudes of poor are willing to work and fight this menace but find vacuum of opportunities to work. They prescribe social and labour inclusion by programmes such as conditional cash transfers, labour and production inclusion programmes and social pensions etc. (Taiwo, 2016)⁷ suggests that poverty being a multidimensional problem should be treated with multi-pronged approach social as well as financial.

Peeping into the cause of poverty

To tackle the problem effectively we first need to know the causes and the gravity of the problem. Likewise, to solve poverty we first need to know exactly what circumstances, conditions, situations, incidents, activities are responsible to make poor a poor. The prime reasons though unconventional type in nature, which can be attributed to cause poverty are:

1. Inherited poverty
2. Large sized poor family
3. Medical emergencies
4. Social customs from birth to death in certain communities involving conspicuous expenditure
5. Expensive justice delivery mechanism and corruption

6. Individuals vices like intoxication, gambling etc
7. Illiteracy, flawed education system, financial illiteracy and lack of discipline etc
8. Wrong pattern of social up-liftment policies like reservation system
9. In appropriate land ownership system

Inherited poverty

Inherited poverty is a significant aspect of the poverty cycle. With each new child born into an already poor family, the burden of raising them deepens as they cannot earn for several years. This perpetuates the cycle and leads to poor education, health, and social issues like substance abuse and crime.⁸ Thus, there is a complete cycle of inherited poverty which entails and bigots a further never ending poverty cycle naturally.

Large sized poor family

Large families can be beneficial for the poor as they can use their children for income-generating activities at a young age, such as begging, waste picking, domestic work, and working in family businesses. However, this may hinder their future education and earning potential. (Maurya OP,2001)⁹ has in a paper cautioned that the amount of child labour is near to 20% of child population. Child labour is less a phenomenon of poverty than of social attitudes and sensibilities.¹⁰ such children develop into a underdeveloped individual and remain less capable in comparison to the peer youth thus limiting their earning capacity for life. (Francoise Remington, 1996)¹¹ has said that this phenomena is not a result of poverty rather than a cause of it.

Medical emergencies

The cost of medical treatments are sky-rocking day by day. As out of pocket cost increases the poor and near poor find it extremely difficult to sail through the situation. In a study in china (Liu et al, 2003)¹² suggests that medical expenses were a major contributor in making rural china poor and it increased the rural poverty by 44.3%. in India though the percentage of out of pocket expenditure as percentage to current health expenditure has come down from 74.1 % in 2001 to 50.59 % in 2020¹³, still it is magnificent expenditure with wide scope for public expenditure to be incurred, health of subject being prime state responsibility. Thus this being a major cause of transient poverty here too.

Social customs ranging from birth to death in certain communities involving conspicuous expenditure

Another major concern is the ostentatious expenditure incurred in the name of social customs. In Indian society, there exists a propensity to spend extravagantly on various customary practices ranging from birth to death, and even beyond life (Mratyu Bhoj) system. These traditions are perceived as sacred duties by Indians, compelling them to incur significant

expenses regardless of their financial condition; often resorting to debt in order to perform these rituals. (Bowles et al, 2006)¹⁴ in his book finds primary role of social customs being the prime source of the poverty of nations.

Expensive justice delivery mechanism and corruption

The other system responsible for impacting financial viability of people being its judicial system. Indian judicial system is too inefficient, exorbitantly costly and extremely time-consuming process. (Jaithlia and Maheshwari, 2010)¹⁵ have brought out that slow delivery of justice, the appointment of judges enmeshed in controversies, ineffective disciplinary mechanisms as characteristics of Indian judicial mechanism. Loss to poor in litigation is in two ways firstly by paying the direct costs in court process and transportation, secondly by losing the wage for absenteeism for attending court proceedings. This creates pessimism and hopelessness in mindset. Hopelessness hits the will power and morale and is a core experience, associated with poverty.¹⁶

Equally responsible for similar plight is corruption. Term corruption has here been taken in broader connotations and does not only covers the monetary favours demanded for doing wrong / right actions but also involves lapses / delays / manipulations / intrigues/ excessive adherence to process to create procedural delays / legal atmosphere of delayed justice by extra application of judicial discretion and morale tergitude etc.the corruption in any form thwarts the poverty elimination drive / programmes by diverting / nullifying the efforts and resources and more dangerously it creates a psychological roadblocks in the mind of poor.

In this regard forbes¹⁷ states, to quote, "Corruption delays, distorts and diverts economic growth." With this it is ample clear that corruption is also a major factor which has severe impact on the willpower of the people and this degenerate the spirit to fight. This results in gloomy perspective pervading in the mindset of the poor masses that their misfortune is everlasting as the poor will not be able to gain the benefits of the bigger plans as they have nothing to offer as bribe and are having pitchless voice or powerless arm to raise hands. We may call it the poverty cycle from the psychological perspective.

Individuals vices like intoxication, gambling etc

The other vices prevailing in the poor families like intoxication, gambling, indiscipline towards their occupation, high mindedness, lack of craving for earning due religious impressions are some of the affecting factors which do not let a poor family grow and even on many counts if liberated from poverty brings the family back into poverty trap.

Illiteracy, flawed education system, financial illiteracy and lack of discipline etc

Education plays a vital role in curbing poverty. Education brings knowledge, awareness, analytical capacity, decisiveness and increases intelligence. Government launches many policies,

programmes, schemes etc to support the poor but due to unawareness they fail to take advantages of them. The corruption in society specially in g- Sec is due to lack of morale education and lack of education among the trapped masses. (Taiwo, 2016)¹⁸ points out that in order to serve self interests during framing of poverty removal policies and their implementation, corruption and dishonesty creep in. Indian education system is unable to inculcate value system among people and thus they resort to corrupt, in-ethical and short cut methods. Another problem of the education system in India is of relevancy. Besides just amassing aimless degrees, the education system should be need based and should be linked to the application of degree holder in broader futuristic occupational requirement and plan.

Wrong pattern of social upliftment policies like reservation system

Speaking on the topic of reservation system has generally been a danger zone to enter. Reservation was first adopted by the colonial rule to follow 'divide and rule' policy, for weakening the nationalist agenda of then INC.¹⁹ Reservation system, which was on pretext of a serene idealism of uplifting the poor and downtrodden, has in its present form proved defective. First defect being the reservation based on the social class rather than based on financial position. Poverty has no cast, creed, faith or class. (Galanter M, 2002)²⁰ in the scholarly article proposes the idea to measure the backwardness based on financial or literacy standards rather than based on cast base. In its present form reservation system partially succeeds in serving the purpose of poor upliftment. Any such measure should be commonly applied among poor of all categories. Second shortcoming being its is unlimited in application. Hand holding should have a limit of just providing condition to enable self propelling. It should not be unlimited as is in practice. The reservation at higher positions breeds inefficiencies and incapacity's which are harmful for nation and society in broader terms and hinders the optimum use of best available human resources. Third lacuna which is self defeating in its purpose being the cascading provision of reservation. Repeating doze of reservation benefits to same person or family is unjustified at cost of other members of same class. On the pretext of social justice it is social plundering in offing. (Paramjit S judge, 2014)²¹ states that impact of cast based reservation has resulted in making an elite class within privileged class who have identified themselves distinctly from their original cast. It forces competition between the heterogeneous members of a homogeneous class. It should be ensured that a particular person or family takes advantage only once or in limited way so that others of the same society can also make use of it and fight their poverty and deplorable conditions.

In appropriate land ownership system

Roughly 44 %²² of Indian population is engaged in primary sector occupational activities. And it contributes barely 22 percent of national GDP. The figure itself exposes the low earning capacity of the sector. Around 80 percent of Indian farmers are small and marginal farmers. Average size of holding in Uttar Pradesh and Uttarakhand being 0.73 and 0.85²³ hectare respectively. Such small unit size is cause of low yield per acre. The government

should have a plan of either buying back uneconomical small land holding or plan cooperative farming, so that the production per acre should be enhanced and people earn higher income.

Measures adopted to contain poverty through MPI Gateway

Poverty removal has been a top priority of GOI since independence, through tailor made programmes to hit specific trait of poverty. These programmes can be broadly classified under following categories:

- A) Training Training and skill development programmes to make him employable. (Skill development programmes)
- B) Direct assistance in cash allowances or scholarship and pension programmes in form of social security measures. (Social assistance programmes in form of freebies)
- C) Educational subsidies, free books, uniform and provisions of mid-day meal in schools and other in-kind assistance etc
- D) Extension of credit facilities and financial assistance for unemployed person to start his business. (Self employment programme)
- E) Providing paid part / full-time paid job. (Wage employment programme)
- F) Health-care facilities

The topic of poverty removal efforts of the government is quite exhaustive and we shall contain our self to the present theme of improving indicator of poverty through MPI report card improvement. The table below indicates the various programs initiated to better MPI count.

Table 1: Indicating the MPI score chart and related GOI sponsored programmes

MPI Factor	Sub factor	Connotation	Weight	Examples of GoI programmes with analysis
Health	Nutrition	Any person under 70 years of age for whom there is nutritional information is undernourished	1/6	Mid day meal, PM Garib Kalyan Anna Yojna covering 81.35 crore beneficiaries
	Child mortality	A child under 18 has died in the household in the five year period preceding the survey	1/6	Starting with National programme for family planing in 1951, diarrhoea disease control programme and expended programme on immunization in 1978, universal immunisation programme in 1985, child motherhood and safe immunisation programme in 1991, national rural health mission in 2005, national urban health mission 2008, mission Indra dhanush (2014), Poshan Abhiyan (2018), Anaemia Mukh Bharat (2018), Ayushman Bharat - PM jan arogya yojna (2018), etc
education	Years of schooling	No eligible household has completed six years of schooling	1/6	Samagra shiksha Abhiyan, and provision like scholarships, free uniforms, bags, textbooks, right to education act 2005 has given legal canvas to the educational needs of the Indian children.
	School attendance	Any school aged child is not attending school upto the age at which he / she would complete class 8	1/6	
Living standards	Cooking Fuel	A household cooks using solid fuels such as dung, agri crop, shrubs, wood, charcoal or coal	1/18	PM Ujjwala scheme
	Sanitation	A household has unimproved or no sanitation facility or it is improved but shared with other household	1/18	Swachh Bharat Mission, Making villages ODF and (Individual household latrine) IHHL scheme in urban area.
	Drinking Water	The households source of drinking water is not safe or safe drinking water is a 30 minute or longer walk from home round trip.	1/18	PM Jal Jeevan Mission (JJM)
	Electricity	The household has no electricity	1/18	PM Sahaj Bijli har ghar yojna - Saubhagya, PM Surya Ghar Yojna
	Housing	The household has inadequate housing materials in any of the three components i.e. floor , roof , walls	1/18	Pradhan Mantri Awas Yojna (PMAY)
	Assets	The household does not own more then one of these assets : Radio/TV/ Telephone / computer/ animal cart / bicycle / motorbike / refrigerator and does not own a car or truck	1/18	Various government sponsored schemes like free laptop / tablet / smartphone schemes to meritorious students etc.

Partial Source: Global MPI dimensions

Poverty elimination policy and programme: Effective Vs Eyewash.

In the competitive world environment governments are drastically inclined to outperform others. Various government have devised programmes even adopted shortcuts to impress upon the points to score in MPI count, unmindful of their long term sustainability. There are many one time go policies of the government which though temporarily looks like departed from the deprivation but actually in further term have net zero effect on lifestyle or on the actual well being of the targeted individual or family. If a policy / programme / training / financial assistance is capable of creating condition of self dependency without further support from the state or without repetitive dose of external freebies then the programme has virtual meaning in addressing the MPI else it is only an eyewash just to score high temporarily on MPI. The table(s) below expatiates the narrated concern:

Table1.1: Analysis of MPI factors and state intervention

MPI Factor	Sub factor	Effective Vs Eyewash
Health	Nutrition	The provision of food assists in healthy body and mind which results in capacity building for making endeavours for fighting poverty. On other hand it also breeds negatively by dis-incentivising efforts with freebies and they becomes parasite on state assistance. State support should be limited to emergencies to avoid rewarding laziness and eroding citizens' character. Providing support without programs for self-earning and capacity development is ineffective tool in long run.
	Child mortality	Heath of the subjects is the prime responsibility of the state. Irrespective of the financial status the population should be aided in ensuring good health and all the expenditure made in this direction even if supported by the government have long term positive implication. Good health is a pre-condition to fight poverty.
Education	Years of schooling school attendance	Education being the fundamental state function, any amount of education / training / skilling in order to make them employable and thus hitting at poverty is a measure with deep impact with long term sustainability. To reduce poverty, the government should train unemployed people with industry skills and directly connect them with jobs. Improving elementary education may increase MPI count but does not address poverty eradication.
Living standards	Cooking fuel	Any gun shot measure like providing freebies and making a tick mark in the qualifying list of MPI count is an artificial non sustaining measure of removing poverty. Without the corresponding repetitive purchasing capacity development the purpose is defeated as the family is forced to switch to traditional method of cooking once free unit of cooking gas is finished. So without permanent free supply of LPG for cooking food the scheme in its present form is just an eyewash.

	Sanitation	Under Swachh Bharat mission, the scheme like making villages, open defecation free (ODF) by providing assistance for making house hold latrine and in urban area scheme like Individual household latrine have contributed towards hygiene living and sanitation. This is one time sustainable impact programme.
	Drinking water	PM jal jeevan mission(JJM) - har ghr jal has provided water tap connection in every targeted village household. This aims at improving quality of life. As per report of Ministry of jal shakti PIB report since launch 9.42 crore rural household have been provided tap connections, thus covering 65 percent of the household. However, the dried tap only pay lip service to the intentions and in only a superficial solution by temporarily enhancing the MPI scores.
	Electricity	These scheme help improving the MPI count and facilities provided are one time but permanent in nature, except in case of electricity connection of traditional type where if an household is unable to pay the electricity bill then they revert back to the deprived status. In all cases this has credible and sustainable impact on removing poverty.
	Housing	
	Assets	

Source: Global MPI dimensions²⁴

Table1.2: Umbrella scheme improving MPI indirectly

Sector / Programme dimension	Modus-operandi
Self employment programmes	<p>Many poor have the potential for taking business risk and want to fight their own destiny with the business activities but they lack venture fund. For this the government has opened various credit based facilities. MUDRA yojna, Coir Udyami Yojna, KVIC/KVIB/DIC sponsored schemes under PMEGP, standup India, DRI schemes, bank linkage of SHG under NRLM etc are the efforts in this direction. Creation of CGTMSE (Credit Guarantee Fund Trust for Micro and Small Entrtprises) by min of MSME (GOI) and SIDBI has done away the need to mortgage by the aspirant.</p> <p>NRLM through predominantly its woman SHG model has emerged as an impressive tool to combat poverty effectively. Presently there are 100,245,234¹ household mobilised into SHG in India. Union budget of 2024 -25, envisaged the target of making one crore woman assisted by 83 Lacs SHG as “lakhpati didi”. This will be an effective tool in transgressing the poverty at the grassroots level. The scheme being of woman empowerment, shall have broad spectrum of benefits on family and societal development and welfare and is likely to be game changer in fighting the menace of poverty.</p>

Health	Health is one of the three basic state functions other being defence and education. Even though GOI spends massive amount (2.2 ² percent) of GDP in recent years, still out of pocket expenses of Indians are extremely high. ³ The programme like Ayusmaan Bharat have given lot of respite to the poor from the healthcare expenses, however, Future Generali ⁴ reported that 55 million of people in India were dragged into the poverty net because of high out of pocket health expenses. GOI needs to broaden the scope of programme in both verticals i.e. in coverage and insured amount so as to be more effective in fighting poverty.
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Conclusion:

It is clear from the above discussion that not all the policies / programs are having same impact on the poverty removal. Some measures are transitory in effect while other proves to be sustainable in nature. The transitory measures like any kind of freebies be it in form of Ujjavala, giving electric connection to every household etc are such measures which lose their utility once the further dose of the state support is not provided and subject revert to previous state of facility vacuum. Like if someone is not having capacity to refill the LPG¹. Nearly 9.2 million customers did not take any refill in 2021-22 and 10.8 million customers took only one refill, thus approximately 20 million of the 93.4 million beneficiaries of PMUY took only maximum of one LPG refill means reverting to fossil fuel for cooking, though temporarily we are able to tap our back and artificially improve our MPI scores, similar is the case with electric connection with no capacity to pay monthly bills. Then there are infrastructure planning lacuna like provisioning water tap in every household which never runs and are just a showpiece in the house implementing har ghr jal mission. To conclude, the aim of the policies should be viable infrastructure development and human capacity development so that the subjects do not depend upon the state and external assistance for living a satisfactory human standards life. Though not all state aids cannot be terms as worthless like food to direly poor, medical aid to all, thrust on education, skill development etc as they are necessary for sustaining life and create precondition to take off, they will deliver results in long run as their gestational period is quite long. Further deep research needs to be undertaken to identify within policies and programmes to distinguish between an artificially MPI scoring effort, an eyewash or an action having real impact in creating enabling and sustainable capabilities.

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Microfinance and Urban Street Vendors: An In-depth Analysis of PMSVA Nidhi Scheme Implementation

Arpita Singh

Abstract

Street vendors constitute a vital component of the urban informal economy, ensuring access to affordable goods and services for city residents. The COVID-19 pandemic disproportionately impacted these vendors, emphasizing the urgent need for intervention, particularly through the Pradhan Mantri Street Vendors' Atmanirbhar Nidhi Yojana (PM SVANidhi). Launched on June 1, 2020, this scheme provides working capital loans with a manageable 7% interest rate, benefitting around 50 lakh street vendors nationwide. The study evaluates the scheme's impact post-pandemic, emphasizing its role in reviving individual businesses and contributing to the broader urban economy. The study is based on data collected from different sources such as articles, research papers, SBI reports on street vendors, and the PM SVANidhi dashboard. Examining state-wise distribution, targets, and achievements, the research highlights disparities and potential areas for improvement. The involvement of top lending institutions is discussed, underscoring their role in facilitating the scheme's widespread impact. The study concludes by emphasizing PM SVANidhi's inclusive approach, breaking down community barriers and promoting social integration among urban street vendors. The initiative's diverse participant demographics reflect its commitment to inclusivity, making it a powerful catalyst for social harmony and equal opportunities.

Keywords: Urban Informal Sector, Street Vendor, PM Street Vendor's Atmanirbhar Nidhi.

Introduction

Street vendors play a pivotal role in the urban informal economy, ensuring the accessibility of goods and services at affordable rates for city residents. Known by various names like vendors, hawkers, Thelewala, Rehriwala, Theliphadwala, they contribute to a wide array of products and services, including fresh produce, street food, textiles, footwear, and artisanal goods. The COVID-19 pandemic and subsequent lockdowns have disproportionately affected

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these vendors, often operating with limited capital. The prolonged lockdowns may have depleted their resources, posing challenges to restarting their businesses effectively. This highlights the urgent need for immediate intervention, particularly through credit for working capital, to facilitate the resumption of their economic activities. Providing financial support to street vendors is crucial not only for the revival of their individual businesses but also for the broader urban economy. This intervention, enabling them to replenish stock, restart services, and regain economic stability, can significantly contribute to restoring the urban informal economy. It ensures the continued availability of essential goods and services for city dwellers. In the post-pandemic recovery phase, targeted financial assistance becomes a linchpin for the resilience and sustainability of this integral component of the urban economic landscape.

The Indian Government introduced the Pradhan Mantri Street Vendors' Atmanirbhar Nidhi Yojana (PMSVANidhi) on June 1, 2020, aiming to support and uplift street vendors impacted by the Covid-19 pandemic. Under this scheme, eligible street vendors can avail working capital loans ranging from Rs. 10,000 to Rs. 50,000. These capital loans come with a manageable 7% interest rate, providing vendors with financial resources to invest in various aspects of their businesses. The initiative is anticipated to benefit around 50 lakh street vendors across the country. Identification of street vendors for this scheme is carried out by the Urban Local Bodies (ULBs) or the Town Vending Committees (TVCs). To qualify, street vendors must be certified by the ULBs or TVCs. The enactment of the Street Vendors Act in 2014 in India underscores the government's commitment to safeguarding the livelihoods of urban street vendors and providing them with social security, contributing to poverty alleviation.

This study aims to assess the impact and effectiveness of the PM SVANidhi Scheme, specifically designed for urban street vendors in the informal sector. It evaluates the scheme's benefits, particularly in the context of the challenges posed by the COVID-19 pandemic. The research seeks to understand the extent to which the scheme has been instrumental in supporting and benefiting street vendors in the aftermath of the pandemic, providing valuable insights for policy evaluation and improvement.

Review of Literature

Joshi, A. and Reddy, V. (2022) in his study investigated the perceptions and experiences of street vendors participating in the PM SVANidhi Yojana in Ahmedabad. They collected data from 60 street vendors in the west and central zones of Ahmedabad, using surveys. The study also involved interviews with bank employees to gain insights into various aspects related to the PM SVA Nidhi Yojana. The findings indicated varying perceptions among street vendors, with positive views on the government's microcredit scheme providing working capital and revitalizing their livelihoods.

Vijayabhaskar, Nagaradona and Kumar, G. Arun (2021) examined the impact of the Pradhan Mantri Jan Dhan Yojana (PMJDY) on the financial stability and life protection of street vendors during the pandemic that was based on secondary data. The findings showed

that the Indian government allocated 5000 crores to street vendors under the PMSVANidhi Fund in September 2020. However, out of 12,15,000 applicants, only 825 crores were sanctioned by banks, with 600 crore disbursed based on eligibility criteria, and 4400 crore remained unutilized. The study recommends increased awareness and communication from the authorities and government regarding financial inclusion schemes.

Nandru et al. (2021) explore financial inclusion determinants and its impact on the well-being of Indian street vendors. The research includes 371 vendors, utilizing demand-side analysis, combining exploratory and descriptive methods. The data was collected from structured interviews with convenience sampling. The paper highlights the significance of accessibility, availability, usage, and affordability in shaping financial inclusion, while financial literacy has limited impact. The study emphasizes the substantial positive effect of financial inclusion on vendor well-being, offering guidance to policymakers and financial institutions for enhancing the financial health of this vulnerable group.

Silambarsan, M. and Paul, J.P. (2021) in her study conducted over a span of six months, collected data from 477 street vendors through a structured questionnaire. The findings indicated that a significant majority of the street vendors required a daily working capital ranging from Rs. 201 to 300. Most of them relied on their personal savings as their primary source of working capital, followed by acquiring capital from money lenders. Surprisingly, while almost all street vendors held a bank account, only one vendor out of the entire sample of 477 had managed to secure a loan from a bank.

Malsawmtluanga, H. and Lalnunthara, R. (2020) examined the extent of financial inclusion among street vendors, specifically focusing on street vegetable vendors in the Pukpui locality of Lunglei town, Mizoram. The study selected a sample of 60 participants using a convenient sampling method and collected primary data through structured questionnaires. The findings revealed that only 28.33% of the respondents possessed ATM cards, roughly one-fifth of them saved money in banks monthly, and none had insurance policies. The study recommended that relevant organizations increase public awareness about available financial services.

Patil, V and Gogte, Jayashree (2019) in their article investigated the prevailing situation of street vendors operating in the central market area of Yeola Town. The study aimed to discern the current scenario and identify key parameters for integrating these street vendors into the main market activity. The research revealed that the presence of street vendors in the central market area of Yeola town had significant impacts on pedestrian activities. This finding underscores the substantial role played by street vendors not only in the local economy but also in shaping the dynamics of daily life and movement within the town's central market area.

Chakravorty, R. and Koley, S. (2018), in their paper comprehensively explore the daily marketing practices and spatial challenges faced by street vendors near Tatanagar Rail Station, Jamshedpur. The study highlights that male street vendors tend to have a relatively better

income status compared to their female counterparts. However, it also indicates that the subsistence patterns in the daily market are challenging for street vendors. Despite these difficulties, most street vendors continue to operate in the market as they lack better alternatives for their livelihoods.

Karthikeyan, R. and Mangaleswaran, R. (2014), in their paper investigated the socio-economic status and working patterns of respondents in Tiruchirappalli city. The study is based on primary data collected from individuals in the area of Chattiram bus stand and Palakkarai, which are situated outside of market areas. The findings of the study indicate that both central and state governments are making efforts to amend regulations with the intention of protecting the rights and interests of street vendors.

Nidan (2010) in his paper “Study on Street Vendors at Patna (Bihar)” conducted research involving 600 street vendors across 72 wards in Patna. The study revealed that many respondents chose vending as a profession due to the lack of alternative job opportunities, easier entry, and lower investment requirements. It also shed light on the challenges faced by female street vendors, emphasizing the significant constraints related to their safety and the absence of basic facilities such as toilets and childcare services.

Bhowmik, S. (1999), in his paper “Urban Responses to Street Trading: India,” conducted a survey across seven Indian cities, including Mumbai, Ahmedabad, Kolkata, Imphal, Patna, and Bhubaneswar. The study found that, with the exception of Kolkata, all other municipalities had provisions for issuing licenses to street vendors, reflecting varying urban responses to street trading across different cities in India.

Objective of the Study

The study focuses on evaluating the effectiveness of the government-sponsored PM SVANidhi scheme, which aims to aid individuals in the urban informal sector affected by the COVID-19 pandemic. Through a thorough examination, the research intends to analyze the scheme’s impact on beneficiaries, pinpoint any shortcomings in design and execution, and address pre-existing deficiencies. By uncovering insights, the study aims to optimize the scheme’s benefits and establish a more efficient support system, contributing to enhanced assistance for those in the urban informal sector grappling with the challenges posed by the pandemic.

Data and Methodology

The study is based on data collected from different sources such as articles, research papers, SBI reports on street vendors, and the PM SVANidhi dashboard. This comprehensive approach allowed for a thorough analysis of existing knowledge on the subject. This helped us thoroughly understand the topic by gathering data and opinions from experts. By relying on these trusted sources, our study gained credibility and depth in analysis. Examining existing research formed a solid foundation, allowing for a better grasp of the subject and meaningful discussions.

Data Analysis

State-wise Distribution of PM SVA Nidhi Accounts:

The table 1 presents the state-wise distribution of PM SVANidhi accounts, categorizing account holders based on their spending activity. Uttar Pradesh has the highest total number of accounts at 16 lakhs, with active spenders constituting 24% of the total. Madhya Pradesh, Maharashtra, and Telangana follow, with varying percentages of active spenders. Punjab stands out with the highest proportion of active spenders, reaching 32% of total accounts. Notably, states like Tamil Nadu, Andhra Pradesh, and Karnataka exhibit higher percentages of active spenders, showcasing greater engagement in utilizing the scheme. On the other hand, West Bengal and Jharkhand have lower percentages of active spenders. Overall, the data underscores the heterogeneous participation and spending patterns across states, emphasizing the need for targeted strategies to enhance the effectiveness of the PM SVANidhi scheme nationwide.

Table. 1 State-wise movement of PM SVANidhi A/C holders (in lakh)					
State	Total PM SVANidhi A/Cs of which	Not so Active Spender	Passive Spender	Active Spender	Active/Total
Uttar Pradesh	16	3.7	8.5	3.8	24%
Madhya Pradesh	9.8	2.3	5.6	1.9	20.00%
Maharashtra	7.1	1.7	3.8	1.6	22%
Telangana	6	1.3	3.3	1.4	23%
Gujarat	5.1	1.1	2.9	1.4	20%
Tamil Nadu	4.3	0.7	2.4	1	28%
Andhra Pradesh	3.9	0.8	2	1.2	28%
Karnataka	3.8	0.9	2	1.1	25%
Delhi	1.5	0.3	0.8	1	24%
Punjab	1.5	0.3	0.8	0.4	32%
Rajasthan	1.5	0.3	0.8	0.5	25%
West Bengal	1.4	0.4	0.8	0.2	17%
Bihar	1.1	0.3	0.6	0.2	22%
Haryana	1	0.2	0.6	0.3	25%
Chhattisgarh	0.9	0.2	0.5	0.2	23%
Jharkhand	0.8	0.2	0.4	0.1	18%
Odisha	0.7	0.2	0.4	0.2	20%
Kerala	0.6	0.1	0.3	0.1	24%
All India	70	16.4	38.3	15.3	22%

Source: SBI Report

Targets and Achievements of The PM SVANidhi

The table2 illustrates the targets and achievements of the PM SVANidhi scheme across various states and union territories in India. As of March 2023, the initial loan targets for street vendors vary significantly, with Uttar Pradesh having the highest target of 12,30,000 and the Union Territories/Small States having the lowest target of 34,990. The targets for subsequent loans (2nd and 3rd) also display variations among states. Examining the achievement data, it's evident that the total disbursed amount exceeds the target for the old 1st loan, indicating a commendable 106% accomplishment. However, the new 1st loan shows an 84% achievement rate, while the 2nd and 3rd loans exhibit 65% and 62% achievement rates, respectively. This discrepancy suggests varying degrees of success in implementing the scheme across states and highlights potential areas for improvement in reaching the stipulated targets. Overall, the table provides a comprehensive overview of the PM SVANidhi scheme's progress in different regions of India.

Table 2. PM SVANidhi: Target and Achievement

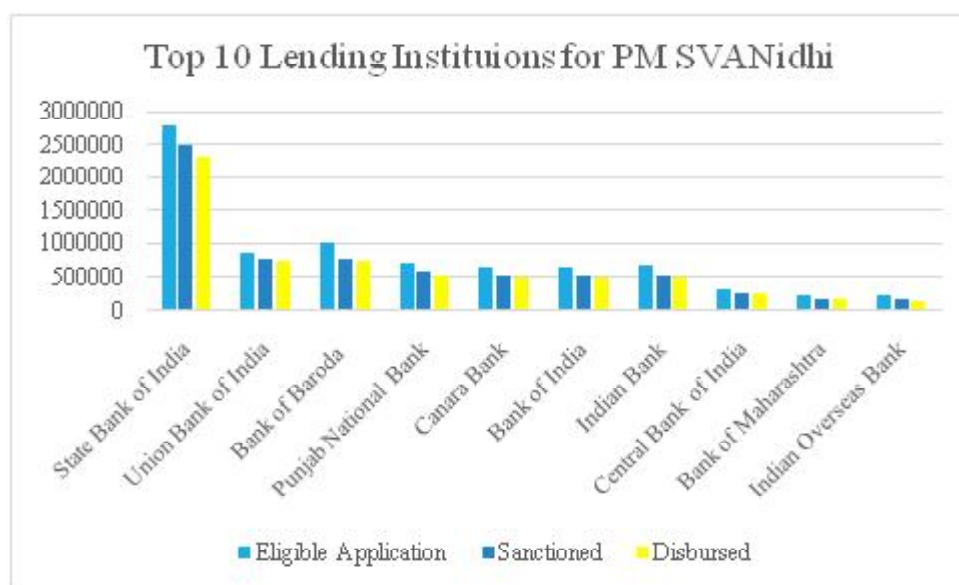
Table 2. PM SVANidhi: Target and Achievement				
State	Old 1 st Loan Target upto Mar-23	New 1 st Loan Target upto Dec-23	2 nd Loan Target upto Dec-23	3 rd Loan Target upto Dec-23
Andhra Pradesh	250000.00	3,15,000	134200.00	18900.00
Bihar	1,20,000	1,40,000	35000.00	1600.00
Chhattisgarh	70000.00	85000.00	34300.00	3900.00
Delhi	1,30,000	1,60,000	37700.00	1400.00
Gujarat	3,00,000	4,00,000	159600.00	22900.00
Haryana	1,10,000	1,92,000	21130.00	3100.00
Jharkhand	80000.00	95000.00	21500.00	2300.00
Karnataka	2,50,000	3,13,000	110200.00	19900.00
Kerala	80000.00	95000.00	7600.00	2250.00
Madhya Pradesh	5,20,000	6,90,000	360700.00	59700.00
Odisha	70000.00	84000.00	25300.00	3000.00
Punjab	1,20,000	1,40,000	29300.00	2100.00
Rajasthan	1,95,000	2,30,000	47200.00	500.00
Maharashtra	5,50,000	6,60,000	164450.00	19270.00
Tamil Nadu	3,50,000	4,20,000	1,24,900	10200.00
Telangana	4,00,000	5,00,000	2,44,100	62100.00
Uttar Pradesh	9,25,000	12,30,000	6,13,350	51730.00
West Bengal	2,95,000	3,50,000	9900.00	100.00
Uts / Small States	27900.00	34990.00	16360.00	2550.00
NER / Himalayan States	1,34,000	1,66,200	66600.00	5570.00
Total Target	49,76,900	63,00,190	22,63,390	2,93,070
Total Disbursed	52,90,101	53,19,779	14,79,703	1,82,094
Disbursed as % of Target	106%	84%	65%	62%

Source: SBI Report

Lending Institutions Participation

The Figure 1 presents the top 10 lending institutions participating in the PM SVANidhi scheme, highlighting their respective figures for eligible applications, sanctioned amounts, and disbursed funds. The State Bank of India (SBI) leads the chart with 2,775,759 eligible applications, 2,492,474 sanctioned, and 2,317,491 disbursed. Following closely is the Union Bank of India, with 878,707 eligible applications, 767,036 sanctioned, and 747,502 disbursed. Bank of Baroda, Punjab National Bank, and Canara Bank also feature prominently, each demonstrating substantial engagement in the scheme with noteworthy figures for eligible applications, sanctioned amounts, and disbursed funds. These lending institutions collectively play a pivotal role in facilitating the financial support extended through the PM SVANidhi scheme, contributing significantly to its widespread implementation and impact across the country.

Figure: 1



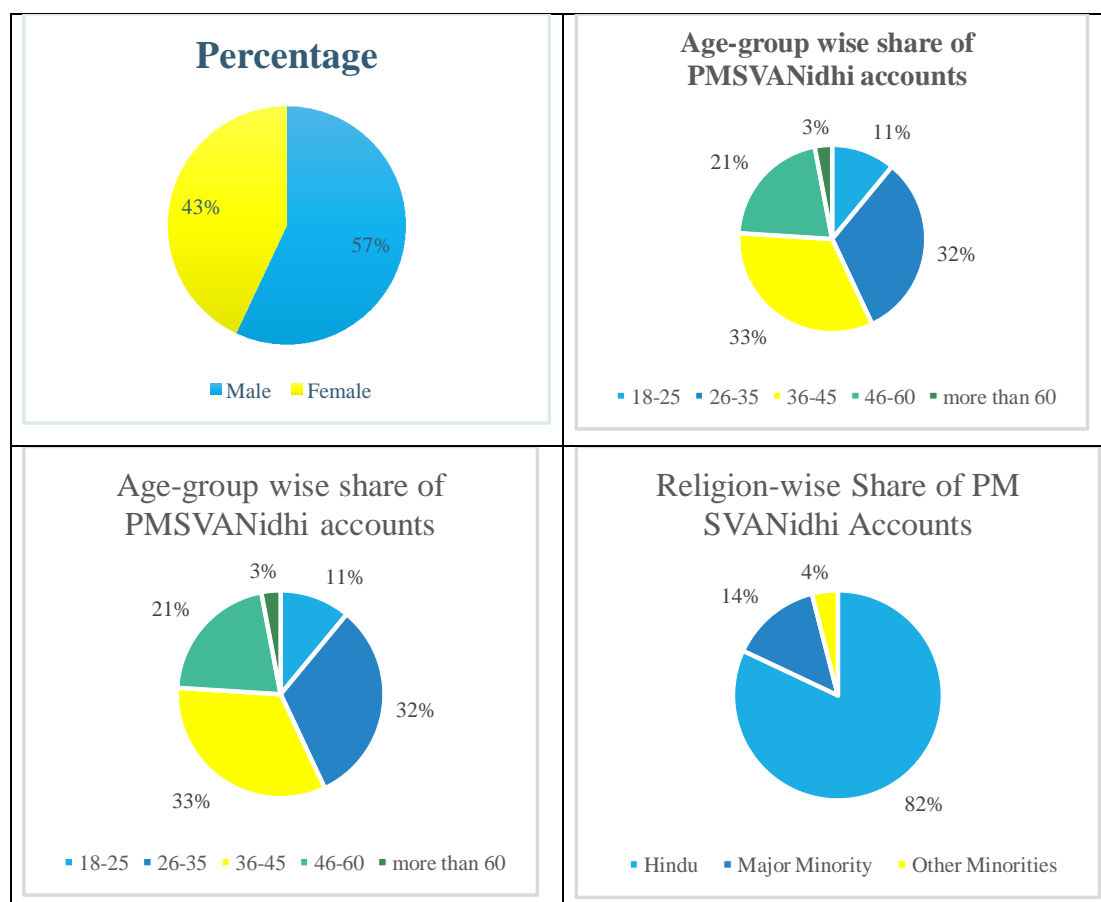
Source: SBI Report

Inclusive Approach of PM SVANidhi

The PM SVANidhi initiative has emerged as a powerful catalyst for social integration, breaking down barriers within urban street vendor communities. With a significant 75% of beneficiaries hailing from non-general categories, the program showcases its potential to drive transformative change. Analysis of disbursement data highlights the substantial participation of Other Backward Classes (OBCs) at 44%, while Scheduled Castes (SCs) and Scheduled

Tribes (STs) collectively make up 22%. Impressively, the scheme promotes gender equality, with 43% female participation, empowering urban women and enhancing their entrepreneurial capabilities (see figure 2).

Figure: 2



Source: SBI Report

Religiously, the beneficiaries represent a broad spectrum, with 82% being Hindu, 14% from major minority groups, and 4% from other minorities. The age distribution further underscores inclusivity, with 11% in the 18-25 age group, 32% in 26-35, 33% in 36-45, 21% in 46-60, and 3% over 60 (see figure 2). PM SVANidhi stands as a powerful catalyst for social inclusion, especially among previously marginalized urban street vendors. The initiative has effectively shattered community barriers, promoting harmony and equal opportunities. The statistics reveal a diverse participant profile, showcasing the inclusive nature of the program. PM SVANidhi's commitment to an inclusive approach is evident in its diverse and

representative participant demographics, reflecting a commendable effort to bridge social divides.

Conclusion

The Pradhan Mantri Street Vendors' Atmanirbhar Nidhi Yojana (PM SVANidhi) has emerged as a critical intervention to revive and support urban street vendors, particularly in the challenging aftermath of the COVID-19 pandemic. The scheme, introduced on June 1, 2020, offers working capital loans to eligible vendors, with a manageable 7% interest rate. Despite the scheme's positive impact, there are variations in its effectiveness across states, as evident in the disparities in achievement rates for different loan categories. The state-wise distribution of PM SVANidhi accounts reveals diverse spending patterns, emphasizing the need for tailored strategies to enhance the scheme's effectiveness. Furthermore, the targets and achievements display notable accomplishments in disbursing funds, but discrepancies suggest areas for improvement. The top 10 lending institutions, led by the State Bank of India, play a crucial role in facilitating the scheme's widespread implementation.

PM SVANidhi has not only provided financial assistance but has also contributed to social integration, breaking down community barriers among street vendors. The inclusive approach is evident in the diverse participant demographics, with substantial representation from non-general categories, OBCs, SCs, STs, and females. This initiative signifies a transformative change, showcasing the government's commitment to fostering social harmony and equal opportunities in the urban informal sector.

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Women Empowerment with Social Protection Scheme

Dr. Richa Rastogi & Dr. Vishal Singh

ABSTRACT

This paper attempts to analyze the status of women empowerment in India using various indicators based on from secondary sources. the study revels that women of India are Relatively disempowered and they enjoy some what lower status than that of men in spite of many efforts under taken by government. today the empowerment of women has become one of the most important concerns of 21st Century but practically women empowerment is still an illusion of reality. The study examines the perspective of women who are getting benefitted through various government schemes implemented In assistance with non-government organization. studies have shown that such initiatives are boosting self-confidence increasing the purchasing power and decision making power leading to their empowerment. It Addresses the economic, socio cultural, inter personal, political and legal domains of Empowerment. The study concludes some by reason why social protection scheme is essential for women, and also describe important laws provide support a women against harassment on work place. protection for women workers in formal/informal sector and strict enforcement of relevant laws such as equal Remuneration Act and minimum wages act must be undertaken, On the other hand protection of Women's Property rights is very important perspective for social Security for women. domestic violence Prevention act 2005 guarantees women's rights to stay in Matrimonial and parental home. The basic message of this paper are as follows (i) To Ensure social Security for women under these types of factors as Education, Health, drinking water & Sanitation, Environment, Science & technology (ii) Finally, the paper argues that the Efficiency and effectiveness of some social protection scheme which must Ensure women empowerment in society. Particular attention needs to be paid to female participation in and their access to social welfare programs.

Keywords: Women Empowerment, Education, Health, Social Protection, Government Schemes, MGNREGA.

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INTRODUCTION

Women in India have played an important part in our social life. In our history, they have played important part in every branch of national Activities from high learning to valour on the battle field. Today we pass rapidly through various phases of transition. The rapid changes now ever have not uprooted us from our old foundation. The Indian women in the majority that is lives in her own time in The rhythm of her own history, which does not quiet keep time with the clock of the 21 Century. The government has tried to improve the socio-economic conditions of women in India as by introducing National education policy 1986 and schemes like KanyaVidhyaDhanYojana, Kasturba Gandhi Education plan, BalikaSamriddhiYojana, Girls Empowerment scheme, Women's reservation bill, national women commission and flagship scheme, BetiBachao, BetiPadhao etc. But Still we are fail to achieve the desired status or level of women empowerment. So we found that education of women is necessary-Because to fight against social evils such as domestic violence and dowry demand etc. women empowerment may fulfill with social protection scheme of the government. Because social security measures Employment, sustainable income, ownership of Assests, food, health care, child care, maternity care, old age support, housing and other locally-defined needs (Transport, water, skills) Economics security & social security directly linked with social security. Because Economics security is a primary means by which people are able to obtain social security.

OBJECTIVE OF STUDY

- 1- To know the need of social protection scheme.
- 2- To analyze the factors influencing the social protection of women.
- 3- To discuss the role of SEWA bank in providing social security.
- 4- To study the Review of legislation for women Entitlements and government scheme for social protection for women.
- 5- To provide useful suggestion for the Economics Empowerment of Women.

RESEARCH METHODOGLY

This paper attempts to analyze the needs of women Empowerment in India and highlights The methods and schemes of women Empowerment. This paper is descriptive and analytical in nature. The data used in it purely secondary Sources according to the need of this study. Today empowerment of women has become one of the most important concerns of the 21st century. but practically women empowerment is still an illusion of reality. In the census 2011 sex ratio in India is 940 and literacy rate among women are 65.46% as compared to the men 80%. In this condition the growth of the women population are very slow than men population.

WHY SOCIAL PROTECTION SCHEMES ARE ESSENTIAL FOR WOMEN.

Access to health care- In low income countries more than 90% of the population- a large

proportion of them women do not have legal health coverage to access the most essential health care. In some cases women go untreated as power differences in household decision making it impossible for them to access the funds Needed to pay for medical treatment. Moreover, needs of women (such as quality The specific maternal health care and specific facilities for women including females medicals staff) are often under resourced.

Reduced Poverty- The social protection scheme through the provision of shelter, food, clothing counselling training, clinical and legal aid aims rehabilitate such women in difficult circumstance economically and emotionally under Swadhar greh scheme and skill up gradation training is provided for economic rehabilitation of women.

Improved food security & Access to education and employment- Social protection schemes ensure the provision of food assistance to women who are struggling to access adequate nutrition, and also help provide education and employment opportunities women to participate fully in society and live more fulfilling lives.

Lack of social security on work place- The majority of women around the world work in unregulated jobs for long hour with little pay and No security At the work place. They have no health and unemployment insurance, protection against employment injury and disability and maternity protection. Due to a lack of income security and fear of dismissal many women work late into their pregnancies.

Older women lose out- women tend to have a longer life expectancy than man. they are thus more likely to need income security for a longer time than man and may face higher health related costs for long term care. At the same time, many women frequently do not receive any pensions as they were not formally employed or receive low pension based on often lower wages during their working years.

Social Empowerment of women that aims to ensure social security for women in terms of these factors.

Education- Equal access to education for women and girls will be ensured. special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender sensitive education system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/ technical skills by women.

Health- A holistic approach to women's health which includes both nutrition, And health service will be adopted and special attention will be given the needs of women and the girls at all stages of life cycle. The reduction of infant mortality and maternal mortality, which are sensitive indicators of human development is a priority concern. In accordance with the commitment of the national population policy (2000) to population stabilization, this policy recognizes the critical needs of men and women to have access to safe effective and affordable methods of family planning.

Drinking water and sanitation-Special attention will be given to the needs of women in the provision of safe drinking water, sewage disposal, toilet facilities, and sanitation within accessible reach of households, especially in rural areas and urban slums is women's participation will be ensured in the planning delivery and maintenance of such services.

Environment- The vast majority of rural women still depends on the locally Available non-commercial sources of energy. Such as animal dung, crop waste and fuel wood. In order to ensure the efficient use of these energy resource in an Environmental friendly manner. The policy will aim at promoting the programmes of non-conventional energy resources. Women will be involved in spreading the use of solar energy, bio gas, smokeless 'chullahs' and other rural application so as to have a visible impact of these measures influencing eco-systems and in changing lifestyles of rural women.

Science And Technology-It will motivate girls to take up science and technology for higher education and also ensure that Development projects with scientific temper and awareness will also be stepped up. Special measures would be taken for their training in areas where they have special skills like communication and information technology.

Role of Voluntary organization and SHGS in providing social Security

The Self-Employed women's Association (SEWA) was founded in 1972 as a trade union Representing Self employed women vegetable vendors, Home based garment workers, and service providers (Such as rag Pickers) It has since taken on the additional roles of Bank, cooperative marketing agency, service provider, educator, and advocate for changes in government policy.

When SEWA was formed the women it represents were desperately poor (dispite working grueling) 18 hour days) In part because they were more vulnerable to exploitation and lacked the protection of social security and minimum wage laws. women has lack of capital unable to secure loans from commercial banks, many women had been forced to borrow from moneylenders at interest rates as high as 3000% annually.

(SEWA) by contrast, charges the market rate of 17% on its loans) Women are lacking the capital necessary to buy there own equipment per also trapped in cycle of inedebttness. SEWA has helped some women escape from poverty. The SEWA Bank has opened 125,000 saving accounts and granted 30,000 loans, many of which have helped the borrowers to increase their productivity and income. SEWA has also popularized Insurance schemes for women in informal sector. it has involved thousands of women's in rural women's bank and has issued coded smart cards that can not be used by their male family members. Voluntary organizations provide voice to voiceless women and has provided minimum wages and implement employment guarantee act 2005.

Women's workers union can provide Best guarantee for social security it have Highlighted the following Demands.

- ❖ Food Security, safe and cheap transport
- ❖ Special Buses and trains for working women's
- ❖ Part time work, Flexi time.
- ❖ Maternity Benefits and baby care center.
- ❖ Occupational Health & Safety.

Review of legislations for women's Entitlement and government scheme for social protection for women.

India has a history of three decades legislation for women's entitlements. Equal remuneration Act, 1976 ensure equal opportunity, equal Treatment and equal wages for women Important laws affecting women's lives Are-

Workmen's Compensation Act, 1932.	The minimum wages Act, 1948	The factories act 1948
maternity Benefits Act, 61	Plantation labour Act, 51	Bidis & cigar workers Act, 96
The contract labour Act, 70	Bonded labour Act, 1976	Equal Remunartion Act, 76
Migrant workers Act, 76	Child labour (P&R) Act, 1986	Legal Service Act 1987

These are laws is provide support a women against harassment on work place. Protection for women workers in formal/informal sector and strict enforcement of relevant laws such as equal remuneration Act and minimum wages Act must be under taken. women's cells in police station Encourage women police stations, family Courts, Mahila court, Counseling centers, Legal Aid center and nyayaPanchayats must be strengthened and expanded to Eliminate violence and atrocities against women.

Wide spread dissemination of information on all aspects of legal rights, humans rights and other entitlements of women through specially designed legal literacy programmes and right information programmes must be done. International labour organization has also demanded laws regarding for maternity protection.

- Standardization of work hour
- Child labour prevention
- Occupational health and safety
- Economic activities for women refugees
- Human rights of ethnic minorities wages & safety.

on the other hand protection of women's property rights is very important prospective for social security for women. Domestic violence prevention Act, 2005 Guarantees women's right to stay in matrimonial and parental House. In social and natural disaster management programmes In rehabilitation Schemes land, house, Equipment's, animals, loans and other goods must be given in joint name of women and men.

Women Empowerment policy 2001 of government of India has declared that the provision of support service for women like child care facilities, including crèches at work places and educational institutions homes for the aged and the disabled will be expanded and improved to create an enabling environment and to ensure their full cooperation in social political and economic life. There are some social protection scheme which must ensure women empowerment in society as-

The Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA- The MGNREGA have made special provisions to encourage participation of women. It provides preference to women (especially single women) and older person for work near on their residences. child care facilities at the work site are also present especially child under age six year of age. MGNREGA staff are providing 100days of work for widows, deserted women and destitute women. This schemes also ensure women to handle bank procedures, treating pregnant and lactating mother's as a special category and provision of suitable work for them.

Indira Gandhi National Widow Pension Scheme- Under this scheme widow pension is provided to the widows belonging to below poverty line (BPL) households. under the scheme, center assistance Rs. 300/ per month is provided to widows in the age group of 40-79 years and the pension Amount is enhanced to Rs. 500/ per month on attaining 80 years.

PradhanMantri Mudra Yojana (PMMY) has been initiated by government 8 April 2015 for generating self-employment. Under PMMY collateral free loans up to Rs. 10 lakhs are extended to micro/small business enterprises and to individuals to setup or expand their business activities majority of the beneficiaries under this Yojana are women.

PradhanMantriAwasYojana (PMAY-U) The government has been launched this schemes 17-06-2015, to ensure house facility for all persons. Under this scheme central assistance is provided to status/UTs in addressing the housing requirement of economically weaker sections (EWS) including slum dwellers in the urban areas.

Integrated programmer for older persons- The objective of the scheme is to improve the quality of life of the senior citizens, including women, by provide Basic amenities like shelter, food, medical care, and entertainment opportunities and by encouraging productive and active ageing through providing support for capacity building of state/UT governments/ Non-Government organizations/ panchyatiraj institutions.

Annapurna Scheme- Under Annapurna scheme of the ministry of rural Development, 10kg of food grain is given to those eligible aged persons who have Remained uncovered under the Indira Gandhi national old age person scheme.

In alignment with the goals under National health policy (NHP) 2017, the government announced the ambitions and holistic **Ayushman Bharat Programme**. this schemes will cover to poor and vulnerable families. this is likely to help improve women's access to health care services. under this scheme private and government hospital have provided free treatment and health facilities up to INR 500,000 per family.

Recently ministry has launched “**mission shakti**” (Integrated women Empowerment programme) An umbrella scheme in a mission mode aimed at strengthening interventions for safety, security and empowerment of women. It seeks to realise the government vision for women-led development.

Conclusion :

From the study we concluded that in the present scenario the condition of the Indian women is not as good as it should be and there is a need to accomplish such steps which will help to accommodate the rights and the basic needs of women population. The empowerment of women has become one of the most important concerns of the 21st century not only at national level but also international level. Society must provide equal opportunity to both of the sexes for the upliftment of society and for the well being of society as a whole. Women represent half of the world's population and gender inequality exists in every nation on the planet. Until women are given the same opportunities that men are, entire societies will be destined to perform below their true potentials. The best way of empowerment is perhaps through inducting women in the main stream of development. Government initiatives alone would not be sufficient to achieve this goal because empowerment will be real and effective only when they are endowed income and property. So that they may stand on their feet and build up their identity in the society. Society must take initiative to create a climate in which they can get the proper benefit from the schemes made by Government for the women development. There should be no gender discrimination and women have full opportunities of self-decision making and participating in social political and Economic life of the country with a sense of equality.

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Ayushman Bharat Health and Wellness Centre: A Case Study of Baragoan Village of Lucknow District, Uttar Pradesh

Dr. Anjali Singh

Abstract

Ayushman Bharat-Pradhan Mantri Jan Arogya Yojna the flagship program of Government of India was launched in year 2018, with the vision of universal health. The idea behind this twin fold (AB-HWCs & PM-JAY) initiative was to meet out the standards of Sustainable Development Goals-2030, target-3. National health policy 2017 envisioned - 'Ayushman Bharat Health and Wellness Centre' as a delivery outlet for a diverse range of comprehensive health care services like maternal and child health. In addition to above said care services, AB-HWCs provide free essential medicines and diagnostic services, Tele-consultation, and health promotion including wellness activities like Yoga.

Uttar Pradesh the most populous state of India with a minimal score of 24 still aspires to match the standards of health and well-being for all at all ages. In such crucial time the role of - 'Ayushman Bharat Health and Wellness Centre' becomes pivotal to achieve 'good health and well-being. The idea of the current study aims to observe the basic features of AB-HWCs in context of Uttar Pradesh. The researcher shall carry out a case study of Baragoan village's Ayushman Bharat Health and Wellness Centre' (situated in Kakori Block of Lucknow district). The study also aspires to point out the lacunas of the network and suggest some measures for remedial.

Keywords: *Ayushman Bharat Health and Wellness Centre', Baragoan village, case study.*

Introduction: Ayushman Bharat (AB) program aims to transform 150,000 existing Sub-Health Centers and Primary Health Centers into Ayushman Bharat Health and Wellness Centers (HWCs), to provide comprehensive healthcare. Lahariya, C.(2018) in 'Ayushman Bharat' Program and Universal Health Coverage in India, explores the embark initiative of Ayushman Bharat program the key features, working and coverage in India, introduced the terminology, functioning and challenges of Universal health care in India. Panda, S. K., Panda, D., Behera, R. R., Panda, S. C., Munda, A., & Sahu, P. R. (2023) in 'Assessment of Functioning of

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Health and Wellness Centers of Western Odisha: observed 26 HWCs of Odisha' and presented a comprehensive picture of reality . Lahariya, C. (2020). 'Health & Wellness Centers to Strengthen Primary Health Care in India: Concept, Progress and Ways Forward; talks about the reforms and key features of the program. The current study is presenting a methodic picture of AB-HWC situated at village Baragaon in Lucknow tehsil and Lucknow district under Kakori Community Development block. The key features and facilities of the AB-HWCs shall also be discussed in this study. The study is divided in three parts the first part comprises service availability and readiness assessment of the HWC situated at Baragaon village, using an assessment tool based on the key features of the reforms of PHCs, to check the availability status of the facilities and staff at the said HWC physical confirmation has been done. The second part of the study is based on the information related to the provision of outpatient care services including, medicines and diagnostics. OPD register was observed during the visits to find the outpatient trend visiting the HWC of Baragaon village. The third part of the study puts forth the findings and proposes some suggestive measure based on the interview of the staff and self observation.

Key Features of Ayushman Bharat –HWCs: The National Health Policy 2017 envisioned AB-HWCs as the foundation of India's comprehensive health and care system. The then PHCs and SHCs were transformed into AB-HWCs to ensure universal access to an expanded range of comprehensive primary health care services. "To ensure delivery of Comprehensive Primary Health Care (CPHC) services, existing Sub Centres covering a population of 3000 -5000 would be converted to Health and Wellness Centres, with the principle being "time to care" to be no more than 30 minutes. Primary Health Centres in rural and urban areas would also be converted to HWC. Such care could also be provided/ complemented through outreach services, Mobile Medical Units, camps, home and community-based care, but the principle should be a seamless continuum of care that ensures the principles of equity, universality and no financial hardship."⁸

To improve the access of health care, electronic record keeping, usage of technology were also incorporated as key features. Comprehensive healthcare through HWCs basically have nine components with its multidimensional range of services and activities. The continuum of care will be assured through referral to higher centres and reverse referral to AB-HWCs. After getting treatment from higher health care facilities the AB-HWCs will ensure the patient's day-to-day management including compliance to advice and follow-ups as expanded services.

These centres not only deliver a range of comprehensive health care services like maternal and child care but also provide free essential medicines and diagnostic services. An idea of holistic health care lies behind these centres because services like tele-consultation and health promotion including wellness activities like Yoga and Jan Arogya Samiti have intrinsic role to play for universal health care system. Figure -1(source: inspired from Booklet of HWCs year -2021) is projecting the key features of AB-HWCs. The service delivery at health care is of three levels:

I family/household and community level through outreach OPDs, Health-Mela, village Panchayat, village and home visits, school and Aganwadi visits.

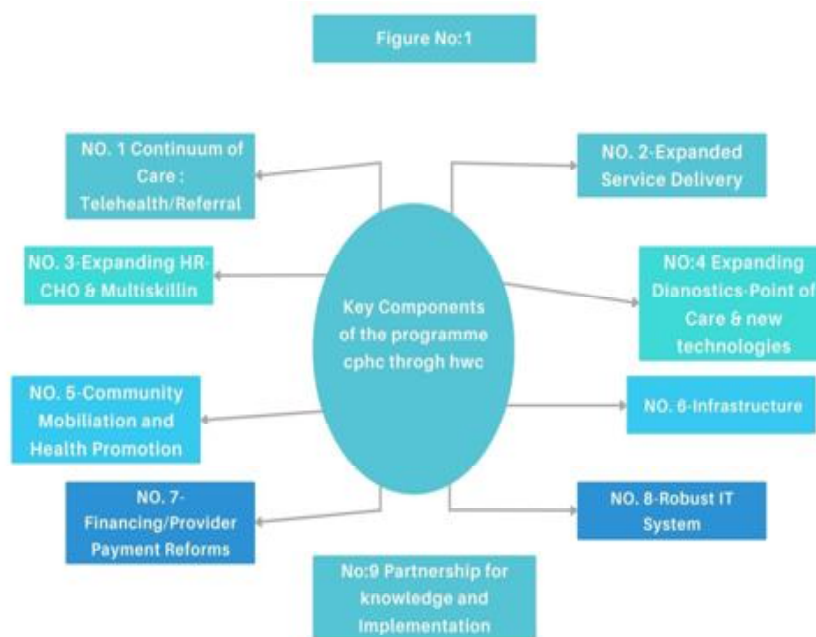


Figure No.1

II: AB-HWCs

III: Referral facilities/sites: Delivery of services closer to the community and close monitoring would enable increased coverage and help in addressing issues of marginalization and exclusion of specific population groups.

The add-on services made available at AB-HWCs are mainly tele-consultation, free diagnostic, and medicines for chronic diseases, referral services, and wellness activities, digital health records with the traditional services catered at PHCs like child and maternal health, communicable and non-communicable diseases, family planning, with availability of an IT platform, standardized digital health records, establishment of seamless flow of information across all levels of care and continuum of care assured. At primary health care facilities were limited and focus on wellness components were lacked but at HWCs wellness activities including yoga are mainstreamed into the healthcare delivery system.

Figure no. 2 (source: inspired from Booklet of HWCs year -2021) is projecting the services made available at Ayushman Bharat health and wellness centres.

Services at AB-HWCs

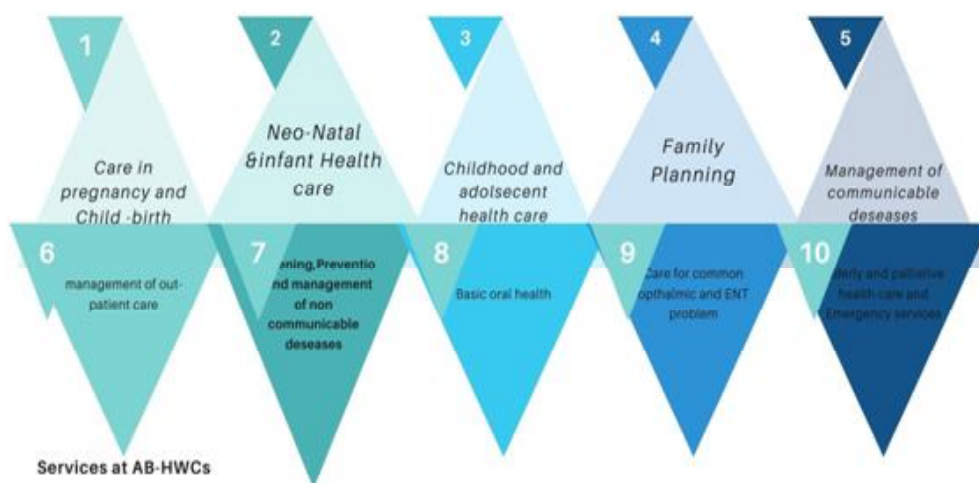


Figure No.2

AB-Jan Arogya Mandir: PHC of Baragaon : Health and wellness centres in India were named as ‘Jan Arogya Mandir’, equipped with several additional services and a wellness calendar to be followed. Ayushman Arogya Mandir (HWC) Primary Health Care Centre of Baragaon village comes under Kakori development block of Lucknow district it is situated approximately 9 km. far from Dr. Shakuntala Misra National Rehabilitation University. There are 10 sub-health centres and a HWC of Baragaon under Kakori Community Health Centre. On every third Wednesday regular vaccination program takes place at every sub health centres. Baragaon HWC strictly follows the Wellness calendar and conducts as many activities as possible in accordance.

Before visiting the HWC of Baragaon the researcher thoroughly observed the key features and blue print of AB-HWCs in India to be able to carry out a rational observation. To observe the available facilities and activities a tool was developed and crosschecked while visiting the centre, the findings in relation to facilities are as follows:

Table-1 -Status of Availability of Facilities/ Features at Baragaon PHWCM

S.No.	Facilities/Features Available at AB-HWC of Baragaon	Status
Part –A: Reproductive and Child Health		
1.	Ante Natal (ANC) High Risk Pregnancies	Facility Not Available
2.	Delivery	Facility Not Available
3	Number of Caesarean(C section) Deliveries	Facility Not Available
4	Pregnancy outcome & details of New-born	Facility Not Available
5	Anemia Mukht Bharat	Facility Available
6	Post Natal Care (PNC)	Facility Not Available
7	Reproductive Tract Infection	Facility Not Available
8	Family Planning	Facility Not Available
9	Child Immunization	Facility Not Available
10	Number of cases of Childhood Diseases	Facility Available
11	National Vector Borne Disease Control Program: 11.1 Malaria 11.2-Rapid Diagnostic Test 11.3- kala Azar Test 11.4- Lymphatic Filariasis	Facility Available
12	Adolescent Health-12.1- Adolescent Friendly Health Clinic	Facility Not Available
13	National TB Elimination Program	Facility Not Available
Part –B: Health Facility Services		
14	Patient Facility Services:	Facility Available
14.1	Out Patient Department	Facility Available
14.2	Inpatients Details	Facility Not Available
14.3	Total Number of patient referred out	Facility Available
14.4	Out Patient Attendance	Facility Available
14.5	Inpatient by disease/Health Condition(Malaria, Dengue, Typhoid, Asthama, TB, Pyrexia,	Facility Not Available
14.6	Emergency	Facility Not Available
14.7	Sick Newborn (up to 4 weeks)	Facility Not Available
14.8	Janani Shishu Suraksha Karyakram	Facility Not Available
14.9	Total Number of Blood samples Screened by Rapid tests for Viral Hepatitis B	Facility Available
14.10	Total Number of Blood samples Screened by Rapid tests for Viral Hepatitis C	Facility Available
15	Laboratory Testing	Facility Available
15.1	Widal Tests	Facility Available
Part-C:Mortality Details		
16	Mortality Details	Facility Not Available
17	Quality Assurance &BEMMP	Facility Not Available
17.1	EQAS Compliance	Facility Not Available
17.2	Biomedical Equipment Management &Maintenance	Facility Not Available

This table is based on the HWC-Primary Health Centre format.

Table-2-Status of Availability of Staff and Doctors at Baragaon PHWC

SN.	Medical Officer/Health workers at Baragaon PHWC(Name)	No.of Staff	Status
1.	Dr.Pawan Singh (Medical Officer In-charge)	01	Facility Available
2.	Dr.Priyanka Maurya (Chir Arogya Ayush)	01	One day a week (Sunday)
3	Mr. Vijay Kumar (Pharmesist)	01	Facility Available
4	(Staff Nurse)	01	Facility not Available
5	Mrs.Amita Soni (Lab Assistant)	01	Facility Available
6	Mr. Parrmanand (NMA)	01	Facility Available
7	Mr.Anees Ali (Ward Boy)	01	Facility Available
8	Mohd. Rehaan Siddique (BHW)	01	Facility Available
9	Peon/Cleaner	00	Facility not Available

Table-3-Diagnostic Facilities Available at AB-HWC of Baragaon

SN.	Diagnostic Facilities Available at AB-HWC of Baragaon	Status
1.	Hb(Facility Available
2.	HBsAG	Facility Available
3	Pregnancy Confirmation Test	Facility Available
4	Widal Test	Facility Available
5	H1N1	Facility Available
6	Blood Sugar Test	Facility Available
7	B/S for Malaria	Facility Available
8	HIV Test	Facility Available
9	HCV Test	Facility Available
10	Urine---a/b and sugar	Facility Available
11	X-Ray	Facility not Available
12	Ultra-Sound	Facility not Available
13	Elisa rapid Test	Facility not Available
14	Hepatitis-B in Pregnancy	Facility not Available

Findings and Observation: The study has been divided in three segments first two segments explores the availability of facilities:

Facilities Available at Baragaon HWC: The health and wellness centre of Baragaon on an average helps 300 women of reproductive age 20-49 years (non-pregnant, non-lactating) to fight with Anemia by providing them Red Iron and folic Acid tablets. This information has been obtained by observing the Attendance register of the HWC of Baragaon.

Out Patient Department of the HWC of Baragaon is frequently visited by the villagers. Approximately 1295 patients of different diseases like Diabetes, Epilepsy, Hypertension, Cardiovascular disease, ENT, Dental, Ophthalmic care has been witnessed by observing the attendance register maintained at HWC of Baragaon . As per the record In total number of outpatient around 12% preferred Ayush therapy and rest of them preferred Allopathic treatment. Dr. Pawan Singh the Medical Officer and in-charge of the HWC examines cures and helps the patients to understand the importance of wellness through hygiene and yoga.

The centre also helps approximately 70 cases of childhood diseases like Diarrhea in a month or so.

Approximately 104 Microscopic tests are done in a month at HWC of Baragaon.

Rapid Diagnostic tests facilities (Malaria) are also available at HWC of Baragaon.

A separate COVID-19 section is also functional at HWC of Baragaon.

The HWC of Baragaon is also working for National TB elimination program.

Laboratory test facility is also frequently used by the villagers, out of 506 patients in the month of January 2024 around 135 villagers visited for Hb test, around 17 tests were conducted for HIV and 40 cases of Widal tests.

Facilities not Available at Baragaon HWC: Basically the reproductive and child care, Post Natal Care (PNC), Reproductive Tract Infection, Family Planning, facilities are not available at the HWC of Baragaon. In absence of a trained lady doctor and a staff nurse the centre lacks the facility of reproductive and child care. It is important to point out that the lady doctor of Baragaon HWC has been attached to the Tudiyananj hospital thus she visits the HWC only on Sundays and attends the female patients in Health Mela conducted at centre. In such a situation the HWC of Baragaon has farfetched the standards of Target-3 of Sustainable Development Goals 2030. In the absence of lady doctor cases of deliveries and Neo Natal health care are out referred to the Community health centre of Kakori or Queen Marry hospital or Balrampur hospital of Lucknow city .

Mortality details cannot be procured at HWC of Baragaon because the facility for reproductive and child health care is not available at the centre. Details/information related to the deaths reported with probable causes and new born deaths within 24 hrs of birth/facility in transit/ at home or home to facility transit/Infant deaths, cannot be obtained from this centre because of the unavailability of related services.

Basic diagnostic facilities of Hb, Blood sugar tests etc are available but facilities like; x-ray, ultra-sound, Elisa, and hepatitis during pregnancy are not available at Baragaon Health and Wellness Centre.

Conclusion and Suggestions: The basic objective of AB-HWCs is to offer comprehensive and universal health care with a set of multiple reforms to cater the dire need of reproductive and child care, counseling care during pregnancy, high risk pregnancy identification, but insufficient staff at Baragaon HWC gives a bad taste. Even though OPD and diagnostic facilities are being provided very aptly at Baragaon's HWC, so it may be infer that if the required staff members will be available the vision of AB-HWCs will surely be matched at the HWC of Baragaon of Lucknow district. The unavailability of technological assistance and internet facilities are also putting a question mark to the performance of the centre. At all the sub-health centres of the Baragaon HWC, community health officer ASHA and / multi-purpose worker (female) are attached and trying their level best to provide a linkage to the system. The unavailability of staff, facilities and internet collective drag the score of AB-HWC of Baragaon village.

Suggestions: Availability of staff is the best suitable reform to the HWC of Baragaon or any other HWCs in India.

To improve the health care services at Baragaon village the Diagnostic services like X-ray, Ultrasound and hepatitis during pregnancy should be made available.

To improve the access of health care, electronic record keeping, usage of technology were also incorporated as key features AB-HWC but internet access at the village level was not found so the related facilities are dreams for AB-HWCs in India and Baragaon as well, to detour the situation some private companies may be hired /requested to provide minimum working hour accessibility of internet in skirt areas for record keeping at HWCs, this will doubly resolve the pre-existing lacuna.

The unavailability of staff, facilities and internet collective drag the score of AB-HWCs of rural areas in India create a lag so sometimes the efforts of the health care team remains unaccounted and it gradually affects the score of district/State/Country on the NITI Ayog SDG India Index.

Stock clearance and restoration of all types of medicines and required equipments with the development funds are routine work at any HWCs. If the record keeping will be online the monthly reports of the HWCs (facility available /not available, medicines available/nit-available) will be available for reference whilst restoring the stock, will certainly lower the cost of the health system.

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Nutritional Security and Millets: Opportunities, Challenges and Innovations

Priyanka, Dr. Satish Kumar & Dr. Harnam Singh

Abstract

Millets are a nutritional crop and an excellent source of minerals as well as nutritious food. Millets have been the food of the traditional Indian way of life. The best practices have also been forgotten in the struggle to be cutting edge and in the hustle and bustle of life. There have also been inconsistencies in the method of growing food grains, preparing food, and eating food, along with the very intense lifestyle as well as the glare of Chinese, fast food. Potatoes, sugar, wheat flour and rice have started making most of the food. As a result, along with blood pressure, sugar, heart diseases, etc., calcium, blood, and protein deficiency has also started in the body. As long as millets were a part of the diet, all these diseases used to occur in very less quantity. In view of the importance of coarse grains, The International Year of Millets has been designated for 2023. With an estimated 41% global production share, India is one of the top millets producers in the world. Recognizing the huge potential of millets, which also coincides with the Sustainable Development Goals (SDGs) of the United Nations, the Government of India has accorded priority to millets with Shree Anna.

In the presented research paper, an attempt has been made that how the general public along with the farmers of the country can be benefited by adopting coarse grains (millets) in the food plate and the concept of healthy India-healthy world can be realized. How millets can play their role in generating livelihood opportunities, increasing farmers' income and ensuring food and nutritional security.

Keywords: *Nutritional Security, Millets, Livelihood Opportunities, Shree Anna*

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Introduction:

Millets are the oldest grain in the world. The main diet of the people of India was only coarse grains. Fat grains were about to disappear from the plates of food in India and the world that the Government of India has taken a special initiative regarding this. Taking a lead role, the Government of India had declared the year 2018 as the National Year of Millets with an aim to generate more production and demand. In the year 2018, Bajra was also made a brand under the name of “Nutri Cereal”. With the special efforts of the Government of India, the United Nations General Assembly has declared 2023 as the International Year of Millets (IYM). On the occasion of International Millet Year 2023, various programs and events are also planned for the production and demand of coarse grains including millet. In the G-20 summit too, the promotion of millet has been made an integral part of the diet. The International Millet Warp initiative can also be seen as a form of global acceptance. The Government of India intends to transform IYM 2023 into a “people’s movement” and make India the “Global Hub of Millets.”

The term “millet crop” refers to crops of coarse grains like Jowar, Bajra, Ragi, Sawan, Kangni, Cheena, Kodo, Kutki, and Kuttu. It is an important crop of semi-arid tropical regions. It is produced in the developing countries of Asia and Africa, especially in India, Mali, Nigeria and Niger. Developing countries account for 97% of the world’s total coarse cereals production. Due to the COVID-19 epidemic, everyone has become very conscious about their health and food habits.

Review of Literature

Extensive literature highlights the nutritional richness of millets, which are naturally endowed with high levels of essential nutrients including dietary fiber, protein, vitamins, and minerals. Several studies have underscored the adaptability of millets to various agro-climatic conditions, making them resilient in the face of climate change-induced uncertainties. Some available reviews are as under:

*Nagaraj, N et al (2013)*¹. claims that sorghum and pearl millet are still vital components of the dryland economy and are grown in rainfed circumstances in arid and semi-arid areas of India.

*Finnis, E. (2012)*². noted that shopping locations mean that people who are not a part of the millet-marketing scheme are also unlikely to purchase or consume them, except possibly on the infrequent occasions when they might find themselves in town.

*Sood, S, et al (2019)*³ proposed systematic characterization of the finger millet germplasm and wild species for various nutritional and additional traits for their application in breeding programmes, fundamental and strategic research to determine the genetic mechanisms underpinning improved crop input use efficiency, appropriate crop management techniques, post-harvest added value, and identification of novel genes for abiotic stress tolerance and nutritional traits.

*Choudhury, P. R., & Sindhi, S. (2017)*⁴claimed that decision-makers and extension agents have been prevented from comprehending small farm ecosystems in a whole by small farmers' growing marginalisation and limited voice. They are severely impacted by the neglect and undervaluation of their ecosystems, but droughts also cause them to fall deeper into a cycle of poverty that forces them to work for low wages to support global development.

*Jeeva, J. C. et al (2019)*⁵⁵Jeeva, J. C., Joshi, K., Singh, A., & Behera, B. C. (2019). Engendering finger millet-based value chains for livelihood and nutritional security of women in agriculture. *Current Science*, 116(11), 1893

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New India News, Central Bureau of Communications, New Delhi Year 03 Issue 15 February 2023. claims that finger millet has been a staple crop for millions of farm households in arid and semiarid regions of India and is a highly nutritious source of food for the country's poor rural communities.

After the instance reviews of the literature, we can say that existing literature underscores the manifold benefits of millets in advancing food and nutritional security. This review highlighting the need for a comprehensive analysis of millets' potential to transform food systems and improve the health and well-being of communities worldwide.

Objectives of the Research

Objectives of the research paper is to investigate the role of millets in enhancing food and nutritional security on both local and global scales. The main objective of the paper encompasses a comprehensive exploration of various aspects related to millets and their potential contributions to food security and improved nutrition. Some objectives are as under:

- To assessment of Nutritional Value of different millet varieties.
- To evaluate the economic viability of millet cultivation for smallholder farmers.
- To investigate the historical and cultural significance of millets in different regions.
- To examine existing policies and interventions that promote millet cultivation and consumption.

Importance of the Study:

In context of addressing global challenges related to food security, nutrition, and sustainability. This study aims to contribute valuable insights that can inform policies, practices, and interventions, fostering positive changes in agricultural systems, dietary patterns, and overall human well-being. Millets' capacity to thrive in challenging environments can provide insights into creating more resilient agricultural systems that are less susceptible to climate-related shocks. Millet cultivation is often associated with smallholder farming communities. The economic viability and income-generation potential of millets can offer guidance on how to improve the livelihoods of these farmers, contributing to rural development and poverty alleviation.

Thus, we can say that it tackles critical issues such as malnutrition, climate change resilience, agricultural sustainability, and cultural heritage preservation.

Millets and Environment

Millets are the main sources of food for humans, fodder for animals and raw materials for industries. Coarse cereals are the most preferred crop in areas of low and average rainfall. These crops grow under semi-arid climate, where other crops do not grow properly. Along with coarse grains, crops of marginal and small farmers, it is also called super food, because nutrients are relatively high in them. Coarse grains are grown in extreme climate, less water and without chemical fertilizers and medicines. Less resources and less money is spent in growing it. Due to non-use of chemical fertilizers and medicines and due to minimum exploitation of underground water, the environment also remained healthy. The production of coarse grains and their use in food keeps the health and environment of all animals including humans healthy. The Bundelkhand region of Uttar Pradesh and the plains of the south-west are suitable for the cultivation of coarse cereals.

International Year of Nutritious Cereals 2023

After playing an important role in declaring the year 2023 as the International Year of Nutritious Cereals, the Government of India is now very active in the production of coarse cereals. Although there are 13 varieties of millet in the world, but for the International Nutritious Cereal Year 2023, eight cereals – Bajra, Ragi, Kutki, Samwa, Jowar, Kangni, Chena and Kodo have been included. In the budget presented on February 1, 2023, a special scheme has been made by naming coarse grains as Shri Anna. The Government of India aims to make the International Year of Nutritious Cereals a 'people's movement', and establish India as the 'Global Hub of Millets'. Each millet has its own importance. As millet is loaded with calcium,

millet has potassium and phosphorus, and millet has fiber while kodo is rich in iron. About 97% of the world's total coarse grain production is in the developing countries. In the table presented below, we can see the area and production of millets.

Table – I, Production of Millets in the World

GLOBAL OUTLOOK OF MILLETS		
Millets Area and Production Region-wise (2019)		
AREA	AREA (Lakh Hectares)	Production (Lakh Tonnes)
Africa	489	423
America	53	193
Asia	162	215
Europe	8	20
Australia and New Zealand	6	12
India	138	173
World	718	863

- India produces >170 Lakh tonnes (80% of Asia and 20% of global production)
- Global average yield: 1229 kg/ha, India (1239 kg/ha)

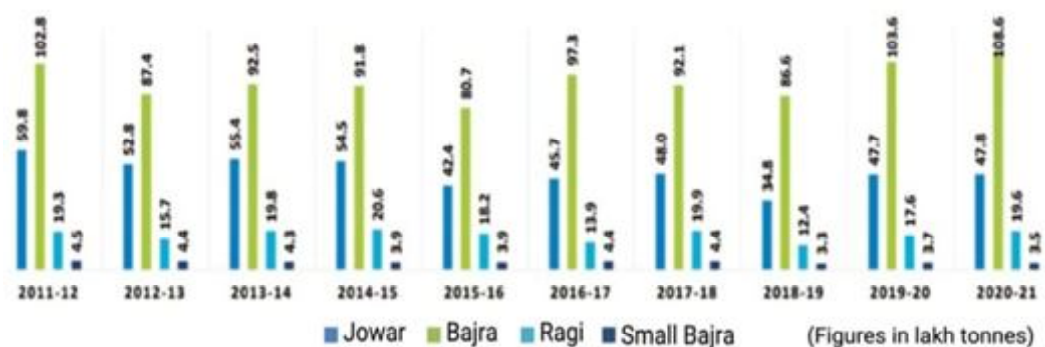
Source – PIB, New Delhi, 2023

Millet production and consumption

Currently grown in more than 130 countries and considered a traditional food for more than half a billion people all over Asia and Africa, millet, is one of the ancient crops grown in India, and its proof is also found in the Indus Valley Civilization. Bajra is primarily a kharif crop, requiring less water and agricultural inputs as compared to other similar cereals. Millets have enormous potential to generate livelihoods, increase farmers' income, and ensure food security. The Indian government has created its action plan while taking the lead. 2018 was designated as the National Year for Millets by the government in an effort to increase both supply and demand. Dietary fiber-rich millet aids in blood pressure and sugar level regulation. Even though understanding of millets' health advantages has increased since the post - Covid, there is still much to be done. In the production of coarse cereals in the last ten years, we can see the production of millet and its consumption in the following picture.

INDIA: PRODUCTION OF COARSE CEREALS DURING THE LAST 10 YEARS

India is one of the major producers of Millet in the world. Production of Millets in India increased from 1.45 crore tonnes in 2015-16 to 1.8 crore tonnes in 2020-21



Source - New India News, Central Bureau of Communications, New Delhi, Year 03 Issue 15 February 2023.

Shri Anna

For the promotion of production and consumption of coarse grains, the “Shri Anna” scheme has been announced in the budget presented on February 1. In the era of marketing, common people have gone away from the consumption of coarse grains. Single crop farming got a boost and paddy and wheat have come to play a major role in this. As a result, both the proportion of coarse cereals in the cultivated land and their yield have gone on decreasing. The urban people left the dishes made of coarse grains out of the kitchen considering them to be rustic food. Due to this change over time, one of the reasons for malnutrition and lifestyle related problems is the neglect of coarse grains. In the era of growing demand for vegetarian foods, millets are a great option. Their cultivation is also economical, in which much care is not required. Millets have been continuously neglected during the era of Green Revolution and wheat rice. The situation has become such that the share of cereals, which used to have about 40% share in our food grain production, has been reduced to less than 10%. By the way, Asia and Africa are the major production and consumption centers of coarse grains. India, Sudan and Nigeria are their major producers. About 40% of the production of coarse cereals in the world is still in India.

Nutritious Cereals and Health

The main reason for the increase in the demand for coarse grains is the importance of nutrients and being healthy in them. As millet is rich in Vitamin E, it protects the body tissues from injuries. Millet controls the cholesterol level, which keeps the heart healthy. Millet is also

useful in the prevention of diabetes. Weight is controlled by drinking barley water. Considered good for kidney health. Sorghum is widely used in animal feed, but a variety of it is found in plenty of potassium, phosphorus, calcium and iron. To increase blood or to strengthen the immune system to stay away from diseases, tide is very useful. Tide- Protects the cells of the body, reduces the risk of colon cancer and heart disease. Ragi- helps in the development of bones, it is also effective in anemia. Kangni or Tangoon - Strengthens the bones with the abundance of calcium and prevents osteoporosis. Kodo- helps in strengthening the nervous system. Sawan is rich in iron. Helps in blood circulation. Katuki- Very beneficial for the heart, helps in controlling the level of sugar in the blood. The coarse grain, which was clumsily banished from the food plate as being fit for cattle feed, has found its value today in smart avatars of Ragi Biscuit, Oatmeal Porridge and Millet Muesli. Gym trainers and nutritionists are now explaining these things in a new way to those who consider coarse grains as the food of the poor because they are rich in nutrients. That's why the government is encouraging the production and consumption of coarse grains. The nutritional value of millets can be seen in the following table two.

Table-2

NUTRITIONAL VALUE OF MILLETS (In 100 Gm Edible Portion)

Cereals	Proteins (gm)	Fats (gm)	Carbs. (gm)	Energy (kg)	Calcium (mg)	Iron (mg)
Jowar	10.4	3.1	70.7	349	25	5.4
Bajra	11.8	4.8	67.0	361	42	11.0
Ragi	7.7	1.5	72.6	328	350	3.9
Kodo	9.8	1.6	66.6	353	35	1.7
Kutki	8.7	5.3	75.7	340	0.02	2.8
Sanwa	6.93	2.0	80.6	333	23.2	6.9
Foxtail Millet	10.3	3.1	69.9	349	30.1	3.7

Source – PIB, New Delhi

Increase in income from millet

The cultivation of millets can increase the income of the resource-poor farmers. An increase in income requires the co-ordination of technologies, marketing systems, input supplies, credit, and policies. To double the income of farmers, there are possibilities of earning more income through value addition and processing of coarse grains. Presenting coarse grains as

healthy food and creating demand for their value-added products will boost their production and consumption and will have a positive effect on increasing farmers' income. Crops of coarse grains can be utilised in the processing of food and also have a bright future as an export good. To promote the sale of coarse cereals by the government, the support of marketing capacity is very necessary. Coarse grain-producing states in India are mainly, Uttar Pradesh, Rajasthan, Puducherry, Maharashtra, Madhya Pradesh, Karnataka, Puducherry, Haryana, and Punjab etc. Where farmers can be empowered economically by using new technologies.

Promotion of Millets for Cultivation

Despite being climate-adaptable to millets, their cultivation has declined due to a lack of institutional support as compared to rice and wheat. Keeping in view the importance of the development process of coarse grains, some of the major suggestions are:

- Cultivation of coarse cereals, especially jowar and bajra, being highly labor intensive, the cost of labor is high. Therefore, a machine that works jointly for harvesting and threshing should be constructed and used.
- Export of Indian coarse grains should be encouraged through Farmer Producer Organizations (FPOs) in targeted domestic markets as well as in international markets.
- Development and use of productive varieties according to the soil will also give encouraging results.
- Capacity building through research and support for scientific cultivation of coarse cereals crops through partnership system.
- Promoting processing and value-addition and ensuring demand growth and supply in the market through group system like farmer producer organizations and self-help groups.
- Repurchase system with minimum support price, crop insurance, mid-day meal and public distribution system should be included.
- Policy assistance should be provided for primary processing and godowns after harvesting.
- There is a need to strengthen the skills for entrepreneurship development on coarse grain based products keeping rural and urban people at the center.
- The government should alter its policies to lower the cost of products made from millet and coarse cereals.

Conclusion

Cultivation of coarse grains is highly beneficial for the poor farmers of the country as it does not require costly chemical fertilizers and pesticides. Entrepreneurs are required to produce convenience foods made from millet that are popular with urban customers. Goods and Services Tax should be minimum on processing of coarse grains. Currently, millet that is

packaged is subject to a 5% goods and services tax, whereas processed millet products like noodles are subject to an 18% tax, which raises the price of the item. If millet consumption is to be promoted then tax exemption should be given. The income of coarse grain-producing farmers can be increased only by setting up a processing industry. To increase the production of coarse grains, the government should further increase their minimum support price. Along with the government, the general public and organizations should also make innovative experiments to take Shree Anna to every household, only then health benefits and the objectives of the Global Nutrition Year can be achieved by nourishing coarse grains.

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Are Direct Cash Transfers by the Government a Better Option than Launching a Universal Basic Income Model for India?

Ananya Gupta

Abstract

As per the recent reports of the United Nations, India-home to around 142.86 crore people surpassed China as the world's most populous country. The huge population of India has its own merits and challenges and the matter remains highly debatable, whether India truly has a demographic dividend or not. India opted for a mixed economy model wherein both public and private sectors have a significant role to play. There is a near perfect blend of socialism and capitalism in the Indian economy which aims to ensure the minimization of income inequalities and maximize the social welfare. Due to the nature of a welfare state of India, the governments have a unique role to play i.e., collect taxes from the high earning individuals and providing the basic amenities and opportunities to the disadvantaged sections of the society. In this regard a number of government initiatives are currently ongoing some of which offer cash transfers directly to the beneficiaries (Direct benefit transfer or DBT) like PM-KISAN scheme which is regarded as the world's largest DBT scheme for farmers. This paper aims to understand the affordability of such schemes on the country's financial resources and will try to analyse the adaptability of UBI or universal basic income in India. After comparing the universal basic income model with these social security schemes where cash benefit is provided it was found out that even though these two might come across as the same thing, they are not same at all. Also, the practicality of adapting a universal basic income model for a huge population like that of India is also studied in the paper along with the suggestions and ways out.

Lastly, the implications of giving cash to people on their productivity and work attitude is also taken into account while writing the paper.

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INTRODUCTION

In January 2013, The Government of India, introduced the Direct Benefit Transfer or DBT scheme to streamline the transfer of government-provided subsidies in India. The objective was to improve the delivery system and redesign the existing procedures in welfare schemes. DBT aims to transfer subsidy benefits from various Indian welfare schemes directly into the bank accounts of the beneficiaries. To avail of the DBT benefits, beneficiaries must ensure they link their bank account to their Aadhaar number.

AIM: The idea behind the introduction of DBT was to reduce the poverty by giving direct cash benefits instead of subsidies. Also to remove the malpractices like duplicate payments associated with the current system by introducing direct benefit transfer in the Aadhaar linked bank accounts of the beneficiaries thus bringing transparency in the distribution of funds.

DBT Process

The following are the steps or sub-sections, which are the major checkpoints in the Direct Benefit Transfer process:

1. Public Financial Management System (PFMS) registration.
2. Examination of eligibility of the beneficiary.
3. Verification of the beneficiaries' bank account/ Aadhaar Enabled bank account.
4. Initiation of the payment

Economics of DBT

Economic Survey 2015-16 observed that growth needs to be complemented with active government support to improve the economic lives of the poor and vulnerable, and achieve equity. Moreover, it showed that in several price subsidies that governments offer, rich households benefit more from the subsidies than do poor households (say, in the case of electricity, water, or fuel subsidies), and distortions are created in the market that ultimately hurt the poor the most (say, in the case of minimum support prices or railway passenger subsidies). Further, on account of their leakages not only are direct wastages created, but opportunity costs of how the government could have otherwise deployed those resources also pile up. It held that the benefit that price subsidies seek to create for the poor can be directly transferred to the poor through lump-sum income transfers, avoiding the distortions that subsidies induce. Against this backdrop, the goal of converting subsidies into DBT mediated through the Jan Dhan, Aadhaar and Mobile Number (JAM) trinity was set into motion

What makes the Direct Benefit Transfer a unique government initiative

The DBT is not a social assistance programme in itself; instead, it is a mechanism to consolidate and control the data on direct benefit transfers from multiple sources. Over time, DBT in India has been recognised to bring all-round inclusivity and efficiency by experts from various fields.

First phase of DBT

First phase of DBT was initiated in 43 districts and later on 78 more districts were added in 27 schemes pertaining to scholarships, women, child and labour welfare. DBT was further expanded across the country on 12.12.2014. 7 new scholarship schemes and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was brought under DBT in 300 identified districts with higher Aadhaar enrolment.

Electronic Payment Framework was laid down vide O.M. dated 13.2.2015 and 19.2.2015. This Framework is to be followed by all Ministries/ Departments and their attached Institutions/ PSUs and is applicable on all Central Sector (CS)/ Centrally Sponsored Schemes (CSS) and for all schemes where components of cash is transferred to individual beneficiaries. Aadhaar is not mandatory in DBT schemes. Since Aadhaar provides unique identity and is useful in targeting the intended beneficiaries, Aadhaar is preferred and beneficiaries are encouraged to have Aadhaar.

JAM Trinity and DBT

Jan Dhan, Aadhaar and Mobile are DBT enablers and as on date more than 22 crore Jan Dhan Account, more than 100 crore Aadhaar and about 100 crore Mobile connections provide a unique opportunity to implement DBT in all welfare schemes across country including States & UTs. DBT will bring efficiency, effectiveness, transparency and accountability in the Government system and infuse confidence of citizen in the governance. Use of modern technology and IT tools will realize the dream of **MAXIMUM GOVERNANCE MINIMUM GOVERNMENT**.

Implementation: It is a mission or an initiative by the government of India started on 1st January 2013 as a way to reform the government delivery system.

- o Central Plan Scheme Monitoring System (CPSMS), the earlier version of the **Public Financial Management System (PFMS)**, of the Office of Controller General of Accounts, was chosen to act as the common platform for routing of the Direct Benefit Transfer.

➤ **Schemes under DBT:** There are 310 Schemes from 53 Ministries under DBT. Some important schemes are:

- o **Pradhan Mantri Fasal Bima Yojana,**
- o **National Food Security Mission,**
- o **Pradhan Mantri Krishi Sinchai Yojana,**
- o **PM KISAN,**
- Swachh Bharat Mission Gramin,**
- o **Atal Pension Yojana,**
- o **National AYUSH Mission.**

➤ **Aadhaar not Mandatory:** Aadhaar is not mandatory in DBT schemes. Since Aadhaar provides unique identity and is useful in targeting the intended beneficiaries, Aadhaar is preferred and beneficiaries are encouraged to have Aadhaar.

DBT Process

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- Verification of the beneficiaries' bank account/ Aadhar Enabled bank account.
- Initiation of the payment
- **PFMS** (Public Financial Management System) is a Central Plan Monitoring System of the Ministry of Finance, Government of India.
- It is used as a common platform to carry out both Aadhar and non-Aadhar e-payments for the DBT program.

Literature Review

IMF appreciated India's Direct Benefit Transfer scheme as a logistical marvel and praised the role of technological innovation in achieving this feat. This was highlighted by Badgamia, N. (2022). "A lot to learn' from India: IMF praises direct cash transfer and other government schemes.

DBT played a major role in sustaining life especially of the under-privileged segments of the society impacted by the COVID-19 crisis, helping millions in providing immediate relief in tiding over the turbulent period. An assessment of DBT during the Covid 19 pandemic was also highlighted in Sharma, A. (2022). 'How Direct Benefit Transfer Became India's Booster During Pandemic, and Why World Bank is in Awe'

World Bank in its report titled "The Role of Digital in the COVID-19 Social Assistance Response" (English) mentioned that with the outbreak of the COVID-19 pandemic and the imposition of lockdown and social distancing norms, DBT emerged as a boon in providing relief to millions of citizens whose livelihood was impacted. As the crisis loomed large, a lockdown was imposed by the Government for 21 days. The Public Financial Management System (PFMS) team took up the challenge during this adversity of facilitating smooth functioning of the financial machinery of the Govt. of India. PFMS recorded the highest number of transactions in a single day on 30th March, 2020 of 2.19 crore transactions largely driven by DBT payments. Cash amounts were transferred using the digital payments technology vehicle, Public Financial Management System (PFMS) under Central Schemes (CS) and Centrally Sponsored Schemes (CSS).

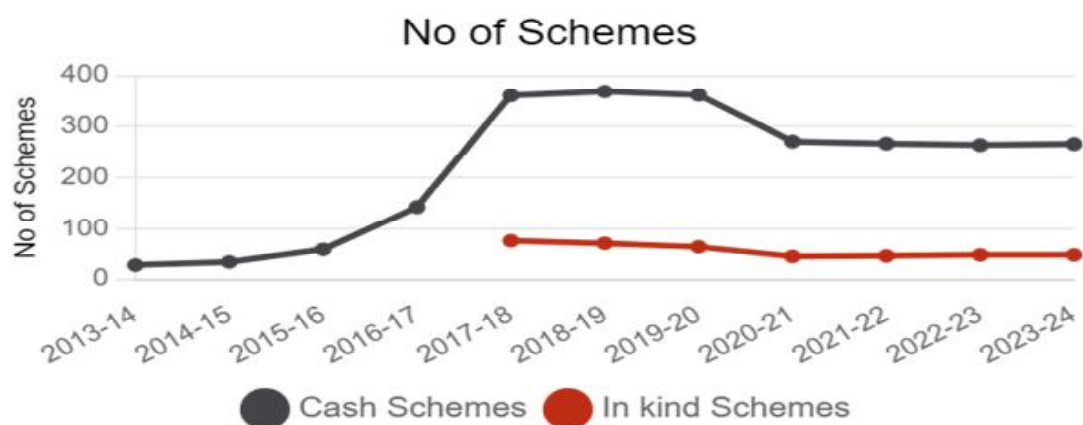
Methodology and Framework

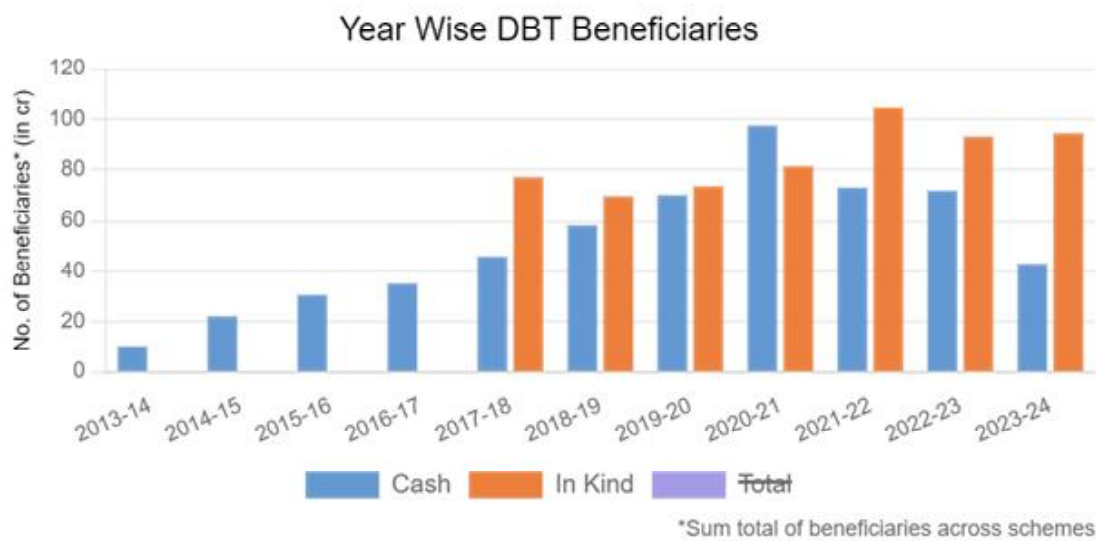
This study is based on the secondary data collected through various government reports, national and international indices and websites of ministries.

Total Direct Benefit Transfer (Cumulative) Rs34,19,756 cr,19

Financial year	Total no. of transactions in crores	Total no. of DBT in crore Rs
2019-20	438	381631
2020-21	603	552527
2021-22	717	630264
2022-23	693	716396
2023-24	497	435343

Currently there are 314 schemes covering 54 ministries with department of higher education having maximum number of schemes i.e., 26 in which the amount is directly transferred into the bank accounts of the beneficiaries.





Result and Analysis

The data collected shows the tremendous growth in DBT transfers at the level of Central government in the past decade. Over time, DBT in India has been recognised to bring all-round inclusivity and efficiency by experts from various fields. The World Bank (2022) also recognised the need for countries to back the DBT-styled public interventions into action

plans for disaster resilience. The positive impact of DBT in India on the economic and social position of women within and beyond their households.

DBT in the G20 Agenda

The ongoing Indian Presidency of the G20 is envisaged to be inclusive, ambitious, action oriented, and decisive. It has also been stressed that since 'India is a microcosm of the world', the initiatives that we take for 'leveraging technology for citizen welfare' will ...catalyse a fundamental mindset shift, to benefit humanity as a whole. (PMO *ibid.*) The DBT is a shining instance of Indian innovation that fits seamlessly into this farsighted vision. India is endeavouring to use the G20 platforms for introducing the home-grown DPI-based DBT paragon to the world, particularly the Global South (PTI 2023). DBT also fits into the bigger picture of India's co-chair ship of Global Partnership for Financial Inclusion, a forum where India seeks to promote 'the development of an open, inclusive and responsible digital financial ecosystem based on the presence of a sound and effective digital public infrastructure (DPI) for the advancement of financial inclusion', a vision reiterated in FMCBG (2023). For its impact on promoting transparency, DBT was also showcased in the G20 Anti-Corruption Working Group Meeting.

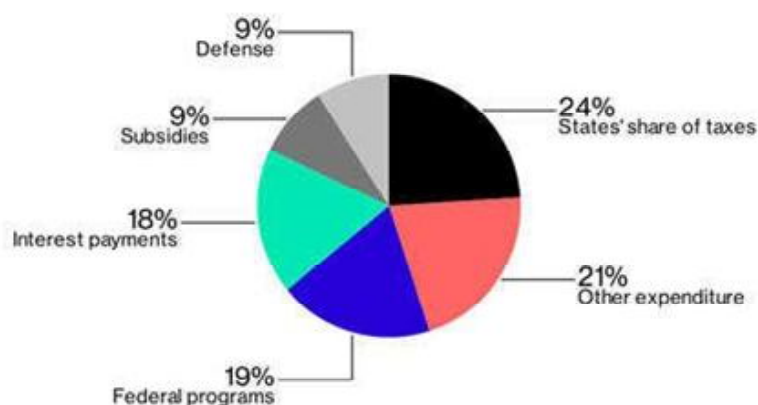
World praises India's DBT

India's Direct Benefit Transfer has been a force multiplier in facilitating the transfer of social safety net payments directly from the government to beneficiaries' bank accounts, helping reduce leakages, curb corruption, and provide a tool to effectively reach households to increase coverage. The IMF has hailed DBT for being 'a logistical marvel how these programmes that seek to help people who are at low-income levels reach literally hundreds of millions of people', with the World Bank also lauding the scale at which DBT impacts people's lives – 'Helped by digital cash transfers, India managed to provide food or cash support to a remarkable 85% of rural households and 69% of urban households. At the same time, DBT and accompanying governance reforms have been estimated to save the Government of India cumulatively a sum of Rs 2.23 lakh crore up till March 2021 or close to 1.1% of GDP (Alonso et al., *ibid.*). This figure has subsequently gone up to Rs 2.73 lakh crore as of March 2022, as per the data available.

Are the Direct Benefit Transfer (DBT) same as Universal basic income model

How India Spends

Subsidy expenditure equivalent to the country's defense outlay



Source: India budget estimates for 2018-19

Bloomberg

- Under a UBI, the government gives a “basic” income to every citizen in the country — from the richest person to the poorest one, regardless of whether they work or not.
- But there is a flip side to UBI: The government also rolls back all types of subsidies — from food to fertiliser to train tickets to medical bills.
- **The idea is simple:** Just give everyone a minimum income amount, cut down the bureaucratic costs involved in running scores of welfare programmes, and simply tax everyone in such a manner as to fund the UBI. The truly needy people will get a minimum help while anyone who doesn't actually need the UBI help will find it taxed away.

Why this issue arises in the Indian context?

- 2024 is the year of general elections or the biggest festival of world's most powerful democracy. President of a prominent political party told an election rally that if voted to power, his party would implement the NYAY scheme under which women would receive at least Rs 60,000-70,000" annually.
- Earlier, in 2018, the then government had rolled out schemes like PM-KISAN to provide income support to the needy households.

o PM-KISAN was billed as the world's largest Direct Benefit Transfer (DBT) scheme for farmers.

Are Schemes like NYAY and PM-KISAN the same as Universal Basic Income (UBI)?

Although both the 2 concepts might look similar to each other but in reality they are not.

- These schemes like PM KISAN are targeted at specific groups of Indians; they are not universal like UBI.
- If UBI is rolled out, the tax rates would be increased because the rich will be taxed in a higher tax bracket.

Why has UBI not been Implemented in India, and is not Popular elsewhere?

- In rich countries like Switzerland, which considered and dropped the idea, the UBI amount be quite a lot, even though the beneficiary population may be small.
- And in poorer countries, the amount would be smaller, but the population perhaps too large.
- Also, cutting existing subsidies and raising taxes to fund the UBI would be politically unpopular ideas almost everywhere.

Arguments in favour of UBI:

o UBI reduces poverty and income inequality, and improves physical and mental health.

- o UBI leads to positive job growth and lower school dropout rates.
- o UBI guarantees income for non-working parents and caregivers, thus empowering important traditionally unpaid roles, especially for women.

Arguments against UBI:

- o UBI takes money from the poor and gives it to everyone, increasing poverty and depriving the poor of much needed targeted support.
- o UBI is too expensive.
- o UBI removes the incentive to work, adversely affecting the economy and leading to a labour and skills shortage.

What is more suited in country like India?

India- world's most populous country is still a home to a vast population of below poverty line households. In this regards it becomes very complicated to estimate a truly "universal" income for all. Also, categorising its huge population in income levels on consumption

levels or to estimate a poverty line is not an easy task. If we set a universal income then its periodic revision and the basis of such revision would become a hot topic for debate along with its political implications and interference.

Therefore, as per the present scenario, DBT looks more promising but there certainly is an alternative or switch awaiting for us in the form of UBI in the future.

Conclusion

The DBT scheme has been beneficial on the ground level but there are some issues regarding its rigidity like the criterion for identification of poor people. But these issues can be sorted and the functionality of this scheme has a window for improvement in the future.

DBT scheme marks a paradigm shift in the process of delivering government benefits to the people which are bringing efficiency, effectiveness, transparency and accountability in the Government system and infusing confidence of citizens in the governance. It is aimed to realize the dream of MAXIMUM GOVERNANCE and MINIMUM GOVERNMENT.

Way Forward

For DBT to be a universal success and fulfil its mandate of re-engineering benefit delivery system, it may be important to address a few issues as discussed below, which will further embolden the DBT efforts in the country.

I. Universal Beneficiary Database and Grievance Redressal System

Currently, each Ministry/Department maintains its own database of beneficiaries, which is used as a base for transferring benefits to the intended recipients. These databases at multiple levels not only duplicate the effort but hamper the process of aggregating subsidies to individuals as well. Thus, a unified beneficiary database needs to be created by capturing the unique JAM details of each beneficiary. The universal database will need to be dynamic, linked to Birth/Death registration. The database will also need to be maintained at local level and aggregated at higher levels, viz. District/State/National. These unique details of beneficiaries shall help government in effective scheme planning or creation and eventually will lead to holistic realisation of subsidy outlays.

II. Aadhaar-based Payment

Only about 37% payments out of total DBT fund transfers were disbursed through Aadhaar Payment Bridge (APB) as on 31.1.2016. Rest of the payments under DBT were made using other electronic transfers including, NEFT. Government intends to make maximum DBT payments through APB. Universal Benefit Accounts linked to Unified Beneficiary Databasewith banks/mobile/Aadhaar (JAM) details will pave the way, going forward.

III. Rationalising Govt. Subsidy

Government is committed that food, kerosene and fertilisers on which large share of government subsidy is involved, may be brought on DBT platform. In the budget speech

Finance Minister Arun Jaitley had said, “We have already introduced direct benefit transfer in LPG. Based on this successful experience, we propose to introduce DBT on pilot basis for fertiliser in a few districts across the country, with a view to improving the quality of service delivery to farmers.” Introducing direct cash transfer for fertiliser subsidy will help farmers and manufacturers apart from helping the government’s finances.

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Socio-Economic Empowerment of SC Women through Self Help Groups: A Case Study of Bhadohi District

Ankit Kumar Mishra & Dr. Ravindra Pratap Singh

Abstract:

A Self-Help Group is a small voluntary association of poor people belonging to the same socio-economic condition residing in the same locality. Women empowerment is always considered as the key aspect of social and economic development throughout the world. Empowerment is an active process of enabling women to realize their full identity and power in all spheres of life. Self Help Groups are one of the most important tools for the improvement of the socio-economic condition of the rural women in general and the social inclusion of the Scheduled caste (SC) women the most downtrodden at particular. They faced twin disadvantage in the society, one because of their caste and other because of their gender. There has been minimal research done on the empowerment of SCs, specifically on SC women of Bhadohidistrict of Uttar Pradesh. Consequently, the present study aims to assess the impact of SHGs on the socio-economic empowerment of SC women. For the study, primary data has been collected from the SC members of SHG through interview with the help of well-structured schedule. Thus, 100 SC women randomly selected from 2 development blocks of Bhadohidistrict namely Aurai and Suriyawan. The data was analysed with the help of percentage, bar-diagram, and other relevant statistical techniques. The finding of the study shows that all the dimensions of SHGs significantly influence the socio-economic empowerment of SC women in study area. The finding also shows that the agriculture and allied activities is the most common occupation among the respondents. To further increase the impact of SHGs on the socio-economic empowerment of SC women the first and foremost step should be the removal of illiteracy among them. Policy and program should be framed in such a way that they achieve better results in reducing poverty and empowering women.

Keywords - Self Help Groups (SHGs), Women Empowerment, Scheduled Caste (SC), Illiteracy, Social Inclusion.

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Introduction

Self Help Groups are considered as one of most significant tools for the socio-economic empowerment of women. It is an important institution for improving the pattern and life style of women. The main objective of SHG is that it acts as the platform for women to provide space and time to each other. SHG comprises vulnerable people who do not have access to formal financial institutions. It enables all the members of group to learn cooperate and work in a group environment.

Women in India, covers almost fifty percent of the total population, but they remain to be a neglected section of our society. In this modern sophisticated world, women are treated as a subordinate of men. They have been confined to the four walls of the household, controlled of their mobility and personal freedom by the men of household. So they have lagged behind in the field of education, skill development and employment. As a result, in every sphere of life the women position is lower than men.

The situation of SC women needs more special attention. They are one of the most disadvantaged sections of our society. SC women faced discrimination not only by people of higher castes, but also within their own communities. On the one hand they were discriminated on the basis of their caste status and on the other hand, they were discriminated on gender lines. SC women in villages are suffering from deprivation in education, socio-economic, political and religious aspects. Due to such deprivation, the SC women can not participate in productive sector. Hence empowerment of such scheduled caste women is needed.

Women Empowerment

In recent year, empowerment of women has been recognised as a central issue in determining the status of women. Empowerment is a practice of transformation by which individuals or groups gain power and ability to take decision on their livelihood. The word 'empowerment' means a concept including economic, social and political empowerment.

The empowerment of women leads to:

- Generation of decision making power.
- Increasing access to healthcare and education.
- Making them self-reliant and self-confident.
- Changing the status of women and making them more able to fight various discriminations.

Review of Literature:

Kasi R.K and Y. Ashok K (2022), in their study on "An Analysis of Scheduled Caste Women through Self Help Groups – with Reference to Prakasham district of Andhra Pradesh", the main objective of the study is to analyse the impact of SHG on the empowerment of SC women. The study found that the stronger role of SHG enhancing the women empowerment by making them financially strong and enabling them to save money. SC women ability in the

field of income, expenditure, savings, decision making and external relations are improving as a result of SHG operations.

KalachandS,AmitraM (2017), conducted a study on, “An Empirical study to examine the Impact of Self Help Groups on the Income of Rural Women”, They point out that level of income of women has increased after joining the group. Income and savings of women group members are positively correlated. The study also stated that the increase in savings lead to positive impact on financial situation of the family.

Meena,Sharma and Kumar(2015), in their study examined the impact of SHG on socio-economic conditions of women of Vidisha district. The study stated that the self help group is a program which is able to reach the vulnerable poor at affordable cost. They point out that after joining in group the women enjoying all kind of social amenities like medical facilities, water supply services, school for children and increase in self confidence.

KanchanS. (2015),conducted a study on, “Women Empowerment through Self Help Groups”. She found the NGO intervention was the major motivating factor for the women to join SHGs. Women gets a platform to links not only to bank but also wider development programmes. She also found that majority of the members were willing to continue as members of SHGs as they not only to increase there family income but also for overall development of family

Scope of the Study:

The present study is to observe the impact of SHGs on women empowerment and problem faced by the SC women in SHGs in surveyed area in Bhadohi district. This study covers the socio-economic aspects of SC women in SHGs. Socio-economic factors such as age group, educational status, marital status, occupation, income, etc. are explored in this study. The result of this study can be useful for the Government, NGOs concern and policy makers to take decisions to achieve women empowerment.

Objectives:

The objectives of the study stated as following:

- 1- To assess the socio-economic impact of Self Help Groups on scheduled caste women.
- 2- To find out the problem faced by SC women in Self Help Groups

Methodology:

Purpose of the present study, 100 SC women samples collected from Bhadohidistrict.Two development blocks namelyAurai and Suriyawanwere selected for this study. The sample respondentsare chosen using simple random sampling. In this study primary data were collected from directly respondents by pre-designed interview with the help of well structured schedule. Simple percentage, graphs, bar-diagrams and other relevant statistical techniques were adopted.

Result and Interpretation:**Table: 1**

Agegroup	Percentage
Up to 30	31
31 to 40	38
41 to 50	14
51 to 60	07
Above 60	10

Source: Primary data

Table 1 shows that out of total respondents taken for the study, 31 percent of respondents belong to the age group of 30 years, 38 percent of respondents are 41 to 50 years, 7 percent respondents are in age group of 51 to 60 years and remaining 10 percent of them belong to age group of above 60 years. As the result, the majority of SC women in SHG are found to be young.

Table: 2

Educational Status	Percentage
Illiterate	64
Primary Level	17
Upper Primary Level	08
High School	04
Intermediate	03
Above Intermediate	04

Source: Primary data

Table 2 shows the distribution of sample respondents of their education. There are 64 percent of respondents are Illiterate, 17 percent with primary level education, 8 percent with upper primary level education, 4 percent of respondents are high school level education, 4 percent of respondents are above intermediate level and 3 percent with intermediate.

Table:3

Marital Status	Percentage
Unmarried	02
Married	89
Divorced	00
Widow	09

Source: Primary data

Table 3 shows the distribution of sample respondents of their marital status. There are 89 percent respondents are married, 9 percent are widow and only 2 percent respondents are Unmarried.

Table: 4

Occupation	Percentage
Agriculture and Allied Activities	42
Labourer	24
Housewife	33
Self Employed	00
Others	01

Source: Primary data

Table 4 shows the distribution of sample respondents by their occupation. It is observed that 42 percent of respondents are involved in agriculture and allied activities followed by 33

percent are involved in household 24 percent are involved in labourer work and 1 percent involved in other works. As a result, majority of the respondents involved in agriculture and allied activities.

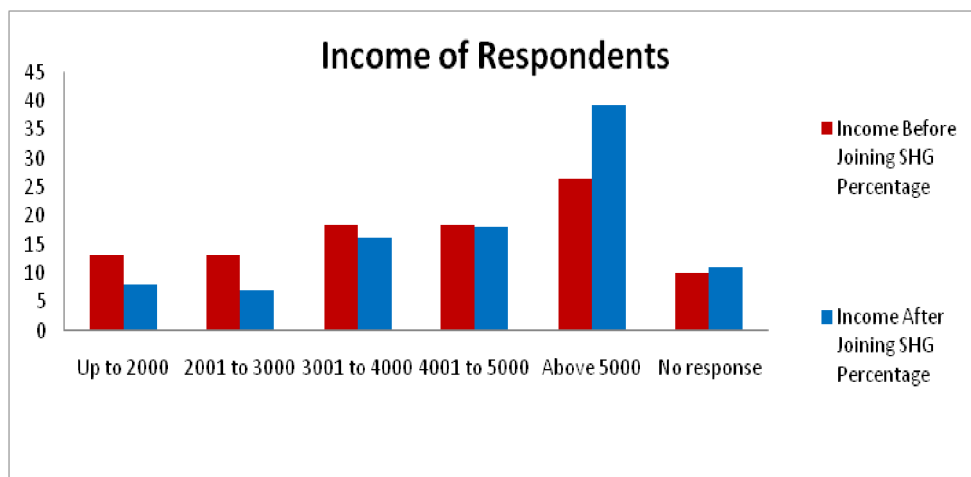
Table: 5

Income Before Joining SHGs		Income After Joining SHGs
Income	Percentage	Percentage
Up to 2000	13.3	8.1
2001 to 3000	13.3	7.1
3001 to 4000	18.4	16.2
4001 to 5000	18.4	18.2
Above 5000	26.5	39.4
No response	10.2	11.1

Source: Primary data

Table 5 shows the distribution of sample respondents by monthly income. Before joining in SHGs, 13.3 percent of respondents had a monthly income up to 2000 Rs, followed by 13.3 of respondents got between 2001 to 3000 Rs, 18.4 percent of respondents got between 3001 to 4000 Rs. 18.4 percent of respondents got between 4001 to 5000 Rs, 26.5 percent of respondents got above 5000 Rs and 10.2 percent of respondents are given no response. After joining in SHGs, 8.1 percent of respondents are earned up to 2000 Rs, 7.1 percent respondents earned between 2001 to 3000 Rs, 16.2 percent respondents earned between 3001 to 4000 Rs, 18.2 respondents percent earned between 4001 to 5000 Rs, 39.4 percent respondents earned above 5000 Rs and 11.1 percent respondents given no response. Thus, majority of respondents increased their monthly income after joining in SHGs.

Figure: 1



Source: Primary data

Figure: 1 shows the graphical illustration of monthly income of respondents before and after joining SHGs.

Table: 6

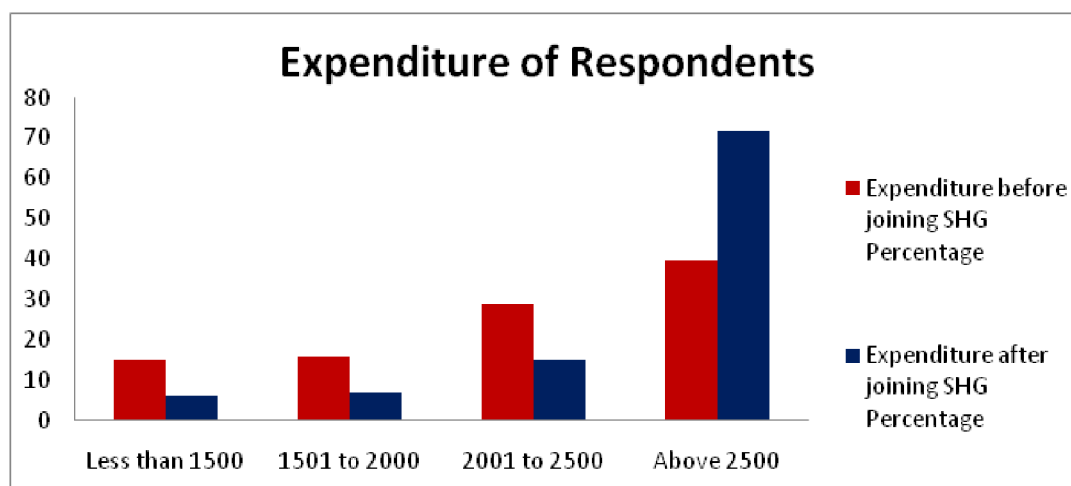
	Expenditure before joining SHGs	Expenditure after joining SHGs
Expenditure	Percentage	Percentage
Less than 1500	15	6
1501 to 2000	16	7
2001 to 2500	29	15
Above 2500	40	72

Source: Primary data

Table 6 shows the expenditure of sample respondents. Before joining in SHG, 40 percent respondents are spend above 2500 Rs, followed by 29 percent respondents spend between 2001 to 2500 Rs, 16 percent respondents spend between 1501 to 2000 Rs and remaining 15 percent respondents spend less than 1500 Rs, but after joining in SHG, 72 percent respondents spend above 2500 Rs, followed by 15 percent respondent spend between 2001 to 2500 Rs,

7 percent respondents expend between 1501 to 2000 Rs and remaining 6 percent respondents expend less than 1500 Rs. As a result, majority of respondents increased their monthly expenditure above 2500 Rs after joining in SHGs.

Figure:2.



Source: Primary data

Figure:2 shows the graphical illustration of monthly expenditure before and after joining SHGs.

Table: 7

Reasons	Percentage
For support your family	13
For getting loan	20
For increase savings	57
For debt repayment	01
For self-employment	00
Others	09

Source: Primary data

Table 7 shows the percentage of sample respondents who joined SHGs for various reasons. There are 57 percent of respondents are for increasing their savings followed by 20 percent respondents for getting loan, 13 percent of respondents for support their family member, 01 percent respondent for debt repayment.

Table: 8

	Yes (percentage)	No (percentage)
Do you feel independent after joining SHG?	44	56
Do you feel SHG helps in increasing your self- confidence?	66	34
Do you find any improvement in your family status after joining SHG?	65	35
Have your standard of living improved after joining the SHG?	68	32
Have your economic dependency decreased after joining SHG?	46	54
Do you feel SHG helps in improving your communication skills?	83	17
Do you have any right in making financial decision?	53	47

Source: Primary data

Table 8 shows the improvement in social status and their family status after joining SHG. 66 percents of respondents felt improvement in their self- confidence. They were able to express their view in a better way. 44 percent of respondents felt they became more independent after joining SHG, 65 percent of respondents realized their family status improved. The improved family status was explained in terms of easy availability of loans, better management of available resources and social recognition due to involvement in work. 53 percent of respondents expressed that they were involved in making financial decision in family matters after they became member of SHG, 46 percent of respondents realized that their economic dependency decreased after joining SHG. They were earned some money with the help of SHG so due to that their dependency decreased on their family members. 68 percent of respondents felt their standard of living improved. They full-fill their basic need easily. 83 percent of respondents felt improvement in their communication skill. They were able to express the feelings, talked to concerned people in a better way.

Table: 9

Problems	Yes(percentage)	No (percentage)
Difficulty in approaching the authorities for getting loans	49	51
Poor response of bank sakhi	62	38
Delay in sanctioning the loan	54	46
Loan provided by SHGs is inadequate	65	35
Awareness regarding new schemes and facilities	78	22
Lack of cooperation among SHGs member	60	40
High interest rate charged on loans sanctioned by SHGs	75	25
Complex Documentation process for joining SHGs	60	40

Source: Primary data

Table 9 shows the problems faced by respondents in SHGs. The major problem faced by majority of respondents (78 percent and 75 percent) was lack of awareness regarding new schemes and facilities and high interest rate charged on loan sanctioned by SHGs. 62 percent of respondents felt there was poor response of bank sakhi, 60 percent respondents felt there was lack of cooperation among SHGs members within the group due to various reasons. 65 percent respondents said loan provided by SHGs is inadequate, 49 percent of respondents felt difficulty in approaching the authorities for getting loan, 54 percent of respondents experienced delay in sanctioning the loan and 60 percent of respondents reported complex documentation process for joining SHGs.

Findings of the study :

- The majority of respondents are found to be young.

- 64 percent of the respondents are Illiterate and 17 percent of respondents are studied primary level education.
- Marital status of respondents reveal that about 89 percent women are married.
- Majority of respondents involved in agriculture and allied activities.
- Before joining SHGs 26.5 percent respondents had a monthly income above Rs. 5000, after joining SHGs 39 percent of respondents have a monthly income above Rs. 5000.
- Majority of respondents increased their expenditure above 2500 Rs after joining the SHGs.
- The most of the respondents said that they were joined in SHGs for increasing their savings.
- 44 percent respondents felt they became independent after joining SHGs.
- After joining SHGs, 66 percent respondents felt improvement in their self- confidence.
- 65 percent respondents felt their family status improved in society.
- After joining in SHGs, 53 percent of respondents making financial decision in their family matters.
- 46 percent of the respondents realised that their economic dependency decreased.
- 68 percent of the respondents felt their standard of living improved.
- 83 percent of respondents felt improvement in their communication skill.
- The major problem faced by majority of respondent are lack of awareness regarding new schemes and facilities.

Limitations of this Study:

The limitation of this study are followings :

- 1- The data have been collected only from 100 SC women in two development blocks of Bhadohi district.
- 2- The facts presented are based on the information provided by the respondents.
- 3- The study is focused only on the socio-economic profile of SC women in SHGs in Bhadohi district.

Suggestions:

In view of above findings, the following suggestions to improve the overall functioning of SHGs for women empowerment :

- Education is the most important variable of women empowerment therefore, the first and foremost step for empowering women is the removal of illiteracy among them.

- The group leader should be maintain cooperation among the members.
- Government should take steps to provide more credit facilities through institutional sources.
- Government and NGOs should be promotes more awareness programmes with the help of media.
- Continuous evaluation of the SHGs should be done by promoting institutions.
- There should be chapters need for women empowerment and programmes at school level.

Conclusion:

SHGs are proving to be an effective tool for women empowerment. Self-Help Group is a small voluntary association of poor people belonging to the same socio-economic condition residing in the same locality. The major findings in the study justify the vital role played by SHGs in increasing socio-economic empowerment of women by making them financially strong as well as it help them to save money. Self Help Groups have been successful in empowering rural women through income generating activities. It is also found that the SHGs created confidence in the fields of income, expenditure, savings, decision – making and external relations among the members in district. However there is a positive impact of SHGs on socio-economic empowerment of SC women in Bhadohi district.

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The Macroeconomic Impact of Indira Awas Yojna in Creating Sustainable Livelihoods

Prof. Manmohan Krishna & Dr. Sumedha Pandey

Abstract

Social protection means the protection of the underprivileged and neglected sections of society, by means of policies and programmes, from social evils, such as poverty, malnourishment, unemployment, absence of shelter, etc. Social protection consists of mainly (i) Labor markets, (ii) Social assistance, (iii) Social insurance, (iv) Micro and area-based schemes to protect communities and (v) Child protection. Social protection programmes mainly aim to protect the deprived from either the dominant section of society or from climate and social change.

Indira Awas Yojna (IAY), also known as Pradhan Mantri Awas Yojana (PMAY), is one of the most important social protection programs in India till date that commits to provide grant for construction of houses to members of Scheduled Caste (SC)/Schedule Tribes (ST), freed bonded labors, to non-SC/ST category below the poverty line, and to households headed by women.

The present paper focuses on analyzing the impact of PMAY on the targeted group. Out of all the social protection programmes, PMAY has been chosen on the pretext that providing housing facilities to the needy is the biggest kind of social protection one can provide. Housing schemes provide multidimensional social protection, all at once. This scheme has benefited a lot of people in India.

With the help of secondary data, this paper will try to do an impact assessment of the scheme since its inception and suggest measures for higher applicability to enhance its reach to large number of masses.

Keywords: *social protection, housing scheme, PMAY.*

1. Introduction

Every human wishes for a home. Even birds and animals make their homes. Having a comfortable home is a long, cherished wish of all living beings. It is a fundamental need for

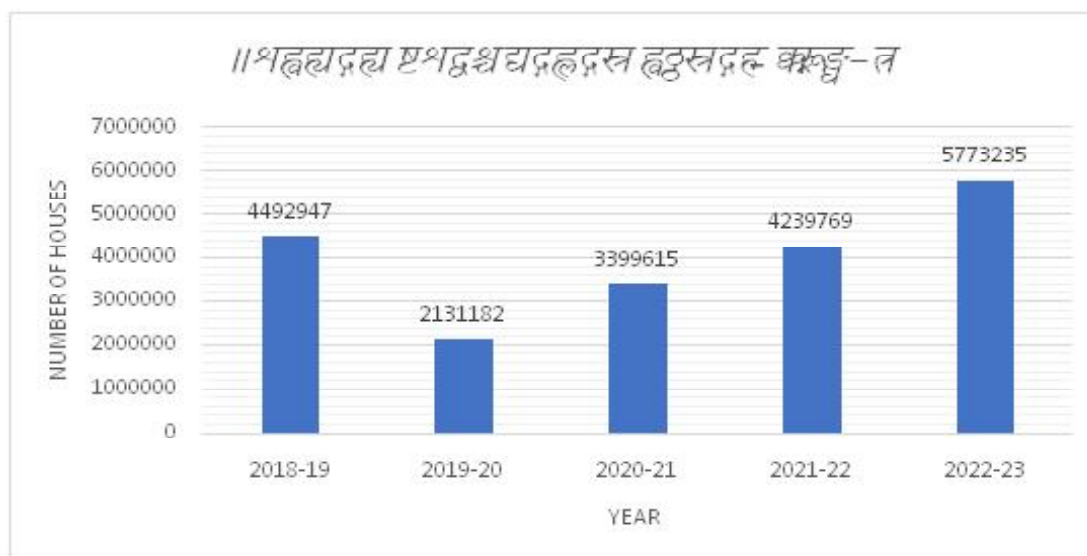
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privacy, protection, identity, self-esteem, and more importantly, provides psychological satisfaction which is essential for social economic development of an individual and family. A house, for economists, is both a consumer good as well as an investment good. It is essentially a private good in nature. It must be remembered that nearly all houses in urban as well as in rural areas, are self-built and managed. But it's also a fact that in India, a large population lives in purely temporary structured houses made from mud, plastic, tin, or whatever is available in nearby surroundings. Crores of people especially in rural areas have hutments (kaccha makaan made of mud). But more importantly, it could not save the inhabitants from extreme weather. There were no sanitation facilities, neither kitchen nor fuel. These individuals basically lacked every facility. It must be remembered that in the Constitution of India, rural housing is in the domain of state governments and Panchayati Raj institutions.

Public housing programmes under the Centre also has a history. Nearly 5 lakh houses (shelters) were built for refugees in different parts of India. Village housing programme was also launched under community development programme, but it remained a nonstarter. With the sixth plan 'Garibi Hatao', NREP and RLGEF were launched by the Centre with some commitments to rural housing, but no norms were specifically mentioned. It was the Istanbul Declaration on Human Settlement (June 1996) which led to global awareness for the need of safe and healthy shelter, which is essential for individual's physical, psychological, social, and economic well-being. In fact, India had launched an ambitious scheme on 1st January 1996 named as 'Indira Awas Yojna' a flagship programme of Ministry of Rural Development as a strategy to provide an identity to each family, which was followed by Istanbul Declaration.

However, the basic objective behind Indira Awas Yojana was to provide a safe and healthy shelter to marginalized sections especially in rural areas. But as mentioned earlier, a house is both a consumer good as well as an investment good. Indira Awas Yojana provided an opportunity to all individuals to become builders and owners of a property as well as Gram Sabhas to create a social, cultural, and political activity of utmost importance. To build a house of at least 20 square meters (excluding toilet) in different regions of India which could withstand not only the natural wear and tear as well as extreme weather, especially in desert areas also lead to local employment with use of local material. Since 1996, the programme has grown significantly in size and scope. In the last 28 years, one could witness the changes that have been brought up for the welfare of not only rural but also urban poor. Many other programmes have now been included such as toilet with soak pit and compost pit. Earlier smokeless chulhas were included but now Ujjwala scheme has been made a part of the scheme. Atal Jyoti Mission has been included to provide electricity. So now, the scheme is a comprehensive scheme for shelter less people. The growth of the scheme is presented in the graph below.



Source: Ministry of Rural Development

2. Review of literature

P Ananth (2017) in his article “Housing for Poor and the impact of IAY in rural India: Present context” discussed the problem of housing facilities faced by a major segment of population in India. Throwing some light on the IAY Scheme, this article discusses in some detail the major thrust areas like innovative technology, low-cost but quality building material, designs, and methods of constructing or upgrading houses to durable and disaster-resistant lodgings or arrange for coordinated supply of raw materials like cement, bricks etc., of the scheme and the shortcomings faced in its implementation.

M. Swathi (2018) in her research article “A Study on the Housing in Rural Areas with special reference to Pradhan Mantri Awas Yojana (PMAY-G)” highlights the very meaning of houses in India i.e., house is an inclusive component of the possessed world. Lack of inexpensive houses is one of the critical issues faced by rural areas in India. Rural housing development can improve the lives of those with insufficient shelter, while at the same time can be profitable to the local economy.

M. Rajasekhar Naik (2018) in her article “Adoption of Technology for Implementation of Pradhan Mantri Awas Yojana (PMAY): A Case Study of Andhra Pradesh” analyzed the construction time required for completion of houses, with all possible and available technologies as identified by PMAY in Andhra Pradesh. Cost effective housing is a relative concept and has more to do with budgeting and seeks to reduce construction cost through better management, appropriate use of local materials, skills, and technology but without sacrificing the performance and structure of life.

N R Bhanumurthy, (2018) in his article “Impact of Pradhan Mantri Awaas Yojana - Gramin (PMAY-G) on Income and Employment” demand for construction materials such as bricks, cement, and steel for implementation of PMAY-G programme. An attempt has been made to estimate the impact of PMAY-G in generating additional employment and income since the scheme is revamped.

3. Methodology

The study is based on secondary data made available by government reports. Many empirical research has also been utilized to highlight the changes in the scheme. Statistical tools with tables and graphs have been used to highlight the facts. Test of goodness has been used to test the hypothesis.

4. Objectives of the study

- 1) To study the importance of the scheme for providing socio economic importance to marginalized sections.
- 2) To analyze the importance of scheme in reducing the multidimensional poverty in India since 2019.
- 3) To study the role of scheme in empowerment of women.

5. Hypotheses of the study

- 1) H_0 : There is no significant impact of this scheme in women empowerment.
 H_1 : There is significant impact of this scheme in women empowerment.
- 2) H_0 : There is no significant impact of this scheme in providing socio economic/political identity to marginalized sections.
 H_1 : There is significant impact of this scheme in providing socio economic/political identity to marginalized sections.

6. Testing of Hypotheses

Hypothesis 1

This hypothesis has been selected on the presumption that a home provides greater empowerment to women in various respects, such as safety against violence, and diseases. It is presumed that in almost all houses, women are food processors i.e., they are responsible for kitchen work. When there is no home with a kitchen or a chulha, they have to collect wood and other material and consume smoke while cooking, especially in rainy season when the woods are numb the smoke is great. Similarly, lack of sanitation facility, forces women to go for open defecations, which is of course hazardous for both male and female. But females are also prone to sexual harassment. Moreover, they need partners to go together. Pucca home also provides a self-esteem. Thus, the hypothesis is made to test and find out as to whether getting a pucca house with lavatory, kitchen and light is a source of women empowerment.

Table 1: Gender-wise sanctioned house ownership

STATES	WOMEN OWNED	MEN OWNED
ARUNACHAL PRADESH	3400	3557
ASSAM	376039	570115
BIHAR	1340488	670428
CHHATTISGARH	145477	171685
GOA	205	19
GUJARAT	66696	207017
HARYANA	16933	7099
HIMACHAL PRADESH	3395	6957
JAMMU AND KASHMIR	18607	32319
JHARKHAND	282428	665598
KERALA	18446	4834
MADHYA PRADESH	534293	1738758
MAHARASHTRA	166551	167675
MANIPUR	4508	8640
MEGHALAYA	12550	5259
MIZORAM	2020	724
NAGALAND	1065	929
ODISHA	473569	710733
PUNJAB	8442	13265
RAJASTHAN	827514	476609
SIKKIM	107	246
TAMIL NADU	89936	108325
TRIPURA	55637	81103
UTTAR PRADESH	1353361	441792

Source: Ministry of Rural Development

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Women Owned</i>	<i>Men Owned</i>
Mean	198606.2	208584.2
Variance	1.39103E+11	1.51061E+11
Observations	35	35
Hypothesized Mean Difference	0	
Df	68	
t Stat	-0.10958612	
P(T<=t) one-tail	0.456530191	
t Critical one-tail	1.667572281	
P(T<=t) two-tail	0.913060382	
t Critical two-tail	1.995468931	

Result: Since the p-value is greater than 0.05, we fail to reject the null hypothesis i.e., there is no significant impact of this scheme in women empowerment in terms of number of houses owned by women, in spite of the emphasis of the scheme in promoting women to ownhouses. Sometimes the statistical tests are not able to present the full picture. One has to remember that in this scheme the allotment of houses to women is 198606 as against men 208584. Naturally any test would fail to indicate the priority given to women because the number of males is greater even in this scheme. But when this data is compared to the real data of rural India then only the true facts could be revealed. In rural Bihar 92% of the houses are owned by males. In U.P. it is above 90%. In Karnataka also, the number of houses owned by males is nearly 90%. In all India, there are very few States like Mizoram and Meghalaya where women ownership of houses is almost 50%. So, when one finds that in Indira Awas Yojana the women getting ownership of houses is 48% which is 500% more than in general what has been happening then only one can realize the importance of Indira Awas Yojana in empowerment of women. The fact is that traditionally in India, ownership of landed property had been with males only in rural areas so that post marriage fragmentation could be stopped because women have to move to in laws house. This cultural tradition has limited the scope of women ownership of landed property. Dowry was supposedly given for their share. Although government has adopted various measures to enhance the ownership of landed property in favour of women with Succession Act and lately by charging less fees for women than men in registration of houses. Still even in urban areas women owned houses are less than 10% and in rural areas it was nearly 3%. This scheme of women empowerment has substantially changed this pattern.

Hypothesis 2

The presumption of this hypothesis is that any individual who does not have any landed property, especially a house, has no identity/prestige in society. There were various Ghumantu Tribes in India, but they cannot be included in any kind of growth process. There are various

schemes of government, Central/Regional/Local which can be provided only to an individual or a family which has a fixed address. No one can open a bank account without any address. So, financial inclusion is not possible. No one can have a voting ID/Aadhaar card, so political inclusion is also not possible. Moreover, social deprivation is ascertained because the help of police, law against atrocity can be availed only when an address is made available. An individual has psychological satisfaction as well as enjoys all political, economic benefits provided by the government if he has an address. Thus, a house is as mentioned, not only a consumer good, but also a guarantee (like an investment asset) to get all the privileges of a citizen. Therefore, a house is not only a brick, cement, iron structure, but it is a beginning to struggle against deprivation. The fact of the matter is marginalized section of the population has just begun to enter a civilized society. So, the very definition of marginalized section begins with an address. Without a geographical address, any fight against deprivation is impossible. The Istanbul Declaration said that minimum requirements of education, sanitation, drinking water are impossible without a house. Thus, the second hypothesis is tested to find out as to how social security can be ascertained by providing a house.

Table 2: Category-wise house completed

STATE	COMPLETED	ST	SC	MINORITIES	PH	OTHERS	TOTAL ALLOTMENT TO MARGINALIZED SECTION
ARUNACHAL PRADESH	30352	29045	0	470	18	1307	29533
ASSAM	1822346	320695	189412	767882	1318	1312239	1279307
BIHAR	3647030	96637	711985	554548	10267	2838408	1373437
CHHATTISGARH	987265	379016	198022	4667	920	410227	582625
GOA	229	78	11	16	0	140	105
GUJARAT	520711	270327	31238	8379	514	219146	310458
HARYANA	28321	130	14103	4661	46	14088	18940
HIMACHAL PRADESH	15081	2144	5817	892	19	7120	8872
JAMMU AND KASHMIR	207114	72153	25411	1895	645	109550	100104
JHARKHAND	1558575	525509	277844	179819	157	755222	983329
KERALA	33090	2560	10829	7343	336	19701	21068
MADHYA PRADESH	3644994	1384574	647545	43918	8886	1612875	2084923
MAHARASHTRA	1219020	401168	182942	35325	2098	634910	621533
MANIPUR	30488	18943	789	3072	8	10756	22812

MEGHALAYA	50722	48070	229	1948	42	2423	50289
MIZORAM	14352	14278	18	55	1	56	14352
NAGALAND	10120	9886	0	76	8	234	9970
ODISHA	2050535	688997	369402	18699	2114	992136	1079212
PUNJAB	36282	116	26417	905	83	9749	27521
RAJASTHAN	1684852	613092	369444	94189	2577	702316	1079302
SIKKIM	1286	598	112	60	1	576	771
TAMIL NADU	600457	22159	259669	14240	507	318629	296575
TRIPURA	339065	150399	60264	26227	52	128402	236942
UTTAR PRADESH	3526747	57078	1295975	344062	1894	2173694	1699009
UTTARAKHAND	51329	3832	21055	4539	909	26442	30335
WEST BENGAL	3411320	309224	1046863	1185419	1110	2055233	2542616
ANDAMAN AND NICOBAR	1225	9	0	311	5	1216	325
DADRA AND NAGAR HAVELI	3826	3815	3	7	0	8	3825
DAMAN AND DIU	16	6	0	0	0	10	6
LAKSHADWEEP	45	45	0	0	0	0	45
PUDUCHERRY	0	0	0	0	0	0	0
ANDHRA PRADESH	69795	11167	19776	1728	30	38852	32701
KARNATAKA	123330	23592	36605	17194	227	63133	77618
TELANGANA	0	0	0	0	0	0	0
LADAKH	2909	2902	0	7	5	7	2914

Source: Ministry of Rural Development

t-Test: Two-Sample Assuming Unequal Variances		
	Others	Total allotment to Marginalised Section
Mean	413108.7143	417753.5429
Variance	5.34123E+11	4.5294E+11
Observations	35	35
Hypothesized Mean Difference	0	
Df	68	
t Stat	0.027658669	
P(T<=t) one-tail	0.489007701	
t Critical one-tail	1.667572281	
P(T<=t) two-tail	0.978015401	
t Critical two-tail	1.995468931	

Result: Since the p-value is greater than 0.05, we fail to reject the null hypothesis i.e., there is no significant impact of this scheme in providing socio economic importance to marginalized sections (SC, ST, Minorities and PH). As mentioned in the previous hypothesis, testing a non-testable hypothesis would give a false image. In the scheme itself, it was decided that 50% of houses are to be allotted to marginalize (by definition SC, ST and PH) but the fact is that the EWS and OBC population is much higher in India 40% as compared to SC, ST and PH (27%) yet the share of marginalized section is more than 50% so in fact the success of IAY in providing housing to marginalized section is much greater in comparison to their population. Hence, the acceptance of null hypothesis provides a clear success of government policy.

7. Conclusion

Since independence India had a large population which was deprived of basic necessities of life. In first plan, it was assessed that 20% population is very poor. There were no numerical measures as there was no definition as to how poverty shall be measured. Since second plan various authors used a calorie system to have a head count ratio. As per headcount ratio of planning commission, 37% of Indian population was deprived in 1980. So, the government of India began with various policy measures of Garibihatao, development with human face, inclusive growth and so on. Various policy measures were adopted which included a 20-point programme, rozgar yojanas, sanitation and drinking water plans. In 2005, NREGA(MGNREGA) was adopted as a combined programme of poverty alleviation by giving an employment for a fixed period. In the meantime, UN and other agencies were working on deprivation which included not only income support but also a package approach. Tendulkar and Rangrajan Committee added housing and transport as a measure of poverty. The government of India began ambitious housing scheme by providing cash and technology support to build a pucca house. Housing for all could provide the families safeguard from extreme weather conditions and ownership of a property which will also provide identity and psychological satisfaction. For women smokeless chulhas were to be distributed. Later, the concept of Multidimensional Index of Poverty became important. So, housing scheme was combined with other measures. Now as per requirement a house would mean that it should include (1) washroom, (2) kitchen, (3) electric connections (4) gas stove and cylinder (5) drinking water facility. So, the total budget for a house which was as low as Rs. 35,000 in 2005 has been enhanced to Rs. 1,65,000 per allotment. Since 2014, the number of houses distributed are nearly 2 crore 70 lakhs. If one household has 5 family members, then nearly 14 crores persons have been graduated from below poverty line. The latest data of MPI gives ample evidence when it says that the incidence of MPI in India has come down to 13% of population from 29%. NFHS (expenditure) also denotes a decline in average family expenditure. This is only because now individuals have to pay less for medicines and treatment and education. They are also supported by free food (the scheme has been extended for five years). So, one can clearly conclude that Indira Awas Yojana (from a mere one room to

including all amenities) has been one which has provided not only protection but also greater identity and assets.

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Impact of Financial Development on Development of Agriculture Sector in India: A Regional Analysis of the Post Reform Period

Pankaj Kumar & D.K. Yadav

Abstract

With its solid forward linkages, the agriculture and allied activities sector significantly contributed to the country's overall growth and development by ensuring food security. The Indian agriculture sector has been growing at an average annual growth rate of 4.6 per cent during the last six years. It also plays a crucial role in the development of the Indian economy. Though the share of agriculture in national income has come down since the beginning of planning era in the economy, it still has a substantial share in the country's Gross Domestic Product/Gross Value Added (GDP/GVA). The contribution of agriculture and allied sector activities in GDP, which was 55.4 per cent in 1950-51, now stands substantially reduced to only 18.3 per cent in 2022-23. Since Independence it has been recognised by the policy makers that access of credit is quite crucial for sectoral, regional and overall development of the country. As credit is one of the important supply side factors which contribute to agricultural production. An efficient and effective rural credit delivery system is imperative for providing timely, adequate, and equitable access to credit for raising agricultural productivity and income. Equitable access to institutional credit is important in the context of relative scarcity of credit and the high cost of informal credit (Rao et al. 2000). A very good length of literature is available which explain the association between financial development and development of economic activities (Felix Rioja and Neven Valev (2004)), Thorsten Beck (2011). In India there is huge regional inequality in disbursement of credit and access of other financial services. Only few states are enjoying major share of credit disbursed by the Indian Schedule Commercial Banks in comparison to their share in total population or geographical area, while the states of central and northern region where most of the population reside have very low share in total credit disbursement of Indian Schedule Commercial Banks

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(SCBs). Because most of the economic activities, including consumption activities are financed, access and availability of institutional credit plays very important role in economic development of the regions/states. States or regions those have better access of institutional credit may have better development prospects in comparison to states/regions those have less access of institutional credit. Present paper aims to explore the linkage between financial development and development of agriculture sector, considering six geographical regions of India for analysis viz., Northern region, North-eastern region, Eastern region, Central region, Western region and Southern region, as per the classification of the Reserve Bank of India (RBI). Financial Development Index has been considered as indicator of financial development and Agriculture Development Index, have been used for measuring agricultural development. Credit-deposits ratio of different regions and share in total branches of scheduled commercial banks (SCBS) and regional credit distribution have been considered as indicators of financial development. Indicators of Agriculture sector development cover Cropping Intensity, Gross Domestic Production in Agriculture, State Wise Gross Irrigated Area. Credit to agriculture and allied activities gained momentum supported by the Government's concessional institutional credit and higher agricultural credit target. The performance of the agriculture sector remains critical to growth and employment in the country. Investment in this sector must be encouraged through an affordable, timely and inclusive approach to credit delivery. Hence, for analysis the study considers the time period of 1991 to 2018, which is sub divided into two period considering years of 2006 as landmark after which government has initiated sincere policy efforts in the direction of financial inclusion for that data is sourced from the RBI.

Keywords: Financial Development Index, Agriculture Development Index, Credit Deposit Ratio, Gross Irrigated Area

1. Introduction

India is still largely a rural economy, with 66% of the country's population living in rural areas (World Bank, 2019) and agriculture continues to be the mainstay of a large segment of this section of the population. Agriculture is also important for consumers, as an average Indian household spends about 45% of its expenditure on food (NSSO). Moreover, theoretical as well as empirical literature indicates that financial development play a very important role in the economic development of any region (Schumpeter 1939). Raymond, G (1969) it has been established by many studies that development of financial system help real economic activities by mobilising savings, managing the entrepreneurial activities, mitigating the risk and allocating the credits towards those activities which are socially and economically more productive (Majid, M. S. A. 2008). Therefore, it is very important to allocate and distribute all sorts of financial services as per macroeconomics objectives of the economy. Removing regional inequality is one of the important objectives of fiscal as well as monetary policy in India. Due to certain historical and political factors, certain states of India have better development prospects than others. Considering the above factors in considerations, India have adopted a federal political structure and made special provision of finance commission

in constitution to remove regional inequality (Article 280 of Indian Constitution). The Finance commission recommends special grants to those states which are under developed. However, in spite of more than 75 years of independence problem of inequality is not only existing but also increasing at an alarming rate. Perhaps it appears that federal finance is not sufficient to cope-up the problem of regional inequality in India.

In the present paper it has been assumed that increasing regional inequalities is the result of imbalance in the distribution of banking resources. Resources provided by banking institutions are directly enhancing the production capacity of the private sector. And because now most of the economic activities are also in the hands of private sector, development of financial sector is also enriching those regions where there is better access of financial services.

For empirically testing the above hypothesis, as per classification of RBI, India has been divided into six geographical regions; viz, Northern region (NR), North-eastern region (NER), Eastern region (ER), Central region (CR), Western region (CR) and Southern region (SR). It has been presumed that each region should get as much banking resources as its share in total population and geographical area. For analysing the linkage of financial development and economic development in six geographical regions, suitable indicators of financial development and economic development have been identified. Regional credit distribution, credit-deposits ratio of different regions and share in total branches of scheduled commercial banks (SCBS) have been considered as an indicators of financial development. For capturing the prospectus of agriculture development indicators of Agriculture sector development cover Cropping Intensity, Gross Demotic Production in Agriculture, State Wise Gross Irrigated Area.

The study will consider the time period of 1991 to 2018, which is sub divided into two period considering years of 2006 as landmark after which government has initiated sincere policy efforts in the direction of financial inclusion.

Paper is organised into seven sections. First section is the introduction, which establishes the motivation and relevance of the study. Second section deals with the review of literature. Third section covers the methodology of the study. The fourth section analyses the regional distribution of population and geographical areas of six regions. The fifth section includes trend and descriptive analysis of financial development indicators. The sixth section deals with the trend and descriptive study of agriculture development indicators. The seventh section provides the econometrics analysis with the help of panel regression modelling. The last section provides the conclusion and policy recommendations of the study.

2. Literature Review

Nirvikar Singh et.al. (2003), argued in their paper that concerns of increasing regional inequality after the economic reforms of 1991, are sensitive to what measures of attainment are used for measuring the regional inequality. Measures like human development indices, consumption and credit indicators may not be as bad as suggested by state domestic product data.

Nirvikar Singh et.al. (2014), in their paper, “regional inequality in India in the 1990s: A district level view”, using cross sectional growth regression of 210 districts from 10 states illuminate the role of physical infrastructure, financial development, and human capital in influencing regional patterns of growth.

Sabyasachi Kar et. al. (2014) have analysed the impact of reforms on regional inequality in India. The results show that regional inequality in India remained largely unchanged during the 1980s but rose dramatically after the adoption of the reforms. This is mainly due to the fact that the per capita output from the industrial and services sectors showed convergence before the reforms and divergence afterward.

Gaurav Nayyar (2008) has analysed the question - “Given the disparate level of income and development among the states in India, do they exhibit any tendency in the data to converge to common-steady state paths?” Using the panel data of 16 Indian States for the period from 1978-79 to 2002-03, it is found that states are not converging to identical level of per capita income in the steady-state. Rather there is increase in dispersion of per capita incomes across state over time. It has been argued that it is mainly due to inter-state increasing disparity in the level of public and private investment and insignificant and insignificant equalising impact of centre-state Government transfers.

Angus Deaton and Jean Dreze (2002), in their paper “Poverty and inequality in India: A re-examination” found that regional disparities increased in the 1990s, with the southern and western regions doing much better than the northern and eastern region.

3. Methodology

For empirically testing the above hypothesis, as per classification of RBI, India has been divided into six geographical regions; viz, Northern region, North-eastern region, Eastern region, Central region, Western region and Southern region. It has been presumed that each region should get as much banking resources as its share in total population and geographical area. For analysing the linkage of financial development and agriculture development in six geographical regions, suitable indicators of financial development and agriculture development have been identified. Share in total banking credit, credit-deposits ratio of different regions and share in total branches of scheduled commercial banks (SCBS) have been considered its indicators of financial development. For capturing the prospectus of agriculture development in different regions five three Indicators of Agriculture sector development have been cover Cropping Intensity, Gross Domestic Production in Agriculture, State Wise Gross Irrigated Area.

Study will consider the time period of 1991 to 2018, which is sub divided into two period considering years of 2006 as landmark after which government has initiated sincere policy efforts in the direction of financial inclusion.

This study is a panel data study, so we first analyzed all the variables through trend analysis, descriptive analysis, and Gini coefficients, then applied random effect model on the indices of financial development and other economic development in order to capture the

difference between the regions. To apply the model, we estimated some variables i.e. literacy rate, agricultural credit and per capita state GDP through interpolation and extrapolation using STATA.

3.1 Calculation of Indices of financial development and economic development

This approach is similar to that used by UNDP for computation of some well-known development indexes such as the HDI, the HPI, the GDI and so on. As in the case of these indexes, the financial development index and economic development index of each sector is computed by first calculating a dimension index for each dimension of financial development and economic development. The dimension index for the *i*th dimension, d_i , is computed by the following formula:

$$d_i = (A_i - m_i) / (M_i - m_i) \quad (1)$$

where

A_i = Actual value of dimension *i*

m_i = minimum value of dimension *i*

M_i = maximum value of dimension *i*

Formula (1) ensures that $0 \leq d_i \leq 1$. Higher the value of d_i , higher the region's achievement in dimension *i*. If *n* dimensions of financial development and economic development are considered, then, a region *i* will be represented by a point $D_i = (d_1, d_2, d_3, \dots, d_n)$ on the *n*-dimensional Cartesian space. In the *n*-dimensional space, the point $O = (0, 0, 0, \dots, 0)$ represents the point indicating the worst situation while the point $I = (1, 1, 1, \dots, 1)$ represents the highest achievement in all dimensions. The index of financial development and economic development for the *i*th region, then, is measured by the normalized inverse Euclidean distance of the point d_i from the ideal point $I = (1, 1, 1, \dots, 1)$. The exact formula is:

$$FDI \text{ or } EDI = 1 - \frac{\sqrt{(1-d_1)^2 + (1-d_2)^2 + \dots + (1-d_n)^2}}{\sqrt{n}} \quad (2)$$

In formula (2), the numerator of the second component is the Euclidean distance of d_i from the ideal point *I*, normalizing it by "*n*" and subtracting by 1 gives the inverse normalized distance. The normalization is done in order to make the value lie between 0 and 1 and the inverse distance is considered so that higher value of the FDI and EDI corresponds to higher financial development and economic development. The dimensions are the variables of development indicators and number of dimensions depend upon the variables considered for the respective development indicators.

3.2 Model

For tracing the effect of financial development on agriculture development (*Ceteris paribus*)

in the regions of India, we define the model to be estimated and we use the same model for agriculture development.

$$ADI = f(\text{Regions, FDI})$$

$$ADI = \beta_0 + \beta_1d_1 + \beta_2d_2 + \beta_3d_3 + \beta_4d_4 + \beta_5d_5 + \beta_6FDI + U_i$$

Where,

ADI = Agriculture development index

FDI = Financial Development Index

β_1d_1 = dummy variable (dichotomous; 1= southern region, 0=others)

β_2d_2 = dummy variable (dichotomous; 1= western region, 0=others)

β_3d_3 = dummy variable (dichotomous; 1= northern region, 0=others)

β_4d_4 = dummy variable (dichotomous; 1= eastern region, 0=others)

β_5d_5 = dummy variable (dichotomous; 1= north-eastern region, 0=others)

β_6FDI = Financial development Index (Reference Category: Central region)

4. Regional Distribution of Population and Geographical Area

Table 1.1: Regional Distribution of Population

	1951	1961	1971	1981	1991	2001	2011
ALL INDIA (in Million)	361.088	439.235	548.160	683.329	846.421	1028.737	1210.855
NR	10.58302	10.93583	11.26551	11.841	12.26612	12.92702	13.12222
SR	26.17728	25.16967	24.78327	24.17474	23.31027	21.80761	20.85642
ER	22.12674	22.57288	22.42685	22.15199	22.0694	22.14589	22.40805
WR	13.54351	13.85864	14.2369	14.35033	14.37311	14.51061	14.44104
CR	24.7286	24.16178	23.71497	23.85996	24.25436	24.87215	25.44235
NER	2.84169	3.301194	3.572315	3.622267	3.727223	3.737107	3.729844

Source: RBI.

Regional Distribution of population from 1951 to 2001 census. The mostly populated region of India in 1951 was Southern eastern region with 26.18 percent of total Indian

population followed by Central region 24.73 percent, Eastern region 22.13 percent, Western region 13.54 percent, Northern region 10.58 percent and the lowest in southern region 2.84 percent respectively. Over the period of time from 1961 to 2001 census Southern region has controlled the population up to 5 percent records 21.81 percent in 2001. Eastern region has managed its population with its previous growth rates of 22.15 percent. All other regions are showing increasing trend of population from 1961 to 2001.

Table 1.2 Distribution wise Geographical Area, and Population among Regions in India

REGION	AREA	% AREA
NR	549628	17.61311
NER	255083	8.174265
ER	433681	13.89753
CR	737847	23.64468
WR	508042	16.28046
SR	636281	20.38995
Total	3120562	100

Source: RBI.

The Distribution of Geographical land area among various regions in India is as follows. The highest land area is under central region 23.64 percent, southern region 20.38 percent, northern region 17.61 percent, western region 16.28 percent, eastern region 13.89 percent and north eastern region 8.17 percent respectively. Similarly, the population among these regions is as follows central region 25.44 percent, eastern region 22.4 percent, southern region 20.85 percent, western region 14.44 percent, northern region 13.12 percent and northern eastern region 3.72 percent respectively. The main aim of the study is to check the distribution of population and land area among regions.

Table 1.3 Percentage wise Aggregate Credit Distribution

Regions	Percentage Wise Distribution of credit
NR	21.78
NER	0.98
ER	7.17
CR	8.48
WR	33.78
SR	27.91

Source: RBI.

Credit distribution among regions in India plays a significant role in development of a particular region. Table 3 shows status of credit Distribution in different regions in the country. Highest credit share goes to western region 33.78 percent, followed by southern region 27.91 percent, Northern region 21.78 percent. The other three regions have less than 10 percent share which shows huge gap between the regions. Our hypothetical perception is that due to unequal credit distribution among the regions, is one of the primary reasons of hampering growth and development of the low share credit areas.

Therefore, the fundamental questions arise? How credit mismatch hampers growth and development? This study is an investigation to check the status of development among all the six regions of the country and will try to describe the issues and challenges of development among the regions. This study has been divided in two time periods to check credit distribution as a parameter of development. The motivation behind this segregation is based on the benchmark year of 2006 as following this year onwards the financial development got maximum attention via various policy initiatives to promote financial inclusion across the country. Therefore, this study is an attempt to check effects of credit distribution on development indicators of the Indian economy.

5. Financial Development Indicators

5.1 Share in Bank Branches

Access of financial services is very much decided by the presence of bank branches. Regions those have better presence of bank branches have greater chances of access to financial services. If we analyse the regional share of bank branches, we found that northern, western, and southern regions have perpetually enjoyed the higher share of bank branches and the share has been on continuous rise over the period of time. Nearly two-third of total branches is present in these regions. While share of bank branches in the underdeveloped regions such as North-Eastern region are less and also declining over the period of time. Joint Share of North-Eastern, Eastern, and Central Regions have declined from 42 per cent in 1990 to 38 per cent in 2018, while more than 50 per cent population reside in these regions.

Table 1.4: Regional Share of Bank Branches

Year	NR	NER	ER	CR	WR	SR
1990	15.38792035	2.9282	17.97736	21.0642	15.56143	27.08089
1991	15.27120731	3.029616	18.40775	21.0696	15.43322	26.78861
1992	15.26375944	3.060157	18.41567	21.08466	15.40864	26.76712
1993	15.32322299	3.049033	18.38022	21.05808	15.40606	26.78338
1994	15.34928502	3.041447	18.30235	20.935	15.39663	26.97528
1995	15.42849084	3.028973	18.21928	20.8142	15.40812	27.10093
1996	15.54703984	3.003599	18.1302	20.70249	15.41827	27.1984
1997	15.66094823	2.981063	17.99389	20.60174	15.52887	27.23349
1998	15.80026736	2.945555	17.92854	20.50495	15.59671	27.22398
1999	15.89303658	2.906549	17.80824	20.42833	15.67857	27.28527
2000	15.91983418	2.88245	17.7853	20.31732	15.67975	27.41534
2001	15.97630507	2.865605	17.69715	20.26064	15.74676	27.45354
2002	16.13178786	2.824867	17.66205	20.26157	15.67669	27.44304
2003	16.26516643	2.805605	17.59306	20.17832	15.60563	27.55222
2004	16.37846893	2.794086	17.54389	20.1282	15.5889	27.56647
2005	16.52731924	2.775515	17.45201	20.00314	15.56975	27.67225
2006	16.70198937	2.753758	17.39008	19.92766	15.53634	27.69018
2007	16.93875599	2.736376	17.21745	19.80082	15.50841	27.79819
2008	17.14951286	2.683432	16.92686	19.7982	15.44808	27.99393
2009	17.19884599	2.666194	16.71108	19.85771	15.48128	28.08489
2010	17.34935603	2.608096	16.51219	19.87121	15.57383	28.08533
2011	17.5602766	2.5815	16.43345	19.75097	15.65075	28.02306
2012	17.76201577	2.535589	16.21447	19.7887	15.62522	28.074
2013	18.00986466	2.533881	15.98569	19.74853	15.56841	28.15363
2014	18.18707891	2.586699	16.01786	19.91981	15.4367	27.85186
2015	18.2730185	2.563572	16.01217	19.86941	15.1906	28.09123
2016	18.31556155	2.641297	16.09322	19.87053	15.02395	28.05544
2017	18.17267644	2.6666	15.94754	19.72457	14.89131	27.95901
2018	18.22858311	2.710892	15.99476	19.84934	14.92083	27.91578

Source: RBI

Figure 1.1 Trend Analysis of Share of Bank Branches

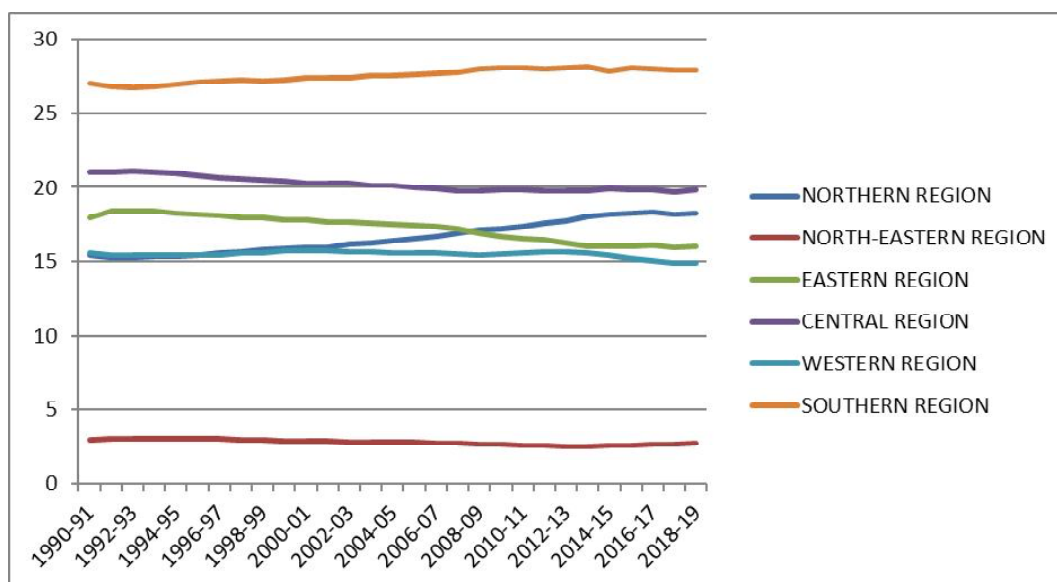


Table 1.5 Descriptive Analysis of Share of Bank Branches

	BEFORE 2005 FROM 1990 TO 2005				AFTER 2006 FROM 2006 TO 2017			
	AVERAGE	SD	MINIMUM	MAXIMUM	AVERAGE	SD	MINIMUM	MAXIMUM
NR	15.76	0.42	15.26	16.53	17.68	0.56	16.70	18.32
NER	2.93	0.10	2.78	3.06	2.64	0.07	2.53	2.75
ER	17.96	0.32	17.45	18.42	16.42	0.50	15.95	17.39
CR	20.59	0.38	20.00	21.08	19.83	0.07	19.72	19.93
WR	15.54	0.12	15.40	15.75	15.37	0.27	14.89	15.65
SR	27.22	0.29	26.77	27.67	27.98	0.14	27.69	28.15

Source: Estimated by Author

In the period from 1990 to 2005 the mean value of Southern region at 27.22 highest among all the regions reflect the fact that this region has seen maximum expansion of bank branches during this period. With the lower mean value at 2.93 of North-Eastern region manifest the minimum bank branch expansion during the same period. Similarly, during 2006 to 2018 the Southern region has accounted for maximum bank branch expansion and minimum expansion in the North-Eastern region. Comparatively, the North-Eastern region, Eastern region, Central region has seen a decline in the bank branch expansion with mean value declining from 2.93, 17.93, 20.59 in the period 1990 to 2005, to 2.64, 16.42, 19.83 in the period 2006 to 2018 respectively. The maximum standard deviation from the mean value is accounted in the Southern region i.e., from 0.29 before 2006 to 0.14 after 2006, hence after bank branches are more evenly distributed. Moreover, it is the Northern region has seen the maximum variation in both the period with standard deviation of 0.42 in the period 1990 to 2005 and 0.52 during 2006 to 2018 periods, though there is bank branch expansion the distribution is not even.

5.2 Credit-Deposit Ratio

Credit-Deposit ratio is an indicator of utilisation pattern of resources in respect of its mobilisation. If any region is utilising more resources this means that region have better development prospects. Table 2.2 indicates that C-D ratio of northern, western, and southern regions have increased continuously from 47.6, 63.7, and 83.2 per cent in 1991 to 81.9, 90, and 93.2 per cent in 2018, respectively. While C-D ratio of north-eastern and eastern regions have declined continuously from 70 and 52.6 per cent in 1991 to 41 and 44.1 per cent in 2018 respectively. With little bit fluctuations in decade of 2000, credit-deposit ration of central region was almost constant at nearly 50 per cent. From the table it can be inferred that C-D ratio of developed regions of India is faring better than other underdeveloped regions and also continuously over the period.

Table 1.6 Credit-Deposit Ratio

Regions	NR	NER	ER	CR	WR	SR	ALL INDIA
1990	47.6	70	52.6	49.8	63.7	83.2	60.7
1991	52.4	60.9	49.2	52.8	66.1	82.1	61.9
1992	49.3	66.3	49.1	50.2	56.5	77.7	57.7
1993	56.7	64	50.4	49.7	58.5	72.3	58.9
1994	56.6	50	43.9	44.3	52.2	67.9	54.3
1995	47.5	45.9	46.6	41.2	62.4	69.9	55.6
1996	50.4	41.1	46.4	42	71.4	74.8	59.8
1997	47	36.1	42.1	40.7	66.2	75.3	56.8
1998	47.5	33.5	40.4	39.2	65	72	55.3
1999	49.4	33.7	38	36.8	67	68.7	54.8
2000	49.6	30.6	37.2	36.8	74.6	66.8	56
2001	52.5	32	36.6	36.9	74.8	66.8	56.7
2002	55	53.2	41.4	38.4	71.3	68.9	58.4
2003	55.5	48.2	42.8	38.6	71.5	71.2	59.2
2004	56.8	33.7	45.2	39.9	63.2	72.7	58.2
2005	62.2	44.6	50.4	45.8	71.8	83.9	66
2006	67.9	52.3	55.6	50	78.9	90.8	72.4
2007	71.2	48.6	60.6	52.3	77.3	96.6	75
2008	70.1	48.3	58.2	54.6	76	96.8	74.4
2009	71.1	39.2	50.8	48.7	77	94.1	72.6
2010	74.9	39.1	53.5	51	74.7	94.8	73.3
2011	83.4	36.3	53.3	50.9	74.1	98.3	75.6
2012	89.6	37.8	52.5	50.7	80.7	99.3	79
2013	89.5	35.3	52.2	53.6	79.9	99.3	78.8
2014	93.6	36.6	51.1	51.8	80.3	97.4	79
2015	91.8	35.2	48.4	51.3	80.9	92.4	77.1
2016	87.4	39.3	46.8	53.2	88.3	92.1	78.4
2017	79.1	38.2	43	48.7	88.5	86.6	73.8
2018	81.9	41	44.1	50.5	90	93.2	76.7

Source: RBI

Figure 1.2 Credit-Deposit Ratio

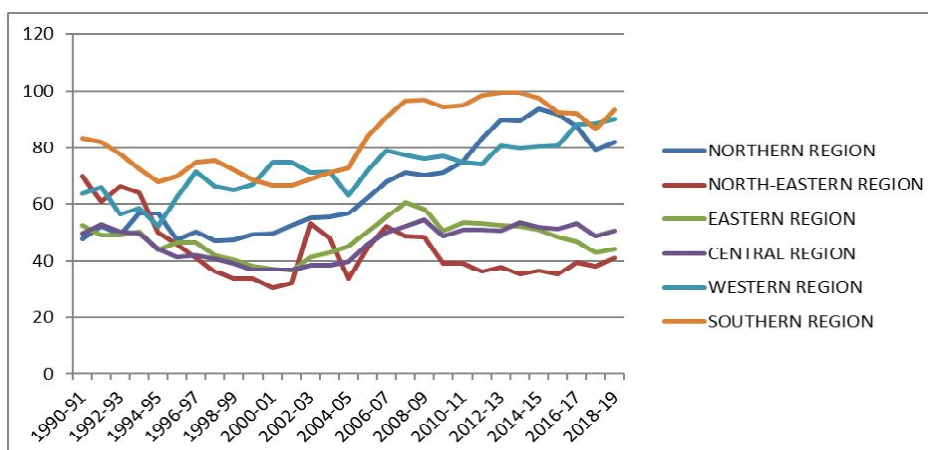


Table 1.7 Descriptive Analysis of Credit-Deposit Ratio

	BEFORE 2005 FROM 1990 TO 2005				AFTER 2006 FROM 2006 TO 2017			
	AVERAGE	SD	MINIMUM	MAXIMUM	AVERAGE	SD	MINIMUM	MAXIMUM
NR	52.25	4.46	47.00	62.20	80.88	9.10	67.90	93.60
NER	46.49	13.21	30.60	70.00	40.55	5.56	35.20	52.30
ER	44.52	5.04	36.60	52.60	51.55	5.10	43.00	60.60
CR	42.69	5.39	36.80	52.80	51.33	1.77	48.70	54.60
WR	66.01	6.52	52.20	74.80	80.51	5.29	74.10	90.00
SR	73.39	5.70	66.80	83.90	94.75	3.72	86.60	99.30

Source: Estimated by Author

5.3 Reginal Credit Distribution**Table 1.8 Regional Credit Distribution**

Region	NR	NER	ER	CR	WR	SR
1990	17.7373	1.534036	13.5187	11.02589	27.80441	28.37967
1991	18.82542	1.287208	12.55028	11.42397	28.15768	27.75543
1992	18.36138	1.316752	12.43599	11.04609	29.188	27.65179
1993	19.9262	1.168512	12.23862	10.2706	30.1968	26.19926
1994	22.74019	1.080159	11.3701	9.891984	28.25469	26.66288
1995	19.57346	1.042654	10.90047	9.146919	31.84834	27.48815
1996	19.08877	0.942655	10.25137	9.033778	32.83582	27.8476
1997	19.12799	0.914205	9.845288	8.966245	32.13783	29.00844
1998	19.84848	0.878788	9.787879	8.909091	32.0303	28.54545
1999	21.33891	0.83682	9.335774	8.525105	31.98222	27.98117
2000	21.16931	0.804173	8.911106	8.367746	33.71006	27.0376
2001	22.65973	0.780089	8.618128	7.968053	32.98663	26.98737
2002	22.0003	0.762311	8.339686	7.897545	36.02683	24.97332
2003	21.76214	0.740839	8.479958	7.659743	35.5338	25.82352
2004	21.81322	0.795274	8.566235	7.941377	33.90139	26.9825
2005	21.19056	0.841722	8.252343	7.766401	35.69073	26.25824
2006	21.02656	0.891795	7.728894	7.372176	36.95336	26.02722
2007	21.42674	0.837142	8.006779	7.323712	36.72128	25.68435
2008	20.82661	0.815026	7.657937	6.942203	37.89665	25.86157
2009	21.64554	0.797135	7.616673	6.956491	36.38375	26.60041
2010	22.38132	0.816095	8.011479	7.350831	34.25804	27.18223
2011	23.41741	0.770439	7.782903	7.044362	34.0637	26.92119
2012	23.39176	0.766124	7.721614	7.097056	33.91764	27.1058
2013	23.27518	0.758344	7.634113	7.391588	33.75081	27.18997
2014	23.17415	0.752945	7.518306	7.674308	34.15314	26.72716
2015	23.06898	0.77924	7.520535	7.998837	34.01759	26.61481
2016	21.91854	0.848134	7.350048	8.028023	35.25604	26.59922
2017	21.59411	0.919436	7.34033	8.309021	34.87541	26.96169
2018	21.77712	0.979811	7.163226	8.476104	33.6991	27.90464

Source: RBI

Figure 1.3 Regional Credit Distribution

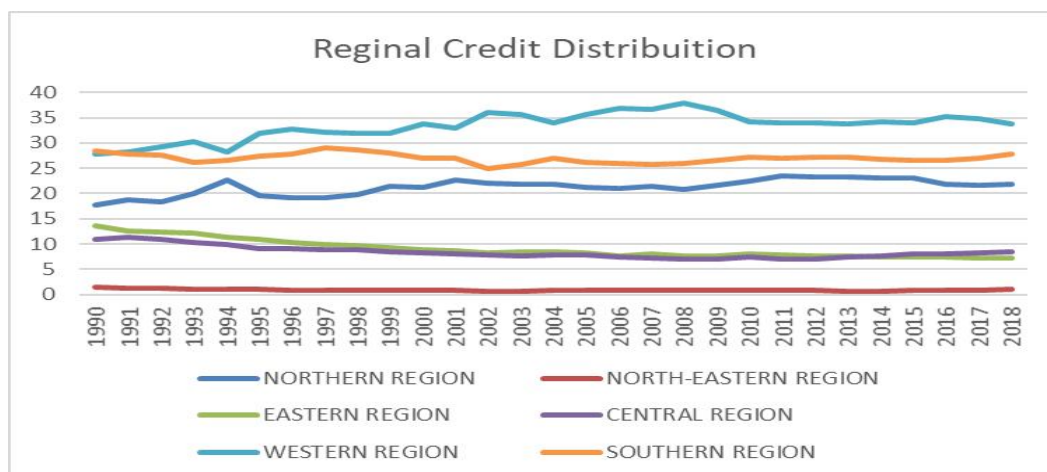


Table 1.9 Regional Credit Distribution

Region	MEAN	SD	MINIMUM	MAXIMUM	MEAN	SD	MINIMUM	MAXIMUM
NR	20.448	1.578	17.737	22.74	22.225	0.939	20.827	23.417
NER	0.983	0.235	0.741	1.534	0.826	0.069	0.753	0.98
ER	10.213	1.744	8.252	13.519	7.619	0.247	7.163	8.011
CR	9.115	1.258	7.66	11.424	7.536	0.517	6.942	8.476
WR	32.018	2.685	27.804	36.027	35.073	1.433	33.699	37.897
SR	27.224	1.072	24.973	29.008	26.722	0.607	25.684	27.905

Source: Estimated by Author

The overall credit disbursal has seen an increasing trend in the western region which is 27.80 percentage to 33.69 percentage. Which is also reflected through the increase in its means value from 32.01 in 1990 to 2005 period to 35.07 in 2006 to 2018 period. Moreover, the same kind of increasing trend can also be seen in the northern region. However, the three regions viz; north-eastern region, eastern region and central region has seen a continuous decline in the credit distribution to these regions i.e., from 1.5 percentage to 0.9 percentage, 13.5 percentage to 7.16 percentage, 11.02 percentage to 8.47 percentage, respectively. The credit distribution to southern region has remain same on an average with little bit fluctuation in the middle.

6. Agriculture Development Index

6.1 Cropping Intensity

Table 1.10 Cropping Intensity

Region	NORTHERN REGION	NORTH-EASTERN REGION	EASTERN REGION	CENTRAL REGION	WESTERN REGION	SOUTHERN REGION
1990	154.0963	138.1334	151.5967	134.1094	115.8556	128.4263
1991	149.421	140.9964	144.9262	132.3272	113.8883	130.1664
1992	150.554	140.9261	141.3351	134.6248	116.3278	132.0949
1993	150.4154	140.7028	144.8911	136.4953	116.2182	131.1143
1994	153.3704	128.0425	148.175	136.6168	117.5969	131.946
1995	154.2161	126.1623	150.9875	137.083	117.175	131.0778
1996	150.1542	116.5718	136.3981	138.6568	118.4915	131.7509
1997	155.8253	115.9987	137.2668	139.6571	118.6093	131.4982
1998	159.2755	116.6204	137.1149	139.6699	118.9709	130.7717
1999	156.641	116.5187	137.797	140.4587	118.1251	132.0324
2000	157.9276	117.611	141.0355	134.403	117.6584	133.1772
2001	152.3417	116.8033	147.7623	137.36	117.4519	130.7202
2002	157.6233	118.0782	143.6066	135.1386	116.4347	129.5382
2003	162.0006	115.11	144.7131	140.1127	120.7061	131.5343
2004	163.1623	115.12	144.3499	141.2526	123.2051	134.3665
2005	162.5614	116.0066	145.6359	139.5899	123.8524	134.2666
2006	166.6129	115.7975	147.0232	141.5651	125.0489	133.982
2007	168.1915	116.8893	146.4663	142.2952	126.1323	132.8422
2008	168.1769	116.3875	147.9058	141.9847	121.5886	131.5172
2009	169.9802	127.235	142.9658	142.5088	119.4421	131.0997
2010	173.047	126.8402	144.7456	144.809	124.5892	132.235
2011	168.6817	127.0585	142.4188	145.0418	126.1274	128.433
2012	174.3447	127.3496	146.0272	146.0957	123.9869	127.7835
2013	166.913	127.8871	147.6571	146.8622	125.7621	131.4512
2014	165.4524	128.1505	143.7606	147.1247	126.9677	130.3842
2015	179.9	116.5367	148.6517	147.0938	122.6498	129.6458
2016	181.1	134.9591	153.1564	149.0036	125.1409	129.4691
2017	180.5	135.4268	154.5908	149.8003	123.979	130.7518
2018	182.5	135.5222	155.2988	151.8484	122.9257	132.2465

Source: RBI

Figure 1.4 Cropping Intensity

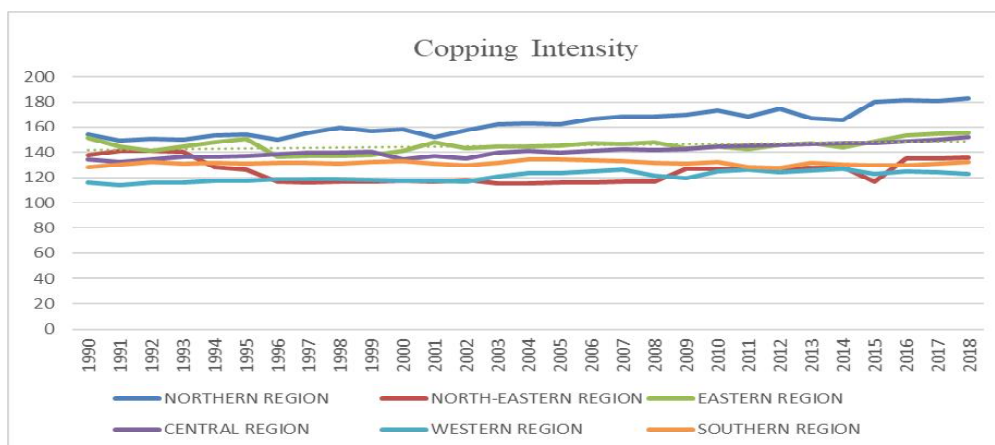


Table 1.11 Descriptive Analysis of Cropping Intensity

Region	MEAN	SD	MINIMUM	MAXIMUM
NR	163.275	10.148	149.421	182.5
NER	124.67	9.117	115.11	140.996
ER	145.457	4.943	136.398	155.299
CR	141.158	5.179	132.327	151.848
WR	120.859	3.844	113.888	126.968
SR	131.253	1.649	127.784	134.367

Source: Estimated by Author

Cropping intensity represents the number of crops grown on the same field in different seasons during an agricultural year. It is measured as a percentage of gross cropped area to net sown area (DES, 2017). Higher cropping intensity implies intensive use of land for agriculture (Deshmukh & Tanaji, 2017). The northern region has seen significant increase in its cropping intensity, this is also reflected by rising trend line and highest mean value, and however the region has highest standard deviation from its mean value. The other two regions such as eastern region, central region and western region showing an increasing trend though not very significantly as far as cropping intensity is concerned. Moreover, the southern region has seen a marginal increase in cropping intensity. The western region with its lowest mean value of 120.85 has seen mild increase in its cropping intensity.

6.2 Share of Agricultural in GDP

Table 1.12 Share of Agriculture in GDP

Region	Northern Region	North-Eastern Region	Eastern Region	Central Region	Western Region	Southern Region
1990	19.0882	3.07985	16.3989	25.6879	14.6979	21.0472
1991	18.876	3.22444	16.9059	25.5972	12.0511	23.3453
1992	19.1471	2.92883	15.0047	24.4298	16.2768	22.2128
1993	17.7773	3.35618	16.5713	23.9627	14.3876	23.945
1994	18.3198	3.16453	17.0655	22.9338	15.2952	23.2211
1995	18.2095	3.29341	16.1932	23.7904	15.0905	23.4229
1996	18.5756	3.03956	16.2329	23.1873	16.9745	21.9901
1997	19.096	3.33528	17.1107	23.1692	15.5819	21.7069
1998	18.4476	3.08196	16.643	22.3132	15.8697	23.6446
1999	18.2236	3.1673	16.4151	23.9092	14.6029	23.6819
2000	17.0377	3.67499	15.8993	28.4076	12.5328	22.4476
2001	18.4534	3.99932	18.3256	21.2162	12.675	25.3305
2002	19.2506	3.90804	18.1305	21.8939	13.7543	23.0627
2003	17.9173	4.24177	19.2959	21.9951	14.6133	21.9367
2004	20.5511	3.90331	17.2893	22.3084	15.8535	20.0943
2005	19.5028	3.90019	18.0254	21.3591	14.6887	22.5237
2006	19.2225	3.80868	17.4573	23.0078	13.0659	23.4379
2007	18.2868	3.68679	16.31	22.8501	14.6909	24.1754
2008	18.5902	3.61103	16.9094	22.3832	15.0911	23.4151
2009	17.957	3.61279	16.2879	21.7053	16.2063	24.2307
2010	18.659	3.69513	17.2071	22.4441	13.7322	24.2624
2011	18.0061	3.84836	17.0274	22.8697	13.8137	24.4347
2012	19.0988	3.62649	16.1679	21.8268	15.6717	23.6083
2013	18.7805	3.58429	16.6897	22.8038	15.2149	22.9267
2014	18.2226	3.58014	17.3103	24.3352	13.9574	22.5944
2015	17.9398	3.5075	15.8417	24.5046	15.5395	22.667
2016	18.7153	3.2372	17.9844	29.691	7.66652	22.7056
2017	17.8151	3.96106	15.3766	24.6802	17.4326	20.7344
2018	16.7802	3.17969	15.5909	26.4285	19.2695	18.7512

Figure 1.5 Share of Agriculture in GDP

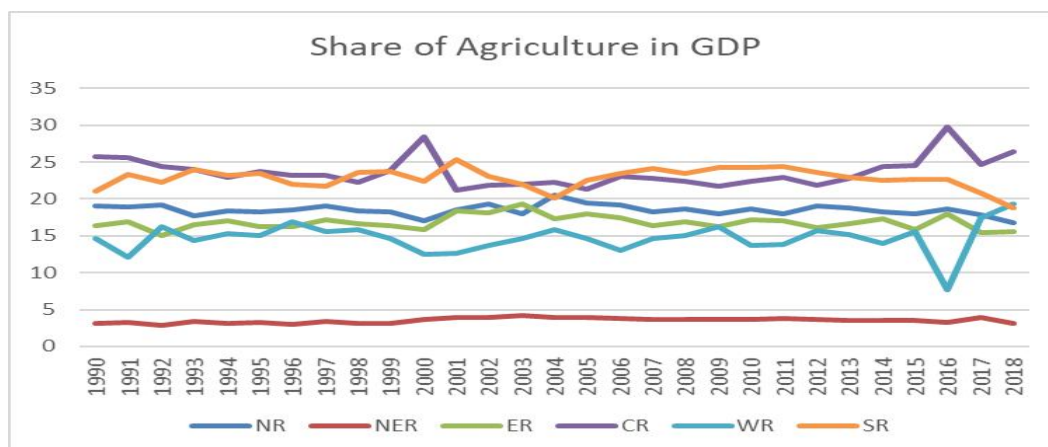


Table 1.13 Share of Agriculture in GDP

Region	MEAN	SD	MINIMUM	MAXIMUM
NR	18.502	.748	16.78	20.551
NER	3.525	.344	2.929	4.242
ER	16.816	.945	15.005	19.296
CR	23.645	1.999	21.216	29.691
WR	14.7	2.032	7.667	19.269
SR	22.812	1.396	18.751	25.33

Source: Estimated by Author

As far as share of agriculture in GDP the contribution from northeastern region has remain stagnant on an average at 3.5 percentage and this region has lowest mean value of 3.52 among all the regions. The northern region has seen an overall decline in the contribution of agriculture to GDP. Moreover, the eastern region and west region has seen a marginal increase in their agriculture share to GDP. The central region and southern region have seen an increase and decrease respectively with some fluctuation in the middle. Also central has highest mean value at 23.64 and southern region has 22.81.

6.3 Gross Irrigated Area

Table 1.14 Gross Irrigated Area

Region	NR	NER	ER	CR	WR	SR
1990	30.20225	3.308727	20.78486	26.02437	12.32182	17.72487
1991	31.62685	3.296966	21.19991	27.35391	12.16435	18.68986
1992	32.30367	3.363611	20.79409	28.34463	12.84146	18.36453
1993	32.76944	3.367531	21.28062	29.67146	12.34347	18.83287
1994	33.44808	3.379292	21.72103	31.02811	13.46345	19.23364
1995	34.7344	3.406734	22.40587	31.37507	13.15639	18.59713
1996	35.74236	2.042472	27.37265	32.5596	14.66021	19.66112
1997	35.76783	2.034632	27.86841	32.32242	14.77831	18.92246
1998	36.84674	2.018951	28.98905	35.36234	15.21921	20.90114
1999	36.87585	1.944465	29.77304	36.31918	14.82751	20.42808
2000	35.83151	2.054233	27.68394	31.92396	14.23111	20.69683
2001	37.09964	2.097357	29.27959	33.7265	14.44172	19.67055
2002	33.96297	2.160081	27.17896	32.66124	14.72713	16.43771
2003	36.59748	2.242407	29.19888	35.2729	16.21716	16.37327
2004	38.0239	2.269849	28.59475	36.58347	16.35692	18.68514
2005	39.3357	2.089516	29.94367	36.28395	17.40998	21.23904
2006	39.59405	2.093436	31.34793	37.67854	18.80356	21.21704
2007	40.05982	2.1444	31.99587	37.65686	19.709	21.7011
2008	39.76508	2.591313	31.59465	38.53509	19.04173	22.88454
2009	38.69526	2.363936	27.08673	38.72076	18.32919	21.34277
2010	40.56016	2.289451	26.33503	39.59357	19.97473	24.00197
2011	41.96111	2.293371	28.2996	41.10879	20.70498	23.58863
2012	42.93086	3.226401	29.14354	42.60504	19.68144	21.60366
2013	43.72048	3.336169	28.96599	44.20564	20.73254	23.84324
2014	44.53558	3.410655	29.25192	45.53112	20.34281	22.76824
2015	45.55263	3.508662	30.93979	45.00255	23.19493	21.05516
2016	45.53807	3.951655	30.65156	47.75245	23.4331	21.21861
2017	45.79825	4.002619	30.68615	47.92593	23.99211	22.60165
2018	45.51988	4.061423	31.35254	50.02663	23.92322	23.93754

Source: RBI

Figure 1.5 Gross Irrigated Area

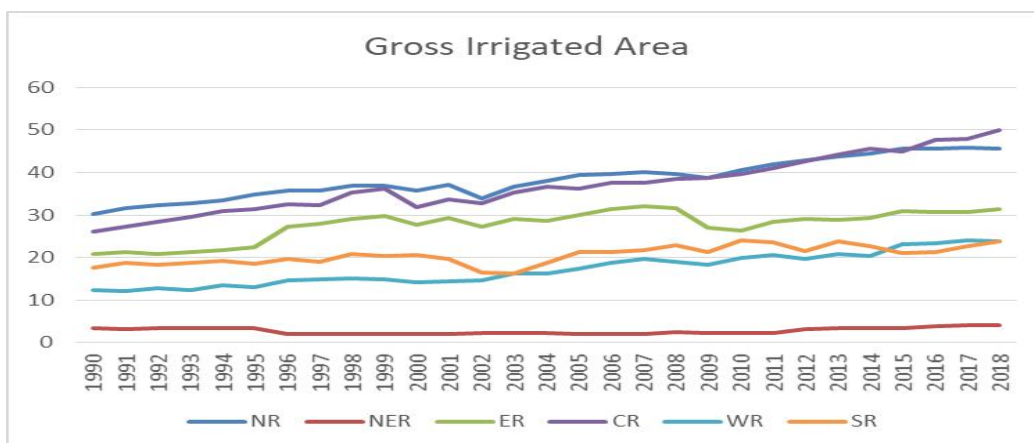


Table 1.15 Descriptive Analysis of Gross Irrigated Area

Region	MEAN	SD	MINIMUM	MAXIMUM
NR	18.502	.748	16.78	20.551
NER	3.525	.344	2.929	4.242
ER	16.816	.945	15.005	19.296
CR	23.645	1.999	21.216	29.691
WR	14.7	2.032	7.667	19.269
SR	22.812	1.396	18.751	25.33

Source: Estimated by Author

The availability of water for irrigating the crops (either through rainfall or other irrigation sources) is one of the most crucial factors affecting cropping intensity. The five regions viz; northern region, eastern region, central region, western region and southern region have seen increase in their gross irrigated area, however the central region has seen maximum increase in the gross irrigated area, which is also reflected the trend line for the central region and its mean value at 37.005. however, the north eastern region has remain stagnant as far as gross irrigated area is concerned also with lowest mean value among all the regions.

6. Linkage Between financial Development Index and Agriculture Development Index

6.1 Panel Regression Analysis of Agriculture Development Index and Financial Development Index

Dependent variable: AGI	R Squared	0.9626
Sample: 1 174	Adjusted R-squared	0.9613
Included observations: 174	F- Statistic	716.49
	Prob. (F- Statistic)	0.0000

Table 1.16 Regression Analysis of Agriculture Development Index and Financial Development Index

	Coefficient	Std. Error	t- Statistic	Prob.
FDI	.1242474	.0650335	1.91	0.058
D1	-.2898271	.0405629	-7.51	0.000
D2	-.4624627	.0272882	-16.95	0.000
D3	.1000616	.0213997	4.68	0.000
D4	-.0729008	.0142448	-5.12	0.000
D5	-.638397	.0227085	-28.11	0.000
Constant	.6735425	.0221418	30.42	0.000

Model 1

$$AGI = \beta_0 + \beta_1 d_1 + \beta_2 d_2 + \beta_3 d_3 + \beta_4 d_4 + \beta_5 d_5 + \beta_6 FDI + U_i \quad (1)$$

For central region:

$$\begin{aligned} AGI &= \beta_0 + \beta_6 FDI + U_i \\ &= .6735425 + .1242474 + U_i \end{aligned}$$

For southern region:

$$\begin{aligned} AGI &= \beta_0 + \beta_1 d_1 + \beta_6 FDI + U_i \\ &= .6735425 + (-.2898271) + .1242474 + U_i \\ &= (\beta_0 + \beta_1) d_1 + \beta_6 FDI + U_i \\ &= (.6735425 + (-.2898271)) + .1242474 \\ &= 0.3837154 + .1242474 + U_i \end{aligned}$$

For western region:

$$\begin{aligned} AGI &= \beta_0 + \beta_2 d_2 + \beta_6 FDI + U_i \\ &= .6735425 + (-.4624627) + .1242474 + U_i \\ &= (\beta_0 + \beta_2) d_2 + \beta_6 FDI + U_i \\ &= (.6735425 + (-.4624627)) + .1242474 \\ &= 0.2110798 + .1242474 + U_i \\ &= 0.2110798 + .1242474 + U_i \end{aligned}$$

For northern region:

$$\begin{aligned} AGI &= \beta_0 + \beta_3 d_3 + \beta_6 FDI + U_i \\ &= .6735425 + .1000616 + .1242474 + U_i \\ &= (\beta_0 + \beta_3) d_3 + \beta_6 FDI + U_i \\ &= (.6735425 + .1000616) + .1242474 \\ &= 0.7736041 + .1242474 + U_i \end{aligned}$$

For eastern region:

$$\begin{aligned} AGI &= \beta_0 + \beta_4 d_4 + \beta_6 FDI + U_i \\ &= .6735425 + (-.0729008) + .1242474 + U_i \\ &= (\beta_0 + \beta_4) d_4 + \beta_6 FDI + U_i \\ &= (.6735425 + (-.0729008)) + .1242474 \\ &= -0.0554655 + .1242474 + U_i \end{aligned}$$

For north eastern region:

$$\begin{aligned} AGI &= \beta_0 + \beta_5 d_5 + \beta_6 FDI + U_i \\ &= .6735425 + (-.638397) + .1242474 + U_i \\ &= (\beta_0 + \beta_5) d_5 + \beta_6 FDI + U_i \\ &= (.6735425 + (-.638397)) + .1242474 \\ &= 0.0351455 + .1242474 + U_i \end{aligned}$$

The above model interprets the linkage between financial development and agricultural development. From the above model we can analyse that agricultural development is positively and significantly related to financial development, and 1 percent change in financial development leads to .1242474 percent change in agricultural development. At the same time the intercept term is positive and highest in northern and central region followed by southern region and western region. On the other hand, it is negative in eastern region and in north eastern region it is positive but low, that shows the variations among regions that means inequality within the regions.

7. Conclusion and Policy Recommendations

The financial development has positively contributed towards the development in agriculture sector of northern region, southern region, central region and western region however there is a low impact in the eastern region and north eastern region, which is in contradiction with their population size and geographical area. As agriculture is the principal source of livelihood in these regions is dominated by smallholders, and the farmers suffer from disadvantage of scale as well as weak institutional support and market access. Therefore pumping more capital and credit with continuous expansion of bank branches would bridge the inequalities existing between the regions as far as agriculture development and regional inequality is concern.

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Analysing Growth of Service Sector in India-Education and Health Services

Keshav Vishal Singh & Prof. Archana Singh

Abstract

The health and education service sector in India offers a wide range of services that cater to all aspects of the education sector. Health is not just the absence of disease but a state of complete physical, mental, and social well-being. The expansion of both the health and education sectors has contributed to the advancement of the service sector. Economists like Fisher and Colin Clark have classified the economy into primary, secondary, and tertiary sectors. The service sector encompasses activities such as trade, commerce, transport, communication, hotels and restaurants, banking and finance, health and education, tourism, the stock market, the film industry, insurance, and the astrology industry. The service sector contributes more than 50% of India's Gross Domestic Product (GDP). There have been significant changes in the sectoral contributions to India's GDP over time, with the share of other services and the service sector showing varying growth rates.

Introduction

As civilizations progress, human desires increase, leading to the evolution of economic activities. Initially, primary activities such as hunting, animal husbandry, and agriculture emerged. As science and technological development progressed, the industrial sector evolved. The expansion of both these sectors contributed to the advancement of the service sector. Economists like Fisher (1935) and Colin Clark (1940) divided the economy into primary, secondary, and tertiary sectors. The primary sector encompasses tangible goods in agriculture, forestry, fishing, and hunting. The secondary sector includes mining, manufacturing, and activities like gas, electricity, and water supply, involving tangible products. The tertiary sector consists of trade and public services. However, economic activities do not fit into clear-cut divisions, as economists update the list of activities and there is overlapping between sectors. Economic activities have shifted between sectors over time. Currently, the primary sector includes agriculture, forestry, animal husbandry, and fisheries. The secondary sector comprises mining,

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manufacturing, electricity, gas, water supply, and construction. The service sector encompasses trade, commerce, transport, communications, hotels and restaurants, banking and finance, health and education, tourism, the stock market, the film industry, insurance, the astrology industry, the advertising industry, sports, legal services, the publishing industry, and the mass media, among others. The service sector, also known as the tertiary sector of the economy, is expanding rapidly and is one of the three sectors of the economy. The “soft” part of the economy in the service sector includes all activities where people offer their knowledge and time to improve productivity, performance, potential, and sustainability, and is known as advice, experience, and discussion. The service sector involves activities from the production of goods and services to their delivery to the consumer. Over the last 30 years, there has been a significant shift from the primary and secondary sectors to the service sector. Now it has become a largest sector of the economy. Further, the service sector activities can be grouped into:

1. Trade, hotel and restaurants.
2. Transport, storage and communication. Transport includes roads and railways, airways and inland and overseas, water transport.
3. Financial institutions, insurance, real estate and business services.
4. Community, social and personal services. Community services include government establishment and its departments and personal services such as health, and education, NGOs etc

While there is a fine line between distinguishing private sector and public services, as some services are provided by both sectors, we can classify service sector activities that fall under both categories. Private services encompass trade, commerce, transport, communication, hotels and restaurants, tourism, insurance, cinema, advertising, sports, health and education, legal services, and NGOs, among others. The government sector includes government establishments such as the legislature, executive, judiciary, various departments at the central and state government levels, autonomous bodies, and local bodies.

Objectives

1. To examine the growth of the service sector in India
2. To assess the implementation of health services
3. To evaluate the implementation of education services

Methodology

The research relies on secondary sources obtained from the Economic Survey of the Government of India. Data on specific parameters outlined in the objectives was collected for the period between 1991-92 and 2022-23. The performance of health and education sectors has been utilized to analyse the performance of health and education.

Role of Service Sector in Economic Development

In any country, economic development hinges on the growth and evolution of its three economic sectors. However, in recent years, the service sector has been growing at a rapid pace in developing countries, contributing significantly to output, income, and employment. Productivity per worker in the service sector is surpassing that of agriculture and industrial sectors. The service sector already dominates in developed countries. When the agriculture sector is stagnant, new service activities emerge and add to the service sector, driving economic growth. Thus, the service sector plays a crucial role in the economic development of any country. The importance of the service sector can be measured by its contributions to various aspects of the economy. Business includes both domestic and foreign trade. Trade, as a service sector activity, facilitates the exchange of goods and services between producers and consumers. Domestic trade refers to exchanges within the country, providing income and employment to those engaged in these activities. Foreign trade also plays a significant role in a country's development, especially through imports of machinery and equipment that cannot be produced domestically initially. Such imports, whether for creating new production capacity or enhancing existing capacity, are termed as developmental imports. Imports that aim to maximize productive capacity are termed as maintenance imports. Finance, as a service sector activity, is crucial for undertaking economic activities. It refers to the funds or monetary resources needed by individuals, businesses, and governments. Individuals require funds for daily expenses or buying capital goods, businesses need funds for various purposes like paying wages, buying raw materials, or upgrading machinery, while governments need funds to provide services. Finance institutions provide funds for various activities, thereby generating income and employment. Traditionally, the service sector was responsible for distributing the output of primary and secondary sectors for intermediate and final consumption, as well as providing services to producers and consumers. Trade, transport, and storage activities ensure the distribution of goods and services as needed by consumers. Business and financial services facilitate the mobilization and development of resources across different sectors of the economy. Services sector activities generally require less capital investment than other sectors, and many of these activities also require less physical space. However, the service sector is knowledge-intensive, requiring substantial Human Resource Development (HRD) inputs to develop most of its activities.

Service Sector in India

Today, the service sector accounts for more than 50 percent of India's Gross Domestic Product (GDP), marking a significant shift in the sectoral contribution to the economy over time. In 1950-51, the primary sector contributed about 56.5 percent to India's GDP, followed by the secondary sector at 13.6 percent, and the tertiary sector at 29.9 percent. By 1990-91, the share of the agriculture sector in India's GDP had decreased to 34 percent, with the secondary sector at 23.2 percent and the tertiary sector at 42.8 percent. In 2007, the primary sector's contribution had further decreased to 18 percent, while the industrial sector increased

to 29 percent, and the service sector to 53 percent (Misra and Puri, 2009). In 2008-09, the primary sector accounted for 15.7 percent, the secondary sector for 28 percent, and the service sector for 56.4 percent (GOI, 2010), indicating a continual rise in the share of the tertiary sector over time.

The tertiary sector, also known as the service industry or sector, includes a wide range of businesses, including financial institutions, schools, transport, and restaurants. India's growth has been led by the service sector, making it one of the leading economies. The service sector is a significant part of the Indian economy in terms of employment potential and its contribution to national income. Demand and supply factors have driven this growth. On the demand side, the high growth of services in the economy was mainly due to increasing usage of services by other sectors. On the supply side, increased trade in services following trade liberalization policies and other reforms of the 1990s induced this growth. Trade liberalization has led to the development of finance, transport, communication, and other service sector activities, including hotels and restaurants. Alongside this, the increased demand for health and education has also contributed to the expansion of these sectors. In the future, the services sector is expected to provide about 70 percent of the new job opportunities in the economy, as the share of agriculture in total employment is already falling. The share of services is projected to increase in the coming years. The services sector in India contributes about 55.2 percent to the GDP, growing at a rate of 10 percent annually, contributing significantly to total employment, a high share in foreign direct investment, and one-third of total exports, with export growth reaching 27.4 percent in the first half of 2010-11.

The contribution of services, such as infrastructure, including roads, railways, civil aviation, financial services, and social services, plays a major role in enhancing the contribution of the service sector to the Indian economy. In India, the contribution of the service sector to the GDP is classified into three categories: trade, hotels, transport, and communication; financing, insurance, real estate, and business services; and other services, including public administration, defence, health, and education sectors.

Health Services Sector in India:

Health is defined as a state of complete physical, mental, and social well-being, not merely the absence of disease or ailment. The health service sector is considered a fundamental human right and is accorded significant importance in the constitution through Article 21. This article emphasizes the responsibility of both state and central governments in safeguarding the health and nutritional well-being of the people. The Indian health sector comprises various components, including medical care providers such as physicians, specialist clinics, nursing homes, and hospitals. It also includes diagnostic service centers, pathology laboratories, medical equipment manufacturers, contract research organizations (CROs), pharmaceutical manufacturers, and others.

Education Services Sector in India:

Our comprehensive range of services offers a complete solution to all education sector needs. The education sector in India is at a critical juncture in its development. The country's demographic advantage, with a large youth population and low gross enrolment ratios, presents a significant opportunity for education sector stakeholders. Additionally, the growth of the Indian economy and rising income levels are increasing spending on education, which already accounts for the second-highest share of the wallet for middle-class households. Government support for the education sector has also increased, with significant reforms and higher financial allocations being announced and implemented.

Performance of the Service sector in India

The growth of service sector in India has been evaluated in terms of the percentage share to the

G.D.P. The following sections deal with these issues in detail.

Share of service sector in GDP

Year	Service Sector	GDP	Per Cent (%)
1950-51	82591	279618	29.5
1960-61	123872	410279	39.1
1970-71	196158	589787	33.2
1980-81	300613	798506	37.6
1990-91	573465	1347889	42.5
2000-01	1179976	2342774	50.3
2010-11	2818125	4885954	57.6
2022-23	57715498	130467760	49

During 1950-51 the contribution of service sector to G.D.P was 29.5 per cent. In 1960-61 it was 39.1 per cent it increasing the per cent. In 1970-71 it was 33.2 per cent this period decreasing the per cent. In 1980-81 it was 37.6 per cent. In 1990-91 contribution of service sector to G.D.P was 42.5 per cent this period share of per cent increasing. 2000-2001 this period also increases the 50.3 per cent. During 2010-11 the share of service sector to G.D.P was 57.6 per cent over a period of time between 1950-2011 the contribution service sector has doubled but we can see decline in service sector share in 2022-23 due to covid impact and other relate economic condition only 49% share was in the economy

Share of Other Services and G.D.P

Year	Other Service	GDP	Percent
1950-51	28474	279618	10.1
1960-61	40741	410279	9.9
1970-71	68218	589787	11.5
1980-81	101666	798506	12.7
1990-91	180564	1347889	13.3
2000-01	343963	2342774	14.6
2010-11	637675	4885954	13
2022-23	22179519	130467760	17

During 1950-51 the contribution of other services and G.D.P was 10.1 per cent. In 1960-61 it was 9.9 per cent this period decreasing the per cent. In 1970-71 it was share of per cent 11.5 per cent. In 1980-81 it was 12.7 per cent. In 1990-91 it was 13.3 per cent, 2000-01 it was 14.6 per cent. 2010-11 the share of other service to G.D.P was 13 per cent. In 2022-23 share was 17 percent this is been because of mainly covid pandemic as health and education sector have been boost during last 2-3 years online services in these two sectors were at its peak Over a period of time between 1950-2011 the contribution of other services is little bit increasing.

Performance of Growth Rates of Service Sector and G.D.P

In the coming section an attempt has been made to discuss the growth rate of service sector and

G.D.P. The simple growth rate has been calculated for each decade.

Percentage Growth Rate of Service Sector and G.D.P in India

Year	Service Sector %	GDP%
1950-51	-	-
1960-61	49.9	46.7
1970-71	58.3	43.7
1980-81	53.2	35.3
1990-91	90.7	68.8
2000-01	105.7	73.8
2010-11	138.8	108.5
2022-23	148.9	113.7

The above table reveals some trends. It is clear that the growth rates have been fluctuated in the study period for all the service sector and G.D.P In the first decades of development between 1950-51 and 1960-61 the growth rate of G.D.P was 46.7 per cent and service sector growth rate was 49.9 per cent. In the second decades of during 1960-61 and 1970- 71 the growth rate of G.D.P was 43.7 per cent and service sector growth rate was 58.3 per cent. In the third decades between 1970-71 and 1980-81 the growth rate of G.D.P was 35.3 and service sector growth rate was 53.2 per cent. In the fourth decades between 1980-81 and 1990-91 the growth rate of G.D.P was 68.8 per cent and service sector growth rate was 90.7 per cent. In the fifth decades 1990-91 and 2000-2001 the growth rate of G.D.P was 73.8 per cent and service sector growth rate was 105.7 per cent. In the last decades during 2000-2001 and 2022-2023 the growth rate of G.D.P was 113.7 per cent and service sector growth rate was 148.9 per cent in the same period.

Percentage Growth Rate of Other Services and G.D.P in India

Year	Other Service %	GDP %
1950-51	-	-
1960-61	43	46.7
1970-71	67.4	43.7
1980-81	49	35.7
1990-91	77.6	68.8
2000-01	90.4	73.8
2010-11	85.3	108.5
2022-23	91.2	113.7

The above table reveals some trends. It is clear that the growth rates have been fluctuated in the study period for all the other services and G.D.P In the first decades of development between 1950-51 and 1960-61 the growth rate of G.D.P was 46.7 per cent and other services growth rate was 43 per cent. In the second decades of during 1960-61 and 1970- 71 the growth rate of G.D.P was 43.7 per cent and other services growth rate was 67.4 per cent. In the third decades between 1970-71 and 1980-81 the growth rate of G.D.P was 35.3 and other services growth rate was 49 per cent. In the fourth decades between 1980-81 and 1990-91 the growth rate of G.D.P was 68.8 per cent and other services growth rate was 77.6 per cent. In the fifth decades 1990-91 and 2000-2001 the growth rate of G.D.P was 73.8 per

cent and other services growth rate was 90.4 per cent. In the last decades during 2000-2001 and 2022-23 the growth rate of G.D.P was 113.7 per cent and other services growth rate was 91.2 per cent in the same period.

Conclusion

As civilization progresses human desires increase leading to the evolution of education activities. The expansion of both health and education sectors have made the advancement of service sector. The service sector can be ganged by its contribution to different aspect of the economy. In the decade period between 2000-01 and 2021-23. Was highly increased in compare 1950-51 to 2000-01. This period service sector and other services have been increased.

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An Analysis of Employment Status and Demographic Profile of Street Vendors in India

Asheerwad Singh & Dr. Harsh Mani Singh

Abstract

This paper intends to analyse the employment status of Street vendors within the five different categories of street vending. This study is also trying to analyse the ratio of participation of workers with respect to their age and their education level. This study is based on secondary data given by WIEGO; Informal Workers in India, A Statistical Profile, August 2020. This study is descriptive in nature. This study is exploring the participation of street vendors in different category and trying to analyse the change with the different age group and change in participation with the change in education level. This study also reveals that there are many problems at workplace for women street vendors like safety and security and other health issues due to lack of public facilities. Due to all of these and other reasons participation of women is less than men in street vending. In this paper we also discuss about some organizations and government policies which are empowering street vendors to tackle these problems and run their livelihood smoothly.

Keyword: *Street Vendors, Demographic Profile, Employment Status, Informal Sector, Women Street Vendors.*

Introduction

India is developing a country and the second largest population of the world. In this era of globalization and liberalization informal sector of Indian economy is playing a significant role in India, 422 million workers which are more than 92% of total workforce working under informal sector directly or indirectly. Informal sector is performing as absorber of unemployment and underemployment all over the country. Due to lack of proper employment and regular earning in rural areas workers are migrating to urban areas. Most migrants suffer to earn their livelihood due to lack of skill and training and start working in informal sector on the daily

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wage bases. Urban informal economy is rising rapidly. Informal sector is playing important role in providing employment income and other services. Street Vendor is the major part of the urban economy. Who are the street vendors? -

According to NPUSV - *“A person, who sells goods in the public without having a permanent built up structure but with a temporary static structure or mobile stall, is a street vendor”*.

Street vendors work as self employed workers. They sell their goods manufactured in small scale and goods from home based industries. Street Vendors are selling their goods by temporarily occupying the space on the pavement and on other public or private areas. Street vendors face existential denial as they will disappear soon from a place. They encroach on the street. Women have big participation in street vending but they got less public space. Women usually sell by moving door to door with goods on their head. Street vendors suffer from diseases like migraine, hyper acidity, hyper tension and high blood pressure etc.

There are 49.48 lakh street vendors in India. Uttar Pradesh has largest number 8.49 lakh of street vendors. There are 72457 street vendors in the capital Delhi. There are no street vendors in Sikkim.

Objectives of the Study

- Analyses of the demographic profile of street vendors.
- Analyses of the employment status of workers in street vending.
- To understand the challenges faced by women street vendors.

Employment status:

Employment status refers to whenever an employer hires new personnel, it is up to them to decide what type of employment status they are hiring under, e.g., worker, self-employed, employee, etc. Here we have taken, (1) Own account workers – who work on their own with one or more partners. It is a subcategory of self-employment. (2) Employer – a person that provides a job by paying a salary or wages. (3) Contributing family workers– workers who hold self- employment in an economic enterprise established and operated by a family person or a relative.

(4) Regular employee – an employee holding a job with the expectation of working continuously on an ongoing basis, can only be terminated for specific reasons. (5) Casual worker – worker who has temporary or contract-based employment.

Employment Status of Street Vendors in India

Employment Status	India			Urban India		
	Total	Women	Men	Total	Women	Men
Own Account Worker	75.3	58.7	77.2	73.1	60.7	74.6
Employer	1.2	1.3	1.2	1.2	1.1	1.2
Contributing Family Worker	8.2	30.0	5.8	8.5	28.2	6.0
Regular Employee	9.4	5.7	9.8	11.3	6.2	11.9
Casual Worker	5.8	4.4	6.0	6.0	3.7	6.2

Source: WIEGO; Informal Workers in India, A Statistical Profile, August 2020

Men and women both are predominant in own-account work as 77.2% of men and 58.7% of women work as own-account work. In urban India, women's percentage is slightly higher but men's percentage is a little lesser. Other than that, women prefer to work as contributing to family work as here 30% of women do. In urban India, this percentage got decreased by 1.8%. But men prefer to work as regular employees rather than contribute to family work. Whereas 9.8% of men work as regular employees but only 5.8% of men contribute to family work which is even less than the men's percentage of casual workers. Percentage of men in casual work is higher than percentage of men in contributed to family work and similar pattern for the urban India.

Demographic profile:

Demographic profile refers to a form of analysis in which information is gathered about their sex and age group to understand the group's composition and behaviours. We have taken the sex and their age group of 15 to 55+.

Demographic Profile of Street Vendors in India

Age Group	India			Urban India		
	Total	Women	Men	Total	Women	Men
15-24	11.2	8.4	11.5	10.3	5.5	10.9
25-34	25.0	15.9	26.1	27.0	17.1	28.2
35-44	26.9	27.7	26.9	26.3	29.0	26.0
45-54	21.5	25.6	21.1	20.2	21.9	20.0
55+	15.3	22.4	14.5	16.2	26.5	14.9

Source: WIEGO; Informal Workers in India, A Statistical Profile, August 2020

Maximum percentage 26.9% of men belong to 35-44 age group and 26.2% of men belong to 25-34 age group but maximum percentage 27.7% of women belong to 34-45 age group follow by 25.6% of women of 45-54 age group. It means in broader sense 53% (26.1+26.9) of men belong to 25-44 age group but 43.3% (27.7+25.6) of women belong to 35-54 age group. The average age of women street vendor is higher than men street vendor. In urban India maximum percentage 28.2% of men belong to 25-34 age group but maximum percentage 29.0% of women belong to 35-44 age group. Average age of women street vendor is higher than average age of men street vendor also in urban India.

Education Level of Street Vendors

Level of Education	India			Urban India		
	Total	Women	Men	Total	Women	Men
Below Primary	32.2	63.0	28.7	30.0	64.6	25.7
Primary & Middle	38.5	24.9	40.1	38.8	22.3	40.8
Secondary & Higher Secondary	22.7	9.4	24.2	23.3	10.9	24.9
Graduate & Above	6.5	2.7	7.0	7.9	2.2	8.6

Source: WIEGO; Informal Workers in India, A Statistical Profile, August 2020

Over 50% of women in street vending are educated below primary and over 40% of men are educated only primary and below secondary. Only 7% of men are graduate, in urban India percentage became 8.6% but only 2.2% of women is working as street vendor and in urban India only 2.2% of women is working as street vendor. It means more men are working as street vendor in comparison of women even after being graduate.

Challenges faced by Women Street Vendors

- 1) Many time women street vendors' experiences criminal exploitation, abusive behaviour and sexual harassment.
- 2) Usually women have other unpaid work and care responsibility so they got issue related to adjustment between paid and unpaid work. All of this makes it difficult to women street vendors to fully concentrate on street vending and thereby earn a living.
- 3) There is also an issue of credit availability for women because due to lesser disposable income and lesser saving eventually women face problems related to credit.
- 4) Women street vendor are more likely to incline to illness due to not appropriate numbers of public toilets many times women street vendors got enacted and face kidney problems.

Organizations and Government Scheme Empowering Street Vendors

SEWA -: Self-Employment Women's Association, it is trade union of women. SEWVA started some health care scheme and social security scheme for the members engaged in informal sector. It was stabilised in 1974. It is working with the help of NGOs and Self Help Groups (SHGs) to avail capital for small business. Initially there was 5000 women with 60000 Rs. of deposits, now they have reached 825 million Rs. of deposits with the help of 20000 depositors. SEWA promotes Self Help Groups for micro loans.

NASVI -: National Alliance of Street Vendor in India is helping street vendors to run their business smoothly. NASVI has made better connection between financial institution and street vendors. It encourages financial institution and Self Help Groups to lend to street vendors.

NIDAN -: It is non profit organization, empowering workers, women and their child of informal sector. Group insurance is centre of this organization. NIDAN is formed by SEWA in 1996. It is helping to their members to get enrolled in several insurance groups like LIC GIC.

Manushi -: It is non profit organization established by Manushi Trust in 1978. This organization is promoting social justice and human rights by doing research, educational activity and advocacy. This is working for working poor and it also organize Lok Sunwayi for Hawkers.

PM-MUDRA Yojana -: Pradhan Mantri Micro Unit Development and Refinance Agency is providing loan to street vendors, traders, shopkeepers and other service sector activities.

MUDRA Yojana is providing loan in three category – Shishu, Kishor and Tarun. Under shishu this scheme provide loan upto 50000 Rs. to small businesses.

PM-SVANidhi Yojana -: Pradhan Mantri Street Vendor Atmanirbhar Nidhi is a micro credit scheme. It is providing working capital collateral free affordable loan to street vendors. Amount of loan is up to 10000 Rs. for one year tenure, repayment within time ensures a loan up to 20000 Rs. in second tenure and in the third tenure up to 50000 Rs.

Conclusion

This paper concludes that maximum percentage of men and women work for their own account work. A large percentage of women working for contributing family work but men prefer to work as regular employees and casual employees. The average age of women street vender is higher than men street vendor. Women faces many problems due to unpaid work and care responsibilities e.g. marriage and child nurturing for a long period. All of these may be the reason for the higher average age of women street vendor's. Even average earning per hour of women is 40-50 Rs. which is less than average earning per hour of men which is 60-80 Rs. Street Vendors are backward section of informal sector facing many problems like heavy dependency of family, low level of education, long working hours in a day, low capital

availability and unavailability of formal credit. Government is trying to empower street vendors by implementing different types of schemes.

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'Employment Issues of Migrant Workers and Labour Market Discrimination'

Mahendra Pal & Prof M.K. Singh

ABSTRACT:- *Unemployed or dissatisfied heads of households are more prone to migrate. The mechanics of the private market call into question the need for measures to encourage unemployed people to move. Recent newcomers who can't find work are more likely to transfer again, typically because they're unhappy. Local economic factors affect outmigration primarily among the unemployed and job seekers. Family income and origin pay rates can affect migration. Migration's complicated consequences on job chances and economic dynamics, especially in high-income nations, have been thoroughly explored. The UK Migration Advisory Committee's findings suggest that migration has limited impact on average employment or unemployment levels but affects specific demographic groups differently. According to the Economic Times April 2023, internal migration will surge as India becomes the world's most populous nation, making urban infrastructure management and job creation for 8 million to 10 million young unemployed challenging for the government. Last week, the UN predicted India's population would surpass China's 1.42 billion. The latest 2011 census reported 456 million internal migrants in India's 1.21 billion population. Theories such as Lewis and Fieranis propose that migration from rural to urban areas drives societal transformation and alters labour market structures. However, the Todaro model suggests persistent urban unemployment despite rural-urban migration. Migration, facilitated through various channels, significantly shapes social and economic landscapes, with diverse impacts that warrant careful consideration.*

Key Words:- *Employment, Migration, Labour Market, Economic Impacts, Urbanization.*

I. INTRODUCTION

Employment drives migration. Families with unemployed or unsatisfied heads relocate more than those without job searches. Policy to encourage unemployed people to move may be an expensive duplication of private market forces already moving in the right direction. People who cannot find jobs in a new place are more likely to relocate again, and many repeat migrants are unsatisfied with their previous move. The study reveals that local economic

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factors effect outmigration only among the unemployed, who are most affected. Family income and origin wage rates affect migration more for the unemployed and other job seekers (**Julie DaVanzo 1978**). Migration has been studied extensively, particularly on its impact on the labour market, particularly on high-income country residents' job prospects. While migration can raise average pay but lower salaries for certain individuals, it may also affect the economy. The migration market may respond slower during recessions than booms. It boosts labour supply in specific industries, increases worker demand, and creates new opportunities. However, the "lump of labour fallacy" means that theory alone cannot determine whether migration will improve or hurt existing workers' job chances. Statistical studies are needed to understand practice implications. Migration's effects depend on time, place, and type. **The UK Migration Advisory Committee (MAC)** concluded that migration has little or no impact on average employment or unemployment of existing workers. Migration has a concentrated impact on certain groups, with negative effects for lower-educated individuals and positive effects for higher-educated ones. It may depend on the economic cycle and has little effect on average wages. However, migration can improve global labour market efficiency by allowing migrants to adjust their location choices, leading to lower equilibrium unemployment. Addressing excess labour supply in developing nations, **Lewis (1954) and Fie-Ranis (1960)** theories suggest that migration from rural to urban areas, driven by low productivity in agriculture, leads to the transformation of traditional societies into modern ones and changes the labour market structure at both origin and destination palaces. **The Todaro (1970)** model suggests that despite high unemployment in Third World cities, mass migration from rural areas continues, contradicting the Lewis and Fie-Ranis model. This model posits that labour migrated from rural areas may remain unemployed even after entering urban areas. Migration is a significant aspect of social and economic life in various countries, with diverse migrant populations due to various sources such as free movement, managed labour, family, and humanitarian migration, all with controversial economic impacts.

II. REVIEW OF LITERATURE

Michael J. Greenwood; Gary L. Hunt; John M. McDowell (1986) examined the relationship between employment changes and net employment migration using data from 17 consecutive years. Two added jobs attract one net migrant, affecting local employment by nearly 1.4 jobs. Incremental jobs attract migrants during upswings and repel them during downswings. The study implies that severe metropolis decline and outmigration may have cumulative impacts. The recent trends of labour mobility were analysed on the basis of NSS estimates from the 49th (1992-93) and 55th rounds (1999-00) by **Srivastava and Bhattacharya (2002)**. Urban male mobility increased sharply over this time, with a far higher percentage of male migrants citing economic and employment motivations for movement, while other migrant streams saw a fall in economic migration. Males in metropolitan regions and the non-agricultural sector may have had more labour mobility in the 1990s. **Chandra S (2002)** migration study show a slight growth in employment and that indicated a passive marginal change relating to salary

and wage earners. Migration in Fiji is economically beneficial for migrants. The cumulative causation theory of migration is propounded that migration is sustained itself by creating more migration. **Hussain (2004)** analysed that no availability of jobs was the main reason of migration. **Mishra (2008)** revealed that more than 60 percent people were migrate cause of push factors such as unemployment, poverty etc..

Reimeingam Marchang (2021) explores the job-seeking behaviour of North East migrant workers in Bengaluru, focusing on their employability traits and mobility. North East migrants are utilising social media to find jobs, decreasing wait times and influencing hiring. Due to labour market information imperfection and employment information asymmetry, social networks are needed. The study shows rapid urban migration due to weak economic development and rising unemployment. Individual attributes, occupation-related skills, labor-market conditions, government laws, pay policies, and employer training programmes affect labour employability. Language, skill, education medium, etc. are major challenges for migratory workers. **The State of Working India (2023)** report by **Azim Premji University** examines the impact of growth and structural changes on labour market outcomes for disadvantaged groups. Despite significant macro gains, such as an annual average increase in the working age population, real earnings improvements were mostly negative, with self-employed workers' earnings falling and regular workers' earnings stagnating. **Arup Mitra, Puneet Kumar Shrivastav, Guru Prakash Singh (2022)** explored labour market volatility in urban contexts, focusing on the informal economy. It highlights vulnerabilities in lower castes, illiterates, and large households, and income volatility in the urban informal economy. The study suggests large-scale skill formation, training, and productivity augmenting strategies are needed to reduce income instability in the informal economy. The findings highlight the need for sustainable livelihood sources and improved income stability in the informal economy. Labour market has been designed to play role in removing the hurdles on the path of employment of labour but in spite of equalizing the opportunities for employment.

III. OBJECTIVES OF THE STUDY

The present study focused on the following objectives.

- I. To find out the employment issues of migrant workers.
- II. To analyse the role of labour markets in employment of migrant workers.

IV. HYPOTHESIS

H01- There are no employment issues of Migrant Workers.

H02- The labour market plays no significant role in the employment of Migrant Workers.

V. METHODOLOGY

The research methodology involves a thorough literature review to understand employment issues faced by migrant workers. For studying the role of labour markets, secondary data analysis, case studies, and stakeholder interviews are employed. A mixed-methods approach

integrates quantitative and qualitative data, ensuring a comprehensive understanding. Ethical considerations include obtaining informed consent, ensuring anonymity, and maintaining confidentiality. Triangulation is used to cross-verify findings for reliability. The results are presented clearly using various formats, and policy implications are discussed, providing recommendations for addressing identified employment issues and improving labour market conditions for migrant workers.

Current Status of Migration & Employment

Migration and employment dynamics in India are multifaceted and deeply intertwined, shaping the socio-economic landscape of the country. Internal migration, predominantly from rural to urban areas, driven by aspirations for better opportunities, is a significant phenomenon. However, internal migrants often grapple with challenges such as limited access to basic services, precarious employment conditions, and social exclusion. On the international front, India has a substantial diaspora contributing to its economy through remittances and knowledge exchange. Yet, international migrants face hurdles like legal barriers and cultural adaptation issues. Migration significantly impacts employment patterns, with migrants forming a substantial part of the workforce across sectors. However, this also exacerbates labour market vulnerabilities, including informal employment and wage disparities, heightened by events like the COVID-19 pandemic. Addressing these challenges necessitates a comprehensive approach, including policy interventions focusing on safe migration, inclusive growth, and labour rights enhancement. Strengthening social protection mechanisms and skill development initiatives is crucial to empowering migrants and leveraging migration for sustainable development in India.

Employment Issues and Migration

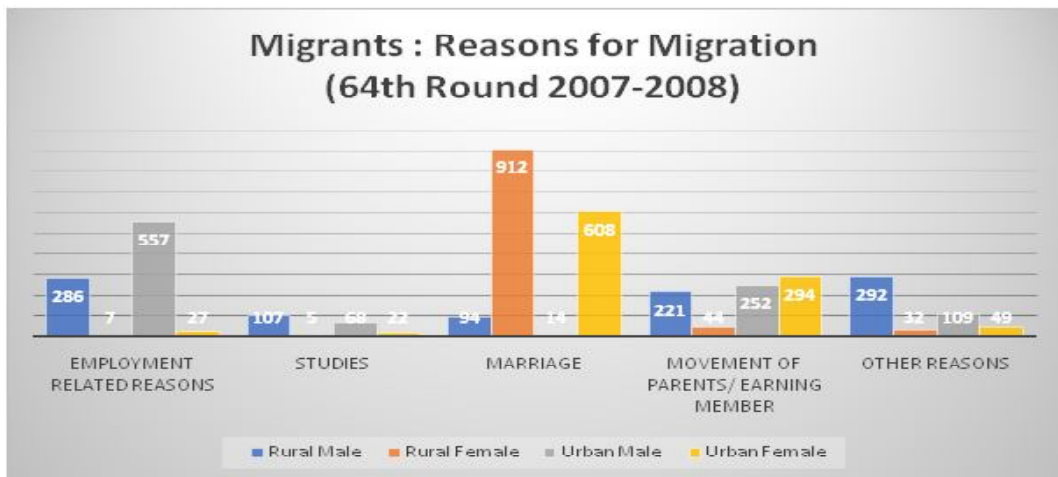
Agriculture labour availability is higher in villages near the main town, while distant villages experience a shortage due to commuting and migration (**Sarda Prasad, 2017**).

“Employment Issues and Migration” examines the complex correlation between job trends and the movement of persons and families. The paper highlights that employment is a key factor that drives migration, especially in families with unemployed or discontented leaders. This raises important questions about the need for policies aimed at encouraging unemployed individuals to migrate, and if these policies may be unnecessary given the presence of private market forces. The study examines the occurrence of repeat migration, particularly among recent immigrants who are facing difficulties in finding appropriate employment, typically driven by unhappiness with their previous relocations. Furthermore, it provides insight into how local economic conditions influence the migration of people, specifically focusing on the unemployed individuals who are most heavily impacted. The study analyses the economic consequences of migration, focusing on its impact on the labour market. It explores how migration affects job opportunities and earnings for residents of both high-income and low-income countries. The study offers a thorough analysis of how employment challenges and

migration trends are interconnected, drawing on theories and empirical evidence. It gives significant insights for policymakers and researchers.

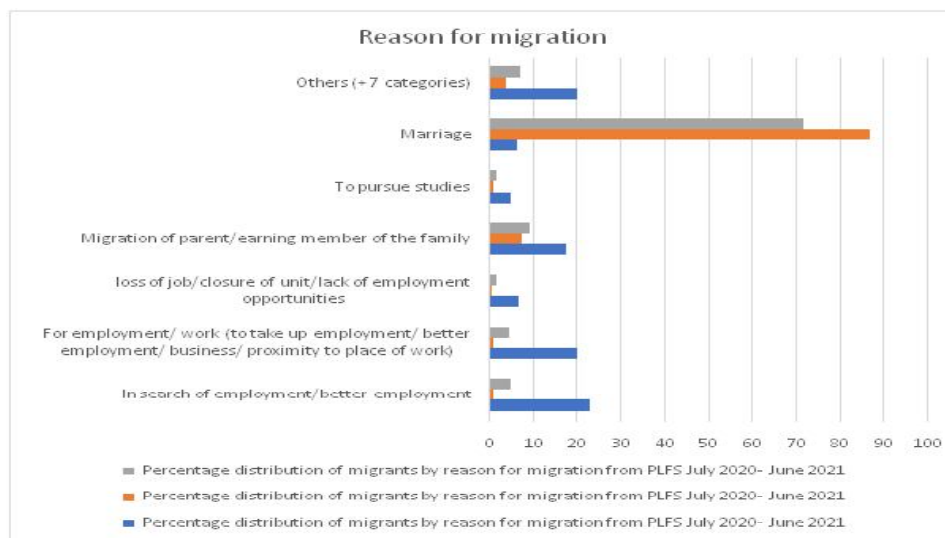
NSSO (2007-08) AND PLFS (2020-21) data represents that employment is the main reason for male migration while marriage is the main reason for female migration.

FIGURE-01



Source : NSSO 2007-08, 64th Round (Table -25)

GRAPH-02

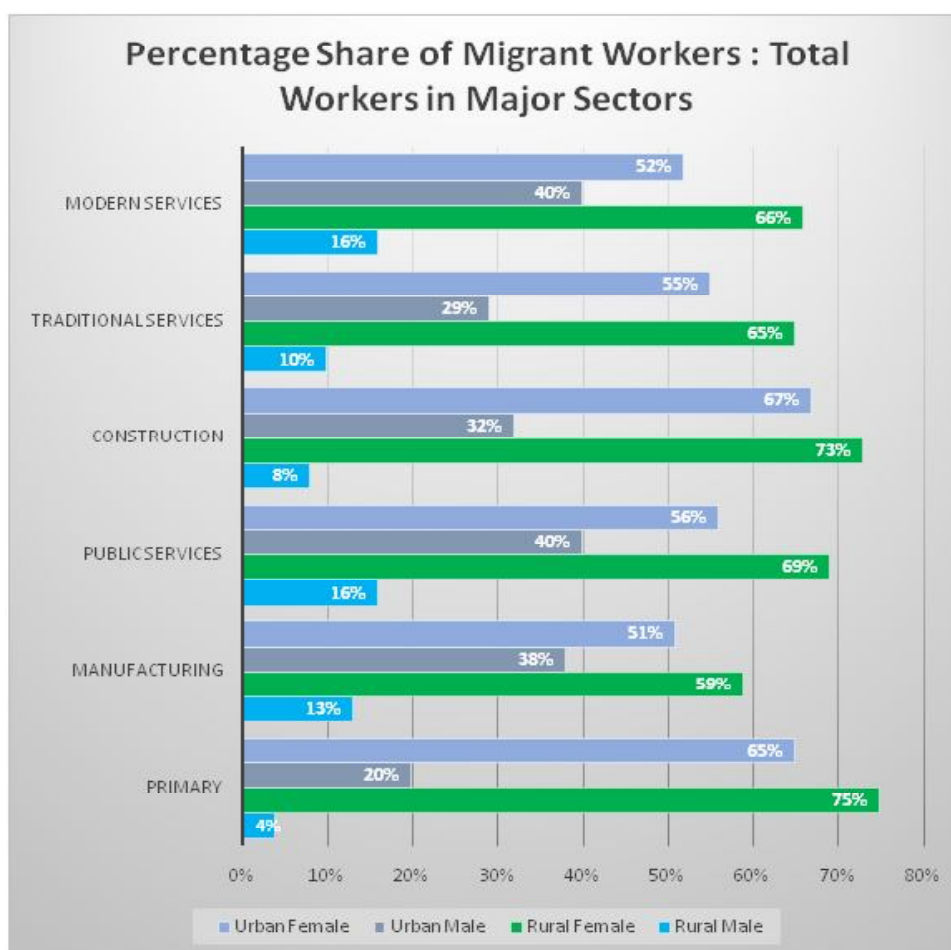


Periodic Labour Force Survey (PLFS) : JULY 2020 - JUNE 2021 (Table 5 of Appendix A)

Labour Market and Employment

Demographic and socio-economic factors determine labour availability for agricultural work. If rural areas have no labour scarcity but are not accessible to farmers, it's considered a labour shortage. During peak agricultural operations, there are significant gaps in the demand and supply of agriculture labour.

GRAPH-03



Source : Source: NSS 2007-08 , National Industrial Classification codes of 2004 (NIC)
Primary includes agriculture, hunting etc.

Farmers often hire labour for tasks such as sowing and harvesting, field operations not managed by family members, and machinery. However, they do not hire labour for weeding, which is crucial for Kharif crops. Some Crops, like Green Gram, Black Gram, and Cow Pea, require more labour for harvesting. Accessibility to agriculture labour is influenced by social relations, field operations, and work nature. Livestock management requires skilled and educated labour for sanitation, feeding, watering, breeding, health care, milking, and security. The affordability of labour for agriculture depends on the economic status of farmers and their capacity to hire workers. The MNREGA wage rate is the starting point for rural works, and farmers struggle to pay wages on the spot due to longer crop germination periods and seasonal income. A large farmer shares his experience of being cheated by share cultivators and selling land to migrate to urban areas due to labour shortages and the absence of bonded labour.

Migration and Labour Market Discrimination

It is well known that migrants have several labour market issues and are at a disadvantage relative to host society. Objective handicaps including inadequate education and training, non-recognition of foreign qualifications, and poor host country language skills are some of these issues. Furthermore, migrants face discrimination based on their nationality, colour, religion, race, or ethnicity. Discrimination occurs when migrants are treated less than nationals despite same education, qualifications, and experience. ILO research indicated widespread migratory worker discrimination. It is frequent in job and training opportunities, work allocation and promotion within organisations, and employment terms and conditions (**Marshal and Williams, 1991; Raskin, 1993; Torrealba, 1993; Zegers de Beijl, 1990**). Individual enterprise prejudice reveals daily discrimination. No official distinction is created between migrants and national workers on the work floor; therefore, discrimination is primarily informal. However, migrants are often considered inferior by their national coworkers and superiors. Migrants frequently work the least rewarding jobs when they work alongside citizens. They use ancient equipment and materials. Problems like missing production objectives and having higher industrial injuries and sick leave strengthen preconceptions about migrants' work performance. Working in a hostile atmosphere includes being excluded from social events, receiving nasty remarks, and seeing graffiti on lavatory walls daily. Migrants must perform above-average amid poor working circumstances to keep their employment.

Evidence reveals that migrants have less job opportunities than equally competent host country workers. Despite employers' efforts to promote discrimination-free employment policies, the overall picture is unsettling. Employers' preference for national applicants and private employment agencies' and public labour exchanges' practices are well established. This discrimination hinders migrants' assimilation into the immigration nations' labour market and society, as well as economic losses due to underutilization of work (Dex, 1992). This discrimination must be addressed in all countries with large migrant populations.

Discrimination hinders migrants' absorption into recipient societies, causing social breakdown and isolation. Therefore, it is an issue for victims and societies. Modern democracies cannot afford to structurally exclude segments of their populations. Therefore, discrimination must be fought for more than only human rights. Equally valid are social and economic costs for the receiving society. This study evaluates legal methods for preventing migrant worker and labour market discrimination to assist develops solutions.

Findings

The study finds that employment drives migration for individuals and families. It questions the need for migration policy for unemployed people. Dissatisfied recent arrivals without work migrate again.

The study examines how migration affects job opportunities and earnings. The UK Migration Advisory Committee finds no impact on average employment but notes group concentration. Global labour market efficiency and economic cycles are studied.

The paper uses Lewis and Fie-Ranis ideas to address excess labour in developing economies. The Todaro model predicts rural-to-urban migration despite significant urban unemployment.

Free mobility, managed labour, family, and humanitarian migration are important in many countries, according to the study. Farm labour dynamics and affordability are explored.

The article discusses labour market discrimination, including migrant obstacles in schooling, qualifications recognition, language skills, and work possibilities. Discrimination hinders assimilation, costing society and business.

The study emphasises the necessity to address discrimination in nations with substantial migrant populations and assesses legal approaches to prohibit migrant worker discrimination for efficiency.

Conclusion

The paper highlights employment as the main factor that motivates migration, especially among families with unemployed or discontented leaders. This raises questions about the need for policies that encourage movement among the unemployed. Recurring migratory patterns are observed among recent immigrants who are unable to find appropriate employment. These patterns are mostly driven by unhappiness with previous relocations. Additionally, local economic conditions play a role in outmigration, especially among the subset of individuals who are unemployed. The paper examines the intricate effects of migration on the labour market, referencing the UK Migration Advisory Committee's research and comparing migration theories proposed by Lewis, Fie-Ranis, and Todaro. The study focuses on the impact of demographic and socio-economic factors on farm labour dynamics, recognising the worldwide importance of migration. Examining labour market discrimination highlights the difficulties faced by migrants and emphasises the necessity of legal solutions, while emphasising the negative

impacts on society and the economy caused by structural exclusion. The study promotes the fight against discrimination, not only to protect human rights, but also to encourage the development of inclusive societies and reduce economic losses caused by the underutilization of migrant labour.

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Role of NRLM in Women Empowerment

Dr. A.K. Kanaujia

Abstract

Indian Economy is now a fastest growing economy in the world but a large number of people are living in rural area and they have not proper opportunities in non-farm sector. After independence government of India introduced number of program and plans for development of economy specially primary sector and Industrial sector. Industrial sector grow positively and after NEP- 1991 its performance and growth increases more than agriculture or primary sector.

The objectives of growth and development now has been change ,Indian economy shows rapid growth in service or tertiary sector, technology plays very important role in acceleration of GDP growth.

Distribution of workforce in 2017-2018, 31 % in tertiary sector and, 24.4 % in secondary and 44.6 % in primary sector the above data shows highly dependency on primary sector, a large segment of workforce continues to depend on primary activities to make a living. This point to the backwardness of the Indian economy. If we see distribution of rural – urban workforce across the different sector in 2017-2018, 19.8 % in tertiary sector, 20.4 % in secondary sector in rural areas. In urban areas 59.1 % in tertiary sector, 34.3 % in secondary sector and only 6.6% in primary sector, above data shows that rural workforce highly dependent on primary sector. In 2009-10, 57.1% female workforce was engaged in primary sector. They prefer to work at their place of residence even for a low wage.

*In 2011-12 Government of India introduced a mission specially for women which is popularly known National livelihood mission in two variants **National urban livelihood mission (NULM)** and **National rural livelihood mission (NRLM)** the paper is focused on the **NRLM**. How NRLM functioning and how it improves the entrepreneur skills in women. A study is conducted in district Bahraich and data collected from the remote block for the study.*

This paper gives complete information about self - help groups and National rural livelihood mission, how it improve the standard of living of women in rural areas.

Keywords– Livelihood, Empowerment, Entrepreneur, Skill, Poverty.

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Linkage Between Financial Development and Human Development: Evidences from Six Geographical Regions of India

D.K. Yadav & Saleha Jameel Ansari

Abstract

The policy makers have recognized that access of credit is very important for sectoral, regional and overall development of the country. A huge literature is available which explain the association between financial development and development of economic activities (Felix Rioja and Neven Valev (2004), Thorsten Beck (2011)). In India there is immense regional inequality in disbursement of credit and access of other financial services. Few states are enjoying major share of credit disbursed by the Indian Schedule Commercial Banks in comparison to their share in total population or geographical area, while the states of central and northern region where most of the population reside have very low share in total credit disbursement of Indian Schedule Commercial Banks (SCBs). Because most of the economic activities, including consumption activities are financed, access and availability of institutional credit plays very important role in economic development of the regions/states. States or regions those have better access of institutional credit may have better development prospects in comparison to states/regions those have less access of institutional credit.

The Present paper aims to explore the linkage between financial development and human development, considering six geographical regions of India for analysis. Financial Inclusion Index has been considered as indicator of financial development. Human Development Index, have been used as an indicator of regional development. This Paper shows that the financial development has negative impact on human development and further concludes with recommending a balanced and better development of financial system in the area of human development.

Keywords: *Financial Development, human Development, Geographical Regions, Credit Allocation.*

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1. Introduction

In 1912 Schumpeter ideated that the financial sector has the potential to affect patterns of innovation and growth. The theoretical and empirical literature indicates that financial development play very important role in economic development of any region (Schumpeter 1939), Raymond, G. (1969) it has been established by many studies that development of financial system helps real economic activities by mobilizing savings, managing the entrepreneurial activities, mitigating the risk and allocating the credits towards those activities which are socially and economically more productive (Majid, M. S. A. 2008). Recent studies on the relationship between financial markets and growth have generally concluded that the presence of strong and efficient financial mechanisms enhances growth (Kendall 2012). As per macroeconomic objectives it is very important to allocate and distribute all sort of financial services along with that removing regional inequality is one of the important aim of fiscal as well as monetary policy. Due to certain historical and political factors, some regions in India have better development prospectus comparatively. Considering above factors, India have adopted a federal political structure and made special provision of finance commission in constitution to remove regional inequality (Article 280 of Indian Constitution). However, in spite of more than 70 years of independence problem of inequality is not only existing but also increasing at very alarming rate. Perhaps it appears that federal finance is not sufficient to cope-up the problem of regional inequality in India.

In the present paper it has been assumed that increasing regional inequalities is the result of inequality in the distribution of banking resources. Resources provided by banking institutions are directly enhancing the production capacity of private sector. And because now most of the economic activities are also in the hand of private sector, development of financial sector is also enriching those regions where there is better access of financial services.

For empirical testing of above hypothesis, we have classified the region as per RBI classifications. The present study considered the time period of 1993-2018 and RBI is the main source of data. It has been presumed in this study that each region should get as much as banking resources as its share in population and geographical area. For analyzing the linkage of financial development and economic development in the concerned region, suitable indicators have been identified. Financial indicators are share in total branches of scheduled commercial banks (SCBs), credit deposit ratio of SCBs, share of total credit distributions of SCBs, share in total agricultural credit and share in total industrial credit. Human Development Indicators includes Life Expectancy, Literacy Rate, and Per capita State GDP.

The study is arranged into five sections. The Section one includes introduction to the study, after that Section two elaborates literature review. The Methodology is mentioned in Section 3. The econometric analysis of financial and human development indicators has been included in the fourth section while final section concludes the study with its findings and suggestions.

2. Review of Literature

Nirvikar Singh et.al. (2003), argued in their paper that concerns of increasing regional inequality after the economic reforms of 1991, are sensitive to what measures of attainment are used for measuring the regional inequality. Measures like human development indices, consumption and credit indicators may not be as bad as suggested by state domestic product data.

Majumdar, R. (2004) tried to explore the trends and pattern and regional dimensions of HDI in India. They found out that level of human development in India and its constituent states have increased substantially but moderate when compared globally. Regional disparity seems to have declined over the years but increased for HDI in the immediate post reform period. The main cause of rising regional disparity has been slowing down of the worse off states and acceleration of the better off states.

SabyasachiKar et. al. (2007) have analysed the impact of reforms on regional inequality in India. The results show that regional inequality in India remained largely unchanged during the 1980s but rose dramatically after the adoption of the reforms. This is mainly due to the fact that the per capita output from the industrial and services sectors showed convergence before the reforms and divergence afterward.

S. Mahendra Dev and C. Ravi (2007) has analysed NSS data from 1985 to 2005 and compared the extent of poverty decline in post reform and pre reform period using mixed reference period data. At the same time, they also examined the relationship of income and Gini elasticities with the levels of head count ratio. They established that the extent of decline in poverty in post reform period is not higher compared to pre reform period in spite of higher overall growth. Apart from other factors an increase in inequality seems to have slowed down the rate of reduction of poverty in post reform period.

Gaurav Nayyar (2008) has analysed the question - "Given the disparate level of income and development among the states in India, do they exhibit any tendency in the data to converge to common-steady state paths?" Using the panel data of 16 Indian States for the period from 1978-79 to 2002-03, it is found that states are not converging to identical level of per capita income in the steady-state. Rather there is increase in dispersion of per capita incomes across state over time. It has been argued that it is mainly due to inter-state increasing disparity in the level of public and private investment and insignificant and insignificant equalizing impact of center-state Government transfers.

Levine (2008) has analyzed in his paper "Finance and the Poor" that financial development can contribute in human development by eradicating capital market imperfections, reducing poverty and income inequalities. The impact of financial development on human development can be seen through widening the credit availability, savings, insurance services and thus enhancing the scope for individuals to invest in their education, skills and health.

Sarma, Mandira (2008) published a working paper on index of financial inclusion, that is, multidimensional index that captures information on various dimensions of financial inclusion in one single digit lying between 0 and 1. The proposed index is easy to compute and is comparable across countries. The approach is similar to that used in UNDP for computation of well-known indexes like HDI, HPI and GDI.

James B. Aug (2010) published the paper “Finance and Inequality: the case of India” in which he examined how finance impacts income inequality in India using annual time series data for over half a century. The result indicate that financial development helps reduce income inequality financial liberalization seems to exacerbate it.

Sandip Sarkar et.al. (2010) in their paper ‘Income Inequality in India: Pre and post reform period’ analyses the issue by using different types of inequality measurements like general entropy indices, kernel density graphs, percentile of income graphs and field decomposition. This study explored the levels of wages and income, disparities and inequality in them. It finds two major features of a rising inequality in urban areas, first even with a doubling of per capita consumption growth in the post reform decade, the decline in poverty was less by a quarter compared to pre reform decade second, in the post reform period the growth of wage rate of regular workers was negative up to the 50th percentile of wage earnings, and beyond that point, wage rate growth turned positive and rose sharply to reach 5 percent per annum in highest quintile of wage earnings.

Zaman et al. (2012a) investigate the impact of financial indicators on human development in Pakistan by using annual data from 1975 to 2010. Results indicate that causality runs from financial indicators to human capital except credit to private sector (CPS) but not vice versa. Financial indicators are closely associated with economic growth and human development in Pakistan. Variance decomposition analysis shows that among all the financial indicators, broad money supply (M2) has exerted the largest contribution to changes in human capital.

Ghulam Akhmat et.al. (2013) investigate the link between economic growth and financial development in human development of SAARC countries over the period of 1988-2008. They employed panel co-integration technique for the analysis of short run and long run relationship between variables. They found that financial development indicator acts as an important driver to increase human capital.

Nirvikar Singh et.al. (2014), in their paper, “regional inequality in India in the 1990s: A district level view”, using cross sectional growth regression of 210 districts from 10 states illuminate the role of physical infrastructure, financial development, and human capital in influencing regional patterns of growth.

Amit Basole (2014) in his article analyses the evolution of income inequality in India in the period 1922-99 using world top income database. This study reveals that inequality at the end of the 1990s was far higher than it had been even in the colonial period.

As per SBI report (2019) the region wise trend of HDI scores suggest mostly southern and northern states outperformed as compared to other regions. The eastern states have a poor performance in HDI. The north-eastern states which have rapidly catches up in HDI value and were well performed among other regions have slowed down in recent period.

Laeek Ahmad Siddiqui et.al. (2022) mentioned in an article that they examined socio economic inequality in longevity in India. Their findings suggested that regionally the south and west have overrepresented whereas central, eastern and north eastern have underrepresented in longevity.

Kumar G and S Batra (2023) has a say about relationship between financial development and human development. In this section they mentioned that financial may also adversely impact human development and it may even increase income inequalities.

3. Methodology and Analytical Framework

This study is a panel data study firstly we calculated the indices of financial development and human development and then applied panel regression on the indices of financial development and other economic development in order to capture the differences of development between the regions. To apply the model, we estimated some variables i.e. literacy rate, and per capita state GDP through interpolation and extrapolation using STATA.

3.1. Calculation of Indices of financial development and Human development

The dimension index for the ith dimension, di, is computed by the following formula:

$$d_i = \frac{A_i - m_i}{M_i - m_i} \quad (1)$$

where

A_i = Actual value of dimension i

m_i = minimum value of dimension i

M_i = maximum value of dimension i

The exact formula is:

$$FDI \text{ or } HDI = 1 - \frac{\sqrt{(1-d_1)^2 + (1-d_2)^2 + \dots + (1-d_n)^2}}{\sqrt{n}} \quad (2)$$

3.2. Model

For tracing the effect of financial development on human development (Ceteris paribus) in the regions of India, we define the model to be estimated as:

$$HDI = f(\text{Regions, FDI})$$

$$HDI = \beta_0 + \beta_1 d_1 + \beta_2 d_2 + \beta_3 d_3 + \beta_4 d_4 + \beta_5 d_5 + \beta_6 FDI + \beta_7 d_1 FDI + \beta_8 d_2 FDI + \beta_9 d_3 FDI + \beta_{10} d_4 FDI + \beta_{11} d_5 FDI + U_i$$

Where,

HDI = Human development index

β_1d_1 = dummy variable (dichotomous; 1= southern region, 0=others)

β_2d_2 = dummy variable (dichotomous; 1= western region, 0=others)

β_3d_3 = dummy variable (dichotomous; 1= northern region, 0=others)

β_4d_4 = dummy variable (dichotomous; 1= eastern region, 0=others)

β_5d_5 = dummy variable (dichotomous; 1= north-eastern region, 0=others)

β_6 FDI = Financial development Index (Reference Category: Central region)

β_7d_1 FDI = Financial development in d1

β_8d_2 FDI = Financial development in d2

β_9d_3 FDI = Financial development in d3

$\beta_{10}d_4$ FDI = Financial development in d4

$\beta_{11}d_5$ FDI = Financial development in d5

4. Panel Regression Analysis of Human Development Index and Financial Development Index

Regression results

Hdi	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Fdi	.32	.277	1.16	.247	-.222	.862	
d1	1.44	.228	6.33	0	.994	1.887	***
d2	1.077	.162	6.63	0	.759	1.396	***
d3	1.055	.107	9.88	0	.846	1.265	***
d4	.581	.135	4.32	0	.317	.844	***
d5	.237	.085	2.80	.005	.071	.403	***
d1fdi	-1.095	.367	-2.98	.003	-1.815	-.376	***
d2fdi	-.549	.345	-1.59	.111	-1.225	.127	
d3fdi	-.875	.299	-2.93	.003	-1.461	-.289	***
d4fdi	-1.169	.443	-2.64	.008	-2.037	-.301	***
d5fdi	-.369	.362	-1.02	.308	-1.079	.341	
Constant	-.056	.084	-0.67	.506	-.22	.109	
Mean dependent var		0.457	SD dependent var			0.313	
Overall r-squared		0.976	Number of obs			156	
Chi-square		5867.751	Prob> chi2			0.000	
R-squared within		0.229	R-squared between			1.000	
*** $p < .01$, ** $p < .05$, * $p < .1$							

4.1. Model Results

For central (reference category) region:

$$\text{HDI} = \beta_0 + \beta_6\text{FDI} + U_i$$

$$= -.056 + .32 + U_i$$

For southern region:

$$\begin{aligned} \text{HDI} &= \beta_0 + \beta_1d_1 + \beta_6\text{FDI} + \beta_7d_1\text{FDI} + U_i \\ &= (\beta_0 + \beta_1) d_1 + (\beta_6 + \beta_7d_1) \text{FDI} + U_i \\ &= (-.56 + 1.44) d_1 + (0.32 - 1.095d_1) \text{FDI} + U_i \\ &= 0.88 - 0.775 + U_i \end{aligned}$$

For western region:

$$\begin{aligned} \text{HDI} &= \beta_0 + \beta_2d_2 + \beta_6\text{FDI} + \beta_8d_2\text{FDI} + U_i \\ &= (\beta_0 + \beta_2) d_2 + (\beta_6 + \beta_8d_2) \text{FDI} + U_i \\ &= (-.56 + 1.077) d_2 + (0.32 - 0.549d_2) \text{FDI} + U_i \end{aligned}$$

For northern region:

$$\begin{aligned} \text{HDI} &= \beta_0 + \beta_3d_3 + \beta_6\text{FDI} + \beta_9d_3\text{FDI} + U_i \\ &= (\beta_0 + \beta_3) d_3 + (\beta_6 + \beta_9d_3) \text{FDI} + U_i \\ &= (-.56 + 1.055) d_3 + (0.32 - 0.875d_3) \text{FDI} + U_i \\ &= 0.495 - 0.555 + U_i \end{aligned}$$

For eastern region:

$$\begin{aligned} \text{HDI} &= \beta_0 + \beta_4d_4 + \beta_6\text{FDI} + \beta_{10}d_4\text{FDI} + U_i \\ &= (\beta_0 + \beta_4) d_4 + (\beta_6 + \beta_{10}d_4) \text{FDI} + U_i \\ &= (-.56 + .581) d_4 + (0.32 - 1.169d_4) \text{FDI} + U_i \\ &= 0.021 - 0.849 + U_i \end{aligned}$$

For north eastern region:

$$\begin{aligned} \text{HDI} &= \beta_0 + \beta_5d_5 + \beta_6\text{FDI} + \beta_{11}d_5\text{FDI} + U_i \\ &= (\beta_0 + \beta_5) d_5 + (\beta_6 + \beta_{11}d_5) \text{FDI} + U_i \\ &= (-.56 + .236) d_5 + (.32 - .369d_5) \text{FDI} + U_i \\ &= -.324 - 0.049 + U_i \end{aligned}$$

The result of the model shows that the intercept term is positive and significant in three regions viz. southern, western, and northern region. On the contrary, it is lowest in central region and north eastern region. In the eastern region the intercept value is positive but insignificant. The variation among regions can be seen through intercept term and it can be interpreted that there is inequality between regions. Secondly we observed that in most of the

regions, particularly the developed regions financial development has negative impact on human development. In case of southern region, the financial development is $-.775$, which means one-unit positive change in financial development index has $.775$ -unit negative impact on human development. Similarly, the values of coefficients western, northern, eastern and north eastern regions are (-0.229) , (-0.555) , $(-.849)$, and $(-.049)$ respectively. This shows that financial development plays a little role or no role in the human development. It is a matter of great concern that how does financial development is negatively affecting the human development? The answer lies in lending pattern of Indian financial institutions in which they make least effort for lending to activities related to human development like, health and education. The data provided by RBI shows that share of education loan in total personal loan is meagre and declining continuously. It was 6.38 percent in 2012, declined to 4.33 percent in 2017 and further declined to 3.65 percent in 2018. At the same time, we hardly see any separate item for lending to health sector in RBI database.

5. Conclusion and Recommendation

On the basis of empirical analysis, we conclude that southern, western and northern region are well-off in both the prospects i.e. financial development as well as human development. On the contrary the eastern, central and north eastern region are under developed financially as well as they showed poor performance in most of human development prospects. But in this analysis we hardly see any positive relation between financial development and human development instead there is negative relation between the two among regions. At national level we can see positive but insignificant relationship between financial development and human development. This means financial development hardly play any role in the human development in India. The reason behind may be low financial development in the area of human development. Therefore, this is a high time to develop our financial sector in the area of human development and there is a need of financial development in education sector, health sector and equal credit disbursement among regions and easy loans to poor section so that they can enhance their earning and lead a better life forward. The study recommends that we need to enhance and develop our financial system in the area of human development and financial development should be as per population distribution and geographical area of the respective regions to remove the inequality of the regions, that means the development should be balanced in every prospects as we can see that there is inequality among the regions of India.

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"An Analysis of India's Monetary Policy Targets Inflation and Unemployment"

Mr. Abhishek Yadav & Dr. Dinesh Yadav

ABSTRACT

India has traditionally aimed to minimize unemployment and control inflation through its monetary policies. In order to fully understand India's monetary policy framework, this study will concentrate on its approaches and efficacy in dealing with these two major macroeconomic issues. The first part of the study looks at how India's monetary policy framework changed over time, moving from a highly regulated system to one that is more flexible and focused on the market. The discussion includes important monetary policy tools like the repo rate, reverse repo rate, and cash reserve ratio (CRR) and how they affect the dynamics of unemployment and inflation.

The study also explores the connection between inflation and monetary policy, emphasizing the several ways that monetary policies affect price stability. It examines inflation targeting's function as the cornerstone of India's monetary policy framework and talks about how well it works to stabilize inflation expectations.

The study also assesses the difficulties India's monetary authorities confront in striking a balance between the goals of supporting economic growth and maintaining price stability. The analysis of the trade-offs between unemployment and inflation takes demand-side pressures, supply shocks, and structural changes into account, all within the framework of Phillips curve dynamics. Additionally, the study looks at how monetary policy is transmitted in India and how it affects interest rates, currency rates, and credit availability. It is evaluated how well monetary policy stimulates investment and aggregate demand, and what that means for creating jobs and promoting sustainable economic growth.

This paper ends with policy recommendations meant to improve India's monetary policy framework's legitimacy and efficacy. Achieving price stability and sustainable economic growth is the ultimate goal, and suggestions for enhancing communication tactics, fortifying institutional frameworks, and taking a more nuanced approach to policy execution are explored.

Keywords: Monetary Policy, Inflation Targeting, Unemployment, India, Phillips Curve,, Economic Growth.

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Introduction

Central banks use monetary policy, which is an essential part of every country's economic structure, to accomplish certain macroeconomic goals. In order to affect total economic activity and guarantee stability, it entails managing the money supply and interest rates. Price stability, full employment, and sustained economic development are usually the main objectives of monetary policy. Central banks use a variety of tactics and instruments to accomplish these goals, with interest rates serving as a crucial tool. Throughout the economy, decisions about investments, spending, and borrowing costs are influenced by interest rate management. Additionally, central banks participate in open market operations, whereby they purchase or sell government assets to alter the amount of money in circulation.

The interest rate is a fundamental idea in monetary policy. Interest rates are one tool that central banks use to control economic growth, unemployment, and inflation. Interest rate increases by central banks increase the cost of borrowing, which discourages investment and consumption. Consequently, this aids in bringing an overheated economy under control and reining in inflation. In contrast, as interest rates decline, borrowing becomes more affordable, which promotes investment and expenditure to boost the economy during downturns or stagnant times.

Many central banks have accepted the common monetary policy framework of inflation targeting. Sustaining a low and steady rate of inflation is the goal. In order to maintain inflation around their objective, central banks set a target inflation rate and modify their monetary policies accordingly. Central banks seek to establish a stable economic climate that supports long-term growth by anchoring inflation expectations.

Regarding monetary policy, the Phillips curve is yet another crucial idea. The trade-off between unemployment and inflation is illustrated. The Phillips curve indicates that unemployment and inflation have an inverse connection, with one tending to decrease as the other rises. In order to manage the economy and make decisions that balance these two factors, policymakers employ this connection. But the trade-off isn't always clear-cut since a lot of things might affect it, such supply shocks and expectations.

The two monetary policies that central banks use to affect the degree of economic activity, manage inflation, and stabilize the economy as a whole are contractionary and expansionary. To accomplish certain macroeconomic objectives, these policies entail alterations to the money supply, interest rates, and other monetary instruments.

Tools To Regulate Monetary Policy:

There are several tools to regulate monetary policy. With these tools money supply is regulated in the market-

Bank Rate-This is the interest rate at which private banks are lent money by central banks. In situations where there is excess demand or an inflationary gap, the central bank will

hike the bank rate. Commercial banks borrow from the central bank less frequently when borrowing costs rise. When there is a deflationary gap, the central bank lowers the bank rate. Low-cost financing provided by the central bank or some commercial banks encourages the latter to reduce their lending rates.

Repo rate-The benchmark interest rate is the word used to describe the interest rate at which the RBI offers short-term loans to banks. As the repo rate increases, so does the cost of borrowing from the RBI.

Reverse Repo Rate-The interest rate at which the central bank borrows money from commercial banks and other financial institutions is known as the reverse repo rate. The repo rate, or the interest rate at which the central bank loans money to banks, is basically the inverse of it. The quantity of money available for lending and investment in the economy is decreased when the central bank raises the reverse repo rate, which encourages banks to deposit more money with the central bank.

Cash Reserve Ratio- The proportion of bank deposits that banks are required to keep in reserves or balances with the RBI is known as the cash reserve ratio. The more the CRR with the RBI, the less liquidity there will be in the system, and vice versa. CRR can be increased from three percent to fifteen percent by RBI.

Open Market Operation-The central bank engages in open market operations when it purchases and sells government assets on the open market, including Treasury bills and bonds. Lower interest rates and a rise in the money supply are achieved by the central bank through the acquisition of assets. However, when it sells assets, it removes money from the market, which reduces the amount of money in circulation and raises interest rates

Statutory Liquidity Ratio -Central banks employ the Statutory Liquidity Ratio (SLR) as a tool for regulatory policy to guarantee the solvency and liquidity of commercial banks. It requires that specific liquid assets, such cash, gold, government securities, and permitted securities, make up a predetermined portion of a bank's net demand and time liabilities.

Review of literature:

Paulson (1989)the aim of the study was to comprehend how, prior to reform, monetary policy affected the Indian economy. His findings demonstrated that reserve money was the single most important factor influencing the economy's total money supply. Broader monetary circumstances were significantly shaped by reserve money, which is essentially the money held by banks in the form of reserves and the currency that is in circulation in the economy. According to Paulson's research, administered prices and inflationary pressures are positively correlated. When administered prices rise, the economy is frequently subject to inflationary pressures since they are established or regulated by the government. Thus, Paulson said, maintaining price stability necessitates encouraging a cooperative and mutually advantageous connection between fiscal policy—which deals with taxation and government spending—and monetary policy, which deals with controlling the money supply and interest rates.

Akerlof et al. (2000) have developed a model for a nearly rational Phillips curve in which the behavior of agents varies as the economy fluctuates between regimes of high and low inflation. When inflation doesn't go too far from zero, a sizable portion of the private sector treats it as though it were zero, which is known as near rational behavior. An increasing percentage of the private sector becomes rational and has reasonable expectations when inflation goes far enough above zero. According to this theory, the long run Phillips curve has a hump on the left, slopes downward for low and positive inflation rates, and matches the natural rate of unemployment for zero inflation. It is also vertical and equal to the long run natural rate of unemployment for high inflation levels. In relation to nominal aggregate demand, the private sector sets lower wages and prices if inflation is ignored at low rates. As a result, unemployment is maintained at lower levels than if inflation were taken into full consideration. This model's suggested Phillips curve demonstrates that there is an inflation rate that minimizes long-term unemployment. Deviations from this rate may result in significant expenses associated with unemployment.

Mohan, Rakesh (2004) discusses the challenges of implementing monetary policy in light of recent world events in his paper "Challenges to Monetary Policy in a Globalizing Context," which appeared in the Reserve Bank of India Bulletin in January 2004. The essay clarifies how globalization has increased national connections and economic interdependence. To fully maximize the advantages of monetary policy in fostering economic growth, the author highlights the urgent need for more cooperation in an increasingly complex global environment, notably in the creation and implementation of monetary policy methods.

Objectives:

- ❖ To measure the trend of inflation and unemployment in India.
- ❖ To examine the relationship between inflation and unemployment in India.

Hypothesis:

- ❖ H₀: There is no relation between unemployment and inflation in India.
- H₁: There is relation between unemployment and inflation in India.

Methodology:

In order to achieving the above objectives, following research methodology adopted-

Sample size: 10 years data has been collected to analyze the study.

Data Collection: Secondary Data has been used for study. The secondary data collected mainly from RBI Monetary Policy reports, and annual reports of RBI. In addition, Data and information has collected from Newspapers, Journals and Magazines etc.

Time Period: This study is completely based on secondary data. The study covers the time period from 2012 to 2022.

Result and Discussion:

Table 1: Rate of Inflation (WPI Base Year 2011-2012)

Year	WPI	Rate of Inflation (%)
2012-13	106.9	
2013-14	112.5	5.238540692
2014-15	113.9	1.244444444
2015-16	109.7	-3.687445127
2016-17	111.6	1.731996354
2017-18	114.9	2.956989247
2018-19	119.8	4.26457789
2019-20	121.8	1.66944908
2020-21	123.4	1.3136289
2021-22	139.4	12.9659643
2022-23	152.5	9.397417504

Source: Handbook of Statistics, RBI 2022-23

Graph 1. Inflation rate in India, (Base Year 2011-2012)



The WPI is 106.9 in 2012-13. It's important that inflation rates are typically calculated by comparing WPI values from one period to another. The WPI increased to 112.5 from 106.9 in 2013-14. The WPI continued to increase slightly to 113.9, resulting in a lower inflation rate of approximately 1.24%. While prices continued to rise, the rate of increase was slower compared to the previous year. The WPI decreased to 109.7 in 2015-16, resulting in a negative inflation rate of approximately -3.69%. This indicates deflation, where the general price level of goods and services decreased compared to the previous year. The WPI increased again to 111.6 in 2016-17, resulting in a positive inflation rate of approximately 1.73%. This indicates a return to inflationary conditions after the period of deflation in the previous year. The WPI continued to increase gradually, leading to inflation rates ranging from approximately 2.96% to 12.97%. These years saw varying levels of inflation, influenced by factors such as changes in demand, supply disruptions, government policies, and global economic conditions. In 2022-23, the rate of inflation is 9.39%. This indicates a substantial increase in the general price level compared to the previous year, likely influenced by factors such as supply chain disruptions, increased demand, and changes in government policies.

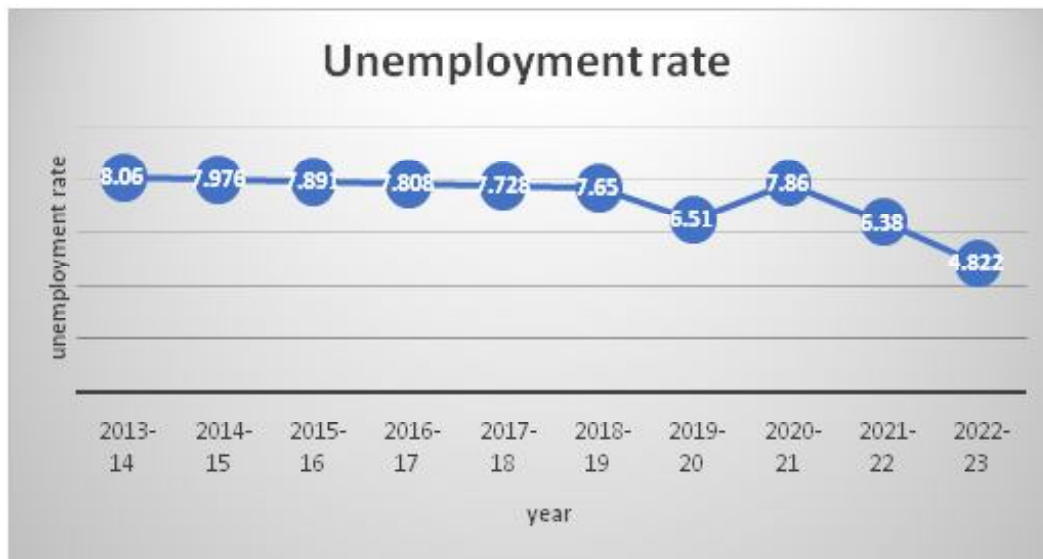
Unemployment In India:

Table 2. Rate of Unemployment in%

Year	Unemployment rate
2013-14	8.06
2014-15	7.976
2015-16	7.891
2016-17	7.808
2017-18	7.728
2018-19	7.65
2019-20	6.51
2020-21	7.86
2021-22	6.38
2022-23	4.822

Source: International Labour Organisation estimated data

Graph 2. Rate of Unemployment in India

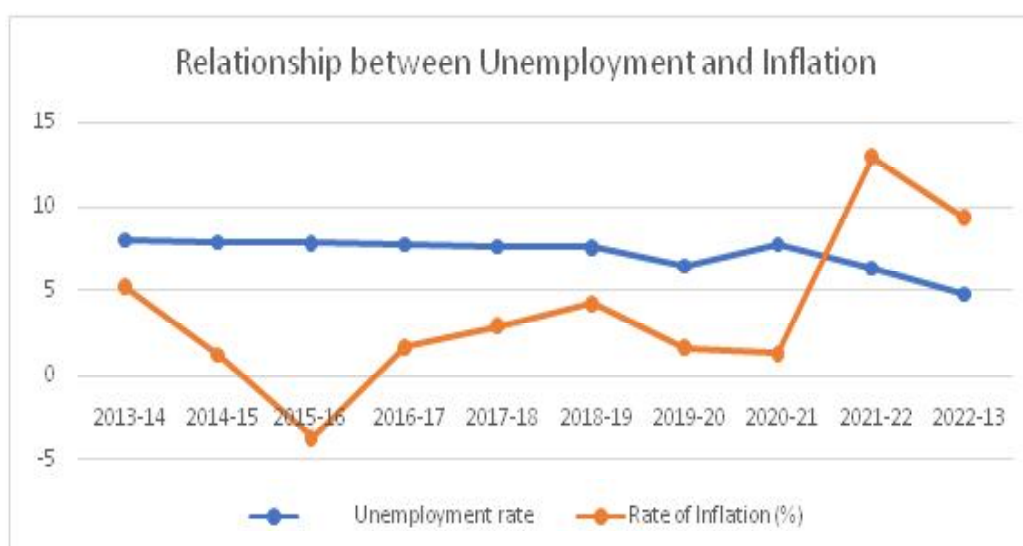


The unemployment rate was 8.06% in 2012-13. This indicates the percentage of the labour force that was unemployed during this period. Between these years 2014-15 and 2018-19 the unemployment rate decreased gradually from 7.976% in 2014-15 to 7.65% in 2018-19. A declining unemployment rate suggests an improvement in labour market conditions, with more people finding employment opportunities.

The unemployment rate experienced a notable drop to 6.51% in 2019-20. This significant decrease could be attributed to various factors such as government policies, economic growth, or changes in workforce participation. However, in 2020-21, the unemployment rate increased to 7.86%. This rise could be linked to the economic disruptions caused by the COVID-19 pandemic, which led to job losses and reduced hiring activity in many sectors. The unemployment rate decreased again to 6.38% in 2021-22 and further to 4.822% in 2022-23. This decline might indicate a recovery in labour market conditions as economic activity resumed post-pandemic, leading to increased job opportunities and reduced unemployment rates.

Table 3. Rate of Unemployment and Inflation in%

Year	Unemployment rate	Rate of Inflation (%)
2012-13		
2013-14	8.06	5.238540692
2014-15	7.976	1.244444444
2015-16	7.891	-3.687445127
2016-17	7.808	1.731996354
2017-18	7.728	2.956989247
2018-19	7.65	4.26457789
2019-20	6.51	1.66944908
2020-21	7.86	1.3136289
2021-22	6.38	12.9659643
2022-13	4.822	9.397417504

Graph 3. Rate of Unemployment and Inflation in%

Phillips Curve:The Phillips Curve is a basic economics concept that shows how unemployment and inflation in an economy are inversely related. Empirical evidence from the 1950s first showed this association, which bears the name of economist A.W. Phillips. Based on the curve, it can be inferred that low unemployment is associated with high inflation, whereas high unemployment is associated with low inflation.

Here,

Dependent Variable -Unemployment

Independent Variable – Inflation

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.645038115							
R Square	0.41607417							
Adjusted R Square	0.343083441							
Standard Error	0.848442113							
Observations	10							
<i>ANOVA</i>								
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	4.103434347	4.103434	5.70037	0.044024204			
Residual	8	5.758832153	0.719854					
Total	9	9.8622665						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	7.805449127	0.350090824	22.2955	1.73E-08	6.998138239	8.61276	6.998138	8.61276
Rate of Inflation%	-0.144747533	0.060626102	-2.38754	0.044024	-0.284551574	0.00494	-0.28455	-0.00494
Dependent variable: unemployment								

R: represents the Karl Pearson correlation coefficient

R2: represents the coefficient of determination or goodness of fit of a model.

Here, value of $R = 0.645038115$ which shows there is an association between unemployment rate and inflation. The value of $R^2 = 0.41607417$, which means 41.6% of dependent variable (unemployment rate) is explained by independent variable.

Here, dependent variable unemployment rate is regressed on predicting variable inflation to test H_0 hypothesis.

Hypothesis	Beta Coefficient	R	R^2	F	t-value	p-value	Sig. F	Hypothesis supported
H_0	-0.14474	0.645038115	0.41607417	5.70037	2.38754	0.044024	0.0440	No

Note, if $p\text{-value} < 0.05$, reject H_0 and accept alternative hypothesis H_1 .

The $p\text{-value}$ is $0.044024 < 0.05$.so, we fail to accept null hypothesis H_0 and accept alternative hypothesis H_1 ; there is an association between unemployment rate and inflation.

The value of beta coefficient is -0.14474 , this implies there is a significant and negative relationship between inflation and unemployment rate which support the theory of Phillips Curve, i.e. 1% increase in inflation rate, unemployment rate is reduced by 0.14%.

Finding:

- There seems to be an inverse relationship between the unemployment rate and the rate of inflation over the observed period. When the unemployment rate decreases, the rate of inflation tends to increase, and vice versa.
- In 2015-16, there was a notable decrease in the unemployment rate alongside a significant decrease in the rate of inflation, indicating a possible inverse relationship between these two variables during that period.
- The year 2021-22 stands out as having a comparatively lower unemployment rate of 6.38% but a significantly higher inflation rate of 12.97%, suggesting potential challenges such as demand-pull inflation or supply-side constraints.
- Conversely, in 2022-23, there was a decrease in the unemployment rate to 4.822%, accompanied by a slightly lower inflation rate of 9.40%. This may suggest an improvement in economic conditions, but inflation remains a concern.
- Policymakers should consider implementing measures to address both unemployment and inflation, balancing economic growth with price stability.

Suggestion:

- Central banks should adopt a clear and transparent inflation target, typically around 2%, to guide monetary policy decisions and maintain price stability.
- Use interest rate adjustments to control inflationary pressures while considering their impact on unemployment and economic growth.

- Central banks should consider both inflation and unemployment objectives when formulating monetary policy, balancing the trade-offs between the two goals.

Conclusion

In the study, the unemployment rate fluctuates over the years but generally seems to show a decreasing trend, with some exceptions and the rate of inflation fluctuates as well, sometimes showing positive values and sometimes negative, indicating periods of inflation and deflation. This study suggests an inverse relationship between the unemployment rate and the rate of inflation.

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Shielding Society: Unpacking the Impact of Social Protection Programs

Simarjeet Kaur Bagga & Dr. Vibha Joshi

Abstract

Social protection programs are pivotal in protecting society from various socio-economic vulnerabilities and promoting well-being. Social protection programs, including cash transfers, food assistance, and healthcare provisions, act as critical safety nets for vulnerable populations, preventing them from falling into poverty traps. By providing regular income support and essential services, these programs alleviate immediate hardships and enhance household resilience, particularly during economic shocks or natural disasters.

These initiatives contribute to human capital development by facilitating access to education, healthcare, and nutritional support. By investing in the well-being and capabilities of individuals, social protection programs not only enhance productivity and employability but also break the intergenerational cycle of poverty, fostering long-term sustainable development.

Likewise, social protection programs promote social cohesion and reduce inequality by addressing systemic barriers and disparities. These programs empower marginalised groups through targeted interventions and inclusive policies, including women, children, and persons with disabilities, ensuring their meaningful participation in social and economic life.

In short, social protection programs shield society from risks and vulnerabilities while fostering inclusive development and resilience. However, ensuring their effectiveness requires a holistic approach that addresses structural inequalities, promotes social justice, and fosters participatory governance.

In light of the above discussion, this article examines the multifaceted impact of such initiatives, shedding light on their effectiveness in mitigating poverty, enhancing human capital, and fostering inclusive growth. Through an extensive review of existing literature and empirical evidence, the study delineates the mechanisms through which social protection programs operate to buffer individuals and communities against risks.

The study explores the role of social protection programs in enhancing resilience to future shocks, including pandemics and climate change. By building adaptive capacities and strengthening

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social solidarity, these initiatives contribute to creating more resilient and sustainable societies. This article extensively explores selected social protection programs, focusing on the PM Jan Dhan Yojana, a prominent government policy, and its significant impact on numerous individuals' lives. It underscores the importance of ongoing research, innovative policymaking, and global collaboration in furthering the goal of universal social protection.

Keywords: *social protection programmes, inclusive development, social justice, reduced inequality, Jan Dhan Yojana, resilience.*

Introduction

Social protection programs are pivotal in addressing societies' multifaceted challenges, ranging from poverty and inequality to vulnerability and social exclusion. These programs encompass diverse interventions to safeguard individuals and communities against risks and vulnerabilities while promoting inclusive development and social justice.

At its core, social protection embodies the fundamental principle of ensuring that all members of society have access to essential resources, services, and opportunities, irrespective of their socio-economic status or circumstances. Social protection programs contribute to poverty reduction, enhance social cohesion, and foster human development by providing a safety net for the most vulnerable population segments.

The overarching objectives of social protection programs are manifold. They encompass alleviating immediate hardship and deprivation and empowering individuals and households to overcome systemic barriers and break the cycle of intergenerational poverty. Moreover, social protection initiatives strive to enhance resilience and adaptive capacity in the face of shocks and crises, contributing to sustainable development and inclusive growth.

Against this backdrop, this research explores some social protection programs related to women. It will also focus on PM Jan Dhan Yojana and how it has helped many people in diverse ways and has gone along with the meaning of financial inclusion and inclusive development.

In a developing country like India, where there are continuous efforts to remove poverty and ensure self-reliance, it becomes mandatory on the part of the government to come up with these programs for social security and also allocate sufficient funds to these programmes so that they benefit not only a handful of people but the entire population.

According to recent statistics from the International Labour Organization (ILO), approximately 53% of the global population, i.e., 4.1 billion people, lacks adequate social protection coverage, with disparities persisting across regions and income levels. Accordingly, they are not eligible for essential benefits such as pensions, unemployment insurance, or healthcare. This underscores a severe gap in providing fundamental security and well-being for a sizable segment of the global population. Furthermore, a World Bank report highlights that the international extreme poverty rate is around 9%, underscoring the critical need for targeted interventions to address

the specific needs of marginalised groups, including women, children, persons with disabilities, and elderly populations.

Adding to these, we have also seen how the proper investment in these schemes also benefits a crowd of people. In recent years, we have seen how the Jan Dhan Yojana and other women-related schemes are doing their jobs on a good note and how inclusive development is taking place. We will delve into these in further sub-points.

Unpacking the Impact of Social Protection:

One of the primary objectives of social protection programs is poverty alleviation. By providing income support, access to essential services, and opportunities for productive employment, these programs contribute to lifting individuals and families out of poverty. Cash transfer programs, for instance, have been instrumental in reducing poverty and inequality in many countries, particularly in low- and middle-income regions. Additionally, research by the International Labour Organization (ILO) shows that social protection measures, including unemployment benefits and social pensions, help stabilise incomes and reduce poverty rates during economic downturns. Moreover, social protection enhances economic security by buffering individuals against income volatility and unforeseen shocks, fostering resilience and enabling households to invest in human capital development and productive assets.

Beyond mitigating material deprivation, social protection programs also play a pivotal role in enhancing human development and well-being. Access to healthcare, education, and social services provided through social protection schemes improves health outcomes, increases educational attainment, and enhances the overall quality of life. By ensuring that individuals have the means to meet their basic needs and access essential services, social protection contributes to the realisation of fundamental human rights and fosters social cohesion and solidarity within communities. According to UNICEF, social protection programs have significantly improved child health and education outcomes in countries such as Bangladesh and Ethiopia. Similarly, research by the World Health Organization (WHO) highlights the positive impact of social protection on reducing maternal and child mortality rates.

Social protection programs have the potential to advance gender equality and social inclusion by addressing structural barriers and disparities that perpetuate discrimination and marginalisation. Gender-sensitive social protection policies, for example, can empower women economically, reduce their vulnerability to poverty, and promote their participation in decision-making processes. According to the OECD, countries with more comprehensive social protection systems tend to have lower gender wage gaps and higher female labor force participation rates. Additionally, targeted interventions aimed at vulnerable groups such as children, persons with disabilities, and the elderly contribute to reducing social inequalities and promoting inclusive development.

Building resilient and sustainable societies has never been more pressing in the face of emerging challenges such as climate change, urbanisation, and global health crises. Social

protection programs act as a vital safety net, providing a buffer against shocks and enabling individuals and communities to cope with adverse circumstances. According to the World Bank, social protection programs can increase household resilience to climate-related shocks and reduce the need for distress coping mechanisms such as selling assets or reducing food consumption. By promoting social cohesion, reducing inequality, and fostering human capital development, social protection lays the groundwork for sustainable development and inclusive growth.

However, realising the full potential of social protection requires concerted efforts to design inclusive, sustainable, and context-specific policies that address the diverse needs of populations. By investing in social protection, policymakers can build more resilient, equitable, and prosperous societies for present and future generations.

Names of Some Social Protection Programs:

We will discuss a few social protection programs, focusing on the Pradhan Mantri Jan Dhan Yojana and some women-related schemes and programs.

1) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): MGNREGA is a landmark Indian labor law and social security initiative that aims to provide a legal guarantee of 100 days of wage employment per financial year to every rural household whose adult members are willing to do unskilled manual work at a statutory minimum wage.

Objectives: To strengthen rural communities' resource base, create durable assets to enhance the base of rural infrastructure, and improve livelihood security for households living in rural areas.

Current MGNREGA Data: 14.33 Cr. of Active Workers (2023–24).

Assets generated as of now: \$8.02 billion.

Person-days generated (2023-24): 282.65 Cr.

Households benefited (2023-24): 5.77 Cr.

2) Public Distribution System (PDS): The Public Distribution System (PDS) is an extensive social welfare program in India that aims to provide essential food items at subsidised prices to low-income families. It is one of the world's most comprehensive programs, serving over 800 million people. The government has launched several initiatives to improve the efficiency and transparency of the PDS, such as One Nation One Ration Card (ONORC) Scheme, which allows beneficiaries to access their PDS entitlements from any FPS in the country, irrespective of the state where their ration card is issued. As of February 2024, 39 states and UTs have implemented the ONORC scheme.

Integration of FPSs with the Open Network for Digital Commerce (ONDC): This initiative aims to leverage the ONDC platform to connect FPSs with consumers and facilitate online ordering and delivery of PDS items.

3) Pradhan Mantri Ujjwala Yojana (PMUJ): PMUY has successfully provided LPG connections to BPL households. The scheme has increased the use of LPG for cooking, which has had several positive impacts, including improved health, reduced environmental pollution, and women's empowerment. As of February 2024, 102.23 crore LPG connections have been released under PMUY. 22.37 crore LPG connections have been released under PMUY 2.0, launched in August 2021. 33.39 crore Aadhaar authentications have been made for LPG customers.

4) Mid-Day Meal Scheme: The Mid-Day Meal Scheme, now renamed Pradhan Mantri Poshan Shakti Nirman (PM POSHAN), is a flagship program of the Government of India aimed at improving enrollment, retention, and attendance in schools while simultaneously addressing nutritional needs. As of 2021-22 data, over 11.8 crore children across 11.20 lakh schools in India benefited from the scheme. The program also comprised 11% of the Ministry of Education's budget. The per-day cooking cost per child is fixed at Rs. 4.13 for the primary level and Rs. 6.18 for the upper primary level.

The Programs Specifically Relate to Women's Upliftment:

Here, we will discuss some of the many social protection programs aimed at uplifting women and fulfilling the objective of inclusive development.

1) Beti Bachao Beti Padhao (BBBP): The Beti Bachao Beti Padhao (BBBP) scheme is a government initiative that aims to improve the survival, protection, and education of girls in India. Prime Minister of India, Narendra Modi, introduced the program in 2015. In 2020-21, the government allocated ¹ 200 crore for the BBBP scheme. As of March 2022, the scheme has reached over 6.6 crore (66 million) beneficiaries. The scheme has resulted in an increase in the CSR from 918 in 2011 to 940 in 2020. The scheme has also increased the GER for girls at the primary level from 94.1% in 2015 to 95.6% in 2020. The BBBP scheme is a significant step towards achieving gender equality in India. The scheme has made some progress towards its objectives, but some challenges still need to be addressed.

2) Sukanya Samriddhi Yojana (SSY): The Indian government introduced the Sukanya Samriddhi Yojana (SSY), a small deposit scheme, in 2015 to advance the welfare of girls. As of March 2023, over 2.9 crore (29 million) accounts have been opened under the SSY. The total amount deposited under the SSY has crossed ¹ 1.5 lakh crore. The current interest rate on the SSY is 7.6%. The maturity period of the SSY is 21 years. The deposits made under the SSY are eligible for tax deduction under Section 80C of the Income Tax Act, 1961. After the girl child reaches the age of 18, withdrawals from the SSY are permitted. The SSY has been a successful scheme in promoting the welfare of the girl child. The scheme has helped increase the savings rate among parents of girl children and provided them with a financial instrument to plan for their daughter's future.

3) Mahila Shakti Kendra (MSK): The MSKs have positively impacted women's lives in India. The scheme has helped to increase awareness of women's rights, improve access to services, and empower women to take charge of their lives. The MSKs provide various

services, including awareness generation on women's rights and entitlements, skill development training, financial literacy training, health and nutrition counselling, legal aid, and support for women entrepreneurs. As of March 2023, 640 MSKs are operational across all districts in India. The total budget for the MSK scheme is ₹ 500 crore.

4) One Stop Centre (OSC) Scheme: The One Stop Centre (OSC) Scheme is a centrally sponsored initiative by the Ministry of Women and Child Development (MWCD) in India. Launched in April 2015, it aims to provide comprehensive support and assistance to women affected by violence in all spheres, including domestic violence, marital rape, sexual harassment, stalking, acid attacks, and sexual harassment at the workplace. As of April 2023, it has 733 functional centres spread across districts nationwide.

Unlocking financial inclusion: Assessing the impact of Pradhan Mantri Jan Dhan Yojana on the Social Protection Program

In August of 2014, the Indian government launched the Pradhan Mantri Jan-Dhan Yojana (PMJDY), a significant effort to promote financial inclusion. The primary objective of PMJDY is to ensure access to financial services, namely banking and deposit accounts, credit, insurance, and pension facilities, for the unbanked and underbanked sections of society.

The key features of the Pradhan Mantri Jan-Dhan Yojana are as follows:

PMJDY aims to provide every household in India with access to a basic banking account. Under this scheme, individuals are encouraged to open zero-balance accounts, making banking services more accessible to marginalised and economically weaker sections of society.

The initiative also focuses on enhancing financial literacy and awareness among beneficiaries. Through various outreach programs and campaigns, individuals are educated about the benefits of formal banking, saving habits, availing of insurance and pension schemes, and utilising digital financial services.

PMJDY facilitates directly transferring subsidies, welfare benefits, and other entitlements into beneficiaries' bank accounts. This reduces leakages, eliminates intermediaries, and ensures that the benefits reach the intended recipients transparently and efficiently.

As part of PMJDY, beneficiaries are issued Rupay Debit Cards, enabling them to access banking services, make cashless transactions, and withdraw money from ATMs conveniently. The widespread distribution of these cards promotes financial inclusion and digital payments across the country.

PMJDY encourages beneficiaries to enroll in government-sponsored insurance and pension schemes, such as Pradhan Mantri Suraksha Bima Yojana (PMSBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), and Atal Pension Yojana (APY). These schemes provide financial security and protection to individuals and their families against unforeseen circumstances.

Here is the data from the government of India indicating the beneficiaries of the Yojana:

Bank Name / Type Number of Beneficiaries at rural/semiurban centre bank branches
 Number of beneficiaries at urban metro centre bank branches No Of Rural-UrbBeneficiaries
 Number of Total Beneficiaries Deposits in Accounts(In Crore) Number of Rupay Debit Cards
 issued to Beneficiaries

Bank Name / Type	Number of Beneficiaries at rural/semi urban an centre bank branches	Number of beneficiaries at urban metro centre bank branches	No Of Rural-Urban Beneficiaries	Number of Total Beneficiaries	Deposits in Accounts (In Crore)	Number of Rupay Debit Cards issued to Beneficiaries
Public Sector Banks	25.35	15.06	22.23	40.41	171966.5	30.55
Regional Rural Banks	8.3	1.36	5.59	9.66	42482.33	3.48
Private Sector Banks	0.74	0.81	0.82	1.54	6440.06	1.22
Rural Cooperative Banks	0.19	0	0.1	0.19	0.01	0
Grand Total	34.57	17.23	28.75	51.8	220888.9	35.24

Source: Department of Financial Services, Ministry of Finance.

Highlights of the above table can be explained as follows:

Public Sector Banks (PSBs) have the highest number of beneficiaries, with 40.41 crores spread across rural/semiurban and urban metro centre branches. PSBs also hold the most considerable deposits, totalling ¹ 1,71,966.53 crore, indicating significant financial inclusion and savings among the beneficiaries. A substantial number of Rupay Debit Cards (30.55 crore) have been issued to beneficiaries, facilitating easy access to banking services and promoting digital transactions.

Regional Rural Banks (RRBs) primarily serve rural areas, with 9.66 crore beneficiaries. While their beneficiary count is lower than PSBs, they still play a crucial role in extending banking services to rural communities. RRBs hold deposits totalling ¹ 42,482.33 crores, reflecting the importance of these banks in rural financial inclusion efforts.

Private Sector Banks: Although Private Sector Banks have fewer beneficiaries than PSBs and RRBs, they still serve a notable 1.54 crore beneficiaries. A smaller but no less noteworthy contribution to financial inclusion is shown by the ¹ 6,440.06 crore in deposits held in Private Sector Banks. They have issued 1.22 crore Rupay Debit Cards, providing beneficiaries access to banking facilities.

Rural Cooperative Banks: Rural Cooperative Banks cater to specific rural areas with the lowest number of beneficiaries and deposits. They have 0.19 crore with minimal deposits. Although their impact may seem small compared to other banks, rural cooperative banks play a vital role in serving localised rural communities.

Overall, the Pradhan Mantri Jan-Dhan Yojana has made substantial progress in expanding financial inclusion across rural and urban areas. The data highlights the significant role of Public Sector Banks and Regional Rural Banks in reaching the masses while also showcasing the participation of Private Sector Banks and Rural Cooperative Banks in this nationwide initiative. The issuance of Rupay Debit Cards further underscores the push towards digital transactions and financial empowerment among beneficiaries.

CONCLUSION

In conclusion, the research has highlighted the pivotal role of social protection programs in addressing numerous societal challenges, from poverty and inequality to vulnerability and social exclusion. By providing a safety net for the most vulnerable members of society, these programs contribute to immediate relief and long-term development outcomes, including poverty reduction, enhanced social cohesion, and sustainable growth.

This study has illuminated the importance of targeted interventions and inclusive approaches within social protection by exploring the various social protection programs, mainly concerning women, specifically the Pradhan Manti Jan Dhan Yojana. By addressing the specific needs of marginalised groups and vulnerable populations, policymakers and practitioners can maximise the impact and effectiveness of social protection initiatives, thereby promoting equitable access to resources, services, and opportunities for all.

Furthermore, this research has highlighted the critical need for ongoing efforts to expand and strengthen social protection systems, particularly in light of emerging challenges such as climate change, urbanisation, and technological disruption. Governments can strengthen societies' adaptability and resilience by forming cross-sector alliances and creative strategies to guarantee that no one is excluded from pursuing social justice and sustainable development.

Policymakers, researchers, and practitioners must collaborate and share knowledge to develop future evidence-based policies, programs, and implementation plans. By building upon the insights gleaned from this research and fostering a culture of learning and innovation, we can collectively advance towards a more inclusive and resilient future where social protection serves as a cornerstone of human dignity and well-being for all members of society.

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Analysing the Role of Prime Minister Employment Generation Programme (PMEGP) in Empowering the Poor and Marginalised: An Investigation of Inclusive Growth in Kanpur Nagar

Neha Dubey & Dr. Vivek Singh

Abstract

Inclusive development promotes equitable growth for all, addressing the challenges of the poor and marginalized, is vital for sustainable progress. This research critically examines the role of the Prime Minister's Employment Generation Programme (PMEGP) in fostering economic empowerment and inclusive growth in Kanpur Nagar, Uttar Pradesh. Utilising a quantitative approach, the study analyses secondary data extracted from PMEGP Annual Progress Reports spanning the years 2017-18 to 2022-23. The focus is on KVIC, KVIB, and DIC's performance in Kanpur Nagar under PMEGP.

Over the six-year period, the number of projects exhibits a positive trajectory, escalating from 103 in 2017-18 to 152 in 2021-22, signifying a commendable rise in entrepreneurial initiatives. The consistent increase in margin money utilisation, from 422.78 lakhs in 2017-18 to 644.69 lakhs in 2021-22, underscores substantial financial investments in the region. Correspondingly, employment generation witnesses an upward trend, reaching 2156 jobs in 2021-22, emphasising the positive impact of PMEGP on local employment. Correlation and regression analyses explore relationships between margin money utilisation, employment generation, and the number of projects. Strong positive correlations (0.8578 for employment and 0.9479 for projects) indicate significant associations. Regression analyses reveal the explanatory power of margin money utilisation in predicting employment generation (73.6%) and project initiation (89.9%). ANOVA analyses confirm the statistical significance of these models, underscoring the pivotal role of well-managed margin money in driving employment opportunities and project initiation.

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The significance F values below 0.05 reject the null hypothesis, affirming PMEGP's substantial impact on economic empowerment, inclusive job creation, and inclusive growth in Kanpur Nagar. This affirms the alternative hypothesis, underlining the program's effectiveness in fostering entrepreneurship and financial inclusion.

In conclusion, the findings underscore the success of the Prime Minister's Employment Generation Programme (PMEGP) in promoting entrepreneurship, driving economic development, and creating employment opportunities, especially for marginalised and economically weaker sections in Kanpur Nagar. The statistical evidence supports the program's substantial impact on economic empowerment, inclusive job creation, and overall inclusive growth in the region.

Keywords –Employment Generation, Marginalised, Growth, Inclusive

Introduction

Inclusive growth, vital for sustainable development, focuses on ensuring fair progress for all segments of society, especially addressing the challenges faced by the poor and marginalised. Kanpur, situated in central-western Uttar Pradesh, India, with a population of 4,581,268 in 2011, holds the distinction of being the 12th most populous city (Census of India, 2011). Historically acclaimed as the “Manchester of Asia” for its textile manufacturing, the city witnessed a shift to prominence in the global leather industry. Despite its industrial stature, Kanpur grapples with infrastructural challenges, financial difficulties, notably in securing loans, and experiences outmigration driven by unemployment concerns.

In this context the PMEGP scheme emerges as a noteworthy government initiative, aiming to tackle unemployment and foster entrepreneurship, particularly among the economically disadvantaged. By offering financial aid and skill development, PMEGP strives to establish micro-enterprises, empowering individuals towards economic independence.

Prime Minister Employment Generation Programme (PMEGP)

The Government of India has approved the Prime Minister's Employment Generation Programme (PMEGP), a credit-linked subsidy initiative. This program aims to generate employment opportunities by establishing micro-enterprises in both rural and urban areas. Administered by the Ministry of Micro, Small and Medium Enterprises (MoMSME), PMEGP operates as a central sector scheme. At the national level, the Khadi and Village Industries Commission (KVIC) is the designated single nodal agency under the administrative control of the Ministry of MSME for implementing the programme.

Review of Literature

Dr. Kh. Dhiren Meetei and O. Deepakkumar (2012): The article underscores the challenges faced by Manipur, linking rural development to human resource advancement. It identifies the absence of industrial establishments as a key contributor to economic backwardness, highlighting the PMEGP's role in addressing unemployment and poverty through rural industrialisation.¹

Rahul K. Wadichar et al. (2022): finds PMEGP positively impacting entrepreneurship in Nagpur District, emphasizing benefits for youth empowerment and innovation. Recommendations focus on increased funding, revised capital criteria, and heightened awareness to amplify PMEGP's role in mitigating unemployment, poverty, and economic disparities.²

Ms. Asaraf Unnisa L & Dr. Amulya M (2016): The study reviews PMEGP, acknowledging its positive impact on employment. Challenges such as inadequate bank response and delayed proposal sanctioning are highlighted. Streamlining administrative processes is recommended for optimising the program's efficacy in meeting employment generation objectives and mitigating rural-urban youth migration.³

Shazia Hussain, Aijaz Abdullah and Fayaz Ahamd (2021): Evaluating KVIs in Jammu and Kashmir under PMEGP, the study showcases achievements in sanctioned cases, money released, production, and sales. Despite challenges in employment generation, KVIs are deemed vital for economic development, overcoming external factors like political conflict and floods.^t

Shoba Ajithan K (2014): Evaluating PMEGP in Coimbatore district, the research indicates a positive impact on the organised sector, addressing stagnant employment opportunities. Despite some delays in loan sanctioning, the scheme is deemed successful, particularly in empowering women and improving their skills.^u

Dr. A. S. Shiralashetti and Iranna S. Bhustali (2016): Investigating development institutes' role in rural entrepreneurship in Vijayapur, Karnataka, the study highlights PMEGP's crucial role in benefiting male entrepreneurs and manufacturing industries.^v

Dr. S. S. Sarkar & S. K. Pandey (2014): Exploring CMJSY and PMEGP's impact on rural entrepreneurship in Assam, the study suggests targeted awareness programs and differentiated subsidy rates. Both schemes show effectiveness, with recommendations aimed at refining implementation for enhanced impact.^w

Mrs. Madhuri O. Vartale and Dr. Manasi Kurtkot (2022): Investigating PMEGP's role in developing women entrepreneurs in Pune, the study recognises the program's contribution to the service sector. Recommendations include government initiatives to enhance awareness, particularly for empowering women and improving their economic status.^x

Arun Kumar Jaiswal (2022): This research explores the role of MSMEs in empowering women entrepreneurship in Eastern Uttar Pradesh, revealing the pivotal role of the micro sector in employing nearly 97% of the total workforce.^y

M. S. Altamash & D. M. Khandare (2020): Investigating PMEGP in Marathwada Region, the study concludes that PMEGP positively influenced factors like age, education, income, and employment generation, contributing significantly to India's economy.^{1p}

Dr. Priyank Mishra and Sarita Pandey (2021): The study found that PMEGP significantly boosts MSME growth in Bilaspur District. Despite positive impacts, concerns about incentive adequacy and support highlight areas for improvement in government initiatives fostering entrepreneurship and economic development¹¹

Research Gap

This research distinguishes itself by specifically examining the impact of the Prime Minister's Employment Generation Programme on economic empowerment in Kanpur Nagar. Unlike previous studies, it focuses on this specific region, providing a localised and detailed analysis. The use of quantitative methods, including statistical analyses and hypotheses, adds a rigorous and structured approach to understanding PMEGP's influence. The incorporation of performance tables and correlation analyses enhances the depth of the study, contributing valuable insights to the broader discourse on entrepreneurship and inclusive growth.

Significance of the study

This study holds significance as it thoroughly assesses the Prime Minister's Employment Generation Programme (PMEGP) in Kanpur Nagar. By analysing project performance and employment outcomes, it provides evidence of PMEGP's positive impact on inclusive growth. The findings supported by rigorous statistical analysis, offer practical insights for policymakers and stakeholders. This research not only contributes to existing knowledge but also guides the enhancement of similar programs, emphasising the importance of consistent project distribution and improved skill development for sustained impact.

Objectives

- Assess PMEGP's influence on economic empowerment through entrepreneurship among the poor and marginalised in Kanpur Nagar.
- Assess the overall impact and contribution of the Prime Minister's Employment Generation Programme (PMEGP) in Kanpur Nagar.

Hypothesis

(H0): There is no significant influence of PMEGP on economic empowerment through entrepreneurship, employment inclusivity, and financial inclusion initiatives for beneficiaries in Kanpur Nagar.

(H1): There is significant influence of PMEGP economic empowerment through entrepreneurship, demonstrating inclusive employment creation, as well as effective financial inclusion initiatives for beneficiaries in Kanpur Nagar.

Methodology

This research employs a quantitative approach to assess the impact of the Prime Minister's Employment Generation Programme (PMEGP) on economic empowerment through entrepreneurship in Kanpur Nagar, Uttar Pradesh. The study relies on secondary data extracted from PMEGP Annual Progress Reports spanning the years 2017-18 to 2022-23. The investigation encompassed a meticulous examination of project initiation, margin money utilization (M.M),

and employment generation. The study conducts statistical analysis, correlation analysis, and regression analysis using Excel software.

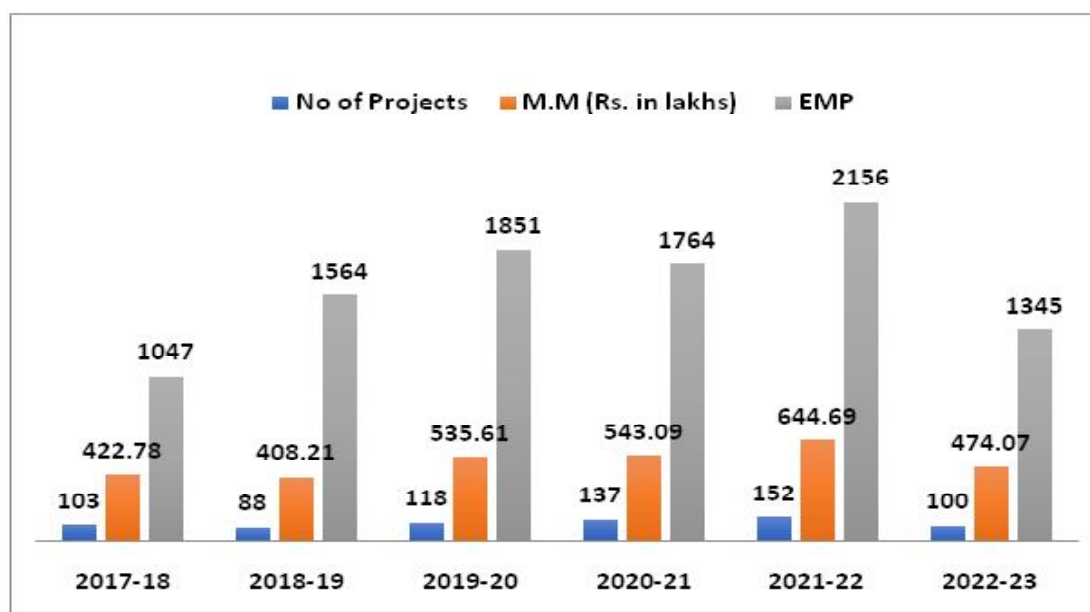
Analysis the role of PMEGP in Empowering the Poor and Marginalised and Inclusive Growth in Kanpur Naga

Table 1- Performance of KVIC, KVIB, and DIC's in Kanpur Nagar under PMEGP (Prime Minister's Employment Generation Programme).

Sr.No	Year	State/UT	District Name	No of Projects	M.M (Rs. in lakhs)	EMP
1	2017-18	UTTAR PRADESH	KANPUR NAGAR	103	422.78	1047
2	2018-19	UTTAR PRADESH	KANPUR NAGAR	88	408.21	1564
3	2019-20	UTTAR PRADESH	KANPUR NAGAR	118	535.61	1851
4	2020-21	UTTAR PRADESH	KANPUR NAGAR	137	543.09	1764
5	2021-22	UTTAR PRADESH	KANPUR NAGAR	152	644.69	2156
6	2022-23	UTTAR PRADESH	KANPUR NAGAR	100	474.07	1345

Source – PMEGP Annual Progress Report 2017-2018 to 2022-23

Figure 1 – Annual Progress of Prime Minister’s Employment Generation Programme (PMEGP) in Kanpur Nagar (2017-2023)



The analysis focuses on the performance of KVIC, KVIB, and DIC under the Prime Minister’s Employment Generation Programme (PMEGP) in Kanpur Nagar, Uttar Pradesh, over the period from 2017-18 to 2022-23.

Performance Overview:

Year-wise Project Numbers: The number of projects has exhibited fluctuations, with an increase from 103 in 2017-18 to 152 in 2021-22, indicating a positive trend in entrepreneurial initiatives.

Margin money utilisation (M.M): The margin money utilisation, measured in lakhs, shows a consistent rise from 422.78 lakhs in 2017-18 to 644.69 lakhs in 2021-22. This signifies a substantial financial investment in the region.

Employment Generation: The employment generated through these projects demonstrates an upward trajectory, reaching 2156 jobs in 2021-22, underscoring the program’s positive impact on local employment.

Trends and Patterns:

Steady Growth: Despite minor fluctuations, the overall trend reveals a steady growth in project numbers, financial investment, and employment opportunities over the examined period.

Financial Viability: The increase in Maximum Margin money indicates the financial viability of projects, contributing to economic development in Kanpur Nagar.

Employment Impact: The consistent rise in employment figures reflects the program’s success in fostering job opportunities, particularly crucial for marginalised and economically weaker sections.

Table 2 - Correlation analysis of Margin money Utilisation and employment generation

	<i>M.M (Rs.in lakhs)</i>	<i>EMP</i>
M.M (Rs.in lakhs)	1	
EMP	0.857766976	1

Source – Excel Output

Table 3- Regression analysis of Margin money Utilisation and employment generation

<i>Regression Statistics</i>	
Multiple R	0.857766976
R Square	0.735764185
Adjusted R Square	0.669705231
Standard Error	225.3101051
Observations	6

Source – Excel Output

Table 4 -Anova analysis of Margin money Utilisation and employment

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	565416.2595	565416.2595	11.13799332	0.028906646
Residual	4	203058.5738	50764.64345		
Total	5	768474.8333			

Source – Excel Output

Analysis and interpretation

In Table 2, the correlation analysis reveals a significant positive relationship between Margin Money Utilisation (M.M) and Employment (EMP) with a correlation coefficient of 0.8578. This strong correlation indicates that as the utilisation of Margin Money increases, there is a substantial positive impact on employment generation, suggesting a direct and noteworthy association between these variables.

Moving on to Table 3, the regression analysis provides deeper insights into the relationship between Margin Money Utilisation and Employment. The multiple R value of 0.8578 signifies a robust positive correlation, emphasising a significant interdependence between the two factors. The R Square value of 0.736 indicates that approximately 73.6% of the variability in employment generation can be explained by variations in Margin Money Utilisation, showcasing the considerable explanatory power of the model. The Adjusted R Square at 0.670 offers a slightly attenuated but still noteworthy measure of the model's explanatory capability, considering the number of variables in the analysis. The standard error of 225.31 demonstrates the precision of the model in estimating the relationship between Margin Money Utilisation and Employment.

In Table 4, the ANOVA analysis supports the statistical significance of the regression model at the 5% level (Significance F – 0.0289). The F-statistic of 11.14 further implies a substantial relationship between Margin Money Utilisation and Employment. This statistical evidence underscores the crucial role of well-managed Margin Money in driving employment opportunities, contributing significantly to the overall success of PMEGP initiatives.

Table 5 - Correlation analysis of Margin money Utilisation and No of projects

	<i>No of Project</i>	<i>M.M (Rs.in lakhs)</i>
No of Project	1	
M.M (Rs.in lakhs)	0.947901882	1

Source – Excel Output

Table 6 - Regression analysis of Margin money Utilisation and No of projects

<i>Regression Statistics</i>	
Multiple R	0.947901882
R Square	0.898517977
Adjusted R Square	0.873147471
Standard Error	8.650206831
Observations	6

Source – Excel Output

Table 7 -Anova analysis of Margin money Utilisation and No of projects

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	2650.02902	2650.02902	35.4158481	0.004000618
Residual	4	299.3043129	74.82607822		
Total	5	2949.333333			

Source – Excel Output

Analysis and interpretation

Table 5 presents a correlation analysis between Margin Money Utilisation and the Number of Projects. The correlation coefficient of 0.9479 indicates an exceptionally strong positive relationship. This suggests that as the utilisation of Margin Money increases, there is a substantial and positive impact on the number of projects initiated under the PMEGP, highlighting a robust association between these variables.

In Table 6, the regression analysis delves deeper into the relationship between Margin Money Utilisation and the Number of Projects. The multiple R value of 0.9479 underscores an exceptionally robust positive correlation. The R Square value of 0.8985 signifies that approximately 89.9% of the variability in the number of projects can be explained by variations in Margin Money Utilisation, indicating a remarkable explanatory power of the model. The Adjusted R Square at 0.8731 provides a slightly attenuated but still substantial measure of the model's explanatory capability, considering the number of variables in the analysis. The standard error of 8.65 demonstrates the precision of the model in estimating the relationship between Margin Money Utilisation and the Number of Projects.

Moving to Table 7, the ANOVA analysis supports the statistical significance of the regression model at the 5% level (Significance F – 0.004). The F-statistic of 35.42 implies a substantial relationship between Margin Money Utilisation and the Number of Projects. This statistical evidence underscores the pivotal role of well-utilised Margin Money in driving the initiation of projects, contributing significantly to the overall success of PMEGP initiatives.

Significance F values below 0.05 in Tables 4 and 7 (0.0289 and 0.004) reject the null hypothesis (H0), indicating PMEGP's substantial impact on economic empowerment, inclusive job creation and inclusive Growth in Kanpur Nagar. This supports the alternative hypothesis (H1) and underscores the program's effectiveness in fostering entrepreneurship and financial inclusion.

Conclusion –

The evaluation of the Prime Minister's Employment Generation Programme (PMEGP) in Kanpur Nagar spanning 2017-18 to 2022-23 reveals a positive impact on inclusive growth and economic empowerment. The analysis indicates a commendable increase in entrepreneurial initiatives, with project numbers growing from 103 to 152. Margin money utilisation witnessed consistent growth, reflecting a substantial financial commitment to the region, reaching 644.69 lakhs in 2021-22. The program's success in generating 2156 employment in 2021-22 underscores its meaningful contribution to local employment opportunities. Despite minor fluctuations, the overall trend demonstrates steady growth in project numbers, financial investment, and job opportunities. The increase in Maximum Margin Money further affirms project financial viability, significantly contributing to economic development. Statistical analyses, including correlation, regression, and ANOVA, robustly support the positive relationship between Margin Money Utilisation, employment generation, and project initiation. Significance F values below

0.05 reject the null hypothesis, confirming PMEGP's substantial impact on economic empowerment and inclusive growth in Kanpur Nagar.

Overall, this thorough analysis emphasises the continued importance of PMEGP in fostering entrepreneurship, economic development, and employment creation for the benefit of marginalised and economically weaker sections. The findings offer valuable insights for policymakers and stakeholders, highlighting the program's effectiveness and areas for enhancement.

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Strategies for Inclusive Higher Education in India

Shweta Singh & Prof. Bharti Pandey

ABSTRACT

Higher education is a powerful tool to change the social, economic and cultural backwardness of a nation. The world has realized that the success of a nation is directly determined by its education system. Higher education is an input to the growth of a country and also an opportunity to participate in the development process of an individual through flexible education system. United Nation's sustainable development goals number 4 also highlights to ensure the quality education, inclusive education and equal opportunities for all by 2030. India is among top three largest educational hub in the world in connection with number of students and educational institutions. Since independence India has shown tremendous progress in the educational field. Despite the growing number of educational institutions there is only one Indian university amongst top 150 universities in the world ranking. Which is a concerning topic. Indian economy is facing various challenges regarding higher education, which need to be overcome through appropriate policy formation and their effective implementation. To reap the benefits of such a young work force, we need to implement the reforms in the education system and also bring forth new factors of production, namely knowledge, skills and technology which have the ability to unleash the productive frontiers of the economy in the most efficient and dynamic way. The present study aims to highlight key challenges and explore the strategies for inclusive higher education system in India.

Keywords- Higher Education, Indian University, Challenges, Strategies, World Ranking

Introduction

Development of any nation depends majorly upon the availability and utilization of technology, capital accumulation, natural and human resources. In addition to other things, human resources are crucial for economic development. Higher education plays an important role in economic and social development through the development of human resources. Higher education with

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research and development drive country towards economic growth in all aspects. India has the largest population in the world. At the same time India enjoys demographic dividend having advantage of young population. If effective measures are implemented in the field of education, India's manpower can be transformed into quality human resources. Knowledge is the driving force in the rapidly changing globalized economy and society. Education general and higher education in particular, is a highly nation-specific activity, determined by national culture and priorities. The emergence of India as a knowledge-based service driven economy has made its human capital its major strength and opportunity for growth. Unlike China or other Asian economic giants, India's growth has not been led by manufacturing. Instead, the nation's pool of skilled workers has allowed India to move quickly up the economic value chain in several knowledge based industries. Indian higher education sector has witnessed large increase in its capacity institutions, the number of teachers and the number of students enrolled each year. With the introduction of five-year plan in 1950s the growth of educational institutions and enrolment of students from different sections of society has expanded irrespective of regional or social imbalances.

As a developing nation, India has been prioritizing universalization of education. Since independence India has shown great progress in the field of education with respect to number of educational institutions established. More than seven decades after independence there exists a large portion of population who are not able to enjoy equal access to education especially higher education. Governments have taken multiple initiative from time to time to ensure equal access to education. A large number of educational institutions have been established for higher learning. Despite being the country with largest number of educational institutions in the world, there is only one Indian university amongst top 150 universities in QS World University Ranking (2023).

Literature Review

Sahil Sharma and Purnendu Sharma (2015) in their paper emphasized that in order to improve the higher education system we need to improve teaching pedagogy, build synergies between research and teaching, encourage alliance of higher institutions among themselves, research centers and industries.

United Nations (2015) has framed Sustainable Development Goals in which there are 17 goals and 169 targets. Goal number 4 of SDGs on education clearly mentions to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Dr. Biswajit Bandyopadhyay (2020) in his study found out that there is lack of female participation in gross enrolment ratio at higher education level, non-availability of good infrastructure, inadequate teaching experts and quality of research. There is an urgent need to develop the quality and standards of education with the increasing number of education institutions and allocation of more financial resources.

Krati Sethi and Dr. Manas Roy (2021) have analyzed that higher education leads to more employment opportunities in today's world. Higher education is the predictor of employment.

Candidates from Maharashtra, Tamil Nadu and Uttar Pradesh are more employable. Over all enrolment has increased during last five years. In 2014, employability was 33.95 percent, which has increased to 46.21 percent in 2019.

Objectives of The Study

- To examine the challenges faced by higher education system in India.
- To bring light on the various strategies for inclusive higher education system in India.

Research Methodology

The present study is mainly in descriptive form and it depends on secondary data. The analysis is based on secondary sources from national and international literature. For interpretation of study we have extracted secondary data from various websites, surveys, books, research papers, articles, journals. The study mainly focuses on challenges faced by Indian higher education system and strategies to resolve these hurdles.

Growth of Indian Higher Education System Since Independence

At the time of independence, India had nearly 20 universities and 500 colleges enrolling about 2.1lakh students which has now grown to 1113 universities and 43795 colleges with total enrolment of 4.13cr (AISHE,2021). After independence, there is a phenomenon increase in the number of educational institutions for higher learning. The government had established numerous commissions and committees to create an excellent and inclusive educational system. The first commission in this kind was the Radhakrishnan commission, which was created in 1949 primarily to suggest reforms in higher education. In the year 1964 government appointed Kothari commission, on the recommendations of Kothari commission, the first NEP was released in 1968. This provided a fresh approach to national education standardization. It promoted use of mother language as a teaching medium in the early years of school. It also emphasized the need to strengthen research in universities. Due to number of factors, NEP 1968 was not particularly successful; therefore, in that series, the government developed a new NEP in 1986 that was modified in 1992. This policy put a strong emphasis on teacher education, women education and adult literacy. It also accepted autonomy of universities and colleges, which was not discussed earlier. Recently, Government has introduced NEP2020, which is first education policy of 21st century and replaces the 34-year-old NEP of 1986. To promote an inclusive higher education system, it seeks to raise the GER in higher education to 50 percent by 2035.

Challenges Faced by Indian Higher Education System

Today, India is one of the largest educational hub in the world. It's been more than seven decades after independence, yet our higher education system has not developed fully. No doubt, there is an increase in number of students enrolled and learning institutions but we are able to make higher education system accessible to all. Even if, India has a huge chunk of trained

manpower and resources for growth of its educational institutes, it is unable to serve the purpose for which it has been created. The progress attained in higher education is grossly inadequate to meet growing needs of society. It suffers from challenges of both qualitative and quantitative nature. The growth of higher education in India has been largely guided by the serviceable prerequisite of the economy. In other words, it has problems of access, equity and affordability. These include inadequate infrastructure and facilities, large vacancies in faculty positions, low student enrolment rate, outmoded teaching methods, declining research standards, unmotivated students, overcrowded classrooms, income, gender, and ethnic imbalances.

Some of the basic challenges faced by Indian higher education system are discussed below:

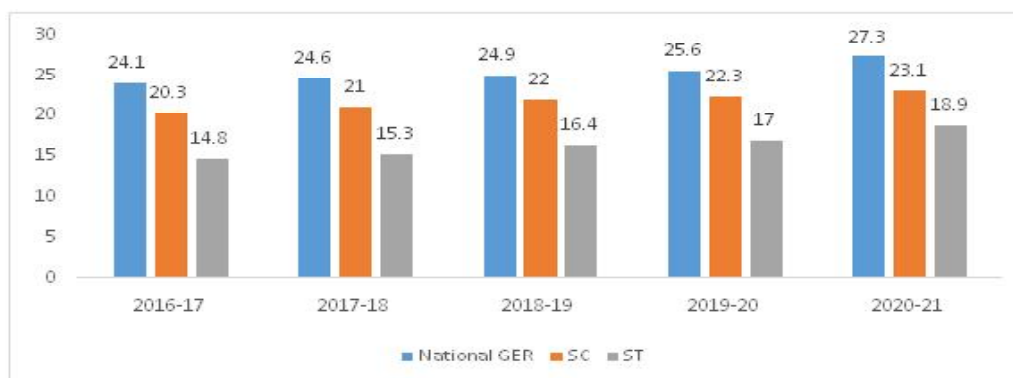
Enrolment

The enrolment has increased during the last five years from 3,57,05,905 in 2016 -17 to 4,13,80,713 in 2020-21, i.e. around 15.89 percent. While enrolment in India has shown increasing trend, it still lags when compared with other countries. According to AISHE report (2021) India's GER in higher education is 27.3 for age group 18-23 years. which means only 27 students are taking admission in higher education out of 100 after completing secondary education. While the GER in India is higher than Pakistan (9) and Bangladesh (22), it is comparatively less than other Asian countries – China (58), Malaysia (42), Indonesia (36) (UNESCO, 2020).

Equity

Equal access to higher education is another challenge faced by Indian higher education. The University Grant Commission has stressed the need to improve the quality of education and eliminate regional and social inequality. In spite of expansion of higher educational institutions, there is inequalities in GER among different categories.

Figure 1: Category-wise GER in Higher Education



Source: All India Survey on Higher Education 2020-21

Figure 1 indicates the improvement in access to higher education by social-economic categories over the last five years. There is significant improvement by them but they still lag behind national averages.

Quality

Ensuring quality in higher education is amongst the foremost challenges being faced in India today. Since independence government has appointed several commissions and committees to enhance the quality of higher learnings in the country. Currently there exists large number of universities and colleges in the country but they are unable to meet the minimum requirements laid down by the UGC. As a result, our universities are unable to mark their presence in the world ranking. According to the QS World University Rankings 2023, there is only one Indian university amongst top 150 universities in the world.

Expenditure on Education

Table 1: Trends in Expenditure on Education (General Expenditure) (in Rs.Cr)

Year	2016-17	2017-18	2018-19	2019-20	2020-21
Total Expenditure on Education	43974	483481	526481	579575	575834
As Percentage of GDP	2.8	2.8	2.8	2.9	2.9
As Percentage of Total Expenditure	10.2	10.7	10.4	10.7	9.1

Source: Economic Survey 2022-23

India's expenditure on education as a percent of its total budget has remained stagnant over last five years. The total expenditure on education has now been decreased from 10.2 percent in 2016-2017 to 9.1 percent in 2020-2021. Expenditure on education by the Centre and the States as a proportion of the Gross Domestic Product (GDP) has been somewhere around 3 percent between 2016 to-17 to 2020-21. Out of this figure, roughly 1 percent is spending on higher education. Due to lack of funding from government, universities and colleges are unable to function properly. They are unable to ensure quality and equity in higher education which hampers the growth of human capital in the economy.

Pupil Teacher Ratio

Availability of qualified and experienced faculty plays important role in the development of quality education. As per the government data, pupil-teacher ratio in higher education is 24:1 which is very low. If we take into account the ideal student and teacher ratio, and compare it with India, we will find huge gap. Sometimes the posts remain vacant for years because of approval or lack of funds and sometimes the reason is lack of qualified person. This is also responsible for underperformance of students. There is shortage of faculties in higher education which is being filled by large number of ad hoc or part-time faculty, which reduces teaching quality.

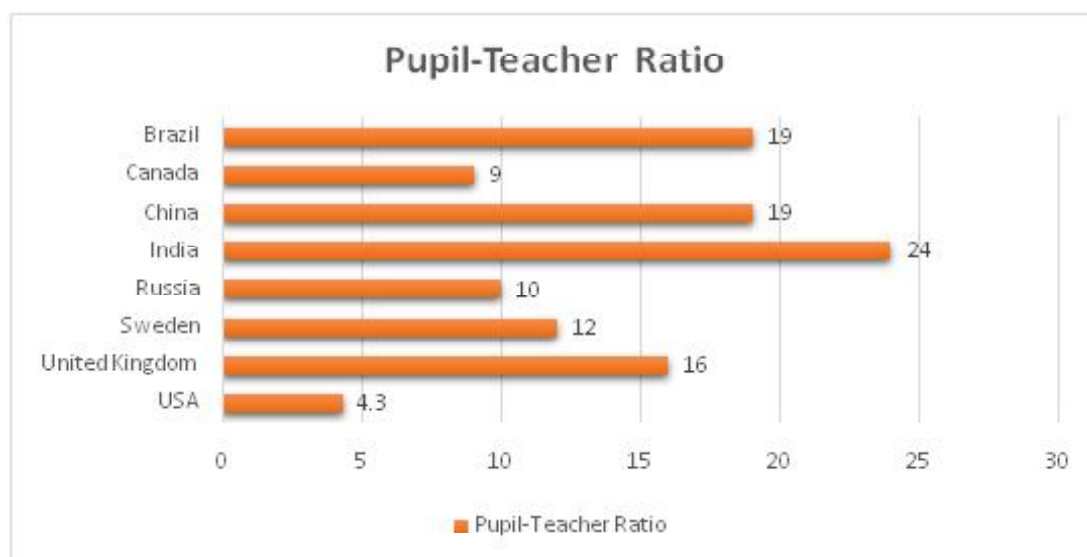


Figure 2: Pupil-Teacher Ratio in Selected Countries

Source: EQUIP Report, 2019 (Ministry of Education)

Figure 2 shows that the pupil-teacher ratio is low in India as compared to other countries of the world.

Accreditation

According to the data obtained from UGC, out of 1113 universities and 43796 colleges, NAAC has accredited 418 universities and 9062 colleges. At least 695 universities and over 34000 colleges across country are operating without accreditation from the National Assessment and Accreditation Council (TOI,2023). Lack of motivation in higher education institutions to apply for quality assessment reduces its quality of education.

Strategies for Inclusive Higher Education

India's demographic dividend offers huge opportunities for development of the higher education sector in India. With help of new age learning tools and advanced teaching tools we can enhance quality of education and can correct imbalances in the GER in different categories of society. In spite of huge investments by the government in the education sector it is just insufficient to meet the growing requirements of the country. Therefore, higher education sector can be seen as one of the promising areas for private and foreign investments. It offers immense investment opportunities in both regulated and non-regulated segments. Equality of educational opportunities in higher education is considered important tool for reducing or eliminating income or wealth disparities. For that we need to enhance the employability of graduates, which provides scope for collaboration of Indian institutes with enterprises and growing industries to train students and recruit them. This will help them to learn industrial skills and to gain industrial exposure.

Due to pandemic situations in recent times online study has become integral part of higher education. more emphasis should be given to ensure better quality e-resources and accessibility to students by insuring internet connectivity and more hardware needed for it. Students should be made aware and encouraged about all the online portals and important educational websites available for them.

India's higher education is based on the traditional teaching and learning methods, which highlights the need to establish more institutions of higher learning to promote need-based and skill-oriented courses. There should be multidisciplinary approach in higher education so that students' knowledge may not be restricted to only up to his own subjects. India's research sector also has immense opportunities to produce quality research because it has not adequately funded and promoted, there exists great reserves of untapped ability in that sector. Government must promote collaboration of Indian higher institutes with international institutes to generate linkages between Indian research laboratories and international research centers for quality and collaborative research.

Conclusion

Since independence, there has been tremendous progress in institutions of higher learnings in all aspects. But with the quantitative growth it has not been able to attend core issue of qualitative growth. Higher education in India has expanded very rapidly in the last seven decades after independence yet it is not equally accessible to all. India is today one of the fastest emerging economies of the world with the annual growth rate going above 9%. Still a large section of the population remains illiterate and a large number of children's do not get even primary education. This is not only excluded a large section of the population from contributing to the development of the country fully but it has also prevented them from utilizing the benefits of whatever development have taken place for the benefit of the people. No doubt India is facing challenges in higher education but to deal with these challenges and

to boost higher education is utmost important. Various opportunities are available in higher education system but how to strategize and get benefits from these opportunities and make them accessible to others is the matter of concern. No doubt that there has been growth in the number of higher learning institutions, the number of students but the growth in GER at higher education, pupil-teacher ratio, the number of accredited institutions and the expenditure on education has been slow. In order to sustain the rate of growth, there is an urgent need to increase the number of institutions and also to enhance the quality of higher education. To reach and achieve the future requirements there is need to look at the financial resources, access and equity, quality standards, relevance and at the end the responsiveness.

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Economic Impact of Marital Breakdown on Women: A Case Study of District Bareilly

Sarvesh Kumar Paswan, Vishwajeet Singh Prajapati & Prof Ashutosh Priya

Abstract

Social Protection Programme (SPP) encompasses a range of initiatives designed to support individuals and families in need, ensuring they have access to essential services and resources. These programs aim to alleviate poverty, reduce inequality, and promote social inclusion. Direct Benefit Transfer, Social Assistance, healthcare coverage, child and family benefits, employment programmes, social housing and disaster relief and social emergency programs. Different social protection schemes focus different groups of people for example MGNREGA launched in 2005 focuses rural households by providing guaranteed employment to the volunteers. The Pradhan Mantri Jan Dhan Yojana (PMJDY) launched in 2014 targets various groups of people, particularly those who have been traditionally excluded from the formal banking sector and financial services. Similarly, there are various other social protection schemes like Pradhan Mantri Suraksha Bima Yojana (PMSBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), National Social Assistance Programme (NSAP), Pradhan Mantri Awas Yojana (PMAY), Integrated Child Development Services (ICDS) etc. The present study seeks how the prevailing Social Protection Programmes benefit women suffering from marital breakdown. The study also reveals the economic status of the women after marital breakdown.

Keywords: *SPP (Social Protection Programmes), Economic Status, and Focus Groups*

Introduction:

People face many types of difficulties and unexpected risks in their life. Some of the difficulties may be purely social, like falling in love and not getting to the right person at the right time, to fall into sorrow because of unexpected bad behaviors of some one that may be one's friend or any unknown person. So, the government becomes responsible to save

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society from such uncertainties and work as a caretaker in a welfare state. Government targets different groups of people according to their specific needs. For example, children, teenagers, youngsters, old age people, girls, single girl child, housewives, widows, divorce women, people with disabilities, people suffering from specific diseases like TB, CANCER, DIABETES, LEPROSY, etc. The government launched many schemes like Integrated Child Development Services (ICDS), Mid-Day Meal Scheme (MDMS), Sarva Shiksha Abhiyan (SSA), Janani Suraksha Yojana (JSY) Rashtriya Bal Swasthya Karyakram (RBSK) National Nutrition Mission (POSHAN Abhiyaan) etc. targeting children under eighteen-year age. Beti Bachao Beti Padhao (BBBP), Pradhan Mantri Matru Vandana Yojana (PMMVY), Mahila e-Haat, Support to Training and Employment Program for Women (STEP), Ujjwala Scheme, Swadhar Greh Scheme etc. are the social protection schemes launched targeting women. Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS), Indira Gandhi National Disability Pension Scheme (IGNDPS) etc. are focused on women and old age group.

Marital breakdown may arise due to many reasons like domestic violence, illicit relationships, communication issues, financial problems, lack of intimacy and emotional connection, substance abuse, parenting conflicts, cultural or religious differences etc. wrong information. The present study is about seeking women deprived from the social protection schemes. The study also focuses on the economic status of women and awareness among the same after marital breakdown.

Objectives:

1. To know the economic impact of marital breakdown on women.
2. To know the focus of ongoing social protection programmes.

Review of Literature:

1. Smock, P., Manning, W., & Gupta, S. (1999): The authors raised an important question whether divorced women would have the same level of economic well-being if they remained married, compared to women who choose to stay married. They found if divorced women stayed married, their economic situation would significantly improve but still wouldn't reach the level of women who remain married. Conversely, if married women were to get divorced, their economic well-being would be like that of divorced women, indicating that women's economic vulnerability exists regardless of marital status.

2. Sayer, L., & Bianchi, S. (2000): The study is about whether the financial independence of women destabilize their marital status and raises the risk of divorce. Measures of marital commitment and satisfaction were found to be better measures of marital dissolution rather than measures of financial independence of wives.

3. Bedard, K., & Deschenes, O. (2003): gave wondering results about the economic status of divorced women in America. The divorced women live a higher economic status

then a never divorced women and the same factors are supposed to affect the marital status and economic status of women. The tendency for marriages was found to be less stable after the birth of girls compared to boys.

4. Ananat, E., & Michaels, G. (2007): Again, this study too found firstborn female child as the main cause of divorce and it concluded that a greater ratio of women remains able to increase her economic level, but a few become unable for the same.

5. Mckeever, M., & Wolfinger, N. (2001): The study finds that the economic impact of marital breakdown on women is not as severe as it used to be in the past. A higher economic status was found for the divorcees and thus a better living status for both the divorcees and their children.

6. Hoffman, S., & Duncan, G. (1988): After divorce, there's a significant gap in the economic situations of men and women but the economic situation of the divorce women does not worsen as discussed by Whitzman in her study.

7. Teachman, J., & Paasch, K. (1994): The authors found the evidence for the decline status of women and children after divorce and a rising status of men after divorce. The authors propose strategies to enhance the financial well-being of single mothers with children post-divorce.

Methodology: To know the focus of prevailing social protection programmes various schemes for SPPs and then various focus groups were scaled out. To know the economic status of women after marital breakdown a questionnaire was prepared and surveyed. Overall, this methodology employs a mixed-methods approach, combining both qualitative and quantitative techniques to gather comprehensive insights into the focus of prevailing social protection programs and the requirements of women regarding SPPs.

Analysis of various SPPs: Five major kinds of activities are involved in social protection programs classified as labor market, social insurance, social assistance and welfare service, micro and area-based schemes, child protection. Labor market includes Labor market assessments, Active labor markets programs, Passive labor market policies, Safeguards. Social insurance programs help alleviate various risks by offering financial assistance in situations like sickness, disability, workplace accidents, maternity, job loss, and retirement. These programs serve as safety nets, providing income support during challenging times and ensuring individuals and families have a financial cushion when facing unforeseen circumstances. Social assistance and welfare services offer support to individuals who may not be eligible for insurance benefits or may receive insufficient aid from such programs. These services are primarily aimed at improving social welfare by directly addressing poverty and aiding those in need. They serve as a vital resource for individuals and families facing financial hardship, ensuring that basic needs are met and helping to alleviate the impacts of poverty in society. Micro and area-based schemes offer similar social protection benefits to individuals involved in small-scale agriculture and the urban informal sector, mirroring the support provided by traditional

social insurance programs to formal laborers. This includes microinsurance, agriculture insurance, and social funds. Ensuring the protection of children holds immense importance for the progress and growth of the region. The protection includes early child development, school feeding programs, scholarships, or school fee waivers; waiving of fees, street children initiatives; child rights advocacy/awareness programs, youth programs, family allowances. (Official Paper ADB 2003)

Schemes of India: The Schemes prevailing in India and their focus groups are specified in the given table. These are the central schemes and are taken from the website of government myscheme.gov.in. Some schemes cannot be kept under the umbrella of social protection, so those schemes are not mentioned in the table below. E.g., Market research information network,

Table 01

Serial No.	Scheme	Aim	Focus Group
1.	Kera Suraksha Insurance Scheme	Accident/disability/death insurance scheme	for Coconu Climbers/Neera Technicians/Co Harvesters.
2.	Coconut Palm Insurance Scheme	To assist coconut growers from loss of income due to crop loss	Coconut grower
3.	Pradhan Mantri Kisan Samman Nidhi	To strengthen the financial condition of Indian Farmers and protect them from financial insecurity	Indian Farmers
4.	Pradhan Mantri Fasal Bima Yojana	To provide financial support to farmers in the event of crop loss or damage due to natural calamities, pests, or diseases.	Farmers
5.	Pension Scheme for the Tappers in Small Rubber Plantations	To provide financial security and support to tappers working in small rubber plantations by offering them pension benefits.	Tappers workin rubber plantatio

6.	One Nation One Ration Card	It aims to provide food security and welfare benefits to migrant workers and their families.	Migrant workers and their families.
7.	Seva Bhoj Yojna	It aims to provide financial assistance to charitable and religious institutions such as temples, gurudwaras, mosques, churches, etc.	Charitable and religious institutions
8.	RMEWF-Financial Assistance for Ex-Servicemen In Penury	It provides financial assistance to ex-servicemen who are in a state of extreme poverty or penury.	Ex-servicemen
9.	AFFDF-Financial Assistance for Treatment of Serious Diseases To Non Pensioner Ex-Servicemen (All Ranks)/Widows	It provides financial assistance for the treatment of serious diseases to non-pensioner ex-servicemen and widows of ex-servicemen	Non-pensioner ex-servicemen and widows of ex-servicemen
10.	RMEWF-Financial Assistance for Vocational Training Of Widows Of Ex-Servicemen	It aims to provide vocational training to widows of ex-servicemen to empower them economically and enhance their employability.	Widows of ex-servicemen
11.	RMEWF-Financial Assistance for Education Of Children & Widows Of Ex-Servicemen	It provides financial assistance for the education of children and widows of ex-servicemen	Children and widows of ex-servicemen
12.	Free Education for Sports Medal Winners / Participants Of National/ International Events	It aims to support overall development and well-being of athletes	Athelets
13.	Post Graduate Indira Gandhi Scholarship for Single Girl Child	It aims to provide financial support to single girl children pursuing postgraduate education	Single girl child

14.	CBSE Merit Scholarship Scheme for Single Girl Child	It aims to provide financial support to single girl children who excel academically in CBSE examinations.	Single girl child
15.	Pragati Scholarship Scheme for Girl Students (Technical Degree)	It aims to provide financial assistance to girl students pursuing technical degrees	Girl students pursuing technical degrees
16.	Swami Vivekananda Single Girl Child Fellowship for Research in Social Sciences	It aims to provide financial support to single girl children pursuing research in social sciences fields.	Single girl child
17.	PM POSHAN - Prime Minister's Overarching Scheme for Holistic Nourishment	It aims to address malnutrition and improve the nutritional status of children, pregnant women, and lactating mothers	Children, pregnant women, and lactating mothers
18.	AICTE – Saksham Scholarship Scheme for Specially-Abled Student (Degree)	It aims to provide financial assistance and support to especially abled students pursuing degree courses.	Especially abled students
19.	Indian Community Welfare Fund	To provide financial assistance and support to Indian nationals in distress abroad.	Indian nationals in distress abroad.
20.	Pravasi Bharatiya Bima Yojana	To offer financial protection to Non-Resident Indians (NRIs) and Persons of Indian Origin (PIOs) against unforeseen contingencies such as accidents, disabilities, or death during their stay in India.	NRIs & PIOs
21.	Pradhan Mantri Jeevan Jyoti Bima Yojana" (PMJJBY)	Providing life insurance coverage to individuals at an affordable premium.	all individuals, especially those from low-income and vulnerable groups

22.	Pradhan Mantri Garib Kalyan Anna Yojana" (PMGKAY)	It aims to provide food security to vulnerable populations, especially during times of crisis or emergencies.	Vulnerable Populations
23.	Atal Pension Yojana" (APY)	It aims at providing a guaranteed minimum pension to workers in the unorganized sector.	Workers of unorganized sector
24.	Pradhan Mantri Jan Dhan Yojana" (PMJDY)	It aims to provide financial inclusion to all households in India by ensuring access to banking services, deposit accounts, remittances, credit, insurance, and pension services.	Marginalized and low-income populations, including women, rural residents, and economically disadvantaged individuals.
25.	Sukanya Samridhi Yojana	It is a government-backed savings scheme designed to promote the financial security and welfare of the girl child.	Girl Child
26.	Senior Citizens Savings Scheme	It is a government-backed savings scheme specifically designed for senior citizens aged 60 years and above.	Senior citizens aged 60 years and above.
27.	Pradhan Mantri Suraksha Bima Yojana" (PMSBY)	To provide financial protection to individuals and their families in the event of accidental death or disability.	Individuals from economically vulnerable backgrounds.
28.	National Scheme of Welfare of Fishermen	To provide various welfare measures and support services to fishermen and their families.	Fishermen and their families
29.	Janani Shishu Suraksha Karyakram" (JSSK)	It aims at ensuring the safe delivery of pregnant women and providing essential newborn care services free of cost.	vulnerable populations, such as pregnant women and newborns.

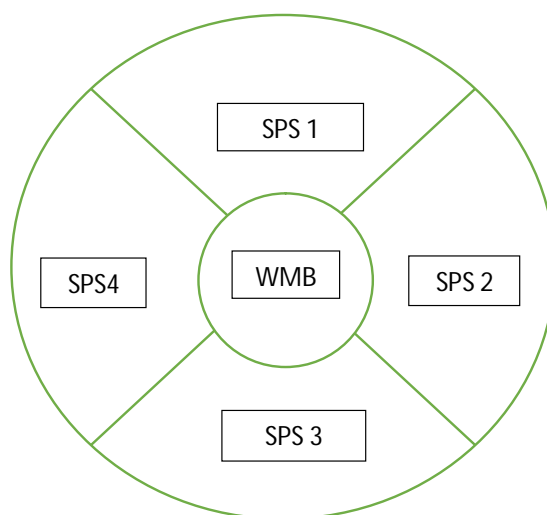
30.	Pradhan Mantri Garib Kalyan Package: Insurance Scheme for Health Workers Fighting COVID-19	To provide financial security and support to frontline healthcare workers who are at risk of contracting COVID-19 while serving the community.	Healthcare workers who are at risk of contracting COVID-19 while serving the community.
31.	Surakshit Matritva Aashwasan Yojana	It aims at providing financial assistance to pregnant women for antenatal care (ANC) services and institutional delivery expenses.	vulnerable populations, such as pregnant women and children.
32.	Rastriya Arogya Nidhi - Health Minister's Cancer Patient Fund"	It aims at providing financial assistance to economically disadvantaged individuals diagnosed with cancer.	Vulnerable individuals facing significant health challenges, such as cancer.
33.	Swatantrata Sainik Samman Pension Scheme	To provide pension benefits to freedom fighters who participated in the Indian independence movement.	freedom fighters who participated in the Indian independence movement.
34.	PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)	It aims at providing financial support and assistance to street vendors who have been adversely affected by the COVID-19 pandemic and the associated lockdown measures.	street vendors
35.	Niramaya Health Insurance Scheme	It aims at providing health insurance coverage to persons with disabilities (PwDs).	Persons with disabilities (PwDs).
36.	Credit Based Schemes for SC - Mahila Samridhhi Yojana	It aims at promoting financial inclusion and economic empowerment among women belonging to Scheduled Castes (SC)	women from Scheduled Caste

37.	Pradhan Mantri Awas Yojana – Urban	It aims at providing affordable housing to the urban poor and economically disadvantaged sections of society.	Urban poor and economically disadvantaged sections of society.
38.	Journalist Welfare Scheme	It aims at providing support and assistance to journalists and their families in times of need.	Journalists and their families
39.	Atal Beemit Vyakti Kalyan Yojana	It is an unemployment insurance scheme launched by the Employee's State Insurance Corporation (ESIC)	Insured individuals who lose their jobs
40.	National Pension Scheme for Traders and Self Employed Persons	It aims at providing pension benefits to traders and self-employed individuals who may not have access to formal pension schemes through their employment.	Self-employed individuals
41.	Group Personal Accident Insurance Scheme for Coir Workers	It is an initiative aimed at providing financial protection to coir workers against accidents and injuries that may occur during the course of their employment.	Coir workers
42.	Khadi Karigar Janashree Bima Yojana	It is an initiative aimed at providing financial protection to khadi artisans and their families in the event of unforeseen circumstances such as accidents, disability, or death	Khadi artisans
43.	Pradhan Mantri Ujjwala Yojana	It aims at providing clean cooking fuel to women living below the poverty line in rural and urban areas.	Women living below the poverty line

Source: myscheme.gov.in

After analyzing the above social protection programs, we find various focus groups like coconut tree climbers, coconut growers, Indian farmers, tappers, migrant workers and their families, charitable and religious institutions, ex-servicemen, non-pensioner ex-servicemen and widows of ex-servicemen, athletes, single girl child, girl students pursuing technical degrees, children pregnant women and lacerating mothers specially abled students, Indian nationals in distress abroad, NRIs & POIs, all individuals especially those from low-income and vulnerable groups, workers of unorganized sector marginalized and low income populations, including women, rural residents, and economically disadvantaged individuals, senior citizens aged sixty years and above, individuals from economically vulnerable backgrounds, fishermen and their families, vulnerable populations such as pregnant women and newborns, healthcare workers, vulnerable individuals facing significant health challenges such as cancer freedom fighters participated in the Indian Independence movement, street vendors, urban poor and economically disadvantaged sections of society, journalists and their families, insured individuals who lose their jobs, self-employed individuals, coir workers, Khadi artisans, women living below the poverty line, persons with disabilities, women from schedule castes etc. We have seen that in none of the above SPPs government focus on the women suffering from marital breakdown. It is a question of concern why the government did not launch any such social protection scheme that focuses on such women. The second and foremost things is that various such schemes are there which focus on the women and their children not only financial protection but also the health protection, employment protection etc. So, may it not needed to give social protection to the women who comes under marital breakdown because they and their children are a part of focus of other social protection schemes. The figure below shows the social protection for such women.

Figure 01



The above figure shows the different social protection schemes focusing women lying in different criteria. WMB stands for women with marital breakdown. SPS1 stands for social protection scheme for pregnant women and lactating mothers, SPS2 stands for low-income group vulnerable, SPS3 stands for women lying below poverty line, and SPS4 stands for women from schedule caste. If any of the women with marital breakdown lie under any of the above categories, she will be benefited by that one or more social protection schemes. If a woman with marital breakdown do not lie under any category of the above social protection schemes, then it is a question whether she requires any type of social protection. The above figure description is only an example to clarify the concept.

Analysis of economic impact of marital breakdown: To analyze the impact of marital breakdown down on womenof district Bareilly50 women with marital breakdown were surveyed.The tabulation of the survey is below in the tables.

Table 01

Economic situation after marital breakdown			
Financial difficulties	Percentage	Child Support Payments	Percentage
Yes	72.22	Yes	33.33
No	5.55	No	27.78
Not Sure	22.22	NA	38.89
Total	99.99		100

Source: Primary Survey, No. of respondents 50

When the women were asked about their financial difficulties facing after the marital breakdown 72.22 percent women accepted that their financial status worsen. 5.55 percent women replied negatively, and 22.22 percent women were not sure about their financial situation after the marital breakdown. When the women were asked about the child support payments 33.33 percent women replied that they get any child support payments from the government whereas 27.78 percent women replied that they don't get any child support payments while 38.89 percent women werenot sure about the child support payments.

Table 02

Economic situation after marital breakdown			
Employment Status	Percentage	Discrimination in job market	Percentage
Improved	5.55	Yes	50
Same	27.78	No	44.44
Worsened	66.67	Not Sure	5.55
	100		99.99

Source: Primary Survey, No. of respondents 50

When the women were asked about their employment status after their marital breakdown 66.67 percent women replied that their employment status got worse while 27.78 percent replied that their employment status remains same whereas only a few 5.55 percent replied that their employment status got improved. When they were asked whether they suffer any discrimination in the job market because of their marital breakdown, 50 percent respondents replied positively whereas 44.44 percent replied negatively. 5.55 percent respondents were not sure about the discrimination in the job market.

Conclusion: Marital breakdown is serious concern for the people but become more serious when it results in deteriorating the situation of women and the children depending on the women. There is no social protection scheme that is made specially focusing the women living in marital breakdown perhaps because of the schemes available for vulnerable women and thus indirectly focus the women with marital breakdown if they lie any of the category of prevailing schemes. The economic status of the women is worsened because of their unemployable situation, they suffer with the discrimination in the job market, and thus they suffer with the financial difficulties. They also do not get any child support payments.

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An Analysis of India's Health Sector with a Special Context of a Symmetric Information

Suraj Prakash Mishra & Dr. Harshmani Singh

Abstract

Healthcare information asymmetries necessitate all-encompassing approaches that focus on increasing openness, strengthening patient education and health literacy, encouraging patient-provider shared decision-making, putting laws in place to guarantee equitable pricing and quality standards, and investing in technology that makes it easier for stakeholders to communicate and exchange information. Healthcare systems can strive toward more patient-centred, cost-effective, and fair care by tackling these issues. The informality that already existed in the healthcare industry has been made worse by the COVID-19 pandemic. Physicians frequently have to utilize heuristics to diagnose and treat patients due to information asymmetry. Better patient outcomes will come from the deployment of procedures and solutions that disarm hidden biases and remove the requirement for surface-level data by surfacing insights into care unit operations ahead of time. Applications using artificial intelligence (AI) are used to track records that have been reported, retrieved, or expired.

Keywords- *Asymmetric information, health care, health issues, moral hazard, non-communicable disease.*

Introduction

In the context of the health sector, asymmetric information refers to circumstances in which one party—typically the patient or the provider—possesses more information than the other, which results in disparities in the allocation of resources, decision-making, and outcomes. There are various ways that this information asymmetry can appear:

Patients frequently lack the medical knowledge and proficiency that healthcare professionals possess. Due to a lack of knowledge, patients may come to mostly rely on the advice of medical professionals without completely comprehending their alternatives or the potential consequences of certain therapies.

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Patients might not know much about the calibre of the medical professionals, facilities, or therapies that are available to them. Patients' decisions may be influenced by providers' access to additional information regarding their qualifications, success rates, and the efficacy of various therapies.

It is common for patients to be unaware of the whole cost of healthcare services, including operations, drugs, and treatment alternatives. Patients' decisions may be influenced by providers' greater understanding of insurance coverage, pricing structures, and possible out-of-pocket costs.

Adverse selection happens in the insurance markets when people with higher risk profiles or more extensive medical requirements are more likely to look for insurance. Insurance companies may encounter knowledge asymmetry on the health state of prospective policyholders, which can make it difficult to manage risk and establish fair premiums.

Because they only pay a small portion of the expenses, people may start using healthcare services excessively or participate in risky behaviours after getting insurance. Information asymmetry about people's choices and behaviours may make it difficult for insurers to appropriately evaluate and reduce these risks with effective ways and measures. Compared to patients or government agencies, researchers and pharmaceutical corporations may have greater knowledge about the efficacy and safety of medications or medical procedures. Decisions concerning medication approval, treatment protocols, and patient care may be impacted by this knowledge imbalance.

Aiming to improve transparency, improve patient education, encourage shared decision-making between patients and providers, implement regulations to ensure fair pricing and quality standards, and facilitate information exchange among stakeholders are often necessary interventions to address asymmetric information in the health sector. The negative consequences of information asymmetry on healthcare outcomes and delivery can be lessened with the use of tactics including risk adjustment mechanisms in insurance markets, quality reporting initiatives, price transparency laws, and health literacy programs.

Review of Literature

Modern healthcare systems rely heavily on medical equipment to help with disease and medical condition diagnosis, treatment, and monitoring (**Kale 2019; James and Jaiswal 2020**). There is a huge demand for these devices due to the magnitude of India's population, but there is also a sizable supply gap (**Peter 2018**).

During the 2014 "Make in India" campaign, the medical device industry was designated as a focus area (**Deloitte 2016**). However, these activities have not produced the expected outcomes due to a lack of funding, a lacklustre R&D ecosystem, inconsistent rules, bureaucratic approval processes, disparate manufacturing standards, and restricted capital (**Dang and Sharma 2019; Saini et al 2022**). On May 2, 2023, the union government passed the National

Medical Devices Policy after realizing the difficulties caused by escalating and unaffordable import expenses and accessible medical technology (Mahal et al., 2006).

The Indian medical device market is expected to increase significantly, reaching up to \$50 billion by 2025 from its estimated \$10–\$12 billion in 2020 (India Brand Equity Fund, 2022). Regrettably, the nation's internal demand for devices is mostly met by imports. Policymakers should focus on this issue right away due to the low per capita income and sizable impoverished population (Bhat et al 2019). Japan, China, Germany, and the United States (US) are India's top suppliers of medical devices. The imports were estimated to be worth \$6.3 billion in 2020. Additionally, the nation exports medical gadgets worth about \$2.7 billion to key export destinations like the US, Europe, Africa, and Southeast Asia. These devices are sold in foreign markets.

It is one of the top 20 worldwide medical device markets and the fourth-largest market in Asia. Less than 2% of the world market is occupied by the nation; the US leads with 40%, followed by Europe and Japan with 25% and 15% of the worldwide market, respectively (KPMG 2020).

In the absence of any particular laws, medical devices were previously governed by the Drugs and Cosmetics Act of 1940, according to a study by Manu and Anand (2022). The Indian Medical Device Rules were introduced by the CDSCO in 2017 to close this gap. These regulations were modified to become the Medical Devices (Amendment) Rules, 2020, which went into effect in April 2020 to keep up with changing requirements.

These detailed regulations cover a wide range of device-related topics, including post-market obligations, labelling, sales, manufacturing and import, registration, and categorization.

Medical technology accounts for between 30% and 40% of the establishment expenditures of a typical hospital (Saini et al 2022). The availability of healthcare facilities is significantly impacted by the high cost of medical technology (Datta and Chauhan 2020). Considering that out-of-pocket expenses (OOPE) account for over 60% of all healthcare costs in India, this is still a major issue of concern (Kumar et al 2023). Particularly for the poorer and middle-class populations, the enormous expense of a single high-end medical item in a life-threatening circumstance forces them into poverty (Reddy and Qadeer 2010; Kumar et al 2023).

Building national MFLs has been approached differently by different nations, and a basic problem in HIS design is the unique identification of health facilities. information infrastructures should be considered instead of information systems (Nguyen et al., 2015; Hanseth, 2010). Conventional information systems were usually connected to discrete, stand-alone entities that could only be used by a small number of people and had a limited lifespan. An electronic patient registration system that solely focuses on patient registration, for instance, is insufficient because it must interface with multiple other systems, including blood banks, radiography, and laboratories.

An information infrastructure perspective emphasizes how modifications to one area of the infrastructure affect the operation of other areas and enables us to view these various systems and their interconnections as a whole. Richer insights into the architecture and operation of distributed, complex systems can be gained from an information infrastructure perspective.

With the launch of the National Rural Health Mission in 2005, India initiated systematic national HIS reforms. Among the initiatives were the standardization of reporting and recording formats, the creation of a data dictionary and reporting guidelines, the execution of an extensive program to enhance capacity, and the deployment of a centralized web portal (**Mishra et al 2012**).

By 2010, these initiatives contributed to the National Health Management Information System (HMIS) portal's monthly reporting requirement for all public health facilities (**MoHFW 2011**).

Due to the portal's inability to adapt to these changes and the program data needs that were constantly changing, there was a simultaneous proliferation of systems at the federal and state levels (**Sundararaman et al 2012**).

To achieve this, the present top-down governance model must be drastically altered in favour of a more bottom-up, collaborative approach where standards and procedures are approved according to their applicability and contextual fit. To help provide guidelines on facility standards, rules, protocols, and mechanisms, a national-level committee under the MoHFW with representation from all major stakeholders and voting rights would be supported by working groups (that is, standards, technology, and policy) with the involvement of users and experts. Additionally, to support the daily operations of the site, a full-time, committed team of professionals from the healthcare and technology domains is needed.

The 2016 publication of the first-ever National Mental Health Survey (henceforth NMHS) (**NIMHANS 2016a, 2016b, 2016c**) brought mental health in India to a previously unheard-of level of public attention. As to the report, there is an 83% treatment gap overall for mental health problems (NIMHANS 2016a), and approximately 1 in 40 people and 1 in 20 people, respectively, suffer from previous and current depression. (**NIMHANS 2016b: 16**)

Declaring that "90% of Indians in need simply don't receive mental health care," the President of India warned against a "possible mental health epidemic" and discussed the need to make mental health treatment a "national mission" in 2017, citing data from the NMHS (**Press Information Bureau 2017**).

According to the Press Information Bureau (**2017**), 11,54,686 qualified allopathic doctors were registered in India in 2018 under the state and national medical councils (**GoI 2019a**). This information was provided during the speech given by the Hon. President of India Shri Ram Nath Kovind on the occasion of the 21st World Congress of Mental Health. This compares to a doctor-to-population ratio of approximately 0.89 per 1,000 people, which is less than the 1:1000 recommended by the World Health Organization (WHO). When AYUSH

physicians and dental surgeons are included, the ratio approaches the “finishing line.” 10,926 people were served by government allopathic doctors on average (GOI 2019a). More than 80% of all specialists—surgeons, obstetricians’ gynaecologists, physicians, and paediatricians—are in insufficient supply at CHCs (community health centres), and more than 74% of PHCs lack a female physician. Just 4% of PHCs have four or more physicians, and only 9% of CHCs have a combination of all four specialities (GoI 2017–18).

Impact of information asymmetries on healthcare

Healthcare information asymmetries can have a big influence on patients, providers, the healthcare system as a whole, and overall health outcome. Among these effects are the following: Variations in healthcare service quality might result from information asymmetry. There could be differences in the quality of care because patients don’t know enough about the various providers or therapies available to them. Individuals who have restricted information access may find it difficult to decide on the best course of treatment. This can make inequities in access to care worse, especially for vulnerable or marginalized communities where getting information and resources may already be more difficult.

Asymmetry in the availability of information may lead to either excessive or insufficient use of healthcare services. Due to ignorance or insufficient information, patients may undergo needless tests or treatments, which could have negative effects and raise healthcare expenses. On the other hand, if patients don’t know about the value of preventative care or the range of treatment alternatives, they might decide not to receive the necessary care. Due to information asymmetries on healthcare expenses and insurance coverage, patients may experience financial hardships. Patients may find it difficult to plan for and manage out-of-pocket costs in the absence of clear price information or awareness of insurance benefits, which could put them in financial difficulty and result in debt from medical bills.

Asymmetric information can lead to an ineffective distribution of healthcare resources. Incomplete information regarding patients’ medical histories, preferences, or treatment results may cause providers to allocate resources and provide care that is not optimal. By aggravating already-existing differences in healthcare outcomes, quality, and access, information gaps can be a contributing factor to health disparities. Information asymmetries may disproportionately impact vulnerable groups, including low-income people, members of racial or ethnic minorities, and people with low health literacy. The patient-provider relationship’s trust can be damaged by information asymmetry. If patients believe that their healthcare practitioners are hiding information from them or making decisions without fully consulting them, they may feel powerless or suspicious. Shared decision-making and effective communication can help reduce these trust-related problems.

To address this, the government finances and provides healthcare in many nations. Health technology organizations also exist to increase efficiency. The principal-agent dilemma that results from informational asymmetries still exists, though, and one example is the absence of cost consciousness among clinicians. The following analytical model assumes that the

doctor has private information and knowledge about medical assistance that leads to moral hazard and adverse selection issues in their relationship, but it does not distinguish between asymmetric information and asymmetric competence impacting the patient-doctor relationship. In other words, the patient only has probabilistic knowledge about the doctor's efficiency and is unable to track the doctor's level of effort.

First, the important variables and objective functions of the doctor and the patient are given within the framework of one-sided knowledge asymmetry. In other words, it is considered that the doctor is the one with access to the patient's personal information.

Health sector status in India

Non-communicable diseases (NCDs) accounted for 65% of all fatalities in India in 2019 (IHME 2019). As indicated by DALYs¹, the proportion of non-communicable diseases (NCDs) to the overall illness burden rose from 31% in 1990 to 55% in 2016, while the proportion of communicable and other diseases decreased in tandem. According to the WHO Factsheet on NCD 2021, the most common NCDs worldwide are cancer, chronic respiratory illnesses, diabetes, and cardiovascular diseases (CVD). Well-known NCDs like cirrhosis, diabetes, ischemic heart disease, stroke, and chronic obstructive pulmonary disease (COPD) all showed significant growth in India between 2009 and 2019.

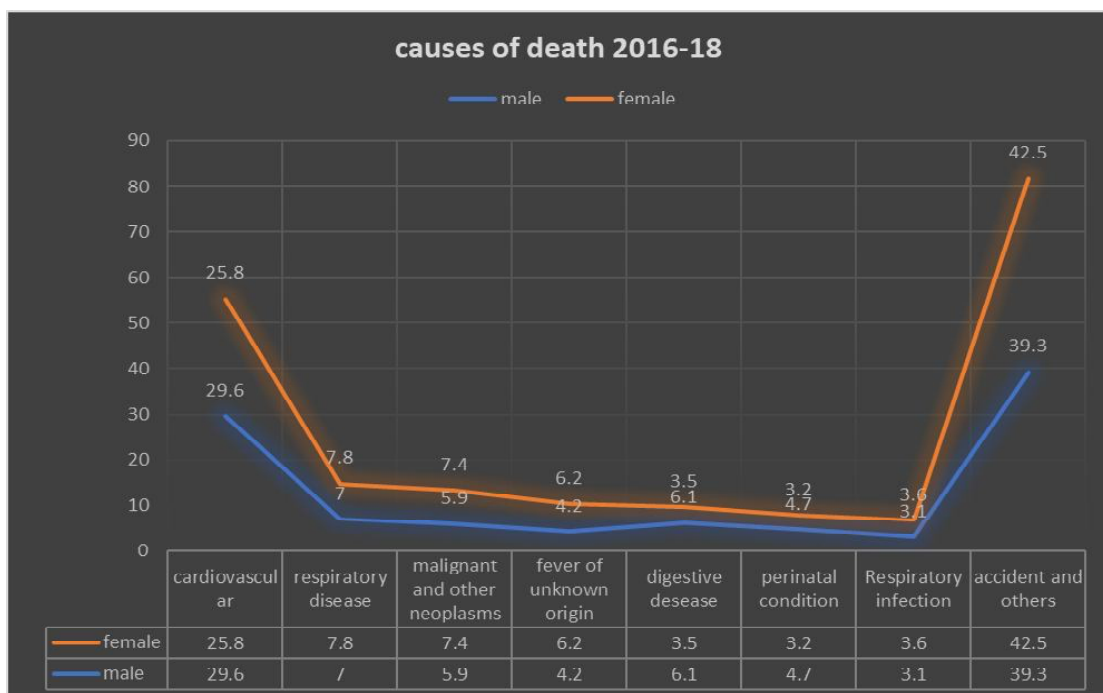
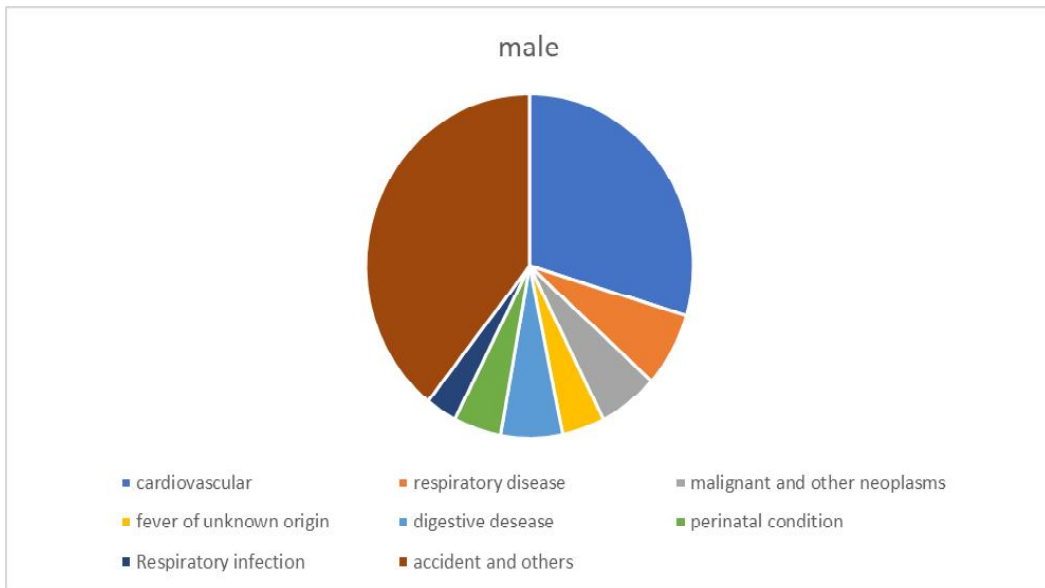
The most troubling trend is the rise in diabetes-related mortality in the nation, accounting for 54% of all deaths. Conversely, infectious diseases exhibit a decline in the same time frame.

Between 2009 and 2019, there was a notable increase in the illness burden due to metabolic risks associated with non-communicable diseases (NCDs), such as high blood pressure, high fasting plasma glucose, high body mass index (BMI), and behavioural hazards like alcohol and tobacco use. The National Medical Devices Policy, 2023 was introduced by the union government to enhance the proficiency, aptitude, and ability of the domestic medical device manufacturing sector.

TOP TEN CAUSE OF DEATH

Causes of Death	Male	Female
cardiovascular	29.6	25.8
respiratory disease	7	7.8
malignant and other neoplasms	5.9	7.4
fever of unknown origin	4.2	6.2
digestive disease	6.1	3.5
perinatal condition	4.7	3.2
Respiratory infection	3.1	3.6
accident and others	39.3	42.5

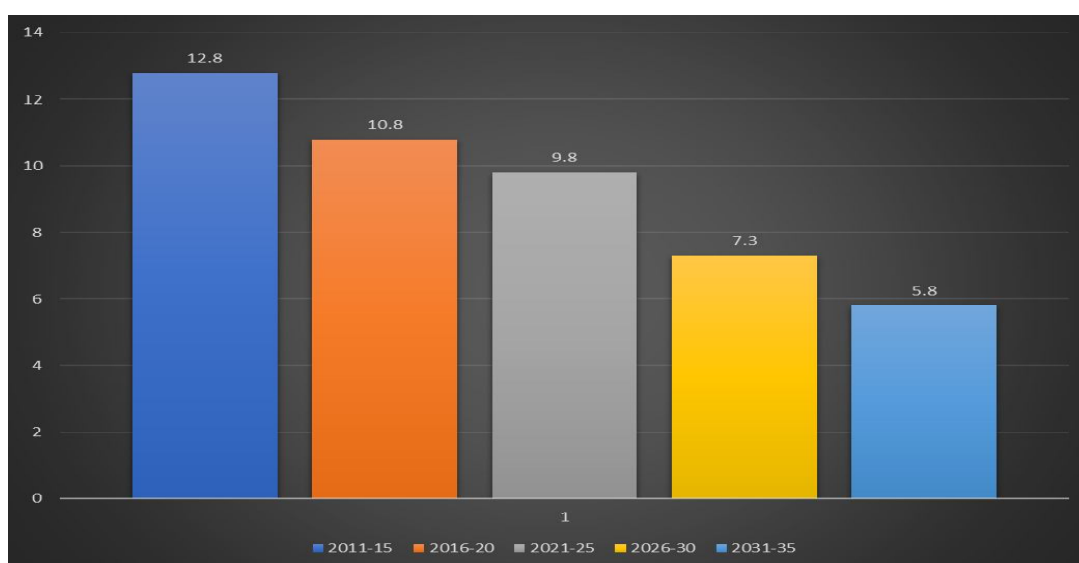
Source- National Health Profile 2022



EXPECTED POPULATION GROWTH

YEAR	EXPECTED POPULATION GROWTH
2011-15	12.8
2016-20	10.8
2021-25	9.8
2026-30	7.3
2031-35	5.8

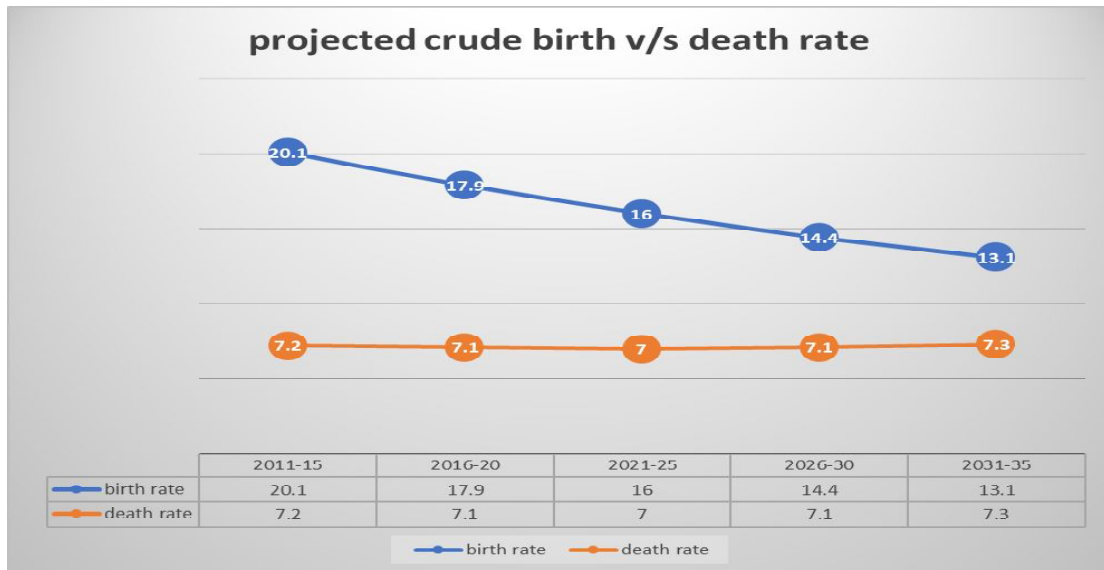
Source- National Health Profile 2022



YEAR-WISE PROJECTED CRUDE BIRTH RATE V/S CRUDE DEATH RATE

YEAR	BIRTH RATE	DEATH RATE
2011-15	20.1	7.2
2016-20	17.9	7.1
2021-25	16	7
2026-30	14.4	7.1
2031-35	13.1	7.3

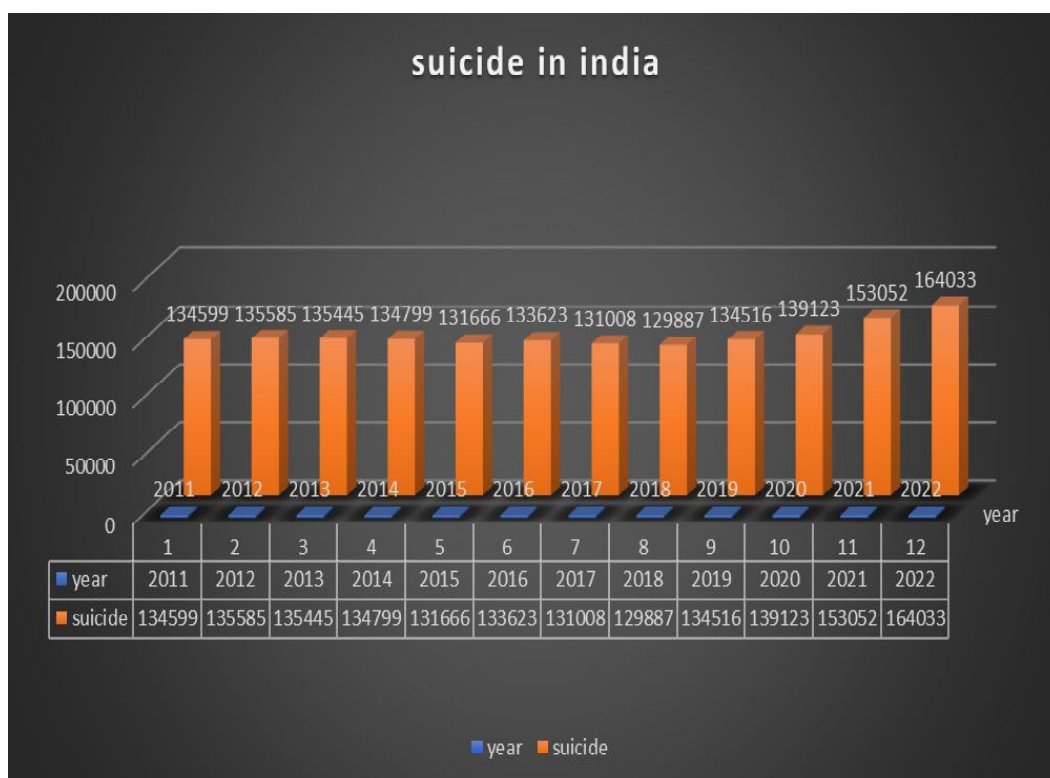
Source – National Health Profile 2022



YEAR-WISE SUICIDE RATE IN INDIA

YEAR	SUICIDE
2011	134599
2012	135585
2013	135445
2014	134799
2015	131666
2016	133623
2017	131008
2018	129887
2019	134516
2020	139123
2021	153052
2022	164033

Source – National Health Profile 2022



Conclusion

To improve the information flow and transparency between patients, healthcare providers, and other stakeholders, removing information asymmetries from the health sector entails several measures. Here are a few methods: Patients are more equipped to make decisions when they are informed about their rights, treatment alternatives, and medical conditions. Workshops, internet resources, and patient education materials can help achieve this.

To ensure that patients understand their diagnosis, treatment plan, potential hazards, and available options, healthcare providers should engage in open and transparent communication with their patients. This entails speaking clearly and staying away from medical jargon. Patients can actively engage in their healthcare decisions when they have access to their test findings, treatment plans, and medical records. Patient portals and electronic health records (EHRs) make this access easier.

Regulations and standards that encourage transparency and accountability in healthcare practices can help to lessen information asymmetry. regulations for conflicts of interest, price transparency, and medical result disclosure are a few examples of this.

Investing in projects to enhance health literacy in the general public can enable people to better navigate the healthcare system, ask educated questions, and advocate for themselves. To promote open and honest interactions with patients, healthcare personnel should undergo training in shared decision-making, patient-centred care, and effective communication techniques. Patients can make better decisions if they have access to unbiased information about medical research, treatment options, and healthcare providers from independent organizations and platforms.

Patients can obtain healthcare services more easily and the information flow between them and doctors can be enhanced by utilizing technology to support remote consultations and monitoring. Interest alignment and the reduction of information asymmetry can be achieved through the implementation of payment structures and incentives that incentivize healthcare providers to offer high-quality care and transparently disclose outcomes.

Investigating and Creating: Putting money into research to create new tools and processes for sharing information in the healthcare industry can result in creative ways to deal with information asymmetry.

By putting these tactics into practice, health sector stakeholders can strive to lessen information asymmetry and advance an open, patient-centred healthcare system.

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An Analysis of Pradhan Mantri Jan Aushidhi Yojana

Prashant Kumar Vikram & Dr. Aditi Pandey

Abstract

The concept of health is difficult to explain yet easy to understand. Health is not absence of disease, but joyness, willingness to live and perform. It is probably the most important factor along with education for economic and social development. No vibrant society can be created without a healthy labor force. WHO defines health as a 'state of complete physical, mental and social being'. One must remember that health is a dynamic condition and is affected by geographical, social, external as well as personal factors and therefore, healthcare is recognized as a Public Good. The pandemic Covid has demonstrated that health care cannot be left in the hands of private sector. It needs to be regulated as well as supported by the government sector specifically in a country like India which is facing multiple challenges of economic growth, demographic transition, technological advancement as well as social, political and cultural. Healthcare industry of India is witnessing a dramatic change in new millennium. In fact, healthcare industry is not limited to diseases and medicines or hospital to surgical instruments, but also includes a host of other activities such as medical insurance, training, nursing, counselling and prevention etc. The list is unending. The private sector with commercial attitude mostly caters to upper middle and rich classes while almost 70% of the population is of poor and lower middle class which does not have enough funds to spend on medicines. It is estimated that household out-of-pocket expenditure (OOPE) on health and medicines in India is almost 66%. India's healthcare industry has crossed 350 billion \$ mark in 2022, but regional and income disparities and large population with low income have not gained from this growth. That is why the government has to step in to bring health equity to improve the health status of Indian diaspora especially for marginalized groups. So, the most important concern for India is affordable, appropriate, comprehensive, health care services to be provided for its population. In India, health sector is in concurrent list in which both Centre and the state need to cooperate for better health care management. The role of state is much more important as it is responsible for last mile delivery.

Keywords: Health, Generic Medicines, OOPE, JAK.

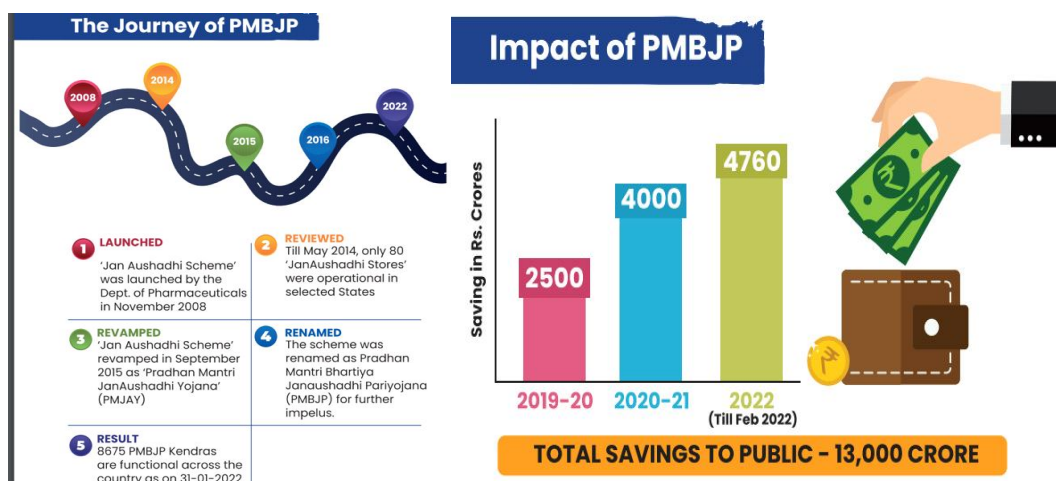
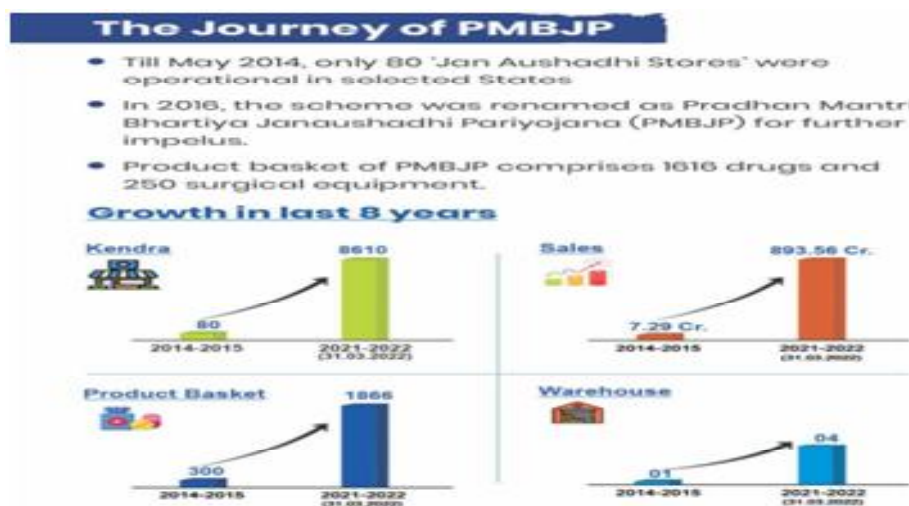
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Introduction

In India, there are variety of programs, schemes and procedures included in healthcare system which are provided by both public and private sector. Allopathy and AAYUSH are two broad categories. In Allopathy, there is a dominant public sector providing all kind of health services, which include defense hospitals, railway hospitals and other health centers and medical colleges along with primary healthcare centers which are expected to provide health and medical services at negligible cost. While big public sector hospitals and medical colleges including AIIMS provide all facilities to all areas and groups. Private sector hospitals are mostly situated in urban areas. In last few years they have extended their services in semi urban areas. An unending list of government programs is continuing to provide health services for all kind of communicable, non-communicable disease, plus lifestyle diseases. Some of the popular programs run by government can be classified into following categories. (a) Vector borne diseases like dengue, malaria, kalazor, etc., (b) Single Specific disease programs for Tuberculosis, leprosg, AIDS etc., (c) lifestyle, hereditary and other diseases like Diabetes, Blood Pressure, heart attacks, (d) Reproductive, Maternal, Child health programs, like Janani Suraksha, safe birth, immunization. Besides these National Health Programs including NRHM, Ayushmann Bharat, etc . Most of these programmes are run with cooperation of the State and Central government. Some state government have their own specific program for health care.

One Important program run by government of India since 2008, especially for marginalized class is Jan Aushadhi Kendra. The programme has been revamped and renamed as Pradhan Mantri Jan Aushadhi Pariyojana with a Moto of providing quality medicine at affordable price for all, through exclusive outlets of Pradhan Mantri Jan Aushadhi Kendra. The main objective is to reduce Out-of-Pocket expenditure on medicine by supplying critical and common non-patented drugs at lower cost. The list of medicines to be provided by Jan Aushadhi. Kendra include (a) analgesic and antipyretic (51 Drugs) (b) Antiallergic drugs (17) (c) anti-cancer drugs (16) (d) Anti-infective drugs (108), (e) Diuretic drug (5) (f) nervous system drug (54) (g) cardio Vascular System drugs (82) and others related eyes,ear, nose, throat, Gastro, intestinal ,skin, respiratory System . Jan Aushadhi Kendra also help in providing cheap and quality medicines for diseases cause of modern life style like diabetes, Blood pressure , anxiety and depression. In all more than 700 popular medicines were included in 2015. On January 13, 2023 the revised list not includes 2012 medicines by their generic names. It is supposed that Jan Aushadhi Kendra would cater to medicines of several use to public at large. But the question is that whether this ambitious scheme has been able to reduce OOPS? If it has not been able to achieve the expected success then what are the reasons and what could be done? If the programme is doing good really then how this could be improved?



Review of Literature

The review of literature in this area is limited as this kind of specific schemes have not been devised at many places. Whatever literature is available is mostly based on primary data but some secondary data analysis have been done. For the purpose of this study the researcher has classified in two areas. One which is regarding Health sector and medicines and second is specific to Jan Aushadhi Kendra.

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Objectives

Jan Aushadhi Kendra project is formulated to provide cheaper medicines to all those who do not have enough funds to avail health and medical facilities from private sector. In private (also in many public hospitals) hospitals doctor prescribes latest patented medicines. Most medicines who complete their patent period are produced by many producers in the name of generic drugs. The objective is

(1) to find out as to what is the time duration when a patent in medicine expires and it is added in the list of generic medicines to be sold through Jan Aushadhi Kendra.

(2) The second objective is to find out as to how many types of generic medicines are added in the kit of Jan Aushadhi Kendra. The larger the number of drugs to be sold in Jan Aushadhi Kendra, the larger would be the benefit of general public so another objective is to find out year-on-year growth of business of Jan Aushadhi Kendra.

(3) The health minister announced in Lok Sabha that this year (2023), the revenue of Jan Aushadhi Kendra is likely to be 1100 crores. It will surpass the target of 1000 crore very easily. The statistics seems very impressive as the revenue was less than 100 crore in 2015. But is this growth really helping to reduce middle-class OOPS on medicines? This study will analyse as to how much benefit is being received by public in general, and what gains have been achieved by the marginalized section of the society? Next objective is to analyse the method of implementation of Jan Aushadhi Kendra. It is being observed that JAK are mostly established in government hospitals and in urban areas. The question is if it was to support the consumers of marginalized section then why JAK are not being established in rural areas. Moreover, in a Metro, there are more than thousand medical shops how would only four or five Jan Aushadhi Kendra help a large population of marginalized class.

Hypotheses

1. H₀ = The growth of Jan Aushadhi Kendra in terms of penetration has been not significant since its inception.

H₁: The growth of Jan Aushadhi Kendra has been significant in terms of penetration since its inception.

2. H₀ = The growth of Jan Aushadhi Kendra in terms of business has been not significant since its inception.

H1: The growth of Jan Aushadhi Kendra has been significant in terms of business since its inception.

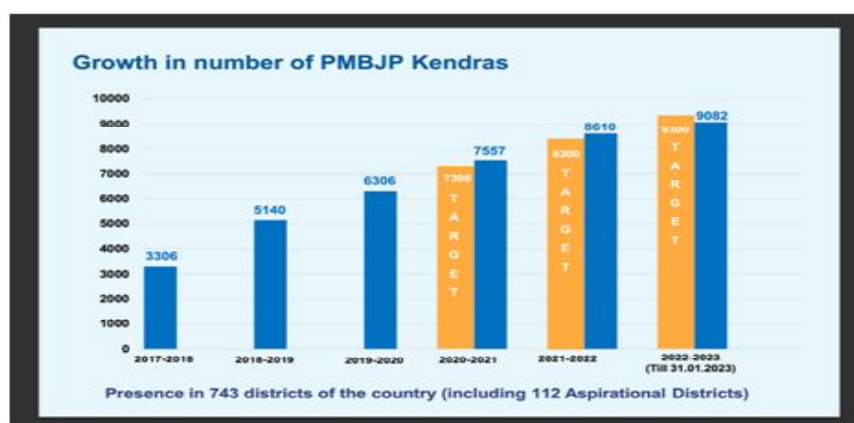
3. Ho= there is no significant difference in price of medicines sold through Jan Aushadhi Kendra and its market price.

H1= There is significant difference in prices of medicines sold through Jan Aushadhi Kendra and its market price.

Table 1: (Year wise Progress of Total Number of PMBJP Kendras)

Financial Years	No of PMBJP Kendra
2014-15	86
2015-16	240
2016-17	960
2017-18	3306
2018-19	5140
2019-20	6306
2020-21	7557
2021-22	8610
2022-23	9082
2023-24	10006

Source: Annual Report PMBJP 2022-23, Ministry of Chemicals and Fertilisers



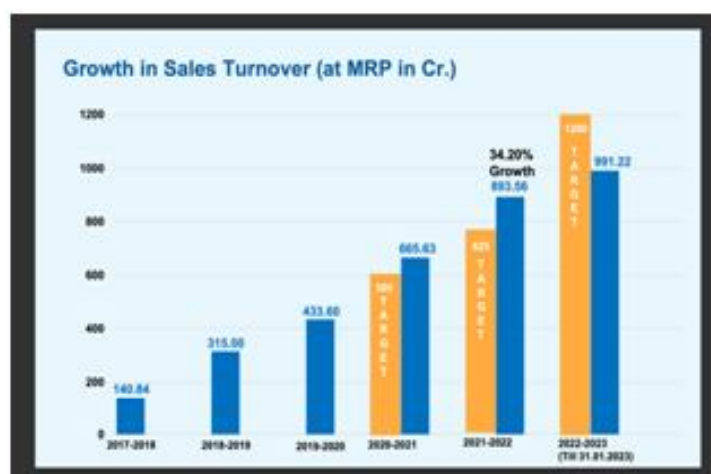
SUMMARY OUTPUT					
<i>Regression Statistics</i>					
Multiple R	0.987439				
R Square	0.975036				
Adjusted R Square	0.971469				
Standard Error	600.8208				
Observations	9				
<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	98693505	98693505	273.4	7.22E-07
Residual	7	2526900	360985.7		
Total	8	1.01E+08			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-2583799	156605.2	-16.4988	7.33E-07	
2014	1282.533	77.56564	16.53481	7.22E-07	

Table 1 shows the number of Jan Aushadhi Kendra since 2014-15. By applying the regression it is found that p value is less than 0.05, null hypothesis is rejected. The value of R square is quite robust. Null hypothesis is rejected and alternate hypothesis is selected. It's true that Jan Aushadhi Kendra have been established in 743 out of total 797 districts in India. It's also true that all aspirational districts have one or more Jan Aushadhi Kendra. But the penetration is not mere presence. While in one district one finds that 65 PHC (on an average) more than 1300 chemist shops, more that hundred hospitals opening of one or two, Jan Aushadhi Kendra is not sufficient. If 10,000 centres are opened in 747 district, the ratio is 10 per district which can hardly supply medicines to a large population of a district. Naturally the number should grow at least 10 times if last mile delivery is to be ensured.

Table 2: (Year wise Progress of Sales at MRP Value in PMBJP Kendras)

Financial Years	Sales at MRP Value (Crore Rs)
2014-15	7.29
2015-16	12.16
2016-17	32.66
2017-18	140.84
2018-19	315.7
2019-20	433.6
2020-21	473.7
2021-22	652.67
2022-23	1235.95
2023-24	935.25

Source: Annual Report PMBJP 2022-23, Ministry of Chemicals and Fertilisers



SUMMARY OUTPUT					
<i>Regression Statistics</i>					
Multiple R	0.935447				
R Square	0.875062				
Adjusted R Square	0.857214				
Standard Error	156.4222				
Observations	9				
<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1199606	1199606	49.02777	0.000211
Residual	7	171275.3	24467.9		
Total	8	1370882			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-285013	40771.75	-6.99044	0.000213	
2014	141.3982	20.19402	7.001984	0.000211	

Table 2 shows the sales at MRP of Jan Aushidhi kendra since 2014-15. By applying the regression it is found that p value is less than 0.05, null hypothesis is rejected. Hence, it can be concluded that ***The growth of Jan Aushadhi Kendra has been significant in terms of business since its inception.*** Most of the times, the P value and R square cannot be taken as presenting the complete picture. The growth from 7.29cr to 1000 cr seems gigantic but the fact is that Jan Aushadhi Kendra do not distribute even 1% of total medicines. The reasons are many. The growth is only because of very low base.

Table 3 (Price Benefits of Jan Aushadhi Store with Comparison to Market Price)

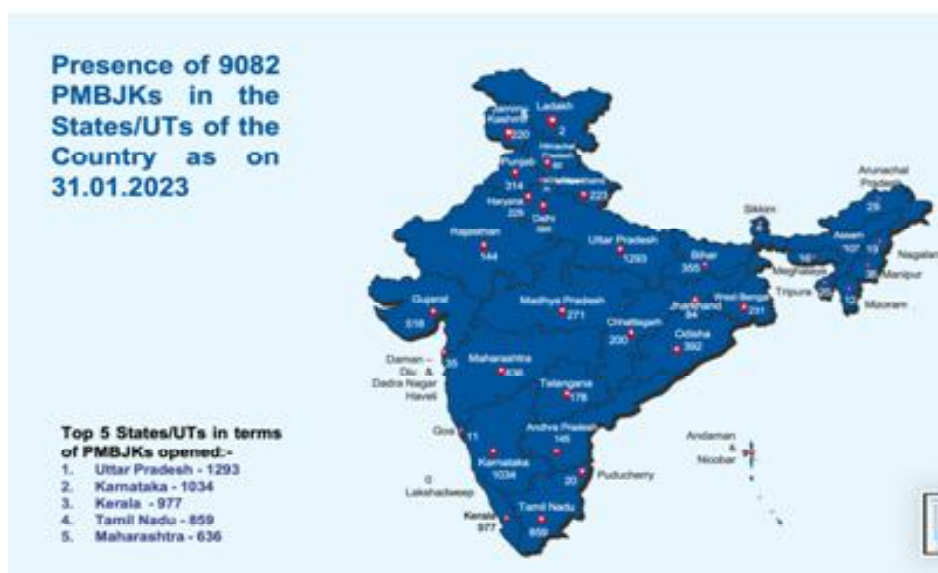
Medicine	Jan Aushidhi Price (Rupees)	Market Price (Rupees)
Atorvastatin 20 mg	12.10	147
Glimepiride 2 mg	5.5	62
Diclofenac Gastro 50 mg	5.5	49
Pantoprezole Gastro 40 mg	12.10	90
Montelukast sodium 10 mg	20	147
Amoxycillian 500 mg	56	122
Paracetamol 650 mg	15	32

Source: Pharmaceuticals and Medical Devices Bureau of India

t-Test: Two-Sample Assuming Equal Variances		
	<i>Market Price</i>	<i>JAK Price</i>
Mean	83.66666667	19.01667
Variance	1972.266667	359.6217
Observations	6	6
Pooled Variance	1165.944167	
Hypothesized Mean Difference	0	
df	10	
t Stat	3.279368945	
P(T<=t) one-tail	0.004148897	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.008297793	
t Critical two-tail	2.228138852	

Table 3 shows the price of medicines at Jan Aushadhi Kendra and Market price. By applying the t test it is found that p value is less than 0.05, null hypothesis is rejected. Hence, it can be concluded that *There is significant difference in prices of medicines sold through Jan Aushadhi Kendra and market price.* In this hypothesis it's quite true that medicines provided by Jan Aushadhi Kendra are much cheaper in comparison to that sold by large pharmaceutical companies. This should help reduce the out of pocket expenditure of the marginal class and patients also need regular medicines. But the general perception is that qualified doctors do not prescribe these medicines and patients generally have great faith in doctors. So the government must come out with certain circular at least in public funded hospitals that the service medicines be prescribed. Then their same would automatically rise.





Source: Press Information Bureau, Ministry of Information and Broadcasting, Government of India

Conclusion

India's healthcare system is fastest growing sector in terms of turnover (14% CAGR between 2014 to 2023), diversity, employment as well as infrastructure. India's public expenditure is 2.1% of GDP and above since Covid. The number of Doctors registered (under the IMC Act) at the end of 2023 were 1.69 millions. Indian medical researches have also touched new heights. Two vaccines produced in India during Covid (Covaxine and Covishield) has been a distinguished gift from India. Indian surgical and other instruments are also being exported all over the world. Beyond allopathy Indian Ayush registered are also 8 million serving the Indian people. India also has more than 3 million male and female nurse. Pharmaceutical companies, distributors to retail medical vendors. The healthcare sector employees more than 10 million people. But many researches found that Indian health care system is urban/ rich biased as most of the public/private hospitals are situated in urban areas up to III tier Cities. The semiurban/semi rural areas are being served by primary health centres created by public sector and the facilities of surgery and diagnostic are very limited. Moreover, the medicines especially the generic medicines are not available. The government of India has started a series of healthcare facilities programs like Ayushman.

The most serious program to reduce the out of pocket expenditure that is Jan Aushadhi Kendra despite its expansion to 786 district and 10713 Kendra (30 December 2023) has not been able to achieve the expected success. There is no doubt that growth of centres and number of medicines (more than 2000) has been significant as evident from hypothesis one

and two but due to very low base and awareness of this program it needs a significant boost. Various empirical surveys and even in government reports it is found that Jan Aushadhi Kendra could not succeed because of poor logistics (The supply of popular generic medicine to those scheme is neither timely nor sufficient). The greatest reason of not attaining success of Jan Aushadhi Kendra is the attitude of Doctors and hospitals. The patients are told to purchase medicine from designated centres and almost all private hospitals have their own medical centres. Even the doctor appointed in PHC or other government institutions do not prefer to write the name of generic medicine or medicine available in Jan Aushadhi Kendra. The only way to success is greater awareness in customers. The role of the government is also very important. If one looks at area wise penetration, what one finds is that states with better health care facilities have greater role centres example Kerala has nearly 1000 centres while much bigger state in area and population Andhra Pradesh has only 145 centres. Jharkhand has only 84 centres. Rajasthan has only 144 centres. The central government with partnership with the state government must make more serious efforts to make this great scheme achieves great success.

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A Comprehensive Analysis of the Impact Of Integrated Child Development Scheme On Child Health And Nutrition In Uttarpradesh

Shradha Pal & Garima Maurya

Abstract - Children are the future of a nation, and its growth and development depend on them. When children are healthy, educated, and skilled, they propel the economy to new heights. India as well as Uttarpradesh benefits from a demographic dividend, and prioritizing the health of children is paramount to harnessing its full potential. By prioritizing child health, we lay the foundation for a prosperous and sustainable future for India and UttarPradesh. Despite India's rapid economic expansion, it still grapples with child malnutrition. With a Global Hunger Index rank of 111 out of 125 countries and alarming statistics from the National Family Health Survey 2019-21, including 35.5% stunted, 19.3% wasted, and 7.7% severely wasted children under five, it's evident that malnutrition remains a pressing issue. This is similar for the state of Uttar Pradesh where the number of stunted children is more ie; 39.7% (NFHS -5). Launched in 1975, ICDS scheme plays a crucial role in tackling malnutrition, promoting early learning, and enhancing the overall well-being of mothers and children, contributing significantly to India's public health landscape. The scheme operates through a network of Anganwadi center's (AWC) across the country. This study examines the ICDS scheme, its effect particularly on child health, immunization coverage, early childhood development, and well - being of children in Uttar Pradesh . It evaluates the equitable distribution of ICDS services in Uttar Pradesh . Identify emerging challenges and recommend adaptive measures to enhance ICDS's role in Uttar Pradesh. The study is based on secondary data including government reports, especially NFHS reports, to assess the impact of ICDS scheme on child health and nutrition in Uttar Pradesh.

Keywords - ICDS , Anganwadi Centre Nutrition and Health of Child , NFHS

Introduction -

Adequate nutrition is vital for women and children. Nutrition is crucial for optimal child development throughout the first 1000 days of life and beyond. Undernutrition has profound

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effects on health throughout the life and is inevitably linked with cognitive and social development, especially in early childhood (Victoria et al.,2008). Maternal and Child Nutrition series 2 by Victoria et al.,2008 provides strong evidence that adequate nutrition in- utero and in the first 2 years of life is essential for formation of human capital. Women 's nutritional well – being ,particularly during reproductive years ,is the single most important criterion influencing their pregnancy outcome. Malnutrition among women both prior to and during pregnancy may lead to high incidence of low birth weight ,still birth as well as high maternal mortality rates and that during infancy /childhood hampers the child's growth and development. Studies indicate that a large percentage of our Indian women are either underweight or overweight. Both these conditions pose risks during pregnancy and affect the long term health of the mother and the infant. Anemia among pregnant women is an established cause of higher maternal mortality during Childbirth. Adequate nutrition is prime for human development. The Nutritional health status of women can make or mar the entire generation. Undernourished women of child bearing ages usually end up being undernourished mothers who bear undernourished children with poor physical and mental development setting -in the inter generational cycle of malnutrition and poor health and this needs to be broken at all costs. Healthy women and children are pillars of a flourishing society. Evidence suggests that investing in the well-being of women and children as in effective strategy for improved outcomes for children. The human capital is the wealth of the nation and is dependent on the health, nutrition, skills and knowledge of people. Increased investment in human capital brings about economic growth. Evidence suggests that every additional dollar invested in the quality of early childhood programmes yields a return of between U.S \$6 and U.S \$ 17 early stimulation in infants is known to increase their future earnings by 25%. India's young and vast working-age population presents a promising opportunity, but investment in early childhood development is crucial for economic productivity. Less than 2 percent of Indian children have adequate nutrition, healthcare, and early learning opportunities. Improving these factors can significantly increase adult wages and GDP. Although progress has been made, malnutrition remains high, especially in poor states like Bihar, Jharkhand ,Chhattisgarh ,Madhya Pradesh , Uttar Pradesh. The absence of these essential requirements can not only have an irreversible impact on the child's development, but also undermine the country's future economic productivity. Improving nutrition in the early years can raise adult wages by 5-50 percent, and reducing stunting can increase GDP by 4-11 percent. Even though the magnitude of India's nutrition challenge is enormous, the country has made good progress over the past decade in tackling this endemic issue. The recently launched Global Nutrition Report 2016 - the first-ever comprehensive narrative on global and country-level nutrition— classifies India among the countries closest to moving on track for tackling stunting under age five. Even so, the challenge remains high, especially in India's poorest states. India has therefore made concerted efforts to expand and strengthen its national flagship programs on nutrition, early learning, and health through the Integrated Child Development Services Scheme (ICDS) . The ICDS program, delivered through a network of 1.3 million village nutrition centers (Anganwadi center's) and managed by a

community worker, covers an estimated 102 million children up to 6 years of age, as well as pregnant and lactating women. However, many of these centres focus on pre-school age children, thus missing the crucial first 1000 day window. The ICDS Scheme was launched on 2nd October 1975, by the ministry of Women and Child Development. It encompasses all children in the age group of 0-6 years. It also caters to the needs of pregnant women and lactating mothers and adolescent girls. It includes a package of integrated services comprising Supplementary Nutrition, Immunization, Health Check-up, Referral Services, Nutrition and Health education and Non-formal Education and these services are provided in such a manner so that it meets the multi-dimensional and interrelated needs of children and mother. This programme is a sign of the country's commitment to its children, pregnant women and lactating mothers and adolescent girls which is driven towards breaking the vicious cycle of malnutrition, morbidity and mortality. The ICDS operates through Anganwadi Centers managed by Anganwadi workers (AWW) and Anganwadi Helper (AWH). There will be 1

Anganwadi center (AWC) for a population of 400-800; 2 AWCs for 800-1600; 3 AWCs for 1600-2400. Norms for one Mini AWC will be 150-400. Anganwadi unit is the heart of ICDS scheme. Uttar Pradesh at this moment houses 1,89,000 Anganwadi centers encompassing both the rural and urban areas which are known for providing essential childcare services related to nutrition, education and health to children under six and pregnant/lactating mothers.

Objective of ICDS Scheme–

- ❖ To improve the nutritional and health status of children in the age-group 0-6 years
- ❖ To lay the foundation for proper psychological, physical and social development of the child
- ❖ To reduce the incidence of mortality, morbidity, malnutrition and school dropout
- ❖ To achieve effective coordination of policy and implementation amongst the various departments to promote child development
- ❖ To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

Beneficiaries –

- ❖ Children in the age group of 0-6 years
- ❖ Pregnant women and
- ❖ Lactating mothers
- ❖ Adolescent Girls (14-18 years) in Aspirational Districts and North Eastern States.

This Scheme is open to all eligible beneficiaries on demand, irrespective of caste, religion and income criteria.

Uttar Pradesh :- Uttar Pradesh has been one of the most densely populated states in India. The state has consistently topped the rankings in terms of the population over time. According to the 2011 census, Uttar Pradesh had a population of about 190 million people. The male population is 104,480,510 and the female population is 95,331,831 and the child population among 0-6 age groups is 30,791,331 . Effective implementation of the ICDS scheme is very necessary for states like Uttar Pradesh whose population significantly contributes to the economy. As per the Sample Registration System (SRS) Bulletin of Registrar General of India (RGI), the Infant Mortality Rate (IMR) has reduced from 37 per 1000 live births in 2015 to 30 per 1,000 live births in 2019 at National Level. Uttar Pradesh ranks 34 out of 36 State and UTs where the infant mortality is 43 per 1000 live births in 2019 which is higher than national level. As per the Sample Registration System (SRS) Report of Registrar General of India (RGI), the Maternal Mortality Rate (MMR) has reduced from 8.1 in 2015-17 to 7.3 in 2016-18 at National Level. In Uttarpradesh the Maternal Mortality Rate has reduced from 20.1 in 2015-17 to 17.8 in 2016-18 which is still higher from national level . UP has a major advantage of demographic dividend which will be a key driver for future growth . To harness this potential it is very important to make our population educated and healthy . ICDS is one of the India 's flagship government programmes targeted towards providing nutrition to eradicate malnutrition among children and women running in the state. Uttar Pradesh at this moment houses 1,89,000 Anganwadi centers encompassing both the rural and urban areas which are known for providing essential childcare services related to nutrition, education and health to children under six and pregnant/lactating mothers. Since undernutrition is a major public health problem leading to adverse health consequences and also affecting the economy . So the effective implementation of the ICDS scheme is the key factor for the development and growth of the economy.

Review of Literature:-

Mohd Younis Mir , Anshu Sharma[Evaluation of Integrated Child development Scheme in India An Analytical Study] 2023: analyzed that a program that hasn't yet been successful in lowering child malnutrition, serves less than one third of the children. Significant operational difficulties, like a lack of monitoring, also confront ICDS.

Dr Naziya Bano [ICDS In India : It's Activities ,Present Status and Future Strategy to Reduce Malnutrition] 2023 : suggest that it is crucial for greater harmony among various entities involved in mother and child development programs to prevent overlap of efforts and maximize their impact . Collaborative initiatives like fixed - day immunization sessions and observance of special interaction days go a long way in enhancing communication among stakeholders and ensuring optimal resource utilization. AWW, the key player in ICDS ,must have more time for community motivational visits and interaction at AWC . This is possible if less time is spent in non - productive work.

Abhishek kumar, Ruby Alam usha [ICDS System Strengthening Program: Impact on Nutrition and Health counseling Coverage among Pregnant

Women in Palghar ,India] 2022 : Study finds that nutrition and health counseling have significant impact on maternal and child health outcomes.

And suggested that new methods for counseling and communication to reach out the beneficiaries should be developed to overcome limitations related to mobility and in - person counseling.

Suni Paul ,Saurav Basu [Utilization of Nutritional Supplementation Services and Their Predictors in Pregnant Women Living in an Urban Resettlement

Colony in New Delhi ,India] 2022: analyzed that ICDS scheme by the government of India provides supplementary nutrition services to all pregnant and lactating women but it's utilization is suboptimal due to inefficient distribution through the health system and beneficiaries concern regarding it's usefulness. The ICDS scheme needs to strengthen information ,education ,and communication strategies and interventions to improve it's acceptability and utilization by the target population to realize sustainable goals.

Priyanka Dixit, Amrita Gupta [Impact Evaluation of Integrated Child Development Services in Rural India] 2018 : study found among the rural women who received nutrition and health education specifically from the ICDS had 12.3% higher institutional delivery as compared to those who did not receive . However no positive impact was observed on children's nutritional status . Thus for improving the scenario of child nutrition it is suggested that emphasis be shifted from supplementary feeding to improving environmental hygiene and child feeding practices

Phuong Hong Nguyen ,Melissa Young [Maternal nutrition practices in Uttar Pradesh, India : Role of Key influential demand and supply factors] 2018 : suggest that strengthen existing program operations and increasing demand for services has the potential to result in large improvements in maternal nutrition practices from current baseline levels but may not be sufficient to meet World Health Organization recommended levels without creating enabling environment including improvements in education and income levels to support behavior change.

In a multivariate model of cross- sectional data collected on Kerala, Rajasthan and Uttar Pradesh between 2000 and 2002, Bredenkamp and **Akin (2004)** found that children who live in village with Anganwadi centers are not significantly less likely to be underweight or ill than other children. Health and nutrition education is a tool to enhance the level of awareness of individuals and thereby bring about a change in their behavior for the protection and promotion that increase in health and nutrition knowledge of the community is an effective strategy to prevent malnutrition and enhance child survival rate. In the context of ICDS health and nutrition education aims at effective communication of certain basic health and nutrition and nutrition messages with a view to enhancing mother's awareness of the child's need and her capacity to look after him within the family environment, Health and nutrition practices in a community are affected by level of education, income and types of occupation of the respondents.

To a large extent, successful delivery of the health and nutrition education component depends upon the attitudes and skills of ICDS functionaries.

Nayar, Kapil and Nandan (1999); A study was conducted to assess community contribution to the Integrated Child Development Services (ICDS) program, which promotes mother and child health in the Agra district, Uttar Pradesh, India. Three rural ICDS projects in the district were selected, out of which a total of 74 AWCs were chosen for the study. The AWWs were interviewed through a semi-structured questionnaire to assess the community's contribution during the previous 6 months. Results revealed that about 68% of AWWs had been able to receive assistance in bringing the children to the AWC. 53.3% had received free accommodation for AWC, and 42.6% had obtained assistance in implementation of health activities. Only 4% and 12% of the AWWs reported community assistance in the preparation and distribution of nutritional supplements, respectively. There had been no contribution received in terms of raw food for supplementary nutrition and fuel for cooking.

The study concludes that rural area free accommodation for the AWC and community assistance in bringing children to the AWC were the most common forms of community contribution to the ICDS program.

Kapil U. (2002) presents an excellent overview of the ICDS program stating the objectives, spread and targeted beneficiaries of ICDS. **Kapil and Pradhan (2000)** present the working, status and efficacy of the program. The authors point out the important role played by the AWW in the implementation of this scheme at the ground level. Research indicates that ICDS had led to (i) reduction in prevalence of severe grades of malnutrition and (ii) better utilization of services of national nutritional anemia prophylaxis program and the national program for prevention of nutritional blindness due to vitamin A deficiency by ICDS beneficiaries. The ICDS scheme is being modified continuously to strengthen the program.

Patnaik et. al. (1999) estimate "before-and-after" intervention effects on the beneficiary coverage (pregnant and lactating women and children less than two years of age) for utilization of supplementary nutrition and health services in the rural block of Amarwada in Madhya Pradesh. The study assessed the impact of these interventions on the coverage rates of the services. Study was conducted between May 97 and March 98. The routine monitoring reports of the ICDS and Health System of the state government were used as study tools. The study sample comprised of AWC beneficiaries in the project area. The total population of the block was 89,476. The results showed that participation in the supplementary nutrition program (SNP) increased two to three folds in all categories of the target population. Immunization and Vitamin A coverage levels for children also showed an increase of about 3 and 5-8 times from baseline status respectively in a year's time. Among pregnant women, Tetanus Toxoid (TT) and Iron and Folic Acid (IFA) utilization rates have shown two and five fold increases respectively.

Research Methodology :-

The purpose of this study is to understand how the ICDS scheme performs in Uttar Pradesh and how it improves the nutritional and health status of children and women in the state. For this purpose, we will evaluate government reports such as the Rapid Survey of Children report (2013-14), National Family Health Survey report, and Niti Aayog report on ICDS to analyze the impact of this scheme. Additionally, several research papers and international reports will be used to evaluate the effectiveness of the ICDS scheme. The findings aim to contribute valuable insights for policymakers, healthcare professionals, and researchers working towards improving maternal and child health initiatives in Uttar Pradesh. In Uttar Pradesh, where maternal and child health indicators have historically faced challenges, the ICDS has been instrumental in improving these outcomes. The scheme's focus on universal coverage ensures that its benefits reach all districts, making a tangible difference in the lives of vulnerable populations. As the program evolves under the new name of Anganwadi Services and aligns with initiatives like Saksham Anganwadi and Poshan 2.0, it continues to be a vital component of the state's efforts to enhance the health and development of its youngest citizens.

Discussion :-

I am using NFHS-4 and NFHS-5 data to track the impact of the ICDS scheme on mother and child health and nutrition. For this purpose, the following indicators have been chosen, as given in the table below :

Indicators	India (nfhs-4)	UP (nfhs -4)	India (nfhs-5)	UP (nfhs-5)
Mothers who had atleast 4 antenatal care visits	51.2%	26.4%	58.1%	42.2%
Children age 12 -23 months fully vaccinated based on information from either vaccinated card or mothers recall	62%	51.1%	76.4%	69.6%
Children under age 3 years breastfed within one hour of birth	41.6%	25.2%	41.8%	23.9%
Children under age 6 months exclusively breastfed with one hour of birth	54.9%	41.6%	63.7%	59.7%
Children under 5 years who are stunted	38.4%	46.3%	35.5%	39.7%
Children under 5 years who are wasted	21%	17.9%	19.3%	17.3%
Children under 5 years who are severely wasted	7.5%	6.0%	7.7%	7.3%
Children under 5 years who are underweight	35.8%	39.5%	32.1%	32.1%
Children under five years who are overweight	2.1%	1.5%	3.4%	3.1%
Children age 6 -59 months who are anemic	58.6%	63.2%	67.1%	66.4%

Mothers who had at least 4 antenatal care visits: Antenatal care visits are crucial for monitoring the health of both the mother and the unborn child. The increase in the percentage of mothers receiving at least four antenatal care visits in India and UP from NFHS-4 to NFHS-5 suggests improved access to healthcare services and possibly increased awareness about the importance of antenatal care.

Children age 12-23 months fully vaccinated: Full vaccination coverage is essential for protecting children from preventable diseases. The significant improvement in vaccination rates from NFHS-4 to NFHS-5 indicates successful efforts in expanding immunization programs and raising awareness about the importance of vaccination among caregivers.

Children under age 3 years breastfed within one hour of birth: Immediate breastfeeding after birth provides newborns with essential nutrients and antibodies, contributing to their overall health and well-being. Despite the slight increase in India and UP from NFHS-4 to NFHS-5, the rates remain relatively low, highlighting the need for further promotion of early breastfeeding practices.

Children under age 6 months exclusively breastfed within one hour of birth: Exclusive breastfeeding for the first six months is recommended by health experts to provide optimal nutrition and protection against infections for infants. The increase in exclusive breastfeeding rates in India and UP from NFHS-4 to NFHS-5 indicates positive progress in promoting breastfeeding practices.

Children under 5 years who are stunted: Stunting reflects chronic malnutrition and inadequate growth among children. While there has been a slight decrease in stunting rates in India and UP from NFHS-4 to NFHS-5, the prevalence remains relatively high, indicating the need for continued efforts to address malnutrition and improve overall child nutrition.

Children under 5 years who are wasted: Wasting indicates acute malnutrition and recent weight loss among children. The decrease in wasting rates in India and UP from NFHS-4 to NFHS-5 suggests some improvement in addressing acute malnutrition, although further efforts are needed to sustain this progress.

Children under 5 years who are severely wasted: Severe wasting reflects extreme malnutrition and requires immediate intervention to prevent serious health consequences. The relatively stable rates of severe wasting in India and UP from NFHS-4 to NFHS-5 highlight the ongoing challenges in addressing severe malnutrition among children.

Children under 5 years who are underweight: Underweight children have low weight for their age, indicating overall malnutrition. While there has been a decrease in underweight rates in India from NFHS-4 to NFHS-5, the rates remain high, particularly in UP, emphasizing the persistent need for interventions to improve child nutrition.

Children under five years who are overweight: Overweight children may face health risks associated with obesity-related diseases. The slight increase in overweight rates in India and UP from NFHS-4 to NFHS-5 underscores the importance of addressing not only undernutrition

but also overweight and obesity among children through balanced nutrition and healthy lifestyle promotion.

Children age 6-59 months who are anemic:Anemia affects overall health and development, particularly among young children. The increase in anemia rates in India and UP from NFHS-4 to NFHS-5 indicates the ongoing challenge of addressing iron deficiency and other nutritional deficiencies among children, necessitating targeted interventions such as iron supplementation and dietary diversification.

Pregnant women age 15-49 years anemic:Anemic pregnant women are at higher risk of complications during pregnancy and childbirth, which can affect both maternal and child health outcomes. Despite efforts to address anemia, the increase in anemia rates among pregnant women in India and UP from NFHS-4 to NFHS-5 highlights the need for more effective strategies to improve maternal nutrition and health during pregnancy.

Under five mortality rate (per 1000 live births):The under-five mortality rate reflects the number of children who die before reaching the age of five, serving as a key indicator of overall child health and healthcare system effectiveness. The decrease in under-five mortality rates in India and UP from NFHS-4 to NFHS-5 signifies improvements in child survival and healthcare access, although disparities persist between India and UP, indicating the need for targeted interventions to further reduce child mortality rates in high-burden areas. Some other findings also drawn from the NFHS-5 data. District-wise implementation of the ICDS scheme remains a challenge for the state. Some districts like Unnao, Barabanki, Bhadohi, Ghazipur, and Chitrakoot have less than 30% of women receiving proper antenatal care. Bahraich has the highest number of stunted children in Uttar Pradesh, while Banda leads in wasted and underweight children. Overall, the data shows improvements in some indicators but also highlights persistent challenges, particularly in Uttar Pradesh, across various health and nutrition parameters.

Conclusion :

Despite substantial progress made in maternal and child health, it continues to remain a major public health challenge. The importance of adequate nutrition for children and women cannot be ignored. ICDS is necessary to ensure a basic minimum level of health and nutrition among the most vulnerable sections of its citizen . While the ICDS scheme has a wide reach across the country, there still exists some concern with respect to implementation processes, and delivery as well as the impact of these services. Even after 4 decades of relentless efforts ,the ICDS still faces the herculean task of providing the nutritional and health outcomes for children and women .

The high prevalence of stunting ,wasting and anaemia continues to pose public health risks for children and women in India and Uttarpradesh. Failure of ICDS scheme in Uttar Pradesh can be attributed to many factors all mostly rooted in bureaucratic sloth, lack of budgetary support, politically insignificant section of the society, corruption, mismanagement and lack of accountability at all the levels of government. So there is need to work on all

fronts for the success of this scheme. In order to achieve Global Nutrition Targets and Sustainable development Goal 3 (Good health and well being) it's imperative to make progress in nutrition and health . Some recommendation which is observe from above analysis is following:

- Anganwadi workers are the key player in ICDS so to enhance the effectiveness of services enhancing the knowledge base and addressing key challenges faced by Anganwadi workers is vital. NITI Ayog recommended more frequent and impactful training sessions, coupled with responsive feedback mechanisms and improved working conditions, can contribute to significant improvements in service delivery for vulnerable populations .
- Foster greater community participation and awareness through outreach programs, community meetings, and involvement of local leaders to increase understanding and utilization of ICDS services.
- Implement robust monitoring and evaluation mechanisms to track the progress and impact of the ICDS program, identify bottlenecks, and take corrective actions as needed.
- Focus on nutrition education and counseling for mothers and caregivers, emphasizing the importance of breastfeeding, balanced diets, and micronutrient supplementation
- Explore the use of technology such as mobile applications for monitoring attendance, tracking growth parameters, and delivering health and nutrition messages to beneficiaries.
- Collaborate with private sector entities, NGOs, and community-based organizations to leverage resources and expertise for the effective implementation of ICDS services.
- Encourage research and innovation in child development, nutrition, and early childhood education to inform evidence-based policies and practices for improving the ICDS scheme's effectiveness.

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A Study of Impact of Social Protection on Household Financial Decision Making

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Abstract:

This research investigates the profound influence of social protection programs on household financial decision-making and their broader implications for economic dynamics. As countries strive for enduring growth, the study positions social protection as a central player in ensuring the well-being of citizens, shielding them from financial hardships associated with poverty, unemployment, and unforeseen economic shocks. Employing a qualitative approach, the research unravels the complexities of human behavior and experiences in financial decision-making, recognizing the deeply personal and culturally influenced nature of these choices.

Key findings shed light on the positive impact of social protection, including improved financial planning, heightened savings, and increased resilience during economic crises. Cultural variations, gender dynamics, and community engagement emerged as critical factors shaping the effectiveness of these programs. The research recommends adaptive policy frameworks, cultural sensitivity training, and enhanced crisis preparedness for policymakers to maximize the efficacy of social protection initiatives. Tailored policies, gender-inclusive measures, and holistic well-being approaches are suggested to ensure comprehensive and inclusive support.

This study contributes significantly to informing policy frameworks, emphasizing the need for flexible, culturally sensitive, and community-oriented approaches in social protection policies. It advocates for continuous monitoring, interdisciplinary collaboration, and overcoming participation barriers to enhance program effectiveness. Ultimately, the research enriches ongoing discussions on viable strategies for promoting financial well-being, offering valuable insights into the intricate relationship between social protection, household financial choices, and economic resilience.

KEYWORDS: Social protection, household finances, financial decision-making, impact assessment.

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INTRODUCTION

In today's economic theater, social protection programs stand out as essential players. As countries pursue lasting growth, the happiness of their citizens takes center stage. Social protection, a superhero in policies, shields individuals and families from money troubles, tackling issues like poverty, unemployment, and unexpected financial shocks. Picture the economy as a rollercoaster, with ups and downs that sway people's financial balance. Social protection steps in as a safety net during these rollercoaster moments, boosting the overall strength of society.

Zooming out to see the big economic picture, social protection plays a double role. First, it tackles urgent needs by fighting poverty and giving a financial hand to those in tough spots. Next, it's an investor in the country's future economic stability. How? By putting money into people's skills, making them more productive, and bringing down economic inequality. This dance between social protection and economic development shows how closely linked individual well-being is to a nation's success. This research dives into the world of household financial choices in the realm of social protection. The goal? To untangle the complex ways these programs influence and mix with the broader economic scene. Understanding this cool relationship is key to making policies that not only lift individuals but also add to the overall economic strength and progress of a society.

Moreover, social protection programs address systemic issues that can impede economic growth, such as unequal distribution of resources and limited access to essential services. They promote fairness, making the economic stage more level. It's like they're the secret sauce in a country's recipe for sustainable development, matching up with global goals to kick poverty out and spread prosperity.

When facing global challenges – think pandemics, economic slumps, or environmental troubles – social protection programs become even more vital. They work like stabilizers, stopping vulnerable groups from sinking deeper into poverty during tough times and speeding up the whole economy's recovery. These benefits don't stop at individual homes; they reach out to the whole community and, in the end, the entire nation.

As this research unfolds, the aim is to delve into the specific ways in which social protection influences household financial decision-making. Placing this investigation in the big economic picture, the study seeks to provide valuable insights that can inform policy frameworks, enhance the efficacy of social protection programs, and contribute to a more resilient and inclusive economic future. Exploring these links, the research wants to uncover how social protection can be a game-changer in the intricate dance of economic dynamics.

Empowering Financial Decision-Making: The Impact of Social Protection Programs on Households during Economic Challenges

Social protection initiatives exert a profound impact on the financial choices made by households, assuming a pivotal role in influencing planning, savings, and resilience, particularly

in the context of economic downturns. A primary avenue through which social protection shapes planning is by furnishing beneficiaries with a dependable and steady income stream. Take, for instance, cash transfer programs—a prevalent form of social protection—bestowing households with a reliable reservoir of funds. This financial consistency empowers families to strategize for essential expenditures like education, healthcare, and housing. The predictability inherent in this financial support contributes to enhanced budgeting capabilities and facilitates long-term planning, instilling a sense of assurance and steadiness in households.

Furthermore, the influence extends into the domain of savings. Social protection endeavors, by injecting additional financial resources into households, open gateways for saving and investment. Families benefiting from such programs can allocate a fraction of their funds to establish emergency savings or venture into income-generating activities. This not only augments the financial well-being of individual households but also bolsters the economic resilience of the community as a whole. In times of economic crises, the role of social protection in fortifying resilience becomes markedly conspicuous. Consider unemployment benefits or targeted aid during economic downturns as an illustration. These forms of assistance act as a vital safety net, preventing susceptible households from descending further into poverty. The infusion of financial aid acts as a cushion against the impacts of economic instability, empowering families to navigate turbulent times with heightened resilience.

Fundamentally, social protection programs serve as catalysts for fostering positive financial decision-making within households. They enable families to plan ahead, create avenues for savings and investment, and offer a pivotal safety net during periods of economic adversity. A profound comprehension and adept utilization of these dynamics empower policymakers to refine the structure and execution of social protection initiatives, ensuring their efficacy in advancing financial well-being on both individual and community levels.

Cultural Dynamics: Shaping Financial Support Attitudes and Enhancing Social Protection Programs

Cultural norms and values play a vital role in shaping individuals' attitudes towards financial support, influencing the success of social protection programs. For instance, in a community where collective decision-making is valued, a financial intervention that incorporates group-based savings or investment schemes may be more culturally resonant. This aligns with the community's existing practices and ensures higher acceptance. Understanding cultural nuances involves recognizing specific beliefs, traditions, and social structures within a community. For example, if a cultural norm emphasizes extended family support, a successful financial intervention might involve strategies that consider and strengthen familial ties. This could include designing programs that provide support not only to individual households but also consider the broader family unit. Moreover, effective implementation requires more than just aligning with cultural practices; it involves fostering genuine engagement. For instance, in a community where oral traditions are significant, utilizing local storytelling or community gatherings as mediums for financial education may enhance program adherence. By incorporating

these cultural elements, social protection programs become more embedded in the community's fabric, ensuring they are not only accepted but also embraced as integral parts of the local financial landscape.

Gender-Inclusive Strategies in Social Protection: A Paradigm Shift for Equitable Financial Outcomes

The impact of gender dynamics on the effectiveness of social protection initiatives necessitates a nuanced strategy. For example, the implementation of policies that promote gender inclusivity aims to empower women facing traditional economic challenges. This may involve targeted measures like facilitating women's access to financial resources, vocational training, or support for entrepreneurial ventures. Addressing gender-specific needs extends beyond mere inclusivity; it strives to eliminate existing economic disparities. In scenarios where women encounter limited access to formal financial institutions, a gender-inclusive social protection program could establish community-based financial cooperatives tailored to women's requirements. This ensures a fair distribution of financial resources, fostering economic autonomy and informed decision-making within households. Furthermore, by acknowledging and actively working to narrow gender gaps, social protection programs contribute to dismantling societal norms perpetuating economic imbalances. For instance, policies encouraging shared financial responsibilities challenge traditional gender roles, creating an environment where both women and men participate in financial decision-making processes within households. In summary, gender-inclusive measures within social protection not only empower individuals but also reshape broader societal structures towards more equitable financial outcomes, aligning with economic principles.

Community-Centric Approach: Enhancing Social Protection Program Effectiveness through Local Engagement

The effectiveness of social protection programs relies on substantial engagement with the community. Actively involving communities in the planning and execution of initiatives ensures that these programs align with local needs and conditions. For example, in a community predominantly focused on agriculture, consulting local farmers during the formulation of income support programs can result in tailored initiatives that directly tackle the agricultural sector's challenges. This not only enhances the program's pertinence but also instills a sense of ownership among community members. Moreover, community involvement in decision-making processes contributes to customizing social protection measures according to the specific economic and social context of each community. In an urban environment, for instance, engaging local business owners and residents in the design of financial assistance programs may lead to the creation of initiatives that address the distinctive economic dynamics of urban livelihoods. This ensures that social protection goes beyond a one-size-fits-all approach, evolving into a tailored strategy that accommodates the diverse needs of various communities. Community engagement not only improves the efficacy of social protection programs but also

establishes a cooperative and sustainable framework where the community actively participates in its economic development. This participatory approach nurtures a more profound connection between social protection measures and the genuine needs and aspirations of the people it aims to assist.

RATIONALE

The rationale for employing an in-depth qualitative approach in studying the impact of social protection on household financial decision-making is rooted in the complexity and nuance of human behavior and experiences. Quantitative data is helpful for seeing general trends and connections in numbers. However, it doesn't always capture the detailed reasons, motivations, and different situations that affect how people make financial decisions in their homes. Financial decision-making is a deeply personal and culturally influenced aspect of life, varying significantly among diverse demographic groups. A qualitative approach enables the researcher to contextualize findings within specific cultural, social, and economic contexts, fostering a more comprehensive understanding of how social protection impacts financial choices.

In simple terms, the qualitative approach makes the research more detailed by uncovering the stories behind the data. It allows for flexibility to understand the diverse and ever-changing nature of households, giving a more accurate picture of how social protection truly affects the decisions people make about money. This qualitative exploration goes beyond just numbers, offering a complete and context-specific view, which is important for creating effective policies and interventions.

OBJECTIVES

The article addresses 3 key objectives:

1. To examine how social protection programs influence household financial decisions, focusing on planning, savings, and resilience during economic crises.
2. To explore the impact of cultural, gender, and community factors on the effectiveness of social protection programs in shaping financial choices.
3. To develop strategies for social protection, ensuring cultural sensitivity and inclusivity in addressing diverse demographic needs.

METHODOLOGY

This study followed the Document Analysis method of Qualitative Research, which is conducted by analyzing the data which is being collected from different journals, articles. It is based on Secondary data.

FINDINGS

Key findings are:

- Social protection programs positively impact household financial decision-making. Families with access to social protection programs might demonstrate better financial planning, increased savings, and improved investment choices.
- Financial decision-making varies across different cultural contexts and social protections have differing effects on households based on cultural factors.
- Households with social protection are more resilient during economic crises. Families may show a better ability to cope with unexpected financial shocks, indicating the effectiveness of these programs in enhancing economic stability.
- Identification of challenges in implementing social protection measures, such as limited accessibility and awareness. Understanding these challenges is crucial for improving existing policies.
- There is potential positive implications of social protection programs on education within households because Families may allocate resources differently, prioritizing education when they have a safety net, potentially breaking the cycle of poverty through improved access to education.
- An intergenerational impact indicating potential benefits for children in such households as they grow older experiencing better educational outcomes and financial decision-making skills.
- Emphasis on the role of community engagement in the success of social protection initiatives.
- One-size-fits-all policies may not be optimal here. To maximize the impact of social protection on financial decision-making there is a necessity of targeted policies addressing specific demographic groups or economic contexts.
- Insights into gender dynamics, highlighting varying impacts on women and men within households.
- Understanding how individuals perceive their economic well-being can provide insights into the psychological aspects of financial decision-making.
- There is potential links between social protection and community empowerment as it indicates whether communities with access to these programs show signs of improved economic self-sufficiency and active participation in decision-making processes.
- There is possibility of long-term behavioral changes in financial decision-making due to social protection. Families accustomed to social protection over time may develop certain financial habits and attitudes that contribute to sustained economic well-being.

- There are indications of positive influences on entrepreneurship within households with a social safety net. Families being more inclined to engage in business ventures, potentially contributing to local economic development.
- Identification of barriers preventing certain households from actively participating in social protection programs for ensuring inclusivity and reaching those who may benefit the most.
- Formulation of policy recommendations based on research findings for program adjustments and enhancements.

IMPLICATIONS OF FINDINGS

The findings from the research carry significant implications, shedding light on various aspects that contribute to a nuanced understanding of social protection's impact on household financial decisions.

Considering the research findings, policymakers are advised to make informed adjustments to existing social protection programs, acknowledging their positive impact on financial choices. Cultural sensitivity is crucial, tailoring these measures to diverse cultural contexts for broader acceptance and impact. Strengthening social protection's role in enhancing economic resilience during crises is pivotal for better preparation against unforeseen shocks. Addressing implementation challenges, like limited accessibility and awareness, is crucial for improving the reach and effectiveness of these initiatives. Policymakers should explore strategies to leverage social protection for educational advancement, recognizing its positive implications for broader socio-economic benefits. The emphasis on community engagement highlights the need to involve communities in designing and executing social protection initiatives, maximizing positive impacts on financial decision-making. Tailored policies for specific demographic groups ensure inclusivity, considering the vulnerability of certain households. Gender-inclusive policies become imperative, acknowledging varying impacts on women and men within households. Recognizing subjective perceptions of financial security provides insights into the psychological aspects of decision-making, urging policymakers to adopt holistic approaches. The potential link between social protection and community empowerment suggests programs extending beyond individual households, contributing to broader socio-economic development. Acknowledging the possibility of long-term behavioral changes implies a need for sustained support, with policies ensuring enduring positive impacts. Encouraging entrepreneurial support within households can contribute to local economic development, recognizing social protection's role in fostering economic initiatives. Policymakers should actively work to address participation barriers, ensuring social protection reaches and benefits a broader spectrum of households. The formulation of holistic policy recommendations based on research findings provides a comprehensive guide for policymakers to enhance the positive impacts on household financial decision-making.

CHALLENGES AND LIMITATIONS

- Unraveling the intricacies of household financial decision-making requires navigating through complex and nuanced qualitative data, posing a challenge in drawing clear and generalized conclusions.
- The qualitative nature of the study introduces subjectivity in data interpretation, making it essential to address potential biases and ensure the reliability of findings.
- Conducting in-depth qualitative research demands significant time and resources, potentially posing constraints on the scope and scale of the study.
- While qualitative research provides rich insights, it may face challenges in generalizing findings to broader populations due to its context-specific nature.
- Different researchers might interpret qualitative findings differently, requiring measures to enhance the consistency and reliability of interpretations.
- Implementing policy recommendations based on research findings may encounter challenges related to bureaucratic hurdles, resistance to change, and the need for coordinated efforts among stakeholders.

RECOMMENDATIONS

1. Policymakers should adopt adaptive frameworks that allow for flexible adjustments to existing social protection programs. This adaptability ensures that policies stay responsive to evolving economic and social dynamics.
2. Integration of cultural sensitivity training for policymakers and program implementers will enhance their understanding of diverse cultural contexts, enabling the tailoring of social protection measures for broader acceptance and effectiveness.
3. Policymakers should prioritize strengthening social protection measures to enhance economic resilience during crises. This involves strategic planning to ensure timely and effective support for households facing unexpected financial shocks.
4. Implementing awareness campaigns to address challenges related to limited accessibility and awareness is essential. This can improve the reach and impact of social protection initiatives by ensuring that eligible households are well-informed about available support.
5. Policymakers should explore inclusive educational strategies within social protection programs. This involves considering the diverse educational needs of households and tailoring support to ensure maximum positive implications for broader socio-economic benefits.
6. Emphasizing community involvement platforms in the design and execution of social protection initiatives is crucial. Creating avenues for community engagement maximizes positive impacts on financial decision-making and ensures the relevance of programs at the grassroots level.

7. Tailored policies addressing specific demographic groups should be a priority. This ensures inclusivity by recognizing and addressing the unique vulnerabilities and needs of different segments of the population.
8. Gender-inclusive policies need to be implemented to address varying impacts on women and men within households. This can involve targeted measures to empower women economically and address gender-based disparities.
9. Policymakers should adopt holistic approaches that consider subjective perceptions of financial security. This involves acknowledging the psychological aspects of decision-making and integrating well-being considerations into policy frameworks.
10. Policymakers should focus on sustained support mechanisms to ensure enduring positive impacts on household financial decision-making.
11. Encouraging entrepreneurial support within households should be a key focus. Policymakers can implement programs that facilitate skill development, access to resources, and mentorship to foster economic initiatives at the local level.
12. Policymakers should actively work on addressing participation barriers. This involves identifying and removing obstacles that prevent certain households from actively engaging in social protection programs.
13. Encouraging interdisciplinary collaboration among policymakers, researchers and community representatives is crucial. This collaboration ensures a comprehensive understanding of the challenges and facilitates the development of effective solutions.
14. Implementing continuous monitoring and evaluation mechanisms is essential. This allows policymakers to assess the ongoing impact of social protection programs, identify areas for improvement, and make informed adjustments.

CONCLUSION

In summary, this study highlights the vital role played by social protection programs in shaping the financial decisions of households and influencing broader economic trends. Key findings underscore the positive impacts of these programs, including better financial planning, increased savings rates, and improved resilience during economic downturns. Cultural diversity, gender dynamics, and community involvement emerged as significant factors affecting the effectiveness of such initiatives.

The implications drawn from this research are extensive. Policymakers are encouraged to implement adaptable frameworks, prioritize cultural sensitivity training, and bolster readiness for economic crises. Tailored policies targeting specific demographic groups, along with gender-inclusive measures and comprehensive well-being strategies, are recommended to ensure effective social protection. Furthermore, continuous monitoring, interdisciplinary collaboration, and addressing barriers to participation are deemed essential for successful program implementation.

This study contributes significantly to informing policy development, enhancing the effectiveness of social protection schemes, and promoting economic resilience and inclusivity. By delving into the intricacies of household financial decision-making, it provides valuable insights beyond quantitative data, stressing the importance of flexible, culturally attuned, and community-driven approaches. Ultimately, the research enriches ongoing discussions on viable strategies for fostering financial stability and prosperity at both individual and societal levels.

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Union Budget: Trends and Allocations for the Development of Agriculture Sector in India

Dr. Alpana Lal & Chhaya Yadav

Abstract

The Indian agriculture sector faced various challenges including small and fragmented landholdings, low productivity, agrarian distress, climate change, water scarcity, inadequate infrastructure, market inefficiencies, transportation bottlenecks, lack of cold storage facilities, and inefficient supply chains. The government typically addresses these issues through budget allocations for various schemes and programs. The budgetary allocations reflect the government's priorities and commitment to increasing agricultural productivity, improving irrigation, modernizing agriculture, providing financial support and income security to farmers, enhancing rural infrastructure, and overall rural development. However, the effectiveness of these allocations also depends on their implementation and monitoring mechanisms. To focus and insights into the agriculture sector development, it's crucial to review past budget allocations and initiatives as specific budget allocations in various fiscal years underscored the government's proactive stance towards addressing pertinent challenges. Therefore, in this article we are trying to analyse the budgetary allocations and policies related to agricultural development in India over a decade from 2014 to 2024, to understand the trajectory of financial allocations and policy measures implemented over the years. This paper, primarily based on secondary sources, provides a comprehensive overview of India's agricultural policy landscape, including budgetary trends, policy initiatives, challenges, achievements, and future prospects. The paper also proposes a set of recommendations, that advocate for inclusive market reforms, social protection measures, natural resource management, and policy coherence to ensure climate-resilient and sustainable agricultural development in India.

Keywords: Agriculture Sector, Allocation, Budget, Development.

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I. INTRODUCTION

India's agrarian economy stands as a cornerstone of its socio-economic fabric, providing sustenance and livelihoods to millions while serving as a linchpin for national development. Agriculture in India has historically been the primary occupation, supporting a significant portion of the population and contributing substantially to the country's GDP. However, despite its centrality and resilience, the sector grapples with multifaceted challenges that impede its full potential and threaten the well-being of millions dependent on it. One of the most prominent challenges facing Indian agriculture is the prevalence of small landholdings. Fragmentation of land ownership due to inheritance laws and population pressure has led to diminishing farm sizes over generations. As a result, a large proportion of farmers operate on marginal lands, which limits their ability to invest in modern agricultural practices, mechanization, and technology adoption. Small landholdings also contribute to inefficiencies in resource utilization and hinder economies of scale.

Another critical issue is the heavy reliance on monsoon rains for irrigation, particularly in rain-fed regions. Erratic rainfall patterns and droughts exacerbate the vulnerability of farmers, leading to crop failures and income losses. Despite efforts to expand irrigation infrastructure through schemes like the 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)', significant areas remain rain-dependent, leaving farmers at the mercy of unpredictable weather patterns. Inadequate infrastructure further compounds the challenges faced by Indian agriculture. Transportation bottlenecks, lack of cold storage facilities, and inefficient supply chains contribute to significant post-harvest losses. According to estimates, India loses approximately 30% of its agricultural produce annually due to inadequate storage and transportation facilities. These losses not only affect farmer incomes but also contribute to food inflation and shortages in certain regions.

Low productivity levels pose another formidable obstacle to agricultural growth in India. Outdated farming practices, limited access to high-quality seeds, fertilizers, and pesticides, and inadequate extension services contribute to suboptimal yields. The yield gaps between India and other leading agricultural nations highlight the need for technology transfer, research and development, and capacity-building initiatives to enhance productivity and farm incomes. Climate change presents a looming threat to Indian agriculture, with rising temperatures, changing precipitation patterns, and extreme weather events disrupting traditional cropping patterns and productivity. Farmers are increasingly vulnerable to crop failures, pests, and diseases, necessitating adaptation strategies and investments in climate-resilient agriculture. Sustainable practices such as conservation agriculture, crop diversification, and water management techniques are crucial for building resilience and mitigating the impacts of climate change.

Addressing the myriad challenges facing Indian agriculture requires a multifaceted approach encompassing policy reforms, investments in infrastructure and technology, institutional support, and stakeholder participation. Initiatives such as the 'Pradhan Mantri Fasal Bima Yojana (PMFBY)', 'Soil Health Card Scheme', and 'e-NAM' (National Agriculture Market) aim to

improve risk management, soil health, and market access for farmers. Additionally, promoting farmer producer organizations (FPOs) and cooperatives can enhance collective bargaining power and facilitate access to credit, inputs, and markets. Investments in research and development, extension services, and agricultural education are essential for promoting innovation and technology adoption in Indian agriculture. Leveraging digital technologies, precision agriculture, and climate-smart practices can empower farmers with real-time information, decision-support tools, and sustainable farming solutions. Strengthening linkages between research institutions, academia, and the farming community is crucial for accelerating technology transfer and knowledge dissemination.

Furthermore, promoting sustainable land management practices, water conservation, and agroforestry can enhance environmental sustainability while improving farm productivity and resilience. Encouraging private sector participation in agricultural value chains, agribusiness development, and agri-infrastructure investments can unlock new opportunities for growth, employment generation, and market integration. While Indian agriculture continues to be a vital engine of growth and rural development, its full potential remains untapped due to persistent challenges. Addressing issues such as small landholdings, dependence on monsoon rains, inadequate infrastructure, low productivity, post-harvest losses, and climate change requires concerted efforts from policymakers, stakeholders, and the farming community. By adopting a holistic and inclusive approach that prioritizes sustainable practices, technology adoption, and institutional reforms, India can unleash the transformative potential of its agrarian economy and ensure food security, rural prosperity, and inclusive growth for future generations. There is widespread recognition of the belief that increasing public expenditure in agriculture can rejuvenate the sector, particularly benefiting small and marginal farmers, thereby ensuring its long-term viability. The budget plays a crucial role in this by allocating funds for initiatives towards infrastructure development; modernisation of agriculture; investment in agricultural research and extension services; and building storage facilities, cold chains, and rural roads.

II. BUDGET TRENDS AND ALLOCATIONS

Budgetary allocations for agriculture witnessed significant growth reflecting the government's emphasis on rural and agricultural development. Investments were made in irrigation infrastructure, crop insurance, soil health, agricultural research, and rural electrification. India's budgetary journey, spanning from the pre-liberalization era to the post-liberalization period, has been characterized by a consistent focus on addressing diverse challenges while fostering economic growth and development. Initially, post-independence efforts aimed at stabilizing the economy amidst partition-induced disruptions, prioritizing food security, and bolstering defence capabilities. Agricultural development and self-sufficiency in food production were paramount, accompanied by initiatives to lay the groundwork for economic planning and public sector development.

Transitioning towards a more liberalized economy in the 1990s, subsequent budgets reflected a shift towards market-oriented reforms and integration into the global economy. Economic liberalization measures, such as tariff reductions and tax reforms, marked a significant departure from past protectionist policies. Despite challenges like persistent inflation and agrarian distress, sustained economic growth was witnessed, driven by the IT sector and export-led expansion. Efforts to enhance transparency and prevent tax base erosion through streamlined tax regulations underscored a commitment to sustainable development. However, concerns regarding inefficient subsidy allocation and energy sustainability persisted, highlighting the need for continued policy adjustments to ensure inclusive and sustainable growth.

The period from 2014 to 2019 witnessed several initiatives and increased investments in agriculture. The government launched flagship schemes such as 'Pradhan Mantri Fasal Bima Yojana (PMFBY)', 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)', and 'Soil Health Card Scheme' to address key challenges in agriculture. The period from 2019 to 2024 saw a continuation of existing schemes and initiatives, with a renewed emphasis on doubling farmers' income and transforming Indian agriculture.

During the last decade, budget allocations for agriculture remained a priority, but the pace of growth slowed down compared to the previous period. The government focused on strengthening existing schemes, promoting agri-infrastructure, enhancing access to credit, and expanding market linkages for farmers. Efforts were made to address structural issues in agriculture, such as fragmented landholdings, lack of market integration, and inefficiencies in supply chains. Reforms were introduced to liberalize agricultural markets, facilitate contract farming, and empower farmers through digital platforms like e-NAM (National Agriculture Market). To understand the role and implications of public expenditure through the government budget for the agriculture sector in India, the trends and priorities of the last few years' budgets are inevitable to analyse.

Union Budget 2013-14

The Union Budget for 2013-14 aims at 'higher growth leading to inclusive and sustainable development' despite a slowdown in global economic growth. A total ¹ 27,049 crore has been allocated to the Ministry of Agriculture, an increase of 22% over the Revised Estimates (RE) of that year. Some key features for the agriculture sector in the budget 2013-2014 are:

- Rs. 1000 crore to facilitate the Green Revolution's expansion into Eastern India.
- Rs.500 crore to initiate a crop diversification program aimed at fostering technological advancements and encouraging farmers to explore alternative crops.
- Rs. 9,954 crore and ¹ 2,250 crore to 'Rashtriya Krishi Vikas Yojana' and 'National Food Security Mission' respectively, to support agricultural development.
- An increment of ¹ 5,387 crore from ¹ 3,050 crore in 2012-13 for the integrated watershed program.
- Rs. 307 crore for the establishment of the 'National Livestock Mission'.

- Provision for the establishment of ‘National Institute of Biotic Stress Management’ for addressing plant protection issues at Raipur, Chhattisgarh.
- The establishment of the ‘Indian Institute of Agricultural Biotechnology’ in Ranchi, Jharkhand.
- ₹ 200 crore for a pilot program focusing on ‘Nutri-Farms’ to introduce new crop varieties enriched with micronutrients, such as iron-rich bajra, protein-rich maize, and zinc-rich wheat.
- ₹ 3,415 crore for agricultural research initiatives.
- ₹ 75 crore for the extension of the pilot scheme to replant and rejuvenate coconut gardens to the entire State of Kerala, which was running only in some districts of Kerala and the Andaman & Nicobar Islands.
- ₹ 50 crore for the FPOs to enable them to leverage working capital from financial institutions.
- ₹ 10,000 crore for the ‘National Food Security Act’.
- ₹ 90,000 crore for food subsidy used in TPDS operations and food grain procurement.
- In addition, ₹ 250 crore for subsidy on the import of pulses and ₹ 318.34 crore for edible oils; ₹ 65,971.5 crore for fertilizer subsidy; ₹ 6,000 crore for interest subvention on farm credit; and ₹ 255 crore for price support by Jute and Cotton Corporations.

Union Budget 2014-15

Recognizing the importance of the Agriculture Sector, the Government during the budget 2014-15 took several steps for the sustainable development of Agriculture. The total amount of allocation to the Ministry of Agriculture was about ₹ 31,063 crore. Other main provisions for the agriculture sector in this budget are:

- ₹ 100 crore for the establishment of an ‘Agri-tech Infrastructure Fund’.
- ₹ 500 crore for farm price stabilization.
- ₹ 200 crore to establish agriculture universities in Andhra Pradesh and Rajasthan, along with horticulture universities in Telangana and Haryana.
- ₹ 100 crore for agro technology institutes in Assam and Jharkhand.
- ₹ 100 crore for a scheme to provide a soil health card to every farmer.
- Additionally, ₹ 56 crore to establish 100 ‘Mobile Soil Testing Laboratories’ nationwide.
- ₹ 100 crore for the establishment of a ‘National Adaptation Fund’ to address the challenges posed by climate change.
- A focus on a second green revolution and a protein revolution to emphasize technology-driven growth.

- Collaboration of the central government and state governments to reform their 'Agricultural Produce Market Committee (APMC) Acts'.
- ₹ 7.50 crore for the development of indigenous cattle breeds.
- An equal amount of ₹ 7.50 crore to kick start a blue revolution in inland fisheries.
- Provision of institutional finance to 5 lakh landless farmers through NABARD to support them.
- ₹ 30,000 crore for the corpus of the 'Rural Infrastructure Development Fund'.
- ₹ 5,000 crore for increasing warehousing capacity in the country.
- ₹ 5,000 crore for the establishment of a 'Long Term Rural Credit Fund' to provide refinance support to cooperative banks and RRBs.
- ₹ 50,000 crore for 'Short Term Cooperative Rural Credit'.
- ₹ 200 crore for 'NABARD's Producers Development and Upliftment Corpus (PRODUCE)' to establish 2,000 producers' organizations over the next two years.
- ₹ 5,00 crore for a proposed national rural internet and technology mission.

Union Budget 2015-16

The union budget 2015-16 aims to achieve higher levels of growth and curb India's fiscal deficit by boosting investment. Agriculture remains a significant component of the budget, with the total allocated funds for the Ministry of Agriculture of ₹ 25,460 crore. The main highlights of this budget are:

- ₹ 5,300 crore for supporting micro-irrigation, watershed development, and the implementation of the 'Pradhan Mantri Krishi Sinchai Yojana', aimed at enhancing agricultural productivity through efficient water management.
- ₹ 2,589 crore for the 'Pradhan Mantri Fasal Bima Yojana (PMFBY)'.
- ₹ 25,000 crore to augment the 'Rural Infrastructure Development Fund (RIDF)' of NABARD, intended to bolster rural infrastructure and facilitate agricultural development.
- ₹ 15,000 crore for the 'Long Term Rural Credit Fund', intended to provide long-term financial support to rural development initiatives and agricultural projects.
- ₹ 45,000 crore for the 'Short Term Cooperative Rural Credit Refinance Fund', aimed at providing timely financial assistance to cooperative banks catering to rural credit needs.
- Additionally, ₹ 15,000 crore for the 'Short Term Regional Rural Bank (RRB) Refinance Fund', aimed at supporting the lending activities of regional rural banks and ensuring adequate credit flow to rural areas.
- ₹ 15,00 crore for the 'Deendayal Upadhyaya Yojna' to boost employment opportunities for the youth.

- Proposal of an organic farming promotion scheme.
- Also a proposal of setting up a horticulture institute in Amritsar.
- An outline plan to create a 'Unified National Agriculture Market' for streamlining agricultural trade and promoting fair pricing mechanisms for agricultural produce.

Union Budget 2016-17

The overall budget for the agriculture sector was raised to ¹ 44,485 crore in 2016-17 (budget estimate) from ¹ 22,958 crore in 2015-16 (revised estimate), a jump of nearly 94%, in which the allocation for Agriculture and Farmers' Welfare was ¹ 35,984 crore, a rise of 44% from ¹ 24,909 crore in 2015-16. Other main provisions of this budget are:

- A total allocation of ¹ 35,984 crore for Agriculture and Farmers' Welfare.
- A target of irrigating 28.5 lakh hectares of land under the 'Pradhan Mantri Krishi Sinchai Yojana' with a mission-oriented approach.
- ¹ 5,500 crore for the 'Pradhan Mantri Fasal Bima Yojana (PMFBY)'.
- Efforts will be intensified to expedite the implementation of 89 irrigation projects under the 'Accelerated Irrigation Benefit Programme (AIBP)', that have been stagnant for an extended period.
- ¹ 20,000 crore as an initial corpus to create a dedicated 'Long Term Irrigation Fund' in NABARD.
- ¹ 6,000 crore for sustainable management of groundwater resources.
- The allocation of ¹ 19,000 crore under the 'Pradhan Mantri Gram Sadak Yojana'.
- ¹ 15,000 crore for the 'Pradhan Mantri Awaas Yojana – Gramin'.
- A provision of ¹ 15,000 crore to alleviate the loan repayment burden on farmers towards interest subvention.
- ¹ 5,500 crore for the 'Prime Minister Fasal Bima Yojana'.
- ¹ 850 crore for four dairy projects, namely 'Pashudhan Sanjivani', 'Nakul Swasthya Patra', 'E-Pashudhan Haat', and the 'National Genomic Centre' for indigenous breeds.
- Provision of soil and seed testing facilities to 2,000 model retail outlets operated by fertilizer companies (over the next three years).
- Establishment of a unified agricultural marketing e-platform to provide a common electronic marketplace for wholesale agricultural transactions.

Union Budget 2017-18

The total allocation for the rural, agricultural, and allied sectors for the fiscal year 2017-18 amounts to ¹ 1,87,223 crore, marking a 24% increase compared to the previous year. Key highlights of this budget for the agriculture sector are:

- ₹ 9,000 crore for the 'Fasal Bima Yojana'.
- The initial corpus of ₹ 2,000 crores for the establishment of a 'Dairy Processing and Infrastructure Development Fund' in NABARD.
- ₹ 20,000 crore for the 'Long Term Irrigation Fund' to support irrigation projects.
- ₹ 5,000 crore as an initial corpus for a dedicated 'Micro Irrigation Fund' in NABARD to promote efficient water usage, aiming to achieve the objective of 'per drop more crop'.
- The budget allocation of ₹ 48,000 crores for MGNREGA.
- An amount of ₹ 27,000 crore, along with contributions from states for the 'Pradhan Mantri Gram Sadak Yojana (PMGSY)'.
- Allocation of ₹ 23,000 crore for the 'Pradhan Mantri Awaas Yojana – Gramin'.
- ₹ 4,814 crore for the 'Deendayal Upadhyaya Gram Jyoti Yojana'.
- ₹ 4,500 crore for the 'National Rural Livelihood Mission', aimed at promoting skill development and livelihood opportunities in rural areas.
- Expansion of the 'National Agricultural Market (e-NAM)' from 250 to 585 'Agricultural Produce Market Committees (APMCs)'.
- Focus on 'Mission Antyodaya' aims to uplift one crore households from poverty and make 50,000 gram panchayats poverty-free by 2019.
- Establishment of new mini laboratories in 'Krishi Vigyan Kendras (KVKs)', ensuring 100% coverage of all 648 KVKs across the country.
- Plans proposal to provide safe drinking water to over 28,000 habitations affected by arsenic and fluoride contamination within the next four years.

Union Budget 2018-19

In the budget 2018-19, the Department of Agriculture, Co-operation and Farmers Welfare has been allocated ₹ 46,700 crore, an increase of 6% (₹ 5,595 crore) over the revised estimate of 2017-18, and this accounted for 81% of the total allocation of the Ministry of Agriculture. The Department of Agricultural Research and Education has been allocated ₹ 7,800 crore and the Department of Animal Husbandry, Dairying and Fisheries has been allocated ₹ 3,100 crore, accounting for 14% and 5% of the allocation under the Ministry, respectively. Other highlights of this budget are:

- A fund named the 'Agri-Market Infrastructure Fund', with a corpus of ₹ 2000 crore for developing and upgrading agricultural marketing infrastructure across 22,000 'Grameen Agricultural Markets (GrAMs)' and 585 'Agricultural Produce Market Committees (APMCs)'.
- Allocation of ₹ 200 crore to provide support by the government for the organized cultivation of highly specialized medicinal and aromatic plants.

- ¹ 1400 crore for the 'Ministry of Food Processing'.
- ¹ 500 crore for 'Operation Greens' to address the challenge of price volatility of perishable commodities like tomatoes, onions, and potatoes.
- ¹ 1,290 crore for the 'National Bamboo Mission' to promote the bamboo sector in a holistic manner.
- ¹ 5750 crore for 'National Rural Livelihood Mission (NRLM)'.
- ¹ 10,000 crore to establish a 'Fisheries and Aquaculture Infrastructure Development Fund (FAIDF)' for the fisheries sector and an 'Animal Husbandry Infrastructure Development Fund (AHIDF)' to finance infrastructure needs in animal husbandry.
- An allocation of the ¹ 2,600 crore for a new groundwater irrigation scheme 'Har Khet ko Pani', under the 'Prime Minister Krishi Sinchai Yojna' in 96 underserved irrigation districts, where less than 30% of land holdings currently have assured irrigation.
- Plans to establish state-of-the-art testing facilities in all forty-two 'Mega Food Parks'.
- Assurance of the Minimum Support Price (MSP) for all unannounced crops of the kharif season, at least one and a half times their production cost.
- Extension of the facility of 'Kisan Credit Cards' to fisheries and animal husbandry farmers to help them meet their working capital needs.
- Encouragement of Women Self Help Groups (SHGs), engaged in organic agriculture within clusters under the NRLM.
- Proposal to increase the volume of institutional credit to ¹ 11 lakh crore for the agriculture sector.
- Favourable tax treatment for farmer Producers Organizations (FPOs) to facilitate farmers in aggregating their requirements for inputs, farm services, processing, and sales operations.
- A special Scheme to support the efforts of the governments of Haryana, Punjab, Uttar Pradesh, and the NCT of Delhi to address air pollution in the Delhi-NCR region by subsidizing machinery required for in-situ management of crop residue.
- Facilitation of farmers by central and state governments together for installing solar water pumps to irrigate their fields.

Union Budget 2019-20

In the Union Budget 2019-20, the allocation for the Ministry of Agriculture was ¹ 1,30,485 crore, and fertiliser subsidy was ¹ 79,996 crore, 140% higher than that for 2018-19 at ¹ 57,600 crore. This leap is mostly due to the staggering ¹ 75,000 crore allocated to the 'Pradhan Mantri Kisan Samman Nidhi (PM-Kisan)'. Apart from this, the other main provisions for the agriculture sector are:

- ₹ 75,000 crore with an anticipated annual expenditure for the newly initiated scheme ‘Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)’, designed to provide a direct income of ₹ 6,000 per year for support to vulnerable landholding farmer families with cultivable land up to 2 hectares.
- ₹ 3,737 crore to the ‘Ministry of Fisheries, Animal Husbandry and Dairying’.
- Out of which, ₹ 805 crore to ‘Pradhan Mantri Matsya Sampada Yojana (PMMSY)’ to address important gaps in the value chain.
- ₹ 750 crore for initiatives such as the ‘Rashtriya Gokul Mission’ to boost the livestock sector.
- Moreover, an announcement of the establishment of ‘Rashtriya Kamdhenu Aayog’, with a focus on sustainable genetic up-gradation of cow resources to enhance production and productivity in the cattle sector.
- ₹ 14,000 crore for the ‘Pradhan Mantri Fasal Bima Yojana (PMFBY)’.
- ₹ 3,500 crore for the ‘Pradhan Mantri Krishi Sinchai Yojana (PMKSY)’.
- ₹ 12,560 crore to implement 18-odd central schemes under the ‘Green Revolution’ umbrella.
- ₹ 18,000 crore for spending towards interest subvention on short-term crop loans.
- Just ₹ 600 crore for promoting farm mechanisation.
- Proposal of a 2% interest subvention for those availing loans through the ‘Kisan Credit Card’ to incentivize farmers engaged in animal husbandry and fisheries.
- An additional 3% interest subvention for those, who repay their loans on time to encourage investment in animal husbandry and fisheries, and provide financial relief and support to farmers engaged in these activities.
- Proposal of an increase of ₹ 1,000 crore to ₹ 3,000 for intervening in the market in times of steep fall in rates under the ‘Market Intervention Scheme and Price Support Scheme (MIS-PSS)’ to ensure minimum support price (MSP).
- Proposal of ₹ 100 crore to ₹ 1,500 crore increased allocation for the ‘Pradhan Mantri Annadata Aay Sanrakshan Yojana (PM-AASHA)’.
- Focus on setting up 20 technology business incubators (TBIs) and 80 livelihood business incubators (LBIs) to develop 75,000 skilled entrepreneurs in the agro-rural industry sector.

Union Budget 2020-21

An allocation of approximately ₹ 2.83 lakh crore has been designated for the agriculture, allied activities, irrigation, and rural development sectors for the fiscal year 2020-21, in which ₹ 1.60 lakh crore for Agriculture, Irrigation & allied activities and ₹ 1.23 lakh crore for Rural

Development & Panchayati Raj. The key provisions of this budget for the agriculture sector are:

- 15 lakh crore for different tasks in which, coverage of PM-KISAN beneficiaries under the KCC scheme, expansion of NABARD Re-finance Scheme, and comprehensive measures for 100 water-stressed districts included.
- Focus on the ambitious goal of doubling farmers' incomes by the year 2022.
- Introduction of the 'Model Agricultural Land Leasing Act' of 2016 to facilitate agricultural land leasing arrangements.
- The 'Model Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act' of 2017 to streamline agricultural produce and livestock marketing processes.
- Similarly, the 'Model Agricultural Produce and Livestock Contract Farming and Services (Promotion and Facilitation) Act' of 2018 to promote contract farming and related services in the agricultural sector.
- Proposed comprehensive measures to address water stress in 100 districts across the country.
- Announcement of 'Village Storage Scheme' (run by the SHGs) to provide farmers a good holding capacity and reduce their logistics cost.
- Establishment of warehousing facilities compliant with 'Warehouse Development and Regulatory Authority (WDRA)' standards.
- Establishment of 'Kisan Rail' by the Indian Railways in collaboration with public-private partnerships to improve the cold supply chain for perishable goods such as milk, meat, and fish, with refrigerated coaches in both Express and Freight trains.
- Introduction of 'Krishi Udaan', a program facilitating air transportation for agricultural produce on both domestic and international routes by the Ministry of Civil Aviation.
- Adoption of a cluster-based approach, emphasizing specialization in specific agricultural products within individual districts.
- Provision of 'Zero-Budget Natural Farming' (as mentioned in the July 2019 budget) with an expansion of 'Integrated Farming Systems' in rain-fed areas.
- Also, the incorporation of practices such as multi-tier cropping, beekeeping, solar pumps, and solar energy production during non-cropping seasons.
- Reinforcement of The 'Jaivik Kheti' portal, an online national organic products market portal.
- Balanced use of all kinds of fertilizers i.e. traditional, organic, and innovative fertilizers.
- Expansion of the 'PM-KUSUM' scheme with the provision of setting up stand-alone solar pumps for 20 lakh farmers.

- Helping another 15 lakh farmers to solarise their grid-connected pump sets.
- Scheme to enable farmers to set up solar power generation capacity on their fallow/ barren lands and to sell it to the grid.
- Doubling of milk processing capacity to 108 million MT from 53.5 million MT by 2025.
- Artificial insemination is to be increased to 70% from 30%.
- Development of fodder farms, through MNREGS.
- The target of ₹ 1 lakh crore fisheries' exports achieved by 2024-25.
- Target of 200 lakh tonnes of fish production by 2022-23.
- Establishment of 3477 'Sagar Mitras' and 500 'Fish Farmer Producer Organisations (FFPO)' to involve youth in fisheries extension.
- The promotion of algae cultivation, seaweed farming, and cage culture
- Framework for development, management, and conservation of marine fishery resources.

Union Budget 2021-22

This budget has allocated a total ₹ 1,31,531 crore to the Ministry of Agriculture. Of this, the Department of Agriculture, Cooperation and Farmers Welfare has been allocated ₹ 1,23,018 crore (94% of the total amount) (an increase of ₹ 1,997 crore from the previous budget), and the Department of Agricultural Research and Education (DARE) has received ₹ 8,514 crore (6%). Besides, some more provisions for the agriculture sector as:

- ₹ 16.5 lakh crore to ensure higher availability of credit for farmers, as well as those in the animal husbandry, dairy, and fisheries sectors.
- Increased allocation of ₹ 40,000 crore for the 'Rural Infrastructure Development Fund'.
- To promote the efficient use of water for agriculture, an allocation of ₹ 10,000 crore to the 'Micro-Irrigation Fund (MIF)', which the NABARD had instituted to achieve the 'per drop more crop' goal.
- Extension of the 'Operation Green Scheme' (introduced in the Union Budget 2018–19) to stabilise the supply and price of tomato, onion, and potato (TOP) crops with the inclusion of 22 other perishable products.
- Assurance of MSP to at least 1.5 times of the cost of production across all commodities.
- Integration of an additional 1,000 mandis with the electronic 'National Agricultural Market (e-NAM)' platform.
- Accessibility of the 'Agriculture Infrastructure Fund' to Agricultural Produce Market Committees (APMCs) for improvement in their infrastructure facilities.

- Proposal of a 'Stand Up India' scheme to include loans for activities, allied to agriculture.
- Introduction of the 'Survey of Villages and Mapping with Improvised Technology in Village Areas (SVAMITVA)' scheme to bring transparency in property ownership in villages.
- Proposal of significant investments in the establishment of modern fishing harbours and fish landing centres in select regions.
- Development of inland fishing harbours and fish-landing centres along the banks of rivers and waterways.
- Setting up a 'Multipurpose Seaweed Park' in Tamil Nadu to promote seaweed cultivation.

Union Budget 2022-23

The overall allocation for the agriculture sector increased marginally to ₹ 132,513.62 crore in 2022-23, from the 2021-22 revised estimates (RE) of ₹ 126,807.86 crore. This budget outlined several proposals aimed at enhancing the agricultural sector such as:

- Total Allocation of ₹ 1,24,000 crore to the Department of Agriculture, Cooperation, and Farmers' Welfare, with the 55% share of 'PM-KISAN' (Pradhan Mantri Kisan Samman Nidhi), 16% of 'Modified Interest Subvention Scheme (MISS)', 13% of 'Pradhan Mantri Fasal Bima Yojana' (Crop Insurance Scheme), and the remaining 16% to other schemes, programs, and administrative expenses within the department.
- Total Allocation of ₹ 8,514 crore to the Department of Agricultural Research and Education (69% for Indian Council of Agricultural Research (ICAR) and the remaining 31% for other research and education initiatives within the department).
- Allocation of ₹ 68,000 crore for 'PM-KISAN', which provides income support by way of cash benefits to the farmers.
- Allocation of ₹ 15,500 crore for 'Pradhan Mantri Fasal Bima Yojana (PMFBY)' or crop insurance scheme.
- ₹ 1,500 crore for the 'Market Intervention Scheme and Price Support Scheme (MIS-PSS)'.
- ₹ 1,395 crore for food and nutritional security.
- Just ₹ 1 crore for the 'Pradhan Mantri-Annadata Aya Sanrakshan Abhiyan (PM-AASHA)' as against an expenditure of ₹ 400 crore in 2021-22 to ensure MSP-based procurement operations in the country, especially for pulses and oilseeds.
- Allocation of ₹ 500 crore to the 'Agriculture Infrastructure Fund (AIF)'.
- ₹ 10,433 crore for 'Rashtriya Krishi Vikas Yojana (RKVY)', including various schemes.
- Creation of a fund to finance start-ups involved in the supply chains of agricultural produce.

- Planning the introduction of legislative changes to promote agro-forestry, involves integrating trees and shrubs into agricultural landscapes, which can provide additional income sources for farmers, improve soil health, conserve water, and contribute to climate change mitigation.
- Initiation of a scheme in a Public-Private Partnership (PPP) model to provide digital and high-tech services to farmers to address their diverse needs, such as access to information, market linkages, precision agriculture tools, weather forecasting, and crop management solutions.

Union Budget 2023-24

Union Budget 2023-24 was the first public budget of 'Amritkaal', the budget of India's vision for the centenary year of its Independence. Many key provisions have been made for agriculture and farmers' welfare in this budget. Some of them are:

- ¹ 1.25 lakh crore to the Ministry of Agriculture and Farmers Welfare, including Agricultural Education and Research.
- ¹ 60,000 crore for the 'Pradhan Mantri Kisan Samman Nidhi (PM-Kisan)' yojna.
- ¹ 23,000 crore for 'Kisan Credit Card (KCC)'.
- ¹ 450 crore for the 'Digital Agriculture Mission'.
- ¹ 600 crore for the promotion of the agriculture sector through technology.
- ¹ 459 crore for the establishment of 10,000 'Bio Input Research Centres' to assist in adopting natural farming over the next three years.
- ¹ 955 crore for the formation of new FPOs.
- ¹ 1,623 crore for food and nutritional security.
- ¹ 500 crore for setting up an 'Agriculture Accelerator Fund' to encourage agri-startups by young entrepreneurs in rural areas.
- Promotion of millets, declared as 'Shri-Anna' in this budget, through the Indian Millets Research Centre, Hyderabad as a Center of Excellence.
- ¹ 2,200 crore for the newly announced 'Atmanirbhar Clean Plant Programme' to improve the availability of disease-free and high-quality planting material for high-value horticultural crops.
- ¹ 2,516 crores for the digitization of 63,000 'Primary Agricultural Credit Societies'.
- ¹ 6,000 crore for a newly launched sub-scheme of 'Pradhan Mantri Matsya Sampada Yojana', which aims to support activities related to fishermen and fish vendors, as well as improve value chain efficiencies in the fisheries sector.
- Launching of 'PM-PRANAM' yojana to incentivize states to promote alternative fertilizers.
- Setting up of massive, decentralized storage capacity to help farmers.

- The increased target of ₹ 20 lakh crore for agriculture credit with a specific focus on sectors like animal husbandry, dairy, and fisheries to support the expansion and development of these sectors.
- Establishment of multipurpose cooperative societies, primary fishery societies, and dairy cooperative societies in uncovered panchayats and villages over the next five years to promote cooperative farming and enhance the livelihoods of rural communities.

Union Budget 2024-25

The interim budget 2024-25, presented in the Parliament on 01 February 2024, has promised to step up value addition in the agricultural sector and farmers' welfare through boosting their income. Recognizing the critical role of agriculture, the interim union budget has allocated ₹ 1,27,469.88 crore to the Ministry of Agriculture. Of this, the Department of Agriculture is allocated ₹ 1,17,528.79 crore (an increase of ₹ 1,997 crore from the previous budget), and the Department of Agricultural Research and Education (DARE) ₹ 9,941.09 crore. In this budget, the agriculture sector is set to undergo significant advancements with the following proposals:

- Increased allocation of ₹ 2,352 crore for the 'Blue Revolution'.
- ₹ 880 crore for the 'PM Formalisation of Micro Food Processing Enterprises' scheme.
- Provision of direct financial assistance to 11.8 crore farmers under the 'PM-KISAN' scheme.
- Additionally, an extension of crop insurance coverage to 4 crore farmers through the 'PM Fasal Bima Yojana'.
- Integration of 1,361 mandis under eNAM to support trading volumes amounting to ₹ 3 lakh crore.
- Promotion of both, public and private investment in post-harvest activities, including aggregation, storage, supply chain management, processing, and marketing.
- Expansion of the application of Nano DAP fertiliser across all agro-climatic zones after the successful adoption of Nano Urea, to improve crop yields and nutrient uptake, leading to better productivity and sustainability in agriculture.
- Formulation of a comprehensive programme for the development of the dairy sector including various measures such as providing access to better breeds, veterinary services, and market linkages.
- Expansion of the 'PM Matsya Sampada Yojana', aimed at enhancing aquaculture productivity with a goal of increasing overall fish production, doubling seafood exports, and generating 55 lakh employment opportunities in the fisheries sector, thus contributing to rural livelihoods and economic growth.
- Formulation of a strategic plan under the 'Atmanirbhar Oilseeds Abhiyaan' to attain self-sufficiency in oilseeds production such as mustard, groundnut, sesame, soybean,

and sunflower. This will cover research for high-yielding varieties, widespread adoption of modern farming techniques, market linkages, procurement, value addition, and crop insurance.

These budget allocations demonstrate the government's ongoing commitment to offering financial assistance to farmers, improving credit accessibility with interest subvention, and ensuring crop insurance coverage. Moreover, the funding for agricultural research and education highlights the significance of investing in scientific and technological progress to enhance agricultural productivity, efficiency, sustainability, and adaptability. Overall, these provisions indicate a multi-faceted approach to modernize and strengthen the agricultural sector, while also fostering partnerships between government institutions, private enterprises, and agricultural stakeholders.

III. POLICY INITIATIVES AND REFORM AGENDA

1. Agricultural Reforms

The government initiated several agricultural reforms aimed at liberalizing markets, empowering farmers, and enhancing private sector participation. The passage of key legislation such as the 'Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020', The 'Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020', aimed to create a more competitive and transparent agricultural marketing system. These reforms aimed to dismantle barriers to interstate trade, provide farmers with alternative marketing channels, and attract private investment in agricultural value chains. However, they also sparked protests and controversy, with concerns raised about their potential impact on farmers' livelihoods and market distortions.

2. Technology Adoption and Innovation

Embracing technology and innovation became a key focus area to enhance agricultural productivity, reduce input costs, and mitigate risks. Initiatives such as the 'National Mission on Sustainable Agriculture (NMSA)', 'Rashtriya Krishi Vikas Yojana (RKVY)', and 'Atmanirbhar Bharat Abhiyan' emphasized the adoption of modern agricultural practices, digital tools, and agri-tech solutions. The government promoted initiatives like e-NAM, soil health cards, weather forecasting services, and mobile-based advisory systems to provide farmers with real-time information, market intelligence, and decision support. Emphasis was placed on leveraging satellite imagery, IoT (Internet of Things), AI (Artificial Intelligence), and blockchain technologies for precision agriculture and smart farming solutions.

3. Rural Infrastructure Development

Enhancing agricultural infrastructure remained a priority to improve farm productivity, reduce post-harvest losses, and strengthen market linkages. Investments were made in irrigation projects, rural roads, cold storage facilities, and agri-logistics infrastructure to boost agricultural value chains and enhance farmers' access to markets. The government launched schemes like

‘Pradhan Mantri Gram Sadak Yojana (PMGSY)’, ‘Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)’, and ‘Agriculture Infrastructure Fund (AIF)’ to develop rural infrastructure, promote farm mechanization, and modernize agri-processing facilities. Special emphasis was placed on creating agri-export zones, food parks, and storage hubs to facilitate agricultural trade and exports.

IV. CHALLENGES AND CONSTRAINTS

1. Agrarian Distress and Farmers’ Suicides

Despite government interventions and support measures, agrarian distress persisted in many parts of the country, driven by factors such as crop failures, debt burdens, price fluctuations, and input cost escalation. Farmers’ suicides remained a tragic reality, highlighting the deep-rooted socio-economic vulnerabilities in rural communities. Inadequate access to credit, insurance, extension services, and marketing infrastructure exacerbated farmers’ plight, particularly small and marginal farmers. The need for holistic and targeted interventions to address the multifaceted challenges facing farmers remained a pressing concern.

2. Climate Change and Environmental Degradation

Climate change emerged as a significant threat to Indian agriculture, with extreme weather events, erratic rainfall patterns, droughts, floods, and heat waves becoming more frequent and intense. Environmental degradation, soil erosion, water scarcity, and loss of biodiversity further compounded the challenges faced by farmers. The government emphasized climate-resilient agriculture, water conservation, sustainable land management, and afforestation initiatives to mitigate climate risks and build adaptive capacities. However, more concerted efforts were needed to mainstream climate-smart practices and integrate them into agricultural planning and policies.

3. Market Reforms and Farmer Protests

The government’s agricultural reforms aimed at liberalizing markets and empowering farmers triggered widespread protests and agitation, particularly in states like Punjab, Haryana, and Uttar Pradesh. Farmers’ unions and stakeholders expressed concerns about the potential adverse impacts of the new laws on minimum support prices (MSPs), public procurement, and agricultural marketing infrastructure. The contentious nature of the reforms underscored the complex socio-economic and political dynamics surrounding agriculture, land tenure, and rural livelihoods. The need for inclusive, participatory, and consultative approaches to policymaking and reform implementation became evident, emphasizing the importance of dialogue, consensus-building, and stakeholder engagement.

V. FUTURE PROSPECTS AND POLICY RECOMMENDATIONS

1. Holistic Approach to Agricultural Development

Addressing the challenges facing Indian agriculture requires a holistic and integrated

approach encompassing production, marketing, credit, technology, and social protection measures. Policies should focus on enhancing farmers' incomes, ensuring food security, promoting sustainable farming practices, and fostering rural prosperity. Strengthening the institutional framework for agriculture, including agricultural research and extension systems, market infrastructure, and farmer producer organizations (FPOs), is essential for building resilient and inclusive agricultural value chains. Investing in human capital, skills development, and women's empowerment in agriculture can unlock the sector's potential as a driver of inclusive growth and rural transformation.

2. Climate-Resilient Agriculture and Natural Resource Management

Building climate resilience in agriculture requires investments in water management, soil conservation, agroforestry, and weather-proofing infrastructure. Promoting drought-tolerant crops, climate-smart technologies, and precision farming techniques can enhance agricultural productivity and reduce vulnerability to climate risks. Sustainable land use planning, watershed management, and ecosystem restoration efforts are essential for conserving natural resources, preserving biodiversity, and mitigating the adverse impacts of land degradation and deforestation. Incorporating indigenous knowledge, traditional farming practices, and community-based approaches can contribute to resilient and adaptive agricultural systems.

3. Inclusive Market Reforms and Social Protection

Market reforms should be accompanied by safeguards to protect farmers' interests, ensure price stability, and prevent market distortions. Strengthening market intelligence systems, establishing robust regulatory mechanisms, and promoting transparent price discovery mechanisms can enhance market efficiency and competitiveness. Social protection measures such as income support schemes, crop insurance, and rural employment guarantee programs play a crucial role in reducing farmers' vulnerability to income shocks, enhancing their resilience, and promoting inclusive growth. Targeted interventions for vulnerable groups, including women, smallholders, and landless agricultural laborers are essential for addressing inequalities and promoting social justice in agriculture.

4. Policy Coherence and Governance

Ensuring policy coherence, coordination, and convergence across sectors such as agriculture, water, energy, environment, and rural development are critical for maximizing synergies, optimizing resource allocation, and achieving sustainable development outcomes. Integrated approaches to planning, implementation, and monitoring can help overcome siloed thinking and foster integrated solutions to complex challenges. Strengthening governance institutions, promoting transparency, accountability, and participatory decision-making, and enhancing the capacity of local institutions and communities are essential for effective policy implementation and service delivery. Engaging stakeholders in policy dialogue, knowledge sharing, and multi-stakeholder partnerships can foster ownership, collective action, and innovation in agriculture.

VI. CONCLUSION

The journey of agricultural development in India through the allocation and provisions of the budget from 2014 to 2024, reflects a mix of achievements, challenges, and opportunities. In essence, these initiatives reflect the government's holistic approach towards agricultural development, encompassing both crop cultivation and livestock management. While significant strides have been made in enhancing productivity, promoting sustainability, and empowering farmers, much remains to be done to address persistent agrarian distress, climate risks, market inefficiencies, and socio-economic inequalities. Going forward, a holistic and inclusive approach to agricultural development is essential, focusing on enhancing resilience, fostering innovation, promoting equity, and ensuring environmental sustainability. By harnessing the transformative power of technology, innovation, and social inclusion, Indian agriculture can realize its full potential as a catalyst for rural prosperity, food security, and sustainable development. Collaborative efforts involving governments, civil society, academia, and the private sector are needed to build resilient and inclusive agricultural systems that leave no farmer behind, and through this, sustainable growth in the agricultural sector can be achieved which further ensures overall rural prosperity and economic development.

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Women Financial Security Scheme in India

Dr. Preeti Chandra, Nisha, Dr. Nandan S. Bisht, and Dr. Padam. S. Bisht

ABSTRACT

The study reveals the present status of government initiative for women financial independency and inclusion. The study is based on secondary data which rely on descriptive analysis. Women have strides forward significantly in various fields, but when it comes to managing their hard-earned money, many of them still rely on male counterpart. Women should recognize their capability of taking their financial decisions independently. Women's financial security refers to the state of having stable and sufficient financial resources, that enable women to meet their basic needs, handle emergencies, and plan for the future. It encompasses various aspects related to economic stability, savings and protection against financial risks. The Indian government has introduced various schemes to empower women and provide them opportunities for their growth and financial safety. According to the reserve bank of India (RBI), the level of financial literacy among Indian adults remains a matter of concern, only 27% of Indian adults, and specifically 24% of women, meet the minimum level of financial literacy. This indicates that there is significant room for improvement of financial literacy, especially among women. Moreover, reports suggests that a staggering 80% of women in India struggle due to financial illiteracy, and approximately 62% of Indian women do not own either bank accounts or have limited access to banking services. These statistics highlights the need for targeted efforts to enhance financial education and empower women in managing their finances effectively. This paper is going to study the government's schemes on women financial security in India and also to assess the impact of various financial security projects. The study will be based on secondary data accumulated from various government and news articles, official site and academic publications.

KEYWORDS: *Financial Security, Women, Indian Government Scheme, Financial Literacy*

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I. INTRODUCTION

According to the Reserve Bank of India (RBI), the level of financial literacy among Indian adults remains a matter of concern, only 27% of Indian adults and specifically 24% of women, meet the minimum level of financial literacy as defined by the RBI. This indicates that there is significant room for improvement of financial literacy among women.

In India, financial inclusion strides significantly, especially for women. Since 2011, the share of adults with a financial account has doubled by reaching 78%. India's gender disparity in financial inclusion has also decreased dramatically over the time, from 22 percentage points to almost insufficient levels. Pradhan Mantri Jan Dhan Yojana (PMJDY) is a game – changer, bringing a higher proportion of the population into formal banking channels. Over 462 million accounts have been opened through PMJDY, with 56 % belonging to women from rural and semi- urban areas.

Despite the increase in the number of women with bank accounts, equity in financial usage has lagged behind. The Global Findex 2021 data shows that just 13% of Indian adults had taken out a formal loan in the year which includes 10% of women borrowers and 15% of men.

A 2020 study revealed a systemic gender gap in credit usage. In India, women's credit amounts to only 27% of the deposits they make; against men's credit amounts to 52% of their deposits. The observed disparity in loan applications could potentially stem from women's underutilization of their credit history, and financial institutions' possible bias against providing equal credit to them.

One possible explanation for low credit adoption among women is account inactivity. Financial institutions often assess risk, based on an applicant's transaction account history. However, India has a high rate of account inactivity, which means that fewer women have a significant account history that can be used to assess risk.

Financial literacy Programs play a crucial role in lifting families out of debt and fueling new prosperity. By promoting awareness, providing practical knowledge, and encourage informed decision- making, these programs can contribute to economic empowerment and financial well-being for women across the country.

Additionally, the gender gap in Literacy rate persists. While the male literacy rate in India is 84.7%, the female literacy rate stands at 70.3%. Efforts to bridge this gap are essential to empower women economically and ensure their financial well-being.

Women's financial security refers to the state of having stable and sufficient financial resources that enable women to meet their basic needs, handle emergencies and plan for the future. It encompasses various aspects related to economic stability, savings, and protection against financial risks.

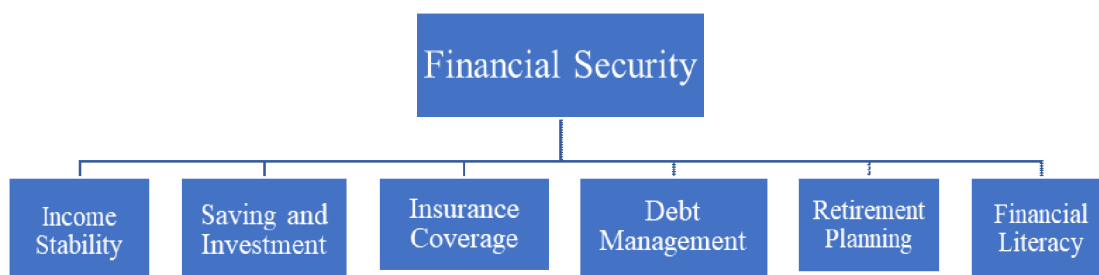


Figure1:Flow chart of main Variables of Financial Security Scheme for Women

To address this, various initiatives, including financial literacy programs, need to be strengthened. These programs can equip women with the knowledge and skills necessary to make informed financial decisions, manage savings, and plan for their future. By promoting financial literacy, we can empower women to take control of their financial lives and build a secure future.

II.OBJECTIVE OF STUDY:

- 1. To study the government's schemes on women financial security in India.**
- 2. Barriers in the effective implementations of the scheme and suitable remedial measures**

III.RESEARCH METHODOLOGY

Secondary data: Data accumulated from various government and news articles, official site and academic publications.

Government reports: Data included from the Indian Budget report, official progress dashboard of various schemes.

IV.FINANCIAL SECURITY SCHEMES FOR WOMEN

The following govt scheme are prominentfor women financial security:-

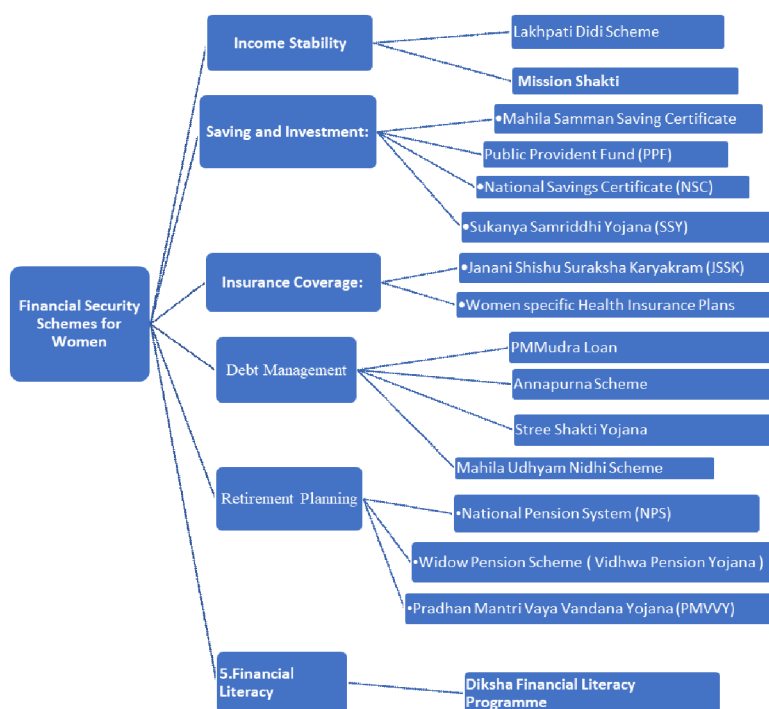


Figure: 2 Flow chart of Financial Security Scheme for Women

1. Income Stability

Having a steady income source through employment, business or investments. Ensuring that women can cover their daily expense and maintain a certain standard of living.

1.1 Lakhpati Didi Scheme

The lakhpati didi scheme is goal to create 2 crore women millionaires in village (referred to as “lakhpati didis”). Its aim is to encourage women to start micro-enterprises and become economically self-sufficient. Under the scheme, women receive skill development training through self-help groups. The training equips them with skills such as plumbing, among other things, producing LED bulbs and managing and maintaining drones. SHGs have played a significant role in poverty reduction in India, lifting millions of women out of poverty. They provide a platform for women to actively participate and contribute to local governance.

1.2 Mission Shakti

Mission Shakti is a government initiative in the state of Odisha, India, aimed at empowering women through the promotion of Women Self-Help Groups (WSHGs). The primary goal of Mission Shakti is to enhance the social and economic empowerment of women. It focuses on

enabling women to achieve economic independence through independent employment and income. Mission Shakti has made significant strides in empowering women across Odisha. Odisha stands out with 43 percent of startups being led by women entrepreneurs, surpassing the national average of 18 percent. It has contributed to the economic well-being of thousands of women by supporting their entrepreneurial ventures and income-generating activities. Mission Shakti is an admirable initiative that seeks to uplift women through financial inclusion, skill development, and livelihood support. It acknowledges the important role that women play in society. The Odisha government has provided credit amounting to ₹ 11,000 crore to four lakh SHGs as institutional finance in 2022-23 alone.

The state prepares a separate Gender Budget, with the Mission Shakti department receiving the highest allocation (41.57 percent) in the Gender Budget for 2023-24. Mission Shakti has enabled women to move beyond traditional roles. Women from SHGs engage with government departments, work as Swasthya Mitras, Jal Sathis, tax collectors, and banking correspondents.

Young women from SHGs are trained in modern trades like fashion, lifestyle, commercial stitching, air-hostess, e-commerce, and beauty and wellness.

2. Saving and Investment:

Building a financial cushion through regular savings. Investing wisely to grow wealth over time (e.g., stocks, real estate, retirement accounts.)

2.1 Mahila Samman Savings Certificate

Mahila Samman Savings Certificate is a one-time programme that runs from April 2023 to March 2025. For two years at a set interest rate, it will provide a maximum deposit facility of up to Rs. 2 lakhs in the names of women or girls.

2.2 Public Provident Fund (PPF)

PPF is a government-backed saving scheme with multiple benefits. It is one of India's most popular and tax-efficient savings schemes, primarily designed to encourage savings and provide financial security to individuals. PPF is ideal for individual with a low risk appetite. It offers stable returns even during economic downturns. By diversifying financial portfolios, PPF contributes to financial stability. It is a scheme in which retirement benefits are accumulated. Under this scheme, an employee (men and women) contributes a certain amount, and the employer matches that contribution. In the union budget 2018-2019, a special provision was introduced for women employees. New women employees can contribute 8% of their salary to the EPF instead of the usual 12%. This privilege is applicable only for the first three years of employment, allowing women to take home a higher pay during this period. Odisha stands out with 43 percent of startups being led by women entrepreneurs, surpassing the national average of 18 percent.

2.3 Sukanya Samriddhi Yojana (SSY)

SSY aims to meet the education and marriage expenses of girl children. It was launched as part of the Beti Bachao Beti Padhao campaign by the Hon'ble Prime Minister on 22nd January 2015. The Sukanya Samriddhi Yojana (SSY) is a small deposit scheme launched by the Ministry of Finance exclusively for girl children. The minimum investment is ₹ 250 annually. The annual maximum investment is ₹ 1,50,000. The age of maturity is 21 years.

Interest Rate: 8.0% (from April 1, 2023, to June 30, 2023). Under Section 80C, the principal amount, interest received, and maturity benefits are all tax-exempt. After the child turns 18, early withdrawals of up to 50% of the investment are permitted, even if the child is not getting married. Since its inception, around 2.73 crore accounts have been opened under SSY, with nearly ₹ 1.19 Lakh Crore deposits. Sukanya Samriddhi Yojana gives parents a safe way to accumulate money for their daughters' future education and marriage costs.

3. Insurance Coverage:

Having health insurance, life insurance and other forms of risk coverage and protection from unforeseen medical costs, accidents, or income loss.

3.1 Janani Shishu Suraksha Karyakram (JSSK)

Janani Shishu Suraksha Karyakram (JSSK) is a significant initiative by the Ministry of Health & Family Welfare in India. JSSK aims to provide comprehensive and quality healthcare services to pregnant women and newborns. It focuses on ensuring that pregnant women accessing government health facilities receive free and cashless delivery, including cesarean sections. The budget allocation under Mission Shakti for the financial year 2023-24 is ₹ 3143.96 crore. This allocation covers both the 'Sambal' and 'Samarthya' sub-schemes.

3.2 Women specific Health Insurance Plans

According to a survey conducted by ICICI Lombard General Insurance, 93% of women participating in the survey believe that women-specific health insurance plans are highly relevant. This indicates a strong awareness of the need for specialized health coverage for women. Among women who hold a health insurance (HI) policy, 65% own a women-specific health insurance plan. More than half of women aged 41-55 years believe that age is a key reason for purchasing health insurance. On the other hand, 61% of respondents believe that 25-34 years is the right age to invest in a health insurance policy. These plans cater specifically to women's health needs and provide targeted coverage. Women who have their own source of income are more likely to own insurance. These financially independent women display higher levels of overall awareness about general insurance, women-centric plans, features, etc. Women-specific health insurance plans are gaining prominence, and more women are recognizing their relevance and benefits.

4. Debt Management

4.1 Pradhan Mantri Mudra Yojana (PMMY): launched by Prime Minister Modi in April 2015, encourages entrepreneurship and provides micro-credit access to promote small businesses. Mudra yojana gives benefits of lower or concessional interest rate on loan for women borrowers. Its also encourages women for entrepreneurship and economics empowerment. **Interest rate benefit:** The government has instructed all bank and NBFCs to reduce interest rates by 25 basis points while allocating Mudra loans for women. This ensure that women entrepreneur pay less interest and avail other benefits under this scheme. There is an impact that women entrepreneurs have received 70% of all loans under the Mudra scheme, despite making up only 14% of all entrepreneurs. As of 2019, 15 crore loans amounting to Rs. 4.78 lakh crore have been distributed to women entrepreneurs under the mudra scheme.

4.2 Stree Shakti Scheme:

The Stree Shakti Scheme is an initiative by the state bank of India (SBI) aimed at empowering women in India. It provides financial assistance and concessions to women entrepreneurs, enabling them to start and expand their businesses. It provides the loan amounts based on the category: Retail Traders: Rs. 50,000 to Rs. 2 lakhs, Business Enterprise: Rs. 50,000 to Rs. 2 lakhs, Professionals: Rs. 50,000 to Rs. 25 lakhs, Small- Scale Industries (SSI) Rs. 50,000 to Rs. 25 lakhs

4.3 Annapurna Scheme

The Annapurna scheme is a government initiative launched by the ministry of social justice and empowerment, Government of India. It aims to empower women entrepreneurs in the food catering sector by providing them with easy access to credit and promoting entrepreneurship. The objective of the Annapurna scheme is to empower women to achieve financial independence and make a positive impact on the nation's economy. By providing access to credit facilities, it empowers women entrepreneurs to realize their dreams and build successful food catering businesses.

4.4 Mahila Udyam Nidhi Scheme

The Mahila Udyam Nidhi Scheme was introduced by the Small Industrial Development Bank of India (SIDBI) to empower women entrepreneurs and promote women entrepreneurship. Women entrepreneurs can avail loans up to ¹ 10 lakh under this scheme. The interest rates may vary from bank to bank. Funding can be used for starting a business, upgrading, or expanding existing projects. The maximum loan repayment period is up to 10 years, with a moratorium period of up to 5 years. The scheme encourages and supports women entrepreneurs by providing financial assistance at concessional interest rates. It aims to bridge the gender gap and achieve economic equity.

5. Retirement Planning

Planning for retirement by contributing to retirement account, ensuring financial security during the post- working years.

5.1 National Pension System (NPS)

It is a government-backed retirement saving scheme that provides financial security to individuals during their old age opening and NPS account is a hassle-free process for everyone, including women. It is available to both working professionals and housewives. The NPS has been in effect for over a decade and has delivered 9% to 12% annualized returns so far. While there is a cap on equity exposure, the scheme offers a balance between risk and returns. NSP provides women with a steady income during their retirement years. The returns can range from 12% to 14% of the investment made in the scheme.

5.2 Widow Pension Scheme (Vidhwa Pension Yojana)

This is implemented across various states in India. It aims to provide financial assistance to widowed women who rely on other family members after their husband's demise. Generally, widows receive a minimum pension of Rs 300 every month, but this can go up to Rs. 2,500 in some states. The scheme ensures a regular income form widow, fostering self- reliance and improving their economics condition. Beyond financial aid, the scheme may also provide additional perks such as job assistance, medical benefits, and overall well-being support. The VPY acknowledges the challenges faced by window and aims to alleviate financial burdens, empower them and provide a dignified way to overcome their difficulties.

5.3 Pradhan Mantri Vaya Vandana Yojana (PMVVY)

The Indian government announced this retirement and pension plan. Operated and managed by the Life Insurance Corporation of the Indian (LIC), this scheme provides financial security to senior citizens. Pension payments under the scheme are made on a regular basis, i.e. monthly, quarterly, half-yearly, or annually. Under PMVVY, the minimum pension is Rs 1,000 per month, Rs 3,000 per quarter, Rs 6,000 per half-year, and Rs 12,000 per year. The maximum pension provided under PMVVY: Rs Rs.9,250 p/m, Rs.27,750 p/quarter. Rs.55,500 p/half-year, Rs1,11,000 p/year. The PMVVY scheme provides subscribers with an assured return at the rate of 7% to 9% for 10 years (the government decides and revises the rate of return). PMVVY ensures that senior citizens receive a steady income during their retirement years. It offers an attractive alternative to traditional bank deposits.

6. Financial Literacy:

Educating women about budgeting, saving, investing and managing finances. Empowering women to make informed financial decisions.

6.1 Diksha Financial Literacy Programme

The Diksha Financial Literacy Programme is a commendable initiative designed to empower women from low-income families with the knowledge and tools they need to manage their finances effectively. The Diksha program aims to provide women with essential financial literacy skills, enabling them to make informed and intelligent financial decisions. It focuses on topics such as cash flow management, safe saving practices, future planning, and debt management. The Reserve Bank of India (RBI) recognizes and acknowledges Diksha as a pioneering financial literacy program.

- ❖ **Budgeting:** Participants learn to create budgets, track income and expenses, and identify surpluses. Once surpluses are identified, women are trained to use banks and various savings products.
- ❖ **Debt Management:** Financial literacy also relates to understanding bank loans, timely repayment, and the impact of credit defaults. Familiarizing participants with digital banking and different channels for financial transactions.

V. CONCLUSION:

Women's empowerment is crucial for economic growth. However, India faces challenges in achieving gender parity, especially in terms of financial inclusion. Initiatives like the Pradhan Mantri Jan Dhan Yojana (PMJDY) have made significant strides in bringing women into formal banking channels, but there is still work to be done. Financial literacy plays a pivotal role in empowering women. Understanding financial concepts, managing savings, and making informed decisions are essential for their economic well-being. Despite progress, India ranks low in terms of gender equality in economic participation. Bridging this gap requires targeted efforts to enhance financial inclusion for women. Challenges such as illiteracy, lack of awareness, and reliance on family members hinder women's financial empowerment. Overcoming these barriers is essential. The Reserve Bank of India (RBI) and the Indian government have introduced various schemes and initiatives to promote financial inclusion among women. These efforts aimed to create an environment where women can make independent financial decisions. Studies highlight how important it is to keep up the fight to improve women's economic empowerment, increase access to banking services, and improve financial literacy. Greater gender equality and inclusive growth can be achieved in India by addressing these issues.

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Loan Waiver and its Impact on Economy with Special Reference to Major States of India

Dr. Tarun Prakash

Abstract-

Loan plays a very important role in economic development of society. It act as a major source of finance in rural area especially for farmers. Earlier farmers use to take loan from traditional money lenders at high rate of interest. As time passed with evolution of banking sector farmers are able to get loan with less interest rate but due to various reasons farmers were unable to repay their debts are given relief through various schemes. One such scheme is loan waiver. In this paper we will study loan waiver scheme of state such as Maharashtra, Karnataka and Uttar Pradesh. Here in we will discuss about the effect of the loan waiver scheme on economy policies of the government on development. The study would try to elaborate the effect of loan waiver on government spending for development purpose. Herein we will discuss the mind set of debtors for paying back the loan if there are frequent loan waivers in country. Sincenonpaying back loan create NPA for bank which result in stagnation of fund, in this study we will go through the resulting scenario of NPA position after loan waiver. Using secondary data from various sources we will try to understand change in various determinants of economic health of states such as GDP and fiscal policy of states resulted due to loan waiver

Keywords-*Loan Waiver, Fiscal policy, Fiscal space, Gross Domestic Product, Revenue Expenditure, Non-Performing Assets, Multiplier Effect*

Introduction-

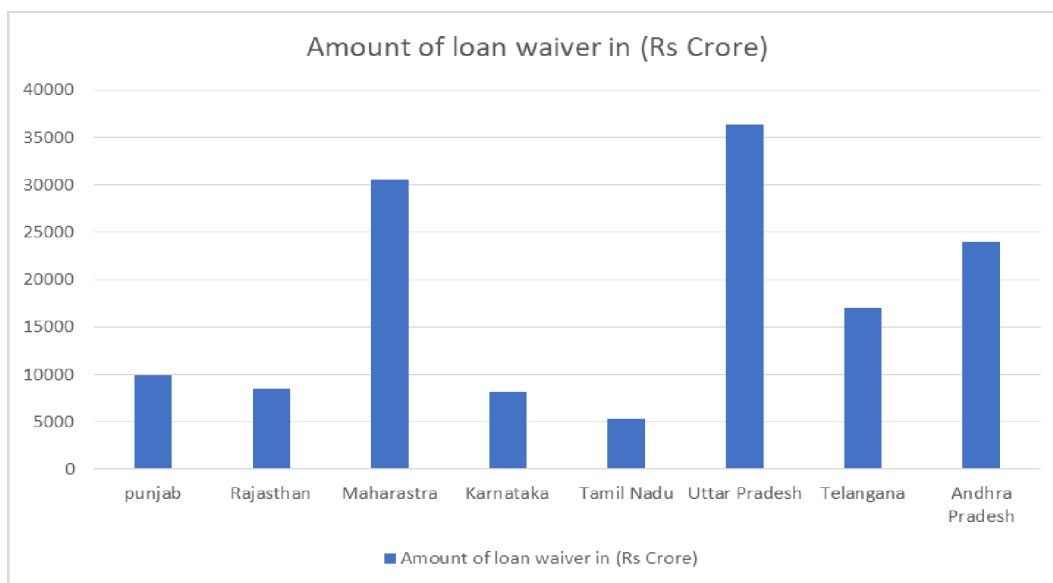
As economy is going complex due to globalization and privatization economic factors such as price market and sales have been unpredictable for anyone including private and government agencies, making everything harder for farmers. So government intervenes through various relief scheme such as of subsidies, debt relief etc. Earlier economists are in favor of such government scheme but economists of new school of thoughts are not in favor of such

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economically bold steps. They are of opinion that these types of strategies are affecting economy adversely. One major such scheme is loan waiver.

Loan waiver means repayment of loan taken by farmer from banks by government partially or fully. It puts heavy pressure on the Government treasury directly as the part of loan wave as relief is fully beard by government without any tangible or intangible returns. It also affects banking up to some extent but this effect is very mild. Economic effect of loan waiver is minimized by proper planning and regulating. In adverse condition like draught floor etc. loan waiver act as a oxygen for the farmers who have suffered from heavy losses. But now days various political parties are using loan waiver not as protection shield for farmers but as their attacking sword for winning election. Loan waiver also operates the mentality of the borrowers as well as moneylenders banks. Borrowers are using loan waiver as such a chance in which they can use government wealth without repaying it. Many people borrow money without any need in a hope that one day their loan will be redeemed by loan waiver scheme of any political party. This is a fact that many farmers need loan waiver badly but there are many borrowers who defaults their dues only in hope of loan forfeiture. This in turn motivates banks to keep disregard for needy farmers and unsupportive in loan sanctioning process due to loss of their interest.

Chart showing loan waiver in various states



These latter set of concerns are best represented in this much-quoted statement by the then Governor of the Reserve Bank of India

He believes abandoning farm credit undermines a culture of good faith, undermines credit discipline, and weakens incentives for future borrowers to repay; in other words, patience

leads to moral hazard. Ultimately, there will also be a transfer from the taxpayer to the borrower. If this raises the level of overall government debt, it will also affect government bond yields. Private borrowers may then become overcrowded as well, as increased government borrowing may raise borrowing costs for others. I think we need to form an agreement so that no promises of credit forgiveness are made. Otherwise, small fiscal problems in this context could ultimately affect the country's balance sheet. (Press Conference, 6 April 2017; See also Patel, 2017).

Agricultural Debt Waiver and Debt Relief (ADWDR) Scheme of 2008

This scheme was announced by Union government of India in budget 2008-9¹. This loan waiver was a step taken on basis of R.Radhakrishnan Report which suggested various measures to provide relief to farmers. This report noted that the measure reason behind the suffering of farmer is the indebtedness of farmers because of growing borrowings from high cost informal sources. The main points related to this loan waiver scheme are as follows

- Marginal farmers would receive a full waiver of all loan not returned as on December 31, 2007 and outstanding as on February 29, 2009. Here marginal farmers are those farmers who hold land upto one hectare.
- All other farmers will get a rebate of 25% of their loan and have to pay back remaining 75% of their loan to bank.

Farmer will be allowed to take loan after full redemption.

The loan waiver was announced as a 60,000, crore package in 2008 by finance minister P. Chidambaram.

Maharashtra-

Maharashtra government came up with loan waiver scheme as promised in its election manifesto. Under this scheme short-term crop loan of rupees 2 lacs to be waived if loans was taken by farmers in between April 1st 2015 to March 31st 2019. Under the scheme short term restructured crop loans areas of 2 sep 30 2019 were waived. As per decision taken by the committee every loan including NPAs of all nationalised bank or private bank and rural banks of Maharashtra were included in this scheme. Following are the people who were excluded from the scheme

- ❖ Any individual who is elected representative of people such as MLA and MP is whether, that are present or former
- ❖ Any government employee, whose income is more than 25000 excluding class 4th will not get benefit of this loan waiver scheme
- ❖ Those who pay tax on income from non agricultural sector.
- ❖ Any individual whose monthly income is more than 25000. Excluding former servicemen

Maharashtra loan waiver scheme benefited 311 lakh farmer out of 1.36 crore. This loan waiver will cost nearly 30500 crore. Maharashtra farm loan waiver was estimated to raise fiscal deficit to 2.71 % which was budgeted to remain 1.53 % of state GDP²

Budgeted fiscal deficit = 1.53%

Observed fiscal deficit =2.71%

Uttar Pradesh-in 2016 Bharatiya Janata Party government under Yogi Adityanath has announced redemption of farm loans. 36000crore was allocated for loan waiver scheme which was initially estimated 8.6 billion small and marginal farmers who have taken loan on or before 2015-16 fiscal year in 2017-18 crop loan worth rupees 20942 crore taken by 3.48 million farmers were wave of in three phases. Also, 12 6000 farmers also benefited when the scheme cleared150 crore NPA of agriculturalsector. In 2018-19, about 8.4 lakh farmers were covered and total credit of 3730 crore is cleared including NPAs. Budgeted Fiscal Deficit of this state is 3.00% where as its revised fiscal deficit is 2.97%³

Budgeted fiscal deficit = 3.00%

Observed fiscal deficit = 2.97%

Table Showing Budgeted And Revised Fiscal Deficit of Major States

States	Budgeted Fiscal Deficit	Revised Fiscal Deficit
Karnataka	2.60	2.80
Maharashtra	1.53	2.71
Uttar Pradesh	3.00	2.97

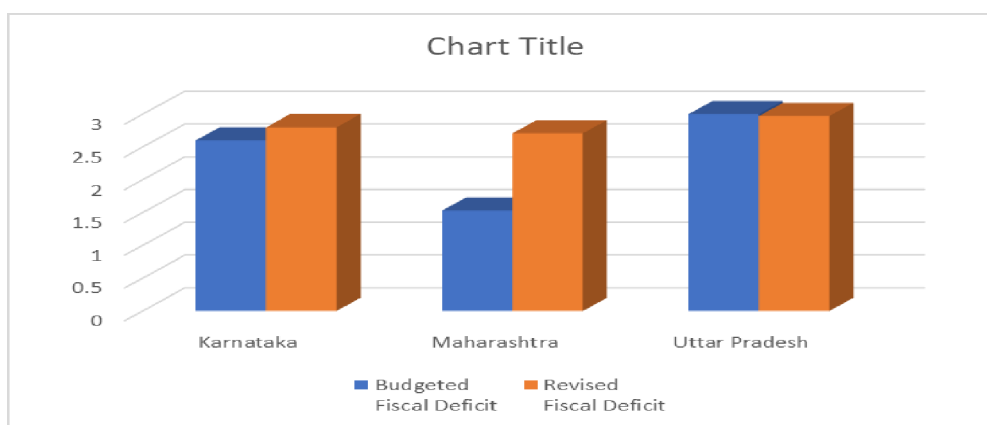


Chart showing estimated and revised fiscal deficit

Impact of loan waiver

1. It is a major argument that loan waiver demoralizes money lender as it motivates borrowers to commit default. Let's take an example of loan waiver by UPA government in 2008. At that time of loan waiver NPA in agriculture sector is nearly 2% of total agricultural loan. But after loan waiver and NPA loans have gone over the severe level from 2% to 6% of total agricultural loan waiver⁴. Usually it is the conduct that when a debtor takes a loan, he has to repay it and until his repayment interest is charged. This repayment could be in form of instalments or in lumpsum. But when it is not repaid for 6 months it is treated as NPA. Due to loan waiver there has become a form of culture to take a loan and keep it unpaid in a hope of a loan waiver. It results in increase in NPA which makes economy of lender distressed. India has been undergone many loan waiver but it did not result in any decrease in nonperforming assets. In 2017 total NPA of agriculture sector was deducted to be 60,161 crore which increased in 2018 to 83,153 crores. This increased further up to 1,04,000 crore in 2019.

2. Farm loan waiver has created an atmosphere of fear among banks of loan waiver by government. This motivates banks to reduce credit availability for farmers who then forced to borrow from traditional and non official source of finance at an over the normal rate of interest. A continuous circulation of fund is required for a money lender such as bank and other institute to regulate its business but when default is committed by any of its debtor, the fund available to that debtor is blocked making that unavailable to lender for further lending process. However it does not affect banks to a large extent because government usually repays the amount of loan to banks, but even then it makes a discontent among bankers for debtors resulting in misbehaves and misconduct for their debtors. It has been seen that loan waiver during the loan cycle motivates the lender banks to reduce loan providing facility for marginal farmer for next loan cycle.⁵

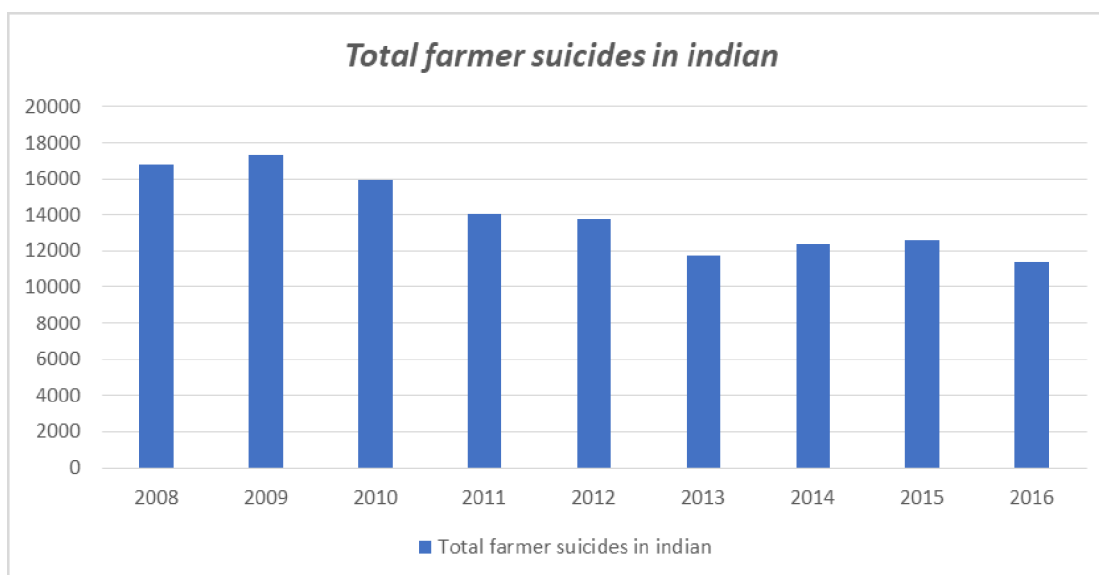
3. The rating firms expects the aggregate fiscal deficit of states to come in higher at 3.2% in financial year 2020/ than the agency forecast of 2019 for 2.8%.⁶

4. Loan waiver hurts economy by affecting its fiscal policy. Fiscal policy is the policy of using government wealth in capital expenditure like Development projects and government investment. Basically government can invest its wealth in two types of expenditure which are Revenue expenditure and other is capital expenditure. Revenue expenditure are those expenditure which incurred for normal running of government day to day business and services i.e. subsidies, Interest repayment of loan taken etc. These are those expenditure which does not create any asset for government. Capital expenditure are those expenditure which are in development activities such as road development, Industry set up. They basically result in asset creation.⁷ When government undergoes a loan waiver it uses its fund in repaying loan to banks which it could have used for asset creation and development purpose causing a hurdle in economic development of country

5. Loan waiver affects GDP at significant level by affecting government spending level. Basically when government invest in capital expenditure such as making assets for economy it somehow creates employment for unemployed public making them able to purchase more resulting in increase in demand. In this situation the portion of efficiency or resource which has been unemployed will be dragged in mainstream to culminate that demand. In economic terminology this is called as multiplier effect. This in turn results in increase in GDP⁸. To waive loan government uses that wealth which they should use in spending for development purposes which could have resulted in promotion of investment activities of government in development scheme. Such change in pattern of the government expenditure reduces the overall efficiency of the fiscal spending. This results in a less favorable GDP condition

6. Distressed beneficiaries benefit inefficiently from debt waiver, but the loan performance of non-distressed beneficiaries worsens after the waiver. As one has seen in loan waiver scheme of Uttar Pradesh, the eligibility of qualifying for a loan waiver as provided facility of loan waiver only to marginal farmers. Only those farmers have been defined as the farmers having land holding below two hectares and marginal farmers have been defined as farmers having land below one hectare. Many farmers who do not come under given condition did not get loan waiver relief even when they are in great need of it. On the other hand people, who were not in need of any loan waiver, got the advantage of loan waivers. These people who got loan waiver as a way to ignore loan repayment develop an inertia in themselves for not repaying loan and creating non-repayment of loan culture in a weight of being loan forfeited by government. There is also a perception that only big and small size farmers are the one who get the highest benefit from loan waiver⁹

7. Loan waiver was formulated for wellbeing of farmer. By loan waiver government tries to provide a support pillar to farmers against the overwhelming loans taken by farmer. This scheme is meant to provide relief to farmer since declaration of a nationwide loan waiver scheme **Agricultural Debt Waiver and Debt Relief (ADWDR) Scheme of 2008** by UPA government in 2008 but results are not as good as estimated. It has been seen that farmer suicide has not significantly decreased after the nationwide loan waiver¹⁰

Table showing farmers suicides in India from 2008-16

All the figures for Farmers suicide as per NCRB¹¹¹²

Conclusion

It is clear from above story that loan waiver without any doubt provide relief to farmer on the spot but in short term only . in long term it does not provide any incentive to farmer. After getting loan waived farmer only get relief from the fear of loosing their land but they did not get any means with help of which they don't need to take loan. However government is providing many ways through which farmers take advantages those are used by farmers. In spite of such facility provided by government farmer had to take loan due to various reasons which are good enough to be taken serious. Political parties must not use loan waiver as a political tool but as a relief to farmers in case of any calamities.

Government has to think about searching a substitute of loan waiver. It could be admitted that loan waiver is not a regular function of government ,so it has to consider other option then loan waiver because loan waiver need a large fund which is usually extracted from that fund which could have been used for development purpose. There could be many such options, first and the most important one is to provide resources and infrastructure at reasonable price and on time of need. The most useful things which farmers need are fertilizer, electricity for irrigation purpose, machinery etc. Government could provide necessary requirement at subsidized rates which could be afforded a farmer and get unwilling to go for a loan. However loan is not always a wrong option to have but not paying it back is a unethical thing that is why a farmer should repay his loan a time . All the steps a government could take

will develop the income of farmer and demotivate him from taking a loan or will motivate farmer to repay loan at time

Generally banking is a financial service providing sector and a bank provide service in return of some earning. Loan provides them a way to earn on its investment in form of interest. When a government announces loan waiver it cause them loss of interest receivable in loan. However government takes the burden of repaying loan so there is no loss of fund of bank but a bank could have earned some interest on it.

Loan waiver promotes credit culture among debtors. In this culture people use to take loan for a undeserving work and also some time not repaying it at all in a hope of a loan waiver. Loan Waiver results in over use fund provided by government for development purpose and using it in a undesirable activities..There has to be more comprehensive rules for providing loan to farmers so that needy farmers could get loan very easily but undeserving could not. Since Government is providing loan for wellbeing of the farmers that is why public should be honest enough to take loan only for farming purpose. It has been seen that some farmers use to get loan for other non farming activities such as education, Business and personal works like marriage. Loan must be taken for some productive venture which must be farming in case of farm loan waiver

It has been seen that loan waiver hearts economic development process.Loan waiver is closely related to the fiscal space that government has because for loan waiver government use the amount of its treasure which it could have used for development purposes the capital expenditure. it must be examined first that state or country have enough fiscal space or not before announcing a loan waiver. Fiscal space means ability of fiscal condition of a state or country so that it can tolerate or indemnify the pressure of any change in fiscal spending.Loan waiver uses that wealth of government which could be used for development purpose. Therefor loan waiver should not be kept as a option of welfare of farmer but should be taken as a last stand for saving farmers. If loan waiver becomes necessary then proper research must be done before any further action. Loan waiver must be limited to those farmers who really wanted it because loan waiver should not mean just waiving the loan but it should be such planned that itcould provide relief to those farmers who pare in claws of getting there life destroyed due to overtaken loan.Government may give relief to farmer with proper planning such as waiving loans up to some extent or predefined limit or requirement. However, loan waiver is not at all profitable but in many circumstances it became necessary evil

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Demographic Shift and Aging Challenges: A Comprehensive Analysis of India's Elderly Population and Strategies for Well- being

Dr. Garima Maurya and Dr. Ved Prakash Mishra

Abstract:

This research paper conducts a thorough examination of the demographic shift and aging challenges faced by India's elderly population, offering a comprehensive analysis of their socio-economic, health, and familial dynamics. Utilizing data analysis from the LASI Wave-1 the research explores critical domains such as health, health care financing, social aspects, and economic factors, incorporating insights into disease burden, risk factors, family structures, social networks, and participation in welfare programs. In addition to LASI report, the paper integrates information from the Census of India 2011 and other relevant sources to provide a comprehensive understanding of the challenges and opportunities associated with India's aging population. The findings contribute to informing strategies and policies aimed at enhancing the overall well-being of the elderly in the country.

Keywords: *Demographic Shift, Aging Challenges, Elderly Population, Social Welfare Programs, Economic Factors, LASI Wave-1 report, Well-being Strategies.*

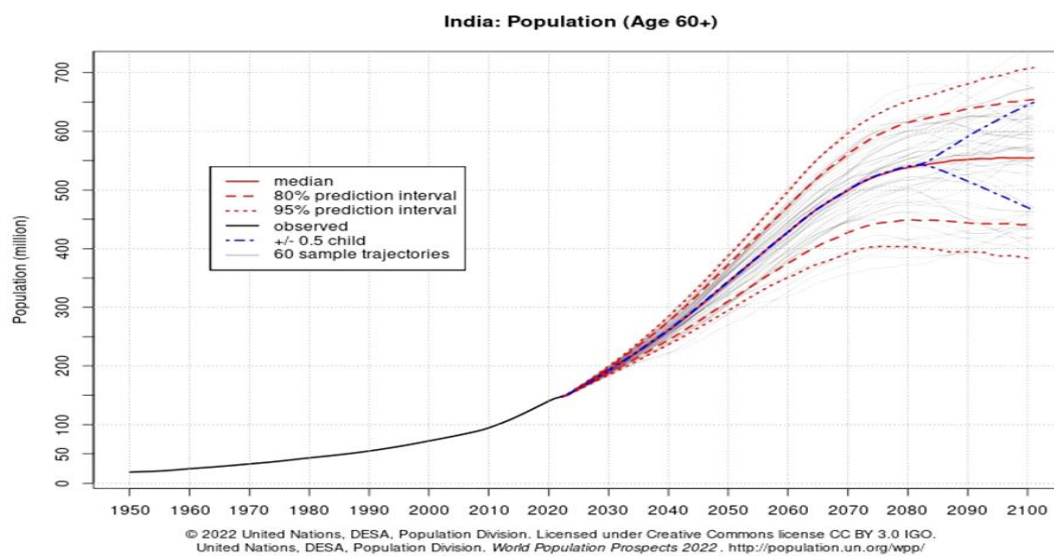
Introduction: The global landscape is witnessing a widespread surge in the aging population, with individuals aged 60 and above steadily increasing worldwide. India, too, is not immune to this phenomenon, experiencing a remarkable rise in its elderly demographic. This shift is propelled by a declining fertility rate, currently below 2.0, and an upward trajectory in life expectancy, surpassing 70 years. Presently constituting slightly over 10% of India's population at around 104 million, this elderly demographic is projected to expand to 19.5% by 2050. The country is undergoing a significant demographic transformation, with the elderly population expected to climb from approximately 9% in 2011 to an anticipated 18% by 2036, as outlined by the National Commission on Population. In light of these shifts, proactive planning and

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strategic provisions are imperative to address challenges and ensure a decent quality of life for the elderly.

Figure 1:



While India has achieved a commendable milestone in doubling life expectancy from around 32 years in the late 1940s to approximately 70 years today, the decline in fertility rates, from six children per woman to two, introduces a new challenge – the aging of the population.

This aging trend brings forth a spectrum of social, health, and financial challenges. Socially, the evolving facets of Indian society, driven by industrialization, urbanization, and globalization, have weakened traditional family bonds. Issues such as neglect of elderly parents, post-retirement disillusionment, and generational gaps are becoming increasingly prevalent. On the financial front, the elderly encounter challenges like dependence on their children in retirement, rising out-of-pocket healthcare expenses, inadequate housing facilities, and economic reliance on family income. A survey by Help-Age India underscores that a significant portion of the elderly population is economically dependent on their families, pensions, and cash transfers.

Health-related issues, including blindness, locomotor disabilities, and mental illnesses linked to senility and neurosis, are pervasive among the elderly. Depression, closely tied to poverty, poor health, and loneliness, affects a substantial segment of the elderly population. While various social assistance schemes like the National Social Assistance Programme (NSAP) have been introduced, concerns such as exclusion risks, complex formalities, and stagnant contributions have surfaced. Other initiatives, including Pradhan Mantri Vaya Vandana Yojana

(PMVVY), Integrated Program for Older Persons (IPOP), Rashtriya Vayoshree Yojana, SAMPANN Project, SACRED Portal for the Elderly, Elder Line, and SAGE Initiative, aim to provide financial, healthcare, and emotional support to the elderly population.

Recognizing the nuanced challenges presented by the aging population, it is essential to continually enhance and innovate social assistance schemes to safeguard the well-being and dignity of the elderly in India. The objective of this research paper is to conduct a comprehensive analysis and address the multifaceted challenges arising from the significant demographic shift in India's aging population.

Objectives of the research:

- ❖ To conduct a detailed examination of the demographic shift in India's aging population, with a focus on individuals aged 60 and above.
- ❖ To identify and comprehensively analyze the social, health, and financial challenges arising from the aging trend, considering the evolving dynamics of Indian society
- ❖ To assess the effectiveness and limitations of existing social assistance schemes.

Data and Research Methodology: The research study integrates data from the Longitudinal Aging Study in India (LASI) Wave-1 survey, conducted in 2017-18, to provide a comprehensive examination of the conditions faced by elderly individuals in India. This survey spans all 30 states and 6 Union Territories, involving a substantial panel sample of 73,396 individuals aged 45 years and above, including their spouses regardless of age. Notably, within this population, 31,902 individuals are categorized as elderly persons aged 60 and above.

The LASI survey covers four principal subject domains, addressing health aspects by exploring disease burden and risk factors, both reported and measured. It also delves into health care and health care financing, social dynamics encompassing family structures, social networks, and the involvement in social welfare programs tailored for the elderly. Additionally, economic factors are scrutinized, encompassing income, wealth, expenditure, employment, retirement, and pension details. Complementing the LASI data, the research paper incorporates information from the Census of India 2011 and other relevant sources, enriching the analysis of the elderly population's circumstances in the country.

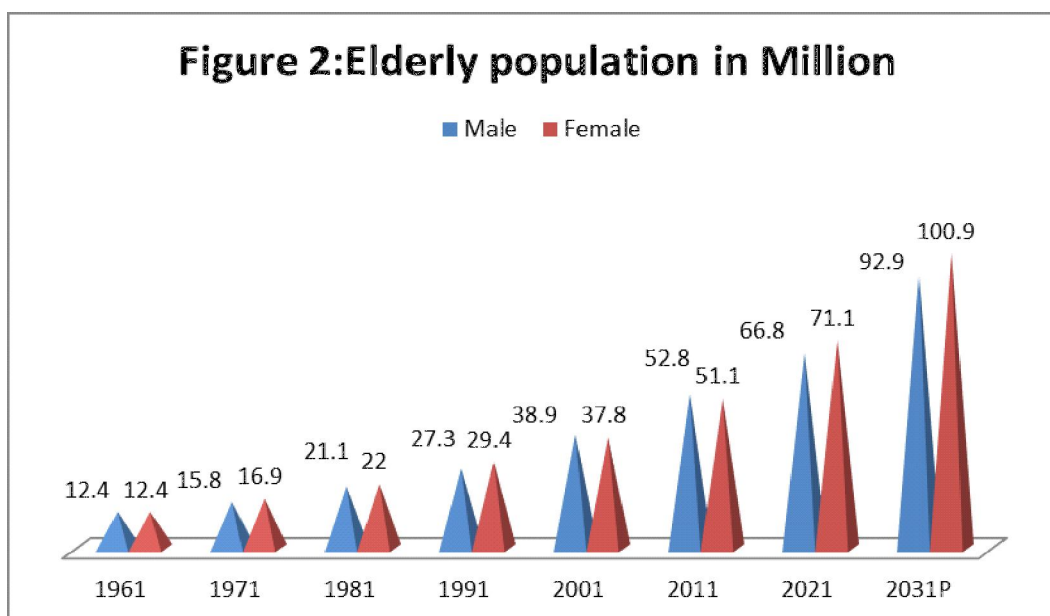
Trends of Demographic Shift in India: The demographic indicator of a country's population holds significant importance, and in India, the elderly population has witnessed a consistent increase since 1961. The growth rate of the elderly population accelerated notably after the 1981 census, primarily attributed to a decrease in the death rate facilitated by various health interventions. Between 2001 and 2011, over 27 million individuals were added to the elderly population.

The preparation of perspective plans in various socio-economic sectors necessitates projections for future population figures. As per the Report of the Technical Group on Population Projections for India and States 2011-2036, the estimated elderly population in India reached

approximately 138 million in 2021, with 67 million males and 71 million females contributing to this demographic segment.

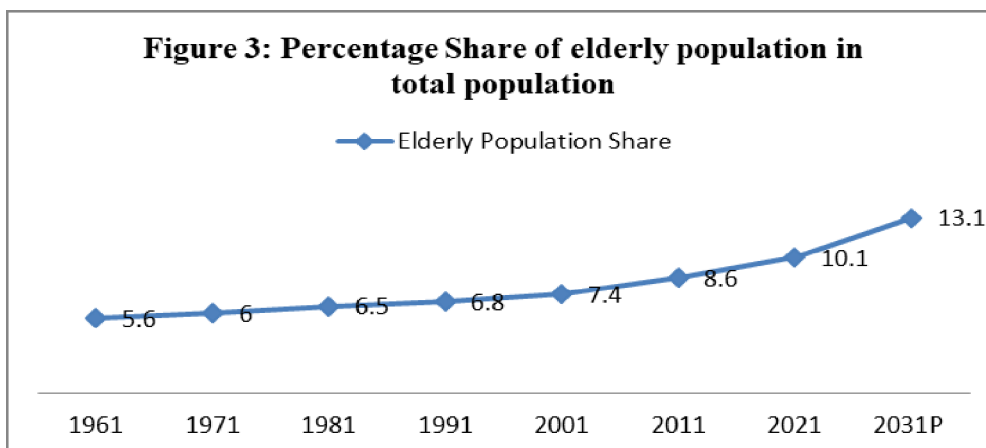
According to the findings in the Report of the Technical Group on Population Projections for India and States 2011-2036, there was a notable rise of approximately 34 million elderly individuals in 2021 compared to the figures from the Population Census in 2011. Moreover, projections indicate a further anticipated increase of approximately 56 million elderly persons by the year 2031.

Figure2: Sex-wise Distribution of Elderly Population (Aged 60 Years & Above) in India



Source: Ministry of Statistics and Programme Implementation

The increase in the elderly population can be attributed to advancements in life expectancy resulting from improved economic well-being, enhanced healthcare, and medical facilities, coupled with a decline in fertility rates. In the period from 2011 to 2021, the overall population experienced a growth of 12.4%, a decrease from the approximately 18% growth observed in the previous decade. In contrast, the elderly population exhibited a remarkable 36% growth in each of the last two decades (2001-2011 and 2011-2021). A similar trend of a higher growth rate in the elderly population compared to the general population was noted in the two decades spanning 1961 to 1981.

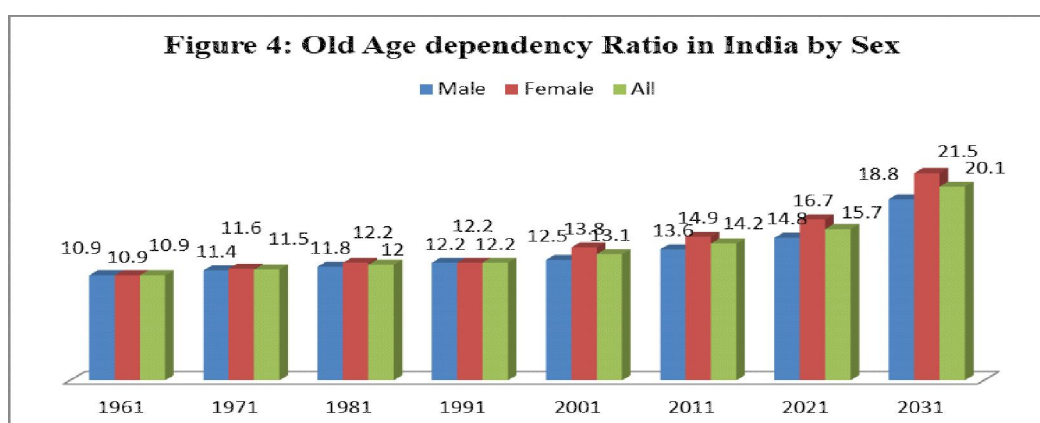


Source: Ministry of Statistics and Programme Implementation

Dependency of Elderly: The old age dependency ratio, reflecting the number of individuals aged 60 and above per 100 persons in the 15-59 age group, demonstrates an upward trajectory. Starting at 10.9% in 1961, it increased to 14.2% in 2011 and is projected to further rise to 15.7% in 2021 and 20.1% in 2031.

The dependency ratio for both females and males exhibits a rising trend, with projected ratios of 14.8% for females and 16.7% for males in 2021. Notably, significant variations exist in the old age dependency ratio between rural and urban areas, likely influenced by a comparatively higher concentration of the working-age population in urban settings.

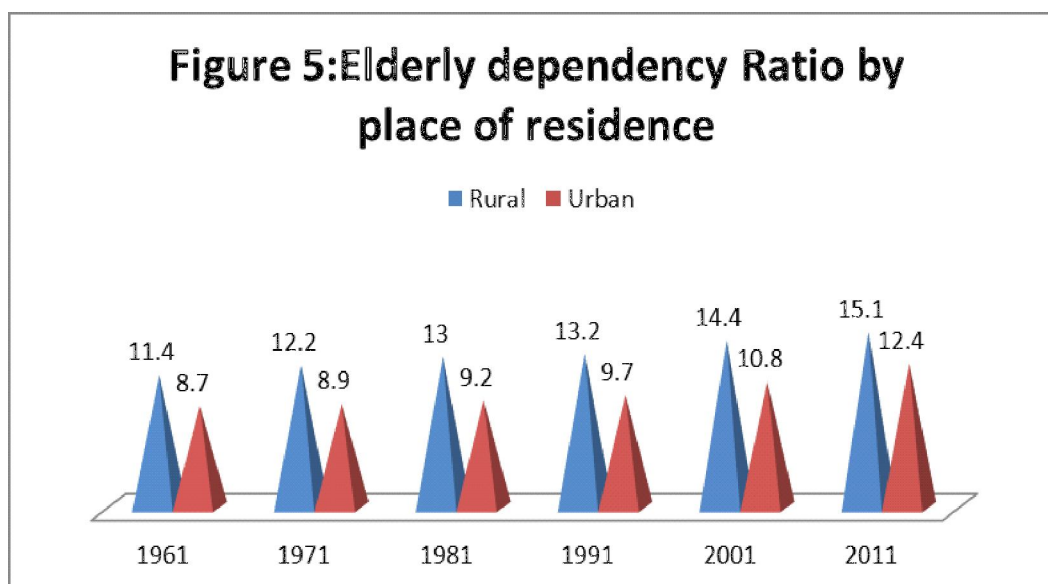
According to the 2011 Census, the old-age dependency ratios were 15.1% for rural areas and 12.4% for urban areas, indicating notable distinctions over time and across geographical locations.



Source: Ministry of Statistics and Programme Implementation

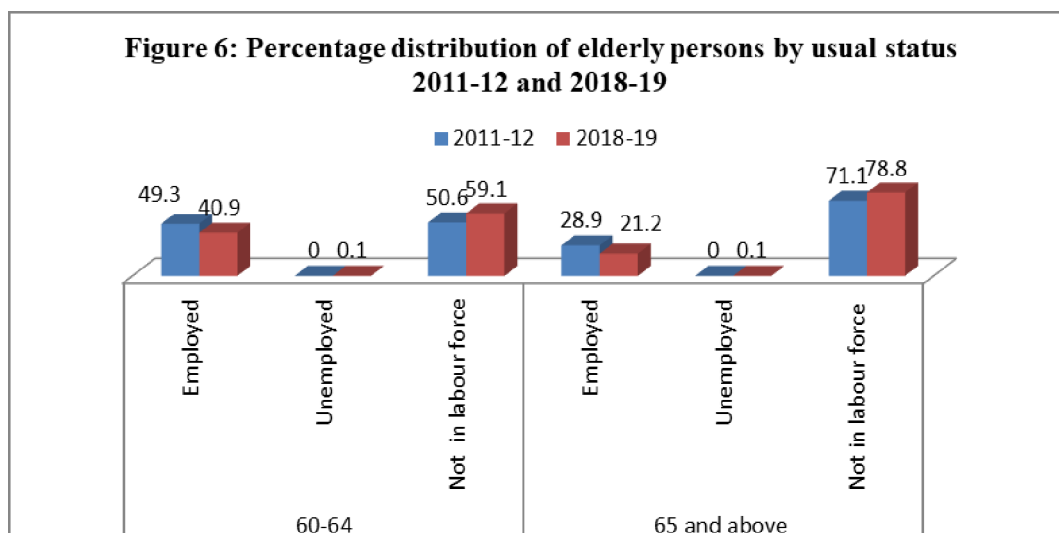
Economic participation of Elderly in India: Economic challenges stand out as fundamental, serving as a bedrock for other predicaments confronting the aged. Retirement, accompanied by the cessation of employment and a decline in social standing, translates into a substantial reduction in income. A significant proportion of the elderly grapple with acute financial difficulties, rendering them economically insecure.

The table illustrates a noticeable decline in the proportion of economic activity participation among individuals in the 60-64 age group. Specifically, there has been a decrease from 49.3% in 2011-12 to 40.9% in 2018-19. This trend is similarly observed in the age group of 65 years and above.



Source: Ministry of Statistics and Programme Implementation

According to the Periodic Labour Force Survey (PLFS) for the year 2018-19, economic activity participation rates differ significantly between elderly men and women in the 60-64 age group. Approximately 65% of elderly men and 18% of elderly women in this age category were engaged in economic activities. Notably, rural and urban areas exhibit substantial variations. In rural regions, 72% of elderly men and 21% of elderly women actively participated in economic activities, while in urban areas; these figures were comparatively lower at 51% for elderly men and 10% for elderly women. Similarly, in the age group of 65 years and above, the engagement of elderly individuals, both male and female, in economic activities is observed at a notably reduced level



Source: Periodic Labour Force Survey (PLFS) 2018-19,

Government Initiatives: The Indian government has implemented various initiatives to support and enhance the well-being of senior citizens. In the fiscal year 2020-21, the Ministry of Finance introduced higher exemption limits for income tax for individuals aged 60 and above. Senior citizens enjoy an exemption limit of Rs. 3 lakhs, while very senior citizens (80 years and above) have a limit of Rs. 5 lakhs. Additionally, tax benefits are provided for interest income, and Section 194A ensures no tax deduction at source for interest payments up to Rs. 50,000. Senior citizens aged 75 or above may be exempted from filing income tax returns if the full tax amount is deducted by the paying bank.

Transportation-related provisions include reserved seats in buses, fare concessions, separate counters, wheelchairs, and ramps, while Air India offers airfare concessions for seniors. In terms of social welfare programs, India has several schemes to assist the elderly.

The Indira Gandhi National Old Age Pension Scheme (IGNOAPS), initiated in 2007, provides a monthly pension to those above 60 years falling below the poverty line. Another notable initiative is the Pradhan Mantri Jan Arogya Yojana (PM-JAY), the world's largest health assurance scheme, offering Rs. 5 lakhs per family per year for healthcare. The Pradhan Mantri Vaya Vandana Yojana (PMVVY) is a pension scheme for seniors, providing assured pensions with a guaranteed rate of return. Additionally, the National Programme for the Health Care of the Elderly (NPHCE) and Rashtriya Varishth Jan Swasthya Yojana (RVJSY) focus on healthcare services for the elderly. The National Social Assistance Programme (NSAP) encompasses IGNOAPS and other components to provide financial assistance to vulnerable sections, including the elderly. These initiatives collectively aim to improve the financial security and overall well-being of India's senior population.

Discussion on Longitudinal Aging study in India (LASI wave -1)

The living arrangements of older adults in India have evolved, with a growing number living alone or solely with their spouse. Traditionally, family members, especially children, bore the responsibility of elderly care. The most common arrangement is living with a spouse and children (41%), followed by living with children without a spouse (28%) and living solely with a spouse (20%). About 6% of those aged 60 and above live alone, rising to 9% among elderly women. Notably, 74% of widowed elderly individuals live with their children, and the majority express satisfaction with their current living situations, with only about 5% considering future changes. Financial dynamics are a factor, with 15% of elderly individuals receiving financial help and 6% providing assistance to others in the past year. Life satisfaction among those aged 60 and above indicates that 32% have low satisfaction, 22% have medium satisfaction, and 46% report high life satisfaction.

Table1: Elderly status based on some indicators

Individual- level Key Indicators	Age	Sex		Residence		Total
	60 years & above	Male	Female	Rural	Urban	
Current Living Arrangement						
Living Alone (%)	5.7	1.8	4.5	3.9	2.3	3.4
Living with spouse and Children (%)	40.6	67.1	52.7	58.4	59.7	58.8
Financial Support received from or provided to family /friend during past 12 months						
Received Financial Support(%)	15.2	12.5	14.5	14.9	10.9	13.6
Provided Financial Support (%)	5.9	9.9	5.2	6.8	8.0	7.2
Perceived Life satisfaction/Social Status						
Persons reporting satisfied with their own life (%)	43.9	45.2	41.9	41.4	47.6	43.3
Awareness of Social Welfare Schemes for Elderly						
Indira Gandhi National Old Age Pension Scheme(%)	55.0	59.0	51.5	57.6	48.6	55.0
Indira Gandhi Widow pension Scheme (%)	44.0	43.0	44.9	44.8	42.0	44.0
Receiving Benefits from Welfare Schemes for Elderly						
Indira Gandhi National Old Age Pension Scheme (%)	29.1	39.8	26.7	30.3	22.1	29.1
Indira Gandhi Widow pension Scheme (%)	23.7	-	23.7	25.4	17.8	23.7
Awareness and Utilization of Concessions for Elderly						
Aware of any concession given by government to elderly (%)	28.4	33.0	24.1	24.9	36.7	28.4
Received any concession or benefit (%)	18.6	22.6	15.0	14.8	27.5	18.6

Source: LASI Wave-1, 2017-18

The LASI survey on awareness of social security programs for the elderly reveals that the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) and Indira Gandhi National Widow Pension Scheme (IGNWPS) are well-known (55% and 44% awareness, respectively), while awareness of the Annapurna scheme is limited (12%). These findings highlight the need for improved awareness campaigns, with awareness levels increasing with education.

Concerning social security program utilization, about 30% of rural elderly from Below Poverty Line (BPL) households receive benefits from IGNOAPS, stressing the importance of broader outreach to economically disadvantaged elderly individuals. Among BPL elderly widows, 25% receive widow pension, emphasizing the mutually exclusive nature of old-age and widow pension schemes. Overall, these insights suggest the necessity for targeted awareness initiatives and expanded social security outreach for the elderly population in India.

Conclusion:

In conclusion, this research paper has multifaceted challenges posed by the demographic shift and aging trends in India, particularly focusing on individuals aged 60 and above. The comprehensive analysis covered socio-economic, health, and familial dynamics, shedding light on critical aspects such as disease burden, risk factors, family structures, social networks, and participation in welfare programs.

The findings underscore the profound impact of the aging population on various sectors, including social relationships, economic structures, and healthcare systems. The societal changes driven by industrialization, urbanization, and globalization have contributed to weakened traditional family bonds, leading to issues like neglect of elderly parents and generational gaps. Financial challenges, such as dependence on children in retirement and rising healthcare expenses, further exacerbate the complexities faced by the elderly.

The demographic data presented in the paper indicates a significant rise in the elderly population in India, projecting an increase to 19.5% by 2050. The old age dependency ratio is on an upward trajectory, posing challenges that require strategic planning and provisions to ensure a decent quality of life for the elderly. The economic participation of the elderly has shown a decline, raising concerns about financial security. Government initiatives, including income tax exemptions and social welfare programs, have been introduced to support senior citizens, but there is a need for ongoing evaluation and refinement. In conclusion, this research contributes valuable insights for policymakers, highlighting the urgency of addressing the evolving needs of the aging population in India. Continued efforts to enhance awareness, expand social security outreach, and innovate support mechanisms are crucial for safeguarding the well-being and dignity of the elderly in the country. As India undergoes a significant demographic transformation, proactive measures and holistic strategies are imperative to build a society that respects and caters to the needs of its elderly citizens.

Strategies for well-being of elderly:

1. Enhanced Social Assistance Programs: The research underscores the importance of continually improving and innovating social assistance schemes for the elderly. Policy interventions should focus on enhancing the effectiveness of existing programs like the National Social Assistance Programme (NSAP), Pradhan Mantri Vaya Vandana Yojana (PMVVY), and others. Addressing issues such as exclusion risks, simplifying formalities, and ensuring dynamic contributions will improve the reach and impact of these schemes.

2. Integrated Health Care Policies: There is a need for integrated health care policies specifically tailored to the elderly population. Strengthening the National Programme for the Health Care of the Elderly (NPHCE) and Rashtriya Varishth Jan Swasthya Yojana (RVJSY) can ensure comprehensive healthcare services, including geriatric care, thereby addressing the health challenges faced by the elderly.

3. Promotion of Economic Independence: Policy initiatives should aim at promoting economic independence among the elderly. This could include measures to encourage continued economic activity post-retirement, skill development programs, and targeted financial incentives to support self-reliance. The success of initiatives like the Pradhan Mantri Jan Arogya Yojana (PM-JAY) and Pradhan Mantri Vaya Vandana Yojana (PMVVY) should be evaluated and expanded.

4. Tax Benefits and Incentives: Considering the economic challenges faced by the elderly, policy-makers should explore further tax benefits and incentives. Adjustments in income tax brackets, exemptions, and additional deductions for healthcare and insurance premiums can contribute to the financial well-being of senior citizens.

5. Accessible Transportation and Infrastructure: Policies should focus on creating age-friendly infrastructure, including accessible transportation. Reserved seats in public transport, fare concessions, and facilities like ramps and wheelchairs contribute to the mobility and independence of the elderly.

6. Regular Monitoring and Evaluation: Establishing a system for regular monitoring and evaluation of policies related to the elderly is crucial. This ensures that the implemented measures are effective and responsive to the evolving needs of the aging population. Periodic reviews can facilitate necessary adjustments and improvements.

7. Public Awareness Campaigns: Implementing public awareness campaigns about existing social assistance schemes, health services, and other benefits available to the elderly

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Social Economics Factor of Bimaru States

Richa Mishra

ABSTRACT

In Hindi, the word BIMARU means "sickly." In a report he submitted to then-prime minister Rajiv Gandhi in the mid 1980s, economist and analyst Ashis Bose came up with the acronym BIMARU. Social norms, ethics, sentiments, and other variables are examined in relation to the economy in social economics. Social economic factors include a wide range of elements, such as industrial development and GDP. Because they consume more food than they produce, BIMARU states are typically negative net providers of food security. As a result, these in order to locate BIMARU STATES HDI. The sex ratio, the literacy differential index, and patterns of population density and growth in the BIMARU states are all examined through processing of the collected data. When compared to Bihar, which had a hdi of approximately 0.3 in 1990, Uttar Pradesh's hdi has increased to 0.607 and 0.59, respectively. In 2020, the HDI of these states has changed significantly. These statistics show below-average development. The majority of people in these states live in rural areas, which is the primary cause of the low HDI index. a significant shift of 12.4 and 12.1 percent, respectively, for Rajasthan and Bihar. Odisha has changed just 1.4%, which is not much.

KEYWORDS: *Bimaru states, HDI, Government intervention, Poverty, development*

INTRODUCTION

India is large country which have 30 states and 8 UT .The country have 7 largest in world and 1 in population in 2023. India is country have different natural resource and in factors of endowment. In mid-1980s, a demographer named Ashish Bose coined a term which was called 'BIMARU' to refer the states including — Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh — having poor economic, social, and demographic growth. Some of the factors that contribute to the 'BIMARU' status of these states are high population growth rates, low literacy rates, high infant and maternal mortality rates, low per capita income, high poverty levels, and inadequate infrastructure. The term BIMARU means "sickly" in Hindi. The abbreviation BIMARU was created by economist and analyst Ashis Bose in a report he gave to then-prime minister Rajiv Gandhi in the middle of the 1980s. The word BIMARU is

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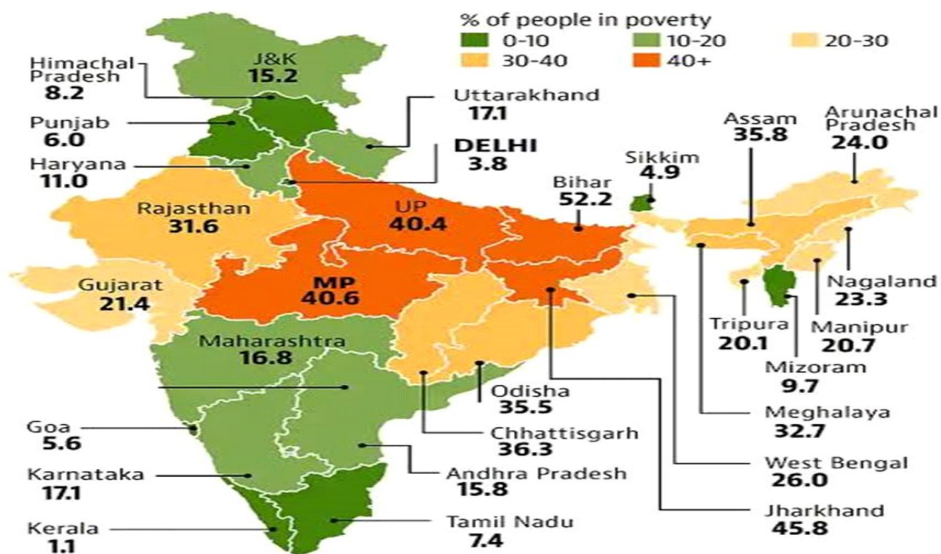
similar to the Hindi word “Bimaru,” which signifies unwell. Numerous studies, including those conducted by the UN, demonstrated how the BIMRU states’ performance impacted India’s GDP growth rate. Additionally, a few of these states are red corridors. Throughout the 1990s, the BIMARU states’ disparity in population and economic growth rates from other Indian states become more pronounced. During the 1990s, the economy of four BIMARU states grew at an average annual rate of 4.6%, whereas India’s GDP grew at an average annual rate of .6.5%. (Kalyan Sundar Soml Prof. R.P. Mishra²) Considering that the BIMARU states’ population growth was. The income gap between the BIMARU states and India during this period was significantly bigger than the Indian average overall also went up. Madhya Pradesh’s BJP governments have performed poorly, according to a “20-year report card” released by Union Home Minister Amit Shah, who also claimed that the state had lost its reputation as “BIMARU” since the party took office. On the key demographic indicator **Total Fertility Rate (TFR)**, there are now two distinct Indias, one on the road to achieving replacement levels, and one still a long distance off. The national goal of reaching a “stabilising population”, meaning a TFR of 2.1 was achieved recently. BIMARU states accounted for 41 percent of India’s total population in 2001 and will account for **43.5 percent in 2026** which has political implication. Population in Indian states also dictates the **delimitation process** or the number of seats allotted to them in Parliament. Currently, the seats are **proportional to the Indian population as of the 1971 census**. It was frozen until **2001 (extended to 2026)** to give states time to meet family planning goals. (nextias 13 feb 2021). NITI Aayog’s 2019-20 Health Index also ranked Rajasthan, Madhya Pradesh, Bihar, and Uttar Pradesh (in highest to lowest order) at the last four positions out of 19 large states.

Social economics, also known as socioeconomics, is the social science and branch of economics that studies the interrelation between economic activity and social behavior. Social economics analyzes how the economy is affected by social norms, ethics, sentiments, and other factors. Social economics factors consist many factors like gdp, industrial development, education, income etc.

Education, Income etc

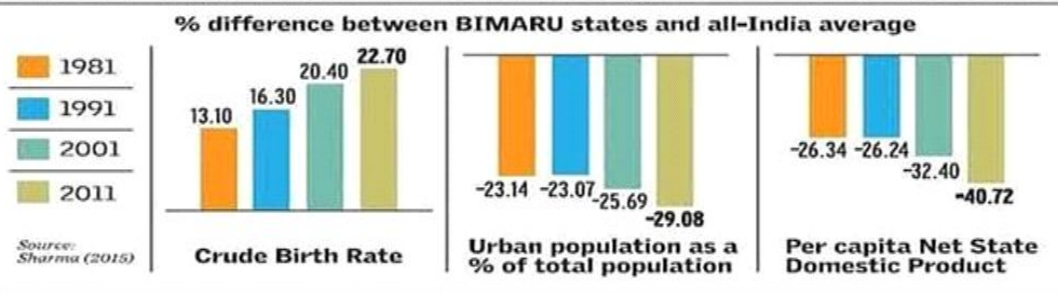
WHERE STATES STAND

Map shows % of poor people in Indian states in 2015-16

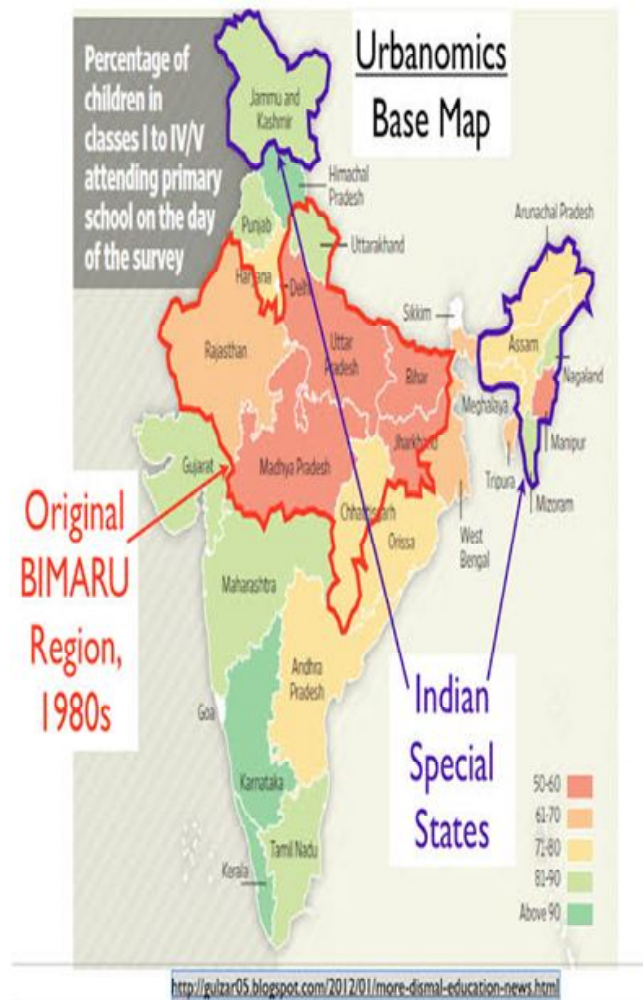


BIMARU STATES: THEN AND NOW

A look at the key parameters that differentiates development in various states across India



Index of backwardness: How BIMARU states fare (rank from the bottom)					
Bihar	Jharkhand	Madhya Pradesh	Chhattisgarh	Rajasthan	Uttar Pradesh
2	4	2	4	9	9



Literature review

BIMARU States: Need a Rethinking Kalyan Sundar Som 1 Prof. R.P. Mishra2 - These believe is clear they are still linger behind than other Indian states based on proficiency, instruction, urbanization and pay. Then again, they are exceptionally high ripeness and low regenerative wellbeing of ladies. Chhattisgarh and Jharkhand some part are Maoist impacted, these region are primarily woods covered and local clans are have a place. Because of this, the mineral-rich states of Chhattisgarh and Jharkhand require special attention. Uttar Pradesh, Madhya Pradesh and Bihar primary issue is weighty richness and large number of kid populace, that s making hindrance to up phase of segment advances.

Status of BIMARU States in Socio-Economic Development of India Dr. Vikas Yadav

More developed in comparison to northern states and there is much difference between socio-economic developed states and those which are poor in socio-economic development. Acronym of BIMRU states developed on demographic variables is not consisting on broad sense of socio-economic variables in this study; because Rajasthan and Madhya Pradesh are not included lowest four backward states, but Bihar and Uttar Pradesh are lowest ranking in not only our study but also same in Ashish Bose's study. We can say that Bihar and Uttar Pradesh are backward state on the basis on both demographic and socio-economic development variables.

Disparities In Social Development & Status of Women In Bihar Dr Kamini Khanna
The problem of Regional disparities in the level of economic development is almost universal. Its extent may differ in different economies. But its existence can hardly be challenged seriously in any country of respectable size. The achievement of Empowered Action Group (EAG) states (Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Rajasthan, Orissa, Uttar Pradesh and Uttarakhand) in the area of social sector indicators have not come up to the desired level. This revealed that overall female literacy has shown strong correlation with indicators of development, means low income persist but amidst all the shortcomings, the female literacy can drag these states on the path of development with a healthy labor force. More emphasis should be laid on female literacy programs so that these states can also be pulled out of abject poverty.

Development and Poverty Assessment Using an Alternate Non-compensatory Composite Index of Rajasthan State in India Nitika Mundetia¹ • Devesh Sharma¹ • Swatantra Kumar Dubey

The goal of the current study is to quantify various viewpoints on poverty and development using the Mazziotta-Pareto Index (MPI), a non-compensatory alternative composite index. The largest and most diverse state in India, Rajasthan, has several important districts that are identified in this study. The index adds penalties for unbalance values in the index in both positive and negative phenomena and makes linear aggregation easier. The study's region-specific dimension and indicators highlight the various districts' socioeconomic standing, infrastructure, access to healthcare, literacy rates, and work.

IIM study finds flaws in health care facility of BIMARU states

Moreover, there are severe misallocations of the specialist doctors and lack of manpower support, equipment and basic infrastructure within the public health system causing serious challenges in effective provisioning of specialist services for maternal and child health care," said the study. It pointed out that the efforts made by the government for providing additional manpower support for these services are also not giving desired results.

UNDERSTANDING SOCIOECONOMIC CONDITIONS OF RURAL HOUSEHOLDS Mukesh Kumar Pandey* and Amit Bhushan Dwivedi**

India's paradoxical democracy is revealed by reflections in its economy. The socioeconomic circumstances within the Empowered Actions Group of States (EAGS) become an important attribute of Indian economy. A review of recently released Socio-Economic and Caste Census 2011 (SECC 2011) presents harsh realities of socio-economic conditions of the rural households. With an aim to understand socio-economic conditions of Empowered Actions Group of States (EAGS), this article, using SECC 2011, attempts to examine variations among States on the basis of income slab, income source and irrigated land ownership. Results suggest that a large number of EAGS households are engaged in subsistence work like manual casual labour and cultivation. SC households of rural India and particularly Bihar among EAG States are major social group relying greatly on subsistence wage labour. Severe lack of irrigated land ownership among SC/ST households leads them to engage in subsistence work and result is low income and social exclusion.

Background of studies

The purpose of this study is to determine why these states are still considered to be part of the Bimaru region even after PM Modi and Congressman Yogi both mentioned the region in speeches in Rajasthan. Despite having an abundance of mature resources and a highly skilled labor force, this state is unable to develop. Why this state has a low income rate while having a good GDP relative to other states is something I would like to know. These states are crucial to the GDP and growth of India. I therefore scaled this state using the HDI tool.

OBJECTIVE

The main objective of this paper is to evaluate the social economics development of bimaruru States . By using human development index as parameter.

Current situation of bimaruru states on based of poverty and urbanization as factors. To find HDI OF BIMARURU STATES.

STUDY AREA

The most notable aspect of the BIMARURU states demographic features is the high rate of fertility, high IMR, high MMR, high rate of population growth, low rate of literacy, and gender disparity in literacy. Nearly two thirds of the people in the high-density region are supported by the plains of the Ganga, Yamuna, Narmada, and Mahanadi. As a result, some districts now have high population densities and concentrations, while the remainder of the region has relatively low densities. The region's population was only 13.43 million in 1951, according to estimates. With 555175135 residents in 2011, the region had a decadal growth rate of almost 25% on the face of the national.

DATA BASE

The paper is based on secondary data gathered from various source

Handbook of statistics on Indian economy, RBI

The gathered information is processed to examine the patterns of population density and growth, the sex ratio, and the literacy differential index in the BIMARU states.

Appropriate diagrams and maps are employed to depict the information.

Information for this study was gathered from books, magazines, research articles, and the national census report.

METHODOLOGY

The source of data consist the RBI , Economic survey ,India census 2011, Agriculture and industrial handbook of rbi. We used data of latest period on 2021-2022. Out of total states we only used states and life expectancy, education, income level. Which cover total area and total population .In this paper we used hdi indicator to rank the states ,it help to used to measure the states development.

HDI OF BIMARU STATES

The Human Development Index developed by Indian economist AMARTYA SEN and Pakistani economist MAHBUB UI HAQ . HDI examines three important criteria of economics development 1-life expectancy ,2-education and 3- income level. Create an overall score between 0 and 1. 1 indicates a high level of economics development and 0 a very low level. Life expectancy factors The life expectancy factors helps to determine how long the average citizen lives. How healthy people can remain during their life and how much she can contribute in their working life .

The HDI MEASURE LIFE EXPECTANCY FROM 20-85 YEARS .LIFE EXPECTANCY INDEX= $LE-20/85-20$ (Life expectancy of states) THE EDUCATION INDEX The education index is another important component in hdi calculation. The education index is found by dividing the number of years of schooling for adults age 25 and older by expected years of schooling for children of school age.

PER CAPITAL INCOME

The per capital income measure the annual income of the average citizen based on purchasing power parity

STATES	HDI							
	1990	1995	2000	2005	2010	2015	2020	2023
Chandigarh	0.635	0.635	0.63	0.658	0.643	0.737	0.759	0.759
Odisha	0.402	0.424	0.452	0.489	0.529	0.586	0.608	0.609
Madhya Pradesh	0.407	0.427	0.453	0.495	0.531	0.585	0.607	0.61
Uttar pradesh	0.398	0.423	0.456	0.498	0.528	0.577	0.603	0.607
Jharkhand	0.562		0.555	0.582	0.567	0.585	0.6	0.602
Bihar	0.379	0.402	0.43	0.465	0.508	0.558	0.581	0.59

Source rbi handbook 1990 -2023

By seeing table 1 we see that the hdi of this is approx constant through out of this period. Uttarpradesh and Bihar have very low hdi in 1990 which is approx 0.3 but now uttarpradesh hdi increase as compare to bihar which is 0.607 and 0.59 respectively. There is drastically change in hdi of these states in 2020. The development of these states is below the average . the main reason of low hdi index is there huge population lived in rural area and these states have huge population.

URBANIZATION IN BIMARU STATES India’s adoption of a mixed economy following independence led to the growth of the private sector and was the primary cause of urbanization in the nation. India is experiencing a faster rate of urbanization. In 1901, 11.4% of Indians lived in urban areas, according to the census. The 2001 census showed that this count had increased to 28.53%, and the 2011 census showed that it had crossed 30% to stand at 31.16%. A UN State of the World Population report from 2007 predicted that 40.76% of the nation’s population would live in cities by 2030. By 2050, India, China, Indonesia, Nigeria, and the United States are expected to lead the world’s

URBANIZATION			
BIMARU STATES	2001	2011	(Thousands)
			AVERAGE
Rajasthan	13214	17048	15131
Odisha	5517	7004	6260.5
Bihar	8682	11758	10220
Madhya Pradesh	15967	20069	18018
Chhattisgarh	4186	5937	5061.5
ALL INDIA	286120	377106	331613

By seeing table 2 we see that odisha and chattisgarh there is small difference in 2001 and 2011 urbanization of population because there is more tribal people as compare to other bimaru states. There is large change we can see in other states rajasthan (77%), bihar(73%), MP(79%),UP(78%) as compare to 2001 census .

state wise poverty					
(Person in Lakh)					
bimaru states	1993-94 (30 day Recall Period)*		1999-00 (30 day Recall Period)*		change in %
	No. of Persons	Percentage	No. of Persons	Percentage	
Bihar	493.4	55.0	425.6	42.6	12.4
Madhya Pradesh	298.5	42.5	298.5	37.4	5.1
Uttar Pradesh	604.5	40.9	529.9	31.2	9.7
Rajasthan	128.5	27.4	81.8	15.3	12.1
Odisha	160.6	48.6	169.1	47.2	1.4

POVERTY IN BIMARU STATES By seeing the table 3 we see that there huge change in poverty n bihar and rajasthan by 12.4 and 12.1 respectively this is huge change . there is little bit change in odisha only 1.4% .Othe states UP,MP have also very little change in there poverty .

RESULT AND FINDING

The investigation's conclusion is that the BIHAR HDI has not changed . Another HDI rises by 0.1, marking a significant advancement in development. About 70% of the states in Bimaru are urbanized, which contributes to the growth of the HDI. Compared to other bimaru states, Odisha has a higher poverty rate of 12.4%; Bihar, on the other hand, does a good job of defining poverty.

Governing bodies' strategies and interventions

Green revelotion

The Indian government's Green Revolution program, which was launched in 2010,-11, has allotted Rs. 8 billion for 2010–12 and Rs. 10 billion to address the issues limiting the productivity of "rice based cropping systems" in eastern India, which is made up of seven states: Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh, and West Bengal (Economic Survey, 2012–13:183).

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) The PMSSY aims at correcting regional imbalances in the availability of affordable/reliable providing tertiary healthcare services and expanding the nation's capacity for high-quality medical education. Under the PMSSY, Rs. 1544.21 crore has been set aside for the 2012–13 fiscal year. The program's objectives are to: (i) build six AIIMS-like institutions in Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur, and Rishikesh; (ii) upgrade thirteen medical colleges in the first phase and six in the second phase.

RECOMENDATION

The government must address high fertility by working with NGOs and the population group that makes up Bangladesh to implement a family planning approach model. Reduce poverty using a self-help group model and a community-based approach. to boost food production in a way that is sustainable, minimizes damage to the environment, and yields long-term results. The government must take drastic measures to combat female feticide and abortion cases, which are contributing to the states' rising child sex ratio.

CONCLUSION

In the final section, it is evident that these states continue to lag behind other Indian states in terms of income, urbanization, literacy, and education. Conversely, women have poor reproductive health and extremely high fertility. Jharkhand and Chhattisgarh Some areas are impacted by Maoist ideology; these are primarily forested areas.. For this reason, Chhattisgarh and Jharkhand both require extra attention. To overcome each of the distinct but related difficulties listed above, the government will need to gather all of its strength and resolve. Through greater incomes, improved health and education, and a bigger say in decision-making, the government must give its citizens the chance to accelerate growth and gain more power. The condition of bimar states does not over change take place the HDI of this states is low so they need to focus on human development . Human development helps people to over all development of states .Limitation of studies This paper on address on social economic factors, but there are so many social economic factors wich affect the development of states . we only compare bimar states so if we compare with over all states it show huge diiference .

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A Critical Analysis of Institutional Agricultural Credit to Indian Agriculture

Dr. Kripa Shanker Yadav

Abstract

Institutional credit flow has greatly helped the agricultural sector in India with a significant increase in credit flow from 2011-2012. The government has been providing interest subvention to those farmers who repay their short-term crop loans on time, thus bringing down the effective rate of interest to 4 percent per annum. The contribution of commercial banks to the agricultural credit is highest with 70 percent followed by Co-operative banks and RRB. The ratio of credit to Agricultural GDP and Credit to total GDP were higher during the period of 2017-18, indicating the efficacy of the credit. The factors influencing the total agricultural output growth have been analysed, and it has been observed that credit has a significant relationship with agricultural output at a 10 percent level of probability. The determinants of the supply of institutional credit have also been analysed, and it has been observed that all the variables except pesticide consumption have an influence on agriculture credit. Gross cropped area has the most significant impact on credit flow, followed by gross irrigated area and GDP. Overall, the flow of institutional credit to the agricultural sector is crucial for its growth and development.

Introduction

In developing countries like India, the development of agriculture sector is important for a variety of reasons. Agriculture is still the primary source of livelihood for majority of people i.e, about 68 percent rural people. It has been observed that the required growth of productivity in agriculture means that more capital must be invested in it. Farmers need much more capital than they can afford to save and small and marginal farmers require a higher input of capital as their savings are meager. Credit is a condition that enables a person to extend his or her control over ownership of resources. The Indian agriculture is not only capital starved, but also faces vagaries of nature. Irrigated agriculture forms roughly 40 percent of total cropped area.

The practice of extending institutional credit to agriculture can be traced back to that period when farmers were provided with such credit by the Government during drought

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years. Thinking to do with credit, cooperation began in the latter part of the nineteenth century. Finally, the Cooperative Societies Act was passed in 1904 and cooperatives were seen as the premier institutions for disbursing agricultural credit. The early years of the twentieth century were characterized by continuous official attention to the provision of rural credit the Mac lagan Committee on Cooperation in India issued a report in 1915 advocating the establishment of provincial cooperative banks, the Royal Commission on Agriculture further examined the program of rural credit in 1926-27. It was then reported that in many provinces credit over dues to these credit cooperative institutions constituted 60 to 70 per %cent of the outstanding principal due.

The need for agricultural finance in India is especially acute for small and marginal farmers who account for a significant proportion of the country's farming population. These farmers face several challenges, including limited access to credit, lack of collateral and low financial literacy. Financial institutions have traditionally been reluctant to lend to small and marginal farmers due to the high risks associated with agriculture and the lack of collateral. To address the need for agricultural finance, the Government of India has taken several initiatives, including the establishment of specialized institutions such as the National Bank for Agriculture and Rural Development (NABARD). NABARD provides credit and other financial services to farmers and rural communities and promotes rural development through various schemes and initiatives.

Purpose of Agricultural credit

Agricultural credit needs of the farmers can be classified on the basis of purpose into the following categories:-

1. Productive Needs 2. Unproductive Needs 3. Consumption Needs

Under productive needs we can include all credit requirements which directly affect agricultural productivity. Farmers need loans for the purchase of seeds, fertilizers, manures, agricultural machinery, livestock, digging and repairing of wells and tube wells, payment of wages, effecting permanent improvements on land, marketing of agricultural produce, etc. Repayment of these loans is generally not difficult because the very process of production generally creates the withdrawal for repayments.

Farmers often require loans for consumption as well. Institutional credit agencies do not provide loan for consumption purpose. Therefore, farmers depend on moneylenders.

Loans are taken for unproductive purposes such as litigation, marriages, and social ceremonies on birth and death of a family member, religious functions, festivals etc.

Sources of agricultural finance-

The two major sources of finance in agriculture are institutional and non- institutional sources.

I- Institutional Source-

Institutional sources consist of the government and co-operative societies, commercial bank including the Regional bank, Lead bank, NABARD etc.

Co-operative Societies - Indian planners consider co-operation as an instrument for economical development of the deprived farmers, particularly in the rural areas. They see in a village panchayat, a village co-operatives and village school, as the trinity of institution on which a self-reliant and just economic and social order is to be built. The co-operative movement was started in India largely with a view to providing agriculturists funds for agricultural operations at low rates of interest and projects them from the clutches of money lenders.

Primary Agricultural Credit Society (PACs)- Primary agricultural credit societies are grass root level arms of the short-term co-operative credit structure. PACs deal directly with farmer borrowers, grant short term and medium-term loans and also undertake distribution and making functions. The usefulness of PACs has been rising steadily. The PACs have stepped up their advances to the weaker sections particularly the small and marginal farmers. The progress has been quite spectacular but not sufficient considering the demand of finance by farmers.

Central Co-operative Banks- Central Co-operative Banks functions as intermediaries between the State Co-operative Bank and Primary Agricultural credit society.

State Co-operative Banks-These Banks are the apex banks of the Co-operative credit structure. It serves as a link between NABARD from which it borrows and lends to the co-operative central bank and primary societies village.

Commercial Banks and Regional Rular Bank- These banks are played a crucial role in agricultural credit in India.

II- Non – Institutional Source

Money Lenders- There are two types of money lenders in rural areas. There are rich farmers or landlords who combine farming with money-lending. There are also professional money lenders whose only occupation or profession is to lend money. The cultivators depend upon the money-lenders for their requirements of cash. However, there are many reasons for the preponderance of the village money-lenders in rural area even now.

1. The money lender freely supplies credit for productive and non-productive propose, and also for short-term and long-term requirements the farmers.
2. He is easily accessible and maintains a close and personal contact with the borrowers often having relations with family extending over generations.
3. Their methods of business are simple and elastic.

Landlord and others- Traders and commission agent supply funds to farmers for productive purpose much before the crops mature. They force the framers to sell their produce at low price and they charge a heavy commission for themselves. Thus, source of finance is particularly important in the case of cash crop like cotton, groundnut, tobacco, and in the case of fruit of chard like mangoes. Traders and commission agent may be bracketed with money lenders, as their lending to farmers is also at exorbitant rates and has other undesirable effects too.

Target and Achieving of Agriculture Credit (crore) from 2010-11 to 2022-23

Year	Targeted	Achieved	% Achieved
2010-11	375000	426531.00	113.70
2011-12	475000	511029.00	107.59
2012-13	575000	607376.00	105.63
2013-14	700000	730122.62	104.30
2014-15	800000	845328.23	105.67
2015-16	850000	915510.00	107.71
2016-17	900000	1065755.67	118.42
2017-18	1000000	1162616.98	116.26
2018-19	1100000	1254762.20	114.07
2019-20	1350000	1392729.00	103.17
2020-21	1440000	1433723.00	102.11

Source- Various Issues of Government Publications.

Flow of Institutional Credit

Agricultural credit started depicting growth after the nationalization of bank and it has been growing continuously since then. The Government has been providing crop loans at concessional interest rates since 2012-13. In the financial year (2021-22), the government is providing interest subvention by 2 percent, thus bringing down the effective rate of interest to 4 percent per annum. This interest subvention is provided to those farmers who repay their short-term crop loans on time. In 2014-15 the subvention rate for timely repayment of crop loans was 1percent which was raised to 2 percent in 2012-13 and further to 4 percent in

2019-20. Over the years, agriculture credit flow has registered significant jump. It has gone up from 180486 Rs. Crores in 2011-12 to Rs. 1392729 crores in 2022-23.

Agency-wise Credit Flow to Agriculture in India (Crore) from 2010-11 to 2022-23

Year	Co-operative bank	RRB	Commercial Bank	Total
2010-11	78121 (16.68)	44293 (9.46)	345877 (73.86)	468291 (100)
2011-12	87963 (17.21)	54450 (10.65)	368616 (72.13)	511029(100)
2012-13	111203 (18.31)	63681 (10.48)	432491 (71.21)	607375(100)
2013-14	119964 (16.43)	82653 (11.32)	527506 (72.25)	730123(100)
2014-15	138469 (16.38)	102483 (12.12)	604376 (71.50)	845328(100)
2015-16	153295 (16.74)	119261 (13.03)	642954 (70.23)	915510(100)
2016-17	142758 (13.40)	123216 (11.56)	799781 (75.04)	1065755(100)
2017-18	150389 (12.97)	140959 (12.06)	877155 (75.07)	1168503(100)
2018-19	152340 (12.12)	149667 (11.91)	954823 (75.97)	1256830(100)
2019-20	157367 (11.30)	165326 (11.87)	1070036 (76.83)	1392729(100)
2020-21	169161 (11.00)	172155 (12.00)	1109162 (77.00)	1450478(100)
CAGR	12.53	22.10	21.45	15.01

Source: NABARD Data Bank (various issues).

Agency-wise Credit Flow to Agriculture in India

The flow of institutional credit to agriculture has very helpful the farmers who have no resources on their own. The agencies which are involving the flow of institutional credit are Co-Operative Banks (20%), RRB (10%) and Scheduled Commercial Banks (70%). The flow of credit from RRB has been increased from the Rs. 54450 crore (2011-2012) to Rs. 172155 crore (2021-22). Contribution of commercial bank to the agricultural credit is highest with the 70 percent followed by Co-operative (16.00%) and RRB (14.00%) respectively, whereas as the growth rate of total Agricultural credit from 2011-02 to 2022-23 was registered at 15.01 percent. Highest growth observed for the Commercial banks (13.81%) followed by RRB and Co-operative with 6.55 and 2.53 percent respectively.

Conclusion

Credit is an important source in the development of agriculture. So, institutional credit has been played a crucial role in the development of agricultural sector as a result of credit. Institutional credit flow has greatly helped the agricultural sector in India, with a significant increase in credit flow over the years. Access to agricultural finance is critical for the success and growth of the agricultural sector in India. The commercial banks have become the primary source of credit for the farmers, and providing training to them on the procedural formalities of financial institutions could enhance their access to credit. Additionally, it is recommended to adopt and streamline microfinance options to aid small, marginal, and tribal farmers, while effectively linking them to Self Help Groups (SHGs).

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Digital Payments for Food Businesses: A Study of UPI Adoption and Implications

Samiya Sharffudin & Vinod Kumar Yadav

Abstract:

Unified Payments Interface (UPI) is an instant financial transaction system which facilitates instant money transfer from one bank accounts to another using a mobile application.

UPI has emerged as a convenient, hence popular mode of digital payments in India, especially during the Covid-19 pandemic. UPI has the capability to consolidate multiple bank accounts within a single mobile application, thus simplify the process of funds transfer. Since its launch in 2016 more than 40% retail digital transaction are done through UPI. This paper aims to study the use of UPI in enabling digital payments for food businesses, its benefits and challenges in technology adoption. The paper finds that UPI has the potential to empower entrepreneurs and enhance their competitiveness in the food industry. However, it also requires combined efforts from various stakeholders to address the existing barriers and gaps. UPI has achieved a position in financial transaction, which if not adopted, will affect the productivity and competitiveness of businesses. This technology has also enabled entrepreneurs to handle cash counters safely while handling large amounts of cash.

Keywords: *UPI, Digital Payments, Entrepreneurs, Food Business, Covid-19*

INTRODUCTION

In India, after demonetization in November 2016, the use of digital payments has witnessed rapid growth transforming the country's financial environment. Various technologies and platforms have emerged, offering convenience, security, and efficiency in conducting transactions. One such platform is Unified Payment Interface (UPI) which allows users to transfer money from one bank account to another using a mobile application. It facilitates its users to link multiple bank accounts, send money, pay bills, and make online and offline purchases. Paytm, Phonepay, Google, and Amazon Pay are among the popular modes of mobile wallet digital payment method. These wallets provide users with digital accounts linked to their mobile numbers, allowing them to store money, make payments, recharge mobile phones, and pay

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utility bills. Internet banking services offered by banks in India also enable customers to perform various financial transactions online, including fund transfers, bill payments, and account management. Aadhaar-enabled payments have integrated India's unique identification system, Aadhaar, into digital payment systems. This enables individuals to authenticate their identity using their Aadhaar number for transactions. Quick Response (QR) code payments have gained popularity as a convenient and contactless payment method. Users can scan QR codes with their smartphones to initiate transactions swiftly. Additionally, electronic funds transfer systems like NEFT (National Electronic Funds Transfer) and RTGS (Real-Time Gross Settlement) allow individuals and businesses to transfer money between different banks. NEFT is suitable for transfers with time delays processed in batches, while RTGS enables real-time and large-value transfers "Making India" "less cash" "dependent and promoting digital payments has been a focus area for RBI since last decade".(Gochhwal, 2017a)



Fig.1 Growth statistic of UPI 2016 to 2023

Note.(*Digital Payments Driving the Growth of Digital Economy | National Informatics Centre, n.d.*)

These digital payment platforms and technologies have revolutionized financial transactions in India, offering individuals and businesses convenience, speed, and security. UPI has emerged as a leading digital payment platform, providing users with a secure, convenient, and interoperable mode of conducting transactions.

LITERATURE REVIEW

(Rastogi et al., 2021) concludes that "the advent of digitalization itself is a path-breaking innovation, and UPI is one such innovation which supports the digital ecosystem and contributes to the inclusion of the bottom of the pyramid into the financial system".

(Tungare, 2018) in his study depicts that UPI has gained traction among customers in the Indore region, with notable differences in adoption based on demographic and sectoral factors. The study provides valuable insights into the factors influencing the adoption of UPI and its implications for the future of mobile payments in India.

(Kapur et al., 2019) The research highlights the adoption pattern of mobile payment services in India, focusing on the BHIM App using the Bass Model. Key determinants influencing adoption, such as trust and compatibility, were identified, emphasizing the need for addressing barriers to increase adoption rates. Collaborative efforts among stakeholders are crucial for promoting a cashless economy and driving widespread adoption of digital payment solutions. The study contributes valuable insights for policymakers, service providers, and researchers to enhance user acceptance of electronic payment methods in emerging economies.

(Thomas & Chatterjee, 2017) The paper discusses the Unified Payment Interface (UPI) as a catalyst for digitalization in India, highlighting its seamless fund routing and merchant payment capabilities. It emphasizes the potential for UPI to simplify the payment ecosystem and reduce transaction costs, while acknowledging challenges related to smartphone penetration, lack of financial literacy, and technical implementation.

(Gochhwal, 2017b) The paper provides a detailed analysis of the Unified Payment Interface (UPI), highlighting its role in transforming the Indian payment landscape. It emphasizes the technical architecture, security systems, and the impact of UPI on the payments industry and businesses.

TECHNOLOGY, PAYMENT, AND BUSINESSES

The onset of the internet has brought many transformative changes in how businesses conduct, operate, and engage with their customers. It has created worldwide communication avenues, granting businesses unparalleled access to information and global markets. With the help of websites, online marketplaces, and social media platforms, businesses can display their offerings to a vast online audience, expanding their reach to potential customers on a global scale. The progression of mobile connectivity from 2G to 5G has played a pivotal role in reshaping the business landscape. The inception of 2G networks enabled basic voice calls and text messaging, facilitating mobile communication and the growth of mobile-oriented services. The shift to 3G networks improved data transfer rates, enabling multimedia messaging, internet browsing, and basic mobile app usage. This presented fresh opportunities for businesses to offer mobile-responsive websites and apps, expanding their digital presence and engagement with customers. The introduction of 4G networks transformed mobile data speeds, enabling businesses to provide rich media content, mobile advertising, and enhanced user experiences. The advent of 5G networks holds the promise of even more significant advancements in mobile connectivity, unlocking new possibilities like real-time data analysis, immersive customer experiences, and improved connectivity for remote workforces. The transition from traditional cash-based transactions to digital payment methods, including options like debit and credit cards, net

banking, mobile wallets, and UPI (Unified Payments Interface), has had a transformative effect on business operations and customer experiences. Digital payment solutions have significantly accelerated the speed and convenience of transactions, enabling businesses to efficiently process payments. The growing popularity of contactless payments, made possible through technologies like NFC and QR codes, has further quickened transaction speeds and enhanced customer convenience. These diverse digital payment methods have expanded the reach of businesses by facilitating e-commerce and online sales, allowing them to tap into a global customer base and operate beyond geographical boundaries.

FIG 2: Technological Advancements Making Way For Advanced Online Transaction

2g	GSM - Introduction of digital mobile communication and basic voice and text capabilities.	This represents the early stages of mobile communication technology, enabling basic voice calls and text messages but not yet supporting online transactions.
3g	UMTS, CDMA2000 - Faster data speeds, improved voice quality, and access to the internet on mobile devices.	With the introduction of 3G technology, the internet became more accessible on mobile devices, enabling the use of online banking and e-commerce platforms.
4g	LTE - Faster speeds, low latency, enhanced capacity, improved efficiency, and support for multimedia-rich applications.	4G technology brought faster mobile internet speeds, making online transactions more seamless and convenient on smartphones and tablets.
5g	Mm Wave, Massive MIMO, Network Slicing - Ultra-fast speeds, high device density, low latency, and the ability to create virtual networks for different services.	The advent of 5G technology revolutionizes connectivity, enabling ultra-fast speeds, low latency, and high device density. This allows for a more immersive and interconnected experience, paving the way for advanced online transactions and emerging technologies like Internet of Things (IoT) and augmented reality (AR).

Artificial Intelligence (AI) has also brought about significant transformations in the payment industry, equipping businesses with valuable tools and capabilities. AI-driven systems have remarkable ability to quickly process large amounts of transaction data in real-time, enabling the detection of patterns and irregularities that signal potential fraud. This not only safeguards businesses but also protects their customers from fraudulent activities, thereby minimizing financial losses and preserving their reputation. AI algorithms further excel in scrutinizing

customer data to offer tailored recommendations and targeted promotions, enhancing the overall customer experience, cultivating loyalty, and ultimately boosting sales. These innovations greatly improve efficiency and customer satisfaction. Consequently, with the progression of mobile connectivity from 2G to 5G, AI has made a profound impact on businesses. This impact extends to broadening market reach, enhancing customer interactions, accelerating transaction processing, and furnishing tools for fraud detection and personalization. Embracing these advancements from a business perspective is instrumental for companies to remain competitive, streamline their operations, and meet the evolving expectations of their customers in this digital era.

NEED FOR DIGITAL PAYMENT IN FOOD BUSINESSES

Traditional payment methods have long been the norm for food businesses in India, with cash transactions being the go-to choice for customers at restaurants, street food stalls, and home-based food services. However, relying on cash has its downsides, including security concerns, operational inefficiencies, and a lack of proper record-keeping. These challenges can hinder the growth and security of food businesses. India has made significant strides in promoting digital payments in recent years, with initiatives like demonetization and government efforts to encourage a cashless economy. Digital payment options such as debit and credit cards, mobile wallets, and UPI have gained traction among both businesses and consumers. Despite this progress, there are still variations in the adoption of digital payments across different segments of society. Embracing card payments, whether through point-of-sale (POS) machines or online gateways, can offer several advantages. It enhances customer convenience, expands the customer base, and streamlines financial management. However, there are factors to consider, such as initial setup costs, transaction fees, connectivity issues, and varying levels of card familiarity among the population. Unified Payments Interface (UPI) has become a popular choice for digital payments in India, allowing direct transactions from bank accounts via smartphones. UPI presents numerous benefits, including accessibility, lower transaction costs, real-time settlements, and increased digital inclusion. It offers a practical and cost-effective solution for food businesses to manage transactions efficiently. The shift from traditional cash transactions to digital payment methods like cards and UPI is pivotal for empowering food businesses in India. Embracing digital payments not only enhances convenience and financial management but also promotes financial inclusion, ultimately leading to increased efficiency and security in the food industry. It's a positive step toward a more secure and prosperous future for these businesses.

RESEARCH METHODOLOGY

A research conducted for Studying Foodpreneur's views on UPI in Kanpur's Food Business Sector.

Research Objective: The objective of this study is to understand the perspectives and experiences of entrepreneurs who run food businesses in the Kanpur region regarding the

adoption and impact of UPI (Unified Payments Interface) as a digital payment method. The research aims to gather insights into the benefits, challenges, and opportunities associated with UPI in the context of their businesses.

Sampling: The research sample consist of 30 entrepreneurs who are actively operating food businesses in the Kanpur region. The selection of participants is based on their experience, business size, and willingness to participate in the study. Efforts are made to ensure diversity in terms of the types of food businesses represented, including restaurants, cloud kitchens, catering services, and home-based enterprises.

Data Collection: In the data collection phase, a questionnaire survey of 30 entrepreneurs was conducted. The survey explored participants' views on the Unified Payments Interface (UPI), including their familiarity with UPI, reasons for adoption or non-adoption, perceived benefits, challenges faced, impact on business operations, and suggestions for improvement.

UPI ADOPTION AND ITS IMPLICATION

The adoption of UPI (Unified Payments Interface) had a significant impact on India's financial landscape, revolutionizing digital payments.

1. **Limited Digital Literacy:** Among the participants interviewed in Kanpur, a significant challenge identified was limited digital literacy. Many entrepreneurs faced difficulties in understanding and navigating the UPI interface, which hindered their adoption of the platform.
2. **Connectivity Issues:** Participants in the interviews expressed concerns about unreliable internet connectivity in certain areas of Kanpur. Inadequate access to stable internet connections posed challenges in accessing UPI services consistently, resulting in transaction failures and delays.
3. **Trust and Security Concerns:** Trust and security concerns were prominent among the participants. Some expressed reservations about the safety of their financial transactions and the potential risks associated with digital payments. Addressing these concerns is vital to building trust and encouraging broader UPI adoption.
4. **Religious Myths and Beliefs:** The interviews highlighted the existence of religious myths and beliefs surrounding the use of hard cash. Some participants mentioned the belief that the first transaction should be in hard cash, considering it as an offering to the Goddess Lakshmi, the deity associated with wealth and prosperity.

Overcoming these deeply rooted religious beliefs presents a unique challenge in adopting digital payment methods like UPI.

Insights from Interviews:

1. **Enhanced Efficiency and Convenience:** Participants who adopted UPI highlighted the convenience and efficiency it brought to their businesses. They appreciated the speed of

transactions and the ability to receive payments instantly, streamlining their operations and reducing the need for cash handling

2. **Financial Inclusion:** UPI adoption played a pivotal role in promoting financial inclusion among entrepreneurs in Kanpur. It provided them with access to digital payment services, allowing them to expand their customer base and actively participate in the formal economy.

3. **Transparent Financial Records:** Many participants emphasized the importance of digital transactions for maintaining accurate financial records and improving transparency. UPI facilitated better financial management by enabling participants to track their income and expenses efficiently.

PROS AND CONS OF UPI ADOPTION:

Pros: Convenience and Efficiency: UPI provide a smooth and organized remittance experience, reducing the need for hard cash and reducing transaction time.

Financial Inclusion: UPI empowers entrepreneurs by granting access to digital financial services, fostering economic independence and growth.

Transparent Financial Management: UPI transactions provide a digital trail, allowing participants to maintain accurate financial records and comply with tax regulations.

Cons: Technological Dependence: UPI adoption relies on access to smartphones and reliable internet connectivity, which may pose challenges in certain areas, particularly in less developed regions.

Limited Awareness and Education: Lack of awareness and understanding about UPI and digital payment methods can hinder adoption, emphasizing the need for awareness campaigns and educational initiatives.

Security Risks: Participants expressed concerns regarding the security of their financial transactions and the potential for fraudulent activities. Strengthening security measures and promoting safe digital practices are essential to address these concerns

CONCLUSION

In conclusion, the adoption of UPI among foodpreneurs in Kanpur face challenges related to limited digital literacy, connectivity issues, trust and security concerns, and religious beliefs. However, UPI adoption brings benefits such as enhanced efficiency and convenience, financial inclusion, and transparent financial management. Limited digital literacy is a hurdle as foodpreneurs struggle to understand UPI, emphasizing the need for digital literacy programs. Connectivity issues, especially unreliable internet access, hinder consistent UPI usage and require infrastructure improvements. Trust and security concerns must be addressed to build confidence in UPI and prevent fraudulent activities. Religious myths and beliefs, such as the notion of first transactions in hard cash as offerings, pose a unique challenge to UPI adoption. Overcoming these beliefs necessitates targeted awareness campaigns. Interviews with UPI

adopters revealed that it brings enhanced efficiency and convenience, streamlining operations and reducing cash handling. Financial inclusion allows foodpreneurs to expand their customer base and participate in the formal economy. Transparent financial records facilitated by UPI aid in financial management and compliance with tax regulations. The pros of UPI adoption include convenience, efficiency, financial inclusion, and transparent financial management. However, challenges such as technological dependence, limited awareness, and security risks exist. In summary, addressing the challenges of digital literacy, connectivity, trust, and religious beliefs will enable broader UPI adoption. Leveraging UPI's benefits can empower foodpreneurs in kanpur, contributing to their growth and the local economy.

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Unlocking the Puzzle of Regional Disparities and Economic Growth in Sub-regions of India

Sukanya Maurya

ABSTRACT

This study aims to investigate the dynamics of sectoral domestic product growth (including agriculture & allied, industry, and service sectors) across 32 regions in India, comprising 28 states and 4 Union Territories, over the period from 2000-2001 to 2021-2022. Utilizing data sourced from the EPWRF time series dataset, the study divides the entire timeframe into two distinct sub-periods: (1) the first period spanning from 2000-01 to 2010-11, and (2) the second period spanning from 2011-12 to 2021-22. The findings reveal that in the agriculture and allied sector during the first period (2011-12 to 2021-22), Gujarat exhibits the highest growth rates followed by Tripura and Telangana, while Kerala and Bihar experience the lowest growth rates and the Andaman & Nicobar Islands show negative growth. While in the second period (2011-12 to 2021-22). Concerning the industry and service sectors, the study observes more pronounced growth during the first period compared to the second period. Targeted interventions are needed to address disparities, especially in regions with negative growth or slower development. Boosting agricultural productivity and allied sectors can stimulate overall growth and reduce disparities. Investment in industry and service sectors, along with infrastructure development, can foster economic diversification and sustainable development. Coordinated efforts among policymakers, stakeholders, and local communities are essential to implement inclusive policies prioritizing equitable growth across all regions of India.

Keywords: *Regional disparities, Economic growth, Convergence, Divergence.*

INTRODUCTION:

Researchers have long been interested in examining regional economic growth and inequality within the Indian economy since gaining independence. The disparities in economic growth rates across different regions pose significant challenges for policymakers and planners, potentially fracturing socio-political unity within the nation. This prompts critical questions:

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Will national economic growth exacerbate existing disparities, widening the divide between prosperous and disadvantaged states? Conversely, is there potential for long-term economic convergence among regions, driven by factors such as infrastructure development and human capital investment? Can targeted governmental interventions, such as regional development policies and investment incentives, or the inherent dynamics of the market system effectively address regional disparities over time? In this context, the examination of the hypothesis of regional income convergence against the backdrop of sustained divergence in state incomes is crucial for understanding the complex dynamics at play in India's economic landscape.

Regional economic disparities have profound implications for the economic and political functioning of national economies, regardless of their development status. These disparities can trigger undesirable movements of labor and capital between regions with varying economic conditions, amplifying the imbalance. Furthermore, they can facilitate the transmission of inflation from prosperous to struggling regions, complicating the national trade-off between inflation and unemployment. In addition to economic consequences, regional disparities often breed political resentment in less affluent areas and foster disillusionment with the political process, potentially leading to social unrest. Consequently, there is a compelling case, grounded in economic, social, and political reasoning, for promoting greater economic equilibrium within countries. Many nations have thus implemented regional policies aimed at addressing these imbalances, recognizing the importance of fostering national unity and ensuring equitable growth. Since India gained independence in 1947, reducing regional disparities in living standards has been a key policy objective, driven by the goal of promoting national unity and achieving inclusive growth.

Examining economic trends at the regional or state level is crucial for several reasons. Firstly, the economic liberalization measures of 1991 delegated more authority to state and local governments, particularly in investment matters. This shift underscores the need to analyze economic growth patterns before and after liberalization. While national-level data offer valuable insights, they may obscure variations among states. It's essential to investigate whether all states experienced similar growth rates or if disparities persisted, with affluent states outpacing others. Understanding these nuances is vital for achieving balanced regional development goals. Additionally, the structure of the Indian government and its intergovernmental relations add complexity. Despite the central government's significant tax-raising powers, the constitution includes provisions for transferring grants to states to ensure balanced growth. These grants, such as statutory transfers and grants in aid, aim to support various state projects. Research indicates that poorer states receive a relatively larger share of funds compared to wealthier ones. For states like Bihar, which face significant development challenges, these transfers constitute a substantial portion of state income. Evaluating whether regional inequalities have diminished over time and if less prosperous states have made progress in catching up with wealthier ones can shed light on the effectiveness of these fund transfers. In the subsequent section, I will delve into an analysis of growth experiences at the state level to further explore these dynamics.

This study aims to investigate the dynamics of sectoral domestic product growth (including agriculture & allied, industry, and service sectors) across 32 regions in India, comprising 28 states and 4 Union Territories, over the period from 2000-2001 to 2021-2022.

LITERATURE REVIEW:

Regionally, the neoclassical growth theory posits that regions with higher initial levels of capital should experience faster economic growth, while the new growth theory suggests that technological innovation and human capital accumulation are the driving forces behind regional economic disparities and growth (Lucas, 1988; Romer, 1990).

In their study, Barro and Sala-i-Martin found that disparities in physical capital and human capital explain a significant portion of regional income differences. This suggests that policies targeting the accumulation of both physical and human capital are crucial for addressing regional disparities and promoting economic growth.

Duranton and Puga (2005) introduced the concept of 'nursery cities,' proposing that cities have the potential to stimulate innovation and facilitate growth in emerging industries, which subsequently diffuse to other regions.

Furthermore, the role of institutions in shaping regional economic disparities cannot be understated. Acemoglu et al. argue that variations in institutional quality across regions account for disparities in economic performance. This highlights the importance of institutional reform and governance in unlocking the puzzle of regional disparities and fostering economic growth.

Recent research conducted by Triplett and Bosworth (2004) has presented a counterargument to this perspective, suggesting that the service sector can attain noteworthy productivity improvements as well. The ongoing discussion regarding whether economic activities are experiencing dispersion or concentration remains a focal point in the field of regional economics.

In conclusion, the literature reviewed suggests that a combination of factors including capital accumulation, technological innovation, human capital, and institutional quality play significant roles in shaping regional economic disparities and growth. Addressing these factors through targeted policies and reforms is essential for unlocking the puzzle of regional disparities and promoting sustainable economic growth.

OBJECTIVE:

- To analyze the growth of sectoral Gross State Domestic Product (GSDP), encompassing agriculture & allied, industry, and service sectors, at the regional level.

DATA AND METHODOLOGY:

Data Sources

The present study is based on secondary sources of data. The data which is used in this

paper is compiled from EPW Research Foundation, covering the period 2000-01 to 2021-22 for the analysis.

Methodology

To compare the growth rate in agriculture & allied, industry, and service sectors in India. This study mainly uses the linear log model to compute the compound annual growth rate of agriculture & allied, industry, and service sectors in India. In this study, the period is divided into 2 parts of 10 years each which is due to the purpose of getting information about the last 2 decades of 21st centuries. By comparing them like this, we can find out the differences between 2 decades of the 21st century.

The Compound Annual Growth Rates are estimated by using the following formula:

The exponential compound annual growth rates are estimated by using log linear functions on the time series data of share of Agriculture and allied sector, Industry and Services in GSDP. The semi-log exponential functional form is used to analyze the trend in growth rate, which is one of the appropriate functional forms to estimate the growth rate. That is, the growth rate is estimated by using the following semi log functional form:

$$\log Y_t = \alpha + \beta t \dots \dots \dots (1)$$

This equation (1) can be elaborated in details as:

$$Y_t = Y_0 (1+r)^t \dots \dots \dots (i)$$

$$\text{Taking log on both sides, we get } \log Y_t = \log Y_0 + t \log(1+r) \dots \dots \dots (ii)$$

$$\text{Equation (ii) can be rewrite as } Y = \alpha + \beta t \dots \dots \dots (iii)$$

Where $Y = \log Y_t$; $\alpha = \log Y_0$; $\beta = \log(1+r)$,

In equation (iii) $Y_t = \text{Agriculture \& Allied/Industry/Service sectors share in GSDP}$, = constant
 $t = \text{Time variable in year (1, 2, \dots, n)}$ = regression coefficient that shows the rate of change or growth rates in a series.

The annual compound growth rate (s) can be worked out by using:

$$\text{Antilog } () = \text{Antilog } (\log(1+r)).$$

Antilog $() = 1+r$ and $r = \text{Antilog } -1$ When multiplied by 100, it gives the percentage growth rate in the sectoral domestic product (including Agriculture & Allied, Industry, and Service sectors)

That is, Compound Annual Growth Rate (CAGR) (%) = $r = (\text{Antilog } -1) \times 100$.

Results and Findings

Table 1 unveils a dynamic landscape in the Agricultural and Allied sector, showcasing Gujarat's triumphant lead in period 1, boasting an impressive Compound Annual Growth Rate (CAGR) of 7.49%. Following closely behind are the surprises of Tripura and Telangana, with

growth rates of 7.05% and 6.86% respectively, painting a vivid picture of their agricultural prowess. However, amidst the triumphs, Andaman and Nicobar Islands suffer a setback, grappling with a negative CAGR of -1.30%, closely trailed by the struggling states of Kerala and Chandigarh. Fast forward to period 2, and a new champion emerges – Andhra Pradesh, capturing the spotlight with an astounding CAGR of 8.87%. Noteworthy mentions include the unexpected rise of Mizoram and Madhya Pradesh in the ranks. Yet, amid the successes, Kerala finds itself at the bottom of the ladder with a negative growth rate, while Union Territory Delhi faces the harsh reality of a dismal CAGR of -4.37%.

What’s truly intriguing, however, is the shifting tide of fortunes over the decades. Gujarat, once hailed as the undisputed leader, now finds itself at the 12th rank in period 2, while Andhra Pradesh, a modest contender in period 1, rises to the helm in period 2, marking a monumental shift in the state rankings – a testament to the ever-evolving landscape of agricultural dynamics.

Table 1. Compound Annual Growth Rate (CAGR) of Agriculture and Allied Sectors in Period 1 and Period 2.

Sl. No.	States& UT	Period 1	Ranking	States& UT	Period 2	Ranking
1	GUJARAT	7.49	1	ANDHRA PRADESH	8.87	1
2	TRIPURA	7.05	2	MIZORAM	8.45	2
3	TELANGANA	6.86	3	MADHYA PRADESH	6.99	3
4	JHARKHAND	5.79	4	TRIPURA	6.33	4
5	MIZORAM	5.50	5	SIKKIM	5.68	5
6	RAJASTHAN	5.36	6	KARNATAKA	5.64	6
7	NAGALAND	5.29	7	TAMIL NADU	5.56	7
8	MANIPUR	4.96	8	MANIPUR	5.33	8
9	MADHYA PRADESH	4.94	9	TELANGANA	5.25	9
10	CHHATTISGARH	4.90	10	RAJASTHAN	5.02	10
11	MAHARASHTRA	4.59	11	CHHATTISGARH	4.97	11
12	SIKKIM	4.42	12	GUJARAT	4.53	12
13	ODISHA	4.07	13	HARYANA	4.08	13
14	ANDHRA PRADESH	4.05	14	GOA	4.01	14
15	KARNATAKA	3.73	15	ASSAM	3.96	15
16	HARYANA	3.62	16	MAHARASHTRA	3.87	16

Sl. No.	States& UT	Period 1	Ranking	States& UT	Period 2	Ranking
17	HIMACHAL PRADESH	3.52	17	ODISHA	3.54	17
18	PUDUCHERRY	3.43	18	MEGHALAYA	3.50	18
19	TAMIL NADU	3.30	19	ARUNACHAL PRADESH	3.31	19
20	MEGHALAYA	3.12	20	UTTAR PRADESH	3.31	20
21	WEST BENGAL	2.44	21	ANDAMAN AND NICOBAR ISLANDS	2.91	21
22	UTTARAKHAND	2.35	22	CHANDIGARH	2.89	22
23	BIHAR	2.28	23	HIMACHAL PRADESH	2.84	23
24	PUNJAB	2.10	24	BIHAR	2.74	24
25	UTTAR PRADESH	2.05	25	WEST BENGAL	2.50	25
26	ASSAM	1.92	26	PUNJAB	2.21	26
27	ARUNACHAL PRADESH	1.85	27	JHARKHAND	1.79	27
28	GOA	1.67	28	PUDUCHERRY	1.52	28
29	DELHI	1.52	29	UTTARAKHAND	1.44	29
30	CHANDIGARH	0.48	30	NAGALAND	0.71	30
31	KERALA	0.11	31	KERALA	-1.14	31
32	ANDAMAN AND NICOBAR ISLANDS	-1.30	32	DELHI	-4.37	32

Source: Author's Calculation

Table 2 vividly illustrates the ebb and flow of industrial sector growth across regions, with Sikkim emerging as the frontrunner in this period, closely pursued by the unexpected contenders of Andaman and Nicobar Island and Uttarakhand. However, the tides of fortune shift dramatically in period 2, as Sikkim relinquishes its crown to Mizoram, showcasing an unprecedented Compound Annual Growth Rate (CAGR) of 14.06%

States too undergo a metamorphosis in their rankings. Assam, once languishing at the bottom with a CAGR of 4.85% in period 1, catapults itself to the forefront, experiencing the 3rd highest CAGR in period 2. Conversely, Meghalaya and Manipur are grappling with a decline, facing the harsh reality of negative growth rates.

The landscape of industrial growth paints a dynamic picture, with some states and Union Territories defying expectations and thriving in the second period, while others witness a downturn in their performance—a testament to the ever-evolving nature of economic dynamics and the resilience of certain regions in the face of adversity.

Table 2. Compound Annual Growth Rate (CAGR) of Industry Sector in Period 1 and Period 2.

Sl.No.	States& UT	Period 1	Ranking	States& UT	Period 2	Ranking
1	SIKKIM	21.54	1	MIZORAM	14.06	1
2	ANDAMAN AND NICOBAR ISLANDS	20.87	2	TRIPURA	9.64	2
3	UTTARAKHAND	19.27	3	ASSAM	9.60	3
4	ARUNACHAL PRADESH	14.20	4	GUJARAT	9.48	4
5	BIHAR	12.76	5	PUDUCHERRY	7.87	5
6	ODISHA	11.59	6	ODISHA	7.56	6
7	GUJARAT	11.31	7	SIKKIM	7.14	7
8	TELANGANA	10.72	8	BIHAR	6.98	8
9	CHHATTISGARH	10.68	9	HARYANA	6.84	9
10	PUNJAB	10.04	10	HIMACHAL PRADESH	6.76	10
11	MAHARASHTRA	9.87	11	ARUNACHAL PRADESH	6.52	11
12	MEGHALAYA	9.81	12	UTTAR PRADESH	6.46	12
13	NAGALAND	9.80	13	WEST BENGAL	6.26	13
14	CHANDIGARH	9.57	14	TAMIL NADU	6.15	14
15	MIZORAM	9.43	15	CHHATTISGARH	6.09	15
16	HIMACHAL PRADESH	8.84	16	KARNATAKA	5.88	16
17	TAMIL NADU	8.74	17	MADHYA PRADESH	5.87	17
18	ANDHRA PRADESH	8.67	18	DELHI	5.79	18
19	KERALA	8.62	19	ANDHRA PRADESH	5.74	19
20	TRIPURA	8.61	20	TELANGANA	5.31	20
21	UTTAR PRADESH	8.50	21	GOA	5.24	21
22	HARYANA	8.50	22	ANDAMAN AND NICOBAR ISLANDS	5.22	22
23	RAJASTHAN	8.30	23	PUNJAB	4.97	23
24	KARNATAKA	8.27	24	UTTARAKHAND	4.84	24
25	GOA	8.12	25	KERALA	4.28	25
26	MADHYA PRADESH	7.99	26	NAGALAND	4.18	26
27	MANIPUR	7.18	27	JHARKHAND	3.80	27
28	WEST BENGAL	6.62	28	RAJASTHAN	3.33	28
29	DELHI	6.30	29	MAHARASHTRA	3.10	29
30	JHARKHAND	4.93	30	CHANDIGARH	2.20	30
31	ASSAM	4.85	31	MANIPUR	-1.00	31
32	PUDUCHERRY	4.68	32	MEGHALAYA	-5.91	32

Source: Author’s Calculation

Table 3 illustrates the remarkable Compound Annual Growth Rates (CAGR) of various states during period 1, showcasing an array of impressive performances. Uttarakhand emerges as the standout, experiencing the highest CAGR in the Services sector, closely trailed by the dynamic states of Haryana and Gujarat, painting a picture of robust growth in these regions. Even at the bottom of the spectrum, Manipur displays resilience, boasting a notable CAGR of 5.83% during this period.

However, the narrative takes a fascinating turn when examining the transition from period 1 to period 2. Karnataka, initially ranked 16th in period 1, undergoes a dramatic transformation, experiencing the highest CAGR in the country during period 2. This shift underscores a significant change in the growth dynamics of the services sector, highlighting the evolving economic landscape and the potential for unexpected advancements in state economies over time.

Table 3. Compound Annual Growth Rate (CAGR) of Services Sector in Period

Sl. No.	States& UT	Period 1	Ranking	States& UT	Period 2	Ranking
1	UTTARAKHAND	13.32	1	KARNATAKA	8.26	1
2	HARYANA	12.21	2	MIZORAM	7.83	2
3	GUJARAT	10.68	3	TELANGANA	7.67	3
4	TELANGANA	10.63	4	GUJARAT	7.44	4
5	PUDUCHERRY	10.52	5	HARYANA	7.02	5
6	DELHI	10.51	6	ARUNACHAL PRADESH	6.98	6
7	GOA	10.25	7	UTTARAKHAND	6.96	7
8	TAMIL NADU	10.20	8	TRIPURA	6.89	8
9	JHARKHAND	10.16	9	SIKKIM	6.68	9
10	ODISHA	10.01	10	JHARKHAND	6.44	10
11	MAHARASHTRA	9.98	11	ANDAMAN AND NICOBAR ISLANDS	6.19	11
12	KERALA	9.85	12	UTTAR PRADESH	6.05	12
13	ANDAMAN AND NICOBAR ISLANDS	9.82	13	PUNJAB	5.97	13
14	CHANDIGARH	9.44	14	RAJASTHAN	5.96	14
15	HIMACHAL PRADESH	9.36	15	MAHARASHTRA	5.95	15
16	KARNATAKA	9.28	16	MANIPUR	5.95	16
17	CHHATTISGARH	8.76	17	BIHAR	5.92	17
18	ANDHRA PRADESH	8.76	18	ANDHRA PRADESH	5.84	18
19	SIKKIM	8.72	19	MEGHALAYA	5.82	19
20	MIZORAM	8.72	20	MADHYA PRADESH	5.79	20
21	ARUNACHAL PRADESH	8.43	21	DELHI	5.74	21
22	WEST BENGAL	8.30	22	TAMIL NADU	5.69	22
23	TRIPURA	8.19	23	HIMACHAL PRADESH	5.46	23
24	RAJASTHAN	8.16	24	ODISHA	5.22	24
25	NAGALAND	8.07	25	NAGALAND	5.20	25
26	BIHAR	7.75	26	GOA	4.81	26
27	MEGHALAYA	7.68	27	WEST BENGAL	4.81	27
28	UTTAR PRADESH	7.62	28	CHANDIGARH	4.74	28
29	ASSAM	7.29	29	KERALA	4.74	29
Sl. No.	States& UT	Period 1	Ranking	States& UT	Period 2	Ranking
30	PUNJAB	7.18	30	CHHATTISGARH	4.69	30
31	MADHYA PRADESH	6.62	31	ASSAM	4.22	31
32	MANIPUR	5.83	32	PUDUCHERRY	3.34	32

Source: Author's Calculation

Conclusion

The examination of regional economic growth and inequality within India is not merely

an academic pursuit but a crucial endeavor with far-reaching implications for the nation's socio-economic fabric and political stability. As this study unfolds, it becomes evident that disparities in economic growth rates persist across different regions, posing formidable challenges for policymakers and planners. However, amidst these challenges lies the potential for transformative change and economic convergence among states.

The evolution of India's economic landscape over the past two decades reflects a complex interplay of factors, from infrastructure development to human capital investment and institutional reform. The findings underscore the dynamic nature of regional disparities and the resilience of certain states in navigating economic adversity. In the agriculture and allied sector, Gujarat's initial dominance gives way to Andhra Pradesh's ascension, signaling a shift in the regional hierarchy. Similarly, in the industrial sector, Sikkim's reign is usurped by Mizoram, showcasing the fluidity of economic fortunes among states. Notably, the services sector emerges as a beacon of growth and transformation. Uttarakhand, Haryana, and Gujarat lead the charge in period 1, but Karnataka's meteoric rise in period 2 reshapes the narrative, exemplifying the potential for rapid advancement and economic resurgence. The findings also underscore the importance of targeted policies and reforms in addressing regional disparities and fostering sustainable economic growth. Investments in physical and human capital, coupled with institutional reforms, are pivotal in unlocking the puzzle of regional disparities and promoting inclusive development. As India continues its journey towards economic prosperity, it is imperative to remain vigilant to the evolving dynamics of regional disparities and to leverage opportunities for collaboration and growth. By embracing the lessons gleaned from this study and charting a course guided by inclusivity and equity, India can aspire to realize its full economic potential while ensuring the well-being of all its citizens, irrespective of regional boundaries.

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Financial Inclusion and Socio-Economic Status of Women in India

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Abstract

Financial inclusion is the process of ensuring that vulnerable groups such as weaker parts and low-income groups have access to relevant financial products and services at an accessible cost, in a fair and transparent manner, from mainstream institutional players. Women make up half of the human population, but they experience discrimination in terms of birth, education, health, employment rights, and pay. Women's empowerment is the process of creating an atmosphere in which women may make their own decisions for their advantage. Financial stability is a crucial factor influencing women's decisions. This study discusses the importance of financial inclusion in improving the socioeconomic position of women in India.

Keywords: *Financial Inclusion, Socio-Economic.*

Introduction

Financial inclusion is a national priority, and many policy measures and initiatives have been implemented by the central and state governments, the Reserve Bank of India (RBI), NABARD, Regional Rural Banks (RRBs), such as Self-Help Groups (SHGs- Banking Linkage Model), the PM Jan Dhan Yojana, the MUDRA Yojana, and others. The Rangarajan Committee on Financial Inclusion (2008) defines financial inclusion as “the process of ensuring timely access to financial services and adequate credit where needed by vulnerable groups such as the weaker section and low-income groups at an affordable cost.” Financial inclusion is critical for more inclusive growth and a tool for poverty alleviation.

Because men predominate in Indian society, women are marginalised there. Women's status, which is a reflection of the kind of society and culture they inhabit, is determined by a number of factors, including their level of education, income, and employment rights, as well as the roles they perform in the home and in society at large. According to a study, financial inclusion may have a positive impact on saving and investment rates if gender discrimination is absent.

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Women have numerous obstacles while trying to obtain official financial services, such as limited mobility and distance, financial illiteracy, ignorance, and lack of identifying documentation. Women who have access to banks and other financial institutions are more economically empowered because they can manage their finances more discreetly and efficiently and have a safe location to store their money. It takes the lead in risk security and a sense of ownership. Compared to males, women are more driven to save money in order to reduce risk, safeguard their families against unforeseen events, and fund their children's college and marriage.

According to the World Bank's Global Findex Report 2017, 77% of Indian women have a bank account, compared to 43% in 2014. The government requires all beneficiaries of various government programmes to receive their wages through formal savings accounts. For instance, MNREGA stipulates that one-third of its participants must be women, and that payments to them must be made electronically to their bank accounts. Women gather in SHGs on a regular basis to save money. Women's institutional savings remain extremely low despite these efforts.

Socio-economic phenomena are those aspects of life in which social and economic life are shaped and affected by economic activity. Gender discrimination is a common issue in social, economic, and political decision-making for women. Through improved decision-making power over their own and their families' health and education, sanitation, employment, financial investments, wealth, purchasing power, and willpower, women's financial inclusion can abolish gender discrimination and boost their socioeconomic and political status.

Review of Literature

Sarumathi et al. (2011) investigated the impact of microfinance on female empowerment. It concluded that microfinance increased courage, self-confidence, skill, self-worthiness, knowledge of children's education, and literacy levels among rural women. 92 percent of women who participated in microfinance agreed that joining a SHG reduced their poverty level.

Pulindidi (2012) found a strong link between women's financial inclusion and decision-making power inside the household. Family duties and responsibilities are equally shared by men and women, but they are rarely given the authority to make decisions.

Mula et al. (2013) assessed how microfinance affected women's empowerment. They discovered a noteworthy improvement in the economic factors related to self-sufficiency, creating jobs, accumulating assets, making profitable investments, and saving money, all of which improved the socioeconomic standing of rural women.

Sultana et al. (2017) assessed the function of microfinance in empowering Muslim and non-Muslim women by comparing SHG members to non-members in order to gain a better understanding of how SHGs work. The notion of microfinance is examined utilising loan size,

loan recovery, and loan period. Economic, social, and knowledge factors are utilised to examine empowerment. The results are derived from a logistic regression model.

Ashalakshmi et al. (2017) investigated the relationship between the role of financial inclusion through SHGs and women's empowerment in rural areas, examining factors such as credit availability, income levels, awareness of financial services, standard of living (consumption and expenditure), and bank account.

Hendriks (2019) found that poverty and inequality are tightly connected. Women and girls continue to earn less, study less, own less, and have significantly less economic influence than their brothers and husbands. This has significant effects for women's health, education, career prospects, and even the authority they have - or lack - over their own lives and decisions.

Shivangi et al (2019) find that women empowerment is concerned with transforming power. According to Shivangi et al. (2019), women's empowerment is focused with shifting power relationships in favour of the female gender and is deemed crucial for global advancement. Social empowerment entails giving women the power or authority to better their livelihood. Person-to-person communication and social variety promote women's social empowerment. The study concluded that women with greater access to and use of financial services, such as opening bank accounts and purchasing insurance, have greater social, political, and economic empowerment.

Serrao et al. (2021) discovered that there is inequality in financial inclusion at the macro level of the Indian economy. A large segment of the vulnerable population does not have access to financial services. The extent of financial inclusion has been quantified by examining the reach of financial services across various income, asset levels, and years of accessing formal financial services. They suggested that social pressure could influence women's decision-making capacity within the family unit. This study is based on secondary data sources with the following objective.

Objectives of the study

1. To examine the policies adopted by the government under the scheme of financial inclusion.
2. To assess the contribution of all these policies in uplifting the socio-economic status of women in India.

Financial Inclusion and Women Empowerment:

The Indian government has long made women's emancipation a top priority. It has also attracted the attention of policymakers. In India, data on financial exclusion vastly outweighs statistics on women's financial inclusion. In India, only 26% of women and 46% of males own a bank account. The government is always attempting to reduce the disparity and delay

caused by the different causes that lead to skewed data. India has improved its statistics over time and produced a number of outstanding ladies. A recent global study found that only four Indian businesswomen are among the top 50 female business executives in the globe. Indian women have made major contributions in a variety of sectors, including science, health, business, sports, and politics. They have held key positions in these disciplines, rising to become prime ministers, Lok Sabha speakers, and freedom warriors.

But in rural India, where women fight to survive in a nation that is utterly impoverished, the situation is very different. Many women who manage small companies, work as maids, and sell vegetables are compelled to contribute their profits to their male family members instead of using them to meet their own basic requirements. None of these women own their own personal bank accounts.

Various Initiatives Taken by the RBI for Ensuring Financial Inclusion

- ❖ **No-frill Account:** This type of account enables users to open one with a minimal or nil balance requirement.
- ❖ **Relaxed Know Your Customers (KYC) Rules:** The RBI has loosened KYC rules to make it easier for the average person to register a bank account. One document, for instance, may serve as confirmation of address and identity.
- ❖ **Basic Saving Bank Deposit Account (BSBDA):** The RBI has directed all banks to open BSBDA accounts, which have standard features like no minimum balance requirements, the ability to deposit and credit cash at branches and ATMs, and the ability to receive and credit money through electronic payment systems.
- ❖ **Rationalisation of Branch Authorization Policy:** The RBI has implemented new procedures in the updated policy to address the problem of unequal branch spread. Additionally, banks were required to open 25% of these locations in rural areas without access to banking services.
- ❖ **Opening of Brick and Mortar Branches:** There was a need to open brick and mortar branches in order to promote financial inclusion, boost banking penetration, and encourage branch openings in rural areas. As a result, banks are required to open 25% of their new branches in unbanked rural areas within a given fiscal year.
- ❖ **Financial Inclusion Plan (FIP):** Beginning in April 2010, all public and private sector banks were required by RBI rules to present a three-year plan that had been approved by the board for financial inclusion. According to this plan, each bank must establish its own goals for opening physical branches, hiring business correspondents (BCs), covering unbanked villages with populations of 2000 or less through branches, and taking other particular actions to assist those who are financially excluded.

- ❖ **Centres for Financial Literacy (FLCs):** People who are financially literate are better able to make decisions that suit their demands and are economical by understanding the advantages of various products and providers. As a result, the RBI updated its standards for Lead Banks' FLCs' camp conduct in January 2016.
- ❖ **Use of Technology:** The RBI acknowledged that the problem of outreach and loan delivery in rural and distant areas can be effectively solved by technology. ICT-enabled BC allows even illiterate account holders to use biometrics to manage their accounts. ICT thereby increases trust in the banking system and guarantees transaction security.
- ❖ **Adoption of Electronic Benefit Transfer (EBT):** In order to lower transaction costs and lessen reliance on cash, banks were encouraged to implement EBT by utilising ICT to transfer government and social benefits electronically to the beneficiary's bank account.
- ❖ **General Credit Card (GCC):** The RBI recommended banks to provide a general-purpose credit card facility up to \$25,000 based on an analysis of cash flow in order to give hassle-free credit to underprivileged and impoverished individuals.
- ❖ **National Strategy for Financial Inclusion (NSFI): (2019-2024)-** • On January 10, 2020, RBI released the NSFI 2019–24, outlining six strategic goals for financial inclusion, including: (1) Providing basic financial services; (2) Encouraging universal access to financial services; (3) Fostering skill development and livelihood; (4) Financial literacy and education; (5) Customer protection and grievance redressal; and (6) Efficient coordination
- ❖ **National Strategy for Financial Education (NSFE): (2020-2025):** On August 20, 2020, RBI published the NSFE: 2020–25 document, which suggested a “5C” strategy for financial education distribution across the nation. Enhancing collaboration among various stakeholders, leveraging the positive effects of the community-led model for financial literacy through appropriate communication strategies, developing capacity among the intermediaries involved in providing financial services, and emphasising the development of relevant content in curriculum in schools, colleges, and training establishments are some of these approaches.

Government Achievements Towards Women Empowerment Under Financial Inclusion:

There were various schemes which just extended the financial services and became the medium of empowering the women. This scheme played an important role to push unbanked women to use the financial services at affordable cost.

- ❖ **Rashtriya Mahila Kosh:** The Ministry of Women and Child Development established RMK in 1993 with the intention of helping Indian women from lower socioeconomic

classes elevate their status by offering microloans. The plan started with an initial corpus of 31 crore, but thanks to additional budgetary allocation of 69 crore, it has grown to over 186 crores to meet the credit needs of asset-poor and impoverished women working in the informal sector, according to the Ministry of Women and Child Development's annual report. In an attempt to empower and enable women, a number of measures have been implemented to encourage small loans, with a cap of 10 lakh.

- ❖ **Conditional Cash Transfer (CCT) Scheme for girl child with insurance cover (Dhanalakshmi)** In order to encourage families to keep and educate their female child, the Conditional Cash Transfer (CCT) Scheme for female Child with Insurance Coverage was introduced in 2008. Situated in 11 blocks in 7 states (Andhra Pradesh, Bihar, Jharkhand, Uttar Pradesh, Punjab, Chhattisgarh, and Odisha), this Central Sector plan is being piloted. Eliminating prejudice against girls was the goal of the Dhanalakshmi initiative. Under this initiative, a direct cash transfer of Rs. 5000 will be made at the time of a girl child's birth and registration, along with an extra Rs. 1250 for vaccinations. Families that promise their girls will live to be eighteen will receive a cheque for Rs one lakh from the Life Insurance Corporation of India.
- ❖ **Support services and financial aid for rape victims:** In accordance with Article 38(1), the Honourable Supreme Court has instructed the National Commission for Women to develop a "scheme so as to wipe the tears of sad rape victims." The Ministry of Women and Child Development will transfer up to Rs. 1 lakh (up to a maximum of Rs. 3 lakh) in compensation for injuries to the victim of sexual assault through the "State Criminal Injuries Relief and Rehabilitation Board."
- ❖ **Indira Gandhi Matritva Sahyog Yojana (IGMSY) – a Conditional Maternity Benefit (CMB) Scheme:** A federally funded programme for union territories and state governments is called IGMSY. It was first implemented in 2010–2011, with a focus on the maternity benefit programme and women who were pregnant or nursing. The direct cash transfer of rupees 4,000/-in three installments will be given to pregnant and lactating women who are 19 years of age or older under this scheme for their first two live births (1,500 at the time of registration within four months of pregnancy, 1,500 after three months of delivery for child registration, immunisation, and counselling session, and the remaining 1,000 rupees transferred to the beneficiary's account after six months of delivery).
- ❖ **Mahila Samakhya Programme (MSP):** MSP, a programme promoting women's equality in education, was introduced in 1989 and was run by the Ministry of Human Resource and Development in the states of Uttar Pradesh, Gujarat, Karnataka, etc. According to the Mahila Samakhya Program-A National Review study, MSP coverage is expected to extend to 60–65 additional districts, encompassing 42,398 villages spread throughout 126 districts across 10 states.

- ❖ **Bhartiya Mahila Bank (BMB):** A bank where men are not only not allowed to work but also open accounts is one that is meant to be for the women of the nation. empowering women and advancing financial inclusion with a single government-adopted tool. Beginning with seven branches, BMB expanded, and as of right now, there are twenty branches. In addition, the bank has designed and developed special products like BMB Parvarish, BMA Annapurna, and so on.
- ❖ **Pradhan Mantri Jan Dhan Yojna (PMJDY):** On August 28, 2014, one of the largest global financial inclusion programmes, PMJDY, was introduced. A few advantages of the scheme are that there is no minimum balance requirement, the account holder receives a Rupay debit card, accident insurance coverage of Rs. 1 lakh (upgraded to Rs. 2 lakhs for new PMJDY accounts opened after August 28, 2015) is available with the Rupay card, and eligible account holders can access an overdraft facility of up to Rs. 10,000.

Table 1: Progress in PMJDY Over Last Six Years

Sr. No.	Particulars	March 2017	March 2018	March 2019	March 2020	March 2021	Sept* 2022
1	No. of PMJDY account (In Crore)	28.17	31.44	35.27	38.33	42.20	46.95
2	Deposits in PMJDY account (in Rs. Crore)	62,972	78,494	96,107	1,18,434	1,45,551	1,73,058
3	Average deposit in PMJDY account (in Rs. Crore)	2235	2497	2725	3090	3449	3685
4	No. of Rupay debit card issued to PMJDY account- holders (in crore)	21.99	23.65	27.91	29.30	30.90	32.17

(Source: <https://pmjdy.gov.in/Archive> Accessed on 29 September 2022, Overview and Progress on Financial Inclusion: PMJDY, Department of Financial Services (DFS), Ministry of Finance (MoF), GoI. *Data as on 21st September 2022.)

The performance of PMJDY is shown in Table 1. Over the years, consistent progress has been made on the above mentioned parameter. Since the scheme's inception, over 46 crore new accounts have been opened, and over Rs. 1,73,058 crores have been deposited by the newly banked individuals in the formal banking system. This initiative has resulted in the rapid

financial inclusion of women. Women's accounts under PMJDY make up 55.54 percent of all Jan Dhan accounts as of September 21, 2022. The average balance of these accounts has increased from Rs. 2235 in March 2017 to Rs. 3685 as of September 21, 2022. To date, 32.17 crore Rupay debit cards have been issued to PMJDY account holders.

❖ **Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY):** The goal of PMJJBY's launch on May 9, 2015, was to provide insurance to the uninsured. Its goal is to give all Indians, especially the underprivileged and impoverished, access to universal social security. For all bank account holders between the ages of 18 and 50 who subscribe, this policy gives a renewable one-year term life insurance of Rupees Two lakh, covering death due to any cause for an annual premium of Rs. 330 per subscriber.

Table 2: Performance of PMJJBY Over Last Six Year

Sr. No.	Particulars	March 2017	March 2018	March 2019	March 2020	March 2021	March 2022
1	Cumulative Enrolment (in Crore)	3.10	5.33	5.92	6.96	10.27	12.66
2	Cumulative No. of Claim Disbursed	84,727	1,52,880	2,54,830	3,45,201	4,54,085	5,71,007
3	Female Beneficiaries (in Crore)	1.15	1.28	1.55	2.07	2.88	4.26
4	PMJDY-PMJJBY Account-holder (in Crore)	-	0.43	0.6	1.11	1.96	3.29

(Source DFS: Overview and Progress on Financial Inclusion: Social Security Scheme.)

Table 2 displays PMJJBY's performance. Over the course of the year, steady improvement has been made in the aforementioned parameter. More than 12 crore account holders have been insured since the program's launch, and more than 5.7 lakh claims have been paid out. The number of female recipients is steadily rising. As of March 31, 2022, there were 4.26 crore insured female beneficiaries. As of March 31, 2021, 1.96 crore PMJJBY accounts were subscribed out of 42.2 crore PMJDY account holders.

❖ **Pradhan Mantri Suraksha Bima Yojna (PMSBY):** PMSBY was also launched on 9th may, 2015. It offers a renewable one -year accidental death-cum-disability cover of Rupees Two Lakh to all subscribing bank account-holders in the age group of 18 to 70 years at annual premium of Rs. 20/- per annum per subscriber.

Table 3: Performance of PMSBY Over Last Six Year

Sr. No.	Particulars	March 2017	March 2018	March 2019	March 2020	March 2021	March 2022
1	Cumulative Enrolment (in Crore)	9.95	13.48	15.47	18.54	23.26	28.19
2	Cumulative No. of Claims Disbursed	16164	34160	51441	66719	80666	96453
3	PMSBY-Female Beneficiaries (in Crore)	3.84	4.21	5.11	6.64	8.87	11.63
4	PMSBY-PMJDY A/c-holders (in crore)	-	1.93	3.12	4.62	6.69	9.5

(Source DFS: Overview and Progress on Financial Inclusion: Social Security Scheme.)

Performance of PMSBY is presented in table 3. Since its inception, over 28.19 Crore account holder have been insured and over 9.6 Lakh claims have been disbursed. Female beneficiaries are increasing continuously. There are 11.63 Crore insured female beneficiaries as on 31st march, 2022. Out of 42.2 Crore PMJDY account-holders, 6.69 Crore have been subscribed PMSBY as on 31st march, 2021.

Conclusion:

Research on financial inclusion for women is still lacking clarity and complexity. In India, financial inclusion is a hot topic involving novel ideas and ideologies with great potential for the advancement of improved goods, systems, and business models. Though policymakers and researchers have taken an interest in women's empowerment through financial inclusion, further research is necessary to fully explore the subject of women's financial inclusion in India. Although women continue to be the financially excluded group, there are countless opportunities to fully realise their potential as direct contributors to economic progress (Manta, 2014). Financial Inclusion programmes have been acknowledged as having a significant impact on women's empowerment.

Women who qualify for a home loan at a lower rate will benefit from financial stability and empowerment. Regarding financial access, these areas require extra consideration from the government, financial institutions, Self Help Groups, and the general public. Numerous tactics used by the RBI to loosen regulations have also been examined. An examination conducted on a state-by-state basis reveals that while Andhra Pradesh, Tamil Nadu, M.P., Orissa, Rajasthan, and West Bengal are deemed satisfactory, certain states require particular attention with regards to providing financial access to women in India. The lack of trust

between women and the financial sector needs to be investigated. Developing relationships based on trust is essential to women's financial inclusion.

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Pattern and Determinants of Household Investment and Its Impact on Farm and Non-farm Income in Rural India

Mukesh Kumar

ABSTRACT

This paper analyses the trend and pattern of household investment and income in rural India. Further, this study identified the factors those are determinants of household investment and its impact on households' income from the farm and non-farm sector in rural India. This study is based on the data of Situation Assessment Survey of agricultural household of 2002-03, 2012-13 and 2018-19. This study found that average values of household investment declined in farm and non-farm sectors, which has adversely affected income from farm and non-farm sectors. Share of income from crop cultivation and non-farm business have declined, whereas income from animal farming and wages have increased in the total income of rural households. The average value of household investment increased in all states except Jharkhand and Chhattisgarh from 2002-03 to 2012-13, whereas it declined in mostly states of the country from 2012-13 to 2018-19. Household investment incurred in the farm sector is lower in the eastern states in the country. These states also evidence of lower households' incomes from farm and non-farm sector. Household investment is a crucial determinant of the return from farm and non-farm sector. Socio-economic factors have significantly influenced household investment as well as their income from farm and non-farm sectors.

Keywords: *Investment; Income; Credit; Farm; Non-farm income*

1.0 Introduction

Investment is a factor of production and plays an important role in agriculture and economic development of India. Public investment is essential to sustain the growth of agriculture and it also reduces the transaction costs as well as the operating costs of the crop production (Narayanamorthy 2013). Moreover, public spending on agricultural research and education, irrigation, rural infrastructure, and subsidies for credit, fertilizer and irrigation has helped farmers, especially small farmers. Lack of adequate capital formation in Indian agriculture

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formed significant symptoms of agrarian crisis, especially due to decline with agriculture growth after 1980, and mainly after economic reform period 1990.

Review of Literature

Wagle (1994) estimated the aggregate function of demand for fertilizers and private investment in Indian agriculture based on secondary data from 1960-61 to 1988-89. He found that share of agriculture investment as percentage of agricultural GDP, increased from 2.8% in 1960-61 to 4.7% in 1979-80 and thereafter, it has been started declining and 2.6% in 1988-89. However, private investment increased from Rs. 298 crore in 1960-61 to Rs. 5901 crore 1988-89. Dhawan&Yadav (1995) used secondary data of all India debt and investment survey and found that low level investment of per cultivator households was reported from the eastern regional states, viz., Odisha, Bihar, Assam and West-Bengal, whereas highest level of fixed capital formation was reported from the states of Punjab, Haryana, Gujarat and Maharashtra. Major components of capital formation was agricultural machinery, implements and transport under fixed capital formation in agriculture, whereas, wells and irrigation source was another second major component. Fixed capital formation in agriculture was not only influenced by the external institutional and non-institutional financing but also influenced by the rate of technical progress, gross irrigated area, intensity of canal irrigation and agriculture growth. Another study of Roy & Pal (2002) revealed that state wise per hectare private investment in agriculture is highest in Kerala, Tamilnadu and Himachal Pradesh and moderate in Uttar Pradesh, Madhya Pradesh, Maharashtra and Karnataka, whereas lowest in eastern states such as Odisha, Assam and Bihar. Reddy and Mishra (2010) shows that share of private account increased from 56.8 percent 1980-01 to 80.6 percent in 2005-06 in total capital formation in agriculture sector whereas capital formation as percentage of agriculture GDP increased from 5.2 to 10.7 percent in same period. Ramkumar (2012) was examined The percentage of farmer households reported in private fixed capital formation, which declined from 11.8% in 1992 to 10.3% in 2003, The proportion of farm business in overall capital formation by rural household declined from 32.8% to 21.8% over the same time period. Additionally, household expenditure on well and other irrigation source construction as well as farm housing in private capital formation for farm business had increased from 1992 to 2003, while the percentage of land reclamation or improvement had decreased. Malik (2013), examined the regional structure and determinants of domestic and foreign private investment across 15 major states in India, from 1993-94 to 2004-05. According to his findings, the top five states in terms of overall private investment were Maharashtra, Gujarat, Tamilnadu, Haryana and Karnataka and these also led in terms of domestic private investment. However, Maharashtra, Gujarat, Karnataka, Tamilnadu and Punjab lead in foreign direct investment.

3.0. Data and Methodology

Data and Source

The analysis of the study is based on data of Situation Assessment Survey of Agricultural Household of 59th, 70th and 77th round of National Sample Survey Office (NSSO), Ministry of Statistics and Programme Implementation (MOSPI), Government of India. These surveys have covered the data of occupation classification of rural households, households' expenditure on cost of cultivation as well as expenditure on productive assets, returns from cultivation, animal farming, non-farm and indebtedness of households in rural areas.

Estimation Methods

The study has used descriptive statistics at the preliminary stage for examining the variation in occupation and income from farm and non-farm sectors in rural India. GDP deflator at 2011-12 price is used for comparison of income of rural households from 2002-03 to 2018-19. Income of rural households depends on numerous factors such as investment, credit, family size, age, caste, land holding class and educational qualification. A multiple regression model is used to understand the determinants of income of farm sector.

$$Y = \beta_1 + \beta_2 \text{credit} + \beta_3 \text{invest} + \beta_4 \text{land_size} + \beta_5 \text{age} + \beta_6 \text{family_size} + \beta_7 \text{education} + \beta_8 \text{caste} + \beta_9 \text{employment_status} + U_i$$

.....(2)

$$Y = \beta_1 + \beta_2 \text{credit} + \beta_3 \text{invest} + \beta_4 \text{land_size} + \beta_5 \text{Age} + \beta_6 \text{family_size} + \beta_7 \text{education} + \beta_8 \text{caste} + \beta_9 \text{employment_status} + U_i$$

.....3

$$Y = \beta_1 + \beta_2 \text{credit} + \beta_3 \text{invest} + \beta_4 \text{land_size} + \beta_5 \text{Age} + \beta_6 \text{family_size} + \beta_7 \text{education} + \beta_8 \text{caste} + \beta_9 \text{employment_status} + U_1$$

.....4

Y^i is the dependent variable i.e., the income of household from farm, non-farm and wage and salary (W&S) respectively in equation number 2, 3 and 4. $\hat{\alpha}_1$ is the constant and $\hat{\alpha}_2$ to $\hat{\alpha}_9$ are coefficient of determinants of income. Invest is the investment by household in crop production, credit is the household have borrowing, family size is total number of members in family, age is the age of head of household, and land size is operated land in hectare whereas educational is the qualification of head of household, caste and employment status used as dummy variable in these three models.

4.0. Result and Discussions

3.1 Household in Investment in Farm and Non-farm sector

Table 1 indicates the average amount of household investment in the farm and non-farm sectors in India. The average amount of investments in the farm sector increased from Rs. 3693 in 2002–03 to Rs. 11289 in 2012–13 and then decreased to Rs. 6741 in 2018–19. Comparably, the average value of non-farm investments increased from Rs. 300 in 2002–03 to Rs. 825 in 2012–13 and then declined to Rs. 475 in 2018–19, while the average value of investments in both sectors went from Rs. 3993 in 2002–03 to Rs. 12114 in 2012–13 and then decreased to Rs. 7225 in 2018–19. On the other hand, the proportion of farm investment in total household investment increased from 92.5 percent in 2002–03 to 93.2 percent in 2012–13 and 93.3 percent in 2018–19, and these results are applicable in the non-farm sector.

Table.1: Household Investment in Farm and Non-farm Sector at 2011-12 Price

Year	Farm	Non-farm	All
2002-03	3693 (92.5)	300 (7.5)	3993 (100)
2012-13	11289 (93.2)	825 (6.8)	12114 (100)
2018-19	6741 (93.3)	475 (6.6)	7225 (100)

*Source: Situation Assessment Survey (SAS), 2002-03, 2012-13 and 2018-19.
Note: Parenthesis values are column percentage of total*

Caste and Land Class wise Average Value of Household Investment in Farm Sector

The average value of households' investment for the farm sector across caste and land holdings displayed in Table 2. The average value of investments made by general households is the highest at Rs. 14876, while those made by OBC households, SC households, and ST households are at Rs. 9543, Rs. 5245, and Rs. 3864. In terms of land class, the average value of investments is the highest at Rs. 36250, which belongs to the average of medium and large farmers. The next highest values are for semi-medium farmers, Rs. 10802 of small farmers, and the average of landless and marginal farmers, respectively. The average values of general households are higher than those of OBC, SC, and SC households. Similarly, the average values of medium and large households are higher than those of semi-medium, small, and the combined group of landless and marginal farmers. These findings reflect differences in land class distribution.

Table.2: Caste and Land Class wise Average Value of Household Investment in Farm Sector (in Rs.)

Caste	Average values of investment	Land Class	Average values of investment
Schedule Caste	3864	Land less & Marginal	4226
Schedule Tribe	5245	Small	10802
Other Backward Caste	9543	Semi-medium	16329
General household	14876	Medium and Large	36250
All household	9275	All household	9275

Source: unit level data of 77th round of Situation Assessment Survey (SAS), 2018-19

State wise Average Value of Investment by Rural Household in Farm Sector

State wise average value of investment by rural household is reflects in table 3 and this table shows that average value of investment by household increased in all states except Jharkhand and Chhattisgarh from 2002-03 to 2012-13 whereas declined in 13 states out of 18 state from 2012-13 to 2018-19. Average value of investment from national level is lower in Jharkhand, Bihar, West Bengal, Assam, Chhattisgarh and Jammu and Kashmir in all period and Orissa in 2002-03 and 2012-13 and Uttar Pradesh in 2012-13 and 2018-19. On the other hand, average values of investment is highest in Haryana followed by Kerala, Punjab, Andhra Pradesh and Rajasthan whereas lowest in Assam, Bihar, Orissa and Jammu and Kashmir in 2018-19. State wise compound annual growth rate of investment by household from 2002-03 to 2018-19 is varies from -.2 percent in Jharkhand to 8.7 percent in Orissa and higher from national level in Odisha, Andhra Pradesh, Kerala, West Bengal, Rajasthan, Maharashtra and Haryana whereas lower in Jharkhand, Assam, Uttar Pradesh, Gujarat, Jammu and Kashmir, Chhattisgarh, Karnataka, Tamilnadu, Madhya Pradesh and Bihar.

Table.3: State Wise Average Value of Investment in Farm Sector by Rural Household at 2011-12 Price

States	2002-03	2012-13	2018-19
Andhra Pradesh	4431	11623	16108
Assam	1685	2686	1802
Bihar	1339	3644	2384
Chhattisgarh	3577	2363	4903
Gujarat	3623	9038	4509
Haryana	11032	152463	24176
Jammu & Kashmir	2262	2953	2985
Jharkhand	1177	1048	852
Karnataka	4200	13462	7028
Kerala	7385	103239	22670
Madhya Pradesh	4662	8436	7861
Maharashtra	3462	15345	8068
Orissa	715	19547	2716
Punjab	14055	40854	17300
Rajasthan	3808	8236	10380
Tamil Nadu	4777	12961	8050
Uttar Pradesh	3739	4970	4043
West Bengal	1523	2975	4455
India	3693	11289	6741

Source: Situation Assessment Survey (SAS), 2002-03, 2012-13 and 2018-19

3.2 Households' Income from Farm and Non-farm Sector in Rural India

Household's income in absolute values increased from Rs. 25380 in 2002-03 to Rs. 77100 in 2012-13 and Rs. 122616 in 2018-19 (GOI, 2003; 2021), It shows that household's income has increased five time from 2002-03 to 2018-19. However, the trend of rural household's income is significantly different at constant price of 2011-12 (Table 4). At constant price of 2011-12, absolute value of income from all sub-sectors has increased during 2002 to 2019. The wage and salary and animal farming has increased continuously from Rs. 18902 and 2100 to Rs. 36420 and 14181, respectively during 2002-03 to 2018-19 whereas crop cultivation has increased from Rs. 22364 in 2002-03 to Rs. 34335 in 2012-13 and marginally increased Rs. 35245 in 2018-19. Income from non-farm business marginally increased from Rs. 5447 to Rs. 5706 and stagnant Rs. 5746 in 2018-19. On the other hand, percentage share of income of rural household from wage and salary declined from 38.7% to 32.2% in 2012-13 and further increased to 39.8% in 2018-19. Whereas income from crop cultivation increased has increased from 45.8% to 48% in 2012-13 and further declined to 38.5% in 2018-19. Share of animal farming increased continuously from 4.3% to 15.5% in 2018-19 whereas non-farm business declined from 11.2% in 2002-03 to 6.3% in 2018-19.

Table 4: Income of Household in Rural in India from 2002-03 to 2018-19 at 2011-12 Price

Source of Income	2002-03	2012-13	2018-19
Income from wage and salary	18902 (38.7)	23079 (32.2)	36420 (39.8)
Income from crop cultivation	22364 (45.8)	34335 (48.0)	35245 (38.5)
Income from animal farming	2100 (4.3)	8503 (11.9)	14181 (15.5)
Income from non-farm business	5447 (11.2)	5706 (8.0)	5746 (6.3)
Income from all source	48814 (100)	71601 (100)	91591 (100)

Source: Estimated from Situations Assessment of Agricultural Household Survey 2002-03 and 2018-19, MOSPI, GoI.

Household's Income across Caste and Land holding size in Rural India

Caste wise source of income of ST and SC households reveals that income from wages and salary is highest (50.6% and 53%) followed by crop production, animal farming and non-farm sources (Table 5). However, the pattern of income from OBC and General category is revealed differently. The income of households belongs from OBC and General households is more in crop production (38.5% and 45.4% respectively) followed by wage and salary, animal farming and non-farm farm sectors. On the other hand, land class wise income of rural households belongs to land less and marginal household is highest (52.2%) from wages and salary followed by crop production, animal farming and non-farm. However, the pattern of income of small, medium and large land holders is quite different. Their income is highest from crop production, followed by wages and salary, animal farming and non-farm business. These results revealed that the income of rural households from crop production has increased whereas income from wages and salary, animal farming and non-farm has decreased with increase in land size.

Table 5: Caste and Land Class wise Income of households in Rural India at 2018-19 price

	Wages and Salary	Crop production	Animal farming	Non-farm	All sources
Caste					
Schedule Tribes	54552 (50.6)	37404 (34.7)	12564 (11.7)	3228 (3.0)	107748 (100)
Schedule Caste	51780 (53.0)	25356 (25.9)	13644 (14.0)	6936 (7.1)	97716 (100)
Other Backward Caste	44232 (36.9)	46092 (38.5)	21348 (17.8)	8052 (6.7)	119724 (100)
General	51960 (33.8)	69720 (45.4)	21852 (14.2)	10140 (6.6)	153672 (100)
Land Class					
Marginal	50382 (52.2)	23550 (24.4)	14982 (15.5)	7638 (7.9)	96558 (100)
Small	43764 (31.9)	64116 (46.7)	22140 (16.1)	7356 (5.4)	137388 (100)
Semi Medium	42576 (21.6)	114936 (58.3)	30612 (15.5)	9096 (4.6)	197220 (100)
Medium	51276 (15.1)	241152 (71.0)	41412 (12.2)	5664 (1.7)	339504 (100)
Large	47316 (6.5)	530160 (72.7)	137676 (18.9)	13944 (1.9)	729096 (100)
All Households	48756 (39.8)	47184 (38.5)	18984 (15.5)	7692 (6.3)	122616 (100)

Source: Estimated from Situations Assessment of Agricultural Household Survey, 2018-19, MOSPI, GoI.

Table 6 reveals that income from wage and salary has increased by 1.9times higher in 2018-19 as compared to 2002-03 for all major states in India. However, there has substantial variation in the increase income from wage and salary with a minimum of 1.2 time in Jharkhand to maximum of 2.9 times in Andhra Pradesh from 2002-03 to 2018-19. This ratio change is highest in Andhra Pradesh followed by Haryana, Jammu and Kashmir, Tamilnadu, Rajasthan and Assam and lowest in Jharkhand followed by Punjab, West Bengal, Karnataka, Madhya Pradesh and Odisha. Similarly, the income from farm sector has increased by 2.0 times in all states during the 2002 to 2019 with substantial variation across states. It is highest in Rajasthan, Haryana, Madhya Pradesh, Punjab, Karnataka and Tamilnadu and lowest and negative in Jammu and Kashmir, Jharkhand, Assam, West Bengal, Kerala and Tamilnadu. On

the other hand, income from non-farm sector increased 1.1 times at national level but different degree of variation across states with a decline of 0.3 time in Jharkhand to a maximum increase of 1.9 times in Rajasthan in India. Income from all sources of rural households is increased 1.9 times at national level. However, Jharkhand is the lowest performer (0.9 time) in terms of increase in income from all sources during 2002-2019. On the other hand, Rajasthan had highest variation and 2.9 times increased households' income from all sources followed by Haryana, Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Tamilnadu and Punjab. Table 7 reflects that changing pattern of source of income of rural households from wages and salary declined in Rajasthan, Haryana, Madhya Pradesh, Karnataka and Odisha and increased in Jammu and Kashmir, Assam, West Bengal, Jharkhand, Kerala and Bihar. These results are apposite in case of income from farm and its share in total income declined in Jammu and Kashmir, Assam, West Bengal, Jharkhand, Kerala and Andhra Pradesh and increased in Rajasthan, Haryana, Madhya Pradesh, Punjab and Odisha whereas income from non-farm declined in all states except Jammu and Kashmir from 2002-03 to 2018-19.

Table 6: State wise Pattern of Income of Households in Rural in India at 2011-12 Price

States	Wage and salary (in Rs.)			Farm (in Rs.)			Non-farm (in Rs.)			All sources (in Rs.)		
	2002-03	2018-19	Ratio	2002-03	2018-19	Ratio	2002-03	2018-19	Ratio	2002-03	2018-19	Ratio
Andhra Pradesh	14840	43466	2.9	19295	44542	2.3	3577	5934	1.7	37712	93942	2.5
Assam	22457	50028	2.2	44613	39603	0.9	5885	6060	1.0	72955	95690	1.3
Bihar	11471	22437	2.0	25642	40875	1.6	4662	4294	0.9	41774	67606	1.6
Chhattisgarh	16364	39836	2.4	18648	44022	2.4	2331	2877	1.2	37343	86744	2.3
Gujarat	21349	39576	1.9	37366	70349	1.9	3231	3308	1.0	61946	113223	1.8
Haryana	29265	70465	2.4	29034	123102	4.2	8216	11196	1.4	66516	204745	3.1
J & K	47544	109100	2.3	64808	40768	0.6	14309	19721	1.4	126661	169579	1.3
Jharkhand	21326	24947	1.2	21649	17507	0.8	4777	1416	0.3	47752	43878	0.9
Karnataka	24257	41019	1.7	32242	77108	2.4	3877	2366	0.6	60376	120484	2.0
Kerala	46459	91441	2.0	29404	43367	1.5	16548	25780	1.6	92411	160589	1.7
Madhya Pradesh	12925	22302	1.7	17748	50718	2.9	2331	1730	0.7	33004	74750	2.3
Maharashtra	18441	38760	2.1	32473	56661	1.7	5931	7592	1.3	56845	103013	1.8
Orissa	13225	23745	1.8	8124	18053	2.2	3162	4025	1.3	24511	45824	1.9
Punjab	33743	53613	1.6	70578	176643	2.5	10155	9089	0.9	114475	239346	2.1
Rajasthan	21487	48011	2.2	8401	55254	6.6	4685	8964	1.9	34573	112228	3.2
Tamil Nadu	25503	58239	2.3	17748	42247	2.4	4570	6409	1.4	47821	106886	2.2
Uttar Pradesh	12902	25995	2.0	20518	42794	2.1	4270	3469	0.8	37689	72258	1.9
West Bengal	20472	33355	1.6	18787	18878	1.0	8724	8381	1.0	47983	60614	1.3
India	18902	36420	1.9	24464	49427	2.0	5447	5746	1.1	48814	91593	1.9

Table 7: Share of Wage and Salary, Farm and Non-farm in Total Income of Households in India from 2002-03 to 2018-19

States	Wage and salary			Farm			Non-farm		
	2002-03	2018-19	Change	2002-03	2018-19	Change	2002-03	2018-19	Change
Andhra Pradesh	39.4	46.3	6.9	51.2	47.4	-3.7	9.5	6.3	-3.2
Assam	30.8	52.3	21.5	61.2	41.4	-19.8	8.1	6.3	-1.7
Bihar	27.5	33.2	5.7	61.4	60.5	-0.9	11.2	6.4	-4.8
Chhattisgarh	43.8	45.9	2.1	49.9	50.7	0.8	6.2	3.3	-2.9
Gujarat	34.5	35.0	0.5	60.3	62.1	1.8	5.2	2.9	-2.3
Haryana	44.0	34.4	-9.6	43.7	60.1	16.5	12.4	5.5	-6.9
Jammu & Kashmir	37.5	64.3	26.8	51.2	24.0	-27.1	11.3	11.6	0.3
Jharkhand	44.7	56.9	12.2	45.3	39.9	-5.4	10.0	3.2	-6.8
Karnataka	40.2	34.0	-6.1	53.4	64.0	10.6	6.4	2.0	-4.5
Kerala	50.3	56.9	6.7	31.8	27.0	-4.8	17.9	16.1	-1.9
Madhya Pradesh	39.2	29.8	-9.3	53.8	67.8	14.1	7.1	2.3	-4.7
Maharashtra	32.4	37.6	5.2	57.1	55.0	-2.1	10.4	7.4	-3.1
Orissa	54.0	51.8	-2.1	33.1	39.4	6.3	12.9	8.8	-4.1
Punjab	29.5	22.4	-7.1	61.7	73.8	12.1	8.9	3.8	-5.1
Rajasthan	62.1	42.8	-19.4	24.3	49.2	24.9	13.6	8.0	-5.6
Tamil Nadu	53.3	54.5	1.2	37.1	39.5	2.4	9.6	6.0	-3.6
Uttar Pradesh	34.2	36.0	1.7	54.4	59.2	4.8	11.3	4.8	-6.5
West Bengal	42.7	55.0	12.4	39.2	31.1	-8.0	18.2	13.8	-4.4
all India	38.7	39.8	1.0	50.1	54.0	3.8	11.2	6.3	-4.9

Source: Estimates from data of d Situations Assessment of Agricultural Household Survey 2002-03 and 2018-19, MOSPI, GOI.

3.3 Determinants of Household Investment and Its impact on Farm and Non-farm Income

Credit is promoting agriculture indirectly through financing household investment in agriculture sector. Therefore, credit is main source for financing investment in agriculture. Table 8

shows that OLS result of determining the household investment in agriculture sector. Log household investment as dependent variable and log credit, family size, age and education level of head of household, caste and land class of rural household are used as independent variable and impact of these variables on household investment in agriculture are significant and positive. Co-efficient value log credit shows that elasticity of credit is .28 and it is imply that credit of rural household increased one percent then household investment increased .28 percent in agriculture. Similarly, family size and age of head of household are positively related to household investment in agriculture. Education shows that household investment of illiterate household is less compared primary, senior secondary and graduate and above. Similarly, household investment of General household is more compared to ST, SC and OBC household and land size wise investment of medium and large farmers is more compared to marginal, small and semi-medium farmers. Similar types results are reflect study in (Baba et al 2010; Bathla and Jee 2019) and they were found that private investment is positively affected by household credit, family size and age and higher educational level of head of household and negatively affected by investment in non-farm.

Table.8: Determinant of Household Investment in Agriculture sector

Variables	Co-efficient	Standard Error	t-values
Log Credit	0.280***	0.013	22.4
Family size	0.016***	0.007	2.37
Age head of household	0.005***	0.001	3.65
Education			
Primary	0.158***	0.040	3.95
Secondary	0.263***	0.050	5.28
Graduate and Above	0.483***	0.072	6.66
Caste			
ST	-0.032 ^{NS}	0.060	-0.53
SC	-0.256***	0.057	-4.52
OBC	-0.130***	0.040	-3.21
Land Class			
Small	0.408***	0.041	10.06
Semi-medium	0.672***	0.049	13.81
Medium and large	1.301***	0.076	17.17
Constant	3.105***	0.161	19.26
R Square	0.1503		
Numbers of Observation	58040		

Source: unit level data of 77th round of Situation Assessment Survey (SAS), 2018-19

Determinants of Household's Income from Farm, Non-farm and Wage and Salary

Double log regression model is used to find out significant determinants of rural household's income in farm, non-farm and wage and salary sectors. Household's income is used as a dependent variable, whereas, credit, investment, land, age and family size are used as continuous independent variables (in log form), and education, social group, employment status are used as independent variables (in dummy form) in this regression model (Table 9). Credit, investment, age are positively impacting to all sources of household's income. The results of co-efficient of credit and investment confirm that one percent change in credit and investment would bring 0.04 and .07 percent change in income in farm and 0.17 and 0.09 percent in non-farm sector, respectively. Land positively impacts to income in farm sector, however, impacts negatively to income in non-farm, and wage and salary sector. Similarly, family size has negative effects on income in farm and positive effects on income in non-farm and wage and salary. The result of educational qualification of head of household reveals that higher the level of educational qualification of heads of household, higher the income from all the sources. The values of co-efficient further reveal that higher educational level (like senior secondary, and graduate and above) bring more income from wage and salary sector compared to farm and non-farm sectors. The values of social category reveal that households from General category receive highest income from both farm and non-farm sectors. It further reveals that difference between General and OBC in farm sector income, and the difference between General and ST, non-farm sector income is highest. The results of employment status shows that household's income as regular and casual labour is positively impacting to income in wage and salary sector compared to farm and non-farm income.

Table.9: Results of Determinants of Household's Income from Farm, Non-farm and Wage and Salary in India

Variables	Farm		Non-farm		Wage and Salary	
	Co-effi.	t-value	Co-effi.	t-value	Co-effi.	t-value
Credit	0.041*	3.42	0.177*	7.36	0.076*	5.97
Investment	0.076*	8.19	0.092*	5.54	0.008 ^{NS}	0.75
Land	0.789*	43.03	-0.084*	-2.67	-0.048*	-2.86
Age	0.007*	5.01	0.004 ^{NS}	1.35	0.000 ^{NS}	-0.14
Family size	-0.007 ^{NS}	-1.07	0.092*	6.41	0.018**	2.10
Educational qualification (base is Illiterate)						
Primary	0.101*	2.79	0.131 ^{NS}	1.51	0.082**	2.16
Senior Secondary	0.259*	5.75	0.261**	2.45	0.393*	7.71
Graduate and above	0.430*	6.24	0.445*	2.96	0.699*	8.36
Social Group (base is General)						
ST	-0.119**	-2.16	-0.653*	-4.94	-0.437*	-7.92
SC	-0.177*	-3.46	-0.032 ^{NS}	-0.29	-0.054 ^{NS}	-0.99
OBC	-0.148*	-4.05	-0.023 ^{NS}	-0.29	-0.103**	-2.28
Employment status (base is Self-employment)						
Regular Labour	-0.362*	-4.93	-0.053 ^{NS}	-0.24	1.147*	22.21
Casual Labour	-0.279*	-4.24	-0.700*	-3.50	0.650*	15.29
Constant	8.296*	52.06	5.825*	17.76	8.485*	51.75
R-Square	0.356		0.201		0.319	
F-Statistics	0.000		0.000		0.000	
Number of observation	58040		58040		58040	

Source: Estimated from Unit Level data of Situations Assessment of Agricultural Household Survey, 2018-19, MOSPI, GoI. Note: *1 percent, **5 percent and ***10 percent level of significance.

5.0. Conclusion

This study is analysed the household investment in agriculture and its impact on income from farm and non-farm sector. This study revealed household investment in farm sector has declined in mostly states of country because income of rural household from agriculture is lower and it has not sufficient to invest in productive assets and income from farm and non-farm sector has also declined whereas income from animal farming and wages has increased in total income of rural household. Income of SC and ST household are more from wage and salary whereas income of OBC and general household are more from crop production. Credit is crucial factor for determinant of household investment but credit is used for fulfill their consumption needs due to households have lower income from farm and non-farm sector in

rural India. Socio-economic factors caste, education and land holding size of household are also influenced the investment and income of rural households.

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Impact of COVID-19 on Poverty, Inequality and Deprivation in India

Dr. Rakesh Kumar Singh & Dr. Triloki Nath Tiwary

ABSTRACT

COVID -19 became curse and boom both for us. We lost many life due to this pandemic, that's why, we will remember it as curse, but can't ignore of this second side, i.e. is boom. Government of India has made various plans and policies to overcome on poverty and inequality since independence, but this pandemic had potential to double the poverty over the past two years. Around 150 to 199 million additional people fell under poverty in 2021-22, majority were from rural areas. Casual labour and self-employed were most affected groups. However, regular salaried groups were suffered. Their labour – hour and wages both were cut. Bihar, Odisha, Uttar Pradesh, Madhya Pradesh and Chhattisgarh were most affected states from this pandemic. It influenced the market forces, i.e. demand – side and supply – side both due to lockdown of industries. GDP went negatively. Everything and every corner we had face loss. On the other hand, we saw it's positive impact also. Information and Communication technology flourished 'day twice and night forth'. Online classes and duties were started and now going on. Many became popular and wealthy due its online. This ICT reached at the level of remote areas very easily.

Keywords: *COVID-19, Quarantine, Lockdown, Sanitizer, Wuhan City, Janta Curfew, Social Distancing, Job Loss*

Before December 2019, we have heard about various kind of infectious diseases like cholera, influenza, dengue and so on. *Corona Virus Disease* (COVID) emerged as newly infectious disease. It was known as pandemic. It has trapped whole world into its effect. It emerged in the last month of year 2019. So, it is shortly known as COVID-19. All knows that its mother country is China, but never accepted. It is mainly transmitted through droplets of saliva or discharge from the nose when an infectious person sneezes, coughs or exhales. These droplets are quickly spread in the air, floor or surfaces. A person can be infected by breathing in the virus if he/she is within very close to someone who has COVID-19, or by touching a contaminated surface and then his/her eyes, nose or mouth. These are transmitted

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person-to-person, not from other sources. Infected people with the COVID-19 experienced mild to moderate respiratory illness and recover without hospitalization. The people who are suffering from cardiovascular disease, diabetes, chronic respiratory disease, cancer and old aged more likely developed serious illness or may be death. When someone is infected with this virus, it takes up 14 days minimum in recovering. During 14 to 15 days, infected people had to be *quarantine* from everybody. It was very painful.

As on 31 January 2020, a total number of 9720 confirmed cases and 213 deaths have been reported in China. The epicenter of the outbreak was initially in **Wuhan City**, Hubei province but has rapidly extended to all other provinces of China. Outside of China, 19 countries have reported a total number of 106 confirmed cases, most with **travel history from China**. Among these countries, mostly affected countries were – Italy, Germany, Australia, France, Spain, England, U.S.A and **India**. On 11 March 2020, World Health Organization (WHO) declared about Corona Virus Disease outbreak as a pandemic. It reiterated actions and scale up response to treat, detect and reduce transmission to save people's lives.

Government of India issued travel advisory requesting the public to refrain from travel to China and that anyone with a travel history since 15 January 2020 from China will be quarantined on return. Prime Minister Narendra Modi called for, **Janta Curfew**, on 22 March from 7 A.M to 9 P.M; urging people to stay have except those in essential services, enforcing published social distancing intervention. Also, P.M Modi issued an order for States/Union Territories prescribing **lockdown** for containment of COVID-19 epidemic in the country for a period of 21 days with effect from 25 March 2020. And from here, *India and Indians trapped into the vicious circle of poverty due to pandemic COVID-19.*

POVERTY, INEQUALITY and DERIVATION

Simply, we know that those who doesn't fulfil their own basic needs known as the Poor and also Poverty refers to lacking enough resources to provide the necessities of life like food along with clean water, shelter and clothing. But in today's world, that can be extended to include access to health care, education and even transportation. Poverty is often further defined as 'absolute poverty' and 'relative poverty'. One refers to that population which is suffering from below poverty line and other refers to that population which faces the poverty as status symbol comparison to others.

Every country has its own measuring tools for poverty. World Bank is the apex body which shows the list of the nation suffering from extreme poverty. The Bank keeps a metric called the International Poverty Line and, as of 2015, set the definition of *extreme poverty* as those who live on less than US \$ 1.25 per day. Those earning are between \$1.90 - \$3.10 per day are classified as the '*moderate poor*'. This number is based on the monetary value of a person's consumption rather than income alone. Since 2007, India set its official threshold at Rs. 26 a day (\$0.43) in rural areas and about Rs. 32 per day (\$0.53) in urban areas.

Characteristics of Poverty and Inequality

These are some parameters which show the effect of poverty:

1. Health: One third of deaths around the world are due to poverty related causes. People living in developing nations, among them women and children, are over represented among the global poor and these effects of severe poverty. Poor people often are more prone to severe diseases due to the lack of health care, and due to living in non-optimal conditions. Economic stability is paramount in a poor household otherwise they go in an endless loop of negative income trying to treat diseases.

2. Hunger: Rises in the costs of living make poor people less able to afford items. Poor people spend a greater portion of their budgets on food than wealthy people. As a result, poor households and those near the poverty threshold can be particularly vulnerable to increases in food prices. For example, in late 2007 increases in the price of grains led to food riots in some countries. Threats to the supply of food may also be caused by drought and the water crisis.

3. Education: Research has found that there is a high risk of educational under achievement for children who are from low-income housing circumstances. This is often a process that begins in primary school for some less fortunate children. As a result, children in poverty are at a higher risk than advantaged children for retention in their grade, special deleterious placements during the school's hours and even not completing their high school education. Advantage breeds advantage. There are indeed many explanations for why students tend to drop out of school. One is the conditions of which they attend school. Schools in poverty-stricken areas have conditions that hinder children from learning in a safe environment. Researchers have developed a name for areas like this: an urban war zone is a poor, crime-laden district in which deteriorated, violent, even war-like conditions and underfunded, largely ineffective schools promote inferior academic performance, including irregular attendance and disruptive or non-compliant classroom behavior. Because of poverty, students from low-income families are 2.4 times more likely to drop out than middle-income kids, and over 10 times more likely than high-income peers to drop out.

4. Gender: Generally, we observe that disadvantages girls from the countries are married early and on the other hand, disadvantages boys make labour force earlier. These groups use to leave the school during their primary education. National Education Policy- 2020 has also planned to stop this dropout situation by 2040.

5. Shelter: Poverty increases the risk of homelessness. Slum-dwellers make up a third of the world's urban population, live in poverty. Most of the children are surviving like orphanages because of poverty. It is speculated that, flush with money, orphanages are increasing and push for children to join even though demographic data show that even the poorest extended families usually take in children whose parents have died.

6. Violence: Many women become victims of trafficking. Prostitution and begging (beside the roads, temples and other tourist places) are the most common form of trafficking. Deterioration of living conditions can often compel children to abandon school to contribute to the family income, putting them at risk of being exploited. For example, in many developing countries, a number of girls are turning to sex in return for food to survive because of the increasing poverty. According to studies, as poverty decreases there will be fewer and fewer instances of violence.

7. Discrimination:

It negatively affects productivity. There are different kinds of discrimination shown in the society like age, caste, racial or gender. Women are the group suffering from the highest rate of poverty after children. The fact that women are more likely to be caregivers, regardless of income level, to either the generations before or after them, exacerbates the burdens of their poverty. Philip Alston, special Rapporteur of United Nations, warned on the eve of the International Day for the Eradication of Poverty that, *'The world's poor are at disproportionate risk of torture, arrest, early death and domestic violence, but their civil and political rights are being airbrushed out of the picture.'*

Methods of Reducing Poverty and Inequality:

Various poverty reduction strategies are broadly categorized based on whether they make more of the basic human needs available or whether they increase the disposable income needed to purchase those needs. Some strategies such as building roads can both bring access to various basic needs, such as fertilizer or healthcare from urban areas, as well as increase incomes, by bringing better access to urban markets.

- I. Increasing the Supply of Basic Needs
- II. Reversing Brain Drain
- III. Controlling Overpopulation
- IV. Increasing Personal Income

Effects of COVID-19, Informal Economy, Unemployment and Poverty:

The ongoing COVID-19 pandemic as a public health catastrophe has affected all ways of life. In this situation, protecting people's lives, as well as the frontline facilities, is now the current priority for both the Central and State governments. Both have rolled up their sleeves for getting into action to tackle this pandemic which has also led to the imposition of a nationwide lockdown from 24 March – 31 May 2020, which disrupted the informal economy and created an unprecedented reverse migration of workers. The effects of the COVID-19 crisis on low-skilled migrant labourers and informal workers have been overwhelming. Early evidence suggests that there has been a massive increase in unemployment and an equally dramatic fall in earnings. It increases the level of poverty. Almost 8 in 10 are eating less food than before;

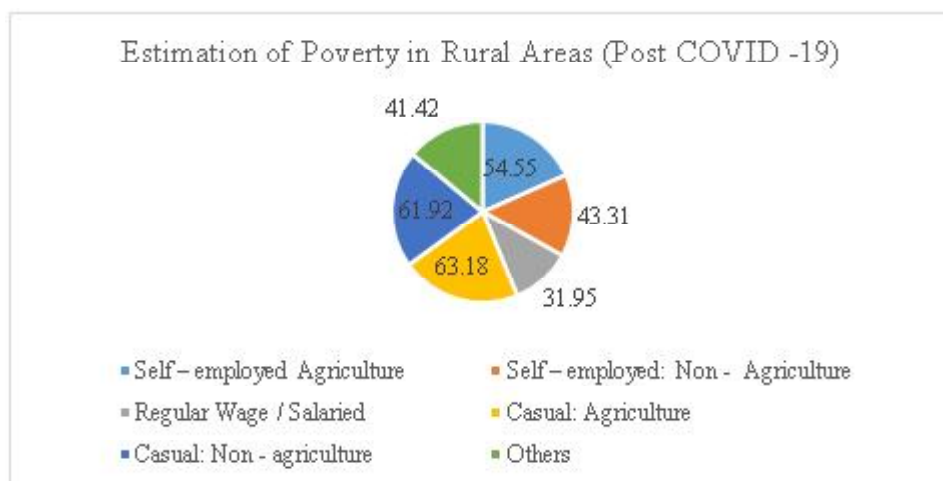
more than 6 in 10 respondents in urban areas did not have enough money for a weeks' worth of essentials. During the lockdown period in the current pandemic, many labourers lost their jobs and due to lack of social security nets and formal benefits, travelled back to their home without any guarantee of returning.

400 million workers from India's informal sector are likely to be pushed deeper into poverty due to COVID-19. A telephonic survey of 4000 workers across 12 States by Azim Premji Foundation (2020) in collaboration with the Center of Civil Society (CCS) shows that 80 percent of the workers in Urban areas reported employment loss (job loss), while 50 percent of the remaining reported income losses or even no salary disbursement. Center for Monitoring Indian Economy (CMIE) estimation shows that there is net loss of 7 million jobs between February 2020 and February 2021. The biggest loss in jobs was suffered by the non – farm workers (11.6 million), followed by salaried employees (4.2 million), daily wage earners (4.2 million) and business persons (3 million).

With millions of migrant workers having returned to their home in rural areas, and the pandemic continuing to bring heavy tolls on the Indian economy and jobs (particularly those in the informal sector), schemes like MGNREGA are being sought out by governments and desperate citizens as an immediate measure to tackle employment and poverty. The Indian government has recently launched Garib Kalyan Rozgar Abhiyan (GKRA). It was launched on 20 June 2020 and is aimed at providing employment benefits of 125 days to return migrants across 116 districts in six states of India. This is a coordinated effort between 12 different Ministries and Departments to implement 25 public infrastructure works and works related to livelihood opportunities. However, among these 25 types of work, 11 of them are already listed under MGNREGA. An analysis of the implementation of GKRA shows that the success of this scheme would depend on the past performance of MNREGA. Furthermore, India needs to ramp up MGNREGA and boost further cash transfers to poor households. *There is no dispute that poverty in the country will worsen.*

Estimation of Poverty at 5 percent and 10 percent Contraction in Consumption across Economic Groups for Rural and Urban India, 2020 – 2021.

[Source: *Periodic Labour Force Survey (PLFS) 2018 – 2019*]



This table shows that 48.96 percent (approx. 49) of the casual agricultural and 44.54 percent of casual non-agricultural labours, followed by 37.78 percent of the self-employed agricultural households in rural areas were poor in the pre-crisis period. A similar pattern is seen in the post-crisis scenario wherein the poverty headcount for casual labourers and farmers is expected to go as high as 67.56 percent. In the urban area, casual labour suffered from the highest poverty rate 56.32 percent in pre-COVID-19 time followed by self-employed households managing small petty shops and businesses. The aftermath of the crisis is expected to push up to 69.33 percent to 72.24 percent of the casual labour households and 42.15 percent to 46.15 percent of the self-employed households into poverty and impoverishment. Further, it can be seen that the rural impact of the crisis is higher than the urban counterpart. For easily understanding, I have used Pie Chart for showing comparative study in rural areas only pre and post COVID.

Thus, the analysis reveals that the high impact bearer group in rural areas are self-employed agricultural households and non-agricultural casual labour. In the urban areas, casual workers are the most vulnerable group. In the urban area, it is mostly the informal nature of jobs, depressed earnings and little to no social security that places the casual workers at the brink of market uncertainties and vulnerabilities.

Conclusion and Suggestion:

The Corona virus outbreak, which started in China, has so far killed 2,612,066 people across the globe and infected 117,747,164 (as on March 9, 2021). The virus has spread to 192 countries. In India, 11,244,786 confirmed cases and 157,930 deaths have been reported so far, according to official figures released by the Union Ministry of Health and Family Welfare. To check the spread of the corona virus pandemic, or Covid-19, Prime Minister

Narendra Modi announced nationwide lockdown till May, meaning the country's 1.3 billion citizens — except those engaged in providing essential services — would not step out of their homes. This lockdown was extended a couple of times and lifted in a graded way starting June 2020. Around 150 to 199 million additional people fell under poverty in 2021-22, majority were from rural areas. Casual labour and self-employed were most affected groups. However, regular salaried groups were suffered. Their labour – hour and wages both were cut. Bihar, Odisha, Uttar Pradesh, Madhya Pradesh and Chhattisgarh were most affected states from this pandemic. It influenced the market forces, i.e. demand – side and supply – side both due to lockdown of industries. GDP went negatively. Everything and every corner we had face loss.

The COVID-19 has highlighted the fragility of India's results in terms of the fight against poverty. In 2019, the **United Nations Development Programme (UNDP)** reported that India had succeeded in lifting 271 million people out of poverty between 2006 and 2016. However in the same year, India's Ministry of Statistics and Programme Implementation, which conducts the National Sample Survey, indicated that for the first time since this type of measurement was available, the percentage of Indians living below the poverty line has begun to rise again. The Covid-19 crisis has amplified this process dramatically. **The UNDP estimates that 260 million people will be back in poverty by 2020 - almost as many as the 271 million who left between 2006 and 2016.** These 260 million people come from the approximately 20 percent of Indians who were just above the 28 percent considered poor. This setback poses considerable challenges for the country in terms of malnutrition, especially in the least developed states such as **Uttar Pradesh** (where 23 percent of migrant workers came from), **Bihar** (where remittances from these workers represented 35 percent of the state's gross domestic product in 2019), **Madhya Pradesh**, (where 36 percent of the inhabitants live below the poverty line) etc.

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“Unveiling Constraints: Understanding Factors Behind India’s Female Labor Force Participation Gap”

Dr. Veerandra Singh Matsaniya & Miss Priya Senger

Abstract:

This paper delves into the multifaceted dynamics surrounding women’s exclusion from the labour force, emphasizing the pivotal roles played by home obligations and education. Drawing from empirical data, it is evident that a substantial proportion of women, approximately 44.5%, attribute their non-participation in the workforce to childcare and other personal commitments related to home-making. This underscores the significant impact of domestic responsibilities on women’s employment choices, indicating a need for comprehensive policies addressing work-life balance and support structures for caregivers. Furthermore, the influence of education on women’s labour force participation is paramount. Educational attainment emerges as a critical determinant, shaping individuals’ decisions regarding entry into the workforce. Higher levels of education are associated with increased participation rates, highlighting the importance of educational opportunities and empowerment initiatives for women. Recognizing these intertwined factors is essential for fostering gender equality in the labour market and advancing inclusive economic growth. Therefore, policymakers, employers, and stakeholders must adopt holistic approaches that address both structural barriers and socio-cultural norms, facilitating women’s full integration into the labour force.

Keywords: women empowerment, women labour,

Introduction:

In India, there is a direct correlation between female empowerment and female employment. Over the years, there have been significant challenges regarding female empowerment and employment. The lives of Indian women have changed significantly as a result of the country’s increasing economic progress, which eventually has an impact on the employment of women. The employment situation of women in India is revealed by the National Statistics Office

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(NSO), Ministry of Statistics and Programme Implementation (MOSPI), Periodic Labour Force Survey and National Household Survey. Without a doubt, India's female labour force participation (FLFPR) rate—which measures the percentage of Indian women who are employed or actively seeking employment—has been below the 47 percent global average for a number of years. Still, it is a notable fact that female employment has increased as a result of women's empowerment over time. Despite the fact that it is still below the world average, it has been getting better over time. According to data from the most recent Periodic Labour Force Survey for 2021–2022, India's FLFPR for the prime working age group (15 years of age and over) climbed significantly to 32.8%. India's female LFPR started increasing as a result of structural changes to their lives, including a drop in childbearing rates and an increase in women's education. In India nowadays, one-third of women have entered the workforce.

A Brief Overview of Female Labor Force Participation

A combination of structural and socioeconomic elements, the female labour force participation rate is a multifaceted phenomenon. The percentage of female labour force participation has been rising over time. Increasing the participation of women in the labour force and embracing them is essential for the expansion of business. The female labour force participation rate (LFPR) in India has grown, according to the most recent Periodic Labour Force Survey (PLFS) 2021–2022 Report. Although female labour force participation rate (LFPR) is still lower than male LFPR, it has been steadily rising over time, with about one-third of women now working.

Approximately 32.8% of working-age women (15 years and older) were employed in 2021–22, up from just 23.3% in 2017–18, according to the PLFS survey. This represents a 9.5%-point increase over these years. More so than the urban sector, the rural sector provided the primary thrust. There it saw increases of 12.0 and 3.4 percentage points, in turn. The female labour force participation rate (LFPR) in rural areas climbed by 12.0% points to 36.6% in 2021–22 from 24.6% in 2017–18. Conversely, there was a notable difference in female participation across rural and urban regions. The percentage of female long-form prospective parents in metropolitan regions increased by barely 3.4% points, from 20.4% in 2017–18 to 23.8% in 2021–2022.

The objectives behind the paper:

- a) To present a picture of a women in the workforce.
- b) To capture the cause of India's low female labour force participation.

Literature reviews:

(Dr. Shashank Goel, 2023) **The Report “Female Labour Utilization in India”** is an attempt to present the various components of female labour utilization, either in labour force or outside the labour force, in order to have robust, reliable, and richer information on female labour utilization for policy formulators. It summarises the barriers that stop female to

participate in labour force with facts and figures. It provides a glance of correlation between female employment and education.

(Chowdhary, Kumar, & Pandey, 2023) “**Employment Opportunities and Skill Development under Atmanirbhar Bharat Abhiyaan**” this paper traces the various programmes under Self-reliant India (Atmanirbhar Bharat Abhiyaan) initiative launched on 12 May 2020 by the prime minister. The study utilized exploratory data analysis (EDA) to examine the effects of the Atmanirbhar Bharat Abhiyaan on skill development, per capita income, and employment rates as event analysis was unreliable due to a lack of data before and after 2020. The study’s findings showed that Atmanirbhar Bharat Abhiyaan helped increase skill development, per capita income, and employment rates.

(Biswas & Paul, 2023) “**Atmanirbhar Bharat And Women: An Exploration of Challenges and Prospects**” Amanirbhar Bharat Abhiyaan has the motto to make India self-sustaining in the economic sphere, i.e., employment sector, labour workforce and manufacturing activities. The paper critically analyzes the issues of women which has a significant bearing for Atmanirbhar Bharat Abhiyan. The economic self-reliance of women is crucial for the development of the nation. Women constitute half of India’s population and play an instrumental role in bringing changes in the society and development of the nation. Many schemes have been introduced to empower women in India. This research paper gives an account of the challenges and measures that has to be adopted to make them equal partners of the development process.

(Behera & Gaur, 2021) “Skill Development of Women for Atmanirbhar Bharat” This research paper endeavours in understanding the Female Labour Force Participation (FLPR) in India, initiatives of Government, support of corporates towards skill development of women, issues that needs to be addressed for achieving the goals, role of skill development of women in meeting the objectives of Atmanirbhar Bharat Abhiyan and the way-forward. The study is a exploratory research based on the secondary data and the research design employed for the study is of descriptive type. Literature Review has been done with reference to skill development of women in India and Atmanirbhar Bharat Abhiyan to identify the research gaps.

Research methodology:

The study adopted descriptive research design and is primarily based on secondary data sources.

Presentation and Analysis of Data

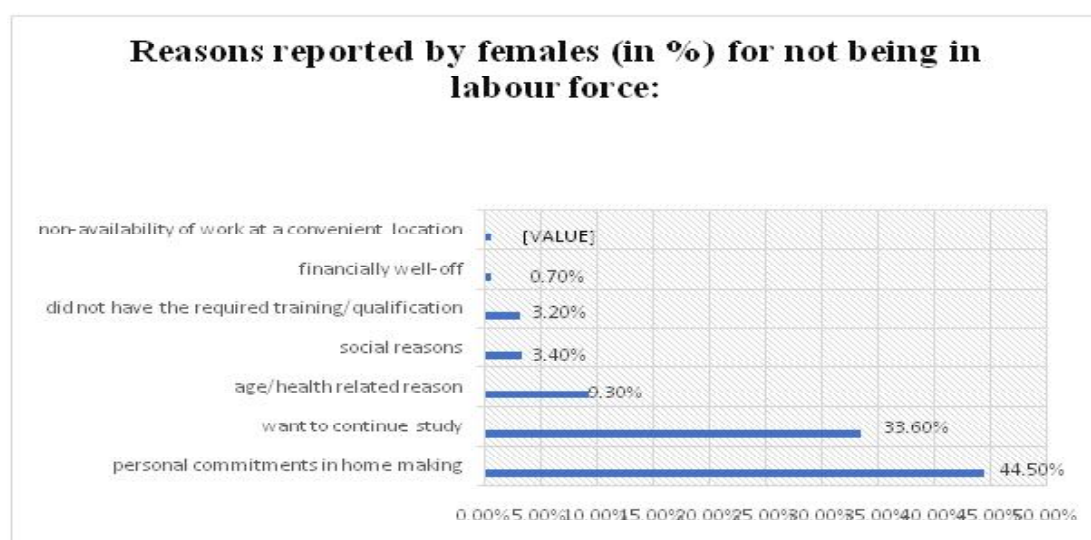
Factors responsible for low Female Participation in labour force:

A number of variables, including economic development, education levels, fertility rates, availability to childcare and other social services, and, ultimately, the cultural and normative environment of a society, are what mostly determine women’s participation in the labour market. social conventions and society. These elements serve as “Push and Pull factors” to

encourage female involvement in the workforce. Despite the fact that women are more likely to be employed due to increased economic growth, increased education, and decreased fertility, they still encounter obstacles when trying to take advantage of economic opportunities.

Based on World Bank Report, “Reshaping Norms: A New Way Forward,” the advancement of economic Raising income levels does not seem to be enough to close the region’s persistently large gender differences in a number of areas. Gender norms in society can be seen as a major barrier to gender equality.

The main causes of women being forced out of the labour force are highlighted in this section. An investigation has been conducted in this instance to identify the main obstacles that prevent women from engaging in labour. power. Information on the causes of non-participation in the labour force is gathered through the periodic labour force surveys. The PLFS 2021–22 data show that the following are the primary reasons why men and women do not participate in the labour market, in percentage terms:



Female Labour Utilization in India Employment Statistics in Focus-April 2023.

Initiatives by the government of India:

In order to guarantee women’s financial stability and the calibre of their work, the government has implemented a number of initiatives to increase female labour force participation. There are some schemes, policies, and programs for women labour in India:

Beti Bachao Beti Padhao Scheme: In Haryana, the Prime Minister of India introduced the Beti Bachao Beti Padhao Scheme on January 22, 2015. purpose of this government program for women is to address the decreasing sex ratio, raise social awareness, and improve the

effectiveness of welfare services designed for girls in order to secure their survival, protection, and education.

Working Women Hostel Scheme: The Government of India being concerned about the difficulties faced by such working women, introduced a scheme in 1972-73 of grant-in-aid for construction of new/ expansion of existing buildings for providing hostel facilities to working women in cities, smaller towns and also in rural areas where employment opportunities for women exist. The government of India initiated a “Working Women Hostel Program” with the goal to support safe housing and environments for working women and offer daycare services for their kids. Government offers grant-in-aid for the construction of new hostel buildings and the expansion of an existing structure on rented property as part of this program specifically designed for women.

One Stop Centre (OSC):

Actions by the Indian government with the goal of empowering women depend heavily on the One Stop Centre Scheme. The Nirbhaya money is used to finance this centrally sponsored program. In order to safeguard women impacted by gender-based violence in both public and private settings, it is intended to offer state governments 100% central assistance. Offering non-emergency services, emergency medical care, legal help, and counselling under one roof, the organization combats all forms of violence against women.

Beti Bachao Beti Padhao Scheme: The Beti Bachao Beti Padhao Scheme was introduced with the goal of raising public awareness of the importance of educating all of the nation’s female children. It was started with the intention of ensuring female children’s education, protection, and survival. As the initiative aims to address the declining sex ratio in recent years, increase social consciousness, and enhance the efficiency of welfare benefits for females.

STEP (Support to Training and Employment Program for Women):

The Support to Training and Employment Program for Women is among the most successful government initiatives for women in India (STEP). The program aims to guarantee job possibilities and provide skill development training for women. Funds are available to institutions and organizations under this government-sponsored program to run training initiatives.

Principal Findings

Women’s exclusion from the labour force is mostly caused by. Around 44.5% of women cite “Child care/personal commitments in home making” as their main reason for not being in the workforce. This suggests that home obligations account for a sizable percentage of women’s absence from the labour force, also Education is a crucial component that affects the participation of women in the labour force. When deciding whether to enter the labour market, a person’s level of education has a significant role.

Statement of the Problem and Conclusion:

In India, female labour force participation rate is at the risings steps. The PLFS 2021-22 shows that the female LFPR for the age group 15 years & above has increased considerably and stood at 32.8% in India, which was 23.3% in the year 2017-18. Female LFPR for the age group 15-59 years also increased to 35.6% in 2021-22 from 25.3% in 2017-18. The continuous Government interventions are one of the major factors of this successive progress. Despite various socio-economic norms, female participation in labour force and workforce is increasing significantly and further inspiring the others for moving on the success path. In the journey of employment of females, Government assistance in terms of policies, schemes, programmes, etc., are their companion. The various Government programmes and schemes are ongoing process to increase the female participation in labour force along with the safe working environment. Girls' enrolment in schools and higher education are also increasing over the years. The structural improvements to their lives, such as decline in fertility rates and expansion of women's education might have a major role to push India's female LFPR on an upward track.

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Measurement of Unpaid Care Work of Women and Men in India

Dr. Vineet Kumar Tiwari

Abstracts

Unpaid care work refers to the provision of services within household for household and other community members. Women in India typically spend a substantial amount of their time on unpaid care work, including cooking, cleaning, childcare, and eldercare etc. This disproportionate burden of unpaid care work limits their ability to participate in paid employment and other activities outside the home. The challenges associated with unpaid work can vary between rural and urban areas. In rural settings, women are often engaged in agricultural and subsistence work, while urban women may face different challenges related to household chores and employment. Study has analyzed only secondary data. The secondary data has been collected from the Time-Use Survey (TUS, NSSO, MoSPI, 2019). The Time Use Survey technique is emerging as an important tool for measuring paid and unpaid work of men and women in a society as such a survey provides detailed information on how individuals spend their time, on a daily or weekly basis, and reveals the details of an individual's daily life with a combination of specificity and comprehensiveness not achieved in any other type of social survey.

Keywords: *Unpaid care work, Women, Men, TUs*

Introduction

Unpaid care work is predominantly performed by women, and it perpetuates gender inequalities. Women are often expected to take on a disproportionate share of caregiving responsibilities, which can limit their opportunities for paid employment and career advancement (Stiglitz & Fitoussi, 2007). Unpaid care work can limit women's participation in the formal labor force, which, in turn, affect their earnings and economic independence. This contributes to the gender wage gap and income inequality. However, recognition of its importance and the need to comprehend its nature and role has been increasing. One consideration of this has been the inclusion in the Sustainable Development Goals of a target to identify and value unpaid care and domestic work (Target 5.4) under Goal 5 on Gender Equality. In India, for

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example, men devote 36 minutes to unpaid care responsibilities, out of which 36% goes into housework, with the remaining time spent on shopping, care for household members, and travel related to household activities. Out of the six hours women devote to unpaid care activities, the portion of time specifically spent on housework reaches 85% (OECD, 2014). In developing countries more people engage in unpaid work than in developed ones (Antonopoulos and Hirway, 2010). Majority of women in developing countries have no option but to perform both unpaid economic work such as fetching water, fuel etc., as well as unpaid non-economic work including cooking, caring for the elderly, disabled etc.

In recent years there has been an increased awareness of the need to lift the veil of statistical invisibility that covers unpaid work. The theory of allocation of time revealed that throughout history the amount of time spent on work in the market economy has never consistently been greater than that spent at nonmarket work and other activities (Becker, 1965). Becker therefore argued that allocation and efficiency of nonmarket working time may be more important to economic welfare than that of market working time. Nordhaus and Tobin (1972) contended that unpaid household service work contributes to economic welfare, which conventional gross national product (GNP) does not properly measure. In the early stages of industrialization and economic development, women's labor force participation tends to decline. This decline is often due to the shift from agrarian economies to industrial economies, where jobs typically move from the home or farm to factories. During this period, men are more likely to enter the formal labor force, while women are increasingly relegated to domestic roles. This decline in women's participation is also influenced by cultural norms and social expectations (Goldin, 1994). Claudia Goldin's research highlights the dynamic nature of women's labor force participation and how it evolves in response to economic development, technological change, and shifts in societal norms. The U-shaped pattern represents a historical trend where women's labor force participation initially declines as economies industrialize and then rises as society's progress toward more advanced stages of development. Hirway has highlighted the significant gender disparities in unpaid work. Women tend to bear a larger share of unpaid work, which can limit their opportunities for paid employment and economic empowerment (Hirway, 2000). The overall participation rates of men in unpaid care work activities are dismal in both urban and rural areas. More than 92 percent of women aged 15-59 years participated in unpaid domestic services for household members, against 29 percent of men. In urban areas, men's participation was at 24.1 percent, and in rural districts, 31.2 percent (NSSO, TUS, 2019). The International Labor Organization (ILO, 2011) estimates that unpaid care work is amongst the most critical barriers preventing women from joining and remaining in the workforce. This disproportionate burden of unpaid care work creates what is called "time poverty", which inhibits women's ability to dedicate time to paid work and acquire the skills necessary to seek better job opportunities. This experience is not unique to India. Globally, in 2016, 46.7 percent of women attributed their absence from the workforce to domestic duties, as compared to only 6.3 percent of men.

Major Research work Reviewed

Women often bear a disproportionate burden of unpaid care work, such as childcare and eldercare, which can limit their ability to engage in paid employment (Chapman and Mishra 2019). Another explanation for the decreasing women workforce participation in terms of rising family and child-care responsibilities of women (Desai and Joshi 2019). Claudia Goldin's research on marriage bars and gender discrimination has shed light on the historical practices and their long-term consequences. She has explored how these policies affected women's labor force participation, wages, and overall economic outcomes (Goldin, 1988). Marriage bars were a form of gender discrimination that limited the career opportunities of women. They reinforced traditional gender roles and expectations. Kabeer Naila (2001) discusses the importance of considering both subjective and objective dimensions of empowerment. Subjective measures may involve women's own perceptions of their empowerment, while objective measures may focus on more tangible indicators such as income, education, and participation in decision-making. Becker discusses how households are involved in the production of goods and services, just like firms in the market. He applies economic principles to analyze household production decisions, including the allocation of time and resources among family members (Becker, 1981). Becker's work has significant policy implications. It suggests that public policies can impact family decisions, such as taxation policies that affect labor force participation, education policies influencing human capital investment, and family law policies concerning marriage and divorce. The gender disparity in time allocation is the highest between time spent on unpaid care and activities related to employment. In comparison, the time spent on other activities, such as learning, socializing, and leisure, only has minor gender-based differences. Women (15-59 years) in urban areas spend 47 percent of their waking hours, and women in rural areas, 43 percent, in unpaid care work; for men, it is 5 percent. In stark contrast, across rural and urban areas, men spend 46 percent of their waking hours on employment and related activities while women spend 10 percent (NSSO, TUS, 2019). Unpaid household work is the production of goods and services by family members that are not sold in the market. Some unpaid work is for consumption within the family, such as cooking, gardening and house cleaning. The products of unpaid work can also be consumed by people not living in the household, e.g. cooking for guests, buying groceries for an elderly relative, or educating the domestic worker's children (Ironmonger, 1999). Male-female intra-household relations are defined by their differential bargaining power, and in turn, determined by their differential access to economic, political and social resources. Property ownership and access to paid employment opportunity outside the household, apart from other issues, increases the bargaining capacity of a woman by giving her a better alternative position (Agarwal 1994). Gender disparities in education, healthcare, and economic opportunities not only harm women but also hinder the development of societies as a whole (Sen, 1990). The unpaid care work is the most critical barriers preventing women from joining and remaining in the workforce. This disproportionate burden of unpaid care work creates what is called "time poverty", which inhibits women's ability to dedicate time to paid work and acquire the skills necessary to seek better job opportunities (ILO, 2011). This experience is not unique to India. One of the central themes is the recognition of unpaid household labor, often performed by women, and the need

to account for this work in economic analysis. This aligns with the feminist economics perspective, which emphasizes the importance of recognizing and valuing unpaid care work (Folbre, 1986). Women unpaid work often goes unrecognized and unvalued. This lack of recognition contributes to gender disparities between men and women. There are not many studies in India on this issue and none on Uttar Pradesh where vulnerability is very high. The proposed study aims to quantify the value of unpaid care work of women and men.

Objectives

1. To study the total time spent on unpaid household work by female and male.
2. To study average time (in minutes) spent in a day per participant of age 6 years and above in different activities.
3. Percentage share of total time in different activities in a day per person of age 6 years and above.
4. To analyze State wise Distribution of time spent in SNA activity by mode of payment.
5. To study weekly average time spent on all extended SNA activities in care for children, the sick, elderly and disabled for own household according to age and marital status.

Data and Methodology

The secondary data has been collected from the Time-Use Survey (TUS, NSSO, 2019). The unpaid activities comprise i) care for children, sick, elderly, differently-abled persons in own household, ii) production of other services for own consumption, iii) production of goods for own consumption, iv) voluntary work for production of goods in households, v) voluntary work for production of services in households, vi) voluntary work for production of goods in market/non-market units, vii) voluntary work for production of services in market/non-market units, viii) unpaid trainee work for production of goods, ix) unpaid trainee work for production of services, x) other unpaid work for production of goods and xi) other unpaid work for production of services(TUS, NSSO, 2019).

Findings and Discussions

Unpaid women's work in India often referred to as "invisible" or "unrecognized" work plays a crucial role in the society. In India no payment is made a number of economic activities. Such activities are" performed either by family labour or through exchange labour. It has been good to study the gender wise detail of the unpaid work in the SNA activities such details are given in Table 4. It may be seen that for the six states combined payment was not made for about 38% of the time spent in SNA activities. The amount of unpaid activities was more (51 %) for women as compared to only 33.0. The predominance of women in unpaid activities was visible in all the six states. The percent of time spent by women in unpaid activities was highest in Haryana (86%) followed by Meghalaya (76°1^a and Orissa(69 %). This percentage was lowest for Tamil Nadu state (32%).

It was generally found that females spent about double the time as compared to male. The time spent by currently married and widowed females were found to be higher than those for never married and divorced. It is also an interesting finding that females aged 60 years and above were found to be spending maximum time as compared to those in the age group 6-14 and 16-59. No significant impact of educational level was found in such activities (Table 5, 6).

In patriarchal society like India, some of the jobs like cooking, taking care of the children, sick and aged persons, etc. are generally performed by women. Unfortunately, no data are generally available at state level to show the time spent by women on these activities. Further, these activities are treated as non-economic as per SNA but they are essential for the survival of society. Moreover, if more and more women get themselves involved in economic activities, then some alternative labour have to be deployed, like in some developed countries, to perform these activities. Time Use Survey is first such source, which have provided much sought after data on these activities.

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भारतीय श्रम बाजार में सामाजिक सुरक्षा की विवेचना

डॉ० अलका श्रीवास्तव

भारतवर्ष एक संस्कृति प्रधान देश है। यहाँ के लोगों में अपनी संस्कृति और सभ्यता के प्रति अत्यधिक आस्था और विश्वास है। हमारे समाज में एकता की भावना प्रबल है तथा यहाँ संयुक्त परिवार को महत्व दिया जाता है। आज भी रिश्तों में अपनत्व का भाव परिलक्षित होता है। यह भारत वर्ष ही है, जहाँ पर लोग अपने मुख्य व्यवसाय कृषि को अधिक महत्व देते हैं और यहाँ का किसान अपनी मेहनत से उत्पादकता को बढ़ाता है तथा अपने व्यवसाय से अपने परिवार का भरण-पोषण करता है और अपनी जिम्मेदारियों का निर्वहन करता है परन्तु कृषि भी ऋतु प्रधान होती है जिसके कारण आज की प्रतिस्पर्धा वाले समाज में उसे अपनी सुरक्षा का डर बना रहता है। प्रस्तुत शोध पत्र का विषय "भारतीय श्रम बाजार में सामाजिक सुरक्षा की विवेचना" को तीन खण्डों में बांटा गया है:—प्रथम खण्ड में विषय से संबंधित प्रस्तावना, शोध का उद्देश्य तथा शोधविधि को रखा गया है तथा द्वितीय खण्ड में सरकार की विभिन्न योजनाएं, तृतीय खण्ड:—समाधान व सुझाव तथा संदर्भ ग्रन्थ सूची को रखा गया है।

प्रथम खण्ड — प्रस्तावना

इस शोध पत्र में सरकार द्वारा चलाई जा रही योजनाओं को जानने से पहले यह जानना आवश्यक है कि सामाजिक सुरक्षा क्या है, इस पर अन्तर्राष्ट्रीय श्रम संगठन ने कहा है कि "वह सुरक्षा जो समाज, उचित संगठनों के माध्यम से अपने सदस्यों के साथ घटित होने वाली कुछ घटनाओं और जोखिमों से बचाव के लिए प्रस्तुत करता है, सामाजिक सुरक्षा है। ये जोखिम हैं— रोग, मातृत्व, अयोग्यता, वृद्धावस्था तथा मृत्यु है।" इन जोखिमों की यह विशेषता होती है कि व्यक्ति को अपना तथा अपने परिवार का भरण पोषण करने के लिए नियोक्ताओं द्वारा सुरक्षा प्रदान की जाती है।

सामाजिक सुरक्षा शब्द का उद्गम औपचारिक रूप से 1935 से माना जाता है, जब पहली बार संयुक्त राज्य अमेरिका में सामाजिक सुरक्षा अधिनियम पारित किया। इसी वर्ष बेरोजगारी, बीमारी तथा वृद्धावस्था बीमा की समस्या का समाधान करने के लिए सामाजिक सुरक्षा बोर्ड का गठन किया गया। सन् 1941 में अटलांटिक चार्टर के अन्तर्गत सभी क्षेत्रों में सामाजिक सुरक्षा को प्रोत्साहित करने को कहा गया जिससे श्रमिकों के रहन-सहन के स्तर तथा उनकी आर्थिक दशा में सुधार हो सके। सन् 1943 में सर विलियम बैवरिज ने अपनी रिपोर्ट में सामाजिक सुरक्षा का सुझाव दिया।

* सहायक आचार्य, अर्थशास्त्र एवं ग्रामीण विकास विभाग, डॉ० राममनोहर लोहिया अवध विश्वविद्यालय, अयोध्या (उ०प्र०)

सामाजिक सुरक्षा कार्यक्रम से आशय यह है कि उससे व्यक्ति को जीवन में कुछ जोखिमों तथा आकस्मिक घटनाओं के भार से सुरक्षा मिलती है। जो भार वह स्वयं वहन करने में असमर्थ होता है, सामाजिक सुरक्षा योजना के माध्यम से वहन कर सकता है। हानि की मात्रा एक प्रकार से समाज के कई लोगों को बंटजाती है। इस कार्यक्रम के कुछ उद्देश्य हैं जो निम्न हैं:—गरीबी से मुक्ति, बुढ़ापे में सहारा, विकलांगताओं की मदद, बीमारी में सहायता, अनाथालय तथा वृद्धा आश्रम की व्यवस्था।

उद्देश्य:— “भारतीय श्रम बाजार में सामाजिक सुरक्षा की विवेचना” शोध पत्र का उद्देश्य निम्नलिखित हैं:—

1. गरीब तबके के लोगों की समस्याओं का विश्लेषण।
2. निम्न श्रेणी के श्रमिकों की सुरक्षा हेतु योजनाओंका विवेचन।
3. भारतीय अर्थव्यवस्थामें श्रम बाजार की सामाजिक सुरक्षा की विवेचना।

शोध विधि:— यह शोध पत्र विशेषतया प्राथमिक तथा द्वितीयक आंकड़ों पर आधारित है। इसके प्रमुख तथ्यों का संकलन पुस्तकों, लेखों, पत्रिकाओं, सरकारी प्रतिवेदन पर आधारित है तथा इण्टरनेट सामग्री का उपयोग किया गया है।

द्वितीय खण्ड—सरकार की विभिन्न योजनाएं

सामाजिक सुरक्षा कार्यक्रम की कुछ विशेषता भी है जैसे व्यक्तियों और परिवारों, विशेष रूप से गरीब तथा कमजोर लोगों संकटों व समस्याओं का सामना करने, नौकरी खोजने, उत्पादकता में सुधार करने, अपने बच्चों के स्वास्थ्य एवं शिक्षा में निवेश करने तथा बढ़ती उम्र की आबादी की रक्षा करने में मदद करती है। इस कार्यक्रम की आवश्यकता उन कठिनाइयों के खिलाफ तैयारी में स्थिर और चिंता मुक्तजीवन सुनिश्चित करने के लिए एक सामाजिक सुरक्षा उपकरण रूप में कार्य करती है, जो बीमारी, चोट देखभाल की आवश्यकता, बेरोजगारी, पैसे कमाने के साधन के बिना सेवानिवृत्ति जैसी जीवन की स्थिरता को खतरे में डाल सकती है। सरकार द्वारा इसके अन्तर्गत योजनाएं चलाई गयी है। जैसे

1. प्रधानमंत्री श्रमयोगी मान धन पेंशन योजना
2. प्रधानमंत्री जीवन ज्योति बीमा योजना
3. प्रधानमंत्री सुरक्षा बीमा योजना
4. प्रधानमंत्री आवास योजना
5. प्रधानमंत्री मुद्रा योजना
6. अटल पेंशन योजना
7. सार्वजनिक वितरण प्रणाली
8. आयुष्मान भारत—प्रधानमंत्री जन आरोग्य योजना

1. **प्रधानमंत्री श्रमयोगी मान धन पेंशन योजना** :— यह योजना 15 फरवरी, 2019 को लागू हुई। इस योजना के माध्यम से उन सभी असंगठित क्षेत्र के कामगार रोज कमाते हैं, रोज खाते हैं। उन्हें दिक्कत तब होती है जबकि उनका शरीर को कई आर्थिक कठिनाइयों का सामना करना पड़ता है। इस योजना के

माध्यम से कामगारों को पेंशन दी जाएगी जिनकी कमाई 15000 हजार फिरइससे कम है। इस योजना का लाभ सब्जी बेचने वाले, चाय बेचने वाले, ड्राइवर, रिक्शाचालक, मोची, दर्जी, मजदूर, घरों में काम करने वाले भट्टा कर्मकार, दिहाड़ी मजदूर आदि प्राप्त कर सकते हैं। इनकी उम्र 60 साल होनी चाहिए।

2. प्रधानमंत्री जीवन ज्योति बीमा योजना:— यह योजना 9 मई, 2015 को लागू हुई। यह योजना दोनों ही स्वाभाविक तथा दुर्घटना मृत्यु के संबंध में लागू होगी। इसके अन्तर्गत प्राप्य राशि 2 लाख रुपया होगी। इसके अन्तर्गत अंशदान 330 रुपया वार्षिक होगा तथा यह 18–50 वर्ष की आयु वर्ग के संबंध में लागू होगी। प्रधानमंत्री जीवन ज्योति बीमा योजना का संचालन जीवन बीमा निगम द्वारा होगा, यह योजना सभी के संबंध में अनुमन्य होगी।

3. प्रधानमंत्री सुरक्षा बीमा योजना:— यह योजना 28 फरवरी, 2015 को लागू हुई। इस योजना के तहत धारक को 2 लाख रुपया का दुर्घटना जीवन बीमा दिया जायेगा। साथ ही आंशिक नुकसान पर एक लाख का बीमा दिया जायेगा। इस बीमा राशि के लिए धारक को केवल 12रुपये प्रतिवर्ष अर्थात् 1 रुपये प्रति माह की राशि प्रीमियम के तौर पर देनी होगी।

4. प्रधानमंत्री आवास योजना :- प्रधानमंत्री आवास योजना को पहले इंदिरा आवास योजना के नाम से जाना जाता था जिसे सन् 1985 में शुरू किया गया था, इसके पश्चात् सन् 2015 में बदलकर प्रधानमंत्री आवास योजना कर दिया गया जिसे प्रधान मंत्री ग्रामीण आवास योजना या च्छळल के नाम से जाना जाता है जो प्रधानमंत्री आवास योजना का ही एक भाग है बशर्ते इसके अन्तर्गत सिर्फ ग्रामीण इलाके के लोगों को आवास योजना का लाभ दिया जाता है।

5. प्रधानमंत्री मुद्रा योजना:— प्रधानमंत्री मुद्रा योजना मुद्रा बैंक के तहत एक भारतीय योजना है जिसकी शुरुआत भारत के प्रधानमंत्री नरेन्द्र मोदी ने 8 अप्रैल, 2015 को नई दिल्ली में की थी। इस योजना का मुख्य उद्देश्य स्वरोजगार को बढ़ावा देना है, इस योजना के तहत गैर-कॉपोरेट और गैर-कृषि, लघु उद्यमों को 10 लाख रुपये तक की लोन सुविधा प्रदान की जाती है।

6. अटल पेंशन योजना:— इस योजना के अन्तर्गत पेंशन की मात्रा तथा इसकी अवधि का निर्धारण इसके अन्तर्गत दिये जाने वाले अंशदान पर निर्भर करेगी। इस स्कीम के तहत लोगों की तेज भागीदारी को प्रोत्साहित करने के लिए सरकार ने यह व्यवस्था की है कि 31 दिसम्बर 2015 के पूर्व इसके अन्तर्गत खोले जाने वाले खाते पर सरकार 5 वर्ष तक प्रीमियम का 50 प्रतिशत जो अधिक से अधिक 1000 रुपया वार्षिक होगा अंशदान करेगी।

7. सार्वजनिक वितरण प्रणाली:— सरकार ने सामाजिक क्षेत्र के संबंध में जो भी योजनाएं चलायी है, चाहे वो रोजगार से संबंधित हो या गरीबी को दी गयी प्रत्यक्ष सहायता या नकद सहायता के रूप में हो या निःशुल्क या रियायती मूल्य पर खाद्यान्नों तथा अन्य जरूरत की वस्तुओं से संबंधित हो। सार्वजनिक वितरण प्रणाली इस दिशा में एक प्रयास था। सार्वजनिक वितरण प्रणाली से तात्पर्य उपभोक्ताओं को उचित मूल्य पर अनिवार्य वस्तुओं की पूर्ति हेतु सार्वजनिक व्यवस्था से है। सार्वजनिक वितरण प्रणाली का उद्देश्य राशन की दुकानों, उचित मूल्यों की दुकानों एवं नियंत्रित कीमत की दुकानों द्वारा सस्ती कीमत पर अनिवार्य वस्तुएं उपलब्ध कराकर आय हस्तान्तरण करना है।

8. आयुष्मान भारत—प्रधानमंत्री जन आरोग्य योजना:— यह योजना 2017 में शुरू की गयी। इस योजना का उद्देश्य यूनिवर्सल हेल्थ कवरेज के उद्देश्य को पूरा करना था। इस योजना की पहल सतत विकास लक्ष्यों और इसकी रेखांकित प्रतिबद्धता को पूरा करने के लिए की गई है जिसका उद्देश्य है कि “कोई भी पीछे ना छूटे”। आयुष्मान भारत स्वास्थ्य सेवा वितरण के क्षेत्रीय और खंडित दृष्टिकोण से हटकर एक व्यापक और अपेक्षित स्वास्थ्य सेवा की ओर बढ़ने का प्रयास है। इस योजना के जरिए तीनों स्तर प्राथमिक, द्वितीय और तृतीय की स्वास्थ्य सेवा प्रणाली को समन्वित करना है।

उपर्युक्त योजनाओं के अतिरिक्त भी सरकार ने गरीबों के लिए कई प्रकार के कार्यक्रम संचालित कर रखे हैं जिसके जरिये उनका भविष्य सुरक्षित रह सकता है।

तृतीय खण्ड:— समाधान व सुझाव तथा संदर्भ ग्रन्थ सूची

सरकार द्वारा देश भर में चलाई गई योजनाओं और उनके लाभों को जनता तक पहुँचाने के लिए एक अभिनय शुरू किया गया है, क्योंकि सरकार द्वारा जनता के लिए अनेक प्रकार की सुविधाओं को संचालित किया जाता है परन्तु जो बिचौलिए होते हैं वह उसका फायदा उठाते हैं जनता को केवल उन योजनाओं का 1/4 ही फायदा मिलता है। कही न कही ये जनता की भी कमी होती है क्योंकि वह अपने अधिकारों को नहीं पहचान पाते और सच कहे तो उसका सही प्रयोग करना नहीं जानते हैं।

उपरोक्त योजनाओं के परिपेक्ष्य में अगर कहे तो सरकार अपनी सामाजिक कल्याण योजनाओं और उसके लाभों को प्रचारित करने की योजना बना रही है। केन्द्र सरकार इनके जरिये इस संदेश को फैलाने की कोशिश करेगी कि विभिन्न सामाजिक कल्याण योजनाओं से महिलाओं और अनुसूचित जाति और अनुसूचित जनजाति समुदाय तथा सभी वर्गों के लोगों को फायदा मिलेगा जैसे सरकार द्वारा चलाई गई उज्वला, प्रधानमंत्री आवास योजना, ग्रामीण रोजगार कार्यक्रम आदि योजनाओं से लाखों परिवारों के लिए रोजगार सृजन, किफायती आवास और रसोई गैस की सुविधा से लाख हुआ है। कोविड महामारी के समय सरकार द्वारा गरीब तथा तथा प्रवासी श्रमिकों को मुफ्त राशन वितरित किया गया। इस महामारी के कारण अर्थव्यवस्था को व्यवधान का सामना करने में मदद करने के लिए महिला स्वयं सहायता समूह और छोटे व्यवसायों का भी समर्थन किया था।

संदर्भ ग्रन्थ सूची

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