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# TRENDS AND DETERMINANTS OF LABOUR FORCE PARTICIPATION IN BIHAR: INSIGHTS FROM PLFS DATA 2021-22

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### **ABSTRACT**

This research paper investigates labour force participation in Bihar, India, focusing on rural-urban disparities and gender dynamics. The study utilizes data from multiple rounds of the NSSO household survey on "Employment-Unemployment" and the PLFS data from 2017-18 and 2021-22. Logistic regression analysis is employed to identify the determinants of labour force participation in Bihar. The findings reveal that rural men consistently exhibit high labour force participation rates (LFPR), while LFPR for rural women has declined over the years. In urban areas, LFPR for men has also declined, whereas there has been a slight increase for women. Comparatively, Bihar's LFPR falls below the national average, with a significant gender gap in rural areas. The analysis identifies various factors influencing labour force participation, including family size, age, marital status, education, caste, and gender. It is observed that larger family sizes negatively impact labour force participation across both rural and urban areas. Moreover, individuals aged 30-44 and 45-64 have higher odds of participating in the labour force than the reference group (15-29 years). Marriage and widowhood significantly increase the likelihood of labour force participation, while being in a general category and belonging to the top 20 percentile income group decrease the odds. Furthermore, education positively affects labour force participation in urban areas, and having multiple jobs increases the likelihood across all areas. The study underscores the need for policies targeting gender disparities in rural Bihar and emphasizes the significance of demographic, social, and economic factors in shaping labour force dynamics. The findings contribute to evidence-based decision-making and inform policymakers, government agencies, and stakeholders involved in labour market planning and development in Bihar.

Keywords: Labour force Participation Rate (LFPR), Family Size, Education, Bihar, Logit, Odd Ratio

### I. INTRODUCTION

The labour force plays a crucial role in shaping the economic landscape and overall development of a region. Understanding the dynamics of labour force participation is essential for policymakers, researchers, and practitioners seeking to harness the workforce's potential and address their challenges. This research paper examines the changing trends in labour force participation in Bihar with a specific emphasis on rural-urban differences and gender dynamics.

Bihar, located in the eastern part of India, is known for its high population density and predominantly agrarian economy. The state has undergone significant socio-economic transformations over the years, including improvements in education, infrastructure, and employment opportunities. These transformations have had a profound impact on the labour force participation rate (LFPR) in Bihar. However, comprehensive research on the changing patterns of LFPR in Bihar, particularly concerning rural-urban disparities and gender dynamics, is lacking. This study aims to fill this research gap and provide valuable insights into the labour market dynamics in Bihar.

The research objectives of this study are threefold. Firstly, we aim to examine the changing trends in LFPR in Bihar and compare them with national trends. By analyzing the LFPR over a specified period, we can identify the extent to which Bihar's labour force dynamics align with or diverge from the overall national trends. This analysis will shed light on the unique characteristics of Bihar's labour market and assist policymakers in making informed decisions to enhance labour force participation.

Secondly, we seek to identify the key determinants of labour force participation in Bihar. Family size, education, age, gender, caste, and marital status have been recognized as influential in shaping labour force dynamics. Understanding these determinants in the context of Bihar will provide valuable insights into the specific barriers and opportunities that individuals face when entering and remaining in the workforce. Such insights are crucial for designing targeted policies and interventions to promote inclusive and sustainable economic growth in the



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state. Lastly, this research explores the influence of family size, education, age, gender, caste, and marital status on LFPR in Bihar. By examining the relationship between these variables and labour force participation, we can gain a deeper understanding of the socio-economic and cultural factors that impact individuals' decisions to participate in the workforce. This analysis will contribute to the existing body of knowledge on labour force dynamics and provide practical recommendations for policymakers to address the challenges faced by different demographic groups in accessing and engaging in productive employment.

The significance of this study lies in its implications for policymakers, government agencies, and other stakeholders involved in labour market planning and development in Bihar. The findings of this research will inform evidence-based decision-making and policy formulation to address the specific challenges and opportunities in Bihar's labour force. By understanding the changing trends in LFPR, policymakers can devise interventions to enhance workforce participation, reduce unemployment, and improve overall labour market outcomes. Additionally, a deeper understanding of the determinants of labour force participation will help identify specific areas that require attention, such as improving access to quality education and skill development programs, promoting gender equality, addressing socio-economic disparities, and creating an enabling environment for inclusive employment opportunities.

To provide a comprehensive analysis of labour force participation in Bihar, this research will draw on a range of data sources, including official statistics, surveys, and previous studies. The methodology will involve conducting logistic regression analysis to explore the relationship between various factors and labour force participation. The results of this research will contribute to both the academic literature and practical policymaking efforts, enabling stakeholders to design evidence-based strategies that promote inclusive and sustainable labour market growth in Bihar.

In conclusion, this research paper aims to contribute to the existing body of knowledge on labour force participation by examining the changing trends in Bihar and investigating the determinants of labour force dynamics. By focusing on Bihar's labour market, particularly in terms of rural-urban differences.

### II. LITERATURE REVIEW

The literature review explores existing research on the labour force participation rate (LFPR) and its determinants, specifically focusing on Bihar, India. While several studies have examined LFPR in different regions, there is a need for more research that specifically investigates the changing trends in LFPR in Bihar, particularly in rural and urban areas, and analyzes the gender dynamics influencing participation. The following studies provide insights into related areas.

Datta et al. (2014) conducted a study titled "Contrasts in Development in Bihar: A Tale of Two Villages," published in The Journal of Development Studies. The study focused on comparing the development trajectories of two villages in Bihar and examining the factors contributing to their divergent outcomes. It explored the role of various social, economic, and political factors in shaping the development disparities between the villages.

Agnieszka Stanimir's study (2014), "Participation in the Labour Market - Generation Y and Other Age Groups," explores the factors influencing employment rates among different age groups in Poland. Although the study is not directly related to Bihar, it analyzes the impact of variables such as education, family size, and income on labour market participation. This approach aligns with your objective of identifying key determinants of LFPR in Bihar.

A study by N. Bisht and Falguni Pattanaik (2020), titled "Youth Labour Market in India," analyzes the national trends of youth employment and unemployment using National Sample Survey data from 1993/94 to 2011/12. Although this study does not focus on Bihar, it employs logistic regression to identify the socio-economic and demographic determinants of youth employment. The findings highlight a decline in youth employment rates, particularly among postgraduate and graduate individuals, which raises concerns regarding achieving Sustainable Development Goals.

Sabreen and Behera (2021) conducted a study titled "Determinants of Non-Farm Employment in Rural Bihar," published in the Indian Journal of Economics and Development. The study aimed to identify the determinants of non-farm employment in rural areas of Bihar. It analyzed data to understand the factors influencing employment in non-farm sectors, such as education, landholding, access to credit, and infrastructure.



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Pal et al. (2021) conducted a cohort study in Bihar, India, titled "Factors Determining Paid and Unpaid Work in Young Adults," published in The Indian Journal of Labour Economics. The study focused on young adults and aimed to identify the factors influencing their engagement in paid and unpaid work. It examined various determinants, including education, gender, household characteristics, and social norms, to understand the patterns of work among young adults in Bihar.

Another study by Bryn Lampe, C. D. Fontenay, Jessica Nugent, and P. Jomini (2022), titled "Climbing the Jobs Ladder Slower: Young People in a Weak Labour Market," investigates the labour market scarring among young people in Australia from 2008 to 2018. While this study is not specific to Bihar, it examines the long-term impacts of the 2008 Global Financial Crisis on young people's employment transitions and labour market outcomes. The findings reveal difficulties in accessing desired occupations and limited wage growth, indicating the potential consequences of poor initial opportunities.

Ajad Singh's study (2022), titled "Women Labour Force in Haryana and its Determinants," examines the trends and determinants of women's LFPR in Haryana. While not specific to Bihar, this study utilizes logistic regression to identify family size, household jobs, education, and marital status that influence women's LFPR. The findings highlight the importance of these factors in shaping labour force participation among women.

Similarly, Ajad Singh and Malti Kapoor's study (2022), "Trends of Labour Force Participation Rate in Rajasthan and its Major Determinant Factors," analyzes the trends in LFPR in Rajasthan from 1991 to 2020-21. Although this study focuses on Rajasthan, it employs parametric logistic regression to identify the main factors associated with the probability of participating in the labour force. The study considers variables such as family size, gender, income level, education, marital status, and job availability. These factors can provide insights into the determinants of LFPR in Bihar as well, given the similarities in socio-economic and cultural contexts between the two regions.

Based on the reviewed literature, it is evident that there is a dearth of research specifically focused on the changing trends in LFPR in Bihar by latest period, especially in relation to rural-urban differences and gender dynamics. While studies have been conducted in India and other regions, the unique context of Bihar necessitates a more in-depth investigation. By examining the LFPR trends in Bihar and identifying the key determinants using logistic regression, your study aims to bridge this research gap and provide valuable insights into the challenges and opportunities facing the labour force, particularly young people, in Bihar.

Understanding the changing LFPR trends in Bihar and comparing them to national trends will contribute to a comprehensive understanding of the state's labour market dynamics. Additionally, exploring the influence of family size, education, age, gender, caste, and marital status on LFPR will shed light on the factors affecting labour force participation in Bihar. This knowledge can inform policymakers, government agencies, and other stakeholders in designing targeted interventions and policies to promote inclusive and sustainable economic growth in the state.

In summary, this study aims to fill the research gap by focusing on Bihar's labour force changing trends in rural and urban areas, with a specific emphasis on gender dynamics. By examining the LFPR trends, identifying determinants using logistic regression, and considering factors such as family size, education, age, gender, caste, and marital status, this study seeks to provide valuable insights into the labour market dynamics in Bihar and contribute to evidence-based policymaking.

### III. OBJECTIVES OF THE STUDY

- 1. Examine changing trends in LFPR in Bihar and compare to national trends.
- 2. Identify key determinants of labour force participation in Bihar using logistic regression.
- 3. Explore the influence of family size, education, age, gender, caste, and marital status on LFPR in Bihar.

### Hypothesis of the Study

Hypothesis 1: Gender and LFPR

Null Hypothesis (H0): There is no significant difference in the labour force participation rate (LFPR) between males and females in Bihar.

Alternative Hypothesis (HA): There is a significant difference in the labour force participation rate (LFPR) between males and females in Bihar.



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Hypothesis 2: Education and LFPR

Null Hypothesis (H0): There is no significant relationship between the level of education and labour force participation rate (LFPR) among individuals aged 15-64 years in Bihar.

Alternative Hypothesis (HA): There is a significant relationship between the level of education and labour force participation rate (LFPR) among individuals aged 15-64 years in Bihar.

Hypothesis 3: Family Size and LFPR

Null Hypothesis (H0): There is no significant relationship between family size and labour force participation rate (LFPR) among individuals aged 15-64 years in Bihar.

Alternative Hypothesis (HA): There is a significant relationship between family size and labour force participation rate (LFPR) among individuals aged 15-64 years in Bihar.

### **Research Questions**

- How have the labour force participation rates in rural and urban areas of Bihar changed over time, and how do they compare to the national trends?
- What are the key determinants that influence labour force participation among individuals aged 15-64 years in Bihar?
- To what extent do demographic factors such as family size, education, age, gender, caste, and marital status impact labour force participation rates in Bihar?
- What is the relationship between the number of jobs held by individuals and their likelihood of participating in the labour force in Bihar?
- Does income inequality, as measured by income percentiles, have any association with labour force participation rates in Bihar?
- How do factors such as education, age, and marital status differently affect labour force participation in rural and urban areas of Bihar?

### IV. RESEARCH METHODOLOGY OF THE STUDY

The primary source of data for this study is the various rounds of NSSO household data on 'Employment-Unemployment', which covers various employment and unemployment dimensions. The household data from the last four thick rounds of NSSO quinquennial rounds, i.e. 50th (1993-94), 55th (1999-2000), 61st (2004-05) and 68th (2010-11) and PLFS, 2017-18, and 2021-22 on Employment and Unemployment are used.

The data extraction process was carried out using appropriate software. The age group of the individuals studied in this paper falls within the range of 15-64 years, as defined by the International Labour Organization (ILO) as a working age group. The data collected is analyzed using the logit model to identify the factors that determine the labour force participation of a person in Bihar. The logit model is applied to the extracted unit-level household data of PLFS 2021-22 of Bihar to identify the main factors associated with the probability of participating in the labour force.

### Basic Description of the Variables and Mathematical form used for the Logit Model are:

Labour force participation is a qualitative characteristic. An observation consists of noting whether the characteristic is present. Thus, the dependent variable, designated as Y, is dichotomous and takes a value of 1 if a person between the ages of 15-64 years had a job or was looking for work and a value of 0 if not in the labour force.

### Dependent Variable:

• Labour Force Participation (LFP) = 1 if a person worked/looking for work = 0 otherwise

The factors influencing labour force participation include (Independent Variables):

- Family Size
- Years spend in education
- Number of Jobs in his/her family
- Income Group (dummy variable) 0-40, 40-80 and Top 20 Percentile based on Family Income.
- Age Group (Dummy variable) 15-29, 30-44 and 45-64 year age
- Marital status (dummy variable) Unmarried, Currently Married and Widow/Divorcee



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- Social Group (dummy variable) SCST, OBC and General Caste
- Gender (dummy variable) Male/Female
- Sector (dummy variable) Rural/Urban

Logit Model for Labour Force Participation of a Person in Bihar:

$$\begin{split} L_i &= log \left[\frac{P_i}{1-P_i}\right] = \quad \alpha + \beta_1(\text{FamilySize}) + \beta_2(\text{YearinEducation}) + \beta_3(\text{No. ofJobs}) + \beta_4(40-80/0-40\text{Percentile}) \\ &\quad + \beta_5(\text{Top20/0} - 40\text{Percentile}) + + \beta_6(30-44/15-29\text{Age}) + \beta_7(45-64/15-29\text{Age}) \\ &\quad + \beta_8(\text{Married/Unmarried}) + \beta_9(\text{Widow/Unmarried}) + \beta_{10}(\text{OBC/SCST}) + \beta_{11}(\text{General/SCST}) \\ &\quad + \beta_{12}(\text{Female/Male}) + \beta_{13}(\text{Urban/Rural}) \end{split}$$

### V. RESULT ANALYSIS

Labour force participation rates (LFPR) provide valuable insights into the economic activity of a region or population. Analyzing LFPR trends and factors affecting participation can shed light on the dynamics of employment and workforce engagement. In this analysis, we examine the LFPR in Bihar, India, focusing on gender differentials and urban-rural disparities. The analysis encompasses two subsection: Ist subsection presents the LFPR trends in Bihar and India for different groups based on gender and location, while subsection 2 showcases the results of a logit model that explores the determinants of labour force participation in Bihar during 2021-22.

### **Analysis of LFPR Trends**

Table 1 provides a comprehensive overview of LFPR trends in Bihar and India, divided into rural and urban areas. The data spans multiple years, ranging from 1993-94 to 2021-22, and includes LFPR figures for males, females, and the overall population. By examining these trends, we can identify patterns and disparities in labour force participation among different segments of the population.

Table 1: Trends of LFPR (per thousand) of working age (15-64 years) population in Bihar and India

	V	Bihar			India		
	Year	Male	Female	All	Male	Female	All
Rural	1993-94	877	277	584	896	512	707
	1999-2k	888	296	594	878	477	679
	2004-05	896	236	563	884	518	701
	2011-12	796	90	457	835	375	607
	2017-18	712	41	393	798	261	532
	2021-22	759	107	435	818	388	604
	1993-94	752	124	473	824	248	551
Urban	1999-2k	770	131	470	814	219	531
	2004-05	753	111	459	821	257	553
	2011-12	686	84	413	796	217	516
	2017-18	685	67	393	786	217	505
	2021-22	727	110	431	796	256	532
All	1993-94	860	259	570	877	445	666
	1999-2k	871	274	577	860	409	639
	2004-05	880	225	553	866	448	660
	2011-12	784	90	453	823	328	579
	2017-18	709	43	393	794	248	524
	2021-22	756	107	434	811	350	583



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The table provided shows the labour force participation rates (LFPR) in Bihar and India for different years and for different groups based on gender and urban/rural locations. The data for Bihar has been collected from various rounds of the NSSO household data on 'Employment-Unemployment' between 1993-94 and 2021-22.

The LFPR for the working-age population (15-64 years) is an important measure of economic activity in a country. It provides an estimate of the proportion of the population that is employed or seeking employment. A higher LFPR generally indicates a higher level of economic activity and vice versa. The LFPRs can also be analyzed for different groups based on gender and location to understand the trends and patterns of labour force participation among different segments of the population. The data in Table 1 for Bihar shows that the LFPR for rural men has been consistently high over the years, ranging from 877 per thousand people in 1993-94 to 759 per thousand people in 2021-22. This suggests that rural men in Bihar have been actively participating in the labour force. However, the LFPR for rural women has been much lower, ranging from 277 per thousand people in 1993-94 to 107 per thousand people in 2021-22. This implies that there is a significant gender gap in labour force participation in rural Bihar, and women are not participating in the labour force as much as men. Furthermore, the LFPR for rural women has declined over the years, which is a cause for concern. In urban areas of Bihar, the LFPR for men has been consistently higher than that for women. However, the LFPR for urban men has declined over the years, from 752 per thousand people in 1993-94 to 727 per thousand people in 2021-22. In contrast, the LFPR for urban women has slightly increased from 124 per thousand people in 1993-94 to 110 per thousand people in 2021-22. Overall, the LFPR for urban areas has remained stable over the years, ranging from 473 per thousand people in 1993-94 to 431 per thousand people in 2021-22. When compared to India, the LFPRs for Bihar are consistently lower for both rural and urban areas and for both men and women. This suggests that Bihar lags behind the rest of the country in terms of labour force participation. For instance, in 2021-22, the LFPR for rural men in Bihar was 759 per thousand people, whereas in India, it was 818 per thousand people. Similarly, the LFPR for urban men in Bihar was 727 per thousand people in 2021-22, whereas in India, it was 796 per thousand people. This difference in LFPRs highlights the need for policies and programs that can increase labour force participation in Bihar, especially among women in rural areas. In conclusion, the data in Table 1 suggests that while rural men in Bihar continue to participate in the labour force at high rates, there has been a decline in the LFPRs for rural women. In urban areas, the LFPRs for men have declined, but there has been a slight increase in the LFPRs for women. However, the LFPRs for both rural and urban areas in Bihar are lower than those of India as a whole. This calls for concerted efforts by the government and other stakeholders to increase labour force participation in Bihar, especially among women in rural areas.

### **Determinants of Labour Force Participation in Bihar**

In this section, A logit model used to estimate the factors influencing labour force participation in Bihar during 2021-22. The model analyzes various variables, including demographic, social, economic, and regional factors, to understand their impact on the likelihood of individuals being part of the labour force. By exploring the odds ratios associated with these variables, we can gain insights into the drivers and barriers affecting labour force participation in Bihar.

Table 2: Odd Ratio for a Persons (15-64 Age) during 2021-22 in Bihar: Logit Model

VARIABLES	Rural	Urban	Rural+Urban
LFPR			
Family Size	0.727***	0.769***	0.742***
Year in Education	0.995	1.041***	1.008
No. of Jobs	4.783***	4.452***	4.542***
40-80/0-40 Percentile	1.020	0.931	1.000
Top 20/0-40 Percentile	0.680***	0.666**	0.717***
30-44/15-29Age	5.473***	5.352***	5.412***
45-64/15-29Age	1.961***	2.058***	2.017***
Married/Unmarried	37.541***	7.281***	20.655***



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102.728***	25.074***	59.391***
0.889	0.819	0.889*
0.707***	0.791	0.778**
0.003***	0.007***	0.004***
		1.102
0.276***	0.311***	0.283***
9,995	4,146	14,141
-2585	-1305	-3947
12	12	13
8435	3046	11367
0	0	0
0.620	0.539	0.590
	0.889 0.707*** 0.003*** 0.276*** 9,995 -2585 12 8435 0	0.889 0.819   0.707*** 0.791   0.003*** 0.007***   0.276*** 0.311***   9,995 4,146   -2585 -1305   12 12   8435 3046   0 0

Note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' estimation from NSO unit-level data of PLFS 2021-22 Table 2 presents the results of a logit model used to estimate the determinants of labour force participation in Bihar during 2021-22. The model estimates the odds ratios for the different variables on the probability of a person being in the labour force. An odds ratio greater than one indicates a positive relationship between the variable and the likelihood of being in the labour force, while an odds ratio less than one suggests a negative relationship.

The variables included in the model are grouped by their categories: demographic, social, economic, and regional factors.

### Demographic variables:

- Family size: A one-unit increase in family size decreases the odds of being in the labour force by 27.3%, 23.1%, and 25.8% in rural, urban, and rural+urban areas respectively.
- Age: The odds of being in the labour force for individuals in the age group of 30-44 and 45-64 years old are significantly higher than for those in the reference group of 15-29 years old, in all areas.
- Gender: Being female decreases the odds of being in the labour force by a significant margin, with the odds ratios being 0.003, 0.007, and 0.004 in rural, urban, and rural+urban areas respectively.

### **Social variables:**

- Marital status: Being married increases the odds of being in the labour force substantially, with the odds ratios being 37.5 and 7.3 in rural and urban areas respectively.
- Widowhood: Being a widow has an even stronger effect, increasing the odds of being in the labour force by a significant margin, with the odds ratios being 102.7 and 25.1 in rural and urban areas respectively.
- Caste: The odds of being in the labour force for OBCs are not significantly different from those of SC/STs in all areas. However, the odds of being in the labour force for general category individuals are significantly lower than those of SC/STs in rural and rural+urban areas.

### **Economic variables:**

- Years of education: The odds of being in the labour force are not significantly related to years of education in rural and rural+urban areas, while in urban areas, the odds of being in the labour force increase by 4.1% for each additional year of education.
- Number of jobs: Having more jobs increases the odds of being in the labour force, with the odds ratios being 4.8, 4.5, and 4.5 in rural, urban, and rural+urban areas respectively.
- Income percentiles: Being in the top 20 percentile income group decreases the odds of being in the labour force significantly in all areas, while being in the 40-80 percentile income group has no significant relationship with labour force participation.



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• Urban/rural: The odds of being in the labour force are not significantly different between rural and urban areas.

The log-likelihood, the chi-squared test, and the pseudo R-squared are presented as goodness-of-fit measures. The model fits the data well, as the chi-squared test is significant, and the pseudo R-squared values are relatively high. The results suggest that the determinants of labour force participation in Bihar are complex and involve a combination of demographic, social, and economic factors.

#### VI. CONCLUSION

The main findings of the research paper based on the information provided are as follows:

### Labour Force Participation Rate (LFPR) in Bihar:

- LFPR for rural men in Bihar has remained consistently high over the years.
- LFPR for rural women in Bihar is significantly lower than for men, and it has declined over the years.
- LFPR for urban men in Bihar has declined over the years, while LFPR for urban women has slightly increased.

### **Comparison with India:**

- LFPRs for both rural and urban areas in Bihar are consistently lower than the national average.
- Bihar lags behind the rest of the country in terms of labour force participation.
- The gender gap in LFPR is significant in rural areas of Bihar, with women participating less than men.

### **Determinants of Labour Force Participation in Bihar:**

- Family size negatively affects labour force participation in both rural and urban areas.
- Age group 30-44 and 45-64 have higher odds of being in the labour force compared to the reference group (15-29 years).
- Being married significantly increases the odds of labour force participation.
- Being a widow also increases the odds of labour force participation significantly.
- General category individuals have lower odds of being in the labour force compared to SC/STs in rural and rural+urban areas.
- More years of education increase the odds of labour force participation in urban areas.
- Having more jobs increases the odds of labour force participation in all areas.
- Being in the top 20 percentile income group decreases the odds of labour force participation significantly.
- Being female significantly decreases the odds of labour force participation in all areas.

Overall, the findings highlight the gender disparities in labour force participation in rural Bihar and the need for policies and programs to increase participation, especially among women. It also emphasizes the importance of demographic, social, and economic factors in influencing labour force dynamics in Bihar.

### Recommendations and suggestions for Policy maker

the following policy recommendations and suggestions can be made to increase labour force participation rates (LFPR), especially among women in Bihar:

- ➤ Promote women's education: Enhance access to quality education for girls and women, focusing on reducing the gender gap in education. This can be achieved through the expansion of schools, scholarships, and awareness campaigns to encourage girls' enrollment and retention in schools.
- > Skills development and vocational training: Establish vocational training programs that are tailored to the needs of the local job market, with a particular focus on sectors that have potential for growth and demand for female labour. This will equip women with the necessary skills and increase their employability.
- > Enhance financial inclusion: Provide access to credit and financial services for women, particularly those in rural areas, to support entrepreneurship and self-employment opportunities. This can be done through the establishment of microfinance institutions and financial literacy programs.
- Address social barriers: Implement measures to challenge social norms and cultural practices that hinder women's participation in the labour force. This includes raising awareness about gender equality, empowering women through community engagement, and encouraging men to support women's economic activities.



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- > Strengthen social protection: Expand and improve social protection programs that provide support to women, especially those in vulnerable situations such as widows or single mothers. This can include cash transfer programs, healthcare benefits, and childcare support to enable women to participate in the labour force without compromising their caregiving responsibilities.
- ➤ Promote gender-responsive employment policies: Encourage employers to adopt gender-responsive practices such as flexible working arrangements, maternity leave policies, and workplace childcare facilities. This will enable women to balance their work and family responsibilities effectively.
- Enhance data collection and monitoring: Improve data collection systems to gather accurate and up-to-date information on labour force participation, particularly disaggregated by gender, age, and location. This will help in monitoring progress and evaluating the effectiveness of policies and interventions.
- > Collabouration and stakeholder engagement: Foster collabouration between government agencies, civil society organizations, employers, and community leaders to develop and implement comprehensive strategies that address the barriers to women's labour force participation. Engaging multiple stakeholders will ensure a coordinated and holistic approach.

These policy recommendations and suggestions aim to create an enabling environment for increasing labour force participation, with a specific focus on reducing the gender gap in Bihar. It is important to tailor these recommendations to the unique context of the state and regularly assess their implementation and impact to drive sustainable change.

### VII. REFERENCES

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