ECONOMY POLITY ENVIRONMENT
An International Peer-reviewed Journal of Social Studies

Women's Economic Empowerment and Rural-Urban Gender Discrepancy in Indian Labour Force

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ARTICLE INFO

Received:
Dec 16, 2023

Accepted:
May 16, 2023

ABSTRACT

Women empowerment is intrinsically related to female participation in workforce. At the macro level, greater participation of females in the workforce is pro-active to economic growth. Female labour force participation (FLFP) is a multidimensional agglomeration of structural and socioeconomic factors. However, it is historically low in India, and in the era of liberalisation and globalisation, particularly during 1993-'94 to 2011-'12, India's FLFP rates remain low, even decline along with increases in gender discrepancy in labour force participation rates despite prevalence of congenial factors including rapid economic growth, educational gains, fertility decline, and Government's pro-female labour market policies for raising this participation rates. Thus, the paper attempts to understand and explain the puzzle of mismatching between economic growth and FLFP through better understanding the issue by extending the analysis across rural-urban regional and political states dimensions along with associating male-female Labour Force Participation Rate (LFPR)s and Work Participation Rate/Work Population Ratio (WPR)s and gender disparity in such participations with socio-economic and structural factors including caste population, human development indices, literacy gains and levels of educations of Indian populations based on National Sample Survey (NSS) data with the ultimate aim at designing appropriate measures for the policy makers to raising FLFP rates. The principal objective of this paper is to evaluate and scrutinise the extent of male-female labour force participation rates along with gender gap in rural-urban regions in India and its states along with associated challenges to understand the relative comfort of rural vis-à-vis urban females. The paper reveals that reducing work opportunities for rural females, lower labour force participations of the higher educated urban females because of their economic comfort and limited flexible, better paid urban work opportunities, persisting social norms for delivering home caring service and for entry in the labour market for the non-tribal women, and balancing family commitments and livelihood opportunities are some of the factors through which the puzzle can be explained.

Key Words: *economic empowerment; female labour force participation; rural-urban gender discrepancy; India*

Introduction

Women's empowerment refers to the process of enabling women to have greater control over their lives and to be able to make their own decisions. This can include empowering women to participate fully in the economy and in the political process, as well as empowering them to

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make decisions about their own health and well-being (Naarisamata, 2023). So, women empowerment must include more choices for women to make on their own.

Employment is the source of income that ensures the individuals' economic empowerment (Biswas & Banu, 2023). Irrespective of gender, being engaged in paid work is the primary step to being empowered. It means economic empowerment is the result of participation in paid work. Thus, the participation of women in economic activities, particularly outside the home, is often posited as an important enabling factor in the economic and social empowerment of women (Kishor & Gupta, 2004). With paid work, women hold power to make their decisions on their own (Afridi *et al*., 2018). Not only can employment be a source of economic independence, but it can help to give women a sense of self-worth. So, for a woman, working status is a crucial determinant of her empowerment status (Sundari, 2020) and economic independence is one of the essential factors for overall well-being (Srivastava & Srivastava, 2010). Studies (e.g. Anderson & Eswaran, 2009) have found that women involvement in economic activity outside of her family helps to increase their decision-making power and leads to more control over resources.

According to Lewis (1954), the transfer of women's work from household to commercial employment is one of the most notable characteristics of economic development. Various other studies (Duflo, 2012; Wong, 2012) also highlight how lower female labour force participation or weak entrepreneurial activity drag down economic growth and that empowering women has significant economic benefits in addition to promoting gender equality. However, historically this is one aspect in which India's record has been dramatically dismal. A low female labour force participation rate is indeed the factor that keeps India's overall labour force participation rate low (Chaudhary & Verick, 2014).

The economic activity may be classified as organised and unorganised, each of which may be in the formal or informal sector. Participation of women in economic activities in formal sectors of industries, services and agricultural sector is measurable in the yardstick of generating direct personal income, but activities of women in informal sectors such as house works, training and education of children, activities in agricultural sectors and household services are difficult to measure on the same criterion. Because of their gender-typical roles as care takers and home-makers in general, many women do not enter into the definition of 'workers' at all, and thereby their participation in paid work is much lower than their male counterparts. Of those that do, many perform marginal rather than main work, because they continually have to balance family commitments against livelihood opportunities (Mandal, 2013). Hence, women work participation rates [or work population ratios] (WPRs) are expected to be smaller than male WPRs in all works in general and main works in particular (*ibid.*). While women constitute a little less than the half of the economically active population, their contribution to economic activity is far below the potential. The progress toward gender equality in respect of participation in economic activities seems to have stalled (Anitha, 2018), while it has long been understood in the literature that gender equality plays an important role in economic development.

The Seminal work of Goldin (Goldin, 1994) has explored the U-shaped relationship between female labour supply and the level of economic development across countries. At initial level of economic development, when the income level is low and the agricultural sector dominates the economy, women's participation in the labour force is high because of the necessity of working to pay for basic goods and services as well as subsistence agriculture. As incomes rise, women's labour force participation often falls, it will only to rise again when female education levels improve, and consequently, the value of women's time in the labour market increases (Das *et al.*, 2015). The Global Gender Gap Report 2014 of the World

Economic Forum 2014 finds a positive correlation between gender equality and Gross Domestic Product (GDP) per capita, the level of competitiveness, and human development indicators.

Among emerging market and developing economies, India has one of the lowest female labour force participation rates, and the workforce participation rate of India's women is significantly lower than that of the men. Historically India has viewed women primarily for their reproductive role rather than productive role (Ratho, 2020). Women's work participation rate in India is well below the global average of 47 per cent for several years (MLE, 2023). According to the ILO's Global Employment Trends 2013 report, India's labour force participation rate for women fell from just over 37 per cent in 2004-05 to 29 per cent in 2009-10 (ILO, 2013). The ILO's Global Employment Trends 2013 report reveals that out of 131 countries with available data, India ranks 121st (i.e. 11th from the bottom) in female labour force participation (*ibid.*). In 2013, India had the lowest FLFP rate in South Asia, with the exception of Pakistan (Andres *et. al.*, 2017).

India has experienced rapid population and economic growth, urbanisation and demographic change over the past four decades. Between 1990 and 2013, India's GDP growth averaged 6.4 per cent, and the share of agriculture in GDP roughly halved (from 33 to 18 per cent), while that of services increased from 24 to 31 per cent (Fletcher *et al.*, 2017). Urbanisation has also increased from 26 per cent to 32 per cent during the same period (World Bank, 2015). Over the same period, total fertility fell from 4.0 to 2.5 children per woman (World Bank, 2014). Between 1994 and 2010, the fraction of women aged 15-24 attending any educational institution more than doubled (from 16.1 per cent to 36 per cent (Kapsos *et al.*, 2014). The Indian government has actively pursued labour market policies including educational scholarships, reservations/quotas, self-employment through self-help groups and more recently capacity building through skill training programmes to increase the Female Labour/Workforce Participation (FLWP) rate in India for several decades (Menon *et. al.*, 2019). However, despite this rapid economic growth, educational gains, fertility decline, and Government's pro-female labour market policies, India's women are conspicuously absent from the labour force. FLFP rates remain low and have even fallen in recent years as stated earlier. Hence, the mismatch between economic growth and FLFP presents a puzzle which needs to be resolved by the researchers through better understanding the issue.

Against this backdrop, the paper attempts to analyse the issue of Women's Economic Empowerment and Rural-Urban Gender Discrepancy in Indian Labour Force based on 50th to 68th Round of National Sample Survey Office (NSSO) Reports on Employment and Unemployment situation in Indian under the Ministry of Statistics and Programme Implementation (MoSPI), Government of India. The principal objective of this paper is to evaluate and scrutinise the extent of male-female labour force participation rates along with gender gap in rural-urban regions in India and its states with associated challenges to understand and explain the puzzle of mismatching between economic growth and FLFP. Since the growth of industry and services sector has been very uneven across different regions and states, the analysis is carried on in rural-urban regions of India and its states. The analysis is further extended by associating male-female LFPRs and WPRs and gender disparity in such participations with socio-economic and structural factors including caste population, human development indices, literacy gains and levels of educations of Indian populations.

1. Methodology

The data set used in this paper is detailed household-level data from five employment and unemployment surveys conducted by India's (NSSO) encompassing the years 1993−94,

1999−2000, 2004−05, 2009−10, and 2011−12 in the post liberalised era. While for India and rural-urban regional analysis, these five survey reports are used, for state level analysis only 68th Round NSSO Report on Employment and Unemployment (July 2011 to June 2012) is applied. For analysis of the data simple percentage technique is applied, and the data is represented through tabular method. The nationwide Employment and Unemployment (E&U) surveys have been replaced by the Periodic Labour Force Survey (PLFS) conducted by the National Statistical Office (NSO) of MoSPI, which started in the year 2017–18. The last available census data refers to 2011 and the quinquennium NSSO data on employment and unemployment is available up to the year 2011–12 only. The PLFS surveys are based on a different sampling framework and uses a different analytical approach vis-à-vis the NSSO surveys on employment (Kannan & Khan 2022). Because of this, the time series data on E&U, available from the NSSO surveys, is not comparable with the PLFS data (Chand & Singh, 2022). Hence, the present analysis has extended up to 2011-12.

2. Conceptual Framework

The employment and unemployment surveys of the NSSO are the primary sources of data on various labour force indicators at national and state levels. NSSO surveys, with large, nationally representative sample sizes, have been conducted every five years all over the country. The survey period spans more than a year, and the sample covers more than 100,000 representative households in each of the five surveys. The number of households surveyed in the latest round of the survey (68th round) was 101,724 (59,700 in rural areas and 42,024 in urban areas), and the number of persons surveyed was 456,999 (280,763 in rural areas and 176,236 in urban areas).

According to NSSO definitions, individuals are classified into various activity categories based on the activities that they pursue during specific reference periods. Three reference periods are used in NSSO surveys, namely a) one year, b) one week, and c) each day of the reference week. The activity status determined based on the reference period of one year is known as the ‘usual activity status’ [uas] of a person, the status determined based on a reference period of one week is known as the ‘current weekly status’ [cws] of the person, and the activity status determined based on the engagement on each day during the reference week is known as the ‘current daily status’ [cds] of the person.

Under the usual activity status a person is classified as belonging to the labour force if he or she had been either working or looking for work during the longer part of the reference year. For a person already identified as belonging to the labour force, the usual activity status is further divided into “usual principal activity status” and “usual secondary activity status.” The activity status on which a person spent relatively longer time during the 365 days preceding the date of the survey is considered the usual principal activity status [upas] of the person. The status in which such economic activity is pursued during the reference period of 365 days preceding the date of survey is the “subsidiary economic activity status” of the person. For the present analysis, the labour force is measured through the usual principal activity status and usual secondary activity status. Here, Labour Force Participation Rate (LFPR) is defined as the percentage of persons in the labour force in the population, i.e.,

LFPR = (No. of Employed Persons + No. of Unemployed Persons) *100/Total Population.

4. Result and Discussion

The Labour Force Participation Rate indicates the percentage of all people of working age who are employed or are seeking work. The rate excludes individuals who are neither working nor looking for work like students, pensioners, housewives, etc. The Worker Population Ratio

(WPR) is an indicator used to assess the country's employment situation. The ratio shows the proportion of a country's population that actively contributes to the production of goods and services.

For overall Indian population, the gender specific labour force participation rates and work population ratios for rural and urban regions of India during 1993-'94 to 2011-'12 is shown below in Table 1.

Table 1: Rural-Urban Gender Discrepancy in LFPR and WPR in India: 1993-'94 to 2011-'12

NSS Round (year)	Labour Force Participation Rate [LFPR]						Work Population Ratio [WPR]					
	Rural			Urban			Rural			Urban		
	Male	Female	Gender Discre--pancy	Male	Female	Gender Discre--pancy	Male	Female	Gender Discre--pancy	Male	Female	Gender Discre--pancy
68th (2011-'12)	*55.3*	*25.3*	***30.0***	*56.3*	*15.5*	***40.8***	*54.3*	*24.8*	***29.5***	*54.6*	*14.7*	***39.9***
66th (2009-'10)	*55.6*	*26.5*	***29.1***	*55.9*	*14.6*	***41.3***	*54.7*	*26.1*	***28.6***	*54.3*	*13.8*	***40.5***
61th (2004-'05)	*55.5*	*33.1*	***22.4***	*57.1*	*17.8*	***39.3***	*54.6*	*32.7*	***21.9***	*54.9*	*16.6*	***38.3***
55th (1999-'00)	*54.1*	*30.2*	***23.9***	*54.3*	*14.7*	***39.6***	*53.1*	*29.7*	***23.4***	*51.8*	*13.9*	***37.9***
50th (1993-'94)	*56.1*	*33.0*	***23.1***	*54.3*	*16.5*	***37.8***	*55.3*	*32.8*	***22.5***	*52.1*	*15.5*	***36.6***

Source: 1. For 68th round: *NSS Report No.563* (*Employment and unemployment situation among social groups in India)*
2. For 66th round: NSS Report no. *543* (*Employment and unemployment situation among social groups in India)*
3. For 61st round: *NSS Report no. 516* (*Employment and unemployment situation among social groups in India)*
4. For 55th round: *NSS Report no. 469 (Employment and unemployment situation among social groups in India*)
5. For 50th round: *NSS Report no. 409* (*Employment and unemployment situation among social groups in India*)

Notes: 1. Figures are based on usual status approach and includes principal status and subsidiary status workers of all ages.
2. The figures represent size of labour force (i.e. workers and people, willing to work) as percentage of population for LFPR and size of workers as percentage of population for WPR.

For each NSS round over 1993-'94 to 2011-'12, male labour force participations vary slightly between rural and urban India with marginally higher male labour force participations in urban regions than that in the rural regions with the exception for 1993-'94. On the contrary, female labour force participation varies widely between urban and rural India with much higher female labour force participation in rural region than that in the urban region primarily because of greater urge for survival of the rural females than that of urban females, and conversely owing to comparatively greater comfort and more social taboo for participation in works for the urban females compared to that of the rural females along with low quality, low paid, unskilled, insecure job opportunities under informal sector in rural India such as labour intensive agriculture.

During this period, the gap of the female labour force participation between rural and urban India has narrowed down moderately primarily because of fall in female labour force participation in rural India. With many family members engaged as subsidiary status workers in cultivation, female labour force as well as work participation was much higher in rural India than that in the urban India. Consequently, taken together rural and urban regions, female labour force participation rates and work population ratios have fallen nationwide moderately

during this period, especially in the first decade of the 21th century. On the contrary, in rural India both male labour force participation rates and work population ratios have fallen marginally during this period, while in urban India both male labour force participation rates and work population ratios have increased marginally over the same period.

Substantial gender gaps between male and female labour force participations as well as work participations prevailed in both rural and urban India. These gaps are more pronounced in urban region than that in the rural region of the nation because of comparatively higher female labour force and work participation rates in the rural region than that in the urban region. However, relatively higher LFPRs and WPRs of rural female than that of the urban female reflects relatively more pressurisation of the rural female rather than a comfort one. A study (Das *et al*., 2015, *op. cit*.) also shows that income has a dampening effect on female labour force participation, with participation rates higher among low-income households, primarily because of their economic necessity. Nevertheless, over this period, both these gaps are growing in both the rural and urban India.

The gap between LFPR and WPR indicates unemployment rate. Both in rural and urban India, the unemployment rate is slightly lower for the female compared to the male. Both for male and female, the unemployment rate is slightly lower in rural region compared to that in the urban region mainly because of relatively easier to be involved in farming in the rural region for both the male and female. Over this period, in rural India both male and female unemployment rates have marginally increased, while in urban India both male and female unemployment rates have slightly decreased.

Since social norms and level of development and thereby work opportunities vary widely across the regions of the Indian subcontinent, the analysis will be more fruitful by carrying it across the Indian states rather than considering India as a unit. Table 2 below furnishes the information on the gender specific labour force participation rate and work population ratio in Indian states for 2011-'12.

Both rural and urban female labour force participations as well as work participations vary widely across the Indian states with the highest rural female labour force participation of 52.9 per cent in Himachal Pradesh where female work participation is also highest, and the largest urban female labour force participation of 27.4 per cent in Sikkim, and the lowest rural and urban female labour force participation of 5.8 per cent and 5.4 per cent respectively in the poorest Indian State Bihar. With higher female labour force participation in the rural regions of the Indian states compared to that in their respective urban regions, gender discrepancy in works force participation, tilted in favour of male, is higher in their urban tracts compared to that in their respective rural tracts.

Table 2: Rural-Urban Gender Discrepancy in LFPR and WPR in Indian States & Territories: 2011-'12

States & Union Territories of India	Labour Force Participation Rate [LFPR]						Work Population Ratio [WPR]					
	Rural			Urban			Rural			Urban		
	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy
High Human Development (0.752-0.702)												
Kerala	58.3	25.8	32.5	56.7	22.2	34.5	56.5	22.1	34.4	52.2	19.1	33.1
Goa	58.6	21.2	37.4	52.6	17.4	35.2	54.7	21.0	33.7	51.1	15.7	35.4
Chandigarh	56.7	4.7	52.0	57.9	13.5	44.4	56.7	4.7	52.0	54.7	12.1	42.6
Delhi	54.4	14.6	39.8	54.8	10.9	43.9	49.3	14.6	34.7	53.0	10.4	42.6
Puducherry	52.1	22.3	29.8	56.3	15.3	41.0	51.7	22.1	29.6	54.8	14.7	40.1
Lakshadweep	59.8	17.7	42.1	58.2	17.8	40.4	54.8	10.5	44.3	55.0	11.6	43.4
Himachal Pradesh	54.7	52.9	1.8	61.2	23.6	37.6	54.1	52.4	1.7	60.0	21.2	38.8
Sikkim	58.6	49.2	9.4	62.8	27.4	35.4	58.0	48.7	9.3	60.9	27.3	33.6
Medium Human Development (0.699-0.638)												
Jammu & Kashmir	55.9	26.3	29.6	56.3	14.5	41.8	54.7	25.5	29.2	53.9	11.7	42.2
Punjab	57.9	23.7	34.2	58.6	14.1	44.5	56.6	23.4	33.2	57.0	13.6	43.4
Haryana	53.2	16.4	36.8	53.5	10.2	43.3	51.8	16.2	35.6	51.4	9.7	41.7
A & N Islands	60.3	30.0	30.3	63.3	24.8	38.5	59.2	26.1	33.1	60.7	20.0	40.7
Maharashtra	58.2	38.9	19.3	56.0	17.2	38.8	57.6	38.8	18.8	54.9	16.6	38.3
Mizoram	59.9	40.5	19.4	50.7	26.7	24.0	59.1	39.4	19.7	48.7	24.9	23.8
Tamil Nadu	60.7	38.6	22.1	59.9	21.1	38.8	59.5	37.8	21.7	58.7	20.1	38.6
Manipur	52.3	27.0	25.3	48.3	20.4	27.9	51.0	26.2	24.8	45.6	18.2	27.4
Uttarakhand	46.5	31.5	15.0	51.9	10.8	41.1	45.2	30.8	14.4	50.6	8.6	42.0
Nagaland	59.0	37.1	21.9	50.9	22.4	28.5	50.4	31.2	19.2	41.2	14.4	26.8
Karnataka	62.0	28.9	33.1	59.4	17.1	42.3	61.2	28.7	32.5	57.9	16.3	41.6
Arunachal Pradesh	49.2	28.2	21.0	47.5	13.9	33.6	48.3	27.8	20.5	45.7	12.7	33.0
Daman & Diu	69.4	3.4	66.0	59.5	15.2	44.3	69.4	3.4	66.0	59.5	14.8	44.7
Meghalaya	52.9	39.2	13.7	51.5	21.0	30.5	52.7	39.1	13.6	50.3	20.2	30.1
Rajasthan	50.0	34.9	15.1	50.7	14.4	36.3	49.5	34.7	14.8	49.0	14.1	34.9
Gujarat	60.2	27.9	32.3	60.7	13.5	47.2	59.9	27.8	32.1	60.3	13.3	47.0
Low Human Development [Below India average of 0.633] (0.630-0.571)												
Andhra Pradesh	*61.2*	*44.8*	*16.4*	*57.6*	*18.0*	*39.6*	*60.2*	*44.5*	*15.7*	*55.4*	*17.0*	*38.4*
Tripura	59.9	28.7	31.2	59.4	26.0	33.4	56.2	22.8	33.4	52.5	11.3	41.2
West Bengal	60.2	19.4	40.8	63.0	18.6	44.4	58.6	18.9	39.7	60.2	17.4	42.8
Dadra & Nagar Haveli	48.8	16.1	32.7	57.6	11.5	46.1	48.8	16.1	32.7	57.6	11.5	46.1
Chhattisgarh	56.3	41.6	14.7	51.7	25.2	26.5	55.7	41.5	14.2	49.6	24.0	25.6
Assam	*56.4*	*12.9*	*43.5*	*57.3*	*9.7*	*47.6*	*54.0*	*12.2*	*41.8*	*54.2*	*9.0*	*45.2*
Odisha	60.6	25.1	35.5	60.3	15.8	44.5	59.2	24.6	34.6	57.9	15.5	42.4
Madhya Pradesh	56.4	23.9	32.5	53.3	11.9	41.4	56.1	23.9	32.2	52.0	11.5	40.5
Uttar Pradesh	49.6	17.8	31.8	53.3	10.6	42.7	49.1	17.7	31.4	51.1	10.2	40.9
Jharkhand	54.2	20.4	33.8	50.3	7.3	43.0	53.3	19.8	33.5	48.0	6.6	41.4
Bihar	*48.7*	*5.8*	*42.9*	*44.1*	*5.4*	*38.7*	*47.3*	*5.3*	*42.0*	*42.1*	*4.5*	*37.6*
All-India	***55.3***	***25.3***	***30.3***	***56.3***	***15.5***	***40.8***	***54.3***	***24.8***	***29.5***	***54.6***	***14.7***	***39.9***

Source: *NSS Report No.563: Employment and unemployment situation among social groups in India*

Based on the calculated Human Development Indices (HDI) of Global Data Lab (2021), the Indian states and union territories in 2010-'11 are categorised into three groups, namely A)

High Human Development comprising Kerala, Goa, Chndigarh, Delhi, Poducherry, Lakshadweep, Himachal Pradesh and Sikkim; B) Medium Human Development including Jammu & Kashmir, Punjab, Haryana, A & N Islands, Maharashtra, Mizoram, Tamil Nadu, Manipur, Uttarakhand, Nagaland, Karnataka, Arunachal Pradesh, Daman & Diu, Meghalaya, Rajasthan and Gujarat, and C) Low Human Development comprising Andhra Pradesh, Tripura, West Bengal, Dadra & Nagar Haveli, Chhattisgarh, Assam, Odisha, Madhya Pradesh, Uttar Pradesh, Jharkhand and Bihar. In the rural regions of most of the Indian states with low human development, male labour force participation is relatively higher (e.g., Andhra Pradesh, Odisha, Assam), female labour force participation is relatively lower (e.g., Bihar, Assam and Uttar Pradesh along with the exception of Andhra Pradesh and Tripura) and gender gap in labour force participation is comparatively higher (e.g., Assam, Bihar and West Bengal). Similarly, in the urban regions of most of the Indian states with low human development, female labour force participation is relatively lower (e.g., Bihar, Jharkhand and Assam) and gender gap in labour force participation is comparatively higher (e.g., Assam, Odisha and West Bengal). On the contrary, in the rural regions of most of the Indian states with high to moderate level of human development, female labour force participation is relatively higher (e.g., Himachal Pradesh, Sikkim and Maharashtra) and gender gap in labour force participation is comparatively lower (e.g., Himachal Pradesh, Sikkim and Maharashtra), while in the urban regions of most of such states female labour force participation is relatively lower (e.g., Haryana, Punjab and Gujarat) and gender gap in labour force participation is comparatively higher (e.g., Gujarat, Punjab and Delhi).

In hilly Indian states such as in Himachal Pradesh and North-Eastern Indian states including Sikkim, Mizoram and Meghalaya, the female work participations is relatively higher compared to the other states. States in the south and north-east of India (such as Andhra Pradesh, Tamil Nadu, Sikkim, and Mizoram) generally have experienced higher female labour force participation rates than those in the east and north (such as Bihar, Assam, Punjab, and Haryana). Female labour force participation in the 'BIMARU' states (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh) is relatively lower compared to other richer Indian states. Similarly, in the eight poor Indian States, namely Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand and Uttar Pradesh (Economic Survey, 2009-10), female labour force participation is comparatively lower than that in the richer Indian states. Again, in the eastern Indian states female labour force participation is comparatively lower than that in other Indian states.

Besides survival urgency for labour force participation and economic comfort as well as economic richness for labour force participation, female labour force participation also depends on social norms which vary across the Indian states. This may explain, at least to some extent, the variation in female labour force participations and gender discrepancy in labour participations between southern Indian states and other Indian states as well as between north-eastern Indian states and other Indian states. These social norms vary substantially across different social groups of people, name Schedule Tribe [ST], Schedule Caste [SC], Other Backward Class [OBC] and General Category. Hence, Table 3 furnishes information on the gender specific labour force participation rate and work population ratio in Indian states for 2011-'12 across social groups.

In rural India, among males, LFPRs were slightly higher at 56.5 per cent for STs compared to 56.2 per cent for Others Category, 55.0 per cent for SCs and 54.7 per cent for OBCs. Conversely, in urban India, among males, LFPRs were slightly higher at 56.8 per cent for Others Category compared to 56.3 per cent for SCs, 56.1 per cent for OBCs and 53.8 per cent for STs. Nonetheless, in rural India, among females, LFPRs were much higher at 36.9 per

cent for STs compared to those of 26.5 per cent for SCs, 24.3 per cent for OBCs and 20.6 per cent for Others Category. Likewise, in urban India, among females, LFPRs were moderately higher at 20.2 per cent for STs compared to those of 18.1 per cent each for SCs and OBCs respectively, and 13.8 per cent for Others Category.

States & Union Territories of India	Labour Force Participation Rate [LFPR]											
	Other Backward Caste [OBC]						Others Category [OC] (General Caste)					
	Rural			Urban			Rural			Urban		
	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy	Male	Female	Gender Discre-pancy
High Human Development (0.752-0.702)												
Kerala	56.7	23.5	33.2	55.8	19.0	36.8	58.5	26.7	31.8	56.3	28.3	28.0
Goa	58.9	10.1	48.8	54.8	22.0	32.8	56.5	14.2	42.3	53.1	16.3	36.8
Chandigarh	63.9	4.4	59.5	50.6	13.5	37.1	47.6	6.6	41.0	63.6	16.4	47.2
Delhi	40.7	6.1	34.6	53.7	4.8	48.9	63.0	19.6	43.4	55.2	11.7	43.5
Puducherry	49.9	18.8	31.1	57.3	16.0	41.3	63.9	29.6	34.3	52.6	11.9	40.7
Lakshadweep	-	-	-	100.0	-	-	-	-	-	100.0	100.0	0.0
Himachal Pradesh	49.7	49.6	0.1	69.4	21.7	47.7	55.0	54.6	0.4	60.9	24.5	36.4
Sikkim	55.7	49.7	6.0	66.7	32.8	33.9	76.4	20.3	56.1	68.6	18.4	50.2
Medium Human Development (0.699-0.638)												
Jammu & Kashmir	53.7	20.5	33.2	57.8	15.3	42.5	56.8	26.0	30.8	56.5	14.0	42.5
Punjab	60.2	19.6	40.6	59.7	14.3	45.4	57.3	26.7	30.6	58.9	14.8	44.1
Haryana	51.9	10.0	41.9	53.1	8.8	44.3	56.1	18.5	37.6	53.7	10.8	42.9
A & N Islands	69.3	19.0	50.3	64.2	26.1	38.1	57.2	32.0	25.2	63.3	24.8	38.5
Maharahstra	56.9	35.9	21.0	56.6	17.3	39.3	60.0	40.0	20.0	56.1	15.7	40.4
Mizoram	68.6	51.3	17.3	47.5	40.3	7.2	57.0	30.6	26.4	53.4	34.5	18.9
Tamil Nadu	61.8	37.6	24.2	59.5	20.9	38.6	52.9	24.6	28.3	56.9	18.3	38.6
Manipur	49.8	25.7	24.1	47.2	19.1	28.1	69.1	27.4	41.7	49.9	19.7	30.2
Uttarakhand	54.7	22.1	32.6	57.9	7.3	50.6	45.1	33.2	11.9	50.0	12.3	37.7
Nagaland	-	-	-	92.2	0.0	92.2	43.5	0.0	43.5	36.8	15.2	21.6
Karnataka	62.8	28.0	34.8	60.5	15.3	45.2	63.3	27.2	36.1	59.2	19.8	39.4
Arunachal Pradesh	67.1	28.2	38.9	38.1	11.0	27.1	55.2	22.9	32.3	54.5	12.6	41.9
Daman & Diu	43.7	2.4	41.3	58.7	17.8	40.9	79.3	0.7	78.6	62.5	5.4	57.1
Meghalaya	61.0	43.5	17.5	77.0	16.5	60.5	58.8	41.9	16.9	62.8	1.5	61.3
Rajasthan	48.8	34.5	14.3	49.2	17.4	31.8	56.2	26.4	29.8	52.4	8.5	43.9
Gujarat	60.5	25.7	34.8	59.4	13.4	46.0	65.1	20.6	44.5	62.0	12.2	49.8
Low Human Development [Below India average of 0.633] (0.630-0.571)												
Andhra Pradesh	61.4	45.3	16.1	58.7	20.0	38.7	59.5	32.5	27.0	55.7	13.1	42.6
Tripura	64.5	32.1	32.4	62.9	26.6	36.3	58.7	21.7	37.0	59.4	27.3	32.1
West Bengal	62.2	12.9	49.3	61.5	16.2	45.3	59.9	18.5	41.4	63.0	17.9	45.1
Dadra & Nagar Haveli	100.0	33.3	66.7	36.4	5.3	31.1	78.5	8.4	70.1	62.1	10.5	51.6
Chhattisgarh	56.1	41.8	14.3	52.4	25.4	27.0	58.8	29.7	29.1	52.6	20.9	31.7
Assam	61.1	19.1	42.0	62.2	7.5	54.7	53.5	8.3	45.2	54.0	9.9	44.1
Odisha	62.9	21.6	41.3	56.9	18.6	38.3	59.2	11.3	47.9	61.0	10.2	50.8
Madhya Pradesh	57.1	23.4	33.7	53.4	12.9	40.5	58.4	12.1	46.3	53.7	9.6	44.1
Uttar Pradesh	48.8	18.4	30.4	54.2	11.7	42.5	50.1	11.2	38.9	52.6	8.5	44.1
Jharkhand	54.0	18.5	35.5	46.7	4.8	41.9	49.2	12.4	36.8	54.7	7.6	47.1
Bihar	49.1	5.1	44.0	44.9	4.5	40.4	46.0	3.0	43.0	41.5	3.4	38.1
All-India	**54.7**	**24.3**	**30.4**	**56.1**	**15.9**	**40.2**	**56.2**	**20.6**	**35.6**	**56.8**	**13.8**	**43.0**

Source: *NSS Report No.563: Employment and unemployment situation among social groups in India*

For both rural and urban males as well as females, the LFPRs for each social category vary widely across the Indian states and territories in variation to the level of economic development attained by the states as well as in variation to the education level attained by the people in each such categories along with intra variation of people in each category across the states. In rural regions, female LFPRs were much higher for STs compared to those of other social categories in most of the Indian States. Similarly, in urban regions also, female LFPRs were well above for STs compared to those of other social categories in most of the Indian states. Thus, besides survival urgency and enjoyment of economic comfort, social norms in terms of caste also have played significant role in female labour force participations in both rural and urban regions of the Indian states.

The male-female discrepancy in LFPRs is observed to be quite prominent for all the social groups with male LFPR much higher than female LFPR in rural as well as in urban regions of India and in its all states, except for rural SCs in Mizoram and urban STs in Kerala. In rural areas, the male-female discrepancy in labour force participations with higher male LFPR compared to female LFPR was well above for non-SC/ST population compared to those of SC and ST population in most of the Indian States. Likewise, in urban regions, the male-female discrepancy in labour force participations with higher male LFPR compared to female LFPR was quite higher for Other Category people compared to those of SCs, STs and OBCs in most of the Indian States.

The social dimension of male-female labour force participations in rural and urban regions of India and its states reveal that the composition of ST population in the total population of India and its states also determines female labour force participation rates in rural and urban regions of India and its states. In both rural and urban regions of four ST population dominated Indian states, namely Arunachal Pradesh, Meghalaya, Nagaland and Mizoram as per census 2010-11, female LFPRs are comparatively higher than those of the most other Indian states as shown in Table 2.

Level of education also enables women to participate in paid works as well as encourage them to be free themselves from social norms. The usual notion is that having higher levels of education, women become more productive, and so their chances of earning should have risen, contributing greater to labour force participation. However, a study (Das & Desai, 2003) has suggested that both cultural factors, such as norms restricting the mobility of women, and structural factors, such as a lack of appropriate job opportunities for educated women, play important roles in determining U-shaped relationship between women's education and labour force participation in India. The information on level of general education and literacy vis-à-vis female labour force participations in Indian states is furnished in Table 4.

Despite the general expectation of an increase in female labour force participations with their increased level of educational attainment and thereby improved job prospects, in both the rural and urban segments of Indian states negative association is observed between females LFPRs and proportion of female attained graduation or higher level education. For instances, in rural Kerala and Manipur the proportion of female attained graduation or above level education is 7.5 per cent and 5.7 per cent respectively, and their respective female LFPRs are 25.8 per cent and 27.0 per cent, while in rural Maharashtra and Andhra Pradesh the proportion of female attained graduation or above level education is 2.0 per cent and 2.2 per cent respectively, and their respective female LFPRs are 38.9 per cent and 44.8 per cent. Moreover, despite attainment of much higher proportion of women in graduation and above education level in urban India and in the urban tracts of each of its states compared to that in rural India and in the rural tracts of each of its states, the urban female LFPRs is lower compared to the rural female LFPRs in India and in each of its states. Generally, with the increase in family

income higher proportion of women attain graduation or higher level education, while because of limited high quality, flexible job opportunities many of such women are not involved in paid work in rural and urban India and in the rural and urban tracts of its states.

Table 4: General Education and Literacy Gain vis-à-vis LFPRs by Rural-Urban Female in Indian States: 2011-'12

States & Union Territories of India%	Rural								Urban							
	% of Female (≥16years) Attained General Education Level					Liter-acy rates	LFPRs	Gen-der Dis-crep-ancy	% of Female (≥16years) Attained General Education Level					Liter-acy-rates	LFPRs	Gen-der Dis-crep-ancy
	Up to IV	VII & X	XII	Certi-ficate/ Dip-loma	Gradu-ation & above				Up to IV	VII & X	XII	Certi-ficate/ Dip-loma	Gradu-ation & above			
High Human Development (0.752-0.702)																
Kerala	22.9	46.1	10.3	3.6	7.5	90.9	25.8	32.5	17.0	44.9	12.3	3.4	16.1	93.3	22.2	34.5
Goa	17.8	35.6	12.9	2.1	6.4	76.7	21.2	37.4	9.8	35.6	15.6	2.2	22.6	87.9	17.4	35.2
Chandigarh	15.7	25.9	27.9	0.0	9.8	84.6	4.7	52.0	13.2	29	14.3	0.6	24.2	81.3	13.5	44.4
Delhi	17.5	32.5	9.2	0.0	30.8	91.9	14.6	39.8	11.9	23.6	16.4	1.5	24.8	81.9	10.9	43.9
Puducherry	23.2	36.5	10.9	4.0	6.6	84.8	22.3	29.8	18.1	39.1	11.3	5.5	14.8	89.9	15.3	41.0
Lakshadweep	24.3	33.9	17.3	5.6	1.4	85.1	17.7	42.1	28.3	39.4	6.4	4.5	4.1	84.9	17.8	40.4
Himachal Pradesh	20.7	29.5	13.2	1.1	5.2	74.2	52.9	1.8	12.0	31.1	17.8	1.4	22.1	87.0	23.6	37.6
Sikkim	46.7	24.4	4.0	0.0	2.1	81.9	49.2	9.4	27.6	40.2	16	0.3	6.4	92.5	27.4	35.4
Medium Human Development (0.699-0.638)																
Jammu & Kashmir	12.8	28.1	6.3	0.2	3.2	59.2	26.3	29.6	10.4	28.7	11.8	0.9	17.7	74.0	14.5	41.8
Punjab	23.1	27.9	10.3	0.2	3.3	70.6	23.7	34.2	14.5	29.5	15.6	1.5	16.4	80.1	14.1	44.5
Haryana	19.1	26.7	8.1	0.2	3.5	63.8	16.4	36.8	13.5	27.9	12.3	1.1	22.3	80.2	10.2	43.3
A & N Islands	28.8	31.7	8.2	3.9	5.2	80.2	30.0	30.3	18.7	37.1	7.4	9.9	11.7	86.7	24.8	38.5
Maharahstra	20.5	30.3	7.0	0.8	2.0	66.6	38.9	19.3	16.5	35.8	13.4	1.8	15.8	85.2	17.2	38.8
Mizoram	44.8	40.1	3.9	0.1	2.3	92.3	40.5	19.4	20.0	62.3	9.4	0.6	6.9	98.4	26.7	24.0
Tamil Nadu	23.3	25.9	7.7	1.6	3.5	68	38.6	22.1	20.7	30.9	13.7	3.1	12.8	82.8	21.1	38.8
Manipur	17.5	42.0	9.9	0.5	5.7	79.6	27.0	25.3	9.0	43	17	0.4	14.5	86.3	20.4	27.9
Uttarakhand	22.8	27.3	7.9	0.1	5.0	70.6	31.5	15.0	15.3	25.2	14.5	0.6	22.9	82.2	10.8	41.1
Nagaland	21.9	45.1	15.1	0.4	7.1	91.3	37.1	21.9	14.0	49.7	16.3	1.5	15.3	96.9	22.4	28.5
Karnataka	18.9	27.7	5.2	1.0	1.8	61.3	28.9	33.1	14.0	33.2	15.3	1.9	16.2	82.9	17.1	42.3
Arunachal Pradesh	24.8	28.3	7.3	0.5	3.0	69.9	28.2	21.0	17.0	38.8	18.8	0.9	7.8	86.9	13.9	33.6
Daman & Diu	14.3	35.1	11.9	3.9	18.2	87.6	3.4	66.0	17.5	40.1	9.1	0	7.2	80.6	15.2	44.3
Meghalaya	46.9	38.6	6.2	0.1	1.9	95.1	39.2	13.7	16.1	46.1	20.3	0.3	15.7	98.9	21.0	30.5
Rajasthan	16.2	14.1	2.4	0.1	2.4	47.6	34.9	15.1	18.8	24.6	9.1	0.3	13.3	70.5	14.4	36.3
Gujarat	28.4	18.4	3.5	0.2	2.9	61.4	27.9	32.3	19.3	37.7	11.8	1.5	10.3	83.1	13.5	47.2
Low Human Development [Below India average of 0.633] (0.630-0.571)																
Andhra Pradesh	16.1	19.8	4.7	0.2	2.2	50.8	44.8	16.4	16.8	28.3	13.5	1.1	13.2	76.5	18.0	39.6
Tripura	41.1	31.1	1.2	0.1	1.4	79.6	28.7	31.2	25.6	40.5	9	0	13.8	89.8	26.0	33.4
West Bengal	30.5	23.6	2.3	0.0	1.7	65.1	19.4	40.8	19.5	35.5	10	0.6	16.1	83.4	18.6	44.4
Dadra & Nagar Haveli	15.4	25.8	2.1	0.0	0.8	55.7	16.1	32.7	20.6	22.3	27.2	3.5	11.1	85.6	11.5	46.1
Chhattisgarh	31.6	19.8	3.4	0.0	1.1	65	41.6	14.7	19.5	28.1	12.3	0.2	12.9	76.1	25.2	26.5
Assam	34.2	34.1	4.4	0.3	1.6	79.1	12.9	43.5	20.7	41	15.2	0.1	11.9	90.0	9.7	47.6
Odisha	23.8	26.8	4.3	0.1	2.1	62.2	25.1	35.5	19.0	31.2	9.2	0.3	11.2	74.4	15.8	44.5
Madhya Pradesh	23.9	17.9	3.9	0.1	1.6	58.3	23.9	32.5	19.5	26.1	14	0.1	15.6	78.8	11.9	41.4
Uttar Pradesh	14.4	19.2	5.5	0.1	2.5	52.5	17.8	31.8	13.8	22.9	10.8	0.3	17.2	68.4	10.6	42.7
Jharkhand	19.9	20.2	2.8	0.0	0.9	56.1	20.4	33.8	15.0	29.5	14.7	0.2	14.2	77.7	7.3	43.0
Bihar	19.1	16.1	4.1	0.1	1.2	53.7	5.8	42.9	19.5	29.7	10.5	0.7	8.2	74.5	5.4	38.7
All-India	**21.3**	**23.2**	**5.2**	**0.4**	**2.4**	**60.5**	**25.3**	**30.3**	**17.0**	**31.1**	**12.8**	**1.3**	**15.2**	**79.9**	**15.5**	**40.8**

Source: *NSS Report No.563: Employment and unemployment situation among social groups in India*

In the rural tracts of most of the Indian states with higher human development, proportion of females attained graduation and above level education as well as literacy rate is comparatively higher, but the female labour force participations is relatively lower compared to that in the rural tracts in India and in most of the states with moderate and low level of human development. Moreover, in the rural tracts of the Indian states where the proportion of females attained higher secondary and above level education is relatively higher, their female labour force participation is comparatively lower in general. So, the Indian states apparently support the inverse relationship between proportions of female attained higher education and their labour force participation rates. Now, to judge whether this relationship will last or not, it is needed to analyse the LFPRs across the levels of education people attained in Indian states. However, because of unavailability of LFPRs data across education levels in Indian states, (WPR) is used as a proxy of LFPR in this paper. The worker population ratio is defined as per cent of employed people to total people. Table 5 below shows rural-urban WPRs by females and males (≥ 16 years) across general education levels in Indian sates below.

The WPRs for females of 15 years and above is relatively higher for those with nil/primary level education than those for females with twelfth grade or higher level of education or education levels as whole in both the rural and urban tracts of India and its most states, especially states with moderate to low level of human development. This is also true for the WPRs for males of 15 years and above. Females with nil/low level education can involve themselves in low quality, low skill and low paid works, especially in rural regions where they have access to be involved in informal sector like agriculture for their survival necessity, while females at graduate and above level education desire to be involved in skilled, high paid jobs, especially in organised sector as well as in flexible jobs. However, with limited presence of such jobs, the WPRs for such females is relatively lower compared to those of the females at nil/low education level. In the urban tracts of the Indian states of high level of human development the presence of such high quality jobs is comparatively higher, and thereby the WPRs for females of 15 years and above is relatively higher for those having twelfth grade or overall higher level of education than those for females at nil/low level education in the Indian states with high human development like Kerala. Despite greater availability of such high quality jobs in the urban regions compared to the rural regions, the WPRs for females of 15 years and above is relatively higher for females with twelfth grade or higher level of education in rural India and in the rural tracts of its most states than those in urban India and in the urban tracts of its most states primarily because of greater economic comfort of such females in the urban regions. Thus, with increases in household income, females get higher chance to get higher levels of education and it keeps them away from labour force as in urban India, while with lower education and income levels, the high work participations by Indian rural females is explained by their need to have an income source.

The WPRs for females of 15 years and above across different education levels decline from relatively higher value at nil/primary level of education, become minimum generally at secondary/higher secondary level of education, and increase with higher level of education beyond twelfth standard in both the rural and urban regions of India and in its almost all states. This is also true for the WPRs for males of 15 years and above across different education levels in both the rural and urban regions of India and in its most states. The experiences of both rural and urban India and of its most states regarding the relationship between LFPR/WPR of females/males and the levels of education establishes the 'U' shape hypothesis regarding the relationship between LFPR/WPR of females/males and the levels of education nullifying their inverse relationship. The increasing work participations for rural and urban females with higher

levels of education beyond class twelfth standard connotes higher economic empowerment for the females with higher levels of education as they

Table 5: Rural-Urban WPRs by Females & Males (≥16years) across General Education Levels in Indian States: 2011-'12

States & Union Territories of India	Rural								
	Female								
	General Education Levels								
	Not Liter-ate	Up to V	VIII	X	XII	UG	PG	X & Above	All
High Human Development (0.752-0.702)									
Kerala	24.5	31.9	29.3	26.0	18.6	32.7	43.6	27.3	28.6
Goa	20.8	20.2	39.7	20.5	3.4	64.3	100.0	26.2	25.9
Chandigarh	17.6	5.7	5.7	0.0	3.3	12.5	84.2	4.6	7.6
Delhi	17.1	2.2	0.4	31.7	3.3	39.9	14.6	31.0	19.6
Puducherry	41.0	43.5	33.1	2.1	2.0	58.6	7.9	13.1	28.8
Lakshadweep	3.1	14.2	36.0	0.0	4.6	71.0	100.0	9.4	13.4
Himachal Pradesh	68.9	80.9	65.0	59.4	54.8	50.9	75.1	57.6	66.7
Sikkim	69.0	79.4	52.7	28.4	81.5	71.9	19.3	44.0	67.4
Medium Human Development (0.699-0.638)									
Jammu & Kashmir	37.2	46.4	35.0	23.1	28.9	25.6	33.4	25.3	35.5
Punjab	33.8	38.8	25.9	25.8	21.6	25.4	46.3	24.6	31.3
Haryana	25.8	24.0	14.3	17.2	16.4	15.9	22.9	17.3	21.8
A & N Islands	38.6	33.8	33.8	21.2	14.8	60.8	41.0	27.2	33
Maharahstra	60.4	57.4	50.6	38.0	18.1	30.4	13.5	31.4	51.5
Mizoram	55.1	61.0	56.3	54.5	60.0	60.5	25.4	56.4	58.3
Tamil Nadu	59.7	58.8	45.8	25.2	22.4	33.2	52.4	26.6	49.4
Manipur	38.4	48.1	33.8	35.9	26.9	36.3	44.0	33.8	37.4
Uttarakhand	45.9	49.2	45.0	29.8	37.8	16.4	37.2	30.9	42.9
Nagaland	37.9	59.8	48.3	29.8	18.1	14.6	26.0	23.1	39.6
Karnataka	46.9	38.8	32.1	22.8	12.9	42.1	81.3	22.6	38
Arunachal Pradesh	55.4	42.1	32.1	19.3	25.8	22.1	36.5	22.4	40.9
Daman & Diu	3.3	7.3	0.0	2.4	0.0	0.0	0.0	6.7	5.2
Meghalaya	80.3	72.3	49.5	44.1	46.2	93.3	12.5	48.5	61.9
Rajasthan	58.5	44.5	32.7	17.9	13.3	29.6	53.1	21.7	50.2
Gujarat	44.5	40.2	31.1	20.5	12.1	6.8	83.5	20.5	38.4
Low Human Development [Below India average of 0.633] (0.630-0.571)									
Andhra Pradesh	67.3	58.5	48.0	35.0	16.1	40.9	32.3	30.9	57.8
Tripura	38.9	33.7	21.8	11.1	24.3	33.4	0.8	16.3	30.5
West Bengal	30.4	27.8	15.2	18.3	14.0	25.1	49.9	18.8	25.8
Dadra & Nagar Haveli	25.2	27.4	8.3	36.2	52.0	44.0	100.0	41.4	24.8
Chhattisgarh	69.1	70.1	37.7	26.8	39.6	29.0	51.1	31.6	61.1
Assam	20.4	18.2	13.8	8.4	17.7	31.4	46.3	13.0	16.9
Odisha	45.7	34.0	23.5	10.8	10.8	15.5	38.3	12.0	34
Madhya Pradesh	46.2	31.0	20.6	9.2	16.9	12.7	41.4	13.4	35.8
Uttar Pradesh	33.7	23.3	16.5	12.6	15.8	16.1	22.0	15.0	27.3
Jharkhand	34.0	25.9	23.9	18.3	20.1	20.3	37.4	19.0	29.4
Bihar	10.3	3.9	5.9	4.9	3.5	23.1	11.5	6.6	8.2
All-India	**41.8**	**36.1**	**27.6**	**22.2**	**17.6**	**26.7**	**41.6**	**22.3**	**35.2**

States & Union Territories of India	Rural								
	Male								
	General Education Levels								
	Not Liter-ate	Up to V	VIII	X	XII	UG	PG	X & Above	All
High Human Development (0.752-0.702)									
Kerala	53.1	75.4	85.7	68.2	52.1	75.2	83.6	68.2	74.9
Goa	28.8	76.2	65.9	78.1	60.8	94.3	100.0	71.8	66.9
Chandigarh	98.4	98.8	94.3	78.5	98.0	84.9	62.7	86.8	91.0
Delhi	93.7	57.9	67.3	27.4	97.1	57.3	100.0	75.8	72.9
Puducherry	89.0	93.4	81.5	62.6	30.5	94.5	100.0	56.2	72.6
Lakshadweep	59.8	83.6	65.2	68.0	95.5	100.0	100.0	79.1	74.9
Himachal Pradesh	71.1	90.7	67.0	72.8	65.2	75.3	95.4	73.0	75.5
Sikkim	65.9	93.6	51.6	63.7	89.2	87.6	86.9	77.1	79.2
Medium Human Development (0.699-0.638)									
Jammu & Kashmir	86.5	86.6	79.1	64.5	55.3	57.2	60.2	60.0	75.2
Punjab	82.1	87.1	70.2	74.4	70.8	65.5	77.2	72.3	77.7
Haryana	79.0	90.4	67.6	69.8	54.8	65.8	71.9	65.2	73.8
A & N Islands	76.9	86.8	83.6	64.0	57.7	92.0	98.5	70.7	79.3
Maharahstra	81.3	90.4	81.3	71.7	65.7	71.7	80.3	69.8	78.7
Mizoram	69.4	92.6	85.2	74.6	75.5	94.3	83.0	80.3	86.3
Tamil Nadu	82.0	91.9	84.9	68.4	57.5	69.6	76.8	66.0	79.8
Manipur	81.6	87.7	74.0	72.9	62.2	81.4	57.9	70.8	74.9
Uttarakhand	73.4	86.0	71.2	52.1	56.5	69.5	84.1	58.0	69.2
Nagaland	92.3	86.2	73.3	65.1	59.1	47.0	39.4	56.4	69.3
Karnataka	90.2	94.7	78.5	68.8	55.1	91.7	91.6	68.6	81.6
Arunachal Pradesh	88.8	80.4	65.4	50.1	53.9	78.0	100.0	58.3	72.6
Daman & Diu	80.7	91.9	97.6	85.8	51.7	100.0	100.0	92.4	92.4
Meghalaya	86.3	90.3	73.7	68.3	77.6	95.8	100.0	73.7	80.8
Rajasthan	89.0	88.0	70.6	56.4	48.9	73.1	85.2	58.9	77.2
Gujarat	85.5	92.9	87.8	69.6	66.8	86.3	81.8	72.7	84.6
Low Human Development [Below India average of 0.633] (0.630-0.571)									
Andhra Pradesh	90.4	92.5	79.9	72.4	40.3	67.3	58.1	62.8	80.8
Tripura	82.9	93.1	70.0	63.7	53.1	75.5	61.4	62.2	80.0
West Bengal	87.1	88.8	78.6	65.7	68.6	82.0	89.1	70.5	82.9
Dadra & Nagar Haveli	98.5	98.7	36.8	64.3	31.4	74.7	100.0	64.8	73.2
Chhattisgarh	89.8	93.7	75.7	64.8	70.6	78.4	90.2	70.0	82.8
Assam	85.7	92.6	74.6	63.8	64.2	79.8	93.8	66.2	79.6
Odisha	84.5	91.6	86.5	68.7	61.6	84.6	72.4	69.6	83.6
Madhya Pradesh	92.0	91.5	73.7	63.6	71.3	84.9	75.6	69.0	82.8
Uttar Pradesh	89.9	86.1	75.1	66.3	70.3	81.8	90.7	71.3	80.7
Jharkhand	92.8	93.2	75.4	68.7	67.0	82.7	98.5	70.2	83.9
Bihar	91.7	83.5	63.6	59.4	58.2	75.7	91.6	62.3	76.3
All-India	**88.0**	**89.2**	**77.0**	**66.8**	**61.8**	**76.9**	**82.8**	**67.6**	**80.0**

States & Union Territories of India	Urban																	
	Female									Male								
	General Education Levels									General Education Levels								
	Not Liter-ate	Up to V	VIII	X	XII	UG	PG	X & Above	All	Not Liter-ate	Up to V	VIII	X	XII	UG	PG	X & Above	All
High Human Development (0.752-0.702)																		
Kerala	18.7	19.8	20.4	20.3	17.3	42.7	42.7	28.1	24.1	49.7	72.2	87.3	63.0	44.5	79.0	77.2	66.2	73.1
Goa	15.8	23.7	7.7	7.1	7.5	42.3	61.1	23.1	20.2	72.1	64.5	59.6	71.7	50.2	79.9	99.5	69.2	67.4
Chandigarh	14.2	11.6	20.0	11.0	10.8	26.0	18.5	16.7	16.0	94.7	88.8	81.3	68.9	48.4	75.0	75.9	66.4	75.7
Delhi	13.1	8.4	2.7	8.4	6.2	24.3	38.6	16.8	13.8	85.3	80.1	72.4	68.4	62.4	74.3	84.9	70.5	73.2
Puducherry	27.5	23.1	17.0	7.5	3.3	28.0	43.7	16.8	19.2	60.0	82.2	74.3	65.9	53.6	78.5	93.8	70.6	72.5
Lakshadweep	5.3	13.3	10.2	11.0	8.3	30.8	82.3	23.3	14.0	36.2	88.6	68.2	49.9	84.8	82.3	93.0	68.3	72.0
Himachal Pradesh	23.1	41.3	13.7	18.6	16.4	31.4	66.8	27.5	27.1	83.3	88.1	61.2	76.1	62.3	87.4	83.4	76.0	76.1
Sikkim	21.7	53.6	29.0	40.2	16.0	38.4	100.0	34.0	37.4	59.6	77.3	64.7	91.5	97.5	84.6	100.0	92.3	81.1
Medium Human Development (0.699-0.638)																		
Jammu & Kashmir	12.9	18.7	9.7	8.1	14.2	20.7	43.4	18.4	15.4	80.1	85.8	69.2	62.1	59.9	73.1	68.1	65.3	70.5
Punjab	13.3	14.1	15.3	11.8	14.7	23.7	44.6	20.9	17.6	83.6	85.0	67.0	73.5	69.3	76.4	84.8	73.4	75.8
Haryana	8.9	9.0	12.3	5.2	9.2	17.3	44.9	15.8	13.0	81.7	81.1	66.2	60.8	57.3	76.4	79.1	67.8	70.0
A & N Islands	16.0	20.0	17.4	14.5	24.2	43.4	60.8	36.1	26.1	83.2	83.1	74.7	66.7	71.1	98.0	96.6	78.1	78.6
Maharahstra	24.9	27.2	18.8	11.5	11.1	30.1	52.1	19.6	21.6	71.9	80.4	78.8	68.0	64.4	78.8	91.3	71.1	73.9
Mizoram	35.0	45.4	36.0	19.0	29.1	63.4	74.2	30.3	35.6	89.6	87.1	74.1	56.9	58.9	80.9	80.6	65.4	71.8
Tamil Nadu	31.2	36.1	23.7	16.2	10.2	26.6	51.7	20.1	26.0	82.7	87.3	82.1	67.6	54.8	78.8	84.5	70.1	76.4
Manipur	38.2	29.2	23.4	21.5	14.9	32.9	34.0	22.6	25.9	75.1	89.0	64.5	66.7	65.9	78.1	81.9	71.0	70.9
Uttarakhand	10.2	10.1	9.5	3.0	5.8	16.4	40.7	14.0	12.0	90.3	75.8	74.2	57.2	56.1	80.1	87.1	67.7	72.5
Nagaland	16.4	18.2	21.9	10.8	21.1	27.3	4.4	17.7	18.7	46.9	69.5	55.6	45.0	52.4	63.4	56.7	54.9	56.2
Karnataka	24.3	23.0	15.0	14.4	14.8	35.1	59.1	22.4	21.9	77.0	88.3	72.2	68.9	64.1	83.3	86.8	74.2	75.9
Arunachal Pradesh	28.4	21.2	25.6	13.1	13.2	13.8	100.0	13.8	19.3	90.2	86.4	66.5	39.4	53.6	84.5	92.6	61.4	67.0
Daman & Diu	35.5	26.1	12.5	11.1	0.0	38.3	42.3	14.1	21.4	28.6	75.7	84.2	57.9	90.7	76.7	100.0	80.9	80.5
Meghalaya	37.7	37.9	24.4	18.9	24.1	41.3	72.2	28.5	29.2	96.3	80.1	60.9	53.9	51.5	81.5	81.8	64.4	66.0
Rajasthan	24.9	20.6	11.6	11.3	5.9	16.3	40.2	15.4	19.1	76.5	79.9	78.3	48.8	53.4	77.3	79.6	61.3	69.2
Gujarat	23.1	12.5	15.9	13.2	17.6	19.0	32.4	18.2	17.7	89.4	86.9	82.3	72.1	67.8	81.0	84.3	74.2	79.7
Low Human Development [Below India average of 0.633] (0.630-0.571)																		
Andhra Pradesh	33.4	28.3	20.4	10.0	9.4	18.3	37.7	14.1	22.5	84.2	88.0	83.9	67.0	47.1	73.1	90.9	66.9	74.0
Tripura	19.4	16.4	9.3	15.4	5.7	16.0	33.3	14.9	14.3	81.3	90.3	69.2	48.1	49.4	65.7	65.5	56.5	68.0
West Bengal	29.8	25.6	15.6	11.8	15.3	23.9	38.5	18.5	21.4	81.4	85.0	75.7	64.1	62.3	73.3	77.1	67.8	74.5
Dadra & Nagar Haveli	22.1	6.8	1.6	22.0	8.2	36.6	100.0	23.0	16.9	76.3	99.8	73.9	82.7	78.9	100.0	0.0	89.4	86.7
Chhattisgarh	43.6	35.0	21.7	15.4	11.4	37.6	69.8	28.6	32.6	76.5	86.2	72.7	62.7	54.8	78.9	78.8	65.7	72.6
Assam	14.1	10.4	6.4	11.1	7.8	20.2	76.7	13.9	11.6	83.1	86.6	70.8	64.5	57.5	81.3	80.8	68.6	72.8
Odisha	35.2	19.9	7.1	4.1	5.4	32.0	21.5	13.7	19.8	87.0	85.6	84.2	70.2	57.1	78.6	88.3	71.6	78.2
Madhya Pradesh	23.6	16.4	11.2	5.0	7.6	23.0	23.0	12.8	16.0	83.1	84.6	67.7	60.1	57.7	82.5	80.9	68.8	73.3
Uttar Pradesh	20.4	15.6	11.2	4.6	7.4	9.1	20.5	9.0	14.2	88.4	87.6	74.0	58.5	53.5	72.9	81.1	64.4	74.3
Jharkhand	13.8	9.3	4.9	2.4	3.6	11.5	29.9	6.8	8.8	87.9	79.8	59.4	62.8	53.2	76.6	89.0	67.2	70.0
Bihar	9.9	6.1	2.5	1.5	7.7	8.50	24.6	5.7	6.7	89.5	85.6	58.8	47.6	43.9	70.4	73.4	53.5	63.6
All-India	**24.0**	**22.3**	**15.8**	**11.0**	**10.8**	**23.7**	**39.5**	**17.3**	**19.5**	**83.2**	**84.7**	**76.5**	**65.1**	**58.3**	**77.1**	**84.4**	**68.7**	**74.1**

Source: *NSS Report No.563: Employment and unemployment situation among social groups in India*

involve in high quality jobs in rural and urban India as well as in both the rural and urban regions of its most states.

The WPRs for females of 15 years and above is comparatively higher at nil/primary level of education than those for females with under graduate/post graduate level of education in rural India and in most of its states with moderate to low level of human development. With greater high quality, flexible job opportunities in most of the Indian states with higher level of human development, the WPRs for females of 15 years and above is relatively greater at under graduate/post graduate level of education than those for females with nil/primary level of education in such states. With greater low quality, unskilled and low paid job opportunities under informal sector in the rural segments of most of the Indian states, especially states with moderate to low level of human development, in the rural areas of such states push factor derived from the urge of survival becomes more effective compared to the pull factor in determining the WPRs for females of 15 years and above. With greater high quality, flexible job opportunities along with lower unskilled job opportunities in the informal sector in the urban regions of the Indian states irrespective of their level of human development, the WPRs for females of 15 years and above is comparatively higher at under graduate/post graduate level of education than those for females with nil/primary level of education in the urban regions of such states. Thus, in the urban regions of the Indian states pull factor (e.g. higher payment, self-manifestation, etc.) becomes more active compared to push factor in determining the WPRs for females of 15 years and above.

A significant degree of gender discrepancy in work participations between males and females of 15 years and above persist with tilted value for males at all levels of education in both the rural and urban regions of the Indian states with few exceptions. The gender discrepancy in work participations between males and females of 15 years and above becomes highest at nil/low level of education, while it becomes lowest at under graduate/post graduate level of education in urban India and in the urban regions of its most states. Hence, the work participations for urban females of 15 years and above not only increases with higher levels of education, especially beyond twelfth standard education in India and its most states, but the gender discrepancy in work participations also declines over such higher levels of education. The gender discrepancy in work participations between rural males and females of 15 years and above becomes highest at lower level of education, while it becomes lowest at higher levels of education, i.e., class twelfth standard and above in rural India and in the rural regions of most of its states. Undoubtedly with increases in education level beyond class twelfth standard, the work participations for rural females of 15 years and above increases, and the gender discrepancy in work participations also declines over such higher levels of education in rural India and in the rural tracts of its most states. However, in the rural regions of several states like Maharashtra and Tamil Nadu, especially in hilly states like Himachal Pradesh, Sikkim and Mizoram, such gender discrepancy in work participations is highest at lower level of education and lowest at higher level of education, especially at under graduate/post graduate level of education, while the work participations for rural females increases with higher levels of education. The gender discrepancy in work participations between males and females of 15 years and above is comparatively higher for lower as well as for higher levels of education in urban Indian and in the urban regions of its most states compared to those in rural India and in the rural regions of most of its states.

5. Challenges for Raising Rural and Urban Female LFPRs

Undoubtedly the Indian rural and urban females can empower themselves through participations in paid works, especially through the involvement in high quality jobs by the females with higher levels of education. However, to enter the labour market and to obtain decent jobs, they face a number of barriers which are disproportionately subject to a wide range of challenges including access to employment, decision to enter in labour market guided by social norms, choice of work, working conditions, job security, wage parity, discrimination and balancing between paid work and family obligations (Employment Statistics, 2023).

In Indian society, besides providing immense unremunerated services towards caring family members as family commitment in the household core, females contribute indirectly to the work productivity of family earners as unpaid labour. Additionally, they contribute directly to production by participating personally in the work process as paid labour, or by supporting and supplementing the direct work contributions of family earners through additional unpaid labour, especially in rural areas, where agricultural or artisanal activity is carried out collectively by family labour. Thus, to enter in labour market, the females continually have to balance family commitments against livelihood opportunities, and thereby many of them perform marginal rather than main work. Thus, balancing employment with household responsibilities, which fall disproportionately on women, becomes more challenging.

With increases in higher levels of education by the females and availability of lucrative and flexible job opportunities, the capacity of such balancing as well as opportunity of greater earning of the higher educated females increase. Moreover, with increases in higher education, the fertility rates and thereby the time involvement for child caring of the higher educated females decreases. Thus, both in rural and urban India and its most states, female work participations increase with their higher levels of education after attaining minimum value as shown in Table 5. Under this context, whether such higher educated females will participate in the labour market or not depends on their attitude to be manifested themselves by involving in such jobs for utilising their higher education which is again dependent upon their challenging power as well as to enjoy the economic comfort which they had. So, the associated challenges are to provide greater access to higher education for females and to take some pro-female steps for this purpose as well as to create greater level of flexible and lucrative job opportunities for higher educated rural and urban females. In India at the present economic scenario, a significant level of rural-urban gender disparity in work participations between males and females of 15 years and above still persist even at higher levels of education primarily because of social norms, *inter alia*.

The gender gap in India's labour force is attributed primarily to conservative social norms and owing to both demand side (work opportunities) and supply side (availability of women for work) factors (Kumar, 2024). Social norms are informal, mostly unwritten rules of behaviour and social conduct that determine the acceptable and appropriate actions and attitude in the given social context. In Indian society, the prevalent social norms for female are 'Female Homemaker norm' which assigns that the role of taking care of home and children to Females, and for males are 'Male Breadwinner norm' which assigns the responsibility of Household expenses to the Males (Employment Statistics, 2023, *op. cit.*). Thus, the prime social and cultural norm is 'time poverty' among married females (*ibid.*). Since under the Hindu caste system, males outside the family are a source of "pollution" for females, it restricts females from working outside the home for preserving their purity (Chen, 1995). Because these restrictions apply more stringently to upper-caste females in India, lower-caste females often have more professional flexibility and autonomy (Field *et al.*, 2010). Hence, the female LFPRs for STs is well above compared to those for other categories of people in rural and urban India

and in the rural and urban regions of its most states as shown in Table 3. For raising females LFPRs by freeing their time from household core, the norm that females bear primary responsibility for housework and child care might be one of most challenging norms to change in all societies.

Education is the sole factor that significantly influences the female labour force participation as it has an important effect on an individual's decision to participate and capacity to participate in the labour market by avoiding persisting social norms. The theories also support that attainment of higher level of education leads to higher labour force participations and productivity growth. The work participations of females were relatively greater at higher level of education (beyond class twelfth standard) in both rural and urban India and in both the rural and urban regions of its most states as shown in Table 5. For increasing the labour force participations for females along with their higher education, creation of sufficient number of lucrative and flexible job opportunities in both the rural and urban segments of the country is one of the greatest challenges that the policy makers are facing presently.

After maintaining the balance between family commitments against livelihood opportunities, Indian females are heavily represented in the informal economy where their exposure to risk of exploitation is usually greatest and they have the least formal protection. Table 2 shows that female labour force participations is comparatively higher in rural India compared to those in the urban India as well as in the rural regions of its states compared to those in their respective urban regions primarily because of greater involvement of rural females in low paid, insecure and unprotected jobs in the informal sector such as agriculture. Table 5 also supports this view by showing that female work participations become highest at nil/low level of education in rural India and in the rural regions of most of its states. For maintaining the balance between family commitments against livelihood opportunities, the Government of India has undertaken multiple social security measures including pension, gratuity and health care & maternity benefits. While the female works in the formal sector get such social benefits, the low paid, informal female workers are deprived from such benefits. So, provision of such social benefits to all female workers is one of the greatest challenging tasks of the government.

6. Conclusion and Policy Issues

Through involvement in paid work, females can empower themselves as well as can feel and realise a sense of self-worth. At the macro level, greater participation of females in the workforce is pro-growth and pro-development of a country. However, historically the female workforce as well as labour force participations in India is low, and it is much lower compared to those in other developing countries. Female labour force participation is a multidimensional agglomeration of structural and socioeconomic factors. In the era of liberalisation and globalisation more specifically during 1993-'94 to 2011-'12, despite prevalence of congenial factors including rapid economic growth, educational gains, fertility decline, and Government's pro-female labour market policies, India's FLFP rates remain low and have even fallen in recent years. So, the Indian females, particularly the educated females could not contribute to the country's economic growth process as they were expected. Hence, the paper attempts to understand and explain this puzzle resulted from the mismatching between economic growth and FLFP through better understanding the issue by extending the analysis across rural-urban regional dimension as well as across the political states dimension along with associating male-female LFPRs and WPRs and gender disparity in such participations with socio-economic and structural factors including caste population, human development indices, literacy gains and levels of educations of Indian populations. .

For low FLFP in India, the critical factor is very low LFPRs of urban females. However, the better labour force participations for Indian rural females compared to those of their counterpart urban females does not connote any greater comfort for the former, rather it indicates their stringent position as many of such rural females participate in low paid, insecure jobs in informal sector from their survival urgency. Nevertheless, during 1993-'94 to 2011-'12, the LFPRs for both Indian rural and urban females have declined, while the decline is much greater for rural females compared to the urban females along with higher and increased gender discrepancy for the rural females. Thus, during this period the Indian rural females have trapped into livelihood crunch. In this context, the concerned authority has to undertake proper measures for provision of greater social security measures for the rural females as well as to create more non-farm work opportunities for them along with improved rural infrastructure, especially farm infrastructure for raising agricultural productivity.

The rural and urban female and male labour force and work force participations as well gender discrepancy in labour force participations vary widely across the Indian states in variation to their geographical location, prevailing level of human development and state GDP and thereby availability of proper job opportunities as well as caste composition and levels of education attainment of their respective population. The limited job opportunities are mainly appropriated by males in both the rural and urban regions of most of the Indian states with low level of human development/economically poor 'BIMARU' states, and thus in the rural and urban segments of such states female labour force participation is relatively lower and gender gap in labour force participation is comparatively higher, whereas with greater job opportunities in the rural regions of most of the Indian States with high to moderate level of human development/rich states, female labour force participation is relatively higher and gender gap in labour force participation is comparatively lower along with lower female labour force participations and higher gender gap in labour force participation for their counterpart urban females, reflecting greater economic comfort and limited flexible job opportunities for the urban females. Thus, the Government of India has to assert and implement specific pro-females measures for raising the LPPRs and WPRs for the females, especially for the rural females, and thereby empowering them in the Indian states with low level of human development/poor states instead of undertaking uniform measures for all states.

Besides survival necessity and economic comfort, persisting social norms, which vary across caste categories of people, also have significant influence on female labour force participations and the associated gender discrepancy in labour force participations in both the rural and urban segments of Indian society. With more professional flexibility and autonomy for tribal females to participate in work and labour force, the labour force participations for tribal females is relatively higher compared to those for females of other categories in both rural and urban India and in most of its states along with lower gender discrepancy in labour force participations for tribal females. With greater per cent of nil/low education level for tribal males, the labour force participations for males is also relatively higher in rural India and in the rural regions of its most states, while the male labour force participation is comparatively greater for Other Category of males in urban India and in the urban areas of its most states primarily because of their greater access to urban work opportunities through attainment of higher levels of education. However, the LFPRs for more than 90 per cent Indian females who are non-tribal is relatively low, especially in the urban regions. Through provision of lucrative and flexible job opportunities, the concerned authority can increase the LFPRs for urban females, especially for higher educated non-tribal females along with pro-females social security measures including maternity leave.

The experiences of Indian states regarding the relationship between the labour force participations of rural and urban females/males and their levels of education support the 'U' shape hypothesis regarding the relationship between LFPR/WPR of females/males and the levels of education nullifying their inverse relationship. With higher levels of education beyond class twelfth standard, female LFPRs/WPRs increase after attaining minimum value at comparatively lower level of education in both the rural and urban regions of India and in its most states along with declines in gender discrepancy in work participations. However, the female and male WPRs are relatively higher at nil/low level of education than those at twelfth grade or higher level of education in both the rural and urban tracts of India and its most states. This is because females with nil/low level education can easily involve themselves in low quality, low skill and low paid works for their survival necessity, while females at graduate and above level education desire to be involved in skilled, high paid, flexible jobs. Nevertheless, despite greater availability of such high quality jobs in the urban regions, the WPRs for rural working females is relatively higher at twelfth grade or higher level of education in rural India and in the rural tracts of its most states than those in urban India and in the urban tracts of its most states primarily because of greater economic comfort of such females in the urban regions along with persisting social norms that prevent them to participate in work force. Since the educated women are an important part of the workforce, the policy makers have to generate diversified job opportunities, especially part-time, better paid jobs which may assist them to make balance between family commitments against livelihood opportunities in urban areas to incorporate higher educated urban females into work force. To rule out the hindrances of social norms, the policy makers may arrange work from home programmes for the highly educated urban females. Above all, the concerned authority should take a holistic approach to improving labour partitions for Indian females through improving access to and relevance of education and training and skills development programmes, access to multiple social security measures including child care and maternity protection, along with provision of congenial job opportunities.

After analysing multiple issues the paper reveals that reducing work opportunities and livelihood crunch for rural females, lower labour force participations of the higher educated urban females because of their economic comfort as well as availability of limited flexible better paid job opportunities in urban regions, persisting social norms for delivering home care service, more restricted social norms for entry in the labour market for the non-tribal women as well as balancing family commitments and livelihood opportunities are some of the factors through which work participation puzzle for Indian women can be understood and explained.

References

Afridi, F., Dinkelman, T., & Mahajan, K. (2018). Why are fewer married women joining the work force in rural India? A decomposition analysis over two decades. *Journal of Population Economics*, 31, 783-818.

Anderson, S., & Eswaran, M. (2009). What determines female autonomy? Evidence from Bangladesh. *Journal of development Economics*, *90*(2), 179-191.

Andres, L. A., Dasgupta, B., Joseph, G., Abraham, V., & Correia, M. (2017). Precarious drop: Reassessing patterns of female labour force participation in India. *World Bank Policy Research Working Paper*, (8024).

Anitha, S. (2018). RURAL-URBAN GENDER DISCREPANCY IN INDIAN LABOUR MARKET. *Indian Journal of Social Research, 59(5).*

Biswas, B., & Banu, N. (2023). Economic empowerment of rural and urban women in India: A comparative analysis. *Spatial Information Research*, *31*(1), 73-89.

Chand, R., & Singh, J. (2022). WORKFORCE CHANGES AND EMPLOYMENT SOME FINDINGS FROM PLFS DATA SERIES. *Manpower Journal*, *56*.

Chaudhary, R., & Verick, S. (2014). Female labour force participation in India and beyond. *ILO Working Papers*, (994867893402676).

Chen, M. (1995). *A matter of survival: Women's right to employment in India and Bangladesh* (Vol. 38). Oxford: Clarendon Press.

Das, M., & Desai, S. (2003). *Why are educated women less likely to be employed in India?: Testing competing hypotheses*. Washington, DC: Social Protection, World Bank.

Das, M. S., Jain-Chandra, M. S., Kochhar, M. K., & Kumar, N. (2015). *Women workers in India: why so few among so many?*. International Monetary Fund.

Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, *50*(4), 1051-1079.

Employment Statistics in Focus (2023). Female Labour Utilisation in India, Ministry of Labour and Employment, Directorate General of Employment, Government of India, New Delhi, https://dge.gov.in/dge/sites/default/files/2023-05/Female_Labour_Utilisation_in_India_April_2023_final__1_-pages-1-2-merged__1_.pdf, Retrieved on 30th May, 2024

Field, E., Jayachandran, S., & Pande, R. (2010). Do traditional institutions constrain female entrepreneurship? A field experiment on business training in India. *American Economic Review*, *100*(2), 125-129.

Fletcher, E., Pande, R., & Moore, C. M. T. (2017). Women and work in India: Descriptive evidence and a review of potential policies.

Global Data Lab (2021). Subnational Human Development Index,
https://globaldatalab.org/shdi/maps/shdi/IND/, Retrieved on 30th May, 2024

Goldin, C. (1994). The U-shaped female labour force function in economic development and economic history.

Government of India (2011). *Census of India, 2010–11* (electronic copy), Planning Commission of India, Government of India, New Delhi.

Government of India (2010). *Economic Survey, 2009–10*, Ministry of Finance and Oxford University Press, New Delhi.

https://mospi.gov.in/sites/default/files/publication_reports/nss_rep_563_13mar15.pdf

ILO. (2013). Global employment trends 2013: recovering from a second jobs dip. *International Labour Office*.

Kapsos, S., Silbermann, A., & Bourmpoula, E. (2014). *Why is female labour force participation declining so sharply in India?* (pp. 1-51). Geneva: ILO.

Kannan, K. P., & Khan, M. I. (2022). Loss of Job, Work, and Income in the Time of COVID-19. *Economic & Political Weekly*, *57*(2), 37.

Kishor, S., & Gupta, K. (2004). Women's empowerment in India and its states: evidence from the NFHS. *Economic and Political weekly*, 694-712.

Kumar, S. (2024). The Female Workforce in India: Emerging Trends and Insights. ORF
https://www.orfonline.org/expert-speak/the-female-workforce-in-india-emerging-trends-and-insights Retrieved on 31st May, 2024

Lewis, W. A. (1954). Economic development with unlimited supplies of labour.

Mandal, G.C. (2013). Studying the Village Economy of the Darjeeling Mountain Region. *Journal of the Regional Economic Studies*, *4*(1), 78-112.

Menon, S., Tomy, D., & Kumar, A. (2020). Female Work and Labour Force Participation in India–A Meta Study. *Sattva, Disha, and UNDP*, *47*.

MLE (2023). Female Labour Utilisation in India, Employment Statistics in Focus-April 2023, Ministry of Labour Employment, Government of India. https://dge.gov.in/dge/sites/default/files/2023-05/Female_Labour_Utilisation_in_India_April_2023_final__1_-pages-1-2-merged__1_.pdf

Naarisamaata (2023). The Importance of Women Empowerment in India. https://naarisamata.org/women-empowerment/ Retrieved on 29th March, 2024

NSS (several rounds). Employment and unemployment situation among social groups in India.
https://www.mospi.gov.in/download-reports?main_cat=NzIy&cat=All&sub_category=All

Ratho, A. (2020). Promoting female participation in urban India's labour force. *Observer Research Foundation (ORF) Issue Brief No*, *348*, 1-14.

Srivastava, N., & Srivastava, R. (2010). Women, work, and employment outcomes in rural India. *Economic and political weekly*, 49-63.

Sundari, S. (2020). Structural changes and quality of women's labour in India. *The Indian Journal of Labour Economics*, *63*(3), 689-717.

Wong, Y. N. (2012, November). World development report 2012: Gender equality and development. In *Forum for Development Studies* (Vol. 39, No. 3, pp. 435-444). Routledge.

World Bank (2014). Fertility Rate, Total (births per woman) | Data | Table. https://genderdata.worldbank.org/en/indicator/sp-dyn-tfrt-in

World Bank (2015). Urban Population % of Total) | Data | Table. https://data.worldbank.org/indicator/SP.URB.TOTL?locations=KE.

World Economic Forum (2014). The Global Gender Gap Report 2014. World Economic Forum, Basel.
https://www3.weforum.org/docs/GGGR14/GGGR_CompleteReport_2014.pdf