Female Labour Force Participation in India: An Interstate Analysis<br>${ }^{1}$ Anushka Singh, ${ }^{2}$ Surendra Meher<br>${ }^{1}$ Ph.D. Scholar, Department of Economics, Babasaheb Bhimrao Ambedkar University, Lucknow.<br>${ }^{2}$ Associate Professor, Department of Economics, Babasaheb Bhimrao Ambedkar University, Lucknow.


#### Abstract

Globally, labour force participation rate (LFPR) for both male and female has been declining since 1990 and that female participation varies considerably not only across the continents and countries but also have huge inter regional differences within our country India. The paper explores labour force participation of both male and female across the Indian states and diversity in range of FLFPRs across regions of India by utilising the secondary data from Periodic Labour Force Survey (PLFS) to conduct an interstate and inter--regional analysis. It also elucidates major reasons for low FLFPR in India using literature review. The study concludes that more concerted efforts are needed by all the stakeholders to create an enabling environment for boosting female labour force participation to enable them to contribute to the growth process.


KEYWORDS - Female participation, Interstate and inter--regional analysis, Labour Force Participation Rate, Periodic Labour Force Survey, Reasons for low FLFPR.

## 1. INTRODUCTION

Gender equality in participation of economic activity has been a pertinent issue across the world. Women constitute almost half of total population in the world but their contribution to economic activity is far below potential leading to various adverse macroeconomic consequences. They also face significant wage differentials and 'time poverty' as they are already engaged in household unpaid work and adding paid work outside the home adds to their burden thus affecting their physical and mental well-being (Amarender Reddy et al., 2021). This is because labour markets across the world remains divided along gender lines as evident by the varying differences of women's economic development and thus progress toward gender equality seems to have stalled. Globally, labour force participation rate (LFPR) for both male and female has been declining since 1990 and that female participation varies considerably not only across the continents and countries but also have huge inter regional differences within a country.

One such country which is characterized by some of the most glaring levels of gender inequality globally and very low female involvement in wage work is India. Although sustained growth of GDP, education, and access to key infrastructure (electricity, cooking gas and piped water) vastly improved Indians' lives since the early 1990s, trends in female participation rates in India have been particularly perplexing. As per the National Sample Survey (NSS), the all-India LFPR for females first decreased between 1987 and 2000 from $29 \%$ to $26.2 \%$ respectively, then increased again in the period thereafter in 2005 and dropped again after 2005 from $29.4 \%$ to $22.5 \%$, as per the 68th round of National Sample Survey of 2011-12. There was a further decline to as low as $17.5 \%$ until the PLFS of 2017-2018 but thereafter the trend has been improving. Moreover, not only the participation rates of women have been declining, the size of women workforce in absolute numbers is also shrinking. It has been dropped by around 44.5 million in thirteen years - from 148.59 million in 2004-2005 to 104.1 million in 2017-2018 (Sundari, 2020). The driving reason which resulted in an improved figure of female labour force participation during 2000-2005 was due to decline in the growth rate of agricultural sector. This forced the women to take up the role of unpaid family workers thus increasing the rates (Mehrotra \& Sinha, 2017). Thus, this is termed as distress-induced increase in employment witnessed in India. Whereas, the labour force participation rate of men has been much higher than that of females. One important conclusion that can be drawn from these trends, is that, the jobless growth of the Indian economy has impacted women more severely than men as the job market seems to be able to absorb the growing number of male workers but it has not been the same case for female workers (Kapoor \& Kapoor, 2021).

Apart from the national estimates by NSSO, World Bank also provides the estimates of female labour force participation rates in India wherein a similar declining trend of FLFPR can be noted. Overall national female participation rates fell from $30.4 \%$ in 1990 to $19 \%$ in 2021 (as per ILO modelled estimate). That means India has one of the lowest FLFPR and about three out of every four women above the age of 15 in India is neither working nor seeking job, which is a historic low level (Shah, 2021). As per the World Bank data, period of 1995-2005 was the only when along with 127 percent increase in GDP the rate of FLFPR hit the peak of 31.9 percent (Costagliola, 2021). But thereafter, GDP has continued to rise since 2005 whereas female LFPR has seen a sharp decline. Moreover, rising gender gap in economic activities as noted by the World Economic Forum's Gender Gap Index shows that India ranked at a low of 140th out of 156 countries in terms of economic participation and opportunities (WEF, 2021).

Besides this, the country also witnesses wide inter-state differences in LFPR across gender and regions. This is because each of the region of India have their own set of demographical and socio-cultural fabric which is a major factor that plays role in women employment. Like we know from several literature how southern states have one of the highest literacy rate, similarly, north-eastern states are known for their matriarchal setup as compared to the patriarchal ones in northern region. So, the present paper explores the inter-state differences in male and female LFPR for the year 2019-20. This will help in gauging the differences in female participation in paid work among the states and regions of India as per their respective social and cultural setup differences. Thereafter, we will explore the inter-regional differences in FLFPR and lastly elucidate the major factors playing deterring role in female employment in paid labour force.

## 2. DATA AND METHODOLOGY

The study is based on the secondary data collected from - Periodic Labour Force Survey (PLFS) for the year 2019-20, published by National Statistical Office (NSO), under Ministry of Statistics and Programme Implementation (MOSPI), Government of India. This study mainly involves the graphical and tabular analysis made using MS-Excel to study the gender and inter-state disparity in LFPR across states in India.

To get inter-regional disparity picture of FLFPR more accurately, we divide the whole of India into six regions namely - Northern, Southern, Eastern, Western, Central and North Eastern regions, as per the classification followed by (RBI, 2018). Thereafter, each region's average FLFPR is calculated on the basis of the individual state's values in each region.

## 3. RESULTS AND DISCUSSION

### 3.1 FEMALE LABOUR FORCE PARTICIPATION RATES (FLFPRs) ACROSS STATES

Information provided in the PLFS of 2019-20 has been utilized to provide a snapshot of where working women stand today among the states of India. Our analyses refer to data on LFPR of both males and females of all ages (all $0+$ ), of all the states and union territories. The LFPR refers to the population which supplies the labour and, therefore, includes both the employed and unemployed. For measuring the labour force participation, the usual status (both principal and subsidiary status taken together) concept is used here. It includes persons who had worked for some time with some regularity and also those who had either sought work or were available for work for some time.

Figure 1 State Wise/UTs Male and Female LFPR by Usual Status (PS+SS) for Persons of All Ages - $(0+$ ) in India, 2019-20


Source: Computed using data from PLFS, 2019-20
As we can see from the Fig. 1, majority of the states have been performing above the national figures for both male and female LFPR. But, male LFPR has been greater than fifty percent for all the states (except Meghalaya and Bihar) whereas for female LFPR it is below fifty percent for all the states (except Himachal Pradesh) and touches as low as just 6.4 percent in Bihar. The All-India figure for male LFPR is 56.8 whereas for female LFPR it is at 22.8. But for both male and female, more than 20 states and UTs ( 21 in case of male LFPR and 25 in case of female LFPR) have lower LFPR than the all-India figure. Next, on deeper analysis of the above figure, we tabulate the top three and bottom three states/UTs for male and female LFPR for the year 2019-20, in Table 1.

Table 1 Top most and bottom most States/UTs for Male and Female LFPR for 2019-20

## Top three for Male and Female LFPR

| States | Male | States | Female |
| :--- | ---: | :--- | ---: |
| Daman \& Diu | 70.2 | Himachal Pradesh | 51.8 |
| Dadra \& Nagar Haveli | 69.6 | Sikkim | 49.1 |
| Lakshadweep | 66 | Chhattisgarh | 40.2 |

## Bottom three for Male and Female LFPR

| Male | Female |  |  |
| :--- | ---: | :--- | ---: |
| Manipur | 51.9 | Assam | 12.4 |
| Meghalaya | 48.1 | Haryana | 11.9 |
| Bihar | 47.1 | Bihar | 6.4 |

## Source: Computed using data from PLFS, 2019-20

As evident from Table 1 above, Bihar registered the lowest male LFPR with 47.1 percent followed by Meghalaya (48.1), Manipur and Ladakh (both at 51.9). Daman \& Diu registered the highest male LFPR at 70.2 percent followed by the Dadra \& Nagar Haveli (69.6) and Lakshadweep (66). Contrary to this, participation rate for the female labour force is depressing than male counterparts. While during the same period, female LFPR is mostly concentrated to the few states, namely- highest in Himachal Pradesh with 51.8 per cent followed by Sikkim (49.1) and Chhattisgarh (40.2) and it was lowest in Bihar (6.4) followed by Haryana (11.9) and Assam (12.4). It is clearly evident from above that the male LFPR even of the least performing states are almost
twice of the female labour force participation rates at the state as well as the national level.
This tremendous disparity between male and female labour force participation is not good for India as right now our country is at advantageous position in global market due to its demographic structure. India's economy is growing, with an increasing GDP and India is currently having the largest number of young populations in the working age group which is expected to climb to over 800 million people by 2050 . It is considered to be the youngest country in the world today. The benefits of the demographic dividend are likely to be deterred if women stay out of work. Moreover, it is not only crucial to get more women into labour force but ensuring their economic well-being is important too. (Sundari, 2020).

### 3.2 INTER-REGIONAL ANALYSIS OF FEMALE LABOUR FORCE PARTICIPATION RATES

As per the above analysis we can see all the states individually but for inter-regional analysis of India of female labour force participation rates, we divide the whole of India into six regions namely - Northern, Southern, Eastern, Western, Central and North Eastern regions, as per the classification followed by (RBI, 2018). As our country is diverse in cultural and social practices which are a major factor that plays role in female labour force participation rates this analysis will help in identifying which region is doing good and which bad. Generally, FLFPR is an indicator of various factors affecting women and their empowerment like family support, their education levels, their agency in household etc. so this analysis will help us figure out specific regions which are doing better in terms of FLFPR and thus are better regions for women empowerment and literacy. So, for each region, we calculate the average on the basis of the states FLFPR in that region and then we compare these averages. This exercise is done just for the year 2019-20 using Periodic Labour Force Survey data. The results are as follows -

Table 2 Region wise female LFPR (\%), India - 2019-20

| Northern Region |  |
| :--- | ---: |
| Ladakh | 38 |
| Chandigarh | 15.8 |
| Delhi | 12.8 |
| Haryana | 11.9 |
| Himachal Pradesh | 51.8 |
| Jammu \& Kashmir | 28.5 |
| Punjab | 18.9 |
| Rajasthan | 28.2 |
| Average | 25.74 |


| Eastern Region |  |
| :--- | ---: |
| Andaman Nicobar Islands | 29.2 |
| Bihar | 6.4 |
| Jharkhand | 25.9 |
| Odisha | 25.9 |
| Sikkim | 49.1 |
| West Bengal | 19 |


| Average | 25.92 |
| :--- | :--- |


| Southern Region |  |
| :--- | ---: |
| Telangana | 36.2 |
| Andhra Pradesh | 31.7 |
| Karnataka | 26.6 |
| Kerala | 26.3 |
| Lakshadweep | 22.8 |
| Puducherry | 25.3 |
| Tamil Nadu | 32.4 |
| Average | 28.76 |


| Western Region |  |
| :--- | ---: |
| Dadra \& Nagar Haveli | 37.7 |
| Daman \& Diu | 27.9 |
| Goa | 22.6 |
| Gujarat | 24.3 |
| Maharashtra | 30.6 |
| Average | 28.62 |


| Central Region |  |
| :--- | ---: |
| Chhattisgarh | 40.2 |
| Madhya Pradesh | 28 |
| Uttar Pradesh | 12.7 |
| Uttarakhand | 24.8 |
| Average | 26.43 |


| North Eastern Region |  |
| :--- | ---: |
| Arunachal Pradesh | 16.7 |
| Assam | 12.4 |
| Manipur | 22.8 |
| Meghalaya | 28.9 |
| Mizoram | 30.4 |


| Nagaland | 33.7 |
| :--- | ---: |
| Tripura | 19.1 |
| Average | 23.43 |

Source: Computed using data from PLFS, 2019-20
As we can see from the above tables, then the region with the highest FLFPR in 2019-20, comes to be the Southern region at $28.76 \%$ closely followed by Western region at $28.62 \%$. while, the region with the lowest FLFPR is the North East region at $23.43 \%$. If we see region wise best and worst performing states, these are - in Northern Region - Himachal Pradesh is the best not only in its region but in overall country as well. In eastern region, Sikkim has highest FLFPR and is the best state while Bihar is the worst at $6.4 \%$. In south, Telangana has the highest FLFPR with Lakshadweep having the least. In the western region, Dadar and Nagar Haveli has the highest FLFPR whereas Goa has the least percentage. Central Region has Chhattisgarh as the best state and Uttar Pradesh having as low as $12.7 \%$. North East region has Nagaland with highest female labour force participation rates and Assam having the least.

### 3.3 Reasons for Low Participation of Women in Labour Force

The study demonstrated wide gap in female labour force participation across the Indian states and huge diversity among regions with majority of states having low FLFPR. Several reasons have been cited behind this lowly female LFPRs. According to (D. Chatterjee \& Sircar, 2021), urbanization has led to less labour opportunities for women who are mostly engaged in agriculture. So, the non-availability of other employment opportunities, in the face of shrinking number of farming jobs, especially in the rapidly expanding areas which are an interface between neither truly rural nor fully urban (U. Chatterjee et al., 2015) is a cause of worry. Moreover, women are usually unwilling to enter the labour market as most women's willingness to work encompasses societal expectations and domesticity(Pandey, 2022).

Participation of Indian women in the labour force has declined due to certain other reasons like "voluntary withdrawal from labour force". In recent years, the focus of academia research is on the "income effect" that explains that mostly women opt out of jobs due to higher family income and they prefer household work (Pandey, 2022). Thus, only if necessitated by poverty, women enter into the labour market. Increasing access to education is also deemed to be a very significant reason behind the low labour force participation of women in India (Bhalla \& Kaur, 2011). While educated women may decrease their labour market participation by choice, lack of opportunity and social stigma are key factors for the less educated. Also, the families have shrunk into nuclear setups and there is no institutional support for child care. Another reason for low and declining female labour force participation rates in India can be attributed to the conflation between work and employment in our statistical system. Only the works which have monetary remuneration gets counted as work while, a plethora of work that women engage in, like the family-based occupations such as agriculture, animal husbandry, weaving etc. still unrecognized, wherein women do not get remunerated monetarily (Ghosh, 2021; Kapsos et al., 2014). Thus, a significant portion of the female labour force is actually not the "missing labour force" but rather due to the existing limitations of the statistical system has given rise to the general perception of "women not working".

From the demand side perspective, it is explained by the fact that gender based occupational and sector segregation exists in India and lack of growth in the sectors which employs mostly women have resulted in their low participation due to low demand for labour (Kapsos et al., 2014). About $26 \%$ of women are engaged in elementary occupations, $19 \%$ are associated with craft and related trade works, and $11 \%$ are in sales and service along with technicians; only $7 \%$ occupy administrative, executive, and managerial occupations (Hossain \& Hasan, 2022). That means women are mostly engaged in low wages sectors with long hours and informal working engagements.

## 4. CONCLUSION

As has been accurately pointed out by (Varghese, 1993), that originally too India has never have had good number of women in active labour force but the current trend of decline in these numbers makes the situation only worse. The benefits of the demographic dividend are likely to be deterred if women stay out of work. Growth experiences of India can be said to be lopsided because not only the labor-intensive sector's growth, formalisation of the growing economy and the much required structural transformation have been missing in the economy, and also social ills like casteism impact the labour force of the country (Kapoor \& Kapoor, 2021).

Thus, fusion of the above underlined unique features of the Indian economy have resulted in skewed gender diversity in the workplace leading to a type of market failure. The loss due to this does not only impact the Indian women but the whole economy as almost half of the population is unable to contribute to the economy's growth and development.

As noted by a study conducted by Associated Chambers of Commerce and Industry of India (Assocham) and Thought Arbitrage Research Institute (TARI) titled 'Female Labour Force Participation in India' initiatives like Beti Bachao Beti Padhao, Make in India, Start-up India and others have been positive steps in the direction to improve female labour force participation in India. More initiatives towards women's empowerment like promoting skills training for women, creating employment opportunities, setting up child care centres, ensuring women safety and security in every sphere through concerted efforts of the central and state governments are needed to create an enabling environment for boosting female labour force participation. Each state needs to formulate policies as per their own regional challenges as 'one cap fits all' theory can't be applied in a country as diverse as India.

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