# Factors affecting economic participation of women: A comprehensive study of North-Eastern States of India 

Gunjan Sarma<br>(M.Phil., Department of Economics, Gauhati University, Assam<br>gunjansharmarock@gmail.com


#### Abstract

: The Himalayan states of North-Eastern India are abundant with natural resources, suitable agro climatic conditions and also favorably placed as the roadway to South-East Asia. Yet, after 73 years of independence of India, the regions finds itself hanging around the tail of most of the important economic indicators. While the North-eastern states together constitutes roughly $7.9 \%$ of the total geographical territory of India, it hardly contributes 3\% of total GDP of the nation. While investigating about the probable reasons, apart from the hilly and difficult terrain of the land and its distance from mainland India, one prominent factor that seems to be responsible is the low level of female participation in the labour force relative to male. In this respect, the paper tries to find the trend of Female Labour Force Participation Rate (FLFPR) in the North-eastern region over the years. Also, it tries to find out the possible factors that are affecting the job market participation of women in the region. Further, the paper also tries to make a comparable study between the FLFPR of North-East and the national average.


Keywords: FLFPR, Education, Northeast, Labour

## 1. INTRODUCTION

Economic participation of women is very essential for the growth of an economy. This is evident from the fact that most of the western developed nations exhibits very high participation of women in the labour force. The participation of female in the economy could be seen from their participation in the labour force. This is determined by the Female Labour Force Participation rate (FLFPR) which is the ratio of females those who are either employed or actively seeking employment at the prevailing wage rate to the total cohort of working-age female (more than 15 years of age). The FLFPR in 2019 is $56 \%, 58 \%, 65 \%$, $55 \%, 53 \%$, and $60 \%$ for USA, UK, New Zealand, Luxembourg, Japan and Norway respectively (World Bank, 2020). The same for India in 2017-18 is $23.3 \%$ which is at a very low percentage and NER in particular again has a very low percentage and varies from state to state ("Periodic Labour Force Survey, 2017-18", 2019).

North-east India is comprised of eight states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. Population of North-Eastern Region (NER) is $38,857,769$ which is $2.9 \%$ of total population of India and the geographical area is $262,230 \mathrm{~km}^{2}$ which is $7.98 \%$ of the total geographical area of India. The average sex ratio of NER is 950 women per 1000 men which is slightly above the national level, i.e. 940 women per 1000 men (Census, 2011).

Participation of women in North Eastern states are less than their male counterparts throughout the years and over the time the rate is also declining. The fall in FLFPR could be attributed to various factors like educational attainment, higher household income, lack of job security etc. which we shall discuss later in this paper. However, withdrawal of female from the labour force leads to shortage of manpower which in turn acts as a barrier to growth. The region is blessed with abundant natural resources, fertile lands, water resources, and sound agro climatic conditions etc. which are prerequisite for agricultural as well as economic growth. Horticulture and sericulture are two promising economic opportunities of the region. Further, it has great potential in developing food and bamboo processing industries, power generation (because of the hilly and steep slopes of its rivers), tourism (based on the diverse geographical landscape
and rich culture and heritage), and development of border trade with neighboring countries etc. Also, it has the potential to grow as a marketing and trading hub connecting with South-East Asian nations through road and rail. Stressing on this possibility, the central government of India has already launched 'Act East' policy and currently working on many relevant infrastructural projects in the region.

The paper has been divided to three segments. In the first section, the trend in the FLFPR from 2004-05 to 2017-18 has been studied for all the eight North-Eastern states. The second section deals with the nature of work that women are mostly engaged in. The third segment tries to see the effects of education on FLFPR.

## 2. OBJECTIVE

The objectives of this study are -
i. To find out the long-term pattern of Female Labour Force Participate Rate (FLFPR) of North Eastern States.
ii. To identify and discuss about the possible factors that might have affected FLFPR.

## 3. METHODOLOGY

i. The nature of this research is primarily descriptive statistical analysis.
ii. Data used are based on secondary sources such as surveys and reports of National Sample Survey Organization, World Bank etc.
iii. The study also extracts data from secondary literature such as Books, Journals, Articles, Newspapers, and Websites etc.

## 4. LITERATURE REVIEW

A considerable amount of work have been done worldwide to figure out the factors affecting female labour force participation. Some of the findings are explained below.

Contreras, Dante \& Plaza, Gonzalo (2010) found that there is a significant negative correlation between cultural factors and women's participation in the labour force in Chile. Women having conservative cultural ethos are less likely to enter the labour force.

Naser, K., Mohammad, W. R., \& Nuseibeh, R. (2009) found that factors that affects participation of women in entrepreneurial activities in UAE are financial support from government, education and knowledge, skills and experience, and the zeal to become financially independent. Another prominent factor turned out from the study was that those women whose spouse or father occupies good jobs and social position are more likely to utilize the position and participate in economic and social activities including entrepreneurship.

Mehrotra, S., \& Parida, J. K. (2017) have observed that FLFPR in India as a whole is falling because of lack of job security in sectors like manufacturing and construction where women are highly employed, proper security measures for women in jobs, low wage rate, lack of skilled jobs for educated women, and education. Such is also observed by Abraham (2013) as well.

Lokshin, M. M., Glinskaya, E. \& Garcia, M. (2004) found that wage rate available for women and the cost for childhood care arrangements in Kenya determines the employment of women in the labour force. If the cost of early childhood care programmes are low and alternately the wage rate available to women in the market is high, then participation of both adult unmarried as well as married women are likely to be high.

The study conducted by Abena Abraham, Fidelia Ohemeng and Williams Ohemeng found that marriage and education are the 2 biggest factors in Ghana that affects female labour force participation. Females
having higher level of education like degree or diploma, are the only females who could get access to formal sector jobs in Ghana, the rest are being completely occupied by male.

Murphy, Anthony (1995) found that in Northern Ireland, religion asserts a significant impact on female labour force participation. Single Catholic women, be it unmarried or widow, are more likely to abstain from the labour force. On the contrary, the role of religion over married women becomes insignificant when their decision to join the labour force is completely conditioned by their spouse's activity. Further, the study have found that catholic married women whose spouses are unemployed are significantly less likely to be economically active.

Farre, L. \& Vella, F. (2012) found that women's participation in the labour force is influenced by three point of views. Firstly, a mother's as well as her children's inherited views regarding the role of women in family as well as labour market plays a significant role in their labour market participation. Secondly, the views of a male regarding what should be the role of women in the labour force significantly affects his wife's decision. Finally, the personal views of women regarding their participation in the labour market and subsequent impact in the economy is formed through education.

Hafeez, A. \& Ahmad, E. (2002) found that in Pakistan, the factors responsible for female participation in labour force are mostly economical and not social. Women from larger families are more likely to enter the job market as they have others to work at home. Further, levels of education plays a positive impact on participation while financial position of the family or family income exhibits a negative influence

Thévenon, O., Ali, N., Adema, W., \& Pero, S. D. (2012) stressing on the importance of women's participation in the work force states that women and men are complementarily used in the production process. Hence, with more women entering the labour force, average productivity of human capital increases up to a saturation point. Also, equal educational opportunities provided to women means that boys with lower abilities would be replaced by girls and their subsequent entering into the labour market would ensure rich human capital formation in the economy.

The study conducted by Lisaniler, F. G. \& Bhatti, F. found that in North Cyprus the factor that are predominantly affecting female labour force participation are education, age and residence. Women in the age group of 25-44 years are more likely to participate in the labour force. Also, education exhibits a positive impact.

Che, G. N. \& Sundjo, F. (2018) found that in Cameroon, while primary education has a positive effect on job market participation of women, higher education exhibits a negative impact. Also, FLFPR is likely to be higher among the elderly women as they have greater opportunities of obtaining jobs than that of younger women. Further, presence of other females in the family positively affects women's participation in the labour force. However, the presence of infants or children at the age group of $0-5$ years negatively affects women's participation. Also, husband's employability particularly determines the fertility of women and therefore determines their labour market participation. The study further found that religion also plays an important role in female labour marker participation. While the rate is relatively higher among Christians, it is considerably lower among Muslims.

The study conducted by Faridi, M. Z., Malik, S. \& Basit, A. B. (2009) makes 2 important observations. First, except for primary and middle school, all other higher levels of education exerts a positive impact of female job market participation and finally, a positive correlation has been found between educated parents or spouse and female labour market participation

Thévenon, O. (2013) found 3 factors to be key determinants of female labour force participation. They are, the structure of the labour market, the institutional setting that supports work-life balance and the improvement in average level of education of women. While provision of growing childcare arrangements has a positive impact on female's full time participation in the labour market, increased tax rate on the second earner of the family (which is the female in case of most societies) exhibits a negative impact.

Further, in case of more flexible labour markets, cash benefits in the form of increased paid leave duration during childbirth and childcare has a negative labour market impact on women as they may become reluctant to return to labour force considering high childcare cost and the provision of entry to the market at a later date considering its flexible nature. However, in countries with less flexible markets, it was found that enhanced duration of paid leave increased labour force participation of women as they know that reentry to the market is difficult and therefore, continuation of work is the best option.

Sorsa, P. et. al. (2015) found that participation of women in the labour market in India Is negatively correlated to education and income. Socio cultural factors are the key determinants of women's job market participation. Financial development, financial inclusion, and infrastructural development asserts a strong positive impact while labour market regulations affirm a negative effect on FLFPR. MGNREGA in particular has helped increasing FLFPR manifold transcending socio-cultural barriers. Further, the study goes on to say that region wise the FLFPR is different. In North, socio-cultural values predominates and hence FLFPR is low in most of the states. However, in relatively developed and educated West and South, the rate is high.

Angela Luci in her study entitled "Female labour market participation and economic growth" found that the impact of economic growth on labour market for female is such that it creates a ' U ' shaped FLFPR curve. That is, initially with growth FLFPR declines and later with further growth the very rate increases. Similar kind of observations have also been encountered by Tsani et. al. (2013). Therefore, it is important for the governments
of developing countries to formulate effective policies that would ensure continuous entry of women in the labour force followed by policies to provide decent and productive job opportunities to women.

## 5. Trend of Female Labour Force Participation in North East India

Over the years, FLFPR in NE India has showed heterogeneous trends. Nagaland who recorded the highest rural FLFPR in 2004-05, i.e. $51.1 \%$ has come down considerably to a mere $12.5 \%$ in 2017-18 (see table 1). The difference between rural and urban FLFPR in 2004-05 was very high but over the years it has also come down considerably. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and Nagaland have witnessed a continuous fall in rural FLFPR over the years. However, Sikkim witnessed a sudden boom to $49.2 \%$ in 2011-12 which again fall to $36.3 \%$ in 2017-18. Similarly for Tripura, there was a gradual rise in rural FLFPR from $12.5 \%$ in 2004-05 to $28.7 \%$ in 2011-12, but then it dropped to a mere $8.9 \%$ in 2017-18. In case of urban FLFPR, a gradual decline have been witnessed in case of Arunachal Pradesh, Manipur, Meghalaya, Mizoram and Nagaland. In case of Assam, the rate is stagnant around 10$12 \%$ over these years. Tripura has gone through an uneven path with constant rise and fall. Contrary to rest of the states, Sikkim has witnessed a gradual rise in urban FLFPR from $17.5 \%$ in 2004-05 to $28 \%$ in 2017189. Looking at the figures for 2017-18 (which is latest available), Meghalaya tops the list of rural FLFPR followed by Sikkim and Mizoram. Similarly, in terms of urban FLFPR the top spot has been acquired by Sikkim followed by Mizoram and Meghalaya. Therefore, from table 1 we can say that Sikkim, Meghalaya and Mizoram are doing quite well in terms of participation of women in the labour force as compared to other states of NE India. In 2017-18, rural and urban FLFPR at all-India level stands at $18.2 \%$ and $15.9 \%$ respectively. Four NE states namely Manipur, Meghalaya,

Table 1: Labour Force Participation Rate of Women at all ages in Usual Status(ps+ss) for different states of NE (in percentage)

| Year |  |  |  | 年 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| States | Category | $2004-05$ | $2009-10$ | $2011-12$ | $2017-18$ |
| Arunachal <br> Pradesh | Rural | 41.3 | 29.5 | 28.2 | 11.2 |
|  | Urban | 15.8 | 15.3 | 13.9 | 8.4 |
| Assam | Rural | 21.6 | 16.8 | 12.9 | 9.5 |
|  | Urban | 11.0 | 10.7 | 9.7 | 12.4 |
|  | Rural | 35.4 | 22.1 | 27.0 | 16.8 |
|  | Urban | 23.3 | 15.2 | 20.4 | 19.8 |
| Meghalaya | Rural | 48 | 37.3 | 39.2 | 37.6 |
|  | Urban | 30.8 | 23.5 | 21.0 | 23.1 |
|  | Rural | 44.1 | 41.0 | 40.5 | 22.2 |
|  | Urban | 30.4 | 29.8 | 26.7 | 24.6 |
| Nagaland | Rural | 51.1 | 36.2 | 37.1 | 12.5 |
|  | Urban | 24.7 | 16.4 | 22.4 | 14.4 |
|  | Rural | 32.3 | 32.0 | 49.2 | 36.3 |
|  | Urban | 17.5 | 15.0 | 27.4 | 28.0 |
| Tripura | Rural | 12.5 | 23.5 | 28.7 | 8.9 |
|  | Urban | 22.6 | 18.6 | 26.0 | 14.7 |
|  | Rural | 33.3 | 26.5 | 25.3 | 18.2 |
|  | Urban | 17.8 | 14.6 | 15.5 | 15.9 |

Source: Source: NSS Reports on employment and unemployment situation ( $61^{\text {st }}, 66^{\text {th }}, 68^{\text {th }}$ round) and Periodic Labour Force Survey (PLFS), 2017-18

Mizoram and Sikkim are above the all-India level and the rest four are below in terms of FLFPR. However, the average FLFPR of all the 8 states of NE together is above the all-India level over these years (see Figure $3)$.

From figure 1 and 2, it is evident that most of the states are following a downward trend over the years in terms of FLFPR. However, the trend is not a linear one. Rather, it follows a nonlinear U-shaped pattern
which implies that initially FLFPR declines and then again it increases. This U-pattern is

## Figure 1: Rural FLFPR



## Source: Table 1

more evident when we take the average FLFPR of NE states together as well as the national average (see figure 3). This shape is explained by a phenomenon called "Feminization U-hypothesis".


## Source: table 1

According to this hypothesis, at the initial stages of growth women are double burdened with both agricultural works as well as unpaid domestic activities. As the economy grows and household income
increases, women can substitute their agricultural activities by focusing more on domestic activities and thus retiring from labour force. The income effect of increased household income make it profitable for women to stay at home and they can easily compensate their time in the market with the price of home-
produced goods and services. But as female education improves and the price of their time in the market exceeds the


## Source: table 1

relative price of home-produced goods, they move back into paid labour resulting in a U-shaped curve of female labour force participation (Goldin, 1995).

## 6. Distribution of Female Workers in North Eastern States

Women in NE are mostly engaged in Agriculture and allied activities. Almost 50\% or more than $50 \%$ of the working women engages themselves in agricultural activities either as cultivators or agricultural labourer. The share varies across states with Arunachal Pradesh, Nagaland, Meghalaya and Mizoram having sizeable

## Table 2: Distribution of Female workers by category of Economic Activities in NER in 2015

| States | Cultivators | Agricultural <br> Laborers | Household <br> Industries <br> Workers | Other <br> Workers | Percentage of Female workers <br> engaged in Agriculture sector <br> (Cultivators + Agricultural <br> Laborers) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Arunachal Pradesh | 149860 | 17794 | 4217 | 65513 | 70.63 |
| Assam | 961864 | 716136 | 285577 | 1464553 | 48.95 |
| Manipur | 186992 | 67015 | 69520 | 170063 | 51.46 |
| Meghalaya | 217345 | 92022 | 11088 | 161455 | 64.20 |
| Mizoram | 100121 | 19299 | 3958 | 72587 | 60.94 |
| Nagaland | 278248 | 31105 | 13355 | 104057 | 72.49 |
| Sikkim | 54074 | 13103 | 2196 | 44407 | 59.04 |
| Tripura | 67079 | 139512 | 24011 | 193593 | 48.70 |

amount of their female workers engaged in agricultural activities. Lack of infrastructure facilities like supply of input, marketing, institutional credit and extension services are limiting women of NER to go for diversification of their working activities and rather confine themselves in agriculture and allied activities (Pegu, 2015).

Apart from Assam and Tripura all the other 6 states of NE in rural areas have their female workers mostly engaged in self-employment (see table 3). Among them, Mizoram has highest number of female workers engaging in self-employed activities. It is worth to note that 6 out of 8 NE states are above the all-India level as par the female participation in self-employment is concerned. However, when it comes to urban areas only 3 states are above the national level. Also, it is seen that the share of women in selfemployment is lower in urban areas as compared to rural areas. On the contrary, regular wage/salaried employees are higher among urban females as compared to rural
Source: Basic Statistics of North eastern region, 2015 published by North Eastern Council Secretariat
Table 3: Percentage distribution of female workers in usual status (ps+ss) by statuses in employment

|  | Rural female |  |  | Urban female |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| States | $\begin{array}{l}\text { Self } \\ \text { employed } \\ \text { regular wage/ } \\ \text { salaried } \\ \text { employees }\end{array}$ |  |  |  |  |  | \(\left.\begin{array}{l}casual <br>

labour\end{array} \quad $$
\begin{array}{l}\text { Self } \\
\text { employed }\end{array}
$$ $$
\begin{array}{l}\text { regular wage/ } \\
\text { salaried } \\
\text { employees }\end{array}
$$, $$
\begin{array}{l}\text { casual } \\
\text { labour }\end{array}
$$\right]\)

## Source: Periodic Labour Force Survey, 2017-18

| Table 4: Percentage of regular wage/salaried <br> employees who had no written job contract <br> among regular wage/salaried employees in <br> amol <br> usual status (ps+ss) in non-agriculture sector |  |  |  |
| :--- | :--- | :--- | :--- |
|  | rural <br> female | urban <br> female | rural+ <br> urban <br> female |
| Arunachal <br> Pradesh | 50.1 | 12.1 | 42.5 |
| Assam | 14.3 | 44.0 | 47.2 |
| Manipur | 77.5 | 68.4 | 73.1 |
| Meghalaya | 38.3 | 31.4 | 35.2 |
| Mizoram | 35.0 | 42.4 | 41.0 |
| Nagaland | 95.4 | 94.4 | 94.9 |
| Sikkim | 29.9 | 33.3 | 31.1 |
| Tripura | 52.0 | 47.2 | 49.8 |


| All-India | 58.5 | 71.4 | 66.8 |
| :--- | :--- | :--- | :--- |

Source: Periodic Labour Force Survey, 2017-18
females. In case of rural areas, Assam has the highest share of regular salaried women, i.e. $58.8 \%$ and in case or urban areas Arunachal Pradesh takes the lead with $75.5 \%$. It is

Table 5: Average earnings (in Rs.) per day by casual labour engaged in works other than public works

|  |  | States |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Category | Arunachal Pradesh | Assam | Manipur | Meghalaya | Mizoram | Nagaland | Sikkim | Tripura | AllIndia |
| $\begin{aligned} & \text { July- } \\ & \text { Sept } \\ & 2017 \end{aligned}$ | Rural male | 344.51 | 250.76 | 322.66 | 282.06 | 339.33 | 270.77 | 400.00 | 283.23 | 253 |
|  | Rural female | 0.00 | 150.46 | 330.02 | 236.15 | 300.00 | 0.00 | 0.00 | 219.11 | 166 |
|  | Urban male | 313.06 | 292.64 | 340.74 | 382.47 | 326.32 | 245.40 | 324.92 | 281.77 | 314 |
|  | Urban female | 0.00 | 271.26 | 274.23 | 90.69 | 0.00 | 0.00 | 0.00 | 263.94 | 192 |
| $\begin{aligned} & \text { Apr- } \\ & \text { June } \\ & 2018 \end{aligned}$ | Rural male | 286.98 | 266.00 | 291.64 | 360.87 | 298.80 | 377.06 | 400.00 | 320.76 | 282 |
|  | Rural female | 0.00 | 199.79 | 184.68 | 208.66 | 0.00 | 350.00 | 0.00 | 297.98 | 179 |
|  | Urban male | 331.67 | 311.87 | 347.36 | 362.93 | 351.35 | 346.99 | 395.61 | 338.28 | 335 |
|  | Urban female | 0.00 | 300.00 | 262.68 | 147.82 | 311.11 | 0.00 | 0.00 | 271.27 | 201 |

Source: Periodic Labour Force Survey, 2017-18
worthy to note that all the 8 sates of NE stood above the all-India level in terms of share of rural female in regular salaried employees and similarly in case of urban areas except Manipur, all the other states are above the national level. However, the share of women in casual labour for both rural and urban areas in NE states are very low except Assam and Tripura. Tripura accounted for the highest share in casual labour among NE states in both rural and urban areas and is also above the all-India level. It is noticeable that the share of some of the NE states in casual labour are very close to 0 . Therefore, women of NER are mainly engaged in self-employment and regular salaried activities.

Among rural female, the percentage of regular salaried employees without written job contract are high in Arunachal Pradesh, Manipur, Nagaland and

Tripura (see table 4). In this regard, Nagaland and Manipur are even above the all-India level. For urban female, Assam, Manipur and Nagaland have high percentage of women without written job contract. However, only Nagaland is above the all-India level with a high percentage of $94.4 \%$ female without any written job contract. Though the percentage of women without any written job contract in NE states are comparatively lower than the all-India level, yet this acts as a deterrent for women to join the labour force.

There is a considerable gap between the average earnings of male and female casual labours per day. This gap varies from state to state. For states like Assam, Mizoram and Tripura the gap is less. However, Meghalaya and Manipur exhibits large differences between male and female workers. This wage gap is a major factor behind the withdrawal of female labour from the workforce especially from casual labour. This is evident from the very low participation of women in casual labour activities in NE.

## 7. Impact of Education on FLFPR in North East India

FLFPR is high among the diploma/certificate holders, undergraduates, post graduates and any other kind of higher levels of education (see table 6). But the problem is that the enrollment of female in higher levels of education is very low. It is low in allover India including North Eastern states. For e.g. the LFPR of Post Graduate female in rural areas of Manipur is $96.8 \%$ and that of urban areas is $63.6 \%$. But at the same time, enrollment of women in Post Graduate courses in Manipur is only 3668. The overall enrollment
of women in educational institutions is rising, literacy rate of women is increasing but the increase has resulted mainly from higher enrollment in Primary and Middle school levels which doesn't prepare students for jobs. This schooling seems to inculcate discipline, self-restraint, patience, routine and obedience to authority among girls. Thus, modernizing through education that is designed to perpetrate patriarchal values may
only
subordinate women rather than empower (Basu, 2002).
Also, because of gender bias, women are deprived from costly technical and vocational courses those have high value in labour market and solely confined to basic arts and science (Abraham, 2013). According to PLFS report, 2017-18, only $4.1 \%$ of rural female and $6.3 \%$ of urban female under the age group of 15-59 years have received any kind of vocational/technical education in India. These states are disturbing for the entire country as a whole.

Withdrawal of women from education after a certain level forces them to engage in domestic activities. Along with that, as household income increases due to economic growth over the years, greater share of women seem to enter into domestic activities at higher level of income, be it in the rural or urban area. This is primarily because women engage in status production for the household more intensely by withdrawing from paid labour and expending more on domestic activities that produce status such as child

Table 6: Labour force participation rate (LFPR) (in per cent) according to usual status (ps+ss) for persons of age 15 years and above of different general education level for Female

|  | not <br> litera <br> te |  | midd <br> le | seconda <br> ry | higher seconda ry | diplom <br> a/ <br> certific <br> ate <br> course | $\begin{aligned} & \text { gradua } \\ & \text { te } \end{aligned}$ | post <br> gradua <br> te <br>  <br> above | seconda <br> ry <br>  <br> above | not <br> litera <br> te |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arunach al Pradesh | Rural | 16.8 | 17.4 | 12.3 | 8.9 | 17.6 | 0.0 | 42.8 | 100.0 | 14.4 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 3.1 | 8.1 | 5.1 | 7.3 | 24.0 | 100.0 | 42.2 | 81.1 | 21.1 |
| Assam | Rural | 13.1 | 9.1 | 10.1 | 11.8 | 19.5 | 100.0 | 38.3 | 28.3 | 19.3 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 14.9 | 7.7 | 9.3 | 7.8 | 16.2 | 54.8 | 34.2 | 58.8 | 22.6 |
| Manipur | Rural | 20.1 | 21.1 | 15.5 | 17.6 | 27.0 | 0.0 | 62.7 | 96.8 | 31.5 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 17.5 | 30.7 | 17.2 | 18.6 | 21.7 | 90.6 | 45.5 | 63.6 | 31.1 |
| Meghala ya | Rural | 59.0 | 70.6 | 46.9 | 30.7 | 41.2 | 100.0 | 88.8 | 75.8 | 42.7 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 27.0 | 30.4 | 17.1 | 10.2 | 26.5 | 100.0 | 70.6 | 72.7 | 41.4 |
| Mizora <br> m | Rural | 21.6 | 27.2 | 29.0 | 16.9 | 34.2 | 0.0 | 82.2 | 100.0 | 29.9 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 19.6 | 24.1 | 23.2 | 25.7 | 25.6 | 100.0 | 67.7 | 91.0 | 40.4 |
| Nagalan <br> d | Rural | 11.5 | 8.8 | 9.2 | 12.9 | 35.6 | 0.0 | 77.0 | 74.7 | 29.6 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 6.3 | 12.8 | 8.7 | 15.7 | 23.5 | 0.0 | 50.5 | 67.6 | 28.1 |
| Sikkim | Rural | 30.8 | 49.9 | 46.9 | 41.6 | 59.6 | 0.0 | 78.1 | 81.1 | 54.8 |
|  | $\begin{aligned} & \hline \text { Urba } \\ & \mathrm{n} \end{aligned}$ | 19.9 | 8.1 | 35.5 | 33.4 | 34.1 | 100.0 | 54.5 | 80.8 | 43.3 |
| Tripura | Rural | 6.5 | 14.8 | 8.9 | 14.5 | 3.4 | 10.1 | 16.1 | 76.4 | 11.3 |


|  | Urba <br> n | 12.7 | 15.0 | 17.1 | 18.7 | 5.8 | 18.9 | 29.6 | 52.3 | 19.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| All- <br> India | Rural | 29.1 | 26.2 | 19.0 | 16.3 | 14.6 | 46.8 | 27.6 | 49.2 | 19.3 |
|  | Urba <br> n | 21.8 | 22.0 | 14.5 | 11.8 | 11.9 | 43.1 | 30.2 | 44.4 | 21.5 |

Table 7: State wise enrollment in various higher education levels in NE

| State | Undergraduate | Post <br> graduate | Diploma | Certificate | Integrated | Ph. D. | M.Phil. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Arunachal <br> Pradesh | 17734 | 3358 | 663 | 79 | 49 | 247 | 67 |
| Assam | 277744 | 48393 | 7709 | 1353 | 2651 | 1704 | 224 |
| Manipur | 48526 | 3668 | 810 | 30 | - | 314 | 7 |
| Meghalaya | 36156 | 4907 | 1482 | 141 | 27 | 513 | 57 |
| Mizoram | 10079 | 1852 | 1140 | 143 | 37 | 296 | 75 |
| Nagaland | 17467 | 2564 | 1060 | 45 | - | 201 | 23 |
| Sikkim | 10304 | 3863 | 966 | 14 | 177 | 53 | 17 |
| Tripura | 32829 | 4734 | 3293 | 108 | 322 | 44 |  |
| All-India | 13964046 | 2223239 | 869717 | 100261 | 81366 | 68842 | 21822 |

care, healthcare, religious activities etc. (Abraham, 2013).

## 8. Conclusion

To conclude, we can say that the FLFPR of North Eastern States are declining over the years and Source: Periodic Labour Force Survey, 2017-18
it widely varies among 8 states. Only Meghalaya and Sikkim seems to have a relatively high FLFPR. Looking at the employment scenario, we found that most of the females engaged in agricultural sector. Among the regular salaried females, job security is a key concern that prohibits them to enter the market. Also, the wage gap that exists between male and female workers exaggerates the cause. In the education front, though participation of women in the labour force with higher levels of education is quite high but the enrollment of women in higher levels of education is very less in the region leading to less participation overall.

India is looking forward for a speedy economic growth and to attain a 5 trillion \$ mark by 2025 exploiting the demographic dividend it currently possesses. In this regard the central government also looks keen to invest in North East India for speedy growth of this reason. The shift from Look East policy to Act Source: All India Survey on Higher Education, 2017-18, MHRD

East policy, development of key infrastructure such as Bogibeel Bridge, Dhola-Sadia Bridge, Kaladan Multipurpose Transit Transport project connecting NE with Myanmar, Asian Trilateral Highway connecting NE, Myanmar and Thailand, more infusion of funds to North Eastern Council, DONAR Ministry etc. have already shown India's interest to connect NE with South-East Asian and Asia-pacific countries and develop it as an industrial and trade \& commerce hub. This in turn will generate great job opportunities in this reason. Therefore, it is the need of the hour that both men and women in NE participate in the labour force with huge numbers. However, we have seen from this paper that historically the FLFPR in India is very low and even gradually declining at the national level as well as NER. It is indeed a grave concern for NE and it requires immediate attention from the government to frame better socio-economic policies for women that would ensure greater participation of women in all levels of education, provide women with better job contracts and equal pay for equal work, remove social stigma against women's employment and doesn't put women in the jeopardy of domestic work.

## References

1. Abraham, A., Ohemeng, F. \& Ohemeng, W. (2017). Female labour force participation: Evidence from Ghana. International Journal of Social Economics, 44(11), 1489-1505
2. Abraham, Vinoj (2013). Missing Labour or Consistent "De-Feminisation"?. Economic and Political Weekly, 48(31), 99-108
3. Basu, A. M. (2002). Why Does Education Lead to Lower Fertility? A Critical Review of Some of the Possibilities. World Development, Elsevier, 30(10), 1779-1790
4. Che, G. N. \& Sundjo, F. (2018). Determinants of Female Labour Force Participation in Cameroon. International Journal of Applied Economics, Finance and Accounting, 3(2), 88-103
5. Contreras, Dante \& Plaza, Gonzalo (2010). Cultural Factors in Women's Labour Force Participation in Chile. Feminist Economics, 16(2), 27-46
6. Faridi, M. Z., Malik, S. \& Basit, A. B. (2009). Impact of Education on Female Labour Force Participation in Pakistan: Empirical Evidence from Primary Data Analysis. Pakistan Journal of Social Sciences (PJSS, 29(1), 127-140
7. Farre, L. \& Vella, F. (2012). The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labour Force Participation. Economica, 80, 219-247
8. Goldin, Claudia (1995). The U-Shaped Female Labour Force Function in Economic Development and Economic History. Investment in Women's Human Capital and Economic Development. Chicago: University of Chicago Press
9. Hafeez, A. \& Ahmad, E. (2002). Factors Determining the Labour Force Participation Decision of Educated Married Women in a District of Punjab. Pakistan Economic and Social Review, 40(1), 75-88
10. Lisaniler, F. G. \& Bhatti, F. Determinants of Female Labour Force Participation: A Study of North Cyprus. Review of Social, Economic \& Business Studies, 5(6), 209 - 226
11. Lokshin, M. M., Glinskaya, E. \& Garcia, M. (2004). The Effect of Early Childhood Development Programmes on Women's Labour Force Participation and older Children's Schooling in Kenya. Journal of African Economies, 13(2), 240-276
12. Luci, Angela. Female labour market participation and economic growth. Int. J. Innovation and Sustainable Development
13. Malakar, krishnendu (2017). Women in Labour Force in North eastern States. International Journal of Applied Research, 3(4), 35-38
14. Mehrotra, S., \& Parida, J. K. (2017). Why is the Labour Force Participation of Women Declining in India?. World Development
15. Murphy, Anthony (1995). Female Labour Force Participation and Unemployment in Northern Ireland: Religion and Family Effects. The Economic and Social Review, 27(1), 67-84
16. Naser, K., Mohammad, W. R., \& Nuseibeh, R. (2009). Factors that affect women entrepreneurs: evidence from an emerging economy. International Journal of Organizational Analysis, 17(3), 225-247
17. National Statistical Office (2019, May). Periodic Labour Force Survey, 2017-18. New Delhi. Ministry of Statistics and Programme Implementation.
18. Office of the Registrar General \& Census Commissioner, India (2011). Census Report, 2011. New Delhi. Ministry of Home Affairs, Government of India. https://censusindia.gov.in/2011common/censusdata2011.html
19. Pegu, Ananta (2015). Female Workforce Participation in North-Eastern Region: An Overview. International Journal of Humanities \& Social Science Studies, 1(4), 154-160
20. Sorsa, P., Mares, J., Didier, M., Guimaraes, C., Rabate, M., Teng, G. \& Tuske, A. (2015). Determinants of the Low Female Labour Force Participation in India. OECD Economics Department Working Papers, No. 1207. OECD Publishing. Paris
21. Thévenon, O., Ali, N., Adema, W., \& Pero, S. D. (2012). Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD. OECD Social, Employment and Migration Working Papers, No. 138. OECD Publishing. France
22. Thévenon, O. (2013). Drivers of Female Labour Force Participation in the OECD. OECD Social, Employment and Migration Working Papers, No. 145. OECD Publishing. France
23. Tsani, S., Paroussos, L., Fragiadakis, C. \& Charalambidis, I. (2013). Female Labour Force Participation and Economic Growth in the South Mediterranean Countries. Economic Letters. 323328
24. World Bank (2020, June 21). Labour Force Participation Rate, Female. Retrieved 17 September 2019, from https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS
