

Female laborforce participation in India-A gloomy picture

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Abstract

Objectives:To analyse the trend of female laborforce participation rate (FLFP) in India.

Methods/Statistical analysis: The trend of FLFP has been analysed and presented through graphs using secondary data obtained from World Bank for a very recent period 2007-2016. Use of literature and basic statistics has been made to explore various demand side and supply side factors determining FLFP. Feminisation 'U' hypothesis has been tested using statistical techniques.

Findings:The trend of FLFP in India has been found to be declining in the recent period and FLFP rate has been among the lowest in the sample of the countries considered. A major finding of this paper is that feminisation 'U' hypothesis of female laborforce participation rate in India has been verified for the period [2007-2015]. This is consistent with the existing literature and adds value to them as it is based on updated data. Various measures have been suggested to stimulate FLFP in India like childcare subsidy to working mothers, better paternal leave, and improvement in physical and social infrastructure, changes in the legislation and social norms, skill development and job creation, financial and political inclusion of women, improvement in rural employment programmes etc.

Application/Improvements: Boosting FLFP has important implications for economic development of India. If measurement of household works of women can be done, the delineation of real picture of FLFP will be possible.

Keywords: Female, Laborforce, India, Trend, Determinants.

1. Introduction

India is blessed with a high proportion of working age people in her population and has achieved remarkable progress in education as well as technology. History shows that countries with similar demographic dividend have attained higher per capita GDP growth rates through effective laborforce participation, savings and investment effects. India is also expected to have similar growth experience with effective utilisation of this phase of 'Demographic Dividend'. However, there are some critical factors which are working as barriers to the effectiveness of this mechanism. One principal bottleneck to be mentioned here is low, stagnant female laborforce participation rate (FLFP) which is working as an impediment to harness our demographic dividend adequately, thereby weakening the effect of realising high growth potential of the country. Employed women generally have greater bargaining power and positive repercussions of their employment on their own well-being and their families.

2. Data source and methodology

Data has been obtained from secondary database 'World Development Indicator' of World Bank for the period 1990 to 2016. Data on India and some neighbouring countries like China, Bangladesh, Myanmar, Nepal, Pakistan, Sri Lanka, and some advanced countries like Australia, U.S, U.K, and Europe has been used for comparison. Graphs have been prepared for meaningful analysis. Scatter diagram has been used to demonstrate the association between variables. MS EXCEL has been used for analysis and presentation of data.

A couple of studies have researched on the topic of female laborforce participation in India. Their analysis and findings have been summarised below:

India is a country among one of the lowest laborforce participation rates in the world [1,2]. There is a large gap in the labor force participation rates of men and women in India [2]. Between 2004 to 2011, when the Indian economy grew at a healthy average of about 7%, there was a decline in female laborforce participation from over 35% to 25% [3]. Various studies have found explanation of falling FLFP in feminisation U hypothesis [4,5]. Seminal work by Gold in [4] explored the U-shaped relationship between female labor supply and the level of economic development across countries. Initially, when there is low income level and the agricultural sector is dominant in the economy, women's participation in the labor force is high, due to the necessity of working to provide for consumption of goods and

services. As income increases, women's labor force participation declines, only to rise again when female education levels improve and consequently the value of women's time in the labor market increases. This process suggests that, at low levels of development, the income effect of providing additional labor dominates a small substitution effect, while as incomes increase; the substitution effect comes to dominate. The effect of structural change on FLFP has been studied using sector-specific growth rates and U pattern was found [6]. The explanation of low FLFP has been found in income effect and education by various studies [7]. Education and incomes are negatively correlated with female labour force participation in India [8]. International Labour Organisation also attributes fall in FLFP to increase in educational enrolment of women.

There are some contrasting results also. There is evidence of an inverted U shaped relationship between LFPR and income in urban India. Income growth (proxied by growth in real per capita consumption) has affected positively on female participation. Female education is also found to have a positive impact on LFPR.

Education of the spouse (male) has a larger negative effect than the positive effect of female education. Women married to highly educated males earning a substantial income do not tend to work. These points to the male female education and skill gap. There is discrimination against women in terms of entry into the labour force. The presence of the emerging middle class, coupled with male education, is also slowing down the increase in FLFP. Improvement in earnings of male workers that discourages women's economic participation has also attributed to fall in FLFP. In addition to this, lack of employment opportunities at certain levels of skills and qualifications also discouraged women to seek work.

There is a shift to casual work in the public works category which can be attributed to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). But the average person days generated per household under MGNREGA suggests that, although preferred, the work opportunity generated by MGNREGA is not sufficient. The role of the rural employment programme [National Rural Employment Guarantee (NREG)] is important to help overcome the social barriers, raise female labour force participation and reduce wage gaps with men.

Women continue to face many barriers to enter labour market and to access decent work and problems in choice of work, working conditions, employment security, wage parity, discrimination. In addition, women are heavily represented in the informal economy where their exposure to risk of exploitation is usually greatest and they have the least formal protection though most women in India work and contribute to the economy in one form or another, much of their work are not documented or accounted for in official statistics, and thus women's work tends to be under-reported [9].

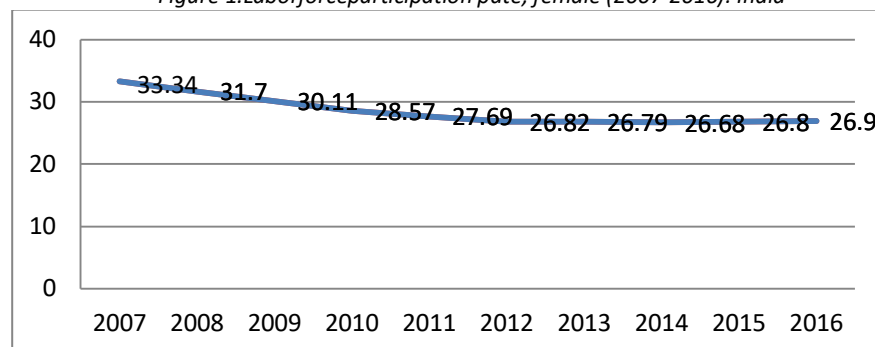
3. Discussion

There is a need of understanding the recent trend and dynamics of female laborforce participation in India and how India performs in comparison with other countries of the world. What are the determinants of this trend and what measures should be applied to improve female laborforce participation in India. The following sections will address these questions.

3.1. Trend of female laborforce participation in India

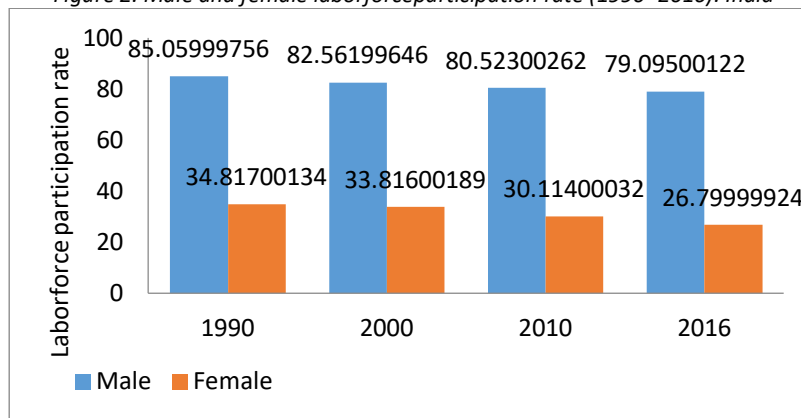
A diagrammatic presentation of the trend of movement of female laborforce participation rate in India in the recent 10 years and comparison with other countries of the world helps to visualise and understand the magnitude and gravity of the problem of low female laborforce participation rate better. Let us consider Figures 1-3.

Figure 1. Laborforce participation rate, female (2007-2016): India



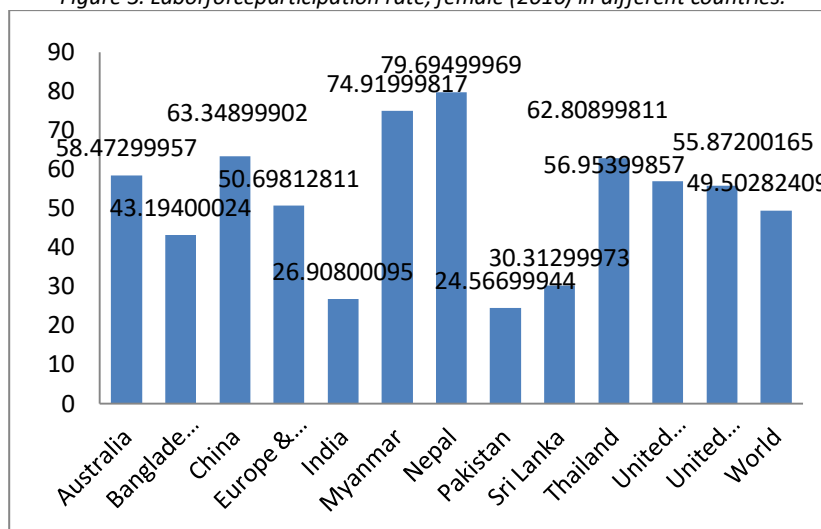
Source: World Development Indicator, World Bank.

Figure 2. Male and female laborforceparticipation rate (1990 -2016): India



Source: World Development Indicator, World Bank.

Figure 3. Laborforceparticipation rate, female (2016) in different countries.



Source: World Development Indicator, World Bank.

As evident in the Figure 1, female laborforceparticipation rate in India has experienced a falling trend in the last 10 years (fallen from 33.3 % in 2007 to 26.9% in 2016).If this declining trend continues then the realisation of higher growth potential through utilisation of demographic dividend will be increasingly difficult and it is not wrong to state that the country will be suffering from severe labor shortages in various key sectors of the economy.

The intensity of the problem can be observed in the difference between male and female laborforce participation rates in India. There has always been a significant difference between them as is demonstrated in Figure 2. The gap has been as large as around 79% for male and around 27% for female in 2016.

A comparison with other countries of the world Figure 3 shows that female laborforce participation rate in India has been one of the lowest in the world, only 26.9% in 2016 as compared with 49.5% world average and it is even below most of its neighbours like Bangladesh, China, Myanmar, Nepal, Sri Lanka. This depressing performance of India in female laborforce participation indicates an alarming situation for the economic development of the country and needs serious attention by the researchers and policy makers.

3.2. The causes of low female laborforce participation rate in India

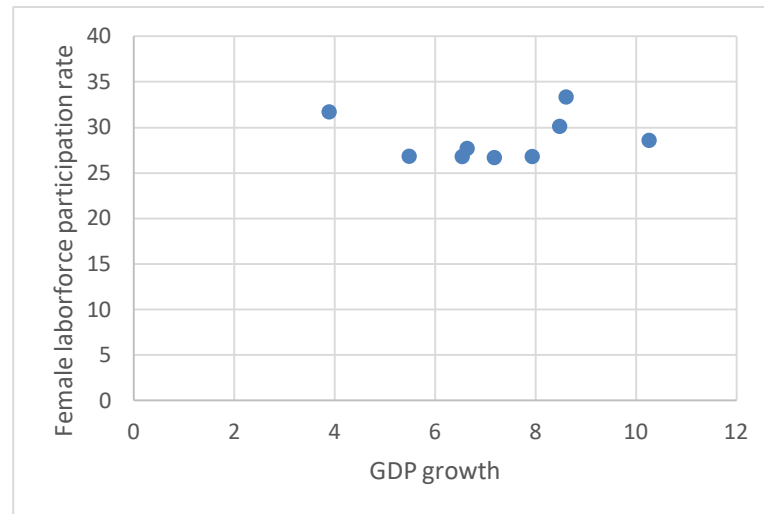
An important question that arises here is 'why is this female laborforceparticipation rate (FLFP) so low in India? A couple of studies have attempted to analyse the determinants of this low female laborforce participation rate. They have found the explanation in the feminization U hypothesis. According to this hypothesis, FLFP initially decreases in the development phase and then there is a turning point after which it increases giving a 'Unshaped pattern of movement. The declining phase can be explained by rising incompatibility of work and family duties (because of distant workplace), an income effect of husband's earnings, increase in education (as female workers join schools for further education) and social stigma against women working outside home. Then the upward rising portion comes with a receding stigma, high earning of female with more education, decline in fertility rate and better and diversified

options(labor-saving household technology, market based household services).There is evidence of U shaped relationship between LFPR and income in India [10] [11].

To test this 'U' shaped association an analysis has been carried out in this paper using data from World Development Indicators(World Bank) for a very recent period(2007-2015).Attempt has been made to examine the nature of association between GDP per capita growth (annual %) and female laborforce participation rate in India. A scatter diagram to present the bivariate relationship has been furnished below:

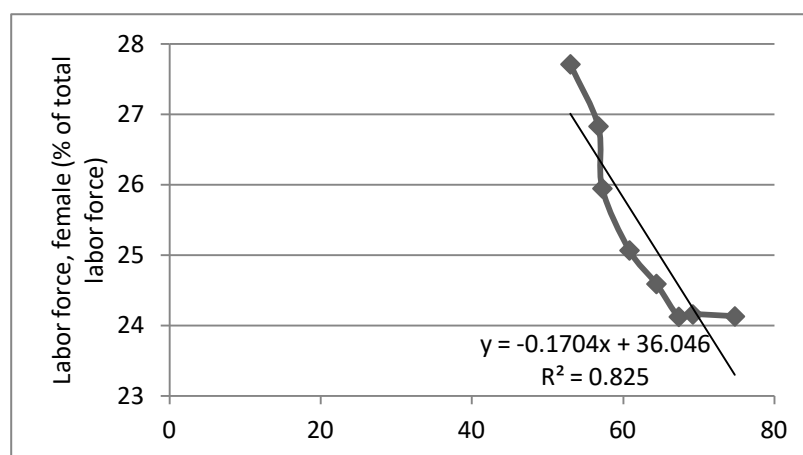
The scatter diagram Figure 4 indicates the existence of a near U shaped pattern (weakly) between the two variables. Because of availability of data the period considered has been very small and hence the pattern of association is not very distinct. If a large sample could be used a clearer picture could have been portrayed and more generalised conclusion from that could be made.

Figure 4. Association between laborforceparticipation rate, female and GDP growth (2007-2015): Indiap



Source: World Development Indicator, World Bank.

Figure 5. Scatter diagram showing association between Labor force, female (% of total labor force) and School enrollment, Secondary, Female (%gross): India



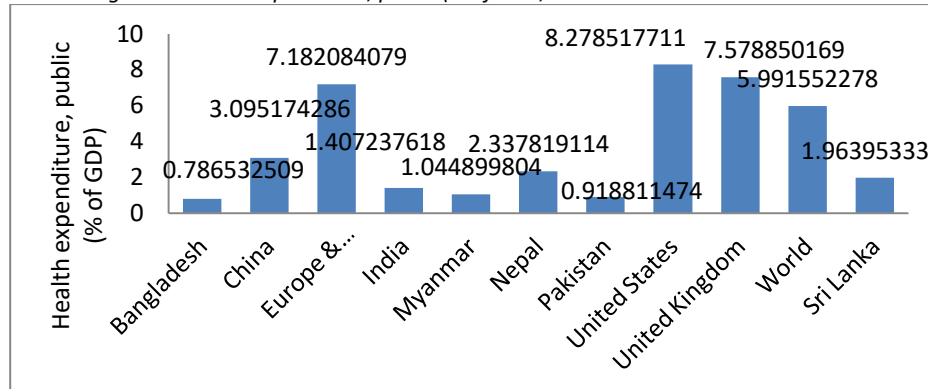
Source: World Development Indicator, World Bank.

Figure 5 shows that the association between female secondary school enrolment and female laborforce participation has been negative in India. This explains an important reason of the falling portion of the U shaped pattern.

The reasons explaining FLFP in India can be summarised into various demand side and supply side factors. Important demand side factors include adverse development in district level labour demand, failure to create jobs appropriate for more educated women (specially in healthcare, education and public services), rapidly shrinking

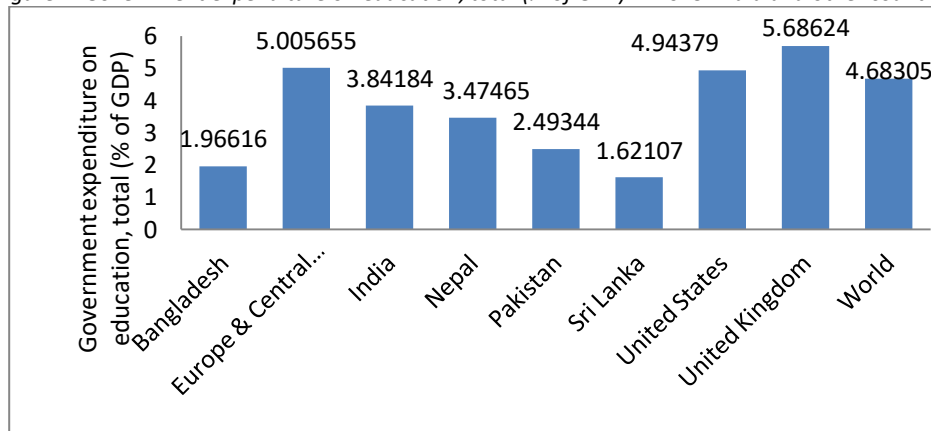
agricultural sector and shift towards manufacturing and service sector, inadequate job creation, lack of job in non-agricultural sectors etc. Supply side factors explain the low female laborforce participation better. Those which affect FLFP negatively include high education and income of husband preventing wife from employment outside, own education of female worker for which they withdraw from workforce, negative effect of marriage, children, measurement, lack of skills for the job, low wage rate offered (discrimination) etc. Factors which have positive effect are: access to finance, infrastructure, declining fertility rate and access to Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) employment etc. As an important aspect here to mention is that the public expenditure on health and education in our country is not satisfactory as evident from figures 6 and 7.

Figure 6. Health expenditure, public (% of GDP, 2014: India and other countries.



Source: World Development Indicator, World Bank.

Figure 7. Government expenditure on education, total (% of GDP) in 2013: India and other countries



Source: World Development Indicator, World Bank.

Figure 6 shows that public health expenditure as a percent of GDP in India had been only 1.4%, much below world average (5.99%) and western countries like U.S, U.K, Europe in 2014. Government expenditure on education Figure 7, total (% of GDP) in 2013 in India had also been very low, only 3.8% of GDP, much below world average.

Health and education are critical factors for encouraging female laborforce participation rate. There is an urgent need for rapid development of our social (health, education) and physical infrastructure [12][13]. Some additional factors responsible for low FLFP are security issues (when travelling for work), sexual harassment at workplace, legal restrictions on women's working hours in factories, retail establishments, IT industry, social mindset, public and political administration, low representation of women in higher echelons of democracy leading to ignorance of policies targeted at women etc.

3.3. Suggestions to improve FLFP in India

The present situation demands a well-designed, comprehensive set of policies to encourage and support female employment. Various measures to improve female laborforce participation in India are suggested below:

1. Fiscal measures can be used, such as, the use of tax credits or benefits for low-wage earners to encourage female labor force participation.

2. There is a need of better publicly financed parental leave schemes to help parents reconcile work and family life, and maintain their connection to the labor market through a guaranteed return to their job.
3. Improved accessibility to comprehensive, affordable, and high-quality child care which can free up women's time for formal employment. Reforms of child care support programs should target benefits to those at work, for example by providing child care subsidies for working mothers.
4. There is a need of reforms of the pension system and it should also ensure that spells of maternity leave do not translate into lower pensions by providing special credits for women with children.
5. Expenditure on the education of women should be increased to stimulate FLFP rate.
6. There is a need of improvements in infrastructure to boost FLFP for example by making clean water more accessible and improving transportation systems, the time women spend on domestic tasks can be reduced which will make them available for outside work.
7. Implementation of policies which remove labor market distortions and discrimination against women in workplace (for example discrimination in wages) to encourage female laborforce participation. Awareness of legal rights to equal treatment should be increased.
8. There is a need of changes in legislation and social norms.
9. Safer working conditions should be created.
10. Empowering national equality bodies to conduct formal investigations on their own initiative (without an individual complaint) can increase employers' awareness of equality issues and help potential victims of discrimination.
11. Policies to encourage a more gender-neutral use of flexible work arrangements for women to balance formal employment with other demands on their time, e.g., telework and compressed work schedules.
12. Part-time employment has become an option in the labor market for women whose labor supply is constrained by family responsibilities. Policies should be targeted to facilitate the eventual transition from part-time to full-time employment which will help to mitigate the lower pay and benefits and the more limited career opportunities associated with part time work.
13. There is a need of the reforms that support child and elderly care. Job creation in child and elderly care can increase female labor force participation by reducing the burden of unpaid work for women and girls and expanding income earning options for women[14].
14. Social acceptance of women in the labor market and in high-level positions contributes to higher female participation in the formal labor force and in entrepreneurship. Policies should be formulated to encourage both private enterprises and the public sector, to create opportunities for women through sponsorship, robust talent management, and search for female candidates for senior executive positions thereby establishing positive role models for future generations of girls.
15. Improving access to training programs for skills development.
16. The promotion of a pattern of growth that creates job opportunities.
17. Policy-makers should be more concerned about whether women are able to access better jobs or start up a business, and take advantage of new labour market opportunities as the country grows.
18. The level of financial inclusion of women in terms of number of women with bank accounts still remains low in India. Efforts should be made to increase this level. Financial inclusion and financial development show positive impact on female labour force participation (increases the autonomy of women within a household).
19. Policies should be formulated which ensure labor will market flexibility allowing more women, many of whom are working in the informal sector, to be employed in the formal sector.
20. Proportion of seats held by women in national parliaments is only 12 % (2016) in India (World Bank). This proportion has to be increased so that policies to encourage women employment receive attention.
21. The work opportunity generated by MGNREGA need to be improved.

4. Conclusion and of further research

There are some important areas of further research. For example, measurement of contribution of women in childbearing and household works can give valuable insight into the true picture of female laborforce participation in India. The effect of low sex ratios on laborforce participation needs to be investigated which is expected to reveal some new features of FLFP. The effect of the migration of unmarried young women from rural to urban areas (metro and large cities) for jobs can be analysed. The role of macro, trade and structural policies also needs to be investigated. For example, the export-oriented, manufacturing-centred growth strategy in Bangladesh has led to

increasing female employment opportunities there. In contrast, India's growth strategy has focused on domestic demand and high-value service exports, which generate too few employment opportunities for women.

Policies should focus on tackling the social stigma which prevents educated women from engaging in outside employment opportunities. Public debates, discussion, and awareness campaign on this issue and its impact are necessary in this regard. Societal change can bring the biggest movement in stimulating female laborforce participation, but a constant effort through the government, organizations and individuals are essential to bend societal norms for realisation of better outcome. This will result in greater economic participation of women and help to realise the post -2015 developmental agenda of the third goal of 'Millennium Development Goals', namely, 'Promote gender equality and empower women'.

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