

Examining the Paradox of Rising Female Labour Force Participation and Low Professional Readiness in Post 2018 India: A Supply Side Approach

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ABSTRACT

Gender equality is an important goal of Sustainable Development Agenda 2030. Since independence female participation at all levels of education has increased. But female participation in workforce has continuously declined till 2017-18 as per data from Periodic Labour Force Survey at different rounds. But thereafter it started to rise. This behaviour has found explanation in current literature and concluded that a large part of the female employment is in unpaid category and has been generated in agriculture and allied activities. But no study has discussed how well-prepared Indian women are for the future job market when the country is moving towards becoming third largest economy of the world. This paper intends to analyze all these issues by using the data relating to Periodic Labour Force Survey, National Family Health Survey and world bank.

Keywords: *Female Labour Force Participation, educational attainment, sustainable development, Professional educational programme*

Achieving gender equality and empowering all women and girls is one of the important goals of Sustainable Development Goals 2030. Though gender equality has been clearly spelt in Goal 5, it is integrated across various other goals of sustainable development goals 2030. Unit level data from employment and unemployment survey and Periodic Labour Force Survey (PLFS) by National Sample Survey Organization at different rounds revealed that female labour force participation declined continuously till 2017-18 and thereafter it started to rise. It is generally accepted that the increase in attainment of education among the masses leads to more participation of people in workforce of any country. Since independence India has progressed remarkably in female participation in education. These have been reflected in increased numbers of Gross Enrollment Ratio (GER), Net Enrollment Ratio (NER), Transition rates, Completion rates and reduced dropout rates across the gender and states of India. Progress in female education in India portrays a U shape like relationship between female education and participation in work force. The U shape like relationship has been widely debated in literature.

So called U-shaped relationship between increase in women education and their participation in work force has been explained in literature by income and substitution effect of education

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on employment. According to Neo-Classical theory, increased education raises productivity of the learners and broadens the potentialities of the educated participants in the work force to acquire higher wages. Therefore, going by this argument, it would be better for the educated ones to substitute leisure with higher wages. But It was found that other family income works as a deterrent to participate in work force by women participants (Chatterjee et al., 2018). Another study observed that substitution effect should surpass the income effect of education on women participation in work force in less patriarchic society (Brinton et al., 1995). A Study shows (Bennett, 1992; Lahoti & Swaminathan, 2013) that despite the progress in women education in India, participation in work force is low. The U-shape relationship between women education and their participation in labour work force has been empirically tested by Klasen & Pieters (2013). Thus, various economic and societal arguments have been put forwarded in support of this. But doubts have been raised whether increase in female labour force participation since 2017-18 is the outcome of distress situation where women are compelled to join labour force or it is the result of economic prosperity. This must be examined in the light of quality of employment women participated during the period of analysis. This paper thus addresses this question by analyzing data from Periodic Labour Force Survey (PLFS) by National Sample Survey Organization, world bank, and National Family Health Survey (NFHS) of various rounds. This study is based on descriptive analysis.

Objective of the study: This paper intends to evaluate the present status of female participation in workforce of India and an attempt has been made to assess how well-prepared Indian women are for the future job market.

DATABASE AND METHODOLOGY

This paper is based on the secondary sources of data collected from Periodic Labour Force Survey (PLFS) by National Sample Survey Organization, world bank, and National Family Health Survey (NFHS) of various rounds This study is based on descriptive analysis.

Employment scenario during 2018-19 to 2022-23

During the period 2018-19 to 2022-23 the pattern of employment across the sectors has witnessed a shift of job from organized to unorganized sector. In 2018-19, 19.60% of the workforce has been engaged in the organized sector and the rest 80.40% were in unorganized sector. Participation in the workforce of unorganized sector increased by 2.87% to 83.27%. in 2022-23. This increase was more pronounced in case of female (5.08%) compared to men (1.82%).

Table 1: Percentage of employment across organized & unorganized sectors for male & female (2018-19 to 2022-23)

	2018-19	2022-23
Organized sector		
Male	19.60	17.77
Female	19.59	14.50
All	19.60	16.73
Unorganized sector		
Male	80.41	82.23
Female	80.43	85.51
All	80.40	83.27

Source: Periodic Labour Force Survey (PLFS) (2020, 2023) by National Statistical Office, GoI

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Employment status of both male and female during 2018-19 to 2022-23 has been shown in table 2.

Table 2: Employment Status of male & female (2018-19 to 2022-23)

Employment Status	2018-19		2022-23	
	Male	Female	Male	Female
Self-employed	51.6	53.4	53.6	65.3
Own account worker	41.3	21.9	39.9	27.2
Employer	2.8	0.7	4.3	0.6
Unpaid family labour	7.6	30.8	9.3	37.5
Regular salaried	24.4	21.9	23.2	15.9
Casual worker	24	24.7	23.2	18.8

Source: Periodic Labour Force Survey (PLFS) (2020, 2023) by National Statistical Office, GoI

Between 2018-19 to 2022-23 it has been seen that regular salaried jobs declined from 21.9 to 15.9 for female and for male it decreased to 23.2 from 24.4. Most interesting thing is that female unpaid family labourers have increased to 37.5% in 2022-23 from 30.8% in 2018-19. Most of the unpaid has been in agricultural sector. This is evident from the following table 3. During 2019-21 there were 42.4 % women agricultural workers who remain in jobs all the year, 53.8 % seasonal workers and 3.8 % occasional workers. About 23.7 % of women agricultural workers are not paid at all. Women participating in paid job might have an important role in stabilizing population. The National Population Policy 2000 of Government of India recognized the importance of women's paid employment in achieving the goal of population stabilization in India and it suggested some measures that helped to encourage paid employment and self-employment of women.

Table 3: Percent distributions of women and men age 15-49 employed in the 12 months preceding the survey by continuity of employment, and type of earnings, according to the type of occupation (agricultural or non-agricultural), India, 2019-21

	Women			Men		
	Agricultural work	Non-agricultural work	Total	Agricultural work	Non-agricultural work	Total
Continuity of employment						
All year	42.4	75	59.9	63.5	84.4	77.6
Seasonal	53.8	20	35.6	34.9	13.8	20.6
Occasional	3.8	5	4.4	1.6	1.8	1.7
Type of earnings						
Cash only	62.5	87.4	75.9	66.1	95.5	85.9
Cash and kind only	10.4	4.8	7.4	20.2	2.7	8.4
In-kind only	3.4	1.2	2.3	3.5	0.4	1.4
Not paid	23.7	6.5	14.4	10.3	1.4	4.3

Source: National Family Health Survey (NFHS-5), 2019-21, Ministry of Health & Family Welfare, GoI

Since the adoption of New Economic Policy in 1991 Indian economy has crossed three and half decades. It emerged as the 4th largest economy in terms of Gross Domestic Products in 2025. During this journey, service sector has become the driver of the growth engine. The

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contribution of manufacturing sector to GDP remains low compared to that of the other emerging economies like China, Brazil, Vietnam. In financial year 2024-25, the contribution of primary sector was 19.7 % to India's nominal GDP and for secondary and service sectors these were 25.3 % and 55 % of the nominal GDP respectively. Despite being the biggest contributor to GDP in terms of value addition, the service sector has not been successful in employment generation, and this is true for manufacturing sector also.

Percentage of employment across sectors for male & female during 2018-19 to 2022-23 has been shown in table 4. The share of industry in employment generation has remained almost same during 2018-19 to 2022-23. Female employment in industry reduced to 15.3 % in 2022-23 from 18.8 % in 2018-19. Contribution of service sector has declined to 28.9 in 2022-23 compared to 32.4 in 2022-23. Interesting thing is that agriculture remains the largest employer though the contribution to GDP in terms of value addition is lowest. Females are mostly employed in agriculture and share of employment has even increased to 64.3 in 2022-23 compared to 55.3 in 2018-19.

Table 4: Percentage of employment across sectors for male & female (2018-19 to 2022-23)

Sector	2018-19			2022-23		
	Male	Female	Total	Male	Female	Total
Agriculture & allied activities	38.3	55.3	42.4	37.1	64.3	45.8
Industry	27.2	18.8	25.1	30	15.3	25.3
Service	34.5	25.9	32.4	32.9	20.4	28.9

Source: Periodic Labour Force Survey (PLFS) (2020, 2023) by National Statistical Office, GoI

The Time Use Survey 2024 conducted by Ministry of Statistics and Programme Implementation (MoSPI) reveals the allocation of time in a day. This is depicted in table 5 below. The table highlighted the fact that unpaid services which are not included in the national income account, occupies an important share of the time-disposition table. Women participate in unpaid services in large percentage compared to male. About 60.8 % of male was engaged in employment & related activities compared to 20.7 % of female in 2024. Therefore, participation of male in employment and related activities are almost thrice than that of female. This may be a crude measurement but indicative in nature.

Table 5: Percentage of person of age 6 years & above participating in different activities in 2024

	Male	Female	Total
Employment & related activities	60.8	20.7	40.9
Production of goods for own final use	13	20.7	16.8
Unpaid domestic services for household members	27.1	81.5	54.1
Unpaid caregiving services for household members	17.9	34	25.9
Unpaid volunteer, trainee and other unpaid work	0.9	1.1	1.0
Learning	22.6	20.2	21.4
Socializing and communication, community participation and religious practice	89.8	90.7	90.3
Culture, leisure, mass-media and sports practices	95.3	90.7	93
Self-care and maintenance	100	100	100

Source: Time Use Survey 2024, Ministry of Statistics & Programme Implementation (MoSPI), NSO

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How well are Indian women prepared for job markets? Supply Side analysis

According to Indian Standard Classification of Education (InSCED), GOI, MHRD (2014), school education is comprised of two segments namely, general courses and vocational courses. In case of higher education there are also two programmes, one is academic programme and other is professional programme. Professional education is defined as higher educational programmes that are designated for learners to acquire knowledge, skills and competencies specific to a particular occupation or grade or class of occupations or trade (AISHE, 2020-21, p.33). On the other hand, academic programmes are designed for learners to acquire knowledge, skills and competencies and literacy and numeracy skills often to prepare for more advanced educational programmes.

Secondary vocational pupils are the numbers of secondary students enrolled in technical and vocational education programmes including teachers training. The following table 6 shows the percentage of secondary vocational pupils out of the total students enrolled in secondary education in some of the emerging economies of the world. This shows a very poor picture of secondary vocational education of India. About 17% of the pupils pursue vocational courses in India compared to 43 % of China, 43 % of Indonesia, 44% Malaysia, 55 % of Brazil and 28 % of Bangladesh. Table 7 further reveals the female participation in vocational courses at the secondary level of education in India during 1971-2017, period of which data available from world bank.

Table 6: Percentage of secondary vocational pupils out of the total students enrolled in some emerging economies

Country/ Year	2017	2018
India	17%	n.a.
China	n.a.	43%
Indonesia	n.a.	43%
Malaysia	n.a.	44%
Brazil	55%	n.a.
Bangladesh	n.a.	28%

Source: data.worldbank.org

Female enrollment in vocational courses at the secondary level is very poor. The point is that after the adoption of New Economic Policy this percentage has declined. About 32 % female participated in vocational courses in 1989 and this figure reduced by more than half to 13 % in 1993. Thereafter, it continued to rise till 2000 and once again fell to 17 % in 2001. In the year 2017 it was 17 %.

Table 7: Secondary education, vocational pupils (% female) India (1971-2017)

Year	% female	Year	% female
1972	36	1995	14
1973	37	1996	15
1974	n.a.	1997	15
1975	38	1999	20
1976	38	2000	20
1977	32	2001	17
1978	32	2002	17
1980	28	2003	15
1981	32	2004	18
1982	29	2005	20

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Year	% female	Year	% female
1983	29	2006	23
1984	29	2007	25
1986	30	2008	25
1987	27	2013	17
1988	28	2014	17
1989	32	2015	16
1993	13	2016	17
1994	13	2017	17

Source: data.worldbank.org

Table 8 shows enrollment of female per 100 males in academic and professional programmes in regular mode at undergraduate and post graduate level. Female enrollment in academic programmes is more than that of male except Bachelor of Commerce (B.Com.) programme in 2020-21. But in case of professional programmes except Bachelor of Nursing [B.Sc. (Nursing)] programme, it is the male who dominates in enrollment. Therefore, females are lagging behind than that of male in case of both vocational and professional courses. Since these courses assume important role in enhancing skills and competencies specific to a particular occupation or grade or class of occupations or trade, less enrollment compared to female might be one of the factors that may reduce the participation of female in workforce in future.

Table 8: Female per 100 male students in important programmes at Undergraduate & Post Graduate level (Regular mode)

Programme	2016-17	2017-18	2018-19	2019-20	2020-21
Academic Programme					
Bachelor of Arts (B.A)	121	124	126	127	119
Bachelor of Commerce (B.Com.)	93	96	99	100	98
Bachelor of Science (B.Sc.)	94	100	106	113	112
Master of Arts (M.A)	169	173	180	190	172
Master of Commerce (M.Com.)	158	168	179	186	180
Master of Science (M.Sc.)	167	171	174	180	164
Professional Programme					
Bachelor of Computer Application (B.C.A)	75	73	70	73	63
Bachelor of Business Administration (B.B.A)	66	67	67	68	64
Bachelor of Pharmacy (B. Pharm)	83	82	79	93	67
Bachelor of Technology (B.Tech.)	39	38	40	42	40
Bachelor of Law (L.L.B.)	47	47	49	53	49
Bachelor of Nursing [B.Sc. (Nursing)]	384	379	358	385	310
Master of Technology (M. Tech.)	67	55	54	63	47
Master of Business Administration (M.B.A)	62	70	75	76	76
Bachelor of Medicine & Bachelor of Surgery (M.B.B.S.)	99	101	106	110	100

Source: data.worldbank.org

CONCLUSION

According to Neo classical theory educational attainment helps to raise productivity of the learners and thus increases the chances of getting employment. In case of India increase in educational attainment shows a U shape like relationship between the educational attainment

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and work force participation of female. Till 2017-18 female participation in workforce shows continuous fall but thereafter work force participation continued to rise along with rising female enrollment in education. This U shape like relation has been well explained in literature. But very few literatures have highlighted the nature of current female employment as well as how well Indian female are prepared for job market in future. This paper by using data from Periodic Labour Force Survey (PLFS) of National Sample Survey Organization, world bank, and National Family Health Survey (NFHS) of various rounds reveals that a large percentage of women participated in unpaid activities. These unpaid activities are mostly in agriculture and allied activities. India has lower female work force participation compared to other emerging economies of the world. Female participation in vocational and professional courses both at secondary, undergraduate and post graduate courses in india are very low compared to other emerging economies. Since these courses have important role in employment generation, low enrollment of female in such courses compared to male may reduce the chances of female participation in future job market. Therefore, government must take some pragmatic approaches to ensure the increased participation of female in such professional courses (Annual Report, PLFS, 2023-24, 2024).

REFERENCES

- Bennett, L. (1992). *Women, poverty, and productivity in India*. World Bank.
- Brinton, M. C., Lee, Y.-J., & Parish, W. L. (1995). Married Women's Employment in Rapidly Industrializing Societies: Examples from East Asia. *American Journal of Sociology*, 100(5), 1099–1130. <https://doi.org/10.1086/230633>
- Chatterjee, E., Desai, S., & Vanneman, R. (2018). Indian paradox: Rising education, declining womens' employment. *Demographic Research*, 38, 855–878. <https://doi.org/10.4054/DemRes.2018.38.31>
- International Institute of Population Sciences (IIPS) and ICF. (2022). *National Family Health Survey (NFHS-5), 2019-21: India* (No. Volume I). IIPS.
- Klasen, S., & Pieters, J. (2013). What Explains the Stagnation of Female Labor Force Participation in Urban India? *IZA Discussion Paper No. 7597*.
- Lahoti, R., & Swaminathan, H. (2013). Economic Development and Female Labor Force Participation in India. *India Institute of Management Bangalore*.
- Ministry of Statistics & Programme Implementation, National Statistics Office (2024). *Periodic Labour Force Survey (PLFS) annual report 2023-24*. Government of India. <https://mospi.gov.in>
- Ministry of Statistics & Programme Implementation, National Statistics Office (2025). *Time Use in India 2024*. Government of India. <https://mospi.gov.in>
- World Bank Open Data*. (n.d.). World Bank Open Data. Retrieved 22 December 2025, from <https://data.worldbank.org>

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Conflict of Interest

The author(s) declared no conflict of interest.

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