# Female Employment Trends in India: A Disaggregated Analysis

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#### **Abstract**

Using the NSSO data, the present study tries to reveal an overall picture of female employment in India–type of employment, wage differentials, work participation, employment potentiality. It looks at rural – urban differences and inter-state disparities. The study focusing basically on disadvantaged women makes appropriate recommendations for improving the employment potentialities of women in India.

**Keywords: Female Employment, Work Force Participation, Wage Differential** 

### Introduction

country's economic development crucially depends upon the participation rates of its women as they constitute around 50 percent of its human resources (NIPCCD, 2010). Not only that, women's participation in the workforce as compared to men is also an important determinant of their social status (Mammen, 2000). Women's employment is crucial for raising their living standards and well-being. However, economic well-being and welfare of women may not improve if they are engaged in low-paying distress-driven work (Srivastava & Srivastava, 2009). Women's participation in the workforce assumes more importance in the case of developing countries. This is because of its positive effects on the level of output and negativeeffects on population growth (Collver & Langlois, 1962). Increasing rates of women's participation have enabled developed countries to embark on a path of higher growth (The Economist,

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2006). It has been found that in developing countries like India, women's participation in the workforce has been remarkably low as compared to men. However, the role of women in economic activity has been increasing in recent years. Therefore, it is important to examine magnitude and nature of work taken up by women in India.

There are extensive studies that have looked at the issue of female employment in India. Ghosh and Mukhopadhyay (1984) reported a drastic reduction in number of female workers and their work participation rates. They explained this situation mainly in terms of the dominant position of the male in the workforce, the low level of overall employment, and the adverse sex-ratio of females in the population. They also examined the issue of inter-state variations in female employment. They found that northern States like Haryana, Uttar Pradesh (UP) and Punjab are characterised by low participation rates and southern states like Tamil Nadu and Kerala show higher participation rates. Dunlop and Velkoff (1999) explain that despite the fact that most women in India work, most of their work does not get accounted in the official statistics. They argue that the recorded workforce participation of females is very low, and it is difficult to estimate unemployment in India. So, much of the unemployment data does not correctly reveal the participation rates of women. Unni and Rani (2000) have examined the issue of informalisation of employed women. Their study finds rising informalization of the labour force in India and other South Asian countries. They argue that sub-contracting and loose contracts are primary reasons that are responsible for this trend.

Chandrashekhar and Ghosh (2007) have examined the urban female employment at the national level. They have looked at the quality of new jobs created for the urban females. Their analysis reveals that there has been a decline in casual employment of urban females and increase in the regular and self-employment. Similarly, a study by International Institute for Labour Studies (2004) has looked at the quality of women employment. The study explains that since most women in India are engaged in part-time work, informal sector, and in the form of non-unionised labour, therefore, it is highly likely that they are employed in low-quality work.

Chandrashekhar and Ghosh, (2007) in their analysis of urban female employment have found that there has been a sharp decline in the casual employment of urban women. They have observed that there has been an increase in self and regular employment for urban women. Srivastava

and Srivastava (2009) have studied the trends and patterns of women's employment in rural India and also examined the determinants of women employment. They have found that rural female employment in last few decades has increased, but there has not been an improvement in outcomes. Their study also finds that female workers are engaged in agricultural work as self-employed or casual labour. They further argue that higher work participation does not always indicate a higher welfare unless it is accompanied by educational attainment. They find that that education is a strong determinant of high-quality work for employed women.

Given the above evidence, this paper attempts to present an overall picture of women's work in India and compare the rural-urban scenario with respect to women's employment. The paper seeks to capture the trends and patterns of female employment in urban and rural areas, both at the all-India and state level. It also examines the kind and quality of work taken up by females in India and makes a comparative study of the urban-rural female employment scenario with respect to wages, education level, sectoral employment, etc.

# **Data Sources and Methodology**

The main data sources used in this paper are the employment and unemployment surveys (EUS) of the NSS. NSSO carries out such surveys once in almost every five years covering about 5 lacs individuals. The NSS reports of the 43rd (1987-88), 50th (1993-94), 55th (1999-2000), 61st(2004-05), 66th (2009-10) and 68th (2011-12) rounds have been used to look at the trends and patterns of female workforce participation in the urban and rural areas. NSS provides four different employment estimates based on three approaches to activity classification (usual status, current weekly status, and current daily status). NSS defines 'Principal Status' (PS) as "the activity status on which a person spent relatively longer time during the 365 days preceding the date of survey." This is similar to the definition of 'main worker' in the Census. A person is said to be employed in 'Subsidiary Status' (SS) "if he is engaged in any activity for only a part of the year (similar to the concept of a 'marginal worker in Census)." If a person is working either under PS or SS, he is said to be counted under 'Usual Status or Usual Principal Subsidiary Status (i.e., both combined). This paper uses the employment estimates based on usual status (or usual principal subsidiary status, PS+SS).

# **Analysis and Interpretation**

In almost all countries especially in the developing parts, the male participation rates are significantly higher than females. Same is also evident in India as well; women participation rates in employment are almost half as compared to men. Figure 1 shows that at the all-India level male WPR range between 50-55percent from 43rd round (1987-88) to 68th NSS round (2011-12). Corresponding rates for females are in the range of 22-29percent. Male WPR has remained more or less stable during the entire study period.

60 50 40 30 Male WPR Female WPR 20 10 0 50th 55th 43rd 61st 66th 68th (1987-88) (1993-94) (1999-00) (2004-05) (2009-10) (2011-12)

Figure 1: Male-Female Workforce Participation Rates

Source: Employment and Unemployment Surveys of NSS

In comparison to the male WPR, female WPR reveals a slightly more fluctuating trend. Female WPR has declined from 28.5 percent in 43rd round to 21.9percent in the 68th round. The 61st round (2004-05) shows significant increase in female WPR as compared to the earlier rounds. Several scholars (Chandrashekhar and Ghosh, 2007; Srivastava & Srivastava, 2009) have argued that globalisation could be one of the important reason for this increase in female employment. However, it is equally important to examine whether there has been an increase in employment opportunities for both rural and urban women.

Table 1 presents male and female WPR in urban and rural areas for the period 1987-88 to 2011-12. It is clear from the table that participation rates of rural women are significantly higher than those of urban women. And there is a wide gap in female employment in rural and urban areas. During the 43rdround, only 15.2 percent of female were employed in the urban areas which further decreased to 14.7 percent during the 68th round. Similarly, 32.3 percent of the rural females were participating in the rural activity which had further decreased to merely 24.8 percent. In comparison to the magnitude of rural-urban disparity of female employment, the same is very less for male participation rates. Given the picture, can we conclude that higher WPR of rural women is an indication of their well-being?

Table 1

Urban and Rural WPR: Male & Female									
	Femal	Male WPR							
Round	Urban	Rural							
43rd	15.2	32.3	50.6	53.9					
50th	15.5	32.8	52.1	55.3					
55th	13.9	29.9	51.8	53.1					
61st	16.6	32.7	54.9	54.6					
66th	13.8	26.1	54.3	54.7					
68th	14.7	24.8	54.6	54.3					
Source: Employ	yment and Unem	ployment surve	ys of NSS						

Such questions can be answered by analysing the kind of work taken up by women. This is done in the subsequent section. Employment in both rural and urban areas has witnessed a decline in the 66th round as compared to 61st round. This decline is sharper for urban women as compared to rural women. One of the reasons for this phenomenon could be the fact global recession of 2008 would have had a more adverse effect on urban employment vis-à-vis rural employment

<sup>&#</sup>x27;Self-employed are persons who operated their own farm or non-farm enterprises or were engaged independently in a profession or trade on own-account. Regular workers are persons who worked in others' farm or non- farm enterprises (household and non- household) and, in return, received salary or wages on a regular basis. Casual workers are persons who were casually engaged in others' farm or non-farm enterprises (household and non- household) and, in return, received wages according to the terms of the daily or periodic work contract. (Definitions taken from NSS employment reports).

# Type of Employment of Females in India

In this section, we have examined the type of work taken up by female workers of both rural and urban areas by examining the status of their employmentwhether self, regular or casual. Such an analysis of employment type is useful in providing information about the nature of women's employment in India. Whether women in India can find employment that raises their welfare or is it solely driven by unskilled, low-paying type of work is a major question. Table 2 shows the employment status of urban and rural females for the period 1987-88 to 2011-12. There has been a continuous rise in the regular employment since the 43rd round. It has increased from 27.5 percent in the 43rd round to 42.8 percent in the 68th round. This increase is positive development since regular employment means better working conditions and higher incomes. Self-employment of urban females has also witnessed an increase during 61st round, after remaining more or less constant for the last two rounds. However, it has declined significantly in the recent years. On the other hand, casual employment of urban females has continuously declined from 25.7 percent in the 43rd round to 14.3 percent in 68th round except a marginal increase in the 61st round in comparison to the earlier round. Overall, the decline in casual employment and increase in regular employment of urban females is a promising development.

Table 2

Type of Employment (PS + SS) of Females Workers										
	Urban 1	Rural Females								
Rounds	R.E	S.E	C.E	R.E	S.E	C.E				
43rd	27.5	47.1	25.4	3.7	60.8	35.5				
50th	28.4	45.8	25.8	2.7	58.6	38.7				
55th	33.3	45.3	21.4	3.1	57.3	39.6				
61st	35.6	47.7	16.7	3.7	63.7	32.6				
66th	39.3	41.1	19.6	4.4	55.7	39.9				
68th	42.8	42.8	14.3	5.6	59.3	35.1				

Source: Employment and Unemployment surveys of NSS

Note: PS: Principal Status, SS: Subsidiary Status, RE: Regular Employment, SE:

Self-Employment and CE: Casual Employment.

In contrast to urban females, there has been marginal increase in regular employment of rural females in the recent years after a slight decline during the 50th round. It has increased from 3.7 percent in 43rd round to 5.6 percent in the 68th round that means that stable employment opportunities for rural women have not increased significantly. On the other hand, casual employment of rural women has remained more or less stable during the entire period except a slight dip during the 61st round. This marginal increase in regular employment and constancy of casual employment needs examination at length. Similarly, self-employment of rural women does not show any systematic pattern. It is erratic in nature.

# **Sectoral Employment of Females in India**

Table 3 represents the broad sectoral classification of employment for urban and rural females. The proportion of urban women engaged in agriculture has gradually declined over time from around 29 percent in the 43rd round to around 11 percent in the 68th round. This sharp decline over this 24-year period from 1987-88 to 2011-12 is very much expected in the context of structural transformation following the economic reforms of 1991. However, the proportion of urban women engaged in the manufacturing sector nearly remains constant upto 66th round. However, there has been a significant increase of urban females to 44 percent in the manufacturing sector. Given the export-oriented and liberalization policies of the government, this stagnancy of urban female employment from 43rd round to 66th round is indeed surprising. Chandrashekhar & Ghosh (2007) have examined this aspect in detail and have pointed to the chances of misclassification of employment in the available data. They find that while the employment of urban women according to principal status does not display any clear trend, but the employment of urban women according to subsidiary status has been rising steadily. They have explained that home-based subcontracting work does not get included in the employment data and thus could be an explanation of the stagnancy of female employment in manufacturing. However, female employment in manufacturing has increased significantly between 66th and 68th round.

Table 3

Share of Female Employment in Different Sectors									
	Urbai	1 Females	Rural Females						
Rounds	Agriculture	Manufacturing	Agriculture	Manufacturing	Services				
43rd	29.4	27	27.8	84.7	6.9	3.7			
50th	24.7	24.1	35	86.2	7	4			
55th	17.7	24	34.2	85.4	7.6	4.3			
61st	18.1	28.2	35.9	83.3	8.4	4.6			
66th	13.9	27.9	39.3	79.4	7.5	5.7			
68th	10.9	44	55.1	74.9	16.7	8.3			
Source:	Employmen	nt and Unemplo	yment sui	veys of NSS					

The major gainer has been the other services. It includes both wellpaying skilled jobs as well as low-paying unskilled jobs in the private and public sphere. For urban women, employment in other services increased from around 28 percent in 43rd round to around 55 percent in the 68th round. The service sector employment needs to be studied at a disaggregated level to examine the nature of service sector jobs being created for urban women. For rural women, the proportion employed in agriculture has declined from about 85 percent in the 43rd round to about 75 percent in the 68th round. Srivastava & Srivastava (2009) have labelled this slow movement out of agriculture as "creeping feminisation" of agriculture. The concentration of women in agriculture would not significantly improve their well-being as agricultural wages are significantly lower than non-agricultural wages. The proportion of rural women engaged in manufacturing has been very low and stagnant except an increase of 16.7 percent in the 68th round. Similarly, the employment in other services is also very low and has increased only marginally.

### **Educational Status of Working Females in India**

Table 4 shows the educational levels of working urban and rural women. The education level is divided into 6 categories: 'not literate', 'literate and up to primary', 'middle', 'secondary', 'higher secondary', and 'graduate and above'. In urban areas, WPR is higher for illiterate females than for females with higher levels of education except graduates. For the 66th

<sup>&</sup>lt;sup>2</sup>Other services category excludes trade, hotels and transport and communication.

round, 23 percent of illiterate urban women are employed, but this is only 15 percent and 9 percent for women who have middle and higher secondary education.

Table 4

Educational Level of Working Females										
Urban Females					Rural Females					
Rounds	43rd	50 <sup>th</sup>	55 <sup>th</sup>	61st	66 <sup>th</sup>	43rd	50 <sup>th</sup>	55 <sup>th</sup>	61st	66 <sup>th</sup>
Not Literate	29.2	30	27.1	30.4	23.1	52.6	54	51.3	55	43.2
Upto Primary	17.5	20.3	17.7	23.4	20.6	39.1	41.6	40.3	44.9	38.4
Middle	11.3	13.1	12.9	16.1	15.4	29	29	29	37.1	29.4
Secondary	15.1	13.4	12.4	12.3	9.7	26.1	25.8	25.7	30.5	22.2
Higher Secondary	NA	14.7	12.4	12.9	9.4	NA	23.4	20.6	25.2	18.3
Graduate & Above	31.5	30.1	27.3	29	25.9	35.1	36.6	31	34.5	29.7
Source:Employ	Source:Employment and Unemployment surveys of NSS									

However, such a pattern does not hold true for men i.e. higher levels of education are associated with higher participation rates (Srivastava &Srivastava, 2009). Now the question arises is that what are the reasons for such differences. There are complex social and economic factors at work which could be held responsible for this pattern.

In the case of urban females with graduate and above level of education, the WPR declined from around 32 percent in the 43rd round to 29 percent in the 61st round and then to 27 percent in the 66th round. This indicates that urban women finding employment are less educated and are probably finding work in low-paying unskilled jobs which do not require much education. Even for rural women, WPR is higher for illiterate females than for females with higher levels of education. In the 66th round, around 43 percent of the illiterate rural women are employed, whereas this is only 18 percent and 29 percent respectively for women who have higher secondary and graduate level of education. Like urban women, WPR of rural women with secondary, higher secondary and graduate and above level of education have also declined from 50th round to the 66th round. This implies that a lesser number of educated and skilled rural women are participating than earlier and most of them finding work in low-paying unskilled jobs.

# Wages Paid to Women

Table 5 shows the average wage of regularly employed for men and women in rural and urban areas from 1993-94 to 2011-12. It is clear from this Table that the absolute wage differentials between rural and urban women have widened over time. During 1993-94, rural women had an average wage of Rs 35 while urban women had an average wage of Rs 62 and the corresponding figures for 2011-12 are Rs 201 and Rs 366 respectively.

Table 5

Average Wage of Rural & Urban Females from 1993-94 to 2011-12									
	Fem	Male							
Rounds	Rural	Rural	Urban						
50th	34.89	62.31	58.48	78.12					
55th	114.01	140.26	127.32	169.71					
61st	85.53	153.19	144.93	203.28					
66th	155.87	308.79	249.15	377.16					
68th 201.56 366.15 322.28 469.87									
Source: Emplo	yment and Unem	ployment surve	ys of NSS						

Thus, it becomes clear that wage differentials for rural and urban women have not narrowed down during the study period. There are also problems like lesser number of days of work for females and receiving less than the minimum stipulated wages (Srivastava &Srivastava, 2009; NCEUS, 2007). In contrast to females, the wage disparities in case of males are less striking. Therefore, female workers are in a worse-off position in terms of wage earnings in comparison to the male workers. In the category of female workers, rural females are relatively worse off. Thus, there is an urgent need for governmental policy to improve the average earnings of rural women and reduce these disparities.

### **State-level Employment Scenario**

Table 6 shows urban female WPR in different states during 1993-93 to 2011-12. Among major states-Tamil Nadu, Andhra, Kerala, Rajasthan and Maharashtra show higher than all-India average participation rates for the urban females. On the other hand, Assam, Bihar, Uttar Pradesh, Gujarat, Haryana, Punjab and M.P. have female WPR lower than the national

average. West Bengal and Orissa show WPR coincide with the all-India average. Only three states Andhra, Kerala and Tamil Nadu have female WPR higher than the level of 20 percent. Almost all states have experienced a fall in urban female WPR during 66th round, 2009-10. The reasons for this fall at the state-level and national-level needs details examination. However, the global financial recession could be one of the possible reasons for this decline in WPR. Except Bihar, Assam, and Kerala, all states experienced an increase in the urban female WPR from 55th round to the 61st round. The increase is more significant for states like Andhra, Tamil Nadu, Maharashtra, and West Bengal. The WPR of both rural and urban females declined between 61st and 66th round. However, this trend was reversed in the subsequent 68th round.

Table 6

State-Wise Female Workforce Participation Rates										
States/		Urba	an Fen	nales			Rur	al Fen	nales	
Rounds	50th	55th	61st	66th	68th	50th	55th	61st	66th	68th
Andhra Pradesh	19.9	17.8	22.4	17.6	24	52.1	47.8	48.3	44.3	62.2
Assam	9.2	11.2	10.9	9.3	12.2	15.9	15.1	20.9	15.8	17.8
Bihar	6.9	7.5	6.5	4.7	7.1	17.2	17.3	13.8	6.5	8.5
Gujarat	14.2	13.5	15.1	14.3	19.3	39.6	41.3	42.7	32	40.3
Haryana	15.2	9.8	13.2	13	14.4	27.1	20.2	31.7	25	23.4
Karnataka	18.1	17.8	18.1	17	23.5	43	38	45.9	37	40.6
Kerala	20.3	20.3	20	19.4	27.8	23.8	23.8	25.6	21.8	30.8
Madhya Pradesh	14.2	13.4	15.4	13.1	17	41	38.2	36.6	28.2	38
Maharashtra	16.9	13.7	19	15.9	23.6	47.7	43.4	47.4	39.6	56.5
Orissa	15.1	14.5	14.8	11.9	21.6	31.7	29.9	32.2	24.3	36.1
Punjab	9.3	12.5	13.3	12.4	19.4	22	28	32.2	24	32.9
Rajasthan	16.3	13.8	18.2	12	20.6	45.7	38.8	40.7	35.7	53
Tamil	23	21.5	24.1	19.1	27.9	47.8	43	46.1	40.5	51.9
Uttar Pradesh	10.2	9.4	11.7	8	14.5	21.9	20.1	24	17.4	28.1
West Bengal	14.3	11.7	15.5	14.1	23.8	18.5	16	17.8	15.2	27.9
All India	15.5	13.9	16.6	13.8	21	32.8	29.9	32.7	26.1	37.2
Source: Employment and Unemployment surveys of NSS										

States like Assam, Bihar and Uttar Pradesh, are the worst performers in terms of the participation of urban women in the workforce. This raises questions about the economic and social status of women in these states. Does economic advancement of a state propel its women into employment? Because of complex social and economic factors which are significantly different in different regions such questions do not have a simple answer. On the other hand, Tamil Nadu, Kerala, Andhra and Maharashtra display a good performance with respect to female WPR.

In the case of Kerala, Punjab and Haryana, WPR of rural women is similar to the all-India average. Gujarat and Rajasthan emerge as two states where rural female WPR are significantly higher than urban female WPR. Assam, Bihar and U.P. are the three states where both urban and rural female employment is very low as compared to the national level. So it is clear that significant inter-state variation in case of female WPR is observed in both urban and rural areas. A more in-depth and disaggregated analysis is required to find out the reasons for such inter-state disparities.

### Conclusion

The female workers have much lower participation rates than their male counterparts and hence comprise a marginalized section. The share of rural women in the workforce is much higher than those in urban. However, women in rural India are clearly in an inferior position in the labour market vis-à-vis their urban counterparts. This is evident from the fact the most of the rural women are casually employed and are engaged in low-paying agricultural work. During 2011-12, more than 35 percent of rural women were casually employed while this figure stood at less than 15 percent for urban women. This implies that most rural women work long hours in poor working conditions. Moreover, most of the rural women are predominantly engaged in agriculture where earning opportunities are low. On the other hand, the proportion of urban women engaged in agriculture has been declining rapidly, and most of the urban women are finding work in 'services' sector. The wage differentials between rural and urban women are also striking. Rural women earn considerably lower wages than urban women, and the disparities have not shown any tendency to decline. It has been observed that both in urban and rural areas, WPR are higher for illiterate females than for females with higher levels of education in general. This implies that a lesser number of educated and skilled women

are participating than earlier, and most of them are getting work in low-paying unskilled jobs.

State-wise female WPR reveals that southern states like Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, and Kerala have participation rates higher than the all-India level. Wide interstate disparities are observed with respect to female WPR for rural and urban females. Several important policy implications emerge out of the above analysis. There is an urgent need to provide education, training and skill development programmes for women that would help in raising their productive potential. It is also important to focus on the provision of secondary and higher education that would ensure that women workers find high-quality regular employment.

There are significant wage differentials between rural and urban women. Apart from rural-urban wage differentials there exists a significant gender differential also in the labour market. Therefore, the study suggests appropriate government intervention along with policy formulation for addressing the issue.

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