

Working Paper

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**Class Matters? :
Exploring the Trends in Female
Workforce Participation
in India after 2004-05**

**Niti Mehta
and
Smrutirekha Mohanty**
September 2017



**Sardar Patel Institute
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Class Matters? : Exploring the Trends in Female Workforce Participation in India after 2004-05

Niti Mehta and Smrutirekha Mohanty*

Abstract

Recently, the issue of declining female labour force participation in Indian labour market accompanied by its impressive economic growth rate has become an important concern for both policy makers and academicians. Studies on this topic propose some probable reasons for this peculiarity in female labour force participation in India. It can be argued from mere logic that the general factors influencing the decision of women to participate in the labour market is similar to that of the men. However, there are complex interplays among the social, cultural and political factors which have more pronounced repercussions on the women's decision to work than that of the men. With this backdrop, the present paper tries to explore the possible aspects or factors which were argued to be instrumental in influencing the level and pattern of female work participation in a society. We specifically make an attempt to see how women belonging to different income categories are placed in terms of participation in work, quality of employment and their engagement in industry of economic activity. We adopt the exploratory approach to analyze the objectives of this paper. Along with the published reports of various government agencies, this paper also utilizes extensively the unit records of the employment schedule of National Sample Survey Office for two quinquennial rounds: 2004-05 and 2011-12. The paper observes that women workers in general are at the disposal of greater disadvantages in India that is particularly striking in rural areas. Employment structure in India has led to the polarization of skills such that women predominate in low paid, low skill work, both in rural and urban areas. Whatever jobs have been created, they mainly cater to the highly educated women. This paper perceives that economic growth alone is not sufficient to ensure higher participation of women in the labour market and also emphasizes that removal of statistical invisibility of women workers be debated intensively.

JEL codes: J20, J21, J22, J24

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1. Introduction

The basic static labour supply model is starting point for many models of female labour force participation (Blundell and MaCurdy, 1999). The model specifies that an increase in the wage rate reduces demand for leisure as its opportunity cost rises, and labour supply increases. If leisure is a normal good, an increase in a person's or their household members' income will increase the demand for leisure and thus reduce labour supply. These are the well-known 'substitution' and 'income' effects (Klasen and Pieters, 2012). In addition to the basic labour supply model, several other factors have been discussed to analyse female workforce participation in developing countries. The best known hypothesis is the feminization 'U-curve' that suggests that as an economy develops female labour force participation first declines and then increases (Goldin, 1994; Mammen and Paxson, 2000). Within a country, at a given point in time there is a U-shape relationship between economic or educational status and women's labour force participation.

Scholars (Boserup, 1970; Pscharapoulous and Tzannatos, 1989) have shown that in the course of development, the agrarian societies have an increased demand for female labour. Higher level of poverty compels women to supply their labour. With the progress of industrialisation and economic growth, female labour utilisation reduces as there is more demand for male skilled labour. This also corresponds with rise in household incomes, inducing women to reduce their labour supply, or the income effect. However, with the expansion of the tertiary sector the demand for the 'reserve' army of labour comprising female labour, is renewed. With an increase in the family incomes and with the improvement in the education /skill level of females, more women get employment, especially in the non-manual or service oriented jobs. This substantiates the U-shaped relation between the participation of females in the labour force and economic growth. Abraham (2013) shows that India, being a middle income country depicts the downward portion of the U-shape and infers that women's withdrawal from the labour market could be the result of income effect.

It is also a well-established fact that in capturing paid employment, statistics on women's work ignores unpaid domestic labour, subsistence production, family farm work, and informal income-generating activities. Household or domestic work is not defined as economic activity, mainly because it is of use value rather than exchange value. The economic activity captured by labour force surveys is limited mostly to paid work excluding the grey areas of self-employment, home based work, or unpaid family labour. There is thus a need to reconceptualise women's work as a continuum having domestic work at one end of the spectrum and employment in the formal sector, or labour force participation at the other (Tiano, 1982). The classification of domestic chores and the 'invisibility' of women's work in our labour surveys is the primary reason for the underestimated figures reported for the economically active female population.

The current literature on the Indian condition articulates four potential explanations for the decline in women's work participation. Firstly, that household incomes could have risen in rural areas due to economic growth and higher wage levels, which take the pressure off the women to seek employment (World Bank, 2010; Himanshu, 2011; Rangarajan et al., 2011). Secondly, that women, more so in the rural areas, are pursuing higher education and are therefore not available for the labour force with the rise in the household incomes (Chowdhury, 2011; Rangarajan et al., 2011). The income effect explains the decline in rural female participation rates, along with the probability that women's labour force participation drops the higher the men's wages are. Thirdly, the decline in women's work is due to an overall absence of employment opportunities in rural areas (World Bank, 2010; Chowdhury, 2011; Mazumdar and Neetha, 2011). Finally, the role of cultural factors and social constraints have been cited, which might be coming to the fore due to rising incomes or limited employment opportunities.

In this paper we have tried to look at the possible explanations put forward - education, income and employment opportunities, for the decline in female work participation after 2004-05 through a simple exploratory analysis of the NSSO Employment and Unemployment Survey 61st and 68th round unit level data.

We specifically make an attempt to see how women belonging to different income categories are placed in terms of participation in work, quality of employment and their engagement in industry of economic activity. Such an examination has not been attempted in a concerted manner in the recent literature, although its need and merit in arriving at a more nuanced policy for economic emancipation of female workers cannot be over emphasised.

Following the introductory section, section two examines the overall WPRs for females, including the trends for age groups, income groups, interaction of age and income groups and educational attainment. Section three examines the quality of work aspects. Section four looks at the work participation for the major states, while section five examines the industrial distribution of workers, both overall and changes across the states. The sixth section deals with the nature of activities engaging the income (MPCE) classes. Section seven gives an overview of the extent of women's unpaid work and under-estimation of women workers. The last section outlines the need for a policy outlook for bettering the female employment outcomes.

2. Work Force Participation Rates (WPR) for Females

Table 1 shows the level and changes in the work participation rates of females following the 1999-00 period.

Table 1: Female Work Participation Rates (%) (15-59 years) 1999-00 to 2011-12

	1999-00	2004-05	2009-10	2011-12
NSS Round	55th	61st	66th	68th
Rural	48.3	51.5	39.2	37.2
Urban	20.9	24.2	19.8	21.0
Total	41.0	44.2	33.6	32.3

Source: NSSO Rounds on Employment-Unemployment, Various years

Workforce signifies the persons actually employed and does not include those available for work but currently unemployed. The data from different rounds of National Sample Survey Office (NSSO) Employment and Unemployment Survey revealed that in 2004-05 (61st round), the work participation rates of women in rural and urban areas increased by around three percentage points over 1999-00 (55th Round). This was contrary to the declining trend observed since 1983. Thereafter, during 2004-05 (61st round) to 2009-10 (66th Round) there was a very significant decline in overall female WPR by nearly 11 percentage points. A reduction by 12 percentage points was observed for the rural female WPR in 2009-10, (falling from 51.5 percent in 2004-05 to 39 percent in 2009-10). The decline was less steep for urban female WPR from 24 percent in 2004-05 to 19.8 percent in 2009-10 (by around four percentage points). Such a decline has been unprecedented. From 2009-10 to 2011-12 (68th Round), the work participation of rural women decreased further by two percentage points, while the urban female work participation rate increased by nearly one percentage point. The decline in participation rates of rural women largely contributed to the aggregate decrease in the female workforce participation.

The increase in work participation of women after 1999-00 and the tremendous decline after 2004-05, as recorded in the 66th and 68th NSS rounds have been the subject of much discussion, with the explanation largely focusing on the withdrawal of rural women from the workforce due to improvement in the economic status of the lower income segments or the 'supply-side effect', as propounded by Gandhi et al (2014), Himanshu (2011), Rangarajan et al (2011) and others. The current trend has been depicted as part of the U-shaped relationship between women's labour force participation and economic growth. The phenomenon has also been explained in the context of emergence of socio-cultural barriers to women's employment with the rise in economic status from subsistence living conditions, often described as 'sanskritization' or emulation of higher caste/class status (Kingdon and Unni, 2001; Olsen and Mehta, 2006, Abraham, 2013). The falling trend of female employment can be attributed mainly to the fall in agricultural employment, declining from 113 million in 2004-05 to 82 million in 2011-12, due to rapid mechanization in

agriculture in the recent years. The decline in female work participation has been exacerbated by the lack of appropriate jobs/work for women in rural areas outside the agriculture sector, according to some scholars (Chand and Srivastava, 2014; Kannan and Raveendran, 2012, Hirway, 2012). After 2004-05, The global downturn may have affected India's rate of growth and the opportunities for work availability. Female workers are more vulnerable to any economic shock owing to their lower skills. In the manufacturing sector, female employment declined from a little more than 17 million (2004-05) to 14 million (2009-10), but rose again in 2011-12 to 17.5 million. It has to be noted that with inappropriate skills, females workers in the manufacturing sector are employed as temporary workers, are particularly vulnerable and can be removed easily. The female employment in non-manufacturing sector (construction, trade) on the other hand increased by nearly 5.5 million during 2004-05 to 2011-12. The largest contributors in this sector were the states of Tamilnadu, Rajasthan, AP, MP, UP and Maharashtra. While the female employment in services increased from 19.5 million to 22.5 million between 2004-05 to 2011-12, Maharashtra, AP, Tamilnadu, WB, Karnataka, UP and Kerala contributed significantly to the employment growth in the service sectors, particularly in the metropolitan cities located in these states (Mehrotra and Parida, 2017).

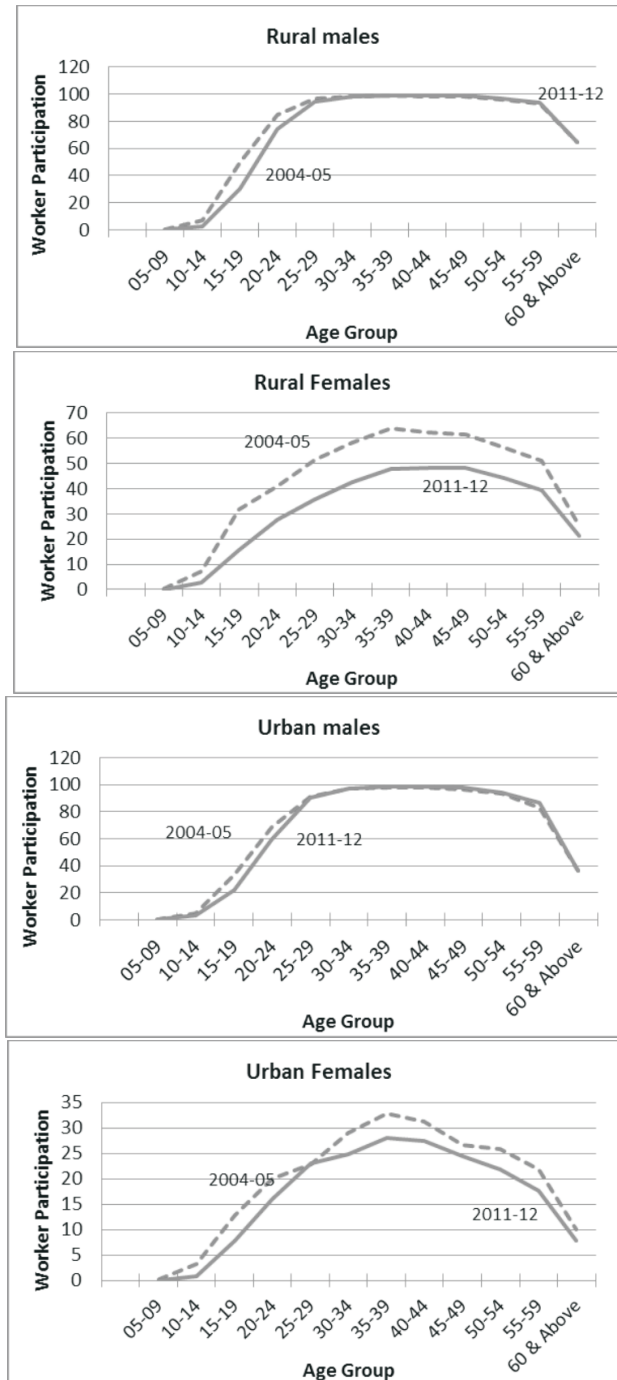
The classification of NSSO of women undertaking productive activities that contribute to the economic wellbeing of the household as non-workers is a reality and may have led to under-estimation of female participation in work. It has been pointed out (Hirway, 2012) that a sizeable share of women in rural and urban areas is actually home-based subsidiary workers, ignored by the NSSO estimates.

A decline in women's participation due to absence of work opportunities needs to be reflected in the increase in the proportion of women who considered themselves unemployed, although available for work. However, the NSSO data does not show this. The unemployment rate in terms of UPSS for females remained at 1.7 to 1.8 percent in 2004-05 and 2009-10. Between 2009-10 and 2011-12 also the unemployment rate in terms of the UPSS status remained invariant for rural females

(2 per cent) and decreased by 1 percentage point for urban females (from 6 per cent in 2009-10 to 5 per cent in 2011-12). Scholars attribute this to definitional restrictions, whereby non-working women are classified as engaged principally in domestic work, even though they may be willing to work. As most women are engaged in domestic duties while not employed, domestic work (status codes 92 and 93) is designated as their principal activity and are excluded from the labour market (Siddiqui et.al, 2017). It is possible that women's unemployment rates could actually be higher than that estimated by NSSO. Apart from insufficient employment creation, the concerns about quality of jobs created are also crucial that have direct and indirect effects on women's participation in the labour market. Informal employment, characterized with low wages, lack of social security, low collective bargaining is the primary option for an overwhelming share of women in the labour force. Insufficient job creation in the economy forces the male workers to usurp occupations with lower returns and that initially engaged women workers (eg., street vending, home-based work, domestic work etc). De-feminisation also marks the declining desirability of female workers with industrial modernization and demand for skilled workers (Kannan and Raveendran, 2012; Ghosh, 2009). Thus for various reasons the demand for female labour is limited, contributing to their withdrawal from the work arena.

We now look at workforce participation by age groups for males and females across rural and urban areas. There was a general tendency for women to enter into paid work at younger ages. Figure 1 plots the workforce participation by age groups for rural, urban males and females. In the case of men, there is no visible change in the work participation across age groups, both in rural and urban areas. Men's participation was nearly 100 percent for the age groups of 25-29 to 55-59 in both rural and urban areas, in both the years. Men belonging to these age cohorts comprised 60 percent and 67 percent of the total employed in rural and urban areas respectively.

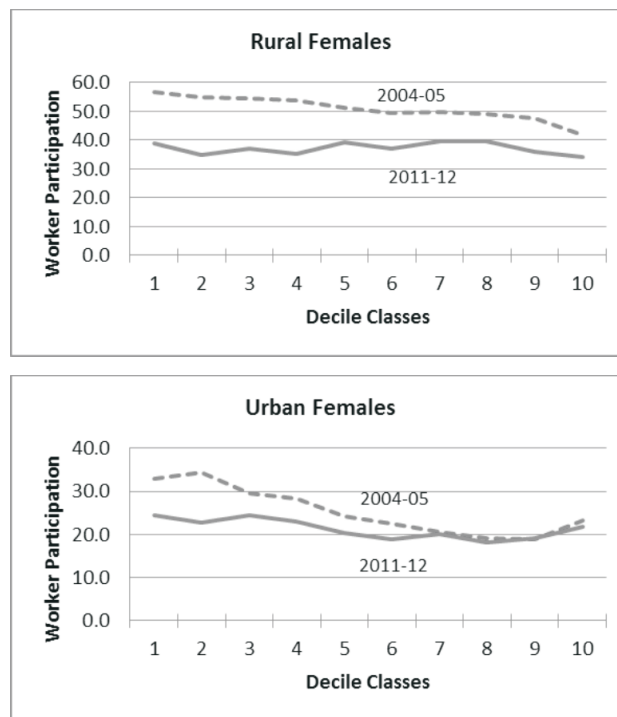
Figure 1: Workforce Participation of Different Age Groups in 2004-05 and 2011-12



Source: Unit level data, NSSO, Various years.

The work participation rates of females in rural (urban) areas were the highest at 64 per cent (33 percent) in 2004-05 for the age group 35-39 years. In 2011-12 the participation rate for this age group of females declined, quite steeply in rural areas (48 %). Although the female work force participation declined across all the age groups, the 15-29 age group had a significant impact as it constituted nearly 32 per cent of the total rural female workforce, and that reduced to 27 percent in 2011-12. The potential evidence of an 'education effect' can thus be discerned, as the magnitude of rural women pursuing higher education increased after 2004-05. In urban areas this trend is absent, and thus cannot be considered as the main reason behind the decline in WPRs. The participation rate for all the working age groups (15-59 years) for the females declined from 51.5 percent (24.2 %) in rural areas (urban areas) to 37.2 percent (21%). This was the most noticeable decline amongst all the sections of workers.

Figure 2: Workforce Participation of Females across Income Groups, 2004-05 and 2011-12



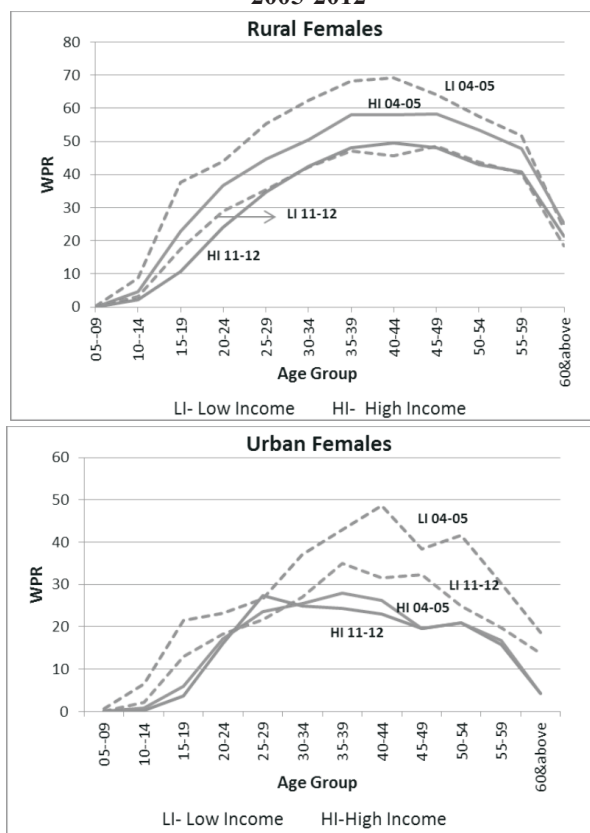
Source: Unit level data, NSSO, Various years.

We now look at the work participation of women by economic status (Figure 2). Data from several countries has shown that poorer the household, the more women work for income, and the larger the proportion of household income derived from women's earnings. In some landless households women are often the main or the sole income earners in the households (Agarwal, 1988). However, when the earning of household rises, some of the females withdraw from the labour market. In Indian context, the traditional upper class/caste norm of excluding women from the work outside the family sphere also acts as a barrier for their entry into the labour force.

The income effect on women's work participation appears to be strong, viz., probability of women in the workforce falling with higher household expenditure levels. Figure 2 plots the work participation rates by the income levels (expenditure deciles of NSSO) for females in urban and rural areas to examine the changes in 2011-12 over 2004-05. The participation of rural women in work in 2004-05 was the highest (at around 54 percent) for the bottom forty percent of the income groups or the poorest sections of the population. The WPR fell quite noticeably after the fourth decile and remained more or less at 49 per cent up to the ninth decile. A significant dip was visible amongst the richest section of income class, with the WPR reducing further to 42 per cent. However, in 2011-12 the sharpest reduction in female work participation occurred among the economically marginalized sections, that is the poorest forty percent. For these sections WPR declined by 18 to 20 percentage points between 2004-05 and 2011-12. Overall, the work participation in rural areas has lowered considerably (37.2 percent average), and irrespective of the income groups it has hovered around the average. The household incomes could have risen in rural areas due to higher wage levels, thus taking the pressure off the women to seek employment. However, the implausibility of rural women from working or looking for work has been cited (Basole and Basu, 2015, Siddiqui et.al, 2017). It is also true that mechanisation of agricultural operations has played some role in reducing the labour absorption in farm based activities, showing up as gradual decline in employment in the farm sector and contributing to overall decline in females' work.

Urban areas present a more interesting picture. Unlike the male participation rates, in 2004-05 there was a secular decline in urban female WPR across the income classes, but only up to the sixth decile class. The period 2011-12 presented a similar picture of declining urban female WPR, even though the WPRs were far lower than 2004-05. However, the work participation rate of females for higher income classes (7th income decile onwards or richest 40 %) has remained unchanged over the two points of time in the urban areas and also show an identical increase towards the highest end of the class hierarchy. The data reveals a U-shaped relationship between women's work participation and the household expenditure. It is obvious that in the urban areas amongst the higher income levels, years of education of women would have a far greater influence on the participation in paid employment.

Figure 3: Female Workforce Participation for Expenditure Quintiles across Age groups, 2005-2012



Source: Calculated from Unit level data, NSSO, Various years.

The relationship between age and women's workforce participation has been much talked about in literature, but the pattern for income groups is quite revealing as it underlines the fact that causes for the decline in women's work may be quite varied across the income spectrum and even location. For brevity and ease of analysis the income quintiles have been clubbed into three groups: low income comprising bottom three NSS expenditure quintiles, middle income group that includes fourth to seventh expenditure quintiles and lastly high income group, which clubs the eighth to tenth expenditure quintiles. Figure 3 depicts the workforce participation for the richest and poorest 30 percent of the women workers across the age groups, for rural and urban areas, and the changes that occurred between 2004-05 and 2011-12.

Quite obviously, the overall workforce participation rate is higher in case of rural than the urban females, though there is persistence of an inverted U-shape pattern across the age groups, implying participation in work for women increases with age, peaks in the middle age when women are relatively free from reproductive and care responsibilities and declines thereafter. However, there is some variation in the pattern for the rich and poorest segments. In rural areas during 2004-05, the participation rates amongst the bottom 30 per cent (poorest) income classes rose sharply for women aged 15 years onwards till 35-39 years, peaked at around 70 percent for women up to 44 years, and declined thereafter. The curve for the poorest segments in 2011-12 appears much flatter for all the age groups. The curve in 2011-12 started diverging sharply from that of 2004-05 at 15-19 years, converged somewhat at 20-24 years and from 25 to 44 years a difference (over 2004-05) of nearly 22 per cent points on an average in the participation rate was maintained. From 45 to 59 years the variation between the two time points in WPR for the poorest segments was much less. Such a trend possibly indicates a far greater involvement of younger women even amongst the poorest households in educational activities leading to their withdrawal from work. For older women (30 years above) it possibly indicates a withdrawal from work either due to the income effect or lack of work opportunities within and outside agriculture. The participation rates amongst richest segments are considerably lower than the bottom 30 percent for all the age groups.

Also, for the richest segments of rural women, the difference in WPR in the two survey years is more or less uniform across age groups, as seen by the distance between the curves for the two survey years. Thus it can be contended that during 2011-12 the decline in work participation was sharper for the poorest rather than the affluent segments of rural women and distinctively points to loss of job opportunities in agriculture/labour and absence of alternative avenues for employment for the displaced workers.

In urban areas, the participation of women for richest quintiles did not show much divergence over the two survey years, indicating that for educated and affluent sections of urban women not many changes happened on the work front. Some decline in 2011-12 in work participation for women aged 30 to 49 years was witnessed, that could be attributed to rise in household incomes. In 2004-05, the highest work participation by urban women was recorded by those aged 40-44 years and belonging to the poorest segments, most likely accounted for by engagement as domestic workers and personal services. Unlike the richest 30 percent, there was significant fall in women's work in case of the poorest 30 percent of urban women during 2011-12. The decline was particularly sharp for women aged 35-39 years and above and points towards increased family/husband's earning rather than withdrawal from work for education purposes.

A U-shaped relationship between economic and educational status and women's employment has also been propounded at a given point of time. That the women in the rural areas are pursuing higher education and hence not available for work has been propounded by several commentators (Rangarajan et al, 2011, Chowdhury, 2011). Table 2 shows that from 2004-05 to 2011-12, the dominance of female workers who are illiterate has declined more sharply in case of urban areas (61 % to 26%) than rural (68% to 54%). As per NSSO, nearly 34 per cent of the female workers in rural areas have an education up to middle school- an improvement over 27 percent in 2004-05. Nearly a quarter of the urban female workers possess post higher secondary education and such workers come inevitably from the well-off income groups.

Table 2: Distribution of Female Workers (15-59 years, UPSS), by Educational Level,

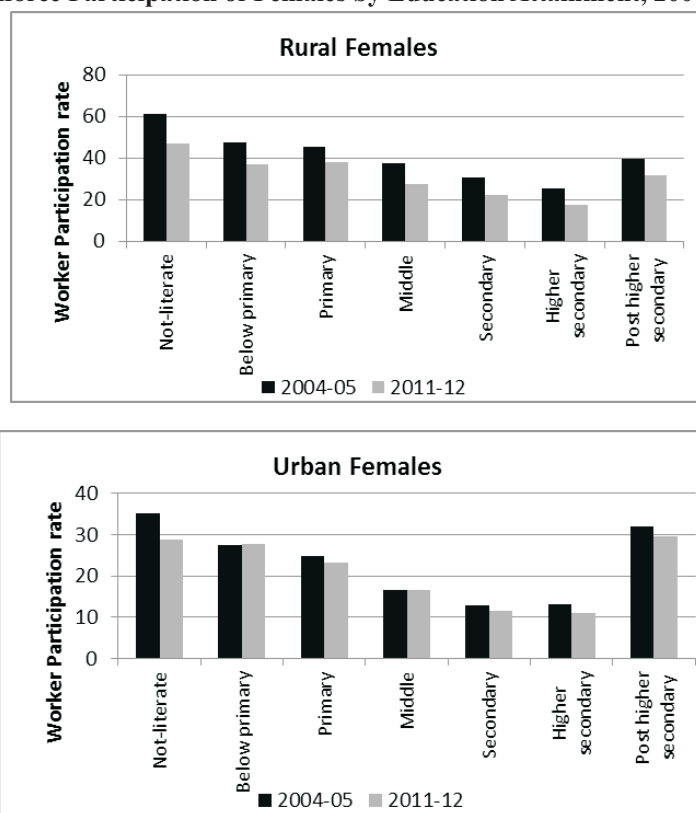
	2004-05		2011-12	
	Rural	Urban	Rural	Urban
Not-literate	68.4	60.5	53.9	25.9
Below primary	8.7	8.2	10.2	8.6
Primary	9.8	14.7	12.5	11.1
Middle	8.5	10.6	11.5	12.7
Secondary	3.2	3.7	6.3	9.4
Higher secondary	1.0	1.3	2.8	7.3
Post higher secondary	0.4	1.0	2.7	25.1
Total	100.0	100.0	100.0	100.0

Source: Unit level data, NSSO, Various years.

The participation rates of female workers by education status are shown in figure 4. For urban females the participation in the workforce at lower education levels is dictated by economic necessity, while there is a pull factor operating for highly educated women entering the workforce. Increasing participation at the highest education levels reflect the modernizing influences that raise women's aspirations, combined with higher returns to education, increasing the economic incentives for women to work (Klasen and Pieters, 2012). The decline in the participation rates of women with middle school or more (up to higher secondary levels) is often explained by the stigma attached against educated women seeking menial/inappropriate work.

Employment in sectors appropriate for educated women has grown less than the supply of educated workers, causing many women to withdraw from the labour force (Das et. al, 2015, World Bank, 2010, Mazumdar and Neetha, 2011). It can also be concluded that the country's economic performance has only created job opportunities for highly educated women. For poor women with little education, the push factors and household status are major determinants of participation. This was also observed when interaction of income groups and age was examined.

Figure 4: Workforce Participation of Females by Education Attainment, 2004-05 and 2011-12



Source: Unit level data, NSSO, Various years.

3. Quality of Employment

So what type or quality of employment are the female workers engaged in? The structure of employment for the working age groups, based on the distribution of usually employed in rural and urban areas can be seen in Table 3. There was a sharp increase in self-employment in rural India for females (6.4 percent points) from 1999-00 to 2004-05. This period also registered a decline in the proportion of female workers in casual jobs. The share of self-employment for females in 2004-05 was the highest recorded in recent history, and was certainly more than that for males. Even in the urban areas, increase in self-employment for females was noticeable (by 2.4 percentage points). Urban women engaged in casual employment recorded a steep decline (by 5 percentage points) during this period.

Table 3: Distribution of Usually Employed Females, 1999-00 to 2011-12 (%), 15-59 years

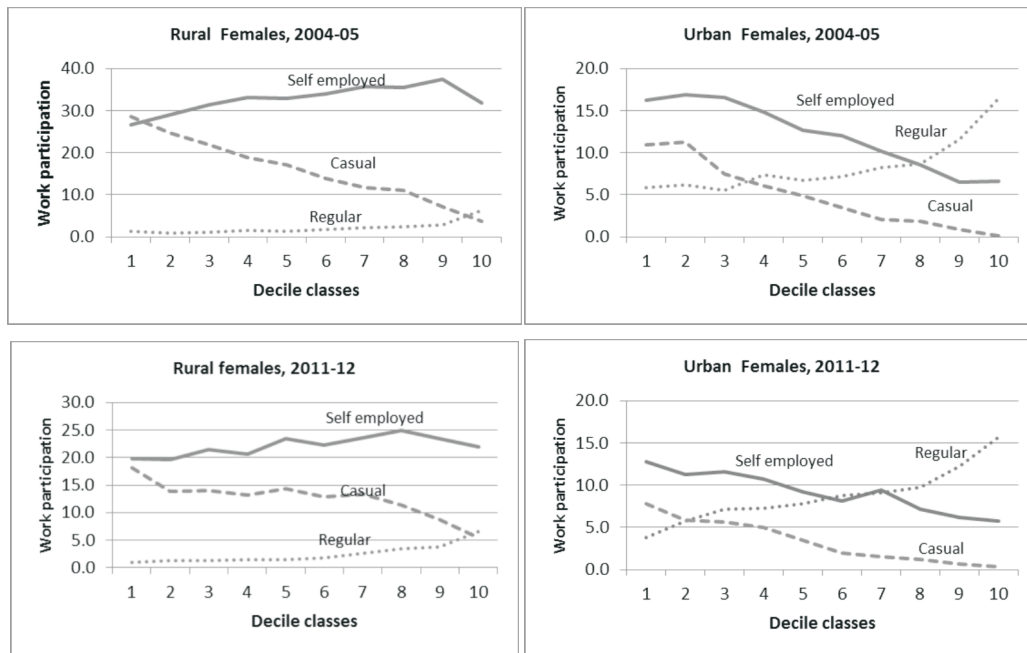
Year	Usual Status (ps+ss) Males			Usual Status (ps+ss) Females		
	Self Employed	Regular Employed	Casual Labour	Self Employed	Regular Employed	Casual Labour
Urban						
2011-12	41.7	43.4	14.9	42.8	42.8	14.3
2004-05	44.8	40.6	14.6	47.7	35.6	16.7
1999-00	41.5	41.7	16.8	45.3	33.3	21.4
Rural						
2011-12	54.5	10	35.5	59.3	5.6	35.1
2004-05	58.1	9	32.9	63.7	3.7	32.6
1999-00	55	8.8	36.2	57.3	3.1	39.6

Source: NSSO Employment & Unemployment Survey Reports, Various years.

After 2004-05 significant changes have occurred. In rural areas female self-employed workers have declined from 64 percent in 2004-05 to a share of nearly 60 percent in 2011-12. However, the proportion of rural female wage earners has increased steeply; casual workers reaching the highest ever share at 5.6 per cent, with regular wage earners also growing in magnitude. The improvement in men's opportunities relative to women's plays a crucial role in how women's employment changes with development. With development men increasingly move into new blue collar jobs that enhance incomes or move out of agriculture and into paid employment with more urbanization. Thus this could lead to fewer family farms or family enterprises in which the women could be employed (Mammen and Paxson, 2000). Thus, until the rural women acquire requisite schooling and transferable skills, their chances of finding suitable employment in the expanding sectors of the

economy may be severely restricted. On the other hand, the urban areas have created a growing share of regular jobs for female workers (an increase by nearly 7 percentage points). This is quite expected as higher education (post-secondary) amongst urban women has increased sharply during this period and seems to be positively correlated with employment in better jobs. In rural areas, though women still face the barrier of entry into good quality jobs due to poor quality of human capital and occupational segregation (Shultz, 1988; Gallaway and Bernasek, 2004). At least for a vast section (54%) of the females in rural areas the minimal and most immediate educational requirement is to overcome illiteracy.

Figure 5: Female Work Participation by Type of Employment across Economic groups



Source: Unit level data, NSSO, Various years.

Figure 5 plots the participation of female workers in type of employment against the NSSO expenditure classes for 2004-05 and 2011-12. In the urban areas participation of females in regular employment in 2011-12 has dipped for the poorest 20 percent of the population, it recorded an increase across the higher income classes. Participation of women in own-account or self-employment however, showed a secular decline across the class hierarchy in urban areas. Rural areas depict a decline in participation

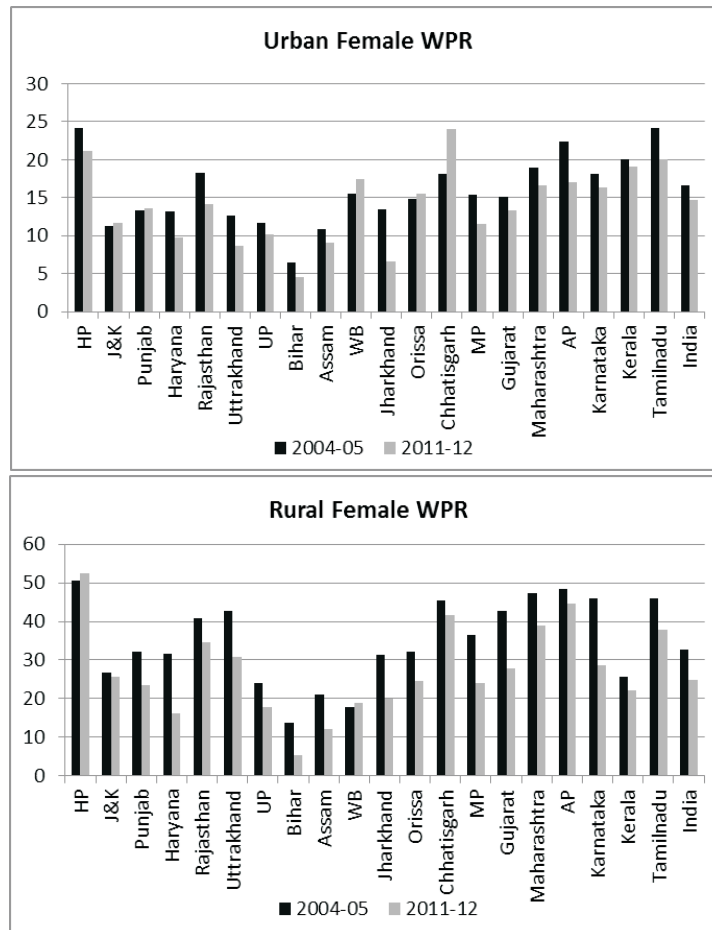
of self employed women across all the income categories, the decline is particularly noticeable in the richest 30 per cent of the population. Thus employment of women in prosperous rural households even on own farms is declining. The alternative explanation could be that own account employment or the work of women in household enterprises remains underreported. It has been extensively discussed in literature that most of the productive work related to agriculture and dairying (code 93) carried out by females of farm families is not qualitatively different from the purely domestic chores (code 92 activities), and is thus under-reported. In fact the proportion of female participation in code 93 activities would vary directly with the resource position (or land holding size) of the household (Sen and Sen, 1985; Nayyar, 1987).

Educated women, who also belong to the richer strata prefer to stay out of employment, rather than accept low status (manual) jobs. The poorest rural households have more of their women working as casual wage labourers. Curiously while the participation of rural women in casual jobs recorded a decline amongst the poorest 40 percent of the population, the participation in such jobs increased for the middle and high income groups (6th decile onwards). Thus unlike 2004-05, in 2011-12 female casual employment has bulged even amongst the better off sections of the rural society. Due to their poor human capital, females are worst affected by the crisis of quality of livelihoods in the rural sector.

Figure 6 shows the female work participation across major states. Considerable variations in female participation rates persist between the states. Participation rates for females increase across the country as we move from north to south and from east to west. In rural India, it is seen that the WPRs for the states of UP, Bihar, Assam, Madhya Pradesh, predominantly agricultural states, are the lowest, and have further declined. Neff, Sen and King (2012) take the per capita state domestic product as an indicator of the availability of employment opportunities in respective states

4. State wise Work Participation of Female Workers

Figure 6: Work Participation Rates for States, 2004-05 and 2011-12



Source: NSSO Employment & Unemployment Survey Reports, Various years.

(with higher the per capita NSDP, greater the employment opportunities). In the study, the per capita NSDP rankings for most states seemed consistent with the rural female work participation ranking. Bihar was ranked the lowest on both the counts. In Kerala the development strategy has been responsible for curbing the growth of women's work participation. The structural changes brought about by the growth process have imposed limitations on the prospects of women continuing to participate in the workforce at a high level, thus Kerala is marked by duality in its pattern of development.

It is also seen that after 2004-05 all the states have experienced substantial annual growth rates of the net state domestic product, hence it can be assumed that the employment opportunities have risen. However, most of the states have experienced a decline in the labour force and worker participation rates. Clearly income growth alone is insufficient to explain participation of women in work, but has to be looked in conjunction with social, cultural constraints that emerge as incomes rise (Olsen and Mehta, 2006). West Bengal is the only state where rural female workforce participation has increased. In urban India West Bengal is accompanied by Chhatisgarh and Odisha that have recorded increase in female WPR. Given the disparate regional picture, it is essential to examine the sectors/occupations where the WPR has risen and the relative output performance of the industries where majority of the women are working.

The regional atlas of female work participation projects a depressing scenario, both for rural and urban areas of Indian states as revealed by the employment survey of 2011-12. The first thing we notice is that the female WPR in urban areas (14.7%) is recorded to be lower than the rural areas (24.8%), true across all the states. The coefficient of variation in female WPR in rural areas (42.5) across all the states was much higher than that of the urban areas (36.4). In fact in 2011-12 the coefficient of variation for female WPR across the states increased from 31.6 in rural areas and 29.0 in urban areas in the survey year of 2004-05, indicating that the variability across the states in terms of women's work participation has increased, instead of converging. This large variation in the WPR of women across the rural and the urban areas of Indian states is majorly contributed by the states like Himachal Pradesh, Andhra Pradesh, Chhattisgarh, Maharashtra, Tamil Nadu and Rajasthan, where female WPR is more than 30 percent. On the other hand, in rural Bihar and Assam the female WPR is depressingly lower than the all India average (at 5 and 12 % respectively). For the survey year 2011-12, rural HP (52.4%) followed by Andhra Pradesh (44.5%) registered highest female WPR followed by rural Chhattisgarh (41.5%). These figures are higher by 26 to 17 percentage points than the national average. The high levels of female WPR in the rural areas of the states like Andhra Pradesh,

Chhattisgarh and Tamil Nadu are generally indicated to be the consequences of male out-migration from agriculture. Studies such as Waris, Nirmala and Kumar (2016) argue that in rural Andhra Pradesh, women constitute an important part of agricultural labour force as they are involved in every stage of paddy cultivation except ploughing. The rural men who are also engaged in agriculture that is seasonal and low-paying migrate to other regions and states in search of better paid jobs in agriculture or non-agriculture. These vacant places are then mainly filled up by the women workers. Though India is passing through the structural transformation phase and agriculture sector is shrinking across all the states, yet the rural females with little or no education rely solely on agriculture for livelihoods (Sinha, 2005). This is mainly true in the agriculturally developed states like Andhra Pradesh, Tamil Nadu and Chhattisgarh. Research also reveals that particularly in case of Chhattisgarh, rural men migrate from the agricultural sector to serve as helpers in urban households (Arya and Roy, 2006). In rural Tamil Nadu also, studies show that men tend to migrate from less-irrigated areas to high irrigated areas with an expectation to earn higher wages which leads to a larger participation of women in agriculture in the lesser irrigated areas (Mishra and Raveendran, 2011). The state of Himachal Pradesh is unique in a varied ways, women's development and progress in aspects such as literacy, employment, health and political participation have been achieved here. In spite of its close proximity to Punjab and Haryana which lag behind in the latter aspects and bear strong patriarchal hegemony, women here are more progressive and empowered taking decisions at least at household level. Women participate in agriculture, hold government jobs and are key decision makers, consequent to changes in social attitudes (Guha et.al, 2016). Though Punjab, West Bengal, Uttar Pradesh and Haryana are agriculturally developed states, but historically the participation of women in the agriculture has been low here. As a result, the lower levels of rural female WPR in these states are consequent upon the lesser number of jobs generated in the non-agricultural sector (Bagchi and Gupta, 2005; Ghosh and Ghosh; 2014). The depressing figure of female WPR in rural Bihar is a product of multiple factors, emphasis being on the social and cultural factors than economic.

The glaring picture of Bihar with respect to social indicators like maternal mortality rate, sex ratio and literacy rate, all these interacting with each other creates a negative effect on the female WPRs.

With regard to the changes in WPR for states after 2004-05, a declining trend of female WPR across the rural areas and urban areas of majority of the Indian states was observed except that of the urban areas of Chhattisgarh, J&K and West Bengal and rural areas of HP. The causes of the decline in female WPR in the states are possibly those that are well argued for India like income effect, own education and husband's education effect, shrinking job options in agricultural sector accompanied by little expansion of job opportunities in the non-agricultural sector, possible increasing returns to home production etc. The rise in female WPR in urban Chhattisgarh could be a consequence of rising supply of women in the category of helpers acting as household servants in urban areas. Women in Chhattisgarh are largely participating in the self-employment category like street vendors of vegetables, apparels etc. (Kispotta, Kumar and Vadyak, 2016). In the urban West Bengal, it is observed that female workers are being absorbed in trade, hotels, public administration and the education sector. It is also seen that more and more women in West Bengal are now moving away from household activities and switching to non-traditional home based production activities thus increasing their visibility as workers. There might be an increase in the supply of women into the small scale and cottage industries in rural West Bengal too which are observed to be significantly present in the state (Bagchi and Gupta, 2005). A comparative study (Government of India, 2013) on female WPRs in Uttar Pradesh and Gujarat shows that a major cause of decline in female WPR in Uttar Pradesh is the non-availability of employment opportunities both in rural and urban areas. This can also be observed from the pattern of employment of women workers across economic sectors, taken up in the next section.

5. Employment of Women by Industrial Category

Table 4 gives an overview of the industrial classification of workers for females

separated by rural and urban areas. In 2004-05, 83 per cent of the rural women were engaged in agriculture and allied activities. With the exclusion of a small share of 6.6 percent engaged in the tertiary sector, almost the entire rural female work force was engaged in commodity production, dominantly the primary sector. Data for 2011-12 shows that rural females continued to crowd the agriculture sector for livelihoods- however the magnitude is lower and the sector engaged 75 percent of the rural working females. In absolute numbers agriculture sector recorded a decline by nearly 24 million female workers in rural areas alone. It has been intensively critiqued that agriculture sector has a declining role in supporting livelihoods, necessitating adoption of diverse sources of income (Basole, 2017). Hence, there has been a significant shift in rural occupational distribution away from this sector.

Employment of female workers in manufacturing sector increased by around 1.5 percentage points. In the rural areas it was the non-manufacturing, dominantly the construction sector that attracted the largest influx of female workers (4.1 million) that were relieved from agriculture. It is well known that construction, including public works under the Mahatma Gandhi National Rural Employment Guarantee Act has emerged as the significant source of non-farm employment. Trade, transport and other services also showed an increase in share, absorbing an additional 0.3 million female workers. In percentage terms manufacturing sector registered an increase of 1.4 percent, however in absolute terms around 0.4 million female workers have exited from manufacturing jobs. Overall the proportion of rural women engaged in non-farm activities increased from 17 to 25 percent (additional 4 million workers); agriculture yet continues to be the dominant employer of females (UPSS) in the rural scenario.

In urban India during 2011-12 more than a half (56%) of the female workforce was engaged in tertiary activities, against nearly a third (29%) in manufacturing. Involvement in construction and trade did not witness any remarkable increase in participation of female workers in 2011-12 over 2004-05 (0.2 million). Employment in transport sector has doubled. The clear increase, if not dramatic, is for “other services” which is a catch all for a wide range of both public and private services, as

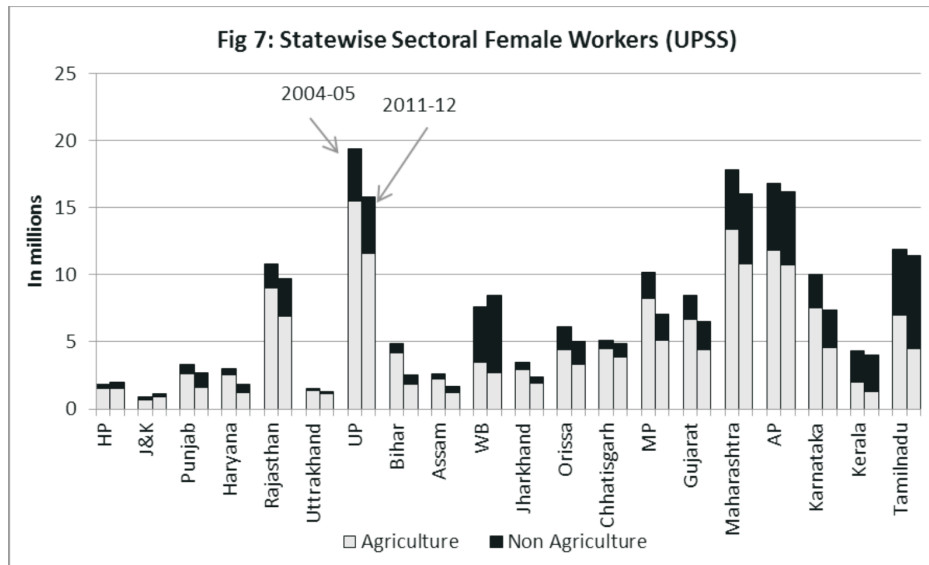
Table 4: Percentage of Females Employed by Broad Industry Divisions (UPSS), 1999-00 to 2011-12 (per cent of total employed)

Industry Category	Rural			Urban		
	1999-00	2004-05	2011-12	1999-00	2004-05	2011-12
Agriculture	85.4	83.3	74.9	17.7	18.1	10.9
Mining & Quarrying	0.3	0.3	0.3	0.4	0.2	0.3
Manufacturing	7.6	8.4	9.8	24	28.2	28.7
Electricity, Gas & Water	0.0	0.0	0.1	0.2	0.2	1.0
Construction	1.1	1.5	6.6	4.8	3.8	4.0
Trade etc	2.0	2.5	3.0	16.9	12.2	12.8
Transport, storage & Comm.	0.1	0.2	0.2	1.8	1.4	2.7
Other services	3.7	3.9	5.2	34.2	35.9	39.6

Source: NSSO Employment & Unemployment Survey Reports, Various years.

well as both high value added, high revenue jobs to low productivity activities. In absolute terms, urban areas engaged an additional one million women workers in manufacturing and 2.4 million in trade, transport and other service related jobs, However, share of females employed in the tertiary sector was less than that of males in urban areas too. Relatively lower engagement of females than males in tertiary activities is indicative of discrimination in terms of access to highly productive jobs. This is more severely felt in the countryside.

The state wise changes in industrial distribution of employment (urban and rural) can be witnessed from figure 7. The manufacturing, non-manufacturing (mainly construction) and service sector (including modern services) female workers are clubbed together to form the category of 'non-agriculture'. It can be seen clearly that the falling trend in female employment is mainly due to the decline in female employment in agriculture in all the states, during 2011-12. States dominantly contributing to this declining trend include UP, Rajasthan, Bihar, Maharashtra, Andhra Pradesh, Tamilnadu, Madhya Pradesh, Orissa, Karnataka,



Source: Mehrotra and Parida, 2017

Gujarat, West Bengal and Jharkhand. Chart indicates that the relatively underdeveloped and agrarian states have contributed more to the decline in female employment. But in the same period the industrialised and more advanced states have contributed to the growth in non-farm female employment. Most noticeable in this category are West Bengal, Tamilnadu, Maharashtra and AP and even Rajasthan. In most of the remaining states, the size of non-farm sector is small and more or less unchanged.

With enhanced mechanisation in agriculture, declining trends of agricultural employment, both in shares and absolute numbers are likely to exacerbate in the coming years. While agriculture sector's capacity to generate jobs is dwindling, more and more females coming out of the sector would be looking for alternate jobs in the non-farm sectors. Between 2004-05 and 2011-12, employment gains in the manufacturing sector were contributed significantly by West Bengal, Tamilnadu, UP, AP, Maharashtra and Gujarat. Female jobs in non-manufacturing, mostly construction were largely created in the states of Tamilnadu, AP, MP, Rajasthan, UP and Maharashtra. Given the nature of manual work involved in this sector, the female

workers seeking work are likely to be having low levels of education, skills and with little scope of employment elsewhere. On the other hand, employment in service sector (nearly 22.5 million in 2011-12) was contributed largely by the states of Maharashtra, AP, Tamilnadu, W Bengal, UP, Karnataka and Kerala.

Table 5: Shares of Total Income by Economic Sectors

Economic Activity	CARG (2004-05 to 2011-12)			
	2004-05	2011-12	NDP	Labour Productivity (NDP/worker)
Agriculture & Allied	20.2	14.7	3.6	4.6
Mining & Quarrying	1.9	1.7	1.4	-0.3
Manufacturing	13.0	13.2	8.4	4.6
Electricity, gas & water	4.9	1.0	5.1	-4.9
Construction	1.1	8.3	8.4	-3.1
Trade, Hotel & Restaurant	8.2	18.4	9.0	5.1
Transport, Storage etc	15.1	10.8	12.4	6.0
Other Services	35.5	31.9	9.7	4.1
All sectors	100.0	100.0	8.3	6.0

Source: CSO, National Accounts Statistics, Net Domestic Product at Factor Cost (2004-05 prices).

It is also important to note that amongst the females workers (UPSS, 2011-12) involved in agriculture, nearly 72 percent were illiterate (32 percent in case of men) and 18 percent had education up to middle school only. Even in the urban sector, 45 percent of females engaged in non-farm jobs as against 54 percent men, possessed secondary and post-secondary and technical education. It is clear that given their poor skill and human capital base, females are denied access to more specialized segments of the economy.

Furthermore, it is clear from information shown in Table 5 that the growth of output coming from the sectors that largely engage women have been worse than the aggregate economy. Growth of output per worker in agriculture, manufacturing and other services is considerably slower than the activities in the tertiary sector that have the largest labour productivity advantages. In fact construction related activities,

attracting the largest share of female workers in rural areas, have shown a sharp decline in output per worker in the recent years due to overcrowding. Even though agricultural growth is noticeable during this period, it needs to be remembered that the employment of women in agriculture is confined to traditional low-yielding production of food crops, besides animal husbandry. The mechanized, export-oriented or commercial subsector of cash crops employ men, pushing female workers further into casual low paying wage work, such as sowing, weeding, harvesting and cotton picking. Women involved in agriculture related activities are not allowed to play an equal role in the production process, nor do they have control over land. Moreover, the work of women performing tasks in their own farms largely goes unrecorded and is indivisible from the domestic and productive work performed by them (Nayyar, 1987; Reddy, 1979). Even in the manufacturing sector women are largely involved as unskilled low wage sectors. The gender typecasting of tasks in the production process leads to increasing segregation with supervisory role remaining with the male workers. The broad picture emerging, especially in rural areas is that of diversification of livelihoods from agriculture to construction (including MNREGA) and low-paying service sectors jobs. Manufacturing sector jobs have depicted comparatively weak growth which call for a bold vision for rural industrialisation (Basole, 2017). This also has to be accompanied with skilling of female workers, often considered as a reserve army, but who most often face the brunt in the event of any setback in the manufacturing sector.

6. Sectoral Distribution of Female Workers across Income Groups

In addition to observing the engagement of women in sectors and the trends in relative earnings at which labour is being absorbed, we also need to look at the sectoral absorption of women workers positioned across the income distribution spectrum. This can be examined from Table 6. In the rural areas during 2011-12 the middle 20 per cent of the expenditure quintiles (4th and 5th) have recorded a sharp increase in tertiary earners vis-à-vis 2004-05. The fourth quintile continues to account for larger than average shares of tertiary sector female workers. In the urban

Table 6: Sectoral Employment Share of Female workers in Quintiles of Household**MPCE Class****Rural**

2004-05				
Quintile	Agricu lture	Manufa cturing	Const ruction	Services
1	85.3	9.0	1.9	3.8
2	84.8	8.4	1.8	5.1
3	83.9	9.2	1.4	5.4
4	82.7	8.6	1.2	7.5
5	76.1	8.0	0.7	6.8
Total	83.2	8.7	1.5	6.6
2011-12				
Quintile	Agricu lture	Manufa cturing	Const ruction	Services
1	78.0	9.4	7.7	4.8
2	75.7	10.6	8.1	5.6
3	75.1	10.8	6.5	7.5
4	74.0	10.3	5.5	10.2
5	67.7	10.1	3.8	6.5
Total	74.7	10.2	6.6	8.4

Urban

2004-05				
Quintile	Agricu lture	Manufa cturing	Constru ction	Services
1	26.8	33.1	6.7	33.3
2	25.6	32.9	4.8	36.7
3	20.7	33.1	4.2	42.0
4	12.7	27.0	2.8	57.5
5	4.4	15.6	1.2	16.7
Total	17.6	28.0	3.8	50.5
2011-12				
Quintile	Agricu lture	Manufa cturing	Constru ction	Services
1	18.6	38.5	8.7	34.2
2	13.7	38.5	6.6	41.2
3	11.7	34.2	3.5	50.6
4	8.1	29.7	1.9	60.2
5	2.4	13.1	1.2	17.1
Total	10.3	30.0	4.1	55.6

Source: Calculated from Unit level data, NSSO, Various years

areas, more employment for females in services continues to be created in the higher quintiles (third and fourth). Another notable feature is that in 2011-12 in urban areas, except for the highest and lowest 10 per cent of income categories, share of tertiary earners registered a sharp increase across other expenditure quintiles. Moreover, the fact that the richest quintile in urban areas depicts the least presence of workers in tertiary activities suggests that the higher paying jobs in services elude large segment of women. The entire distribution of incomes has been changing in the tertiary sector in response to the high growth of employment in this sector.

Predictably, construction workers have increased manifold, particularly amongst the poorest 30 per cent of the rural expenditure quintiles. This group accounts for larger than average concentration of women workers and also record the highest increase in share of workers. The bulk of women workers exiting agriculture are being absorbed by the construction sector that is largely informal with declining labour productivity and low wages. Except for the poorest 10 per cent, share of workers in manufacturing shows a uniform distribution in rural areas. Involvement of women workers in such activities diminishes quite sharply as we move up the expenditure classes. Also, involvement of urban workers in manufacturing activity increased sharply between 2004-5 and 2011-12 for the two poorest quintiles, indicating welfare gains for women workers. However, women in the richest income categories are withdrawing from secondary sector jobs in the urban areas.

Apparently, while the pace of occupational diversification from agriculture in rural areas has hastened (increasing from 16.8 to 25 per cent), the women workers in the lower expenditure classes are still languishing either in agriculture or the less lucrative sections of non-farm economy. Women are largely excluded from 'capitalist' employment and are concentrated in informal jobs. The iniquitous distribution of women across economic activities translates into lower levels of wellbeing for them. Males on the other hand are engaged more and more in manufacturing sector and trade, personal/community services and transport segments.

7. Women's Unpaid Work

Lack of skill formation amongst women and mobility combined with domestic responsibilities reduces the space in which women can operate to improve their status in the economy. The involvement of women of working age by different types of activities in which they are usually employed is depicted in Table 7. The NSS data contains detailed enumeration of tasks performed by women who are primarily categorised as housewives and domestic workers. It reports household activities (activity status codes 92 or domestic duties only and 93 or domestic and allied activities) as principal activity in order to capture the activities undertaken and aspirations for participation in the labour market. These can be used to develop alternate estimates of workforce participation of women, based on the definition of production boundary by the System of National Accounts (SNA). The proportion of working age women (UPSS) involved in usual domestic duty (activity status 92 and 93) increased from 41 per cent to 51 per cent in rural areas and from 61 to 62.4 per cent in urban areas. A negative significant correlation has been reported between the labour force participation rate and proportion of women engaged in domestic duties and allied activities, more than the inverse relation between participation rate and involvement of women in domestic duties alone (Sen and Sen, 1985). Thus women, even if not part of the workforce, undertake production of goods and services for households' consumption. If the range of activities coming under code 93 were justifiably acknowledged as 'economic', then the overall workforce participation of women would indeed rise. No doubt, such work varies with the resource position of households, cropping pattern and caste variations besides the households' monthly per capita expenditure.

The upward trend in work participation in domestic activities has been considered as evidence of income effect at play, or the desire of women to engage in 'status' producing activities (Srivastava and Srivastava, 2010; Himanshu, 2011; Rangarajan et.al, 2011). It is also true that with declining availability of farm sector jobs with mechanisation, and scanty job creation in the non-farm sectors, women are left with

Table 7: Distribution of Working Age (15-59 years) females by Different Type of Activities

UPSS Activity Status (code)	2004-05		2011-12	
	Rural	Urban	Rural	Urban
Self-employed own account or employer (11& 12)	8.0	5.8	6.7	5.3
Helper in Household enterprise (21)	24.5	5.4	15.1	3.4
Regular worker (31)	2.0	8.8	2.2	9.2
Casual Worker (41 & 51)	16.9	4.0	13.0	2.9
Proportion of workers (11+12+21+31+41+51)	51.2	24.0	37.0	20.9
Attending educational institution (91)	5.6	11.2	9.7	13.7
Usual domestic duty (92 & 93)	40.5	60.9	51.2	62.4
Others not part of labour force (97)	1.5	1.7	1.4	1.6
Proportion of non-labour (91+92+93+97)	47.6	73.9	62.8	77.8
Unemployed but available for work (81)	1.3	2.1	0.8	1.3
Total	100.0	100.0	100.0	100.0

Source: NSSO Unit level data, Our source: Siddiqui et.al., 2017

little opportunities for paid work. More than the income effect, the lack of sufficient opportunities commensurate to the skills of the women is possibly the factor causing withdrawal of females from labour market and their increased engagement in domestic and allied work, that contributes to households economically.

Scholars (Banerjee, 2006; Hirway, 2012; Banerjee and Duflo, 2012; Naidu, 2016) argue for including women engaged in such activities contributing to the households' wellbeing, in the category of workers. The rural women, even when not working on farm related work, were engaged in a diversified portfolio of activities (captured through time-use surveys). Such activities were pursued to insulate against risk of livelihood losses due to negative shocks (eg. drought). Ignoring such activities adopted as survival strategies by the poor households resulted in considerable under estimation of women's workforce participation. Furthermore, activities of women involving maintenance of kitchen garden, dairying, poultry, free collection of goods for home consumption, caregiving to children and elders etc need to be considered as production related work. Hirway (2012) also contended that in all likelihood students (code 91), and 'others' i.e., rentiers and people receiving remittances, disabled,

beggars and prostitutes (codes 97) also contribute to economically important activities for the households. Additionally, another category of workers that remains largely unremunerated are helpers in household enterprises (code 21), whose work is similar to home based workers. Such working age women engaged as unpaid family labour need to be considered as unpaid labourers in the economy. Proportion of women that can be called non-labour (codes 91, 92, 93 and 97) together increased from 48 to 62 per cent in rural areas and from 74 to 78 per cent in urban areas. It is apparent that the decline in rural work participation for women could be reduced significantly if the economically productive services/activities carried out by women for their households' use is enumerated as 'work' (Siddiqui et al, 2017).

The women engaged in domestic duties belonged to all age groups. It is estimated that in the economically active age group (15–64 years), 151.9 million and 81.8 million females were outside the labour force in the rural and urban areas, respectively, in 2011–2012 (Sanghi et al, 2015). With regard to relation of participation in domestic work with economic status of households, Naidu (2016) show that there is a positive association between MPCE and the proportion of women engaged in domestic activities only. However, the association between MPCE and proportion of urban women engaged in domestic and allied activities is negative. Share of rural women engaged in the same increases for poorest 30 per cent and thereafter declines. Further the proportion of women engaged in both set of activities was the highest for households cultivating less than 0.004 hectares of land, constituting 48 per cent of all rural households. Thus the highest participation in such activities is for effectively landless households, with lower access to remunerative and secure non-farm work. This trend belies the notion that code 92 and 93 activities are status producing, as these can be substituted by market goods in households with high incomes. Additionally, also revealing is the fact that as per NSSO for 2011-12, of the women in working age group that listed domestic duties as their principal status, nearly 42 per cent and 49 per cent in rural and urban areas respectively were willing to work in the labour market on a part time basis in regular jobs.

It can thus be surmised that invisibility of the domestic sphere for working class households is glaring and remains unaccounted in official statistics. Women's increased participation in the domestic and allied activities is likely to be the stemming from inadequate job opportunities, increase in household incomes and women's reproductive and care-giver roles.

8. Emerging Concerns for Policy

The overall picture that emerges is one of greater disadvantage for women workers in general and those belonging to rural areas in particular. Women have limited access to resources, and low levels of education and skills. Employment structure in India has led to the polarization of skills such that women predominate in low paid, low skill work, both in rural and urban areas. This indicates that there is a long way to go before the faster growing and more productive sectors can make a dent in transforming labour conditions for Indian women. Strengthening the human capital base of women workers, including improving their education and skills is important, apart from enhancing the access of women and ownership of productive resources like land in agriculture.

Analysis indicates that impressive growth of the Indian economy had created labour market opportunities for only the highly educated women. The labour market for women (and men) with low education and skill levels is stagnant with little evidence to show that for rural poor, illiterate and unskilled women, their participation in labour market in recent times is a positive reflection of India's economic growth. It is quite apparent that women are victims of social disadvantages in a patriarchal structure, and for large section of women workers push factors and household social status are major determinants of participation. For others increased involvement in domestic work is on account of absence of economic opportunities. Under such circumstances, women's participation cannot be considered as a sign of emancipation, as economic growth apparently has not translated into higher participation in remunerative activities for most of the female population.

In the context of dramatic decline of women's workforce participation and rise in domestic work, enrolment in education etc., it is imperative that removal of statistical invisibility of women workers be debated intensively. With alternative estimates that capture women's economic contribution to households (domestic duty as main activity) and account for their participation in education, the reported decrease in women's participation rates would not appear as large. The proportion of unpaid family work among rural woman is also much higher. With such estimates it would be difficult to substantiate the supply side effect or the voluntary withdrawal of women from workforce.

Stable work by women can be ensured by certain policy prescriptions, notably, by promoting non-farm jobs at local levels in order to divert women workers from unpaid family labour. This would require women-centric programmes, enhancement of entrepreneurship, upgradation of skills and training activities besides stepping up availability of credit for micro enterprises. Policy need to focus on increased public investments and provision of public services for direct employment generation for women in rural areas and fiscal incentives for expansion of activities that use female labour. Rural India is experiencing diversification of livelihoods from agriculture to construction and other lower paying service related jobs. Share of manufacturing is lagging, and this trend requires coordinated action for rural industrialisation. Expanding MNREGA's role to begin with in creation of private goods has also been outlined (Basole, 2017). Economic and labour market factors can have significant effects on marriage, fertility and human capital investments and policies promoting labour market opportunities for women have been known to improve these outcomes (Jenson, 2012).

The decrease in farm related work due to increasing mechanization in agriculture is a plausible reason for declining female work participation, than voluntary withdrawal from labour market. As such this decline is not offset by increase in availability of suitable non-farm work, forcing women to concentrate on production related activities within the domestic sphere. The U-shape model postulates positive income effect to explain the declining female work participation, but it is now being

increasingly debated that for the Indian situation more nuanced analysis for the working classes in the lower end of the income and asset spectrum is required. Shrinking employment opportunities in sectors having higher labour productivities, rising gender wage gaps, shift towards domestic and allied activities are cited to be the result of interplay of political, social and economic institutions under contemporary capitalistic practices influencing the access to means of production (Naidu, 2016). The crisis cannot be averted simply with further economic growth.

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