



# Estimates of Women's Labour Force Participation: Rectifying Persisting Inaccuracies

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## The Context

Accurate data is critical for evidence based policy making. Yet, despite improvements, estimates of women's labour force participation rate (LFPR) from the Census, NSSO and PLFS remain inaccurate. Most women who live in villages and slums **are** workers. Women in agriculture are farmers. If their families own land they work jointly with men on family farms. Women also work as casual labour on the farms of others. They look after cattle, other animals and poultry, sell fish, vegetables, tea and groceries, run shops, are engaged in embroidery or tailoring, collect non timber forest produce, make leaf plates, agarbattis, kathputlis and torans and contribute to a range of other economic activities including other home based economic work. They also work as paid domestic workers in other people's houses. However, a significant proportion of women who are working in the informal sector are simply not reported as workers either by the

head of the household or by themselves (Mehta and Pratap 2017).

In addition to contributing to economic activity, women also do most of the unpaid care work comprising cooking, cleaning, child care, elder care and taking care of family members who are ill. However, while women's contribution to unpaid care work is under discussion both nationally and internationally, women's massive contribution to economic activity and GDP is undercounted and invisibilised. One reason why this gets ignored in international debates is that this problem is peculiar to India.

## Inaccurate Estimates of Women's Labour Force Participation: Persistence Despite Evidence in the Literature

For decades now, feminist academics have highlighted the serious inaccuracies in the recording of work contributed by women. The

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literature on this issue is large.<sup>1</sup> A few examples from the early literature are given below.

Jain and Chand (1982) conducted a household survey in 6 villages, 3 in Bharatpur district of Rajasthan and 3 in Birbhum district of West Bengal, between September 1976 and December 1977. Using observation methods, they found that in West Bengal, 20 out of 104 females who reported themselves as non-workers were observed to be working in activities such as winnowing, threshing and parboiling, and working as domestic servants in the homes of others for 8 to 10 hours per day. Similarly, in Rajasthan, at least 30 per cent were outside the questionnaire net. Omvedt (1992) showed that there were 239 women workers in one village and 444 workers in a second village where the 1971 Census had counted only 38 and 9 respectively.

For 2009-10, NSSO ranked Bihar at the bottom among Indian states with an abysmal labour force participation rate of 7.2 per cent (Usual Principal Status and Current Daily Status) among rural women. Based on findings of a survey of 30 villages that was conducted at the same time as the NSSO enquiry for 2009-10, Rodgers (2012) presented a different reality:

*Overall, the labour force participation rates are high: 94 per cent of the men and 64 per cent of the women aged 15 to 59 years belong to the labour force under the wide definition of labour force participation.*

There is a plethora of such examples but only a few should suffice to draw attention to this issue.

## Women's Work and GDP: Lack of Attribution

The inaccurate estimates of women's LFPR presented in the Census, NSS and PLFS are cited in national and international documents, many of which suggest that if only India's women worked our GDP would increase significantly. The case described below shows why this argument is flawed.

### The Goleppas and Samosas Example

When a male vendor sells goleppas or samosas or other snacks, he is usually able to do so because his wife wakes up early in the morning and spends six hours rolling out the goleppas or samosas and frying them and making all the other ingredients that get loaded onto the cart that the vendor takes to different localities to sell the goleppas or samosas. The value of the goleppas or samosas gets counted in the GDP. This value includes the labour contributed by both husband and wife. However, the problem is that while he gets counted as a worker, his wife does not. Neither she herself, nor her husband, see her as a worker or consider her contribution as valuable.

Source: Mehta (2019). *The Missing Women in India's Workforce*. *The Hindu Business Line*. 26 January.

If the output method is used to estimate GDP, women's contribution is automatically included in it. What is missing is the attribution of the work to women leading to flawed estimates of women's labour force participation.

1. See for instance Jain and Chand (1982); Mencher and Sardamoni (1982); Agarwal (1985); Sardamoni (1987); Shramshakti (1988); Krishnaraj (1990); Omvedt (1992); Chowdhry (1993); Mehta (1996, 1998, 2000); Sudarshan (1998); Krishnaraj and Shah (2004); Srivastava and Srivastava (2009); Datta and Rustagi (2012); Rodgers (2012); Ghosh (2013); Mehta and Arora (2015); and Mehta and Pratap (2017) among many others.
2. Wide definition=employer, own account worker/self-employed, regular wage worker/salaried, casual wage worker and attached labourer, unpaid family worker, unemployed and beggar.



## Data Flaws and Inaccuracies

It is undeniable that massive efforts are made by the national official statistical system to collect and provide data on a vast array of development indicators. In the context of labour force participation, according to the PLFS, among those in the age group 15 years and above, about 76.4 per cent of the rural males, 26.4 per cent of the rural females, 73.7 per cent of the urban males and 20.4 per cent of the urban females were in the labour force in 2018-19. In other words, if this data is to be believed, there is a 50 per cent gap in participation in the labour force between men and women in both rural and urban areas of India in the age group 15 years and above.

However, even a cursory glance at the state-wise distribution of LFPR in usual status for the age category 15 and above, shows massive variations

in estimates of women's LFPR across States. For instance, in the rural areas of the 11 States listed in Table 1, LFPR of rural males is uniformly high and is above 70 per cent. However, LFPR of rural females varies from an unbelievably low 4 per cent in Bihar to 62.1 per cent in Himachal Pradesh.

This belies logic. Is it possible that only 4 per cent of women above the age of 15 years in rural areas of Bihar are in the labour force compared with 53 per cent in rural Chhattisgarh, 31.8 per cent in rural Madhya Pradesh and 23.4 per cent in rural Jharkhand? So are women in rural areas of Bihar not struggling for survival, not weeding or sowing or transplanting or contributing to agriculture or animal husbandry or silkworm rearing or doing the myriad other things that most women contribute to help their families to survive? Is this possible in a state in which

**Labour Force Participation Rate (LFPR) of Males and Females (in per cent) according to Usual Status (PS+SS) for Age Group 15 years and above in selected States**

State/UT	Rural		Urban	
	Male	Female	Male	Female
India	<b>76.4</b>	<b>26.4</b>	<b>73.7</b>	<b>20.4</b>
Selected Hill States				
Himachal Pradesh	76.1	<b>62.1</b>	73.4	<b>31.4</b>
Uttarakhand	71.3	20.8	72.7	15.5
Central/Eastern/ Western adjoining States				
Chhattisgarh	76.5	<b>53.0</b>	77.5	<b>29.3</b>
Madhya Pradesh	80.8	31.8	73.4	17.4
Bihar	73.5	<b>4</b>	69.7	<b>6.5</b>
Jharkhand	78.9	23.4	68.6	<b>11.8</b>
Odisha	79.8	25.2	75	25.3
Rajasthan	74.8	36.6	73.5	16.2
Haryana	74.7	<b>13.7</b>	73.9	18.5
North Eastern States				
Assam	78.2	<b>12.6</b>	72.4	<b>13.3</b>
Meghalaya	78.2	<b>56.2</b>	66.1	<b>29.1</b>

Source: PLFS 2018-19



the percentage of the population in poverty has remained the highest in the country over decades? Is it possible that over 73.5 men who are 15 years or older are in the labour force in rural Bihar, 80.8 per cent in Madhya Pradesh and 78.9 per cent in Jharkhand while the corresponding estimates for women in these states are a fraction in comparison? Similarly, the estimate of only 20.8 per cent of women above the age of 15 in the LFPR in Uttarakhand is surprising in itself and even more so in comparison with the corresponding estimate of 62.1 per cent for Himachal Pradesh.

### Participation of Women in Specified Economic Activities along with Domestic Duties<sup>3</sup>

In the fifth quinquennial survey on employment and unemployment in its 50<sup>th</sup> round (1993-94) the NSSO provided information regarding participation of women in household work and other specified household activities which resulted in economic benefits to their households. Each person categorised as usually engaged in household duties in the principal status (NSS activity codes 92 and 93) was asked whether he or she pursued certain specified activities more or less regularly for household consumption along with his/her normal house chores. The usual principal status of a person who attended domestic duties only is assigned code **92**. A person who mainly attended domestic duties and was also simultaneously engaged in free collection of primary goods (vegetables, roots, firewood, cattle-feed, etc.), sewing, tailoring, weaving, making baskets and mats, etc., for household use, is assigned code **93**. Hence persons who had been assigned codes 92 and 93 as principal status were asked whether they pursued certain specified activities along with his/ her domestic

duties. The answers obtained were tabulated only for females. The activities were grouped into three broad categories:

- (i) Activities relating to agricultural production like maintenance of kitchen garden, work in household poultry, dairy, etc. including free collection of agricultural products for household consumption.
- (ii) Processing of primary products produced by the households for household's consumption and
- (iii) Other activities for own consumption but resulting in economic benefits to the households.

Activities under (i) are economic activities. It is important to draw attention to the statement in NSS Report 416 (NSSO 1997) that:

“Some women, however, found to be engaged only in these activities along with their house chores **might not have been classified as employed** in the subsidiary status due to their non-pursual of any other economic activity in a subsidiary capacity and the activities under group (i) pursued being only nominal. **Such persons, however, could be considered to have pursued some economic activity** though nominal in nature. Activities under group (ii), according to the recommendations of an International Standard, **might be considered as economic**. NSSO, however, had not so far considered them as economic when pursued only for own consumption. **In case it is felt that these activities are to be considered as ‘economic’ persons pursuing these activities are also to be considered ‘working’.**”

The Report also notes that the third category of activities is not economic when pursued for

3. This section is based on Mehta and Pratap (2017)



own consumption but such activities obviously provide benefits to the households.

According to NSSO, during **1993-94**, about 29 per cent of rural women and 42 per cent of urban women in India were usually (principal and subsidiary) engaged only in household duties. Each person categorised as usually engaged in household duties in terms of principal status was asked whether they had more or less regularly pursued the specific activities listed under categories (i) to (iii) above for household consumption also along with normal household chores. Based on their findings, NSSO (1997) noted that **58 percent of women characterised as engaged only in household work in rural areas and 14 percent in urban areas were actually** maintaining kitchen gardens, household poultry, collecting fish, collecting firewood, husking paddy, grinding food-grains, preserving meat, preparing gur, making baskets etc., or in other words they were **engaged in economic activities**. The NSSO calculates the percentage of such women, incorrectly categorised as “not working”, **as constituting 17.0 per cent of women in rural areas and 5.8 per cent in urban areas**. An upper limit of women worker population ratio, therefore, can approximately be obtained by raising the population ratio of all women workers (principal and subsidiary status) by adding to them the above proportions.

Similarly, using this extended production boundary of SNA-2008, NSSO report 559 (68<sup>th</sup> Round 2011-12), finds that “the approximate upper bound of worker population ratio (WPR) of women of all ages in usual status (ps+ss) are obtained as 44.8 per cent in rural areas and 21.6 per cent in urban areas.”

However, these estimates are presented in a separate report on Participation of Women

in Specified Economic Activities along with Domestic Duties and are not included in the NSSO estimate of either Worker Population or Labour Force Participation. **Hence, it is suggested that the production boundary be redefined so that it conforms to SNA – 2008 and women who perform these tasks, are included as workers while estimating labour force participation.**

### **Conclusions: Need for Accurate Estimation**

Several micro studies have been conducted over many decades that highlight the inaccuracies in the estimates of women’s LFPR in India. However, micro studies have not had the needed impact on the official data collection systems. The NSSO has tried to partially rectify existing data gaps through their reports on Participation of Women in Specified Economic Activities along with Domestic Duties. However, this resolves only a small part of the problem through inclusion of women who are involved in a few additional tasks that are also considered economic activity by the UN SNA. It does not resolve the festering problem of invisibilising all those women who work jointly with other household members on farms and in other home based work, as well as all those who work individually but who are not reported as workers either by the head of the household or by themselves.

This problem cannot be resolved without collecting accurate and reliable data through a large sample survey that is representative of the diverse situations that exist in India. This requires skilled and trained investigators and close supervision and monitoring of their work. Who collects the data and how the data is collected are important factors that determine the quality of the evidence that forms the basis for policy analysis and decision making.





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1. See for instance Jain and Chand (1982); Mencher and Sardamoni (1982); Agarwal (1985); Sardamoni (1987); Shramshakti (1988); Krishnaraj (1990); Omvedt (1992); Chowdhry (1993); Mehta (1996, 1998, 2000); Sudarshan (1998); Krishnaraj and Shah (2004); Srivastava and Srivastava (2009); Datta and Rustagi (2012); Rodgers (2012); Ghosh (2013); Mehta and Arora (2015); and Mehta and Pratap (2017) among many others.
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