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WOMEN IN INDIAN AGRICULTURE

Trends and Correlates

The paper explores the trajectory of defeminisation in Indian agriculture for over three decades based on NSSO and Labour Bureau data between 1983 and 2015. It concludes that withdrawals due to education and increased household incomes can only partially explain the trends.

With structural changes and neo-liberal globalisation there has been some evidence of feminisation of agricultural workforce in developing countries (Deere, 2005; Allen and Sachs, 2007). It has been observed that while proportion of labour force working in agriculture declined over the 1990s, the proportion of women working in agriculture increased in developing countries (Cornheil 2008).

The Indian case, however, seen in a long-term perspective, captures a trend which is contrary to the above-mentioned literature. For the last three decades, there has been a consistent fall in both female labour force and work force participation, both in rural and urban areas; the fall in the rural area is more consistent and sharp, in relation to male work participation.

This paper traces the unusual trajectory of decline in female work participation in Indian agriculture till 2015, relative to that of men. The paper revisits the two major reasons that

emerge from existing literature to explain this trend, i.e., higher participation in education and prosperity-induced withdrawals. We highlight two processes in conclusion that may have some effect in explaining the trend but have not been explored so far.

Data and Concept

This paper uses unit level data from the Employment-Unemployment rounds published by the National Sample Survey Organization (NSSO), Ministry of Statistics and Programme Implementation (MOSPI) (from 1983 to 2012) and Labour Bureau Survey conducted by the Ministry of Labour and Employment (MoLE) (2015).

The definitions and concepts used in NSSO and Labour Bureau Survey are more or less comparable, particularly with respect to how a person is classified as 'working' or 'seeking or available for work'. This paper uses the 'usual' activity status, which is available from the two data sources. In usual status criterion, the broad

Women from prime-age working group have been withdrawing from the rural workforce due to a structural shift away from agriculture; Achanakmar area of Chhattisgarh.



activity status of a person (employed, unemployed and not in labour force) is decided by majority time criterion within the reference period. For example, if an 18-year-old woman is a student for 7 months in the year, though she may have been looking for a job for 3 months and worked for 2 months, she would be classified as a student, i.e., not in the labour force in the usual principal status (UPS). Subsidiary status is also recorded to understand if a person has done any work for less than 6 months but more than 1 month. In the example given above, the woman would be classified as a worker in the subsidiary status. UPSS (usual principal and subsidiary status) has two components, i.e., usual principal status and subsidiary status and captures short-term jobs too, which is extremely important to capture women's work and jobs that are seasonal.

Three Decades of Defeminisation in Indian Agriculture

Rural India, unlike its South Asian neighbours is experiencing a trend encapsulating an increasingly defeminised labour-force, contrary to a process of feminisation of agriculture due to male selective outmigration. In Nepal the female work participation is extremely high, comparable to that of men, while in both Bangladesh and Pakistan, the latter albeit from a very low base, the female work participation rates have increased over time (Verick, 2014). Agriculture, being the least paid sector within the rural economy, is expected to witness increasing participation of women, with men seeking better options within and outside rural areas. Figure 1 shows that the share of women workers in agriculture has fallen from 44 to 30 per cent for a period of three decades, barring the exceptional year of 2004-05. A number of reasons has been offered for less ranging from increased attendance in educational institutions of women, higher income levels of households and an associated prosperity induced withdrawal, a structural shift away from agriculture, increased mechanisation in agriculture as well as fall in the importance of animal husbandry and lower international demand for labour intensive industries (Mehrotra and Sinha, 2017; Abraham, 2013; Lahoti and Swaminathan, 2013; Kannan and Raveendran, 2012; Neff, Sen and Kling, 2012). Some of these reasons are not gen-

der specific and are likely to impact both men and women, possibly not equally, as education and mechanisation related withdrawals.

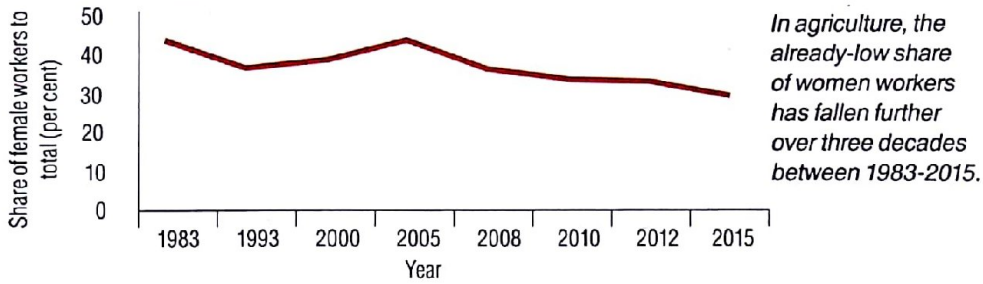
The absolute fall in women's work participation rates (WPR) need not necessarily be a gender concern; a fall in economic opportunities and lack of jobs could potentially lead to a fall for both gender categories. As observed in Table 1, both the female and male work participation rates have fallen, but the former has fallen more sharply than the latter, which is reflected in the ratio of these two. The ratio of the female to male WPR has fallen from 0.58 to 0.40 from 1983 to 2015.

Age-specific changes in work participation

Do education-related withdrawals explain the gender differences in trends of WPR? The changes in the female and male age-specific WPRs reveal notable differences, though the common element is that the fall in both cases is the starkest in the age groups below 20 (Figs 2 and 3). This is clearly indicative of education-related withdrawals from job market, which is a positive sign for the future of the society and economy, though this does not explain the relative decline of women's participation in rural work. In the 15-20 age-group, for example, the fall in the female and male WPRs are 48 per cent to 11 per cent and from 71 per cent to 28 per cent respectively. The differences between Figures 2 and 3, however are revealing. While there is a significant fall in the WPR of women between 30-60 age groups, i.e., the peak working age, for men, there has been no corresponding change for these age categories. The fall for men, other than the younger age groups, has been in the 60 + age-groups, while the elderly women have been working at the same rates over the three decades in question. The gender differences in the trajectories of WPR over time, have clearly resulted from the withdrawal of women from the primary working age groups.

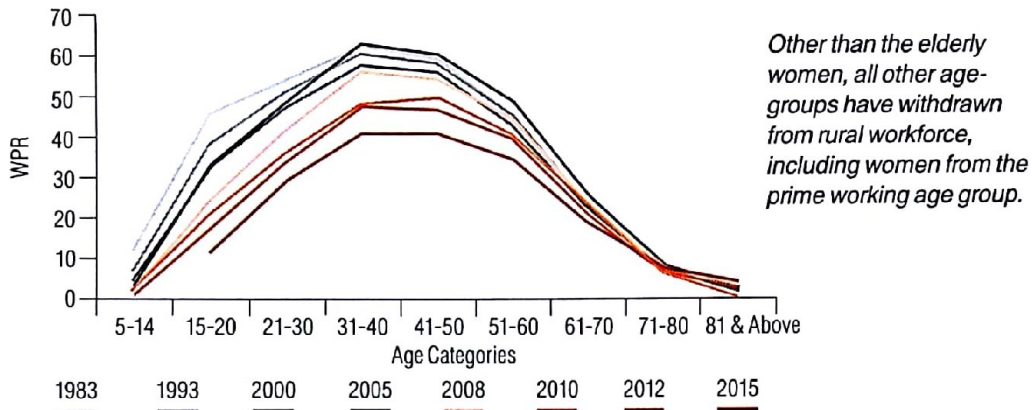
One of the major reasons of the relative fall in the female WPR that has been cited by several scholars is prosperity-induced withdrawals. It has been argued that over the period under question, particularly after the nineties, there has been an overall increase in the rural household incomes (Mehrotra and Parida

Fig. 1: Share of Female Workers to Total Workers in Agriculture



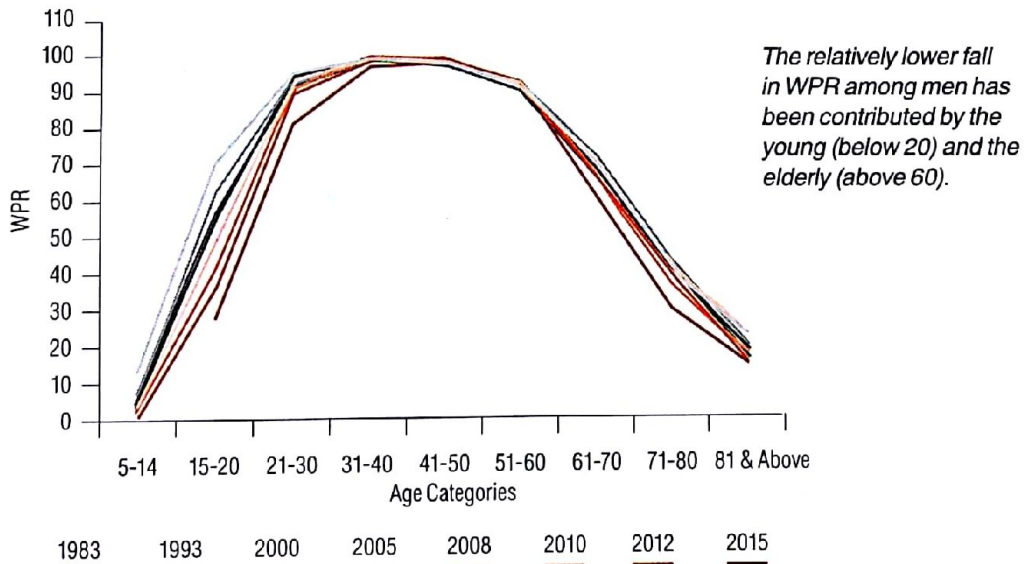
Source: Calculated from Employment-unemployment surveys of NSSO (1983 to 2012) and Labour Bureau (2015)

Fig. 2: Age Specific Rural Female Work Participation Ratio 1983-2015



Source: Calculated from Employment-unemployment surveys of NSSO (1983 to 2012) and Labour Bureau (2015)

Fig. 3: Age Specific Rural Male Work Participation Ratio 1983-2015



Source: Calculated from Employment-unemployment surveys of NSSO (1983 to 2012) and Labour Bureau (2015)

2017; Neff, Sen and Kling, 2012). This has been explained citing the patriarchal restrictions on women and their mobility, which has resulted in them withdrawing from the workforce following the increases in household incomes coupled

with an increase in real wages. Though a detailed analysis is outside the scope of this paper, we attempt to validate this argument from an analysis of the changes in spatial patterns of female WPR (relative to that of men).

Fig. 4: Spatial Variations in Changes of Female WPR (Relative) between 1983 and 2015 in Rural India

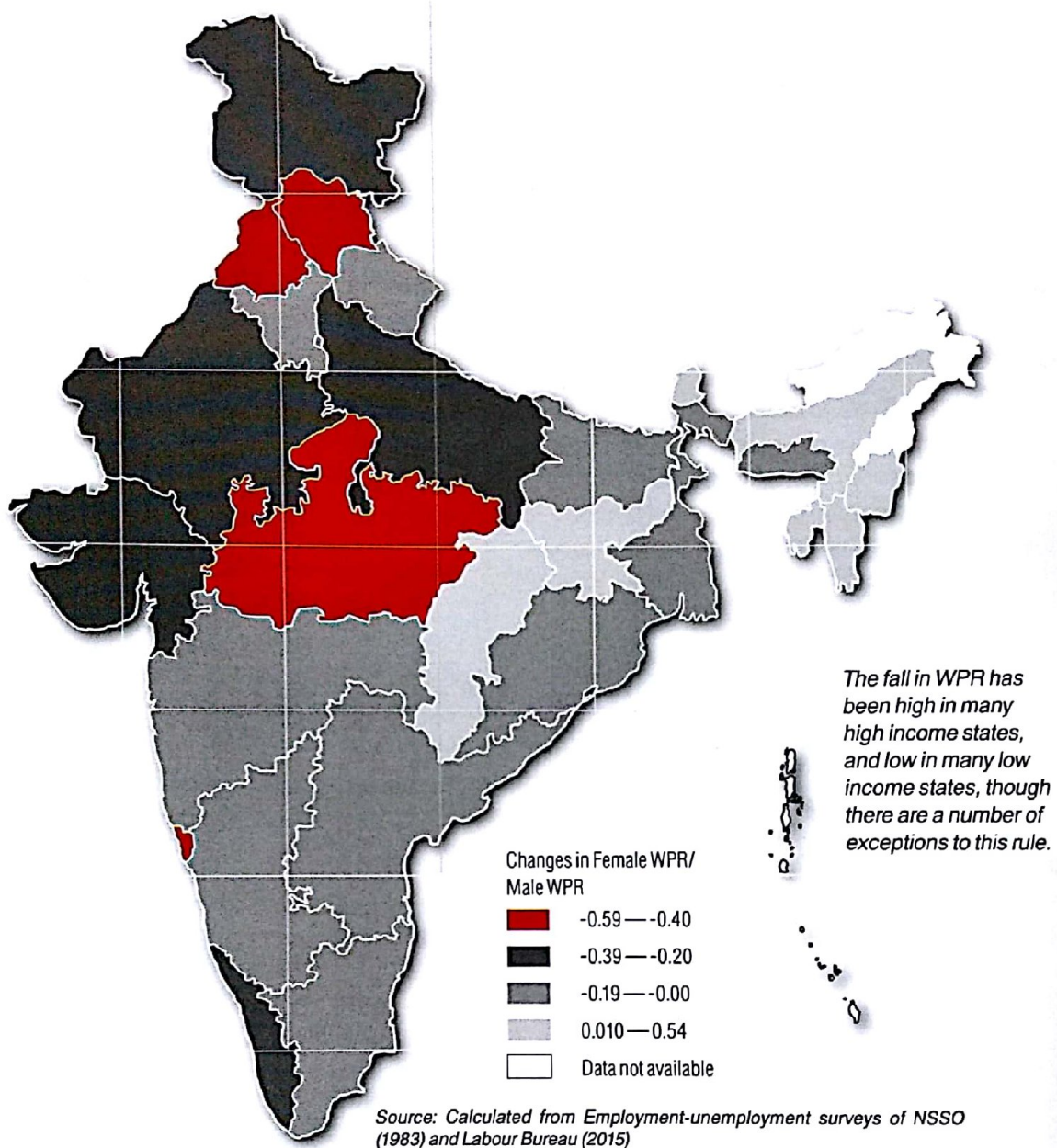


Table 1: Female and Male Rural Work Participation Rates (UPSS) in India

Year	Female WPR	Male WPR	Ratio Female/Male WPR
1983	50.85	87.68	0.58
1993	48.58	86.37	0.56
2000	45.19	84.06	0.54
2005	48.49	84.59	0.57
2008	42.16	83.46	0.51
2010	37.24	81.19	0.46
2012	35.24	79.96	0.44
2015	30.2	75.7	0.40

The female WPR has fallen not only in absolute terms, but in relative (to men) sense too.

Source: Calculated from Employment-unemployment surveys of NSSO (1983 to 2012) and Labour Bureau (2015)


In Figure 4, relative female WPR (as used in Table 1) of 2015 has been subtracted from that of 1983; in other words, Figure 4 depicts the changes in female WPR, relative to that of men, over this period. The question we ask here is, have the states with high per-capita agricultural income experienced higher falls compared to those that have lower incomes?

Figure 4 reveals that some of the states with high per-capita agricultural income like Punjab and Himachal Pradesh have experienced a high fall. Also, most of the states that have registered an increase in relative WPR have comparatively low per-capita agricultural GDP. Notably, however, these states also have a high share of tribal population, with relatively favourable gender relations, where women in work-space are both accepted and required. However, there are inconsistent states as well. Kerala, Gujarat, Rajasthan and Uttar Pradesh are within the same category (second highest category in terms of rate of decrease), with varying levels of per-capita agricultural incomes. The relatively high decline in Kerala is hard to explain, because of the relatively progressive gender relations in the state; it is unlikely that women in the state would withdraw from the workforce in response to high incomes. Though an analysis of spatial variations in changes of relative WPR is inadequate to conclusively comment on the phenomenon of prosperity induced withdrawal, it appears that this explanation can, at best, only partially explain the fall in work participation of women.

Endnote

The overall fall in female work participation in India is of concern, though part of the explanation lies in positive changes like higher participation in education. Rural women's withdrawal out of the labour and work force due to reasons of education and high income appear to be inadequate to explain the process of defeminisation in rural India. The effect of agrarian distress on women, on the one hand, and degradation of and exclusion from common property resources making women's job of collecting fodder, fuel and water more arduous, on the other, are relatively underexplored areas with respect to the issue under

discussion, which needs to be taken up in future research.

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