The female labour force participation rate in rural India fell from 52 per cent in 1987 to 38 per cent in 2011, in spite of rapid economic growth, decline in fertility rates and increase in women’s educational attainment.

80 per cent of the female rural work force is employed in agriculture, with 50 per cent employed as cultivators and the rest as agricultural labourers.

There have been various changes in the structure of agriculture, and effects on the release of labour from the sector are likely to be gendered.

As per the Agriculture Census 2010-11, women farmers manage 12.78 per cent of operational landholdings and 10.34 per cent of the operational area; these figures have increased from 9.5 per cent and 7.2 per cent in 1995-96. However, the role of women as farm managers usually goes unnoticed.

This factsheet is drawn from an ongoing Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) and Indian Statistical Institute (ISI) study that aims to understand the impact of structural transformation in agriculture on female employment over time, by assessing the role of women farm managers. This study uses data from the India Human Development Survey (2004-05, 2011-12) to understand the rise in female farm management, its variation along demographic dimensions, and the differences between cultivator households managed by men and those managed by women.
There has been a steady increase in the proportion of rural households where women manage farms, from 8.3 per cent in 2004 to 10.9 per cent in 2011.

Women farm managers with migrant spouses
- Uttarakhand, Himachal Pradesh, Kerala, Bihar, Uttar Pradesh and Rajasthan had the highest rates of women with migrant husbands in 2004, and were also in the top 10 states in terms of proportion of households where women manage farms. A similar positive relationship held in 2011 as well (Figure 1).

Women farm managers and land ownership
- A positive association is also observed between female farm management and proportions of women owning land in 2011 (Figure 2).

Changes in women-managed farms across Indian states (2004-11)
- Rise in female farm management is largely driven by male out-migration (Figure 3). The most dramatic rise in the proportion of female-managed farm households between 2004 and 2011 has been in Uttarakhand (26 per cent to 45 per cent) and Himachal Pradesh (15 per cent to 25 per cent). These two states have also experienced the largest increases in migration rates.

The proportion of women farm managers whose husbands were migrants showed the largest increase between 2004 and 2011 (by 11 per cent), while there was a commensurate fall (by 9 per cent) in the proportion of women who were living with their spouses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Male-managed</th>
<th>Female-managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>3.4</td>
<td>2.2</td>
</tr>
<tr>
<td>2011</td>
<td>2.8</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Table 1: Average land owned by farm households by gender of manager (acres)

Women farm managers and land ownership
- A positive association is also observed between female farm management and proportions of women owning land in 2011 (Figure 2).
Distribution of farm managers by level of education

- Female farm managers tend to be less educated than their male counterparts, and the gap does not seem to have narrowed over time (Figure 4).

**Figure 4:** Distribution of men and women farm managers by educational attainment (2004 and 2011)

Average land owned by female-managed farm households

- Households with female farm managers own and cultivate smaller landholdings, on average, than households with male managers (Table 1).

**Table 1:** Average land owned by farm households by gender of manager (acres)

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<thead>
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Land ownership and marital status

- Between 2004 and 2011, there was a sharp reduction in the average land owned by farm households that are managed by women with migrant husbands or separated/divorced women (Figure 5).

**Figure 5:** Average land owned by female-managed farm households, by marital status of manager (2004, 2011)
Cultivated area by female-managed farms

- In 2004, the net cultivated area – which includes owned and rented land – was 3.4 acres in farm households with male managers and 2.1 acres in those with female managers.

- The net cultivated area was the lowest amongst female farm managers with migrant husbands in 2004 – even though these households are similar to others in terms of land ownership – as they may not be able to utilise all of the household land due to greater resource constraints (Figure 6).

**Figure 6:** Net cultivated area by female-managed farm households, by marital status of manager (2004)

![Diagram showing cultivated area by female-managed farm households, by marital status of manager (2004)](image)

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Indian Statistical Institute is an ‘Institution of National Importance’ devoted to the research, teaching, and application of statistics, mathematics, and economics.

Policy Implications

- Agricultural policy needs to be aligned to the specific needs of female farm managers, with priority to states with higher rates of male out-migration.

- Government initiatives such as the *Mahila Kisan Sashaktikaran Pariyojana* need to be scaled-up and strengthened.

- As highlighted in the Economic Survey 2017-18, women farmers should have enhanced access to resources such as land, credit, technology and training.