

Women's Participation in Agriculture and Allied Activities: A Study of Kanpur Dehat District (U.P.)

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Abstract:

This study examines the extent and nature of women's engagement in agriculture and allied sectors in Kanpur Dehat, Uttar Pradesh. A literature review highlights the central role of rural women in farming. For example, FAO (2011) reports that women constitute about 43% of the global agricultural labour force while emphasizing persistent gender gaps in access to land, inputs and decision-making. Based on primary survey data of rural women in Kanpur Dehat (n=100), descriptive statistics reveal that only a minority have farming as their main work: about 23% of respondents are primarily farmers and an additional 9% work in dairy/livestock (Table 1). Allied-sector participation is even lower (about 18% engaged in food processing or rural crafts; Table 2). The majority of women reported no formal involvement in agricultural or allied enterprises. These findings show that most rural women in the district contribute informally (e.g. assisting family farms) rather than as identified agricultural workers. Constraints such as limited training, credit and social norms (discussed in literature) help explain this low formal participation. The paper concludes that integrating women through targeted schemes and skill-building could enhance their visible contribution to agriculture and rural livelihoods.

Keywords: Women in agriculture, Allied activities, Gender Sustainable rural livelihoods, Female workforce participation.

Introduction:

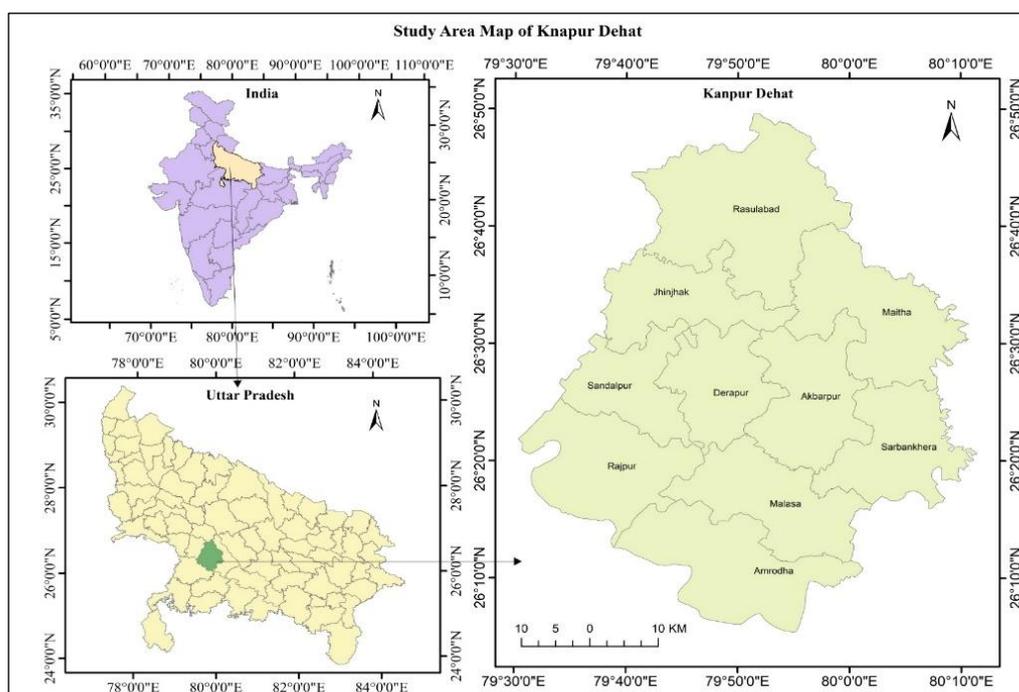
Women are pivotal in Indian agriculture, performing numerous labour-intensive tasks and underpinning rural food security. Globally, women contribute roughly 43% of farm labour, and in developing countries their share is often higher. For example, as one study notes, "if women had the same access to resources as men, they could increase yields on their farms by 20-30%," highlighting the untapped potential of female farmers. In India's agrarian economy, women's work is especially critical: NITI Aayog (2022) observes that about 80% of rural women are employed in agriculture. Despite this, women often remain invisible in official statistics, lacking land titles and full recognition as farmers (Patel & Sethi, 2022). According to Census 2011, a substantial proportion of rural women in Uttar Pradesh are engaged in agricultural and agricultural labour activities. The Agriculture Census (2015-16) reports that only about 13-14% of total operational landholdings in India are owned or operated by women, indicating persistent gender inequality in land ownership. Periodic Labour Force Survey

(PLFS) data further show that rural women's employment remains concentrated in agriculture and informal activities. The state of Uttar Pradesh is a heartland of Indian agriculture; in Kanpur Dehat district, large numbers of households depend on farming. This study focuses on Kanpur Dehat to assess *how* rural women participate in agriculture and allied (non-farm rural) activities, and what barriers they face. By analyzing survey data collected from local women, the paper aims to quantify their roles (e.g. as cultivators, farm labourers, or engaged in allied sectors like food processing or handicrafts) and compare these with broader regional trends. Understanding these patterns is important for designing policies that empower women farmers and enhance overall rural development.

Study Area:

Kanpur Dehat district is situated in the central region of Uttar Pradesh, India. Geographically, it lies between approximately 26°09' to 26°58' North latitude and 79°34' to 80°34' East longitude. The district occupies an area of nearly 3,021 square kilometers and forms a part of the extensive Indo-

Gangetic alluvial plain.



Source: prepared by ArcGIS using SOI data.

The district is surrounded by Kannauj district to the north, Kanpur Nagar to the east, Hamirpur to the south, and Auraiya and Jalaun districts to the west. The physical landscape is generally level and composed mainly of fertile alluvial soils, which support agricultural activities. Kanpur Dehat falls under a subtropical climatic zone characterized by high temperatures during summer, seasonal rainfall mainly received during the southwest monsoon, and relatively cool winters. The Ganga River marks the northern boundary of the district and plays an important role in shaping the soil profile and irrigation patterns. The region is predominantly rural, with villages forming the major settlement pattern.

Literature Review:

research consistently emphasizes that women perform a large share of agricultural work, yet face systemic constraints. FAO (2011) reports that women make up about 43% of the agricultural labour force worldwide, and in South Asia women account for over half of farm workers. In India, official estimates and analyses highlight a growing “feminization” of agriculture: with rising male migration, more women are running farms or doing farm work. However, despite the heavy workload, women often lack secure land rights or pay. A rural livelihood review notes that closing gender gaps could boost agricultural productivity and household wellbeing (Raney et al., 2011). Indeed, *experts* point out that women in developing countries typically receive less training, credit, and technology access than men, reducing their potential. For example, the FAO’s gender report (2011) argues that overcoming institutional barriers in credit and extension is essential to harness women’s contributions.

In the Indian context, several studies and reports document women’s vital yet undervalued role. NITI Aayog analysts note that agriculture employs about 80% of rural women in India, and India’s 2019-20 Economic Survey similarly emphasized that empowering this workforce is key to food security and poverty reduction. Women work across crop production, livestock rearing, horticulture and more. However, most rural women serve as unpaid labourers or marginal workers. A survey report by GEAG (2007) found that roughly 72% of Uttar Pradesh’s population is in agriculture, and “women contribute to more than 80% of these activities”, yet remain a “neglected workforce” with little recognition or decision-making authority. Another regional study showed that women perform the majority of farm tasks (weeding, harvesting, etc.) but are seldom listed as cultivators in official data. Many have no formal income or rely on daily wages from agriculture or allied enterprises, and face social norms limiting their mobility and skills training (More & Kharge, 2021).

Participation in allied sectors (livestock, horticulture, agro-processing, rural crafts) is also crucial yet uneven. Women often oversee poultry, dairy, kitchen gardens or cottage industries, complementing crop agriculture. For instance, More and Kharge (2021) report that 70% of India’s population depends on farming and allied activities, with rural women among the majority engaged in agro-enterprises. However, studies find that allied activities are typically home-based (food processing, weaving, etc.) and yield low returns. Self-Help Groups (SHGs) and cooperatives have been promoted to involve women more formally, and some successes are recorded (e.g. SHGs aiding skill development). But access to extension services and markets remains limited for women. Overall, the literature suggests that while women’s work underpins rural economies, it remains largely informal; improving their participation requires addressing educational gaps, resource access, and cultural barriers.

Studies specifically on Uttar Pradesh or Kanpur region are fewer. However, a recent survey in rural UP found that 90% of rural women work in agriculture or fishing-related occupations, far above the national average. Yet, most of these women are agricultural labourers rather than farm owners, and only a small fraction holds land title. These patterns are likely mirrored in Kanpur Dehat, a district with predominantly small-holder farming. Consequently, this paper draws on such national and regional evidence to frame the research problem: quantifying women’s visible participation in agriculture and allied activities in Kanpur Dehat, within the

context of known gender disparities. The literature underscores that any finding of low formal participation would be consistent with other Indian contexts where women's hidden labour is much larger than what is officially reported.

Objectives:

1. To assess the proportion of rural women in Kanpur Dehat engaged in agriculture, livestock, and agricultural labour.
2. To examine women's participation in allied rural activities and non-farm livelihoods.
3. To analyse women's agricultural work patterns and the key constraints they face.

Methodology:

The analysis uses primary survey data collected from rural women in Kanpur Dehat. The source data (provided as a "frequency sheet") comprises responses of 100 women obtained via a structured questionnaire. The survey likely used purposive sampling of women associated with farming households. Questionnaire items cover socio-demographics, work participation (such as engagement in agricultural or allied activities), and perceptions of resources and support. We interpret the coded responses using the provided coding sheet (e.g. 1=Yes, 2=No, etc.) and compute descriptive statistics. The nature of data is cross-sectional and categorical.

For analysis, we tabulated frequencies and percentages for relevant questions about occupation and allied activity. Tables were constructed to show the percentage of respondents in each category (e.g. farming vs. dairy). Where appropriate, results are presented in both raw numbers and percentages of the sample. We use simple descriptive analysis (no inferential tests) to summarize women's participation patterns. Graphical visualization (bar charts or pie charts) would normally complement this, but here we emphasize tabular presentation. The overall approach is to match findings to the objectives: identifying how many women actively work in farming or allied sectors in Kanpur Dehat, and what forms that work takes.

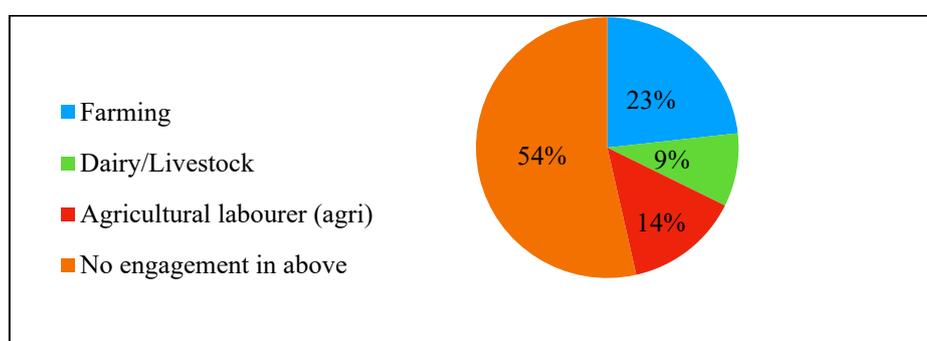
Data Analysis and Interpretation:

Agricultural Occupation: Table 1 shows the distribution of respondents by primary agricultural occupation. Only 23 women (23.0%) reported farming as their main occupation. Another 9 (9.0%) worked in dairy or livestock, and 14 (14.0%) were agricultural labourers (paid farm workers). The largest category- 53 women (53.0%) - reported *none* of these activities (i.e. they are not directly engaged in farming or allied occupations). In numeric terms, fewer than half the women are formally involved in agriculture. This suggests that more than 50% of households rely on male members or other sources for farm labour.

These figures indicate that only 46% of women have agriculture-related occupations (23+9+14 = 46), whereas a slim majority do not identify agriculture as their work. This is notable given that nearly all the respondents are from farming households. In other words, even though women contribute labour on family farms, most did not list it as their own occupation. This pattern is consistent with studies reporting women's heavy but informal farm work (GEAG, 2007; More & Kharge, 2021).

Table: 01

Occupation	Percentage (%)
Farming	23
Dairy/Livestock	9
Agricultural labourer (agri)	14
No engagement in above	54
Table 1: Respondents' primary agricultural occupations (n=100).	



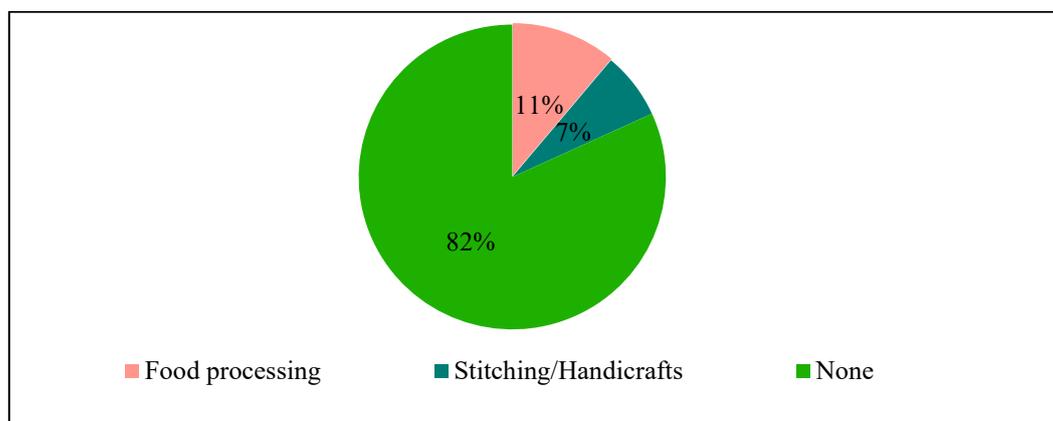
Allied Activities: Table 2 addresses women's engagement in allied rural activities. Only 18 women (18.0%) reported involvement in any listed allied activity. Specifically, 11 women (11.0%) were involved in food processing (such as cooking, preserving produce, or preparing local food items), and 7 women (7.0%) were engaged in stitching or handicrafts. No respondents reported handicraft work under the given code. The remaining 82% of women indicated *none* of these allied activities. In short, the vast majority are not in organized allied-sector work.

Even combined with the 9% engaged in dairy (from Table 1), only 27% of women participate in any allied sector job. Women's involvement in allied sectors (like agro-industry, small crafts, or home enterprises) thus remains quite low. This may be due to lack of training or market access for rural women, a point noted in the literature as a constraint on women's economic independence (More & Kharge, 2021; Patel & Sethi, 2022).

Table: 02

Allied Activity	Percentage (%)
Food processing	11
Stitching/Handicrafts	7
None	82

Table 2: Women's participation in allied rural activities (n=100).



Extent of Engagement:

Among the minority involved in allied work, the amount of time committed was generally high. For example, of the 18 women engaged in allied activities, many reported spending more than 6 hours per day on such work (the survey's Q21 shows 64% of these women devote over 6 hours). This suggests that when women enter allied occupations, they do so intensively, often supplementing household income after domestic chores. However, the critical result is that most women have *no formal job outside household duties*. Even when agriculture is central to village life, very few women in Kanpur Dehat are counted as "farmers" or allied workers on surveys.

Additional Observations: The data also reveal that 31 women (31%) answered "Yes" to being engaged in any agricultural activity, implying 68% answered "No." This roughly matches the occupation breakdown above: a similar minority participate in farming roles. Furthermore, income data show that 89% of respondents earn less than ₹5,000 per month, indicating limited financial returns for the work women do. In combination, the analysis indicates that women's contributions to local agriculture are largely informal and unremunerated: many help on family farms but are not recognized as workers or earners, echoing wider findings in India. Overall, the descriptive tables and percentages show that women's formal involvement in Kanpur Dehat agriculture is modest: about half of the surveyed women have *no official role* in farming or allied businesses, despite being in agrarian households. This suggests that women's work is often hidden as "helping" and not captured as occupation.

Findings:

The analysis leads to several key findings. First, less than half of the women in the sample report agriculture-based occupations. Only 46% (Table 1) are directly engaged as farmers, labourers, or dairymen. The rest are essentially classified as not working in agriculture at all. This pattern indicates that Kanpur Dehat's rural women are primarily involved in household and subsistence roles, rather than formal farming jobs. Second, participation in allied sectors is very limited. Only 18% of women report any allied activity (food processing or crafts), and none report handicrafts. This is striking given that allied sectors (e.g. poultry, agro-processing,

handloom) are often promoted for women's empowerment. Here, however, allied involvement appears marginal. Third, when women do participate, it tends to be intensive. Those engaged in allied work typically put in long hours. However, their numbers are so small that these contributions do not substantially change the overall picture. These findings align with larger trends noted in the literature. Even though rural women "share most of the family responsibilities and perform a wide range of duties on farm and home", they rarely show up as formal farm workers. The survey suggests that *the term "occupation"* for women is often domestic rather than agricultural.

Social norms and systemic factors likely play a role: studies have documented constraints like limited access to training, credit and land, which keep many women working informally (FAO, 2011; Patel & Sethi, 2022). In fact, the data show only a small proportion have any formal income from agriculture or allied crafts (89% earn <₹5000/month). Lastly, the high rural agricultural labour force noted by IWWAGE (2023), 90.6% of rural women in Uttar Pradesh work in agriculture/fishing is not contradicted by our findings; it simply reflects that our women likely *helped* on farms without being counted as workers. In summary, women's participation is real but often unacknowledged in economic terms.

Conclusion:

This study's descriptive analysis of Kanpur Dehat data reveals that women's visible participation in agriculture and allied sectors remains limited. While almost all villagers are engaged in farming, only a minority of women were recorded as farmers, labourers or allied workers. More than half of the surveyed women were not formally working in agriculture at all. Among those in work, dairy and food processing accounted for the largest allied activities, but these comprised under 20% of women. These results mirror findings from broader Indian contexts that women shoulder much farm labour but rarely appear as "farmers" in data. The implication is that agricultural policies and programs targeting farmers may be missing the bulk of women's contributions. To fully leverage rural women's potential, local planners in Kanpur Dehat should consider training and credit schemes specifically for women, promotion of women-led cooperatives (e.g. in dairy or agro-processing), and steps to secure women's land rights. In conclusion, acknowledging and supporting women's roles in both farm and non-farm rural activities is crucial for equitable and sustainable agricultural development in Kanpur Dehat and similar districts.

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