

ISRG Journal of Economics, Business & Management (ISRGJEBM)



ISRG PUBLISHERS

Abbreviated Key Title: Isrg J Econ Bus Manag

ISSN: 2584-0916 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjebm/>

Volume – IV Issue - I (January - February) 2026

Frequency: Bimonthly



Beyond Wages: A Multidimensional Assessment of the Economic Well-being of Women Workers in Uttarakhand, India (2017-2024): Evidence from Secondary Data

Tanu Agarwal¹ Prof. Atul Joshi²

¹ Research Scholar, Kumaun University, Nainital, Uttarakhand, India

² Dean and Head, Department of Commerce, DSB Campus, Kumaun University, Nainital, Uttarakhand, India.

| Received: 15.02.2026 | Accepted: 20.02.2026 | Published: 28.02.2026

*Corresponding author: Tanu Agarwal

Abstract

Women's contribution to agriculture in Uttarakhand extends considerably beyond directly paid agricultural labour. A substantial part of their work is performed through self-employment, household enterprises and family-based agricultural production. Consequently, wage earnings alone cannot adequately represent their economic well-being. The present study examines the economic position of women workers in Uttarakhand during 2017-2024 using secondary data obtained from the Periodic Labour Force Survey (PLFS), Household Consumption Expenditure Survey (HCES), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) administrative records and official statistical publications.

The study examines economic well-being through female labour-force participation, employment status, agricultural wage earnings, household consumption expenditure and participation in public employment. The available secondary evidence indicates a substantial increase in women's labour-market participation during the comparable PLFS period, particularly in rural areas. In 2023-24, the female Labour Force Participation Rate (LFPR) in rural Uttarakhand was 52.6 per cent, compared with 24.4 per cent in urban areas. At the same time, self-employment remained the dominant form of female employment, accounting for 77.0 per cent of female workers in 2023-24, while 44.3 per cent were helpers in household enterprises. Average agricultural wage earnings of female casual labourers increased from ₹231.93 per day in 2017-18 to ₹382.15 in 2023-24. Rural Monthly Per Capita Consumption Expenditure (MPCE) increased from ₹4,641 in 2022-23 to ₹5,003 in 2023-24. Women accounted for 56.8 per cent of MGNREGA person-days in Uttarakhand in 2023-24. The findings suggest that improvements in participation, agricultural wages, household consumption and access to public employment have occurred alongside continued dependence on self-employment and household-based work. The study therefore argues that women's economic well-being in Uttarakhand needs to be assessed beyond wages, with attention to the nature of employment and the economic returns associated with women's labour.

Keywords: Women workers; economic well-being; Uttarakhand; labour-force participation; agricultural wages; self-employment; rural women; Periodic Labour Force Survey; MGNREGA

1. Introduction

Women's labour has always been an important component of rural agricultural production in India. Their work includes cultivation, sowing, transplanting, weeding, harvesting, livestock management, post-harvest activities and work in family enterprises. Much of this work is undertaken alongside domestic responsibilities and is not necessarily associated with a separately recorded wage. For this reason, the economic position of rural women cannot be adequately understood by considering wage income alone.

The issue assumes particular significance in Uttarakhand, where agriculture continues to depend heavily upon household labour. The rural economy is also shaped by small landholdings, difficult terrain and migration of working-age men. Within this setting, women often perform multiple economic roles within the household and agricultural economy.

The Periodic Labour Force Survey (PLFS) provides evidence of substantial female participation in the state. In 2023-24, the Labour Force Participation Rate (LFPR) for women aged 15 years and above was 52.6 per cent in rural Uttarakhand, compared with 24.4 per cent in urban areas. At the state level, the female LFPR was 45.6 per cent.

However, participation does not necessarily mean access to secure or independently remunerated employment. The employment structure is equally important. In 2019-20, 86.2 per cent of rural female workers in Uttarakhand were self-employed. Only 10.4 per cent were regular wage or salaried workers and 3.4 per cent were casual labourers. In 2023-24, self-employment continued to dominate female employment, accounting for 77.0 per cent of female workers. Importantly, 44.3 per cent were classified as helpers in household enterprises.

This distinction matters because self-employment is not a homogeneous category. An own-account worker and a helper in a household enterprise may both be classified as self-employed, but their control over income and productive resources can be very different.

Recent research by Barua and Nagalia (2026), based on seven rounds of PLFS unit-level data for Uttarakhand from 2017-18 to 2023-24, reaches a similar conclusion. The authors find that self-employed rural women were the principal contributors to the increase in female employment, while their real income remained low and declined during the period.

Against this background, the present study examines women's economic well-being through several indicators rather than through wages alone.

2. Review of Literature

The literature on women's employment in India has consistently shown that female labour-force participation is influenced by both household conditions and the availability of suitable employment opportunities. Chaudhary and Verick (2014) examine female labour-force participation in India and South Asia and identify education, household characteristics and labour-market opportunities as important factors shaping women's participation.

Kapsos et al. (2014) draw attention to another important issue: the statistical identification of women's work. In rural households, domestic activities and contributing family work may overlap,

making women's economic contribution difficult to capture through conventional employment measures.

Klasen and Pieters (2015), studying urban India, show that rising household income and educational attainment do not automatically lead to higher female labour-force participation. The expansion of sectors capable of absorbing female workers is also important. Lahoti and Swaminathan (2016) similarly argue that the relationship between economic development and women's labour-force participation is not straightforward.

The nature of rural women's work is further illuminated by Dubey, Olsen and Sen (2017), who examine long-term trends in rural female labour-force participation in India. Their analysis demonstrates the importance of distinguishing between market work and work associated with household production.

Agarwal (2003) places the question of women's economic position within the broader issue of access to productive resources. Her analysis of women's land rights shows that participation in agricultural production does not necessarily imply control over land or the economic resources generated from it.

Khera and Nayak (2009), examining women's participation in the National Rural Employment Guarantee Programme, show the importance of publicly supported employment for rural women. Such employment can provide an additional source of wage income when agricultural employment is seasonal or uncertain.

For Uttarakhand specifically, the recent study by Barua and Nagalia (2026) is particularly relevant. Their analysis of seven PLFS rounds shows that self-employment has been central to the expansion of women's employment, but the real income of self-employed rural women has remained low and declined over the period. The authors relate this pattern partly to the unequal distribution of domestic and caregiving responsibilities and to the limited availability of remunerative employment opportunities.

Taken together, these studies suggest that women's economic well-being needs to be considered in relation to the form of employment, the remuneration attached to it and the resources available to women within rural households.

3. Research Objectives

The study has the following objectives:

1. To examine the pattern of female labour-force participation in Uttarakhand during 2017-2024.
2. To analyse the employment structure of female workers, particularly self-employment and household-enterprise work.
3. To examine changes in agricultural wage earnings of female workers.
4. To examine rural household consumption expenditure as an indicator of material well-being.
5. To assess women's participation in the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
6. To assess the overall economic position of female workers through these dimensions.

4. Research Methodology

The study is based exclusively on secondary data. The principal sources are the Periodic Labour Force Survey (PLFS) of the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI); the Household Consumption Expenditure Survey (HCES); administrative records of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA); NITI Aayog's state-level statistical material; and published academic studies.

The analysis covers the period from 2017-18 to 2023-24, with the Periodic Labour Force Survey (PLFS) providing the principal source of labour-market data. The study considers the annual PLFS estimates available for this period and focuses on indicators that permit meaningful comparison across the years. The analysis therefore confines the empirical assessment to the period ending in 2023-24.

Economic well-being is examined through five dimensions:

Dimension	Indicator	Source
Labour participation	Female Labour Force Participation Rate	PLFS
Employment structure	Self-employed, regular wage/salaried and casual labour	PLFS
Labour remuneration	Female agricultural wage earnings	PLFS/NITI Aayog
Household material well-being	Monthly Per Capita Consumption Expenditure	HCES
Public employment	Women's share of MGNREGA person-days	Ministry of Rural Development

No composite welfare index is constructed because these indicators relate to different units of analysis.

5. Relevant Secondary Data

Table 1: Female Labour Force Participation Rate in Uttarakhand, Selected Years

Year	Female LFPR (%)
2019-20	31.8
2020-21	32.5
2021-22	33.1
2022-23	38.7
2023-24	45.6

Source: MoSPI, *Periodic Labour Force Survey (PLFS), Annual Reports, 2019-20 to 2023-24*, Table 16.

The figures show a clear increase in female participation over the latter part of the period. The increase is particularly visible after 2021-22.

Table 2: Female Labour Force Participation by Rural and Urban Residence, Uttarakhand, 2023-24

Residence	Male LFPR (%)	Female LFPR (%)
Rural	76.9	52.6
Urban	75.0	24.4
Rural and Urban	76.4	45.6

Source: MoSPI, *Periodic Labour Force Survey (PLFS), 2023-24*, Table 16.

The rural-urban difference is substantial. Female participation in rural Uttarakhand was more than twice the urban rate. This underlines the continuing importance of agriculture and household-based economic activity in rural women's employment.

Table 3: Employment Status of Rural Female Workers, Uttarakhand, 2019-20

Employment status	Percentage
Own-account worker/employer	43.3
Helper in household enterprise	42.9
Total self-employed	86.2
Regular wage/salaried	10.4
Casual labour	3.4
Total	100.0

Source: MoSPI, *Periodic Labour Force Survey (PLFS), 2019-20*, Table 19.

The predominance of self-employment is striking. At the same time, the large share of helpers in household enterprises suggests that a considerable part of women's work may not generate independently recorded earnings.

Table 4: Employment Status of Female Workers, Uttarakhand, 2023-24

Employment status	Percentage
Own-account worker/employer	32.7
Helper in household enterprise	44.3
Total self-employed	77.0
Regular wage/salaried	17.2
Casual labour	5.8
Total	100.0

Source: National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), *Periodic Labour Force Survey (PLFS), July 2023-June 2024*, Table 19.

Although self-employment declined as a proportion of female employment compared with the rural figure reported for 2019-20, it remained the dominant category. The share of household-enterprise helpers was particularly high.

Table 5: Average Agricultural Wage Earnings of Female Casual Labourers, Uttarakhand

Year	₹ per day
2017-18	231.93
2018-19	220.07
2019-20	250.79
2020-21	271.29
2021-22	325.01
2022-23	354.36
2023-24	382.15

Source: NITI Aayog, Uttarakhand State SDG Statistical Profile, Indicator 5.a.4, based on Periodic Labour Force Survey (PLFS) data.

The nominal agricultural wage increased by approximately 64.8 per cent between 2017-18 and 2023-24. The increase, however, relates specifically to female casual agricultural labourers and should not be generalised to all female agricultural workers.

Table 6: Monthly Per Capita Consumption Expenditure in Uttarakhand

Year	Rural MPCE (₹)	Urban MPCE (₹)
2022-23	4,641	7,004
2023-24	5,003	7,486

Source: National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), Household Consumption Expenditure Survey (HCES), 2022-23 and 2023-24, Uttarakhand estimates.

Rural MPCE increased from ₹4,641 to ₹5,003 between the two survey rounds. This indicates an improvement in average household consumption capacity, although it cannot be interpreted as an increase in individual women's income.

Table 7: Women's Share of MGNREGA Person-Days, Uttarakhand, 2023-24

Indicator	Percentage
Women's share of person-days	56.8
Scheduled Caste share	17.2
Scheduled Tribe share	5.3

Source: Ministry of Rural Development, Government of India, MGNREGA State Performance Report, 2023-24, Uttarakhand.

The participation of women in MGNREGA was substantial, with women accounting for more than half of total person-days generated in the state.

6. Results and Discussion

The evidence indicates a considerable expansion of women's participation in the labour market. In 2023-24, the female Labour Force Participation Rate in rural Uttarakhand stood at 52.6 per cent, compared with 24.4 per cent in urban areas. The rural concentration reflects the continuing importance of agriculture and household-based economic activity.

The employment structure, however, presents a more complex picture. Self-employment remained the principal form of female employment. In 2019-20, self-employment accounted for 86.2 per cent of rural female employment in Uttarakhand. In 2023-24, it remained the dominant form of female employment, accounting for 77.0 per cent of female employment in the state.

More significant is the internal composition of self-employment. In 2023-24, 44.3 per cent of female workers were helpers in household enterprises. Such work is economically productive but does not necessarily provide an independently identifiable income. This is particularly relevant in agricultural households, where women's labour may be essential to production without being separately remunerated.

The agricultural wage data provide evidence of improvement for women engaged in paid casual agricultural labour. Average female agricultural wages rose from ₹231.93 per day in 2017-18 to ₹382.15 in 2023-24. This represents a significant increase in nominal remuneration.

However, the wage series covers only casual agricultural labourers. Since self-employment constituted the largest category of female employment, the wage increase cannot be interpreted as an improvement in the income position of all women engaged in agriculture.

This distinction is supported by Barua and Nagalia (2026). Their analysis shows that self-employed rural women were central to the increase in female employment but experienced low and declining real income during 2017-18 to 2023-24. Thus, rising female participation and increasing agricultural wages can coexist with weak income outcomes among self-employed women because they refer to different employment categories.

Household consumption provides another dimension. Rural MPCE increased from ₹4,641 in 2022-23 to ₹5,003 in 2023-24. This indicates an improvement in average household consumption. Nevertheless, household consumption cannot be used as a direct measure of women's individual earnings. Household expenditure is influenced by the combined economic resources of all household members, including agricultural income, male earnings, remittances and transfers.

MGNREGA adds an employment-security dimension. Women accounted for 56.8 per cent of MGNREGA person-days in Uttarakhand in 2023-24. This indicates that public employment is an important source of paid work for rural women. It may be particularly significant where agricultural employment is seasonal.

The evidence across the different indicators therefore does not show a single uniform trajectory. Female participation has increased, nominal agricultural wages have risen, household consumption has improved and women's participation in public employment is substantial. At the same time, self-employment and household-enterprise work remain dominant.

The central implication is that increased participation should not automatically be equated with increased economic security. The nature of employment and the extent to which women receive independent returns from their labour are equally important.

7. Findings

The study leads to the following principal findings:

1. Female labour-force participation has increased considerably, with rural participation substantially higher than urban participation in Uttarakhand.
2. Self-employment remains the dominant form of female employment, accounting for 77.0 per cent of female workers in 2023-24.
3. Household-enterprise work forms a major component of women's employment, with 44.3 per cent of female workers classified as helpers in household enterprises.
4. Female agricultural wages have increased in nominal terms, rising from ₹231.93 per day in 2017-18 to ₹382.15 in 2023-24.
5. Rural household consumption has improved, with MPCE increasing from ₹4,641 to ₹5,003 between 2022-23 and 2023-24.
6. Public employment is important for rural women, as women accounted for 56.8 per cent of MGNREGA person-days in 2023-24.
7. The improvement is uneven across dimensions. Rising participation and agricultural wages have not eliminated the dependence of women on self-employment and household-based work, and recent research indicates weak real-income outcomes among self-employed rural women.

8. Conclusion

The economic well-being of women workers in Uttarakhand during 2017-2024 cannot be adequately represented by wage earnings alone. The available secondary evidence shows a substantial expansion of women's participation in economic activity, particularly in rural areas. At the same time, self-employment continues to dominate women's employment, with a large proportion working as helpers in household enterprises.

The rise in agricultural wages is an important positive development for women engaged in paid casual agricultural labour. However, it applies only to a specific segment of the female workforce. The larger group of women engaged in self-employment and household production cannot be assessed through agricultural wage rates.

Similarly, the increase in rural Monthly Per Capita Consumption Expenditure indicates improvement in household consumption but does not establish an increase in women's individual income or economic autonomy.

The evidence therefore points towards an expansion of women's economic participation without a corresponding transformation in all aspects of economic security. The central issue is not merely whether women work, but what kind of work they undertake, what economic return it provides, and how securely that return is available to them.

For Uttarakhand, the assessment of women's economic well-being should consequently move beyond wage levels and incorporate employment status, household-enterprise work, agricultural remuneration, household consumption and access to public employment.

9. Policy Implications

The findings suggest that policy should focus not only on increasing female participation but also on improving the economic returns associated with women's work.

First, women engaged in family agriculture should have direct access to agricultural extension, institutional credit, insurance, technology and producer organisations. Second, policy should distinguish between own-account workers and household-enterprise helpers because their economic circumstances are different.

Third, greater attention should be given to agricultural value addition, food processing, horticulture, livestock and other rural activities that can increase the income generated from women's labour. Expansion of suitable non-farm employment can also reduce excessive dependence on low-return self-employment.

Fourth, MGNREGA should continue to be strengthened as a source of rural wage employment for women, particularly through timely wage payments and accessible worksites.

Finally, state-level monitoring of women's economic well-being should combine labour-force participation, employment status, agricultural wages, household consumption and public employment rather than relying on a single indicator.

References

1. Agarwal, B. (2003). Gender and land rights revisited: Exploring new prospects via the state, family and market. *Journal of Agrarian Change*, 3(1-2), 184-224. <https://doi.org/10.1111/1471-0366.00054>.
2. Barua, K., & Nagalia, S. (2026). Female employment and earnings in Uttarakhand. *Journal of Land and Rural Studies*. <https://doi.org/10.1177/23210249261434311>.
3. Chaudhary, R., & Verick, S. (2014). *Female labour force participation in India and beyond*. International Labour Organization.
4. Dubey, A., Olsen, W., & Sen, K. (2017). The decline in the labour force participation of rural women in India: Taking a long-run view. *The Indian Journal of Labour Economics*, 60, 589-612. <https://doi.org/10.1007/s41027-017-0085-0>.
5. Kapsos, S., Silberman, A., & Bourmpoula, E. (2014). *Why is female labour force participation declining so sharply in India?* ILO Research Paper No. 10. International Labour Organization.
6. Khera, R., & Nayak, N. (2009). Women workers and perceptions of the National Rural Employment Guarantee Act. *Economic & Political Weekly*, 44(43), 49-57.
7. Klasen, S., & Pieters, J. (2015). What explains the stagnation of female labor force participation in urban India? *The World Bank Economic Review*, 29(3), 449-478. <https://doi.org/10.1093/wber/lhv003>.
8. Lahoti, R., & Swaminathan, H. (2016). Economic development and women's labor force participation in India. *Feminist Economics*, 22(2), 168-195. <https://doi.org/10.1080/13545701.2015.1066022>.
9. Ministry of Rural Development, Government of India. (2024). *MGNREGA State Performance Report 2023-2024*.

10. Ministry of Statistics and Programme Implementation. (2021). *Annual Report, Periodic Labour Force Survey, July 2019-June 2020*. Government of India.
11. Ministry of Statistics and Programme Implementation. (2022). *Annual Report, Periodic Labour Force Survey, July 2020-June 2021*. Government of India.
12. Ministry of Statistics and Programme Implementation. (2023). *Annual Report, Periodic Labour Force Survey, July 2021-June 2022*. Government of India.
13. Ministry of Statistics and Programme Implementation. (2024). *Annual Report, Periodic Labour Force Survey, July 2022-June 2023*. Government of India.
14. Ministry of Statistics and Programme Implementation. (2025). *Annual Report, Periodic Labour Force Survey, July 2023-June 2024*. Government of India.
15. National Statistical Office. (2024). *Household Consumption Expenditure Survey 2022-23*. Ministry of Statistics and Programme Implementation, Government of India.
16. National Statistical Office. (2025). *Household Consumption Expenditure Survey 2023-24*. Ministry of Statistics and Programme Implementation, Government of India.
17. NITI Aayog. (2025). *Uttarakhand: State SDG Statistical Profile*. Government of India.