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RESEARCH ARTICLE

FARM AND NONFARM EMPLOYMENT IN RURAL INDIA: TRENDS, SECTORAL COMPOSITION, AND QUALITY OF WORK (2011–2024)

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Abstract: In the past few decades, India's rural labor market has undergone significant structural transformations, reflecting broader economic changes and evolving employment patterns. This paper investigates the sectoral distribution and quality of employment among rural workers in India, focusing on the subsectors within agriculture, classified under the 2-digit National Industrial Classification (NIC). By analyzing data from the 2011-12 National Sample Survey Office (NSSO) Employment and Unemployment Survey (EUS) and the Periodic Labour Force Survey (PLFS) from 2017-18 to 2023-24, the study found that workers share in agriculture declined from 63.3 percent to 57.6 percent, while those in non-agricultural sectors rose from 36.9 percent to 42.4 percent between 2011-12 and 2023-24. Male workers are increasingly moving towards non-agricultural jobs, whereas female workers still predominantly remain in agriculture. However, recent years have witnessed a noticeable rise in female participation in the sectors of health, education, and trade, indicating a gradual diversification. Additionally, younger and prime-age workers exhibit more mobility and a stronger preference for nonfarm employment compared to older workers. Higher education levels are correlated with an increased likelihood of entering nonfarm jobs. Within the rural nonfarm categories, the leading sub-sectors include manufacturing, construction, and wholesale and retail trade. In the agricultural sector, a significant portion (approximately 73 percent) of workers are self-employed, highlighting the dominance of own-account and unpaid family labor. These trends highlight the urgent need for targeted rural employment policies that aim to enhance jobs, especially in nonfarm sectors, and increase productivity and quality of employment across both sectors.

Keywords: *Rural employment, Sectoral composition, Farm and Nonfarm, Quality of work.*
JEL Codes: J01, J21, J43, E24

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INTRODUCTION

The agricultural sector remains the most significant force in India's rural labor market. About 60 percent of workers rely on agriculture for their income (Abraham, 2011). In recent decades, this sector has grown more slowly than others. Its growth rate has stagnated (Himanshu *et al.,* 2013). Mechanization and rising cultivation expenses have led to a decline in total rural employment within this sector, falling from 260 million in 2004-05 to 192 million in 2018-19, averaging an annual decrease of approximately 4.9 million. Concurrently, nonfarm employment has not seen any notable increase (Pattayat and Parida, 2024). This trend highlights a disjointed structural transformation in India's workforce (Padhi and Motkuri, 2021). Workers are not transitioning away from agriculture, and the nonfarm sectors have not been able to absorb the growing labor force as anticipated (Mehrotra and Parida, 2021). It is generally

recognized that economic growth leads to a shift in the workforce from farming to non-farming jobs (Lanjouw and Lanjouw, 2001; Venkatesh, 2013). Recent years have shown similar patterns in rural India (Abraham, 2011; Shukla, 2011). The Work Participation Rate (WPR) serves as a vital indicator of a country's economic development (Luci, 2009). PLFS data indicate that WPR increased after 2018-19, particularly among rural women (NSSO, 2014; PLFS, 2020). However, a rise in market participation does not necessarily reflect overall well-being; the quality of work is also essential (Sundari, 2020).

Consequently, it is imperative to analyze in which sectors and industries these rural workers are employed. Understanding the sectoral composition of rural employment enables an assessment of shifts in sectoral employment, the impact of a decline in agricultural jobs, and the rise of non-farm work (Deshpande and Singh, 2024). Numerous studies have examined broad sectors' employment distribution (Shukla, 2011; Misra, 2025). Nevertheless, research focusing specifically on the distinctions between farm and nonfarm categories at a detailed two-digit level is scarce. Moreover, current studies often lack substantial insights into employment trends across educational backgrounds and social demographics.

It is also important to understand the specific sub-sectors within larger industries that employ rural labor. This study aims to bridge these gaps in existing research. The goal is to explore the sectoral composition and employment quality among rural workers in India. It further investigates the subsectors within the agricultural sector where these workers are engaged, utilizing the NIC 2-digit classification by analyzing data from the NSSO 2011-12 EUS and the PLFS from 2017-18 to 2023-24.

By assessing differences across gender, educational attainment, and social groups, the present study provides a comprehensive understanding of the evolving landscape of workforce participation. The findings will enhance comprehension of rural employment dynamics, aiding policymakers in crafting targeted initiatives to foster the growth of rising sub-sectors in rural India.

The current research is comprised of four distinct divisions. The methodology and data sources are outlined in Section 2. The third section examines the results and provides a discussion. In conclusion, section 4 summarizes the study by providing policy recommendations based on its research findings.

DATA SOURCE & METHODOLOGY

The data for this research is based on unit-level Data of the NSSO EUS from 2011-12, and PLFS of 2017-18 to 2023-24. We use the usual principal activity and usual subsidiary activity status to evaluate workers' employment, assessing both short-term and long-term roles. According to NIC 2008, we classify employment into two main categories: farm and nonfarm.

The farm sector covers Section A (Agriculture, Forestry, and Fishing), while the nonfarm sector includes Sections B to U (Mining, Manufacturing, Construction, Trade, Services, etc.) as defined by the NIC. Additionally, we investigate the sub-sectors within the farm and nonfarm sectors where rural workers are engaged based on the 2-digit NIC classification. To gauge employment quality, we consider categories such as regular salaried, casual labor, and self-employed. The age group analyzed ranges from 15 to 59 years.

RESULTS AND DISCUSSION

Sectoral Composition and Changes in Rural Employment

In rural India, the proportion of workers in the farm sector fell by 5.7 percent, from 63.3 percent in 2011-12 to 57.6 percent in 2023-24. Nevertheless, there was a slight uptick in 2019-20, attributed to the COVID-19 pandemic and its resulting national lockdown.

In contrast, the workers' share in the non-farm sector rose by 5.5 percentage points, increasing from 36.9 percent to 42.4 percent respectively. A slight decline is noted between 2019-20, alongside a significant rise in agricultural employment (Table 1). The lack of appropriate jobs in the non-farm sector during the COVID-19 pandemic led many individuals to return to agriculture to support their livelihoods (Misra, 2025).

Table 1: Sectoral distribution of workers (UPSS) in total rural employment in India (15 to 59 age groups) (%)

Sector/Years	2011-12	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Farm	63.2	57.9	56.2	59.7	58.9	57.1	56.5	57.6
Nonfarm	36.9	42.1	43.8	40.3	41.1	42.9	43.5	42.4

Source: Authors' calculations based on NSSO & PLFS unit-level data

Figure 1 indicates that female employment in agriculture has remained fairly stable at approximately 75.0 percent. On the other hand, within the nonfarm sector, female employment exhibited a slight decline from 25.0 percent in 2011-12 to 23.8 percent in 2023-24. Conversely, male participation in the farm sector declined from 57.9 percent to 46.0 percent, reflecting a gradual shift towards nonfarm employment. The male employment in the non-farm sector increased from 42.1 percent in 2011-12 to 54.0 percent in 2023-24. The overall trends suggest that while male workers increasingly move to the nonfarm sector, female workers maintain a significant presence in agriculture. This points to gender-specific structural changes in rural employment, where males benefit from the transition, whereas females experience marginal movement to nonfarm roles. Obstacles such as limited mobility, prevailing social norms, and insufficient skill development hinder women's transition to nonfarm jobs (Lei *et al.*, 2020; World Bank, 2020; Costagliola, 2021; Jayachandran, 2021).

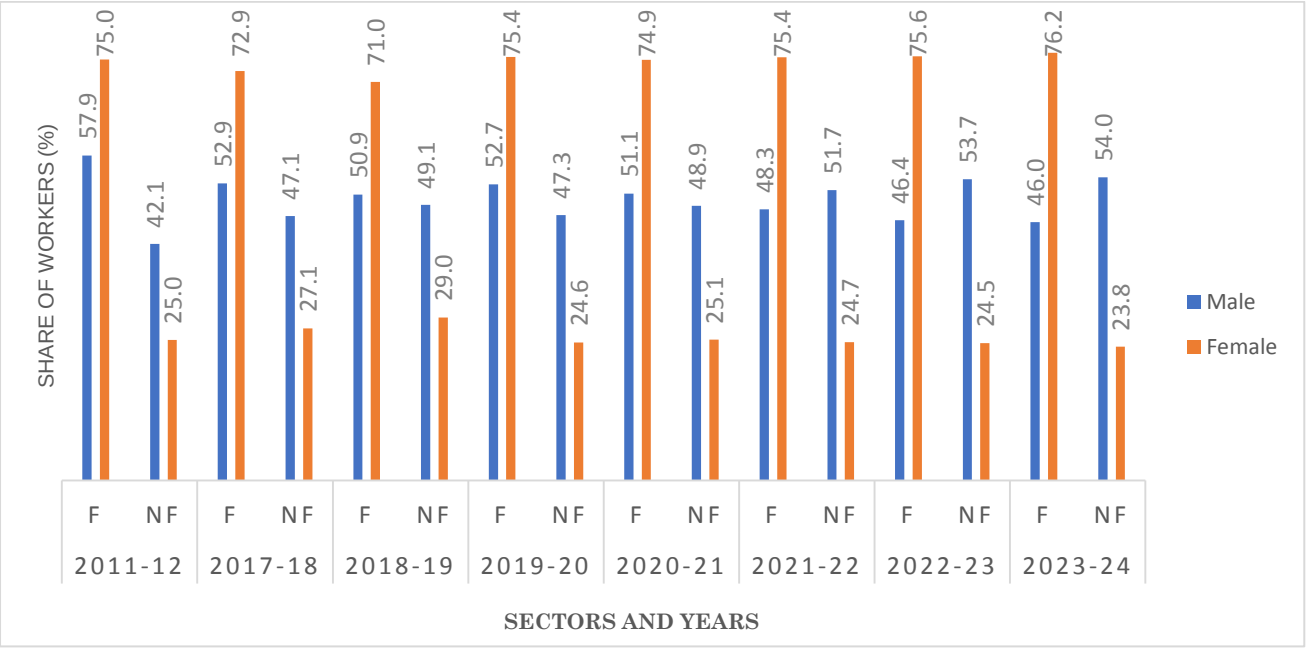

Fig 1. Distribution of rural employment in India by gender and sector (15 to 59 age groups) (%) Note: FA-Farm, NF-Nonfarm

Table 2: Age and sector-wise distribution of rural workers in India (15 to 59 age groups) (%)

Age Category	2011-12	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Farm	**63.2**	**57.9**	**56.2**	**59.7**	**58.9**	**57.1**	**56.5**	**57.6**
(15-25)	59.8	50.7	49.8	52.5	54.0	52.6	52.2	53.8
(26-40)	61.5	54.9	51.2	56.1	54.7	52.0	51.2	51.8
(41-59)	67.8	65.0	65.0	67.3	66.2	65.1	65.0	66.0
Nonfarm	**36.9**	**42.1**	**43.8**	**40.3**	**41.1**	**42.9**	**43.5**	**42.4**
(15-25)	40.2	49.3	50.2	47.5	46.0	47.4	47.9	46.2
(26-40)	38.5	45.1	48.8	43.9	45.4	48.0	48.8	48.2
(41-59)	32.2	35.0	35.0	32.7	33.9	34.9	35.0	34.0

Individuals in the younger age group (15-25 years) and the middle-aged group (26-40 years) held a smaller proportion in the farm sector compared to their older counterparts (41-59 years). The proportion of the youngest age group within the farm sector decreased from 59.8 percent to 53.8 percent. Between 2011-12 and 2023-24, the nonfarm sector's

rate rose from 40.2 percent to 46.2 percent (Table 2). Youth and prime-age workers exhibit greater mobility and a preference for nonfarm employment.

The majority of the older demographic remains heavily involved in the agriculture industry. These trends are more apparent among males than females.

Table 3: Distribution of rural employment in India by sector and education (15 to 59 age groups) (%)

Years	Gender	Sector/Edu	Illiterate	Up to Primary	Middle	S & HS	Graduate & above
2011-12	Male	F	29.2	28.7	19.3	19.4	3.4
		NF	19.9	26.3	21.0	22.3	10.6
	Female	F	58.6	22.4	10.7	7.6	0.7
		NF	39.9	23.9	14.0	13.4	8.8
2017-18	Male	F	27.4	22.2	25.0	20.6	4.8
		NF	15.5	19.5	25.8	26.1	13.2
	Female	F	56.4	20.6	13.6	8.4	1.0
		NF	29.3	18.8	17.1	19.6	15.3
2018-19	Male	F	25.3	23.2	24.7	21.3	5.6
		NF	14.1	20.5	26.1	25.7	13.5
	Female	F	53.5	22.6	13.6	8.9	1.3
		NF	25.8	19.0	19.9	21.6	13.6
2019-20	Male	F	24.1	22.3	24.6	22.5	6.4
		NF	14.3	20.4	25.8	25.9	13.6
	Female	F	51.5	21.2	15.7	10.0	1.6
		NF	26.1	18.5	17.9	22.3	15.2
2020-21	Male	F	22.5	21.5	26.0	22.8	7.1
		NF	13.2	19.2	26.2	26.8	14.7
	Female	F	49.1	22.1	16.5	10.4	1.9
		NF	23.8	21.1	18.6	21.6	14.9
2021-22	Male	F	21.0	21.3	26.8	23.6	7.4
		NF	12.1	18.7	27.3	26.5	15.3
	Female	F	47.0	22.6	16.9	11.3	2.2
		NF	24.4	20.4	18.9	20.7	15.7
2022-23	Male	F	25.5	20.4	23.0	24.2	7.1
		NF	10.7	23.7	26.1	25.2	14.3
	Female	F	44.9	22.8	17.5	12.8	2.0
		NF	20.7	20.7	19.1	23.9	15.6
2023-24	Male	F	20.2	20.8	24.6	26.1	8.4
		NF	10.9	19.9	26.3	26.9	16.0
	Female	F	43.2	22.5	18.3	13.5	2.5
		NF	19.4	19.9	20.4	24.9	15.4

Source: Same as in Table

The proportion of male farm workers with no formal education or primary education decreased from 29.2 percent and 28.7 percent in 2011-12 to 20.2 percent and 20.8 percent in 2023-24, respectively (Table 3). In contrast, the percentage of males with middle, secondary, and higher education in non-farm sectors has been rising steadily.

Table 4. Distribution of rural employment in India by gender and caste (15 to 59 age groups) (%)

Years	Gender	Male		Female	
	Sector/SG	F	NF	F	NF
2011-12	ST	14.0	7.8	10.5	11.8
	SC	18.5	23.6	14.5	23.1
	OBC	45.0	43.1	35.8	42.3
	Others	22.5	25.5	39.2	22.9
2017-18	ST	16.0	8.5	21.2	10.7
	SC	19.7	24.4	20.5	23.1

	OBC	41.4	43.9	41.1	43.4
	Others	22.9	23.3	17.1	22.9
	ST	15.5	9.2	20.2	10.6
	SC	19.3	25.9	21.1	24.8
	OBC	43.7	42.2	43.6	46.2
2018-19	Others	21.6	22.6	15.2	18.5
	ST	14.8	8.5	19.4	12.6
	SC	20.2	26.4	21.6	26.8
	OBC	44.9	42.8	44.3	40.4
2019-20	Others	20.1	22.2	14.7	20.3
	ST	15.8	9.6	20.3	13.8
	SC	21.1	25.2	21.5	24.4
	OBC	43.1	43.6	43.7	42.4
2020-21	Others	20.0	21.6	14.5	19.4
	ST	16.7	9.2	20.8	12.5
	SC	18.1	25.4	19.9	25.9
	OBC	45.7	44.7	45.1	42.9
2021-22	Others	19.6	20.7	14.2	18.7
	ST	14.8	9.1	18.6	11.8
	SC	16.3	23.4	19.8	24.4
	OBC	43.5	42.5	46.4	43.8
2022-23	Others	25.5	25.0	15.3	20.1
	ST	16.4	9.7	19.1	11.9
	SC	17.5	24.5	19.6	23.6
	OBC	46.6	46.5	46.1	46.1
2023-24	Others	19.5	19.3	15.2	18.5

The proportion of rural female farm workers who cannot read and write decreased from 58.6 percent to 43.2 percent over the period 2011-12 to 2023-24, a time when the percentage of more educated females in the same group slightly rose. In contrast, the nonfarm sector saw a significant rise in the share of secondary and higher-educated females. The percentage of females in the non-farm sector holding a graduate degree or higher rose significantly from 8.8 percent during the 2011-12 period to 15.4 percent in 2023-24. Factors driving this shift include access to education, the ability to acquire new skills, and increased job opportunities beyond agriculture (Abraham, 2009; Pattayat and Parida, 2024).

Table 4 illustrates the caste and sector-specific breakdown of rural workers in India, who are in the age group of 15 to 59. Among both genders, the proportion of OBC is greater in both sectors throughout all years. Among male workers, the proportion of OBC workers remains relatively steady at approximately 45 percent. SC Male workers exhibit a slight shift from the traditional farming sector to non-agricultural employment.

In contrast, ST workers, both male and female, show a lack of diversification in their employment. Specifically, female ST workers still display a strong inclination toward farm-based work and relatively low involvement in nonfarm activities. A second category showed a decrease in employment in both farm and non-farm settings, indicating a possible transition towards urban employment opportunities for both men and women.

SUB-SECTORAL COMPOSITION AND SHIFTS IN RURAL EMPLOYMENT

Within the rural nonfarm sub-sectors, construction and manufacturing are the main dominant sub-sectors, followed by wholesale & retail trade, transportation & storage, education, and other service activities (Table 5). This indicates that the rural workers are involved in low-productivity activities.

The study results align with (Kapoor *et.al.*,2021). Over the years, workers' share declined in manufacturing, education, and other service activities. However, the construction industry, wholesale & retail trade activities, and transportation & storage-related sectors show a marginal improvement.

By looking at gender-wise share in the nonfarm sector, we find that females are highly concentrated in the manufacturing sector compared to males (Table 6). There are subsectors in manufacturing, such as textile and food processing, which provide labor-intensive and home-based work opportunities, especially for females. For male workers construction sector is the main job provider. The share of males in the construction industry rose from 32.3 percent in 2011–12 to a peak of 37.9 percent in 2021-22, before slightly declining to 35.5 percent in 2023-24. However, the share of females significantly fell from 26.1 percent to 15.7 percent. The female workers are mainly concentrated in education, healthcare & social services compared to males, indicating the increasing feminization of care-oriented sectors. In the transport and storage sector, female participation is negligible, pointing to gendered barriers in mobility-related occupations. Overall, females' participation is less in the nonfarm sector than their counterparts, and they are mainly engaged in low-paid or informal sectors. However, over the last decades, the share of females increased in health, education, and trade, suggesting a slow but visible diversification.

Table 5: Sectoral Distribution of workers in nonfarm sector of rural India (15 to 59 age groups) (%)

Sector	2011-12	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Mining and quarrying	1.4	1.0	0.9	0.6	0.8	0.8	0.7	0.5
Manufacturing	**23.6**	**19.2**	**18.4**	**18.9**	**19.3**	**19.3**	**19.7**	**20.6**
Electricity, gas, and steam, etc.	0.4	0.6	0.5	0.5	0.7	0.5	0.5	0.5
Water supply, sewerage, waste management, etc.	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4
Construction	**31.0**	**30.3**	**30.9**	**31.7**	**31.7**	**31.8**	**33.7**	**31.2**
Wholesale and retail trade, etc.	**15.3**	**15.9**	**16.6**	**16.7**	**16.6**	**17.2**	**16.6**	**16.9**
Transportation and storage	**8.3**	**9.6**	**9.5**	**9.6**	**9.0**	**8.8**	**8.0**	**8.9**
Hospitality and food service	2.4	2.9	2.8	2.6	2.7	2.8	2.8	3.1
ICT & media service	0.4	0.6	0.5	0.6	0.7	0.9	0.8	0.7
Banking, insurance activities, etc.	1.0	1.1	1.1	1.3	1.3	1.2	1.0	1.3
Property and real estate services	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Specialised professional, scientific, and technical services	0.5	0.7	0.7	0.6	0.6	0.6	0.6	0.6
Administrative and auxiliary support service	0.6	1.6	1.3	1.5	1.2	1.6	1.3	1.3
Government and defense services	2.3	2.6	2.6	2.5	2.5	2.4	2.3	2.1
Educational services	**6.1**	**7.5**	**7.4**	**6.8**	**6.1**	**5.5**	**5.8**	**5.5**
Healthcare and social work activities	1.3	1.6	1.7	1.7	2.3	1.9	2.0	2.2
Arts, cultural, and recreational activities	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.3
Miscellaneous service activities	**4.0**	**3.0**	**3.4**	**3.0**	**3.1**	**2.8**	**2.7**	**2.7**
Domestic and informal household-based production	0.8	1.1	1.1	0.5	0.9	1.3	0.9	1.1

Table 6: Distribution of workers by gender in nonfarm sector of rural India (15 to 59 age groups) (%)

Years	**2011-12**		**2017-18**		**2018-19**		**2019-20**		**2020-21**		**2021-22**		**2022-23**		**2023-24**	
Sector/Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mining and quarrying	1.4	1.2	1.0	0.7	0.9	0.8	0.6	0.1	0.9	0.3	0.9	0.6	0.8	0.3	0.6	0.2
Manufacturing	**19.6**	**38.8**	**17.0**	**30.7**	**15.5**	**31.9**	**16.2**	**30.6**	**16.6**	**30.3**	**16.0**	**33.6**	**16.0**	**35.1**	**15.9**	**37.8**
Electricity, gas, etc.	0.5	0.1	0.7	0.0	0.5	0.2	0.6	0.1	0.8	0.1	0.6	0.1	0.6	0.1	0.6	0.1
Water supply etc	0.3	0.2	0.4	0.1	0.4	0.3	0.4	0.5	0.3	0.2	0.4	0.3	0.4	0.3	0.4	0.4
Construction	**32.3**	**26.1**	**32.4**	**19.4**	**33.3**	**19.6**	**33.9**	**22.0**	**34.0**	**22.8**	**34.3**	**20.8**	**37.9**	**16.5**	**35.5**	**15.7**
Wholesale and retail trade, etc.	**16.8**	**9.5**	**16.8**	**11.2**	**17.7**	**11.4**	**17.6**	**12.8**	**17.7**	**12.2**	**18.3**	**12.7**	**17.2**	**14.1**	**17.8**	**13.6**
Transportation and storage	**10.4**	**0.5**	**11.3**	**0.7**	**11.4**	**0.4**	**11.7**	**0.5**	**11.0**	**0.7**	**10.7**	**0.5**	**9.9**	**0.3**	**11.2**	**0.2**
Hospitality and food service	2.5	1.9	2.9	3.4	2.8	2.8	2.7	2.0	2.7	2.3	2.9	2.3	2.8	3.0	3.2	2.9

ICT	0.4	0.2	0.6	0.4	0.5	0.3	0.6	0.4	0.8	0.3	0.9	0.8	0.8	0.6	0.8	0.5
Financial service activities	1.1	0.5	1.2	0.8	1.2	0.7	1.2	1.8	1.5	0.6	1.3	0.9	1.1	0.6	1.3	1.2
Real estate services	0.2	0.0	0.2	0.1	0.2	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.2	0.1	0.1	0.1
Specialised professional, scientific, and technical activities	0.6	0.2	0.8	0.2	0.8	0.3	0.8	0.2	0.6	0.3	0.7	0.2	0.6	0.4	0.6	0.3
Administrative and auxiliary service activities	0.7	0.2	1.7	0.8	1.4	0.7	1.7	0.6	1.3	0.7	1.8	0.6	1.4	0.7	1.5	0.7
Public administration etc.	2.6	1.2	2.8	2.0	2.6	2.7	2.4	3.0	2.5	2.5	2.4	2.5	2.3	2.3	2.1	2.4
Education	**4.8**	**11.2**	**5.2**	**19.7**	**5.2**	**17.8**	**4.6**	**16.5**	**3.9**	**14.9**	**3.7**	**13.4**	**3.7**	**14.2**	**3.6**	**12.2**
Healthcare and social assistance	0.9	2.9	0.9	5.3	1.0	4.9	0.8	5.6	1.2	6.4	1.0	5.8	1.0	6.1	1.1	6.4
Arts cultural, and recreation	0.4	0.1	0.4	0.1	0.5	0.2	0.6	0.2	0.3	0.1	0.3	0.1	0.4	0.1	0.3	0.2
Other service activities	4.2	3.3	3.1	2.1	3.5	2.6	3.3	1.9	3.3	2.2	3.0	1.8	2.8	2.3	2.8	2.3
Activities of households as employers, etc.	0.5	2.0	0.8	2.4	0.8	2.5	0.3	1.4	0.3	3.3	0.8	3.2	0.4	3.1	0.6	3.1

Note: M-Male, F-Female, ICT- Information & Communication

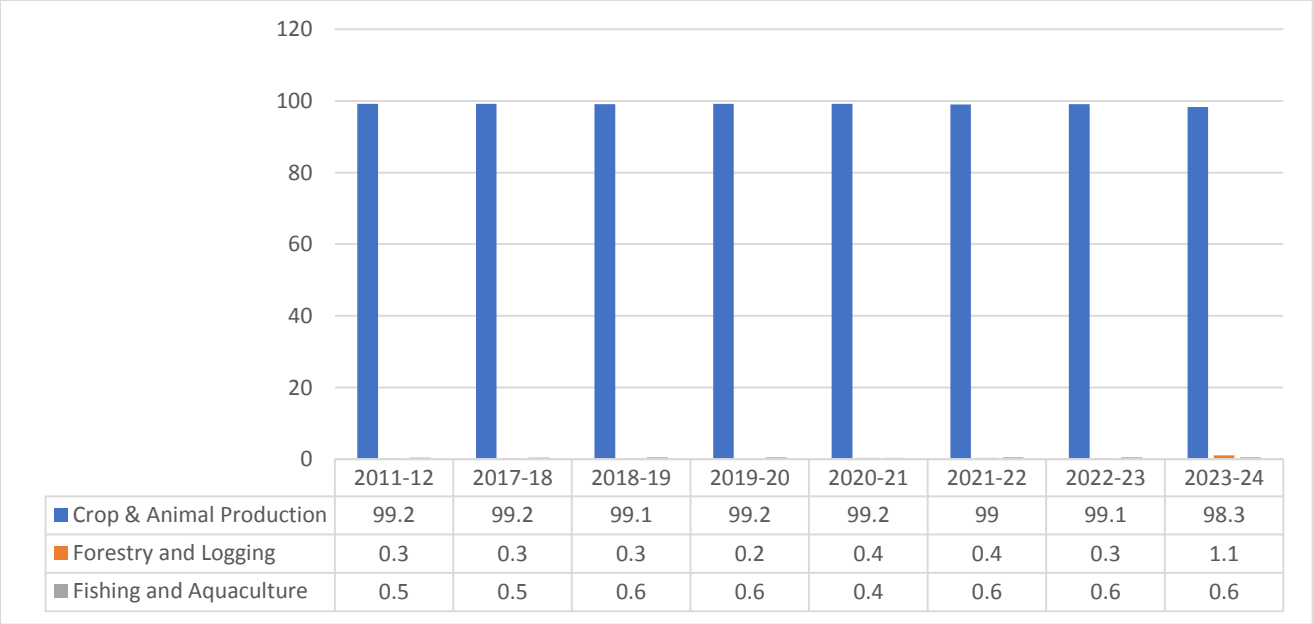

Fig 2: Distribution of workers in farm sub sector of rural India (15 to 59 age groups) (%)

It was noticed that in rural regions, employees are primarily involved in the agricultural sector rather than the non-agricultural sectors (Table 1). The farm sector is then further categorized at the two-digit level of the NIC, revealing that crop and animal production is the primary sector within the farm sector, as illustrated by Figure 2. Examining gender participation in the farm sector by category, the data in Table 8 indicates that both males and females are primarily involved in crop and animal production, with fishing and aquaculture, and forestry & logging being secondary activities throughout the study period.

Table 8: Distribution of workers by gender in farm sub sector of rural India (15 to 59 age groups) (%)

Years	Farm Sub-sector	Crop & Animal Production	Forestry & Logging	Fishing & Aquaculture
2011-12	M	99.0	0.3	0.7
	F	99.7	0.2	0.2
2017-18	M	99.0	0.3	0.7
	F	99.8	0.2	0.1
2018-19	M	98.9	0.4	0.8
	F	99.6	0.3	0.2
2019-20	M	98.9	0.3	0.8
	F	99.8	0.1	0.2
2020-21	M	98.9	0.5	0.7
	F	99.7	0.2	0.1

	M	98.5	0.5	1.0
2021-22	F	99.7	0.1	0.1
	M	98.7	0.3	1.0
2022-23	F	99.5	0.3	0.1
	M	98.4	0.5	1.1
2023-24	F	98.1	1.8	0.1

Table 9 represents the caste-wise sectoral composition in the farm sub-sector from 2011-12 to 2023-24. The analysis shows that in crop and animal production, the share of OBC workers remains high over the years, followed by SC and ST. Forestry and logging activities are primarily dominated by ST workers, indicating their connection to forest-based livelihoods. Overall, the farm sub-sector is mainly dominated by the OBC. The ST and SC demonstrate sector-specific strengths. The share of ST workers has mainly increased in forestry, and for SC, it has increased in fishing. The share of the upper caste (others) in fishing and aquaculture increased significantly from 6.6 percent in 2011-12 to 19.7 percent in 2023-24, whereas in forestry and logging it declined from 19.8 percent to 5.6 percent.

Table 9. Distribution of workers by caste in farm sub sector of rural India (15 to 59 age groups) (%)

Years	Farm Sub Sector/Caste	ST	SC	OBC	Others
	Crop and Animal Production	15.4	19.5	44.3	20.9
	Forestry and Logging	18.5	18.2	43.5	19.8
2011-12	Fishing and Aquaculture	9.6	21.6	62.2	6.6
	Crop and Animal Production	17.6	20.0	41.3	21.1
	Forestry and Logging	41.1	13.2	27.3	18.4
2017-18	Fishing and Aquaculture	12.0	17.1	48.2	22.7
	Crop and Animal Production	17.1	19.6	43.8	19.5
	Forestry and Logging	10.4	48.4	28.0	13.2
2018-19	Fishing and Aquaculture	8.8	30.3	48.5	12.3
	Crop and Animal Production	16.6	20.7	44.7	18.0
	Forestry and Logging	25.4	33.0	25.2	16.4
2019-20	Fishing and Aquaculture	5.1	30.0	37.6	27.4
	Crop and Animal Production	17.7	21.2	43.3	17.8
	Forestry and Logging	25.1	30.0	32.2	12.8
2020-21	Fishing and Aquaculture	10.6	24.0	46.5	18.9
	Crop and Animal Production	18.4	18.7	45.5	17.3
	Forestry and Logging	33.0	23.3	30.1	13.7
2021-22	Fishing and Aquaculture	4.2	29.2	50.7	15.8
	Crop and Animal Production	16.5	18.0	44.8	20.7
	Forestry and Logging	37.0	17.2	28.4	17.4
2022-23	Fishing and Aquaculture	4.8	12.1	46.9	36.2
	Crop and Animal Production	17.8	18.4	46.4	17.4
	Forestry and Logging	17.3	28.0	49.1	5.6
2023-24	Fishing and Aquaculture	10.0	25.5	44.9	19.7

Source: Same as in Table 1

Sectoral Composition & Quality of Employment

In the farm sector, an overwhelmingly large share (around 73 percent) of workers are self-employed, indicating the predominance of own-account and unpaid family workers (Table 10). The same trends were observed by Fernandez and Puri (2023). A slight increase was observed in the share of self-employed workers from 73.8 percent in 2011-12 to 74.6 percent in 2023-24. In contrast, the share of casual labor in the farm sector substantially declined from 62.1 percent to 43.2 percent, reflecting the mechanization of agriculture and the withdrawal of labor from low-productivity agricultural work. In contrast, regular salaried employment in the farm sector remains minimal, fluctuating between 4 percent and 9 percent, highlighting the

limited presence of formal or structured employment in this sector.

Table 10: Distribution of workers by sector and employment status in Rural India (15 to 59 age groups) (%)

Employment Status by Sector	2011-12	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Farm	**63.2**	**57.9**	**56.2**	**59.7**	**58.9**	**57.1**	**56.5**	**57.6**
SE	73.8	74.4	72.7	75.3	74.1	73.7	73.4	74.6
RS	6.2	5.9	5.6	8.8	7.2	4.3	4.9	4.8
CL	62.1	51.6	49.6	52.1	50.6	46.8	42.5	43.2
Nonfarm	**36.9**	**42.1**	**43.8**	**40.3**	**41.1**	**42.9**	**43.5**	**42.4**
SE	26.2	25.7	27.3	24.7	25.9	26.3	26.6	25.4
RS	93.8	94.1	94.4	91.2	92.9	95.7	95.1	95.2
CL	37.9	48.4	50.4	47.9	49.4	53.2	57.5	56.8

In contrast, the nonfarm sector is dominated by regular salaried workers. The share of regular salaried workers increased slightly from 93.8 percent to 95.2 percent during the study. Notably, the proportion of casual labor in the nonfarm sector rose from 37.9 percent to 56.8 percent between 2011-12 and 2023-24, indicating a growing reliance on irregular, low-wage work in rural construction, trade, and other informal activities. Overall, for casual workers, we observed a dual shift; the share of these workers declined in the farm sector and increased in the nonfarm sector.

The persistence of high casualization in nonfarm jobs raises concerns about the quality and security of rural employment. The expansion of regular salaried employment in the nonfarm sector suggests some degree of formalization, but it remains limited in agriculture. These trends point to the need for targeted rural employment policies aimed at enhancing job security, formalizing rural nonfarm work, and improving productivity in both sectors.

CONCLUSION

In summary, over time, India's rural labor market has experienced significant structural changes. The proportion of rural workers in the agricultural sector has declined, while participation in the nonfarm sector has risen from 2011-12 to 2023-24. Similar trends are observed by Misra (2014). More male workers are transitioning to nonfarm jobs, whereas female workers continue to maintain a strong presence in agriculture. Young and prime-age workers exhibit greater mobility and a preference for nonfarm employment, while older workers predominantly remain in farming. As education levels rise, so does the likelihood of individuals moving into nonfarm roles. Data indicates that OBC workers have a higher presence in both sectors for both genders across all years. SC males and females are gradually shifting from traditional farming to nonfarm activities, while ST workers show limited diversification. Notably, ST females prefer agricultural work and have low participation in nonfarm employment. The rural nonfarm economy is characterized mainly by six sectors: manufacturing, construction, wholesale and retail trade, transportation and storage, education, and other services.

Women are more concentrated in the textiles and food processing sectors, which provide labor-intensive, home-based job opportunities, particularly for women. Whereas, construction serves as the primary employment avenue for men. Overall, women are less involved in the nonfarm sector compared to men, primarily holding low-paid or informal positions. However, there has been an increase in female participation in health, education, and trade over recent decades, reflecting gradual diversification.

Both men and women predominantly engage in crop and animal production, as well as fishing, aquaculture, forestry, and logging across the study. OBC workers dominate the agricultural sub-sector, with ST and SC groups showing distinct sectoral strengths. The number of ST workers has risen considerably in forestry, while SC workers have expanded their roles in fishing.

The share of upper-caste (others) workers in fishing and aquaculture increased significantly from 6.6 percent in 2011-12 to 19.7 percent in 2023-24; however, in forestry and logging, it decreased from 19.8 percent to

5.6 percent. A significant majority (about 73 percent) of workers in agriculture are self-employed, indicating a high prevalence of own-account and unpaid family labor. Among casual workers, there is a dual shift: their numbers have decreased in agriculture but increased in the nonfarm sector.

The persistence of high casual employment in nonfarm roles raises concerns regarding job quality and security. Despite some growth in regular salaried positions in the nonfarm sector, formalization in agriculture remains minimal. These trends underscore an immediate need for targeted rural employment policies aimed at improving job security, formalizing rural nonfarm work, and boosting productivity in both segments.

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