



Occupational Patterns of Main and Marginal Workers in The Tembhu Lift Irrigation Project Command Area of Sangli District

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Abstract:

The present study examines the occupational patterns of main and marginal workers in the Tembhu Lift Irrigation Project Command Area of Sangli District. The research is based on secondary data obtained from the District Census Handbook of Sangli District (2011). Workers have been classified into four major industrial categories, namely cultivators, agricultural labourers, household industry workers, and other workers. The analysis reveals that cultivation and agricultural labour continue to dominate the occupational structure of the command area, reflecting the agrarian nature of the regional economy. However, a significant proportion of marginal workers indicates the prevalence of employment instability and seasonal nature of work, particularly among agricultural labourers. Tehsil-wise variations highlight uneven occupational diversification, with limited expansion of household industries and non-agricultural employment. Despite the introduction of irrigation facilities under the Tembhu Lift Irrigation Project, the transition towards stable and diversified livelihoods remains slow. The study emphasizes the need for inclusive rural development strategies focusing on employment security, skill development, and diversification of occupational opportunities to enhance the socio-economic conditions of workers in the command area.

Keywords: Tembhu Lift Irrigation Project, Main & Marginal Workers, Occupational Structure, Agricultural Labour, Cultivators, Household Industries, Non-agricultural Sectors.

Introduction:

The occupational structure of a region reflects its level of economic development, resource availability, and socio-economic transformation. In rural areas, especially in irrigation-based agricultural regions, changes in occupational patterns provide valuable insights into livelihood security and employment stability. The Tembhu Lift Irrigation Project Command Area of Sangli District represents one such region where large-scale irrigation development has been introduced with the objective of improving agricultural productivity and rural livelihoods.

Traditionally, the economy of this command area has been predominantly agrarian,

with a large proportion of the population engaged as cultivators and agricultural labourers. The introduction of assured irrigation through the Tembhu Lift Irrigation Project was expected to bring changes in cropping patterns, increase employment opportunities, and encourage occupational diversification. However, the extent to which these changes have influenced the occupational patterns of main and marginal workers remains a significant area of study. Main workers, who are engaged in economic activities for most of the year, and marginal workers, who work for a limited period, together reflect the stability and seasonality of employment in rural regions. An analysis of their industrial categories

helps in understanding the degree of dependence on agriculture, the prevalence of seasonal employment, and the emergence of non-agricultural occupations. Therefore, the present study attempts to analyze the occupational patterns of main and marginal workers in the Tembhu Lift Irrigation Project Command Area of Sangli District, with a view to assessing the impact of irrigation development on employment structure and rural livelihoods.

Objectives:

1. To examine the occupational structure of agricultural labourers in the Tembhu Lift Irrigation Project Command Area of Sangli District.
2. To examine the distribution of marginal workers and their employment nature.
3. To compare tehsil-wise differences in main and marginal workers.

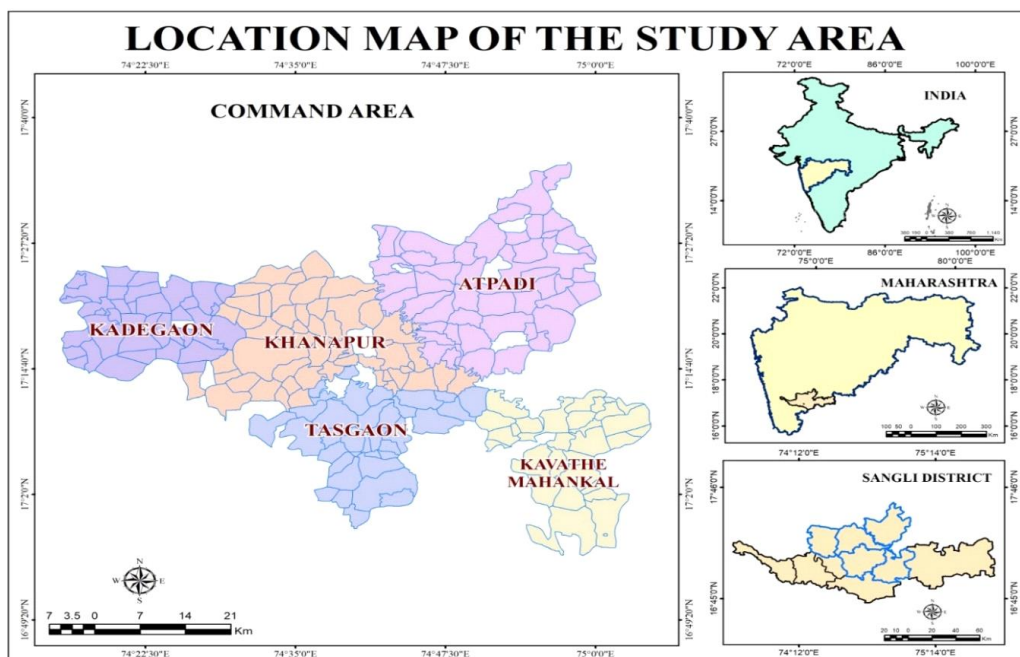
Study Area:

Tembhu Lift Irrigation Project in Sangli district Command area is lying between $74^{\circ} 22'$ East longitude to $75^{\circ} 00'$ East longitude and 16°

$49'$ North latitude to $17^{\circ} 40'$ North latitude. The total geographical area of command area is 2771.017 sq. kms. According to the 2011 Census, the population of the command area is 550869 persons.

Command area of Tembhu Lift Irrigation Project includes 5 tahsils of Sangli district, out of total ten tahsils. Sangli district has two sub divisions as Miraj and Vita with 5 tahsils Tasgaon, Kavathe Mahankal, Kadegaon, Khanapur and Atpadi with total 287 villages. On 28th March 2002 the tehsil of Kadegaon is formed from the Palus and Khanapur tehsil. There are 204 villages in Command Area of Tembhu Lift Irrigation Project that includes 39 villages of Kadegaon tehsil, 55 villages of Khanapur tehsil, 47 villages of Atpadi tehsil, 34 villages of Tasgaon tehsil and 29 villages of Kavathe Mahankal tehsil.

Command area is bordered by Solapur district in north – east, Palus and Walwa tahsils of Sangli district in south-west, Miraj tehsil of Sangli district and Bijapur district of Karnataka State in east-south and Satara district on north-west.



Database and Methodology:

Secondary Data obtained from census of 2011. Some discussions made with native people in Command Area of Tembhu Lift Irrigation Project in Sangli District. Shifting population census characteristics have been observed at different geographic levels ranging from various aspects in this study. The study evaluated whether population characteristics remained static, and if not, assessed the degree of changes for some commonly used census variables across census data in command area of Tembhu Lift Irrigation Project in Sangli district between 2011.

Occupational Structure:

The census of India (1971) defined "occupation as the name of the function, which a person performs by engaging himself in some gainful activity". It shows the nature of the work of the earner. The occupation structure mainly related to the working population and gives functional characteristics of the district.

Industrial Category of main workers:

As per 2011 census, total 203256 persons are main worker that is 79.89 per cent to total population which is divided to the four categories as per census i.e. cultivators, agricultural labors, house hold industry and other workers.

Table No.1: Industrial Category of Main Workers

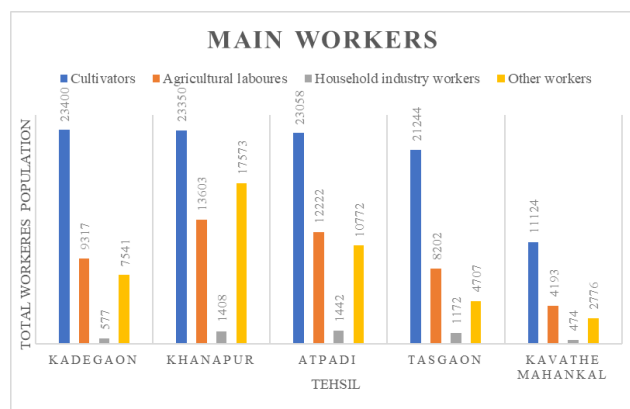
Tehsil	Cultivators	Agricultural labours	Household industry workers	Other workers	Total Main workers
Kadegaon	23400	9317	577	7541	40835
Khanapur	23350	13603	1408	17573	55934
Atpadi	23058	12222	1442	10772	47494
Tasgaon	21244	8202	1172	4707	35325
Kavathe Mahankal	11124	4193	474	2776	18567
Total	102176	47537	5073	43369	198155

Source: District Census Handbook of Sangli District, 2011

The industrial classification of main workers in the Tembhu Lift Irrigation Project Command Area of Sangli District clearly reflects the dominance of agriculture, supported by detailed numerical evidence from the 2011 Census. Out of a total of 1,98,155 main workers in the command area, 1,02,176 (51.57%) are cultivators, forming the largest occupational group, followed by 47,537 agricultural labourers (23.99%), 43,369 other workers (21.88%), and only 5,073 household industry workers (2.56%), indicating limited industrial diversification.

At the tehsil level, Khanapur records the highest number of main workers (55,934),

comprising 23,350 cultivators (41.74%), 13,603 agricultural labourers (24.32%), 1,408 household industry workers (2.52%), and 17,573 other workers (31.42%), showing a relatively diversified occupational structure. Kadegaon has 40,835 main workers, with cultivators forming the majority (23,400 or 57.32%), followed by 9,317 agricultural labourers (22.82%), 7,541 other workers (18.47%), and 577 household industry workers (1.41%).



Graph No. 1

In Atpadi, out of 47,494 main workers, 23,058 (48.55%) are cultivators, 12,222 (25.73%) agricultural labourers, 10,772 (22.68%) other workers, and 1,442 (3.04%) household industry workers, reflecting strong dependence on agriculture with modest occupational diversification. Tasgaon shows 35,325 main workers, of which 21,244 (60.12%) are

2 Industrial Category of Marginal Workers:

Table No. 2: Industrial Category of Marginal Workers

Tehsil	Cultivators	Agricultural labourers	Household industry workers	Other workers	Total Marginal Workers
Kadegaon	2958	2126	355	987	6426
Khanapur	2868	2785	332	1709	7694
Atpadi	1514	2571	492	1451	6028
Tasgaon	4756	1804	374	874	7808
Kavathe Mahankal	927	918	66	463	2347
Total	13023	10204	1619	5484	30330

Source: District Census Handbook of Sangli District, 2011

The industrial classification of marginal workers in the Tembhu Lift Irrigation Project Command Area of Sangli District highlights the continued dominance of agriculture, though with greater employment insecurity compared to main workers. According to the 2011 Census, the command area has a total of 30,330 marginal workers, out of which 13,023 (42.94%) are cultivators, 10,204 (33.64%) agricultural labourers, 5,484 (18.08%) other workers, and only 1,619 (5.34%) household industry workers,

cultivators, 8,202 (23.22%) agricultural labourers, 4,707 (13.33%) other workers, and 1,172 (3.32%) household industry workers, indicating a predominantly agrarian economy.

Kavathe Mahankal has the smallest workforce with 18,567 main workers, including 11,124 cultivators (59.93%), 4,193 agricultural labourers (22.58%), 2,776 other workers (14.95%), and 474 household industry workers (2.55%), highlighting limited non-agricultural employment opportunities.

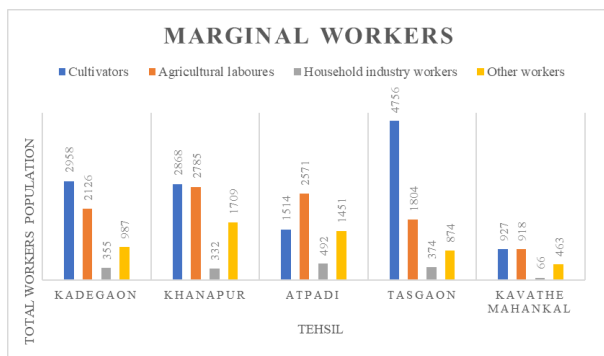
Overall, the data clearly demonstrate that agriculture—both cultivation and agricultural labour continues to be the backbone of employment in the Tembhu Lift Irrigation Command Area, while household industries remain marginal and “other workers” indicate gradual but uneven occupational diversification across tehsils.

indicating that marginal employment is largely agriculture-based with very limited industrial engagement.

At the tehsil level, Tasgaon records the highest number of marginal workers (7,808), dominated by 4,756 cultivators (60.91%), followed by 1,804 agricultural labourers (23.10%), 874 other workers (11.19%), and 374 household industry workers (4.79%), showing a strong agrarian dependence even among marginal workers. Khanapur has 7,694 marginal workers,

with a relatively balanced distribution: 2,868 cultivators (37.28%), 2,785 agricultural labourers (36.21%), 1,709 other workers (22.21%), and 332 household industry workers (4.32%), reflecting slightly higher diversification.

In Kadegaon, out of 6,426 marginal workers, 2,958 (46.03%) are cultivators, 2,126 (33.07%) agricultural labourers, 987 (15.36%) other workers, and 355 (5.52%) household industry workers. Atpadi reports 6,028 marginal workers, where agricultural labourers form the largest group (2,571 or 42.64%), followed by 1,514 cultivators (25.12%), 1,451 other workers (24.07%), and 492 household industry workers (8.16%), indicating higher employment vulnerability. Kavathe Mahankal, with the lowest marginal workforce (2,347), includes 927 cultivators (39.50%), 918 agricultural labourers (39.11%), 463 other workers (19.72%), and only 66 household industry workers (2.81%).



Graph No. 2

Overall, the numerical evidence clearly shows that marginal workers in the Tembhu Lift Irrigation Command Area remain heavily dependent on agriculture, particularly cultivation and agricultural labour, while household industries provide minimal employment. This pattern reflects seasonal, insecure, and low-income occupational structures, underlining the need for diversification and employment stability in the region.

Results:

The analysis of the industrial classification of main and marginal workers in the Tembhu Lift Irrigation Project Command Area of Sangli District reveals the predominance of agriculture as the primary source of livelihood. Among main workers, cultivators (1,02,176) and agricultural labourers (47,537) together constitute a substantial majority of the total workforce (1,98,155), indicating a strong agrarian occupational structure. Although the category of “other workers” (43,369) shows emerging diversification, household industry workers (5,073) remain negligible, reflecting limited rural industrialization.

The distribution of marginal workers further highlights employment insecurity in the region. Out of 30,330 marginal workers, a large proportion is engaged in cultivation (13,023) and agricultural labour (10,204), confirming that marginal employment is also largely agriculture-dependent. Tehsils such as Tasgaon and Khanapur record higher numbers of marginal workers, indicating greater seasonal and irregular employment, while Kavathe Mahankal shows the lowest workforce participation, reflecting limited economic opportunities.

A comparison of both tables indicates that while irrigation development has strengthened agricultural activity and created regular employment for a section of workers, a significant segment of the workforce continues to depend on marginal and seasonal occupations. The low participation in household industries and the relatively small share of non-agricultural employment underline the lack of alternative livelihood opportunities. Overall, the occupational structure of the command area remains agriculture-centric, with limited diversification, emphasizing the need for employment generation beyond agriculture to

reduce dependency, seasonal unemployment, and economic vulnerability among labourers.

Conclusion:

The occupational structure of the Tembhu Lift Irrigation Project area is predominantly agriculture-based, with cultivators and agricultural labourers forming the majority of both main and marginal workers. Household industries contribute minimally, while “other workers” show limited diversification. Marginal employment highlights seasonal and insecure jobs, particularly in tehsils like Tasgaon and Khanapur. Overall, despite irrigation development supporting agriculture, the region shows low non-agricultural employment, emphasizing the need for livelihood diversification and stable rural employment opportunities.

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