

Livelihood Security and Agricultural Labourers: Evidence from Rural Karnataka

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Abstract- The study described the necessities and livelihood of the 'Nandihalli' village. According to the survey, a clear distribution of family sizes within the study area population shows a higher prevalence of smaller families; Small landholdings are the most common among families, while a notable portion of families do not own any land. The largest group of families is primarily engaged in agriculture, the second largest group works for agricultural wages, and the village has access to tap water, which is likely the most convenient and perhaps the most reliable source of water. Understanding the distribution of water sources can help plan for infrastructure improvement and ensure reliable water supply to all homes. Traditional methods are dominant; there is a presence of mechanisation and a variety of other methods for agricultural ploughing in the village. Tubewells are the predominant source of irrigation, reflecting a reliance on groundwater resources. The variability in road quality for agricultural land access highlights a significant portion of respondents dealing with suboptimal or very poor road conditions, and weed spraying in the surveyed families, indicating a strong focus on weed control. The use of artificial sowing machines also highlights the trend towards mechanisation in agriculture.

Keywords: *Agricultural Land, Irrigation Facilities, Source of Allied Activities, Transport Facilities, Etc.*

I. INTRODUCTION

Agriculture remains a fundamental sector of the Indian economy, particularly in rural areas where it provides employment, income and livelihood security to a large section of the population. Despite structural changes in the Indian economy, a considerable proportion of the rural workforce continues to depend on agriculture and allied activities for their survival. Agricultural labourers represent one of the most vulnerable groups within the rural economy because they generally possess limited productive assets, have insecure employment opportunities, and depend heavily on seasonal agricultural occupation for income generation..

The Agrarian Structure in India has historically been characterised by unequal distribution of land, fragmentation of holdings, and the existence of a large number of landless and marginal households. Land ownership plays a crucial role in determining the economic status of rural households; without land are primarily dependent on wage labour and have limited bargaining power in rural labour markets. According to the National Sample Survey Office (NSSO), a significant proportion of rural households continue to depend on agricultural labour as a major source of livelihood, reflecting the Persistence of vulnerability among rural workers..

Agricultural labour markets in India have undergone significant transformations due to commercialisation of agriculture, mechanisation, technical advancement and changing cropping patterns. While these developments have contributed to increased agricultural productivity, they have also influenced the demand for manual labour and created uncertainties regarding employment opportunities for agricultural workers. The seasonal nature of agricultural activities often results in unemployment and irregular income among agricultural labourers, compelling many households to adopt livelihood diversification strategies, including migration and engagement in allied activities.

Livelihood diversification has emerged as an important strategy for improving the economic reliance of rural households. Allied agricultural activities such as animal husbandry dairy farming horticulture, sericulture, and fisheries provide Supplementary income sources and reduce dependence on crop-based employment. These activities are particularly important for small farmers and landless agricultural labourers, as they generate year-round employment opportunities and contribute to household income stability..

Rural infrastructure development is another critical determinant of Agricultural and socio-economic progress. Access to roads, irrigation facilities, healthcare services, drinking water, sanitation, and housing significantly influences the productivity, mobility, and living standards of rural communities. Inadequate infrastructure limits access to markets, employment opportunities, education and essential services, thereby reinforcing rural poverty and inequality..

The government of India has implemented several rural development and Social Security programmes to improve the livelihood conditions of vulnerable Rural households. Programmes such as MGNREGA, public distribution systems, rural housing schemes and Social Security Initiatives aim to provide employment security, improve living conditions and reduce economic vulnerability among rural populations. However, effective implementation and accessibility of these programmes remain Important challenges at the grassroots level..

Karnataka, like many other Indian states, has experienced significant changes in its agricultural economy. Although commercial farming and allied activities have expanded, agricultural labour continues to face challenges related to landlessness, seasonal employment, low wages and inadequate rural infrastructure. Understanding these issues at the local level is essential for designing effective policies aimed at improving rural livelihoods.

The present study therefore examines the socioeconomic conditions, employment patterns, agricultural activities alloyed livelihood opportunities and infrastructure challenges of agricultural labourers in rural Karnataka. The study is based on primary data collected from 105 agricultural labour households during 2025. It attempts to identify the major constraints affecting agricultural labourers and suggests policy measures for enhancing employment security, livelihood diversification, and socio-economic development.

Objectives of the Study:

1. *To examine the socioeconomic characteristics of agricultural labour households*

2. *To analyse the landholding patterns and extent of landlessness among respondents*
3. *To study the pattern of agricultural activities and employment duration among agricultural labourers*

To identify major rural infrastructure challenges affecting rural agricultural labour households

Statement of the Problem and Need for the Study

To identify the Growth and Performance of the Basic infrastructure of the study area and its impact on agricultural labourers and the yield of agricultural activities. and by examining the Income status, basic usage tools for agriculture activities, irrigation conditions and agriculture-allied activities.

Methodology:

The present study is based on primary data collected by Google Form from respondents. Data were gathered through scheduled Interviews and on-site observation using purposive sampling techniques, and a sample of 105 agricultural labourers from Nandihalli village was chosen from the study area and respondents.

Period of study:

The study was conducted Quarterly from September to December 2025 onward.

The Study area:

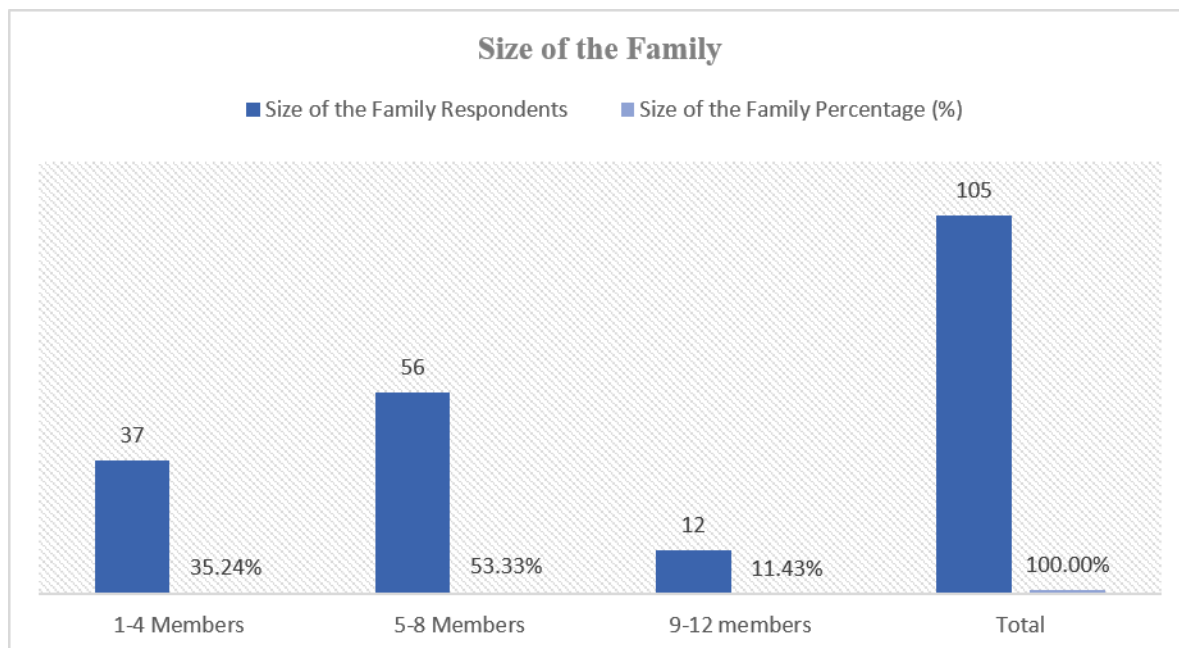
Nandihalli village is located in Savanur taluka of Haveri district, in Karnataka, India. It is situated 6 km away from the sub-district headquarters, Savanur (Tehsildar Office), and 27th Km away from the district headquarters, Haveri. As per 2009 statistics, Teggihalli is the Gram Panchayat of Nandihalli village. The total Geographical area of the town is 276.67 hectares. Nandihalli has a total population of 555 people. Out of this, the male population is 262, while the female population is 69.55%, of which 79.01% of the males and 61.09% of the females are literate. There are about 111 houses in Nandihalli village. The PIN code of Nandihalli village locality is 581116. Bankapur is the nearest town to Nandihalli for all major economic activities, approximately 2 km away.

Discussion and Results

Table 1.1: Size of the Families

Size of the Family		
Members	Respondents	Percentage (%)
1-4 Members	37	35.24%
5-8 Members	56	53.33%
9-12 members	12	11.43%
Total	105	100.00%

Source: Primary data 2025



The table indicates that more than half of the respondents (53.33%) belong to families with five to eight members, making this the most common family size among the surveyed agricultural labourers' households. This suggests that medium-sized families are predominant in the study area, reflecting the traditional family structure commonly found in rural Karnataka,

A considerable Proportion of respondents, 35.24%, belong to small families with one to four members. This may indicate a gradual shift towards nuclear families due to factors such as migration, economic constraints, or changes in social preferences.

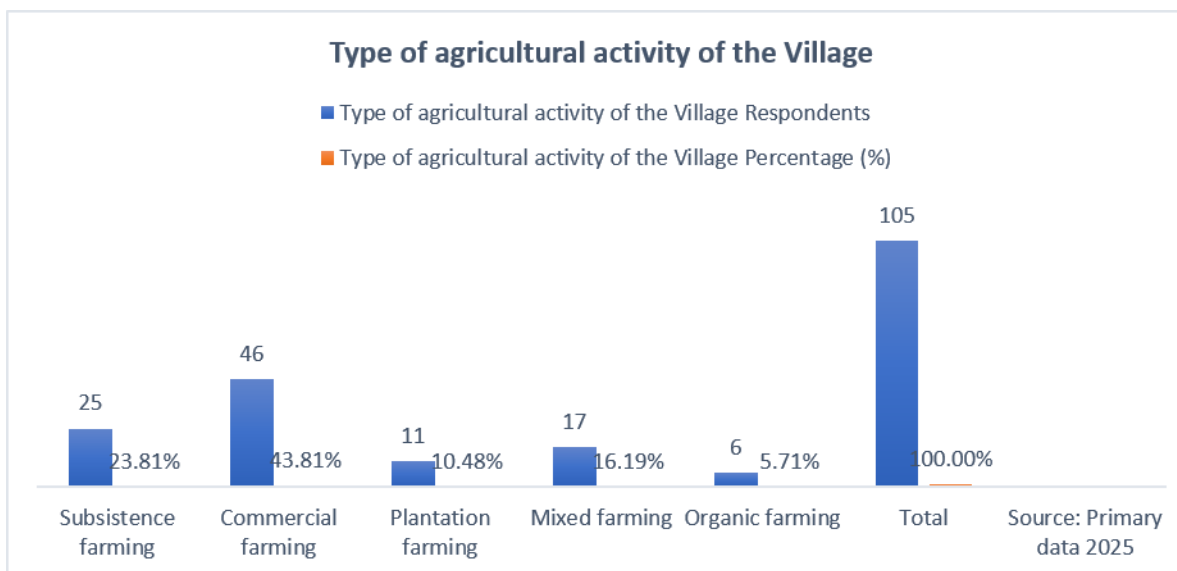
Only 11.43% of respondents belong to large families with nine to twelve members, showing that extended family systems are relatively less common. The

declining proportion of large families may be attributed to increasing living costs, limited employment opportunities, and greater awareness of family planning.

Table 1.2: Main Occupation of the Family

Type of agricultural activity of the Village		
Type of agriculture	Respondents	Percentage (%)
Subsistence farming	25	23.81%
Commercial farming	46	43.81%
Plantation farming	11	10.48%
Mixed farming	17	16.19%
Organic farming	6	5.71%
Total	105	100.00%

Source: Primary data 2025



The table shows that commercial farming is the predominant agricultural activity in the study area, accounting for 46 respondents (43.81%). This indicates that a large proportion of villages are engaged in market-oriented agriculture, where crops are primarily cultivated for sale rather than household consumption. The dominance of commercial farming reflects increasing agricultural commercialization and the integration of rural farmers into regional markets.

Subsistence Farming is practised by 25 respondents (23.81%), making it the second most common type of Agriculture. This suggests that a considerable number of households continue to cultivate crops mainly for their own consumption, reflecting traditional farming practices and limited market participation.

Mixed farming accounts for 17 respondents (16.19%), indicating that some farm Combine crop cultivation with livestock rearing or other allied agricultural activities. Mixed farming diversifies income sources, reduces production risks, and improves household food security.

Only 11 correspondents (10.48%) reported Plantation farming, showing that plantation-based agriculture is limited in the study area. Similarly, organic farming is practised by only 6 respondents (5.71%), making it the least common agricultural activity. The low adoption

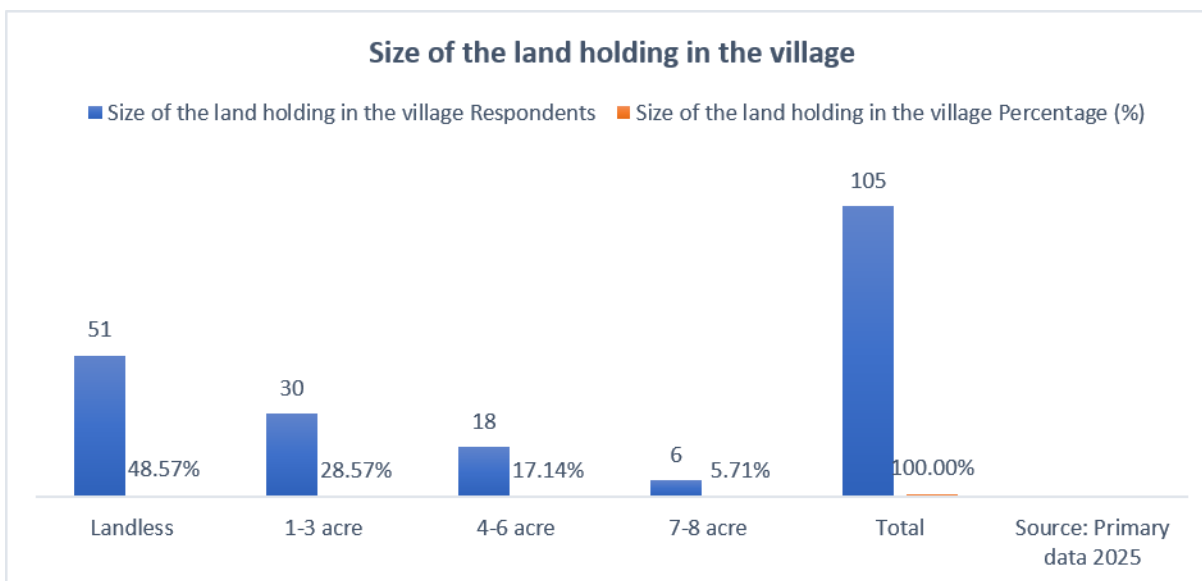
of organic farming may be due to limited awareness, certification challenges, lower initial yields and inadequate market incentives.

Overall reveal that commercial farming is the dominant agricultural practise Followed by sustenance Substances, and mixed farming. Plantation and organic farming account for relatively smaller Shares. The predominance of commercial farming indicates a shift towards market-oriented agriculture, while the continued presence of subsistence farming highlights the dependence of many rural households on agriculture for their livelihood. Promoting sustainable agricultural practices, improving market access and encouraging organic and diversified Farming could enhance farmers' incomes and strengthen rural economic development.

Table 1.3: Distribution of Respondents by Size of Agricultural Landholding

Size of the land holding in the village		
Size of Agricultural Landholding	Respondents	Percentage (%)
Landless	51	48.57%
1-3 acres	30	28.57%
4-6 acres	18	17.14%
7-8 acres	6	5.71%
Total	105	100.00%

Source: Primary data 2025



The table reveals that 51 respondents (48.57%) from the surveyed households are landless, making them the largest group in the study area. This indicates that nearly half of the respondents do not own agricultural land and are primarily dependent on wage labour, seasonal employment, or other livelihood activities. The high proportion of landless households reflects the prevalence of rural poverty, unequal distribution of land, and limited access to productive assets.

A total of 30 respondents (28.57%) own small landholdings of one to three acres. These marginal farmers generally cultivate small plots of land which often provide limited income and are insufficient to sustain household livelihoods throughout the year. As a result, many of them supplement their income through agricultural wage labour or non-farm employment.

Further, 18 respondents (17.14%) possess four to six acres of land, representing small to medium landholders. These households have relatively better access to agricultural resources and income opportunities than marginal farmers, although they may still face challenges such as fluctuating market prices, rising input costs, and climate-related risks. Only six respondents (5.71%) own seven to eight acres of land, indicating that large landholdings are relatively rare in the study area. This suggests that land ownership is highly fragmented, with only a small

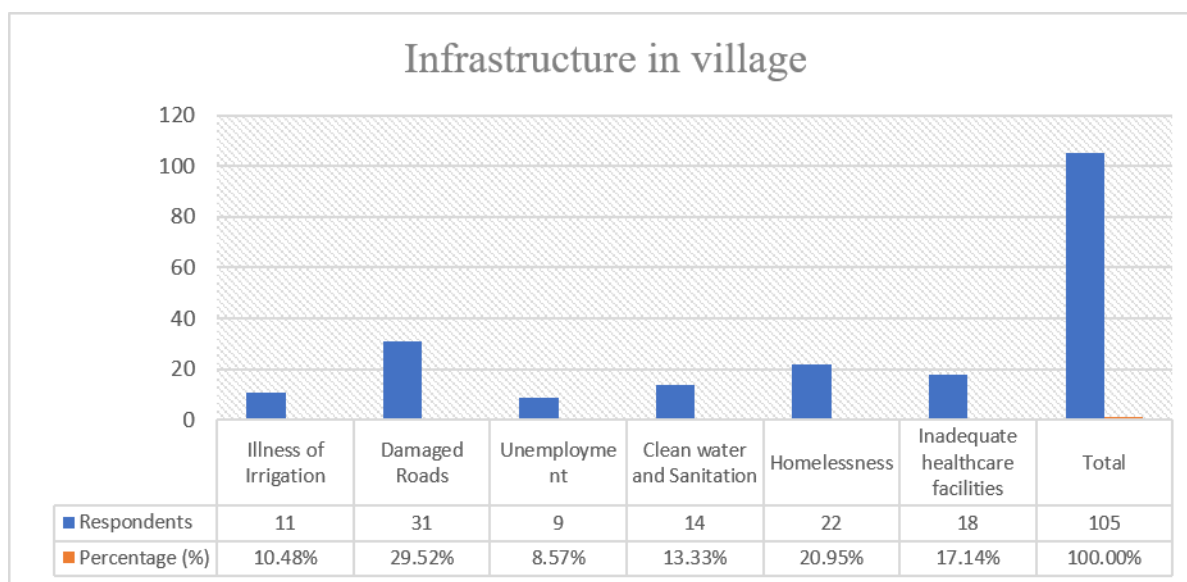
proportion of households having access to comparatively larger agricultural landholdings.

Overall, the findings demonstrate that landlessness is the most significant characteristic of the surveyed households, followed by small landholdings of 1-3 acres. The limited ownership of larger agricultural land indicates a predominance of marginal and landless households in the village. These findings emphasise the need for policies that strengthen livelihood opportunities, improve access to land and productive resources, support rural employment, and support sustainable agricultural development to improve the economic Conditions of rural households.

Table 1.4: Infrastructure in the Villages

Infrastructures	Respondents	Percentage (%)
Lack of Irrigation facilities	11	10.48%
Damaged Roads	31	29.52%
Unemployment	9	8.57%
Scarcity of Clean water and Sanitation	14	13.33%
Homelessness	22	20.95%
Inadequate healthcare facilities	18	17.14%
Total	105	100.00%

Source: Primary data 2025



The table highlights the major infrastructure challenges faced by Respondents in the study area. Among the identified problems, damaged roads emerged as the most significant issue reported by 31 respondents (29.52%). Damaged road infrastructure adversely affects transportation, market accessibility, access to educational institutions, healthcare services, and employment opportunities. It also increases the cost and time required for transporting agricultural produce, thereby reducing farmers' profitability.

The second major concern is homelessness, reported by 22 respondents (20.95%). This finding indicates that a substantial proportion of rural households experience inadequate housing conditions or lack permanent shelter. Poor housing not only affects living standards but also exposes families to health risks and social insecurity.

Inadequate healthcare facilities were identified by 18 respondents (17.14%), suggesting that access to quality medical services remains limited in the study area. Insufficient healthcare infrastructure, shortage of medical professionals and the distance to health centres can negatively influence the health and productivity of Agricultural Labourers and their families.

The scarcity of clean water and sanitation was reported by 14 respondents (13.33%). Limited access to safe drinking water and proper sanitation facilities contributes to waterborne Diseases, poor hygiene, and Lower quality of life. Improving water supply and sanitation infrastructure is therefore Essential for enhancing public health in rural communities.

A total of 11 respondents (10.48%) identified inadequate irrigation facilities as a major problem. Limited irrigation infrastructure restricts agricultural productivity, increases dependence on rainfall and reduces crop yield, particularly during periods of drought or irregular rainfall.

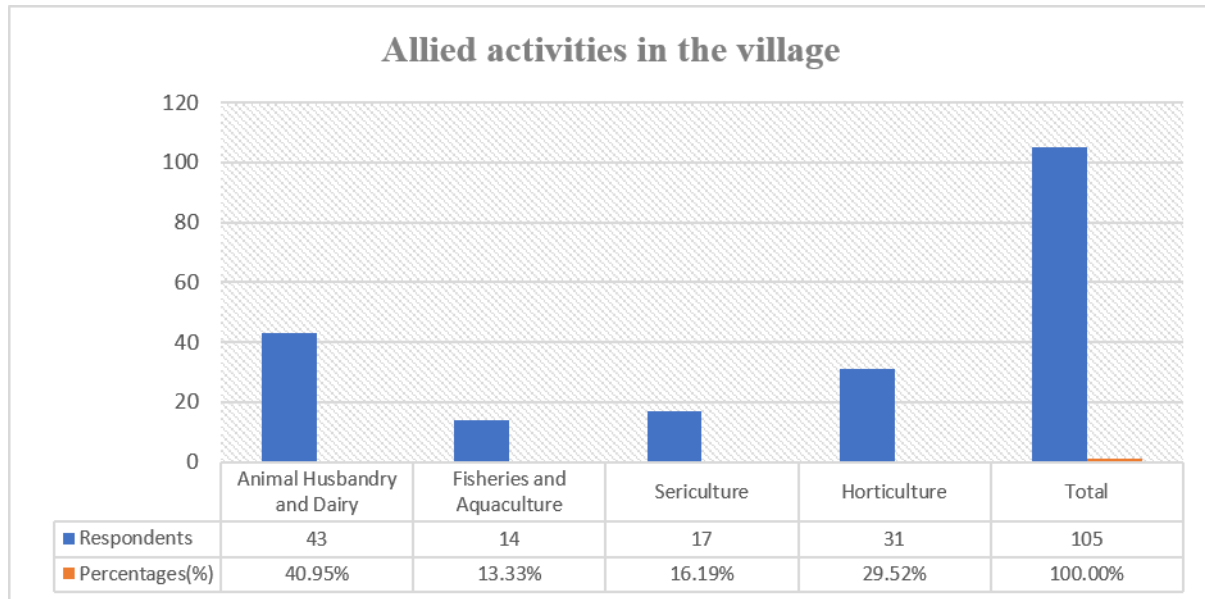
Finally, unemployment was reported by 9 respondents (8.57%), making it the least frequently reported infrastructure-related challenge. Although its percentage is comparatively lower, unemployment remains an important issue that contributes to income instability, regional migration and economic vulnerability among rural households.

Table 1.5: Allied activities in the village

Allied Activities	Respondents	Percentages (%)
Animal Husbandry and Dairy	43	40.95%
Fisheries and Aquaculture	14	13.33%

Sericulture	17	16.19%
Horticulture	31	29.52%
Total	105	100.00%

Source: Primary data 2025



The table indicates that animal husbandry and dairy are the most widely practised Allied agricultural activities among the respondents, with 43 respondents (40.95%) engaged in this sector. Livestock rearing and dairy farming serve as important supplementary sources of income for rural households by providing regular cash flow, employment, and livelihood security. These activities also reduce dependence on seasonal crop cultivation and enhance household livelihood resilience.

The second most common allied activity is horticulture, practised by 31 respondents (29.52%). The cultivation of fruits, vegetables, flowers and other horticultural crops offers higher economic returns compared to traditional field crops and contributes to income diversification. Horticulture also generates employment opportunities throughout the year, particularly in a labour intensive opportunities, Such as planting, harvesting, gardening and marketing.

Sari culture is undertaken by 17 respondents (16.19%), indicating its moderate importance in the study area. The rearing of silkworms and silk production provides an alternative livelihood for rural households, particularly where suitable climatic conditions and institutional support are available. Sari culture has the potential to generate regular employment and additional income, especially for women and small farmers.

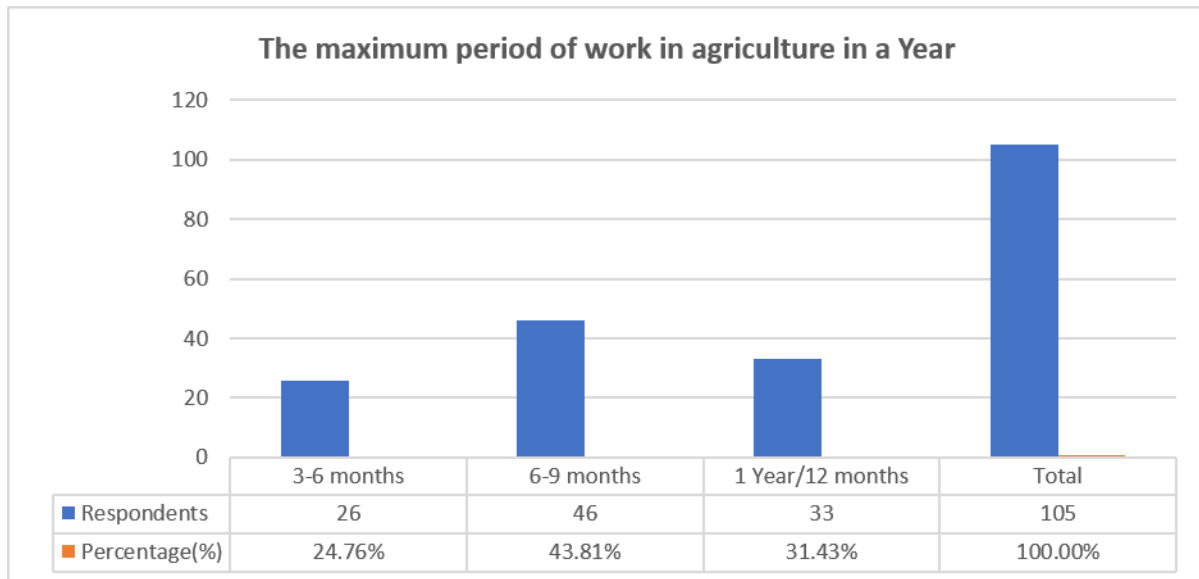
Only 14 respondents (13.33%) reported involvement in Fisheries and aquaculture, making it the least practised allied agricultural activity among the respondents. The relatively low participation may be attributed to limited Availability of water resources, lack of technical knowledge, inadequate infrastructure, and insufficient financial support for fish farming.

Table 1.6: Distribution of Respondents by Maximum Duration of Agricultural Employment in a Year

Working Period	Respondents	Percentage (%)
3-6 months	26	24.76%

6-9 months	46	43.81%
1 Year/12 months	33	31.43%
Total	105	100.00%

Source: Primary data 2025



The table reveals that the largest proportion of respondents (43.81%) receive employment for six to nine months in a year. This indicates that agricultural employment in the study area is predominantly seasonal, with labour demand concentrated during major agricultural operations Such as Preparation Sowing, sowing, weeding, and harvesting. Consequently, the significant number of agricultural labourers experience periods of unemployment during the off-season, resulting in unstable income and livelihood insecurity.

A substantial proportion of respondents, 33 (31.43%), reported that they received employment for the entire year 12 months. This suggests that these labourers are either engaged in diversified Agricultural activities such as horticultural diary forming over allied occupations or are employed in large firms where work is available throughout the year. Continuous employment provides greater income stability and improves the economic well-being of rural households.

Further, 26 respondents (24.76%) reported working for only three to six months annually. This group is the most economically vulnerable, as their employment is restricted to peak agricultural seasons. During the remaining months, they may depend on casual wage labour migration, government employment programmes or other non-farm activities to sustain their livelihoods.

Major Findings and Results

1. High incidence of Landlessness

The study found that 48.57% of the respondents were landless, making landlessness the most prominent Characteristic of this study area. This indicates that nearly half of the agricultural labour households depend primarily on wage labour for their livelihood, reflecting unequal land distribution and economic vulnerability.

2. Predominance of commercial Farming

Among the different farming systems, commercial farming 43.81% was the most common agricultural activity. This suggests that agriculture in the study area is gradually shifting from subsistence farming to market-oriented production, providing greater income

opportunities while increasing dependence on market conditions.

3. Seasonal Nature of Agricultural Employment

The study area revealed that 43.81% of the respondents received employment for only six to nine months, while 24.76% worked for just three to six months annually. This indicates that agricultural employment remains highly seasonal, resulting in income instability and periods of unemployment for a majority of agricultural labourers.

4. Importance of Allied Agricultural Activities

Animal husbandry and dairy farming 40.95% Emerged as the leading allied agricultural activity, followed by horticulture at 29.52%. These allied structures play a crucial role in supplementing household income, reducing dependence on seasonal agricultural work and enhancing livelihood security.

5. Poor rural infrastructure

The study identified damaged roads (29.52%) as the most serious infrastructure problem, followed by homelessness (20.95%) and inadequate healthcare facilities (17.14%). These infrastructure deficiencies adversely affect agricultural productivity, access to markets, healthcare, education and the overall socioeconomic development of rural households.

The study concludes that the livelihoods of agricultural labourers are primarily constrained by landlessness signal employment, and inadequate rural infrastructure. Strengthening allied agricultural active Improving rural infrastructure, and creating year-round employment opportunities are essential for enhancing the socio-economic well-being of agricultural labour households.

Policy Implementations

1. Strengthen rural employment generation

Since most agricultural labourers receive employment for only six to nine months annually, the government should expand employment opportunities through MGNREGA [Now it has become VB-G RAM G.] Rural skill development programmes and promotion of non-farm enterprises. This will help reduce seasonal unemployment and ensure a stable source of income throughout the year.

2. Promote land and livelihood security

As nearly 48.57% of respondents are landless, policies must focus on improving access to cultivable land through land leasing reforms, distribution of surplus

land where feasible and support for livelihood assets. Easy access to institutional credit, agricultural inputs and self-employment schemes should also be provided to landless households.

3. Develop rural infrastructure

Priority should be given to improving rural roads, irrigation facilities, drinking water and sanitation, healthcare centres and housing. Better infrastructure will enhance agricultural productivity, improve market access, reduce transportation costs and raise the overall quality of life of rural communities.

4. Strengthen allied agricultural activities

The government should encourage animal husbandry, dairy farming, horticulture, sericulture, and fisheries through financial assistance, training programmes, veterinary services, storage facilities and market support. Diversifying livelihood opportunities will reduce dependence on seasonal agricultural employment and increase household income.

5. Improve agricultural productivity and sustainability

Agricultural extension Services Promote modern farming techniques, crop diversification, organic farming, efficient irrigation methods and climate-resilient agriculture. Providing timely access to quality fertilisers, credit, crop insurance, and marketing facilities will improve farm productivity and ensure sustainable rural development.

The effective implementation of these measures through coordinated efforts of Govt departments, local self-govt's financial institutions, agricultural universities and community organisations will improve employment security, increase rural incomes, strengthen agricultural productivity and enhance the socio-economic well-being of agricultural labourers in the study area.

CONCLUSION

Analysing all the above factors, infrastructure is the foundation of any economy, and in this regard, the livelihood of the people of 'Nandihalli' shows fewer signs of economic empowerment. While many issues such as irrigation have yielded interim results, issues such as agriculture-related activities, housing, income disparity, sanitation, etc. These types of issues require a fixed schedule and decent sponsorship.

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