



Livelihood Patterns Agricultural Labourers in Three Districts of Andhra Pradesh, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The present study was conducted during 2017-2020 with an aim to find out the livelihood patterns of agricultural labourers in three districts of Andhra Pradesh. An Ex post facto research design used for the study. Three districts from three regions namely, Srikakulam from North Coastal Region, Guntur from South Coastal Region were purposively selected based on highest number of agricultural labourers for the study. From each selected district two mandals were selected by using simple random sampling. From each selected village six villages were selected by using the simple random sampling. Thus, total of 24 villages and from each village ten respondents were selected finally a total of 240 respondents were selected for the study. The statistical tools like Mean and standard Deviation used for the study. Livelihood is the means of people use to survive themselves, to endure, and to prosper. The findings were less than wage earning+ crop production (31.67%), wage earning+ dairy (20.83%), wage earning (15.42%), wage earning+ crop production + dairy (12.50%), wage earning + poultry (4.59%), wage earning + crop production + sheep + goat (3.73%),

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wage earning + dairy + goat (3.33%), wage earning + bee keeping (2.92%), wage earning + crop production+ poultry (2.08%), wage earning+ dairy + petty business (1.26%), wage earning + crop production + piggery and wage earning + dairy+ bee keeping (0.83% each) as livelihood pattern. The strategy was designed with a five-step progressive approach with five core areas to improve the livelihood security of agricultural labourers; the core areas were; education and training, group dynamics, cultural heritage, health and habitat, support and services and communication and networking.

Keywords: Livelihood patterns; three regions; progressive approach; strategy.

1. INTRODUCTION

Agriculture is the primary source of livelihood for about 58.00 per cent of India's population. The Gross Value Added by agriculture, fishing and forestry was estimated at Rs. 19.48 lakh crores. Growth in terms of Gross Value Added Product in agriculture and allied sectors stood at 4 per cent in 2020, and was estimated to be 3.00 per cent in the second quarter of Five Year 2021. With 1.3 billion people employed in the sector, agriculture is the second greatest source of employment worldwide after services and it accounts 28.00 per cent of global employment. While more than two-third of the population in poor countries work in agriculture, less than 5.00 per cent of the population does in rich countries. It is predominantly the huge productivity increase that makes this reduction in labor possible. Agriculture is the most important sector of female employment in many countries, especially in Africa and Asia [1-4]. At the global level, women do share of 38.00 per cent, while men about 33.00 per cent. Female employment in agriculture in India was 56.50 per cent in 2019. Value over the past 28 years was 76.28 per cent in 1991, while its lowest value was 56.50 per cent in 2019, Similarly male employment in India was 39.53 per cent in 2019. It was highest i.e., 58.16 per cent in 1991, while, it was lowest i.e., 39.53 per cent in 2019.

Employment in agriculture in India was 43.21 per cent in 2019 and was 63.05 per cent in 1991 which was highest in last 28 years. From the year ending June, 2005 to the year ending June, 2018, the rural male population employed in agriculture seen a decline of 12 per cent (from 67.00 per cent to 55.00 per cent); while the rural male population witnessed a spike in the manufacturing sector by 8 per cent (from 15 per cent to 23.00 per cent). In the tertiary sector as well, rural male employment has increased by 4 per cent from 18.00 per cent to 22.00 per cent [5].

Presently, the agriculture sector employs 80.00 per cent of all economically active women in

India, which includes 48.00 per cent of the self-employed farmers and 33.00 per cent of the agriculture labour force. Over the years, rural households' dependency on agriculture has declined to 50.00 per cent as per the latest round of the Periodic Labour Force Survey for 2018-19. In addition, the agriculture sector's contribution to National Gross Domestic Product has declined from 34 per cent in 1983-84 to 16 per cent in 2018-19. Similarly, agriculture sector's contribution to Gross State Domestic Product has broadly followed the same pattern over the same period [6].

As per 2011 census, highest number of agricultural labourers were found in Srikakulam from North Coastal Region, 4,42,295 male and female agricultural labourers, Guntur district from South Coastal Region which comprises 1,035,569 male and female agricultural labourers and Kurnool district from Rayalaseema Region consists 8,69,074 male and female agricultural labourers so, these three districts selected from three regions of the state [7].

Livelihood is always more than just a matter of making shelter, transacting money and preparing food to put on the exchange in the market place. It is equally a matter of the ownership and exchange of information, the management of social relationships, the affirmation of personal meaning and group identity and the inter relationship of each of these tasks to the other. All these productive tasks together constitute a livelihood.

India is a country which majority of people depend on agriculture directly and indirectly as a source of income. Agriculture sector is primarily influenced by farmers, agricultural labourers, and traders. In India, 50.00 per cent of work force employed as agriculture labourers are huge in number. Agricultural labourers were deciding factor of cost of production and adopting, practicing of technologies and playing crucial role in yield improvement. Agriculture labourer's livelihood plays crucial role in socio economic

development of agriculture. The type of livelihood-practice influences the ecosystem. So, analysis of the agricultural labourers livelihood is critical important phenomena. Many such studies related to the agriculture labourers were conducted, but there are limited studies related to livelihood analysis of agriculture labourers. Hence the present piece of investigation has been undertaken as one among such studies, focusing on the state of Andhra Pradesh with the given objective.

In this context, an understanding of livelihood patterns of agricultural labourers the strategy was designed with a five-step progressive approach with five core areas to improve the livelihood security.

1.1 The Study was undertaken with Following Objectives

- A. To study the livelihood pattern of agricultural labourers.
- B. To develop a strategy to improve the livelihood security of agricultural labourers.

2. MATERIALS AND METHODS

The study was conducted by using Ex-post facto research design. The state, Andhra Pradesh was selected purposively as the researcher belonged to this state and well acquainted with the regional language i.e., Telugu which would help to build a good rapport and also facilitates for in depth study through personal observation and interview. One district had been selected from each region of Andhra Pradesh based on highest number of agricultural labourers i.e., Srikakulam from North Coastal, Guntur from South Coastal and Kurnool from Rayalaseema region. Two

mandals had been selected from each district by using simple random sampling. From each selected district two Mandals were randomly selected. From the selected villages ten agricultural labourers were selected. The primary data were collected using a pre-tested structured interview schedule by conducting personal interview. Data was tabulated, classified and analyzed using frequency and percentage.

2.1 Livelihood Patterns of Agricultural Labourers

Livelihood is defined as the ways and means of living to meet the basic minimum necessities of the individual agricultural labourer as well as for the whole family. In the research study twelve livelihood patterns were standardized based on various livelihood activities undertaken by agricultural labourers to meet their livelihood security. In turn, respondents were grouped in twelve livelihood patterns based on their practicing livelihood activities.

A. Wage Earning refers to doing labour activity for wages in agriculture, non-agriculture and rural development schemes like Mahatma Gandhi National Rural Employment Guarantee Act .

B. Crop Production means the cultivation of crops practiced by the respondents on their farm.

C. Dairy relating to production of milk, and supplementary production additional source by income to many of marginal farmers & landless labourers. The rearing of milch animal for milk production also includes income from sale of calves/ farm yard manure.

D. Sheep and Goat rearing refers to rearing of sheep & goat for the purpose of income generation to meet their livelihood system.

Table 1. Livelihood patterns that are undertaken by agricultural labourers in the research area

S. no.	Livelihood patterns	Score
1.	Wage Earning	1
2.	Wage Earning+ Crop Production	2
3.	Wage Earning+ Dairy	3
4.	Wage Earning + Bee Keeping	4
5.	Wage Earning + Poultry	5
6.	Wage earning+ Crop Production +Dairy	6
7.	Wage Earning + Crop Production+ Poultry	7
8.	Wage Earning + Crop Production + Sheep+Goat	8
9.	Wage Earning + Crop Production + Piggery	9
10.	Wage Earning + Dairy + Goat	10
11.	Wage Earning + Dairy+ Bee Keeping	11
12.	Wage Earning+ Dairy + Petty Business	12

E. Poultry refers to backyard poultry enterprise which is playing pivotal role in alternate livelihood activity of marginal farmers and landless labourers in rainfed ecosystem.

F. Petty Business, as used in this clause, means a concern, including its affiliates, that it is independently owned & operated, not dominant in the field of operation, it includes the activities like Egg shop, Pan shop, Kirana Merchant etc.

G. Bee Keeping, the occupation of owning and breeding bees for their honey.

H. Piggery: a farm where pigs are raised or kept

I. Petty Business: privately owned corporation, partnership, or sole proprietorship that has fewer employees and less annual revenue than a corporation or regular-sized business.

3. RESULTS AND DISCUSSION

3.1 Livelihood Patterns of Agricultural Labourers

Table 2. Distribution of agricultural labourers according to their livelihood patterns

S. No.	Livelihood Patterns	Srikakulam		Guntur		Kurnool		Overall Andhra Pradesh	
		(n=80)		(n=80)		(n=80)		(n=240)	
		F	%	F	%	F	%	F	%
1.	Wage Earning	11	13.75	13	16.25	13	16.25	37	15.42
2.	Wage Earning+ Crop Production	28	35.00	25	31.25	23	28.75	76	31.67
3.	Wage Earning+ Dairy	17	21.25	19	23.75	14	17.5	50	20.83
4.	Wage Earning + Bee Keeping	2	2.50	2	2.50	3	3.75	7	2.93
5.	Wage Earning + Poultry	2	2.50	5	6.25	4	5.00	11	4.59
6.	Wage earning+ Crop Production +Dairy	12	15.00	8	10.00	10	12.50	30	12.50
7.	Wage Earning + Crop Production+ Poultry	1	1.25	1	1.25	3	3.75	5	2.08
8.	Wage Earning + Crop Production + Sheep +Goat	2	2.50	3	3.75	4	5.00	9	3.73
9.	Wage Earning + Crop Production + Piggery	0	0.00	1	1.25	1	1.25	2	0.83
10.	Wage Earning + Dairy + Goat	4	5.00	2	2.5	2	2.50	8	3.33
11.	Wage Earning + Dairy+ Bee Keeping	0	0.00	1	1.25	1	1.25	2	0.83
12.	Wage Earning+ Dairy + Petty Business	1	1.25	0	0.00	2	2.50	3	1.26
Total:		80	100.00	80	100.00	80	100.00	240.00	100.00

*F=Frequency, %=Per Cent

3.2 Livelihood Patterns in Srikakulam (North Coastal Region)

Findings from the Table 1 showed that more than one third (35.00%) of agricultural labourers in Srikakulam District engaged in wage earning+ crop production followed by those engaged in wage earning + dairy (21.25%), wage earning + crop production + dairy (15.00%), wage earning (13.75%), wage earning + dairy + dairy + goat (5.00%), wage earning + crop production +

poultry, wage earning + bee keeping, wage earning + poultry and wage earning + crop production + sheep + goat (2.50% each) and wage earning + crop production+ poultry and wage earning+ dairy + petty business (1.25% each) as livelihood patterns.

None of them had wage earning + crop production + piggery and wage earning + dairy+ bee keeping (0.00%).

3.3 Livelihood Patterns in Guntur (South Coastal Region)

It could be observed from the Table 1 that less than one-third (31.25%) of agricultural labourers in Guntur District had wage earning+ crop production followed by wage earning+ dairy (23.75%), wage earning (16.25%), wage earning+ crop production + dairy (10.00%), wage earning + poultry (6.25%), wage earning + crop production + sheep + goat (3.75%), wage earning + dairy + goat and wage earning + dairy + bee keeping (2.50% each), wage earning + crop production+ poultry, wage earning + crop production + piggery and wage earning + dairy+ bee keeping (1.25% each) as livelihood pattern.

None of them had livelihood pattern as wage earning+ dairy + petty business

3.4 Livelihood Patterns in Kurnool (Rayalaseema Region)

A glance at the Table 1 concluded that more than three fourth (28.75%) of the Kurnool District agricultural labourers engaged in wage earning + crop production, wage earning+ dairy (17.50%),

wage earning (16.25%), wage earning+ crop production +dairy (12.50%), wage earning + poultry and wage earning + crop production + sheep + goat (5.00% each), wage earning + bee keeping and wage earning + crop production+ poultry (3.75% each), wage earning + dairy + goat and wage earning+ dairy + petty business (2.50% each), wage earning + crop production + piggery and wage earning + dairy+ bee keeping (1.25% each) as livelihood patterns.

3.5 Overall Livelihood Patterns Analysis

An overview of the Table 1 indicated that wage earning+ crop production (31.67%), wage earning+ dairy (20.83%), wage earning (15.42%), wage earning+ crop production + dairy (12.50%), wage earning + poultry (4.59%), wage earning + crop production + sheep + goat (3.73%), wage earning + dairy + goat (3.33%), wage earning + bee keeping (2.92%), wage earning + crop production+ poultry (2.08%), wage earning+ dairy + petty business (1.26%), wage earning + crop production + piggery and wage earning + dairy+ bee keeping (0.83% each) as livelihood pattern.

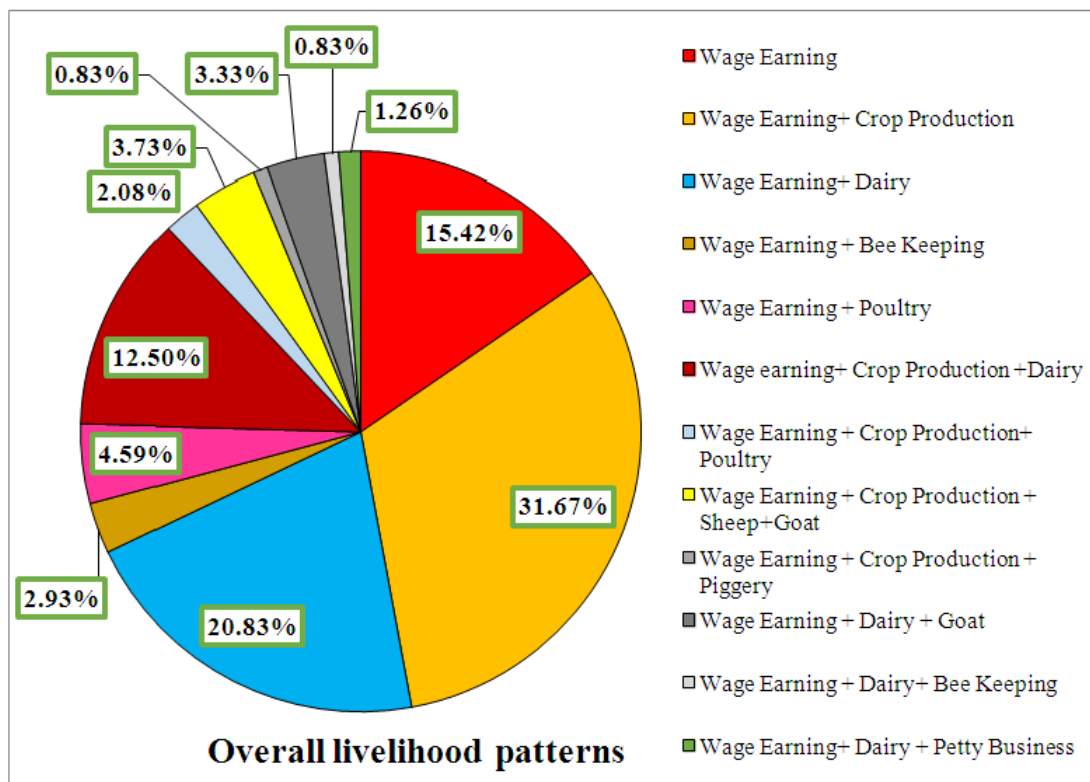


Fig. 1. Distribution of livelihood patterns of agricultural labourers in Andhra Pradesh

Majority of agricultural labourers engaged in wage earning because agriculture occupation is risk prone and that fully dependent on monsoon followed by wage earning and they get additional income from crop production and the biproducts of crops used for dairy that creates additional income to the family.

3.6 Strategy to Improve the Livelihood Security of Agricultural Labourers

Keeping in view of the analysis of the profile characteristics of the agricultural labourers, their livelihood security, existing livelihood patterns and systems, constraints and suggestions as faced by the agricultural labourers, an effective strategy was developed from the present study to enhance the livelihood security of Agricultural labourers.

The strategy was designed with a five-step progressive approach considering five core areas. Each core area is unique in its dimension which focuses on growth and development of agricultural labourers that leads to strengthen their livelihood security.

Each core area starts with preliminary and basic requirements of agricultural labourers as the first

step advance towards continuous progressive development of agricultural labourers towards strengthening their livelihood security. Involvement of different stake holders and their integration was also depicted in the strategy.

I. Education and Training

1. Creating awareness about importance of skill acquisition and up gradation
2. Awareness on ill effects of bad habits and their influence on family expenditure pattern
3. Capacity building on different livelihood patterns and alternate enterprises
4. Vocational training on agro based small scale industries
5. Establishment of capacity building and skill training institutions in rural areas support livelihoods of agricultural labourers.

II. Group dynamics and Cultural heritage

1. Strengthening of SHGs for empowerment
2. Encouraging local leadership among the agricultural labourers
3. Establishing agricultural labourer societies
4. Encouragement of participation in social institutions and organizations

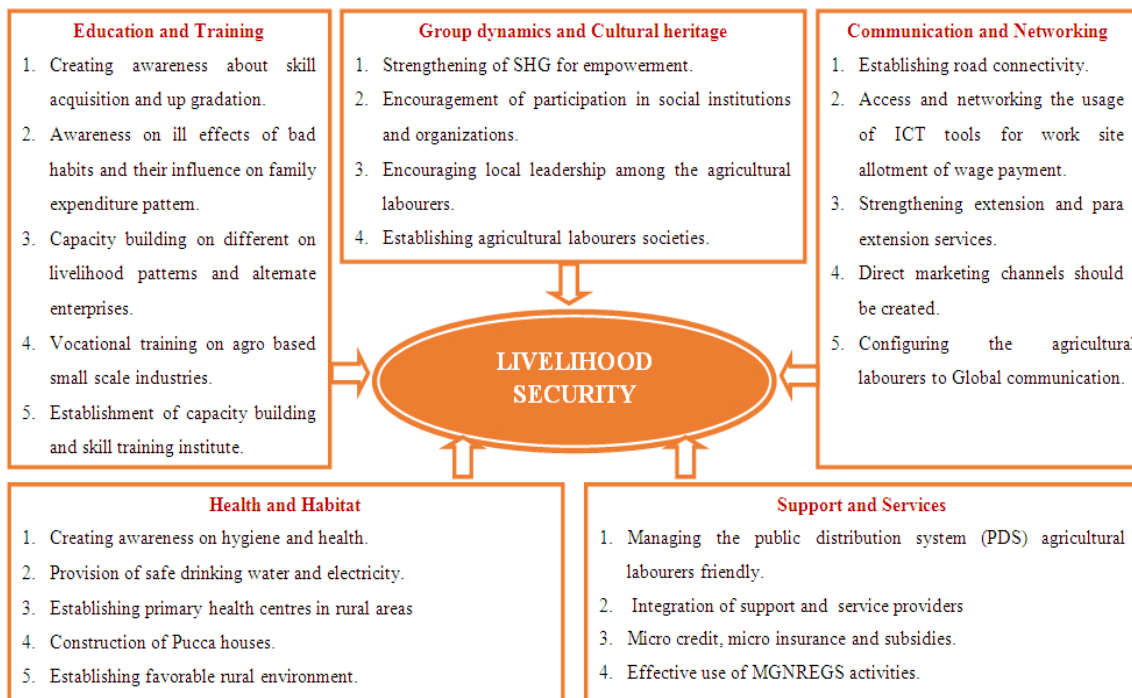


Fig. 2. Livelihood Security

III. Health and Habitat

1. Creating awareness on hygiene and health
2. Provision of safe drinking water and electricity
3. Establishing primary health centres in rural areas
4. Construction of Pucca houses by the government
5. Establishing favourable rural environment for improving the standard of living

IV. Support and Services

1. Making the Public Distribution System (PDS) as agricultural labourers friendly
2. Proving micro credit, micro insurance and subsidies
3. Effective use of MGNREGS activities
4. Integration of support and service providers

V. Communication and Networking

1. Establishing road connectivity in rural areas
2. Access and networking through ICT tools for worksite allotment wage distribution
3. Strengthening extension and para extension services
4. Direct marketing channels should be created
5. Configuring the agricultural

4. CONCLUSION

It is concluded that the majority of the Agricultural labourers had wage earning+ crop production (31.67%) had a livelihood option for their income because wage earning in combine with crop production, they get additional income from the

agricultural and byproducts of agriculture used as Dairy.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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