

A Study on Livelihood Status of Dryland Farmers In Mecheri Block of Sheep Rearing Salem District

P. Prakasam¹, Dr.A. Saravanadurai²

¹PhD, Research Scholar, Department of Economic, Periyar University, Salem-636011

²Professor, Department of Economic, Periyar University, Salem-636011

Abstract—Animal husbandry is an integral component of agriculture, supporting livelihoods of more than two-thirds of the rural population. It plays a significant role in the rural economy by providing gainful employment to a large number of small, marginal farmers and landless agricultural labourers and raising their economic status. Livestock form an important resource for the landless agricultural labourers as it is the only major asset for them. Aim: To analysis livestock the role of livestock rearing and income generation through the Sheep rearing of Mecheri Block. Methodology: Mecheri Block is located the west parts of Salem district tamandu. Mecheri Block 17 Village Panchayat is famous for sheep rearing with majority of the farmers engaged in Sheep Rearing Dry farmer's cultivation. Sample size purposively selected for the present study. From the total 786 Sheep rearing dry land farmers growers only 5 per cent of the farmers i.e., 393 respondents were randomly selected. Result: Regarding the cost and returns from livestock rearing by the sample farmers, the cost and returns from sheep and goat highly benefitted by small farmers than marginal farmers in the study area. Net returns were found to be higher for small farmers than marginal farmers. To increase the income of the sheep rearing dryland farmers, the various Government department should provide proper guidance and trained then to maximize profit by using the input factors with minimum cost.

Index Terms—Livestock, income, cost and returns in sheep rearing.

I. INTRODUCTION

Animal husbandry is an integral component of agriculture, supporting livelihoods of more than two-thirds of the rural population. It plays a significant role in the rural economy by providing gainful employment to a large number of small, marginal farmers and landless agricultural labourers and raising their economic status. Livestock form an important

resource for the landless agricultural labourers as it is the only major asset for them.

Livestock sector plays a critical role in the welfare of India's rural population. It contributes nine to Gross Domestic Products (GDP) and employs eight per cent of the labour force. Sheep plays an important role in Indian economy and source of livelihood and employment to millions of rural households. This sector witnessed significant increase in output of its products like meat, milk and skin. Sheep has a tremendous potential to adapt in harsh agro-climatic conditions and can be performed on scarce input, thus suitable to large number of rural households of entire country. High income elasticity of demand for sheep products is incremental due to increase in per capita income, diet consciousness and increasing urbanization. Rising demand for sheep meat coupled with low capital investment and recurring cost, quick return and less risk make sheep farming a profitable and sustainable enterprise to different categories of rural households.

II. LIVESTOCK REARING AS A SOURCE OF LIVELIHOOD OF RURAL FARMERS

Livestock are important to the livelihood of a huge percentage of rural people and livestock linked interventions are establish to be a successful plan for income generation and poverty mitigation all over the world. About 950 million of the world's 1300 million extremely poor people live in rural areas and most of them rely on agriculture as a livelihood option and livestock keeping in crucial for the rural poor. Around 600 million poor smallholders keep nearly one billion heads of livestock in 2017-2018. Livestock contribute 50 per cent of the global value of agricultural output

and hold the livelihoods and food security of nearly a 10 lakhs people.

III. CONTRIBUTION OF LIVESTOCK TO ENHANCE INCOME AND EMPLOYMENT OF RURAL FARMERS

A significant role of the livestock in the economy of farmer's life was advocated. The farmers in India keep mixed farming system i.e. a grouping or animals rearing and farming where the output of one enterprise endeavor and a value added product to another enterprise thereby realize the resource adequacy. The livestock serve up the farmers in diver's ways. It provides food and non-food items to the rural people.

IV. LIVESTOCK PROVIDES FOOD

The livestock provides food items such as Milk, Meat and Eggs for human consumption. India's is number one milk producer in the world. It is producing about 176.35 million tonnes of milk in a year (2017-2018). Similarly it is producing about 27.95 billion of eggs, 322 million tonnes of meat in a year. The value of output of livestock sector at current prices was Rs.9, 17,910 crores in 2017-2018.

V. SKINS AND FIBER

The livestock also contributes to the manufacture of wool, hair, hides and pelts. Leather is the most main product which has a very high export potential. India is producing about 41.5 million Kilograms of wool per annum.

VI. DRAFT POWER

Bullocks are the back bone of Indian agriculture. Despite lot of advancements in the use of mechanical power in Indian agriculture operations, the Indian farmers particularly in rural areas still depend upon bullocks for different agricultural operations. The bullock are saving a lot on fuel which is a necessary input for using mechanical power like tractors, combine harvesters etc. pack animals like camels, hoarse, donkeys, ponies, mules etc are being widely used to transport goods in special parts of the country in adding to bullock. In situations like hilly terrains mules and ponies serve as the only substitute to

transport goods. Similarly, the army has to depend upon these animals to transport various items in high areas of high elevation.

VII. MANURE AND OTHER ANIMAL WASTE MATERIALS

Manure and other animal's wastes serve as very good farm yard manure or dung and the value of it is worth several crores of rupees. In adding up it is also used as fuel like bio gas, dung cakes, and for construction as poor man's cement (dung).

VIII. STORAGE

Livestock are considered as "moving banks" because of their potentiality to dispose off during emergencies. They serve as assets and in case of landless agriculture laboures a lot of time it is the only assets resource they progression. Livestock serve as assurance for availing loans from the local sources such as money lenders in the villages.

IX. WEED CONTROL

Livestock are also used as biological power of brush, plant and weeds.

X. SOCIAL AND CULTURAL

Livestock offer protection to the owners and also add to their self stem especially when they own pride animals such as pedigreed bulls and high yielding cows/ buffalos.

Source of Income

Livestock is source of source of supplementary income for a lot of rural families in India particularly the resources poor who maintain few heads of animals. Cows and buffaloes if in milk will supply standard income to the livestock farmers through sale of milk, animals like sheep, goat and poultry serve as sources of income during emergencies to meet exigencies like marriages, illness of person, children education and house maintenance.

XI. EMPLOYMENT OPPORTUNITIES

A huge section of population in India being illiterate and unskilled depends upon agriculture for their livelihoods. But it was noticed that agricultural activity was not practiced for 365 days, rather they were engaged in farming only for 180 days. Increase of the landless agriculture farmers they had really more on the livestock rearing.

XII. FOOD

The livestock products such as milk, meat and eggs are an important source of animal's protein to the members of the livestock owners.

XIII. SOCIAL SECURITY

The animal offers social to the owners in terms of their best position in the society. The family's particulars the landless which own animals are better placed than those who do not. Gifting of animals during marriage is a very common occurrence in different parts of the country. Rearing of animals is a part of the Indian culture. Animals are used for various socio spiritual functions. Cows for house warming ceremonies ram's bucks and chicken for sacrifice during festive season's bulls and cows are worshipped during various religious functions.

XIV. DRAFT

In India the small and marginal farmers mainly depended on bullock for draft power and these bullocks were utilized for various work like ploughing, for other support of goods and sometimes for personal use.

XV. DUNG

In rural villages cow dung and goat & sheep litter as fertilizer, plastering material and for cooking. Tamil Nadu is one of the important sheep producing state; it contributes around seven per cent to country's sheep population. Sheep rearing is the backbone of the economy of small and marginal farmers. There is a huge potential of common property resource in general and pastures and grazing land in particular. Large number of local and improved sheep breeds is also

available majority of small, marginal and landless farmers depends on sheep for their livelihood on one hand. There is a good demand for meat and meat products, wool and milk. However, no comprehensive studies on production and marketing aspect of sheep have been conducted in Tamil Nadu. Keeping this in mind the study was conducted on production performance of sheep farming in Tamil Nadu to suggest suitable policy measures for encouraging sheep keeping activities in the state.

In Tamil Nadu, Sheep reared by resource poor farmers, mostly in traditional systems as sheep rearing requires low input and rearing them is easy. There exists a growing demand for mutton and chevon. The supply demand scenario suggests that the demand for livestock products is income elastic 39 and is rising continuously. Over the next two decades, demand for livestock products is likely to grow faster. The non availability of good quality livestock in the open market and its spiraling prices are problems faced by the entrepreneur's farmers in this sector.

The study is undertaking measures for improving the production and productivity of the Sheep population in the State. Improving the genetic pool of meat animals through livestock farms, addressing the Nutritional deficiencies by providing mineral mixtures to farmers, training the farmers on best practices etc. are some important initiatives undertaken by the department for Sheep development during the year 2017-18, 763 lambs and 877 kids were born in the department livestock farms and 761 lambs and 993 kids were sold to the livestock farmers for breeding purposes.

XVI. REVIEW OF LITERATURE

Sati and Singh (2010) studied the importance role of livestock is an integral part of the Himalayan economy and plays an important role in the mixed cropping system. In addition, greater diversity in livestock systems is a key feature of the state of Uttarakhand. As fodder becomes an elaborate grassland form, the state acquires the highest potential for dairy production, locally known as burial or kayaks and forage trees. Apart from dairy production, cattle are widely used for the transportation of fertilizer, tillage and commodities. Extensive grassland availability and potential climatic conditions reveal a path to sustainable livestock farming in Uttarakhand, especially in the temperate zone of 1400 m to 2200 m,

where milk production is high. The valley areas are generally known for breeding drought animals with low milk production capacity. This article discusses the possibilities of sustainable livestock farming and identifies temporary changes in the number of livestock, organization and government policies and plans for raising livestock. This has implications for livestock planners and policy makers on these experiences and raises many research issues related to the development of livestock sector.

Kathiravan and Selvam (2011) analyzed the constraints to Livestock Production this study was carried out Tamil Nadu. A total of 350 farmers were selected to represent the seven agro-climatic zones adopting a three-stage random sampling technique. Garrett's grading technique was adopted Analyze the problems faced by farmers in the study area in raising livestock Buffaloes, sheep and goats. The obstacles faced in raising cross-breeding cows the emphasis is on high fodder costs, followed by inadequate milk and large investment. Low productivity was a major hindrance in desiccated crops, followed by excessive feed costs, inadequate the price of milk. Lack of forage and pasture facilities was a major obstacle to buffalo farming Followed by labor shortages and infertility issues. The first hurdle to face the vast majority of sheep and goat production is fodder free and Grazing facilities.

Devaki et al (2015) made a study on "Socio-Economic Profile of Livestock Farm Women of Thiruvallur District, Tamil Nadu" the present study was socio-economic conditions of on the cattle ranch, a woman a Prerequisite for successful design and implementation of governments Development plans. The purpose of this study is to provide such information Survey and interpretation of absolute and relative socioeconomic conditions. Income levels of education, employment, livestock and other farm and unarmed activities Livestock Farmers in Thiruvallur District, Tamil Nadu has been increasing rapidly in recent times. This study is therefore designed to assess socioeconomics Profile of Livestock Farm Women in Tiruvallur District; Tamil Nadu Results The study found that most of the farm women were young, illiterate and caregivers Nuclear family with fewer than five members. Most of them are landless or borrowing from marginal landowner groups and private sources. Most of the farm Annual income of women, keeping cattle, mass media exposure, Economic motivation and

cosmopolite-local interaction. Their level of social participation was Medium of contact with high-level extension agents.

Sakthivel (2017) attempted to study the livestock contribution of livestock in the livelihoods of marginal and landless livestock farmers. Data were collected from 100 marginal farmers and 100 landless livestock farmers through a well-structured interview schedule following the multistage model. The study revealed that livestock farming, farm workers, non-farm workers, agriculture and migration to urban areas are the main livelihood activities of marginal farmers and landless livestock farmers. Livestock income is a major contributor to households accounting for more than 50% of the total contribution to the household's total income calculation and more than 60% for families. And over a period of time, the contribution to total income from agriculture and farm workers has declined. The contribution of livestock and non-farm workers has increased. While cattle provided livelihood protection, families were in a phase of change as they were unable to cope with the current situation. Although livestock have served as a buffer for their status, the scarcity of resources combined with drought and unemployment has deprived them of economic status. Thus, urgent interventions are needed to protect these homes from the trap of poverty. Senthilkumar et al (2018) the present study was conducted in rural Tamil Nadu to quantify the impact of livestock production on poverty using a randomly selected 540 sample respondents. Data were collected through individual interviews using predictive interview schedules from sample respondents subjected to different occupations in six districts covering four agro climatic zones of Tamil Nadu. adapted to examine the impact of poverty on livestock production. The results show that the value of property, education, employment in the human days, and livestock industry, rather than variables, has a significant positive impact on personal income. Family size, family dependency rate and literacy, which had a negative impact. Individual income with and without specific occupation was estimated using the relevant coefficients.

Deepika et al (2019) made a study on the livestock sector plays an important role in improving the economic status of the farmers. 70% of the livestock population is controlled by landless, small and marginal farmers. They are the source of income for

the farmers. The concept of doubling the income of the farmer 2022 Hon. Prime Minister Mr. Narendra Modi Ji delivered on February 29, 2016 Bareilly Uttar Pradesh. Department of Livestock, Dairy and Fisheries made various proposals on increasing milk production; Progress The quality of the domestic breed of animals will increase the availability of forage and forage. Various The programs are implemented at the federal and state level; Dairy Entrepreneurship Development Program, Livestock Health and Disease Control Program, Fodder and Fodder The development project, Rashtriya Gokul Mission, etc. will be able to earn the income of the framers Doubled. Policy support services such as Kisan Credit Card, Women Self Help Groups, Farmer Consortium and NGOs provide financial assistance to farmers. Livestock The department plays a key role in providing information to farmers through organizing a camp in the village on vaccination of Economic Diseases such as FMT, PPR, HS Guidelines for farmers on knowledge on animal husbandry practices

and value addition and the benefit of diversification in livestock farming.

XVII. METHODOLOGY

For this, both primary and secondary data were used. Mecheri block in Salem district has been chosen for primary data collection. More dry land and / majority of 90 per cent of the farmers in this block were engaged in dry land cultivation and sheep rearing. Total of 786 sheep rearing dry land farmers (Marginal farmer & Small farmer) were found in this block, sample of (5 per cent out of 786) 393 were randomly selected for the purpose of primary data collection. Mecheri block consists of 17 village panchayat and the proportionate sampling technique was used to select the sample size in each village panchayat in Mecheri block in Salem district. The data collection pertained to the agricultural year 2020-21.

XVIII. RESULT AND DISCUSSION

COST AND RETURNS OF FARMERS INVOLVED IN SHEEP GOAT REARING

(Per Year/Per Animal)

Sl. No	Cost Components	Marginal Farmer		Small Farmer	
		Cost (inRs.)	Percentage	Cost (inRs.)	Percentage
I	Cost A				
1	Labour	2112.68	49.53	2314.75	50.75
2	Feed	1776.12	41.64	1833.26	40.19
3	Medicine	198.13	4.65	202.78	4.45
4	Miscellaneous	178.63	4.18	210.58	4.61
	Total cost	4265.56	100.00	4561.37	100.00
II	Gross Returns				
5	Animal Sale Revenue	6293.52	90.00	6843.32	88.60
6	Dung Revenue	698.79	10.00	880.95	11.40
	Total Returns	6992.31	100.00	7724.27	100.00
III	Net Returns				
7	Net Returns	2726.75		3162.90	

Source: Survey Data

It is seen from that total returns realized by the marginal farmers from sheep and goat rearing was Rs.6992.31 per annum / per animal with a net return of Rs.2726.75. The total cost incurred was Rs.4265.56. The major constituent of total cost was human labour

accounting for 49.53 percent followed by feed cost (41.64 percent). The cost of medicine and miscellaneous cost constituted 4.65 percent and 4.18 percent respectively in total cost.

Total returns realized by the small farmers were Rs.7724.27 per annum / per animal with a net income of Rs.3162.90. The total cost of rearing sheep and goat was Rs.4561.37 per annum / per animal. Among input costs, expenditure on labour formed the major input component and it was 50.75 percent of the total cost. The feed cost assumed the second largest share (40.19 percent) of total cost. Less than 5 percent was incurred for medicine and miscellaneous costs.

Thus, it may be inferred from the analysis that the small farmers benefitted more in terms both gross returns and net income compared to marginal farmers. Livestock is one of the important segments in Asian agriculture. It has been practiced as an auxiliary activity in the process of production of different foods since antiquity. The farm animals especially dry land farm animals such as drought animals, milch animals, buffalo, sheep and goat and the like were always reared as subsistence animals of dry land farmers. The animal dung was always valuable for their usage as domestic fuels as well as manure for dry land crops. The livestock sector recently emerged as an important form of diversification of agriculture. It is an important source of food security as it provides meat, milk and the like. Keeping this in mind, the present study attempts to analyse livelihood status of sheep rearing dry land farmers in Mecheri Block, Salem district of Tamilnadu.

Regarding the cost and returns from livestock rearing by the sample farmers, the cost and returns from sheep and goat and poultry were highly benefitted by small farmers than marginal farmers in the study area. Net returns were found to be higher for small farmers than marginal farmers.

The analysis of discriminant function revealed that the family expenditure and sheep and goat rearing discriminated marginal and small farmers in terms of their problems of both marginal and small farmers.

XIX. CONCLUSION

As livestock rearing dryland farmers belonging to lower socio-economic strata and having smaller land and livestock holding, had lower productivity from dryland crops and knowledge and skill levels, the animals husbandry transfer of technology programmes should be planned accordingly and implemented persuasively through personal contacts with experienced dryland farmers. There is a need to

provide technical knowledge and guidance to increase their effective involvement and participation in these areas for an overall improvement. Proper attention needs to be given by the extension functionaries that the entire sheep rearing family is involved in the transfer of technology programmes related to these segments. It is mainly suggested that the sheep rearing dryland farmers should be equipped with knowledge and practical skills in livestock rearing and cultivating dryland crops where they are fully involved.

In order to improve the socio – economic status sheep rearing farmers, Government should support them through bank credit and skill oriented practical training.

To increase the income of the sheep rearing dryland farmers, the various Government department should provide proper guidance and trained then to maximize profit by using the input factors with minimum cost.

REFERENCE

- [1] Sati.V.P and Singh.R.B (2010) “Prospects of Sustainable Livestock Farming in the Uttarakhand Himalaya, India”, *Journal of Livestock Science*, 1(1): 9-16.
- [2] Kathiravan.G and Selvam.S (2011) “Analysis of Constraints to Livestock Production in Tamil Nadu”, *Indian Journal of Animal Research*, 45(1): 56-59.
- [3] Amanda Rao K, Sarjan Rao K, Jagadeeswara Rao S ,Ravi A. Anitha A. (2013) “Analysis of Sheep Production Systems: North Coastal Zone of Andhra Pradesh”, *International Journal of Agricultural Science and Veterinary Medicine*, Vol. 1, No.3, 2016, Pp. 131-144.
- [4] Devaki.K, Senthil Kumar.K and Subramanian.R (2015) “Socio-Economic Profile of Livestock Farm Women of Thiruvallur District, Tamil Nadu”, *International Journal of Science, Environment and Technology*, 4(5): 1322.1329.
- [5] Sakthivel.K.M (2017) “Role and Contribution of Livestock in the Livelihood of Marginal and Landless Livestock Farmers in Rural Tamil Nadu, India”, *Indian Research Journal of Extension and Education*, 1(Special Issue): 20-25.
- [6] Senthilkumar.G, Selvakumar.K.N, Prabu.M, Sermasaravana Pandian.A, Valli.C and Thilakar.P (2018) “Impact of Livestock Production on

- Poverty-Evidence from Rural Tamil Nadu”, Indian Journal of Animal Science, 88(2): 233-238
- [7] Harendra Pratap Singh Choudhri, G.P. Singh, Rajeev Singh, Punam Kushwaha, Rajeev Kumar and Ashutosh Kumar Ranjan (2018) “Costs and Income Analysis of Maize Cultivation in Bahraich District of Uttar Pradesh, India”, International Journal of Current Microbiology and Applied Sciences, Vol. 7, No.2, 2018, Pp. 1060-1065.
- [8] Deepika Tekam, Nikita Sonawane, Adhiti Bhanotra and Manish Sawant (2019) “Doubling of Farmers Income through Animal Husbandry by 2022” International Journal of Current Microbiology and Applied Sciences, 8(2): 3246-3255.