



Reasons for Closure of Livestock Farms in North Eastern Zone of Tamil Nadu

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ABSTRACT

There is a declining trend in livestock holdings among landless households. Retaining the rural folks in livestock farming becomes essential to meet out the growing demand for livestock products which is expected to play an important role in providing nutritional security to the country. Hence, this study was conducted to understand why the farmers were closing the livestock farms or reducing the farm size. The study was carried out in three districts in the North Eastern zone of Tamil Nadu. Garrett's Ranking Technique was applied for the study. The study showed that the feed cost was the major reason for the farm closure or reduction of the farm size followed by marketing, disease management and low production and income from livestock farming.

Key Words: Closure, Farming, Livestock farms, Problems.

INTRODUCTION

The livestock is an integral part of the rural household in India contributing to the rural livelihood and food security (Das *et al*, 2020). In 2015–2016 it contributed around 4 per cent of gross value added (GVA) of the country and 25.7 per cent of the GVA in the agricultural sector at constant prices (DAHD, 2017). This sector plays a major part in reducing poverty, improving resilience as well as combating food insecurity and malnutrition (Enahoro *et al*, 2019). According to Roy *et al* (2021), there is an increase in the livestock product consumption attributing to the increasing human population, urbanization and economic growth.

In India, marginal and small farmers and landless labourers hold 70 per cent of the total livestock population (Ali, 2007). Small holder farmers are highly vulnerable to crisis due to their limited access to resources, credit and technological back up. Farmers also constantly battle against erratic rainfall, crop failures, increasing input costs and price fluctuations for their produce. Kalamkar (2009) indicated that the share in the agriculture workforce having declined marginally over the

last four decades especially among cultivators, but there is an increase in the agricultural labour category. Studies have also shown that there is a declining trends in livestock holdings among landless households which constitute 32 per cent of rural households (Ali, 2007). In this context, retaining the rural folks in agriculture, especially livestock farming becomes essential to meet out the growing demand for livestock products which is expected to play an important role in providing nutritional security to the country. Hence, this study was conducted to understand why the farmers were closing the livestock farms or reducing the farm size.

MATERIALS AND METHODS

The study was carried out in Kancheepuram (D1), Chengalpattu (D2) and Thiruvallur (D3) districts selected randomly in the North Eastern zone of Tamil Nadu. Purposive sampling method was used to select farmers who closed their livestock farms or who reduced their farm size as samples of the study. A total of 36 farmers were selected equally in dairy, goat and poultry farming as given in Table 1.

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Table1. Sample selected for the study.

Type of farm	No. of farmers who closed the farm			No. of farmers who reduced the farm size			Total number of farmers
	D1	D2	D3	D1	D2	D3	
Dairy	2	1	3	1	1	4	12
Goat	1	1	1	4	2	3	12
Poultry	4	2	1	2	2	1	12
	16			20			36

The schedule was developed to collect data for the study. Data were collected in person as well as through online method. Farmers were asked to rank the reasons for closure / reducing the farm size. Garrett's Ranking Technique was applied for the study. The advantage of this technique over simple frequency distribution is that the reasons were arranged based on their severity from the point of view of respondents. Hence, the same number of respondents on two or more constraints may have given different rank. Hence, the study had the respondents rank different reasons based on their impact thereby converting into score value and rank with the help of the following formula:

$$\text{Percent position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where R_{ij} = Rank given for the i^{th} variable by j^{th} respondents N_j = Number of variable ranked by j^{th} respondents

With the help of Garrett's Table, the percent position estimated was converted into scores (Garret and Woodworth, 1969) and for each factor, the scores of each individual were added and then total value of scores and mean values of score was calculated and ranked.

RESULTS AND DISCUSSION

The study showed that the feed and fodder cost and availability was the major reason for the farm closure or reduction of the farm size. The increasing cost of the input without increase in the output cost like milk, meat and egg cost might have been the reason for the farmers to close the farm or reduce

the farm size. Similar findings were reported by Saran *et al* (2020) and Bhattacharya *et al* (2020) among the dairy farmers.

The next major problem faced by the farmers was marketing. The sale of milk, meat, egg and livestock was a major problem faced by farmers. Exploitation of middle men, absence of price fixing agency and authorized might be the reason for closure of farms or reducing farm size. Similar finding of marketing constraint faced by dairy farmers was reported by Thirunavukkarasu *et al* (2019) and Anjali and Senthilkumar (2020) and goat farmers was reported by Ravikumar and Kumaravel (2017).

Disease management was the next major problem faced by the farmers which might be due to non-availability of proper health care facility at the time needed and distant location of veterinary aid facility. Similar findings were reported by Rahman (2017) among the poultry farmers. The farmers felt that the low production and income from livestock farming was found to be less remunerative to maintain the farm profitably. Similar findings were reported by Mazumder (2014) and Mandavkar *et al* (2020).

Capital investment availability for expanding the farm was also felt as a major problem by the farmers. The farmers also felt that the non-availability of good quality inputs, especially, chicks, good goat breeds, high yielding cows and involvement of middle men were the problem faced by the farmers. Fodder shortage was a minor problem faced by the farmers as animals were grazed and poultry was reared as backyard farming. Similar findings were reported by Senthilkumar

Table2. Garret ranking of the reasons for closure / size reduction of farm.

(n=36)

Sr. No.	Reason	No. of respondents given the rank								Total Garret score	Average score	Rank
		1st	2nd	3rd	4th	5th	6th	7th	8th			
1	Feed cost	19	5	5	3	2	0	2	0	2471	68.64	I
2	Marketing	10	11	5	1	3	3	3	0	2256	62.67	II
3	Disease	6	11	6	3	3	5	2	0	2146	59.61	III
4	Low production and income	0	5	10	10	8	1	2	0	1930	53.61	IV
5	Capital investment	1	3	5	9	9	4	4	1	1774	49.28	V
6	Livestock input	0	1	5	3	4	12	8	3	1505	41.81	VI
7	Fodder shortage	0	0	0	8	3	3	14	8	1277	35.47	VII
8	Labour	0	0	0	0	3	8	1	24	973	27.03	VIII

(2017). The labour shortage was also a minor problem might be because majority of the activities were conducted by the family labour.

CONCLUSION

The study revealed that the increasing feed cost which has made livestock farming as not a remunerative enterprise. Low cost and area specific nutritive compounded feed formulation knowledge can be disseminated to the farmers and bulk procurement of feed ingredients can be organised by the farmer producers' organizations to reduce the feed cost. Fodder development programmes need to be implemented at village level in available unutilised land to improve the quality fodder availability to livestock which will additionally satisfy the nutrient requirement of the livestock.

Poultry farmers can be advised specific feed formulation for backyard rearing to reduce the feed cost. Marketing linkage need to be strengthened to reduce the number of actors in the value chain for a better profit to the producers. The latest technologies need to be at the reach of the farmers to create a link between the produce and consumer. Reinforcing of infrastructure and manpower is essential to improve the accessibility of the farmers to the veterinary services. The productivity of the livestock and poultry reared by the farm families need to be improved through training programmes,

trial and demonstrations on various new and successful technologies and rearing practices. Credit plays an important role in farm business. Financial institutions should make credit available, timely and simplified documentation which is farmers friendly. Integrating the research institutions and progressive farmers through public private partnership mode can assist in production of chicks, goat and cattle for horizontal spread of quality inputs.

REFERENCES

- Ali J (2007). Livestock sector development and implications for rural poverty alleviation in India. *Livestock Res for Rural Dev* 19, Article #27. Retrieved February 17, 2022, from <http://www.lrrd.org/lrrd19/2/ali19027.htm>
- Anjali K B and Senthilkumar R (2020). Constraints as perceived by Vechur cattle farmers of Kerala. *J Krishi Vigyan* 8 (2) : 29-34
- Bhattacharya Rupam, Athokpam Haribhushan, Thongam Monika Devian and Amarjit Karam (2020). Backyard poultry farming, A source of livelihood support and nutritional security for the tribal people of South Garo Hills. *J Krishi Vigyan* 8 (2) : 21-24
- DAHD (2017). *Basic animal husbandry and fisheries statistics, AHS Series-18*. Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Government of India.
- Das Arghyadeep, Raju R and Patnaik Neela (2020). Present scenario and role of livestock sector in rural economy of India: A Review. *Int J Livestock Res* 10: 22-30. 10.5455/ijlr.20200701051344.

- Enahoro D, Mason D'Croz D, Mul M, Rich KM, Robinson TP, Thornton P, Staal SS (2019). Supporting sustainable expansion of livestock production in South Asia and Sub-Saharan Africa: Scenario analysis of investment options. *Glob Food Sec* 20: 114–121.
- Kalamkar S S (2009). Urbanisation and Agricultural Growth in India. *Indian J Agric Econ* 64(3): 443-461.
- Kumar A, Mishra A K, Parappurathu S, Jha G K (2018). Farmers' choice of milk-marketing channels in India. *Econ Polit Wkly* LIII(51), 58–67.
- Mandavkar PM, Hanmante A A, Talathi M S and Manjarekar R G (2020). Knowledge and adoption level of poultry farming practices in Raigad District of Maharashtra State. *J Krishi Vigyan* 8 (2) : 199-204
- Mazumder D K, Kalita D N and Kalita S C (2014). Status and constraints in livestock farming amongst tribal farmers of Kamrup District in Assam. *Econ Aff* 59 Special Issue: 757-765
- Rahman S (2017). Status and constraints of backyard poultry farming in Mizoram. *Indian J Hill Farming*. Special Issue :76-82
- Roy Arnab, Banda Sainath and Patibandla Lakshmi Priya (2021). The patterns of livestock products consumption in India: A recent trends and future prospects. *J Pharmacogn Phytochem* 10(1): 376-379
- Ravikumar R and Kumaravel (2017). Constraint Analysis of Goat Farmers in Tamil Nadu, India. *Int J Curr Microbiol App Sci* 6 (9): 594-599. doi: <https://doi.org/10.20546/ijemas.2017.609.072>
- Saran Dropati, Madhu Sharma and Vikram Yogi (2020). Constraint in Production and Marketing of Milk in Rural Areas of Bikaner District in Rajasthan. *Int J Curr Microbiol App Sci Special Issue-11*: 3057-3063
- Senthil Kumar G, Selvakumar K N, Prabu M, Serma Saravana Pandian A, Valli C and Kannadhasan M S (2017). Constraints in livestock rearing among resource poor farmers in rural Tamil Nadu. *Asian j Agric Ext Economics Sociol* 15(2): 1-5.
- Thirunavukkarasu D, Narmatha N, Doraisamy K A, Ramesh Saravanakumar V and Sakthivel K M (2019). Future prospects of smallholder dairy production: Pragmatic evidence from crop-livestock farming systems of an economically transforming state in India. *Cuadernos de Desarrollo Rural*, 16(84). Available at <https://doi.org/10.11144/Javeriana.cdr16-84.fpsd>

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