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Constraints as Perceived and Suggestions as Expressed by Sheep Rearing Farmers in Raichur District of Karnataka, 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 study was conducted in purposively selected Raichur district of Karnataka. Highest number of sheep population criteria were used in selection of taluks and villages. A total of 120 respondents were selected from 06 selected villages of 2 taluks namely Lingasuguru and Raichur The quantitative and qualitative data were used to collected the information through interview schedule, The present study is highlighted different constraints and suggestion perceived by sheep rearing farmers during management practices simple statistical tools frequency and percentage are used in the study. In socio economic constraints the result found that majority (71.67%) poor knowledge and Ignorance on management practices followed literacy rate (62.05 %), It was found that a high majority (92.50%) unaware insurance services, poor credit facilities (87.50%), shrinkage of grazing land (76.67%) and cost of medicine (61.67%). Suggestion expressed by 69.17 per cent suggested on vaccination followed by keeping quality of buck (65.00%), increase number of veterinary hospital

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and staff (60.00%) and increase the community grazing land (37.50%), more than three-fourth of sheep farmers suggested discourage the middle man in market, strengthening the existing the animal market (72.50%) and develop new marketing channel (63.33%).

Keywords: Constraints; sheep rearing farmers; livestock management; suggestion.

1. INTRODUCTION

Livestock is important source of income and employment in rural sector. Seventy per cent of livestock of rural India is owned by 67 per cent of small, marginal farmers and landless labourers. Forty per cent of the people living below poverty line are largely dependent on livestock for their precarious existence [1]. Livestock help to meet the equity objective in rural development through their contribution to the cash income of small and marginal farmers and landless labourers. The rural poor have little access to land and thus there are limited opportunities for them in crop production. On the other hand, livestock wealth is more equitably distributed compared to land and the expanding demand for animal food products generates significant opportunities for the poor to escape poverty through diversifying and intensifying livestock production. The route to poverty reduction through livestock, however, is not free from threats. Poor livestock producers face numerous constraints in production and marketing. They are constrained by a lack of access to capital, quality inputs, improved technology and support services. They have small marketable surpluses, while local rural markets are thin, and sales to distant urban markets result in very high transaction costs. Marketing and transaction costs of livestock products are high taking 15-20 per cent of the sale price [2]. The productive potential of animals depends crucially on the quality of nutrition, genetic makeup and the animal health system [3], basically milk production (productivity) depends on four dimensions of animal husbandry practices i.e. breeding, feeding, health-care and management practices. Initially low genetic potential and low plane of nutrition due to lack of concentrate, feed and fodder both in quantity and quality particularly green fodder are considered major cause of low productivity. Feed and fodder scarcity is identified as the most limiting constraint accounting for half of the total loss followed by problems in reproduction and health [4]. The crop enterprise alone could not help the farmers to increase their income and employment because of poor productivity, low availability of per capita arable land and also lack of other income generating avenues [5]. Hence, there is heavy dependence of households on animal husbandry activities. Thus, livestock keeping generates a continuous stream of income and employment, makes it an inevitable component for development. However, there are area specific and species specific constraints in carrying out the livestock management practices by the sheep farmers. Hence, the present study was carried out to identify the constraints in management practices of sheep farming areas and to suggest suitable policy measures to overcome the hurdles faced by farmers. To successfully transfer the goat husbandry technologies, it is necessary to take stock of the felt factors restraining in the adoption of scientific goat farming. The low level of socio-economic status of villagers is the major hindrance and less number of improved breeds, lack of appropriate feeding of animal and good management points was the inhibitors for the higher production of animal produce *i.e.* milk [6]. The constraints are interactive and are often aggravated in traditional husbandry system by lack of flock management [7].

2. MATERIALS AND METHODS

2.1 Research Design

Based on the nature of research problem, Ex-post facto research design was followed in the present study. Kerlinger [8] defined Ex-post-facto research design as any systematic empirical inquiry in which the independent variables have not been directly manipulated, because they have already been occurred or they are inherently not manipulated.

2.2 Locale of the Research Study

The study was conducted in Raichur district of Karnataka state. The Raichur district was purposively selected for the study as it is the ne of the major sheep rearing area in Karnataka. The two taluks *viz.,* Lingasugur and Raichur were also purposively selected based on the highest population of sheep in these areas. The six villages from each taluk were selected on the basis of highest sheep population in these areas

for the present study. A list of sheep rearing farmers was prepared with consulting veterinary officers department of Animal Husbandry and veterinary Science Raichur and other officers of SAMUHA-NGOs and officials of RSKS.

2.3 Brief Description of Study Area

The study was undertaken in Raichur district of Karnataka during 2017-18. The details of the selected district are as follows, Raichur district is situated in North-Eastern dry and Northern dry zones of Karnataka state. The district lies between 15°09` and 16°34` North latitudes and 75°46` and 77°35` East longitudes. Total geographical area of the district is 8,35,843 hectares of which 5,22,093 hectares was under cultivation, accounting for about 62.46 per cent. Raichur district has a population of 16,69,762 of which includes 8,41.840 and 8,27,922 male and female population, respectively. According to 2011 senses, the literacy rate of Raichur district was 48.80 per cent with male literacy at 61.50 per cent and female literacy at 35.90 per cent. The district is bestowed with varied soil resources comprising 57.60 per cent black and 42.40 per cent red soils. The average annual rainfall of the district is 621 mm. The mean temperature of the area varies from 29.6°C to 44°C. Raichur district has the advantage of growing a variety of field and horticultural crops owing to its varied soil and climatic conditions. Traditionally crops like Green gram, Red gram, Groundnut, Sunflower, Bajra *etc.,* are grown during Kharif season while during Rabi season, crops like Jowar, Chickpea, Safflower, Sunflower, Chilli, *etc*., are grown extensively. And according to 2011 cences there are 6,47, 549 of sheep population in Raichur district.

2.4 Selection of Respondents

Six villages from each taluk were selected on the basis of the highest sheep population. Thus, total 12 villages were selected from two selected taluks. A list of farmers who possess sheep from each selected village were prepared with the help of officials of veterinary department from each selected village 10 sheep farmers were selected with the help of simple random sampling procedure to makeup total number of 120 sheep farmers for the present study Qualitative data were generated through personal interview schedule along with participatory observation, interaction and discussion with key informants, about constraints faced by the sheep farmers and suggestion to overcome problems Data thus generated were analyzed by calculating simple frequencies, percentages, means *etc.*

3. RESULTS AND DISCUSSION

3.1 Constraints as Perceived by the Sheep Rearing Farmers

3.1.1 Socio-personal constraints

It was found that majority (71.67 %) of the sheep farmers faced the problem of poor knowledge about improved technology and Ignorance on management practices followed by literacy (62.05) and social taboos (20.00 %). It depicts that poor knowledge about improved technology was the most important constraint it might be less contact between veterinary officials and poor extension contact. Lower literacy rate and ignorance on management practices among farmers were found second and third important social and personal constraint, because of poor economical status in early age farmers are involved in the sheep rearing this may effect to continue education and ignorance on management practices this might be due in Raichur distrct farmers mainly rearing local breeds called kenguri it is suitable for district resistance from the locals climatic condition and lack of knowledge about scientific management of livestock and high cost of construction of animal shed considered respectively by Naveen Kumar [9]. Social taboos prevalent in the society were found fourth constraints might be due to high prestige associated with sheep rearing were the important social constraints. Similar finding was reported by Yadav et al. [10] Suresh et al. [11] Dineshkumar [12].

3.1.2 Economical constraints

It was found that a high majority (92.50 %) of the sheep farmers faced the problem of unawareness insurance services, followed by poor credit facilities (87.50 %), shrinkage of grazing land (76.67 %) and high cost of medicine to treat the animals (61.67 %). Farmers faced unaware about insurance this might be due to medium mass media exposure and cosmopolites and they were unhappy with claim settlement procedure and time taken to settle claim. Similar findings were reported by Chizari [13]. Poor credit facilities from the government sector with special reference to banks was their main constraint. Shrinkage of grazing land might be rapid urbanization Kuraparthy [14]. High cost of medicine and veterinary services this might be

due to veterinary officers charge high fees for doorstep service., Lack of knowledge about animal diseases and their control and non-availability of animal health service provider in village and lack of awareness about economic losses associated with diseases, small flock size. Similar findings were reported by Mohan, L. Y., [15].

3.1.3 Institutional & Input constraints

It revealed that majority (80.83 %) of the sheep farmers expressed poor marketing facilities followed by poor veterinary infrastructure (68.33 %) and unavailability of vaccination (54.17 %). Poor market facilities might be due to lack transportation facilities and insufficient capital and opportunities, reported that sheep management was dependent upon the time of organization of health camps for treatment of sick animal, vaccination against contagious diseases and availability of veterinary doctor in time, supply of saplings of fodder trees, training in goat rearing, health and other aspects, provision of remunerative price for sheep, easy availability of credit and arrangement of breeding at lower price are in line with the findings of the present study. Similar findings were reported by Chaturvedani et al. [16] and Kumar [17].

3.1.4 Social taboos

The meaning of the word "taboo" has been somewhat expanded in the social sciences to strong prohibitions relating to any area of human activity or custom that is sacred or forbidden based on moral judgment, religious beliefs, or cultural norms.

In earlier days sheep rearing is restricted to particular lower community and they emotionally attached to sheep rearing in other side higher community people hesitate keep sheep and they feel it is not a prestige job to do.

3.1.5 Economical suggestion

Table also notice that, in economical suggestion a large majority (83.33 %) of the sheep farmers suggested free distribution of sheep to increase livelihood of the farmers followed by, an equal (81.67 %) of sheep farmers suggested increase credit and subsides facilities and compensation for died animal due to natural calamities an equal (80.33 %) percentage of the sheep farmers suggested publicize and made easier the animal insurance scheme and marginal rate for vaccination and services sheep farmers also suggested free distribution of sheep or credit and subsidized rate, compensation for dead animal due to natural calamities and publicize insurance scheme.

3.1.6 Institution and input suggestion

Table 2 indicated that suggestion offered by the sheep farmers, in institution and input suggestion 69.17 per cent of the sheep farmers suggested vaccination should be available in needy situation followed by, encourage keeping quality

Table 1. Constraints as perceived by the sheep rearing farmers

n=120

Sl. No.	Constraints		
I	**Socio –personal**	**Frequency***	**Per cent**
1	Poor knowledge about improved technology	86	71.67
2	Ignorance on management practices	86	71.67
3	literacy rate	75	62.05
4	Social taboos	24	20.00
II	**Economical**		
1	Unaware of insurance services	111	92.50
2	Lack of credit	105	87.50
3	Shrinkage of grazing land	92	76.67
4	High cost of medicine	74	61.67
5	High cost of veterinary service	55	45.83
III	**Institutional & Input**		
1	Poor market facilities	97	80.83
2	Poor veterinary infrastructures and services	82	68.33
3	Unavailability of timely vaccination	65	54.17
4	Poor extension service	43	35.83

**Multiple responses*

Table 2. Suggestions as expressed by the sheep rearing farmers

n=120

Sl. No.	Suggestions	Frequency*	Percentage
I	**Economical Suggestions**		
1	Free distribution of sheep from government to increase livelihood of the farmers.	100	83.33
2	Increase credit and subsides facilities	98	81.67
3	Compensation for died animal due to natural calamities	98	81.67
4	Publicize and made easier the animal insurance scheme	97	80.83
5	Marginal rate for vaccination and services	97	80.33
II	**Marketing suggestion**		
1	Discourage middle man in market	92	76.67
2	Strengthening existing animal market	87	72.50
3	Developing new marketing channels	76	63.33
III	**Institutional and input suggestion**		
1	Timely availability of vaccine in hospital	83	69.17
2	Farmers should encourage keeping quality buck	78	65.00
3	Increase number of veterinary hospital and staff	72	60.00
4	Increase the community grazing land	42	37.50

**Multiple responses*

of buck (65.00 %), increase number of veterinary hospital and staff (60.00 %) and increase the community grazing land (37.50 %). All the respondents suggested increasing the number of veterinary hospital and number of veterinary staff to provide better service, timely arability of vaccination, and keeping quality of ram and increase community grazing land to successful the sheep farming [18].

3.1.7 Marketing suggestion

Table 2 it also reveals that more than three-fourth of sheep farmers suggested discourage the middle man in market, strengthening the existing the animal market (72.50 %) and develop new marketing channel (63.33 %). Due to middle man in sheep market the farmers are not getting as they expected. In this regard discourage the middle and strengthen the exiting market and make aware of online market.

4. CONCLUSION

There were many constraints found in the study area like poor market facilities, poor veterinary infrastructure and services, poor extension activity, unavailability of vaccine, shrinkage of grazing land, lack of credit facilities and *etc*. and sheep farmers suggested that vaccination should be timely available, encourage quality buck keeping, free distribution of sheep, icrease credit facilities and compensation for animal dead due to natural calamities So, it can be concluded that due to above constraints and suggestion for scientific management practices to improve wellbeing of farmers stake holders and veterinary staff should focus on demands sheep farmers and there is urgent need to solution for the constraints faced by the sheep farmers and educated and conducted training programs to the farmers about improved management practices and it has huge potential to improve the livelihood status of sheep rearers in Raichur district.

5. SUGGESTIONS FOR IMPROVEMENT

1. Educate sheep farmers and conduct training program to effective management of sheep and facilitate the market information
2. Make ready available all inputs and services like vaccination of the animals, deworming, medicines, supply of fodder seeds and slips in adequate quantities and breeding rams must be made available to the farmers effectively.
3. Create awareness through of mass media programmes like deworming, vaccination and sheep health camps by the extension agencies will go a long way in the dissemination of scientific knowledge to the sheep farmers.
4. Government unutilized waste lands in the villages should be distributed to the landless sheep farmers' community for encouraging fodder cultivation.
5. Goverment makes arrangement of free distribution of sheep to the interested candidates.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Rao CK. Dimensions of the growth of animal husbandry in India. Paper presented in eleventh annual conference of Indian association for the advancement of veterinary research held at IVRI, on 27-28, February, IVRI. 2004;1-6.
2. Birthal PS. Linking smallholder livestock producers to markets: Issues and approaches. Indian Journal of Agricultural Economics. 2008;63(1):19-37.
3. Ahuja V, Kenneth E, McConne, Dina-Umali D, Hann C. Are the poor willing to pay for livestock services? Evidence from rural India. Indian Journal of Agriculture Economics. 2003;58(1):84-99.
4. Anonymous. Report on Animal Husbandry & Dairying for the 12th five year plan. Planning Commission, Govt of India; 2011.
5. Ahmed A, Egwu GO. Management practices and constraints of sheep farmers in Sokoto State, north-western Nigeria. Int. J. Sci. Environ. Tech. 2014;3(2):735–748.
6. Tiwari RK, Bisen JP, Sharma PN. A study on constraints and suggestions regarding adoption of improved animal husbandry practices in Chhatisgarh plains. Indian Research Journal of Extension Education. 2003;3(1):9-12.
7. Kerlinger NF. Foundations of behavioural research. Surjit Publications, New Delhi. 1983;741.
8. Naveen Kumar GS, Wilfred S, Ruban, Pradeep MC, Shivakumar MC. A Study on Kenguri as Mutton Breed of Sheep in Southern Karnataka, India Middle-East Journal of Scientific Research. 2013;13(1):05-08.
9. Kumar S, Deoghare PR, Singh K. Constraints in technology dissemination for sustainable small ruminants' production. Paper presented in the National Seminar on opportunities and challenges in nutrition and feeding management of sheep, goat and rabbit for sustainable production held at CAWRI, Avikanagar; 2004.
10. Yadav DK, Jainanand KVS, Govindaiah G, Aswathnarayan T, Sadana DK. Classification of four ovine breeds of southern peninsular zone of India: Morph metric study using classical discriminant function analysis. Springerplus. 2013;2: 29.
11. Suresh A, Gupta DC, Mann JS. Farmers management practices and economics of sheep farming in eastern semi-arid region of Rajasthan. Indian J. Small Ruminants. 2008;14(2):236-242.
12. Dineshkumar. A study on problems encountered in sheep rearing in Rajasthan. Indian J. Small Ruminant. 2003;9(1):43-46.
13. Chizari M."Perceptions of rural livestock insurance among livestock producers and insurance specialists in Isfahan Province, Iran. Journal of International Agricultural and Extension Education. 2013;37-42.
14. Kuraparthy V, Prasad RM, Suresh. Ravi A, Ekambaram. Constraint analysis of sheep rearers in chittoor district of Andhra Pradesh. Int. J. Sci. Environ. Tech. 2017;6(2):1604 – 1607.
15. Mohan LY, Devi SR, Subhash C, Sharma NK. Constraints in livestock management practices perceived by tribal livestock owners of Banswara District of Rajasthan. Indian Res. J. Ext. Edu. 2014;14(4).
16. Chaturvedani AK, Kalpana D, Devesh TP, Jaiswal SK, Khyalia NK. Constraints in Adoption of Scientific Goat Rearing Practices in Chhattisgarh. Int. J. Animal and Veterinary Sci. 2017;4:6-8.
17. Kumar. A study on problems encountered in sheep rearing in Rajasthan. Indian Journal of Small Ruminants. 2003;9(1):43-46.
18. Saravanakumar AK. A study on the migratory pattern of Nellore sheep and their performance. M. V. Sc., Thesis, Acharya N. G. Ranga Agric. Univ., Hyderabad, Andhra Pradesh (India); 2003.

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