



Original Research

Constraints Perceived by Small Scale Goat Keepers in Goat Farming: A Study in Dhubri District of Assam

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Abstract

The present study was undertaken to investigate the constraints faced by small scale goat keepers in Dhubri district of Assam. Four development blocks with 120 small goat keepers were considered for the present study. The study revealed that higher incidence of diseases was the major constraints of goat keepers with mean score of 77.83 and ranked first among all the constraints. Lack of grazing field (62.45) and recurrent flood (61.41) were ranked second and third major constraints respectively. Similarly scarcity of feed and fodder (59.92), inadequate veterinary facilities (58.78), higher mortality of kid (51.30), lower sale price of goat (49.98), lack of organized marketing facilities (44.29), scarcity of elite buck (42.20), lack of knowledge on scientific goat rearing (35.42), inbreeding (27.61) and lack of credit facilities (26.09) were also some other constraints of goat rearing. Considering above constraints, appropriate strategy could be formulated for the development of small scale goat keepers in Assam.

Key words: Constraints, Goat Keepers, Grazing Field, Recurrent Flood

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Introduction

Goat contributes around 26.40% of the total livestock population in India. The total goat population of the country is 135.17 million numbers and the contribution of Assam towards country's total goat population is 4.56 % (GOI, 2014). Goat is also regarded as "Poor Man's Cow" and is mainly reared for meat in Assam. Rearing of goat is an age old practice in Assam. Goat meat is preferred all over the country as there is no religious taboo in consuming goat meat. Further, more than 95 % people of the entire North-East are non-vegetarian and like to eat meat. Therefore, the demand of goat meat has been increasing day by day and it has become a sign of delicacy in various festive occasions and ceremonies despite of their higher cost.



Rearing of goat in Assam is still in traditional system and not adopting the improved scientific method of rearing to make it a commercial venture. This is may be presumed to be several constraints and drawbacks in the state in rearing goats. The farmers are not getting remunerative prices for their animals and it's product due to unorganized market system in the state. Dhubri has a goat population of 2.74 lakhs and contributes 4.43 % of the state goat population (GOI, 2014). Due to recurrent flood in Dhubri district, animals mostly goat and sheep suffer a lot, which effect their productivity. Therefore the present study was undertaken to find out the different constraints perceived by the small scale goat rearers in Dhubri district of Assam.

Materials and Methods

The study was undertaken in four blocks viz. Agomoni, Golakganj, Gauripur and Raniganj of Dhubri districts of Assam during 2015-16. Two villages were selected from each of the block on the basis of goat population. Again fifteen farmers were selected purposively from each of the villages, thus a total 120 farmers were selected for the purpose of the study. The respondents were selected on the basis of the experience in goat rearing and flock size of 5 to10. Then the goat keepers from each of the village were asked collectively to identify the constraints in their villages in relation to goat rearing. Once the constraints were identified in the village, they were enlisted in an interview schedule. Then each respondent were asked separately to rank them from 1 to 12 according to the severity of the constraints faced by them without interacting with other respondents. Rank 1 denoted the most severe while rank 12 denoted the least severe constraint. On the basis of the ranks given by the respondents, the severity of constraints was assessed. The data so collected were tabulated and analyzed statistically by using Garrett's Ranking Technique. The assigned ranks given by the respondents were counted into per cent position value by the following formula:

$$\text{Per cent position} = 100(R_{ij} - 0.50) / N_j$$

Where, R_{ij} = Rank given for the i^{th} factor by the j^{th} individual; N_j = Number of factor ranked by the j^{th} individual.

The per cent position was then converted into scores by referring the table given by Garrett and Woodworth (1969). Then for each factor the scores of the individual respondents were added together and divided by the total number of respondents for whom scores were added. The mean scores were calculated by dividing the total score by the number of respondents. Overall ranking was obtained by assigning ranks in the descending order of the mean score.

Results and Discussions

It was clear from the Table 1, that higher incidence of diseases with the highest mean score of 77.83 was the major constraints and ranked first among all the constraints in the present study. Higher incidence of

diseases might be due to improper housing management, imbalanced feeding, health care measures such as deworming and vaccination etc. by small goat keepers. As most of the small goat keepers were under below poverty line (BPL), hence they were unable to provide proper housing facilities and optimal feeding to their goats. Again due to high humid climatic condition of the state, which creates a conducive situation for the multiplication of worms, hence goats were often infested with external and internal parasites. Further some of the dreaded diseases like PPR, enterotoxaemia etc. also caused mortality in goats of this area. Gujar and Pathodiya (2008) also reported that higher incidence of diseases was an important constraints among the goat keepers of Southern Rajasthan.

Table 1: Constraints perceived by small scale goat keepers in Dhubri district

S. No.	Constraints	Total Score	Garett's Mean Score	Rank
1	Lack of credit facilities	3131	26.09	XII
2	Recurrent flood	7369	61.41	III
3	Inbreeding	3313	27.61	XI
4	Lack of knowledge on scientific goat rearing	4250	35.42	X
5	High rate of kid mortality	6156	51.3	VI
6	Lack of organized marketing facilities	5315	44.29	VIII
7	Inadequate veterinary facilities	7054	58.78	V
8	Scarcity of elite buck	5064	42.2	IX
9	Scarcity of feed and fodder	7190	59.92	IV
10	Lack of grazing field	7494	62.45	II
11	Higher incidence of diseases	9339	77.83	I
12	Lower sale prices of goat	5997	49.98	VII

Lack of grazing field was also one of the major constraints perceived by the goat rearers and was ranked second with the mean value of 62.45 (Table 1). The severity of the constraint could be judged from the fact that most of the pastures and barren land had been put under deforestation restricting the grazing of animals. Various developmental programmes, road extension, human habitats etc. in the villages caused severe reduction in free grazing area which lead to the most serious constraints in the recent days. Rajkumar and Kavithaa (2014) reported that shrinkage of grazing land/lack of grazing was the most important constraints of goat rearing in Erode district of Tamilnadu. The problem could be overcome by cultivating various hybrid grasses such as maize, napier, Congo signal etc. for feeding of goats. Further, manufacturing of balanced feed with locally available ingredients for feeding of goats would also be helpful in combating such situation.

Recurrent flood was also one of the major constraints faced by the farmers of Dhubri district and was ranked third among the constraints. Flood water submerged the free grazing field leading to scarcity of feeds and fodder caused sub-optimal feeding of animals. The imbalanced fed animals were more susceptible to parasitic infestation and other diseases. The constraints could also be overcome by planting some tress such

as jackfruit, Subabul, neem, guava trees etc. whose leaves might be used for feeding of goats during flood. Scarcity of feed and fodder was also one of the most significant problems faced by the farmers. This might be due recurrent flood, degradation of common grazing land, growing livestock population and lack of management of common grazing resources. The productivity of animals was severely affected due to scarcity of feed and fodder. Rajkumar and Kavitha (2014) also reported that non-availability of green fodder in Tamil Nadu was one of important feeding constraints of goat farming. There was shortage of man power in the Animal Husbandry and Veterinary Department leading to inadequate veterinary facilities which was also became a major problem for goat keepers in the area. The farmers were unable to treat their sick animals in time due to non-availability of Veterinary Officers and trained Veterinary Field Assistants leading to death of the animals in some cases. Non-availability of some common medicines and vaccines against PPR, enterotoxaemia etc. in this area also caused major threat to the goat keepers. Inadequate veterinary service was found to be one of the major constraints among small scale pig farmers in Sivasagar district of Assam (Islam *et al.*, 2016).

Higher rate of kid mortality was also one of the major constraints perceived by the goat keepers under present study. Improper housing and feeding management, various diseases like diarrhea, pneumonia and parasitic infestation were major causes of higher kid mortality. The present findings were also corroborated with the findings of Sabapara *et al.* (2014) and Gujar and Pathodiya (2008) in their respective study areas. The goat keepers of Dhubri district considered that lower sale price of goat was a major hindrance of commercial goat production and occupied seventh position among twelve constraints identified. Due to involvement of more numbers of middlemen in marketing of goat, there was huge price spread and hence farmers were not getting their remunerative prices for their animals. Some other major constraints perceived by the small scale goat keepers was lack of organized marketing facilities followed by scarcity of elite buck, lack of knowledge on scientific goat rearing, inbreeding and lack of credit facilities. Similar to the present findings Tanwar (2011) also reported that inadequate availability of quality breeding buck was one of the major breeding constraints in semi-arid regions of Rajasthan. Singh *et al.* (2013) also reported that the poor access to credit of goat-keepers was observed another important constraint to improving the management system, especially among landless, marginal and small farmers.

Conclusion

It can be concluded that small goat keepers faced multiple constraints. However improved management practices of goat can minimize the severity of problems and ensures better productivity. Therefore, goat keepers should be trained through various training programmes conducted by KVK's and other agencies so as meet the constraints in feeding, health care and breeding. Marketing facility for sale of male and female goats/ kids should be provided to overcome the marketing constraints by the government agencies. Goat

keepers should be organized as cooperative society on the principle of “one for all and all for one” to help the each other’s.

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