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Research Article



Constraints in Backyard Goat Farming in Cauvery Delta Zone – The Farmers' Perception

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ABSTRACT

The present study was undertaken to investigate the constraints faced by backyard goat farmers in Cauvery delta zone of Tamil Nadu. The data was collected through a semi-structured interview schedule containing lists of constraints were asked to rank them. The data were tabulated and Likart score technique was adopted to analyze the constraints as perceived by the respondents. The study revealed that non-availability of vaccination, lack knowledge about balanced feeding, non-availability of improved breeding bucks, low market price for goat and lack of knowledge about goat rearing were the main constraints in the major domain of health care, feeding, breeding, marketing and others constraints.

Key words: Constraints, Backyard goat farmers, Breeding.

INTRODUCTION

Goat is a multi-purpose animal, which produce meat, milk, skin, hair and manure. Backyard farming generates income goat and employment opportunity and uplifts the economic status of rural people. Backyard goat farming is an integral part of landless, small and marginal agricultural farmers. According to livestock census, India is endowed with 135.17 million numbers of the goat (26.40 per cent of total livestock). India ranks 2nd in goat population and also ranks 2nd in chevon production There are 26 goat breeds, which are recognized by National Bureau of Animal

Genetic Resources and vast majority of goats are non-descript or intermixture breeds. Goats in the village conditions are being kept on natural available feed resources such as tree leaves, grasses and food grain by products. Meat from small ruminants, especially chevon is most preferred and is widely accepted throughout the country. Goat meat is consumed by all without any religious and social taboos. The present study was therefore, undertaken to explore the constraints faced by backyard goat farmers in Cauvery delta zone of Tamil Nadu.

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MATERIAL AND METHODS

The present study was conducted in Cauvery delta zone of Tamil Nadu, which comprises 32.60 per cent of the goat population of the state³. Based on the share of goat population to the total zonal goat population, three districts viz., Nagapattinam (16.39 per cent), Thanjavur (14.84 per cent) and Thiruvarur (10.81 per cent) were selected for the study. From these selected districts, a sample of 180 goat farmers (60 respondents in each district) were selected after applying stratified random sampling procedure by selecting two blocks from each selected district as first stratum and five villages from each selected block as second stratum. The primary data for this study were collected through a well-structured pre-tested interview schedule. The identified constraints which was ranked by respondents were subjected to Likart score. The major constraints taken into consideration were related to health, feeding, breeding, marketing and other constraints.

RESULTS AND DISCUSSION

Health constraints perceived in backyard farming in Cauvery delta zone

Health constraints perceived by the backyard goat farming were summarized in Table 1. It revealed that non-availability of vaccination was the most important constraints with 19.51 per cent (rank 1^{st}) followed by lack of knowledge about diseases with 15.21 per cent (rank 2^{nd}), lack of veterinary services with

11.18 per cent (rank 3^{rd}), high incidence of disease with 9.64 per cent (rank 4^{th}), high mortality rate in kids with 9.61 per cent (rank 5^{th}), non-availability of medicines with 8.15 per cent (rank 6^{th}), parasitic problems in goat with 7.87 per cent (rank 7^{th}), high cost of treatment with 6.83 per cent (rank 8^{th}), problems of pre-mature delivery/ abortion with 6.01 per cent (rank 9^{th}), delay in shedding of placenta with 5.94 per cent (rank 10^{th}). These findings highlight that the need for providing adequate facility of vaccination against contagious diseases of goats such as PPR, Enterotoxaemia, etc.

Keeping in view of disease outbreaks in their animals the goat rearers wished to protect their goats from contagious disease by prophylactic vaccination. Findings also revealed that remarkable economic losses due to mortality and diseases in goat and kids. So, provision of adequate veterinary services at door step to needy farmers is essential and it should be addressed properly due importance should be given on kid and goat management training and conduct awareness of programmes on health, disease control and kid management practices. Also, goat rearers should be sensitized regarding spread of infectious diseases and their control. Apart from that, they should be given proper knowledge regarding handling of animals during pregnancy and delivery. These findings were similar to those reported by Tanwar⁷ and Wani *et al.*⁸.

| Sl. No. | Constraints | Constraints score | Per cent | Rank |
|---------|---|--------------------------|----------|------|
| 1 | Non-availability of vaccination | 785 | 19.51 | Ι |
| 2 | Lack of knowledge about disease | 612 | 15.21 | II |
| 3 | Lack of veterinary services | 450 | 11.18 | III |
| 4 | High incidence of disease | 388 | 9.64 | IV |
| 5 | High mortality rate in kids | 387 | 9.61 | V |
| 6 | Non-availability of medicines | 328 | 8.15 | VI |
| 7 | Parasitic problems in goat | 317 | 7.87 | VII |
| 8 | High cost of treatment | 275 | 6.83 | VIII |
| 9 | Problems of pre-mature delivery/ abortion | 242 | 6.01 | IX |
| 10 | Delay in releasing placenta | 239 | 5.94 | Х |
| Total | | 4023 | 100.00 | |

 Table: 1 Health constraints perceived in backyard farming in Cauvery delta zone

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Feeding constraints perceived in backyard goat farming in Cauvery delta zone

Feeding constraints perceived by the backyard goat farming are summarized in Table 2. It indicated that goat rearers with lack of knowledge about balanced feeding was major constraints (27.65 per cent- rank 1st), followed by lack of knowledge about importance of mineral mixturewith27.53 per cent (rank 2nd), shrinkage of grazing land 19.78 per cent (rank 3rd), non-availability of green fodder 11.47 per

cent (rank 4th), high cost of feeds and fodder 6.05 per cent, lack of water for drinking 7.49 per cent (rank 5th). Similar results were observed by Rajkumar and Kavitha⁵, Tanwar⁷ and Sabapara *et al.*⁶. Goat rearers must be educated about balance feeding, pasture management and awareness about mineral mixture. Fodder development programmes are being implemented by department of Animal husbandry to address the problem of fodder scarcity/ non- availability.

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|---------|---|--------------------------|----------|------|
| Sl. No. | Constraints | Constraints score | Per cent | Rank |
| 1 | Lack of knowledge about balanced feeding | 882 | 27.65 | Ι |
| 2 | Lack of knowledge about importance of mineral mixture | 878 | 27.53 | Π |
| 3 | Shrinkage of grazing land | 631 | 19.78 | III |
| 4 | Non-availability of green fodder | 366 | 11.47 | IV |
| 5 | High cost of feeds and fodder | 193 | 6.05 | V |
| 6 | Lack of water for drinking | 239 | 7.49 | VI |
| | Total | 3189 | 100.00 | |

Table: 2 Feeding constraints perceived in backyard goat farming in Cauvery delta zone

Breeding constraints perceived in backyard goat farming in Cauvery delta zone

It was highlighted from the Table 3 that among the breeding constraints, non-availability of improved breeding bucks was major constraint accounting for 42.97 per cent and considered as most serious constraint by all the rearers, followed by lack of knowledge about breeding practices as 35.16 per cent (rank 2^{nd}) and delay in puberty in goat as 21.86 per cent (3^{rd} rank). These findings were in agreement with the findings of Tanwar⁷ and Rajkumar and Kavitha⁵. Provision of availability of improved breeding bucks through organized farm and research farm of Veterinary university and conduct periodical training programmes through extension centers to goat farmers would help to address the above-mentioned constraints.

 Table: 3 Breeding constraints perceived in Backyard goat farming in Cauvery delta zone

| Sl. No. | Constraints | Constraints score | Per cent | Rank |
|---------|---|-------------------|----------|------|
| 1 | Non-availability of improved breeding bucks | 517 | 42.97 | Ι |
| 2 | Lack of knowledge about breeding practices | 423 | 35.16 | II |
| 3 | Delay in puberty in goat | 263 | 21.86 | III |
| | Total | 1203 | 100.00 | |

Marketing constraints perceived in backyard goat farming in Cauvery delta zone

Marketing constraints are summarized in Table 4. It was revealed that low market price for goat as the foremost constraint amounting to 40.22 per cent (ranked 1st), followed by middle man not providing remunerative price **Copyright © Sept.-Oct., 2018; IJPAB**

to kids with 39.31 per cent (rank 2nd) and distant located goat market with 20.45 per cent (rank 3rd). Exploitation by middleman and absence of organized marketing agency hindered the backyard goat farmers in getting their reasonable profit. To overcome these constraints, steps must be taken for regularization of marketing facilities. A **992**

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proper, organised government agency should be set up for price fixation of the goats and a goat co-operative society might be set up similar to that of dairy co-operative society. These findings are supported earlier by Tanwar.⁷ and Sabapara *et al.*⁶.

| | Sl. No. | Constraints | Constraints score | Per cent | Rank |
|---|---------|---|-------------------|----------|------|
| | 1 | Low market price for goat | 354 | 40.22 | Ι |
| | 2 | Middle man not providing remunerative price to kids | 346 | 39.31 | II |
| Ī | 3 | Distant goat market | 180 | 20.45 | III |
| | | Total | 880 | 100 | |

Other constraints perceived in backyard goat farming in Cauvery delta zone

Other constraints were presented in Table 5. Farmers expressed that they lack scientific knowledge (31.31 per cent) in rearing goats as major constraints followed by lack of willingness of young generation in goat rearing (27.33 per cent), attack of predators (21.68 per cent) and complaints from neighbours (19.66 per cent). As a solution for these constraints improved methods of goat rearing and conduct of training and awareness programme through DAH, KVK, VUTRCs to improve the scientific knowledge about goat rearing of the backyard goat farmers.

Goats bitten by stray dogs were considered as the major constraints in these study areas and there should be some measures to control the stray dogs population. As lack of willingness in young generation in goat rearing was observed to be notable constraint. Rural youth should be encouraged and given subsidies to start up goat entrepreneurship through government schemes. Similar results were observed by Kirar *et al.*² and Jana *et al.*¹

| Sl. No. | Constraints | Constraints score | Per cent | Rank |
|---------|---|-------------------|----------|------|
| 1 | Lack of knowledge about goat rearing | 449 | 31.31 | Ι |
| 2 | Lack of willingness in young generation in goat rearing | 392 | 27.33 | II |
| 3 | Attack of predators | 311 | 21.68 | III |
| 4 | Complaints by neighbours | 282 | 19.66 | IV |
| | Total | 1434 | 100.00 | |

CONCLUSION

Non-availability of vaccination, lack of knowledge about balanced feeding, lack of knowledge about goat rearing, non-availability of improved breeding bucks and low market price for goat were perceived as major constraints by backyard goat farmers in Cauvery delta zone of Tamil Nadu. It can be concluded that capacity building programmes by extension centre, out reach of veterinary health care facilities at door step. Increasing the availability of good quality breedable bucks, regularized markets and formulation of goat co-operative societies would help in addressing the above-mentioned constraints.

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