



Participatory problems identification in goat rearing through rank based quotient method in Rajasthan, India

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Goats have been instrumental in poverty reduction in tribal and resource-poor communities. They can thrive in nearly all ecosystems, including harsh, frigid, and arid zones, and have developed certain valuable genetic traits such as the ability to perform better under low input conditions, tolerance to diseases and parasites as well as heat stresses (Peacock 2005, Miller *et al.* 2012). Goat sector development impacts 20 million goat rearers (NSSO 2013) belonging to poor and socially backward resource segments of society living in ecologically vulnerable regions. One of the significant benefits of goats is that they can be reared under a wide range of management systems. Goat rearers could earn 250–300% higher revenues from goat rearing only by adopting scientific goat management standards (BAIF 2015) and substantially higher by improving the size of herds and engaging in goat rearing by rural households as an enterprise. Goats are the backbone of the rural economy in Rajasthan's arid, semi-arid and mountainous regions. Therefore, youths need to play a vital role in India's much-anticipated agricultural transformation. Kumar *et al.* (2010) identified problems in goat rearing in Rajasthan, including seasonally related low nutrition levels, loss of mortality and morbidity, lack of good quality breeding stock and poor management of herds, and poor marketing opportunities. Such prevailing limitations restrict the productivity of goat farming. Based on prevalent problems and needs of the youth, 10 days (in the first phase) of training under the ARYA project was organized by KVK, Banswara. Hence, goat farming needs to be made a lucrative and profitable job for rural youths. The study was, therefore, designed to evaluate the prevailing problems in goat farming.

Banswara is one of the districts in Rajasthan in which the ARYA project was executed in the first phase. Hence, the Banswara district was purposely selected for the study. A total of 73 youth responded to the study before conducting the skill development training during 2019–2020. A pre-tested interview schedule translated in the Hindi language

was administered to collect categorical and continuous data. Prevailing problems were established through participatory mode. The Rank Based Quotient (RBQ) method was employed to identify the prevalent problems in a participatory mode. Problems that goat keepers commonly observed were listed out. They were graded on the priority assigned by individual farmers, i.e. problems that were perceived as the most severe were ranked highest, and the subsequent most severe problems were ranked second and likewise.

The significant problems in goat farming were identified by the RBQ method as used by Anuradha *et al.* (2021). Attack by predators on goats was found to be a major problem (Fig. 1) in Banswara district. Due to hilly, dispersed dwellings and more forested areas in the district, this fear is predominant. Lack of finance/ money for goat rearing was the second major problem. Hence youths used to migrate seasonally in the neighbouring states for their livelihoods. From this migration and labour work, the income of youth (93.15%) was mostly in the range of ₹44,012 to ₹141,795, which is not sufficient for their livelihoods. The third major problem was the non-accessibility of improved breeds of goats in the district. Lack of time for goat rearing was the fourth problem due to seasonal youth migration in areas or cities adjacent to the district. The scarcity of medical facilities for sick goats was the fifth problem. Owing to the lack of animal husbandry services in the region, an outbreak of diseases was the 6th problem. The high mortality rate of kids was observed to be the 7th problem. One of the reasons behind the death of kids could be less knowledge during the precise breeding season. Banswara is a tribal-dominated district where respondents did not have access to good medical services. Owing to the lower availability of veterinary officers and skilled veterinary field assistants, youths were unable to treat their sick animals in time, leading to the death of the animals in some cases.

In this region, the non-availability of common medicines and vaccines against *Peste des Petits Ruminants* (PPR), enterotoxaemia, etc. is also a severe impediment to the goat keepers. In some cases, the scarcity of grain/feeding material was also one of the perceived problems (8th problem).

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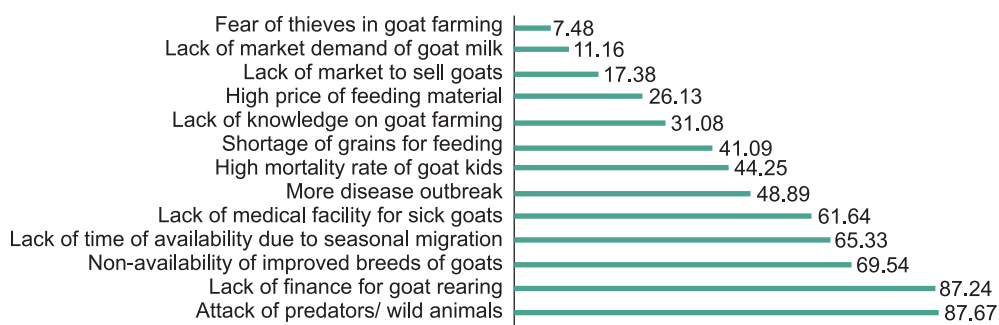


Fig. 1. Participatory problems identification in goat rearing (in %), Banswara district, Rajasthan, India (N=73).

Owing to the lack of feed and fodder, animal production has been severely impacted. Rajkumar and Kavithaa (2014) also noted that one of the major feeding problems of goat farming was the lack of green fodder availability. The 9th problem was the lack of knowledge about scientific practices in goat farming. Many youths agreed that the financial problem was major problem in goat rearing, such as high feed material costs, a lack of sufficient market to sell goat and less market demand of goat milk, and therefore they ranked as 10th, 11th, and 12th problems, respectively. Youth disclosed that they have open space for goat rearing so they have to take care of goats from theft during the night (13th problem).

SUMMARY

Goat farming is a suitable option for revenue generation for small-scale farmers and tribal people as it requires meager investment. Goats can efficiently survive and sustain on sparse vegetation and extreme climatic conditions. Hence, a study was undertaken in the tribal-dominated Banswara district of Rajasthan state to identify problems perceived by youths in goat rearing. A total of 73 tribal youth responded to the study. RBQ technique was employed to identify the problems in goat farming. Predators attack was identified as a major problem (87.67%), followed by lack of funding and unavailability of improved goat breeds (87.24%). So, this study recommended that to prevent goats from predators, proper housing is necessary. So, KVK should maintain follow-ups with participants and provide financial help to initiate venture after skill development. Therefore, youths' migration from rural to urban area could be optimized in

tribal areas. In addition to the ARYA project, the integration of various government schemes would benefit scaling up this profitable venture for tribal youths.

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