



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.03

TPI 2018; 7(7): 844-847

© 2018 TPI

www.thepharmajournal.com

Received: 25-05-2018

Accepted: 26-06-2018

Anupama Jena

PhD Scholars, Division of Extension Education, ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, India

Prasanta Kumar K Mishra

PhD Scholars, Division of Animal Biochemistry, ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, India

Sadhna Ojha

PhD Scholars, Division of Livestock Production Technology, ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, India

Correspondence

Anupama Jena

PhD Scholars, Division of Extension Education, ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, India

Training needs of goat farmers: An analysis

Anupama Jena, Prasanta Kumar K Mishra and Sadhna Ojha

Abstract

Agriculture and animal husbandry complement and supplement each other. In animal husbandry sector various sub sectors are there but goat husbandry is considered as an effective mean for the below poverty farmers of India because it needs less input and in comparison to that output or profitability remains high. Various farmers oriented training programmes are being organized by different organizations but without assessing their need, interest and convenience. There are multifarious need of farmers with respect to goat husbandry like training need on feeding, breeding, housing, health care, marketing, product preparation, care and management of new born etc. among which need of information related to health care and feeding aspects of animals dominates other needs again they think if training programmes can be organized as per their convenience then that would definitely help them in better management of livestock. So mere organization of training programmes will not solve the purpose, a chain of activities from training need analysis, planning, implementation, follow-up of training activities can bring some desirable changes at the intent level.

Keywords: Training needs, goat farmers, complement and supplement

1. Introduction

Animal husbandry has always been an indispensable part of rural India, which accounts for the livelihood of a sizable section of the population. Estimates of 42 percent of the poor worldwide are dependent on livestock as part of their livelihood (Thornton *et al.*, 2002). Due to unforeseen consequences of nature on agriculture, animal husbandry remained as the source of cash income for the subsistence of farmers as such livestock plays an integral part of Indian agriculture. In this context, small ruminants especially goat has a tremendous potential to be projected as 'future animal' for both rural and urban India (CIRG, 2011). Since time goat is being considered as 'poor man's cow', 'mobile bank', 'walking refrigerator', as goat husbandry needs less input and in comparison to that output or profitability remains high. India is among the highest small ruminants holding countries in the world having 15 per cent of world's goat and 6 per cent of

Sheep (SA PPLPP, 2011). But, goat production in India has low productivity *per se* which may be attributed to various factors like shortage of feed and fodder, lack of scientific knowledge, rearing non-descript breeds, low fertility etc. which are also considered to be the major constraints of goat farming (Lande, 2004) [6]. So farmers are not aware about all these aspects, so instead of increasing the population of animals there focus should be diverted towards increasing productivity. So training is considered as most important method in this aspect. Training programme for goat rearers, its proper execution, monitoring and evaluation plays important role for its effectiveness. Absence of training need assessment and shortage of training time are the most important problems identified in training process (Tesfaye *et al.*, 2009) [16]. So this literature is entitled to have a look on the training needs of the goat farmers, which will help both government and non-government sectors to impose proper training programmes as per the need of poor farmers.

A number of studies on this aspect revealed the training needs of goat farmers on different aspects like

2.1 Overall training needs in goat production and management

Majority of the respondents had medium level of training needs on overall goat production and management, followed by low and high level of training needs (Tekale, M. *et al.*, 2013, Gaikwad, 2003) [15, 5]. Majority of the small ruminant farmers perceived training needs in health care as most important, followed by feeding and marketing and finance with ranks I, II and III, respectively. Majority of the farmers' perception was between 'most important' to

‘somewhat important’ for the areas of health care, feeding, breeding, housing and management and marketing and finance, while majority of the farmers perceived ‘somewhat important’ to ‘least important’ for products preparation. Almost similar findings were reported by Tekale *et al.* (2013) ^[15], Al-Shadiadeh (2007) ^[1] and Mohan *et al.* (2006) ^[9]. Health care of animals was the most felt training need as without proper health productivity is a dream. So to make animals more productive, health care aspect should be taken into consideration, so, maximum farmers were in a need of the information related to health care management in goat rearing.

2.2 Training need on breeding

Selection of breed was ranked first followed by pregnancy diagnosis (rank II), infertility problem identification (rank III), estrous cycle and time of mating (rank IV) and estrous detection (rank V). Further, training on estrous cycle and time of mating was least needed since the mating was natural in the study area without any human interventions (Balaraju, B.L *et al.* 2014 ^[2], Tekale *et al.* 2013 ^[15] and Pagaria (2012) ^[10]. Among goat breeding practices, male and female goat selection for breeding and practices for increasing twinning and triplet percentage were considered to be ‘most important’ training needs while methods of breeding for improving genetic potentiality was perceived as ‘important’ need (Tekale, M. *et al.*, 2013, Gaikwad, 2009) ^[15, 4]. Artificial Insemination (AI) in goats (40.42%) and flushing procedure for synchronization of estrus (43.34%) were considered as ‘not important’ training needs (Tekale, M. *et al.*, 2013) ^[15]. These studies revealed that selection of good and potential breed for increasing productivity ranked the top most in training need perceived by the farmers, as farmers may be not cognizant about the breeds, again selection of male and female kids and also their productive potentials. Further, in goat rearing farmers are mostly dependent on natural breeding they did not depend on artificial insemination (A.I), so they perceive information related to this field as less needed to them.

2.3 Training need on feeding

Colostrum feeding was perceived as ‘most needed’ training need followed by balanced feeding and its economical composition and fodder varieties and their cultivation with rank I, II and III, respectively. Majority of respondents perceived mineral mixture supplementation as ‘least needed’ followed by preservation of fodder, feeding of different age groups and nutritional management of breeding problem (Balaraju, B.L *et al.* 2014) ^[2]. One more study revealed that farmers needed varying levels of training in mineral mixture feeding, colostrum feeding and nutritional requirement of different age groups (Senthilkumar and Thanaseelan, 2013) ^[14]. Goat keepers perceived feeding of does before and after kidding as ‘most important’ while, feeding of does and pregnant does and its importance (45.00%), feeding of kids and its importance (47.92%), fodder production for goat and its importance (48.33%) and storage of fodder and its benefits (46.25%) were perceived as ‘important’ training needs in the study area. mineral mixture in goat feeding (46.25%) were felt as ‘not important’ training needs by goat keepers (Tekale, M. *et al.*, 2013 ^[15]). Ration formulation (75.0%) and forage management (81.7%) were the most perceived training needs by majority of farmers (Chah, J. M *et al.*, 2013) ^[3]. These studies revealed that with respect to feeding of goats, farmers are concerned towards the feeding practices like balanced

feeding of pregnant dam, feeding of colostrum to kids and feed composition in a balanced feed because they consider that feeding of balanced ration helps in increasing the productivity of animals, which will ultimately affect their productivity. But they are less concerned about the feeding of mineral mixture as the less important training need for them.

2.4 Training need on health care aspect

The study about goat health care aspect indicated that, more than 50 per cent of the respondents perceived training need in zoonotic diseases control and their transmission (65%), deworming (54.17%), vaccination (60%) and common diseases and their preventive measures (52.5%) as ‘most needed’ and were ranked as I, II, III and IV, respectively. The ranks for other sub-areas like first aid treatment and ectoparasite control was V and VI, respectively (Balaraju, B.L *et al.* 2014) ^[2]. In a similar study, Chah *et al.* (2013) ^[3] and Lioutas *et al.* (2010) ^[7] stated that majority of the farmers perceived training needs on disease and health care aspects while Mohan *et al.* (2006) ^[9] revealed that control of ectoparasites got more priority. vaccination for prevention of contagious diseases and its importance (62.08%), information about disease like ET, Pox, HS (67.08%) and control of internal and external parasites and its importance (45.00%) were considered to be ‘most important’ training needs while diseases of goats and home remedies (37.50%) were perceived as ‘important’ training needs in health care and disease control of goats (Tekale, M. *et al.*, 2013, Braj *et al.* 2006 and Gaikwad, 2009) ^[15, 4]. Study also indicated that information about cutting of naval chord and its importance (39.58 %) was felt as ‘not important’ by goat keepers. More training need on zoonotic and contagious diseases and their prevention was may be due to the reason that farmers were facing severe loss, sometimes whole flock got wasted due to sudden outbreak of diseases, so taking this into eye information on all these aspects along with various preventive measures to keep animals away from diseases were perceived as most important training need by farmers.

2.5 Training need on care and management of new born animals

Among various practices in goat care and management, methods of goat rearing (36.66 %), care of does before, after and at the time of kidding (52.92%), care and management of kids (48.75%), care and management of milking does (40.83%) and castration of kid for sale and its importance (45.00%) were perceived to be ‘most important’ training needs in the study area (Tekale, M. *et al.*, 2013) ^[15]. care of new born ranked first among the management practices (Balaraju, B.L *et al.* 2014) ^[2]. Mandavkar *et al.* (2011) ^[8] reported that farmers perceived medium training need in care of kids, weaning. Among the various managemental practices, care and management of kid and care of pregnant dam were the most delicate aspect of goat rearing, so these were most felt training need by the farmers.

2.6 Training need for goat housing

Construction of scientific low cost housing (rank II) and animal shed sanitation (rank III) (Balaraju, B.L *et al.*, 2014) ^[2]. Housing system and its sanitation was the least felt training need by the farmers (Tekale, M. *et al.*, 2013) ^[15]. There was a variation of response with regard to scientific housing for goat and its sanitation measures as because goats are mostly tethered and they are rarely stall fed. So they do not require

any extra housing facility. So farmers had a variation of view with respect to this aspect.

2.7 Training for Marketing of goat

Among marketing and finance category, majority (67.50%) of the respondents perceived training in banking and insurance as 'most needed' followed by sale of livestock and its products and purchase of livestock and inputs, with ranks I, II and III, respectively (Balaraju, B.L *et al.*, 2014) ^[2]. Record keeping and its importance (41.66%) and management tools for profitable goat farm and its importance (39.58%) were considered as 'most important' while selling management of kids and its importance (42.91%) was perceived as 'important' training need in marketing and record keeping aspects (Tekale, M. *et al.*, 2013) ^[15]. Marketing was the major aspect in terms of small animal rearing, due to unavailability of proper market chain, middle men takes maximum profit on the selling of products. So goat farmers felt training need for proper marketing chain. Further, farmers were still not aware about the term livestock insurance so there was a need felt for training regarding this aspect also.

2.8 Training need on product preparation

Majority (70.00%) of the respondent perceived milk and milk products preparation and preservation as 'least needed' area followed by meat products preparation and preservation since majority of the farmers reared sheep and goat for marketing and meat purpose. Further, majority of the farmers responded that they preferred chicken over mutton (Balaraju, B.L *et al.*, 2014) ^[2] almost similar consumption pattern was reported by Rathod *et al.* (2011) ^[13]. In goat husbandry farmers were more focused towards increase of meat productivity and they sell the raw meat rather than going for any product. Farmers were also not much focused towards milk of goat. So they did not feel much requirement of training needs on product preparation.

2.9 Training needs in terms of duration, place and season needs for training programme

Majority (79.58%) of respondents expressed to have one week training followed by two weeks training (14.58%) and three weeks training programme (5.83%) at their own village (90.83%). Almost same number of farmers preferred to attend training programmes in veterinary college and government training centres (4.58%). Since goat keepers had very less free time, they preferred training of only one week at their villages (Tekale, M. *et al.* 2014.). Gaikwad (2003) ^[5] and Patil (2009) ^[12] also reported similar findings. The study also revealed that significant percentage of respondents (72.91%) preferred summer season for training, while 11.66 and 15.58 per cent respondents expressed rainy season and winter season respectively and negligible percentage (0.83%) of respondents were ready for training at any time of the year. Similar finding was reported by Gaikwad (2003) ^[5]. Training needs a proper place, time and duration preferable to farmers. Without proper planning training becomes a failure. So while planning for an effective training programme all these factors should be taken into consideration.

2.10 Training need for awareness

Farmers felt a need for cheaper rate periodicals; they were also in need of methods like demonstration, kisan melas and kisan gosthi for creating awareness about farm technologies. Input dealers needed to be trained and made skill full, so that

right information can be transmitted to the farmers (Pal *et al.*, 2009) ^[11].

3 Relationship between personal and socio-economic characteristics with training needs

All personal and socioeconomic characteristics were positively correlated with the training needs of goat keepers. According to Tekale, M. *et al.*, 2014, age had positive relationship with training needs of the farmers which may be due to the fact that, as age of goat keepers increased, they realized the importance of training in goat keeping. The study depicted that education was positively and significantly associated with training needs which might be due to increased awareness about the goat enterprise after education. Family size of goat keepers showed positive and significant relationship with training needs which enhanced their goat farming and fetched higher income. The land holding of goat keepers had positive and highly significant relationship with training needs in goat farming. This might be due to the fact that they could increase the size of their goat enterprise if the land holding was more leading to higher returns from goat farming. Flock size and training needs of goat keepers showed positive and highly significant relationship which indicated that, increasing flock size made the farmers to develop an entrepreneurial behavior towards goat farming while, annual income had positive and significant relationship with training needs of goat farmers which may be due to the fact that increased income made the farmers to adopt scientific management practices. It was noticed that social participation had positive and significant relationship with training needs of the farmers. Thus, with the increased social participation, farmers felt higher training needs in goat farming which is in agreement with the findings of Gaikwad (2003) ^[5]. The knowledge level of goat keepers had highly significant relationship with training needs which indicated that thrust for knowledge created the need for deep and specific knowledge and adoption of improved management practices. There was a positive and highly significant relationship between adoptions of practices with training needs of goat farmers which indicated that adoption of improved practices always made the farmers to know better about the subject.

4 Conclusion

A holistic approach for fulfilling the training needs of the farmers is the need of time. government agencies, non-government organizations, training institutes all should take proper care while formulating or planning some training programmes for farmers, because without farmers' consent that will be a mere programme for the sake of record only. Farmers are in need of information related to health care and feeding aspects mostly again they think if training programmes can be organized as per their convenience then that would definitely help them in better management of livestock. So a number of training programmes need to be planned and executed by the extension agencies as per the need, convenience, interest of farmers to maximize profit from goat rearing and to consider it a primary activity.

5. References

1. Al-Shadiadeh ANH. Descriptive study of the training needs for men and women farmers in semi-desert areas a case study of South Jordan. *World. Appl. Sci. J.* 2007; 2(1):12-21.
2. Balaraju BL, Khandekar P, Chander M, Kumar DH,

- Rathod P. Small ruminant farmers' training needs in Karnataka as perceived by farmers and veterinarians. *The Asian Journal of Animal Science*. 2014; 9(1):52-58.
3. Chah JM, Obi UP, Ndofo-Foleng HM. Management practices and perceived training needs of small ruminant farmers in Anambra State, Nigeria. *Afr. J Agric. Res.* 2013; 8(22):2713-2721.
 4. Gaikwad SP, Bodake HD, Kalantri LB. Training needs of goat keepers. *Agriculture Update*. 2009; 4(1,2):82-85.
 5. Gaikwad SP. Training needs of goat keepers. M.Sc. (Agri.) Thesis, MAU, Parbhani, 2003.
 6. Landge S. Study of goat production practices by goat keepers of Kandhar block in Nanded district. M.V.Sc. Thesis, MAFSU, Nagpur, 2004.
 7. Lioutas ED, Tzimitra-Kalogianni I, Charatsari C. Small ruminant producer's training needs and factors discouraging participation in agricultural education training programs. *Livest. Res. Rural. Dev.* 2010; 22(7):144-152.
 8. Madavkar PM, Sawant PA, Mahadik RP. Training needs of tribals in relation to agricultural occupation. *Raj. J Extn. Edu.* 2011; 19:20-24.
 9. Mohan B, Sagar RL, Singh K. Study on evaluation of training needs of goat farmers. *Indian J Small Ruminants*. 2006; 12(1):21-25.
 10. Pagaria P. Training needs in sheep husbandry of farm women in Barmer district. *Agric. Update*. 2012; 7(1, 2):133-135.
 11. Pal SB, Singh AK, Singh L. Communication pattern in drylands of Uttar Pradesh. *Indian Res. J Extn. Edu.* 2009; 9(1):54-57.
 12. Patil AP, Gawande SH, Gobode MR, Nande MD. Training needs of dairy farmers in Nagpur district. *Veterinary World*. 2009; 2(5):187-190.
 13. Rathod P, Landge S, Nikam TR, Hatey AA. Preferential poultry meat consumption and cooking patterns in Bijapur district of Karnataka. *J Vet. Public Health*. 2011; 9(1):39-42.
 14. Senthilkumar S, Thanaseelaan V. Training need assessment of small ruminants farmers in Southern Tamil Nadu. *Indian J Small Ruminants*. 2013; 19(2):232-234.
 15. Tekale M, Deshmukh DS, Rathod P, Sawant M. Training needs of goat keepers in Maharashtra. *Indian Res. J Extn. Edu.* 2013; 13(2):67-71.
 16. Tesfaye T, Karippai RS, Tesfaye T. Farmers training programme of Ethiopian Institute of Agricultural Research: an appraisal. *Afr. J Agric. Res.* 2009; 4(4):409-421.