

Training Needs of Goat Keepers in Maharashtra

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ABSTRACT

An ex-post facto study was conducted in Jalna district of Maharashtra State with the objective to know the training needs of goat keepers. The study revealed that about 35 per cent and 37 per cent of respondents perceived training needs in goat care and management as 'most important' and 'not important' activity respectively. About 24 and 41 per cent of farmers perceived training needs in goat feeding management as 'most important' and 'important' activity respectively while about 33 and 38 per cent of farmers perceived training needs in goat breeding management as 'most important' and 'important' activity respectively. With regards to health care and disease control management, 45 and 30 per cent goat keepers felt training as most important and important respectively while about 34 and 36 per cent of farmers perceived training needs in goat marketing management as 'most important' and 'important' activity respectively. Majority of respondents preferred training of one week duration during summer season in their own village. The study concluded that, goat keepers needed training on feeding and health care management to a greater extent to improve the production potential of goats. Hence, Extension agencies should disseminate information based on training needs at the field conditions for livelihood security of the farmers.

Key words: Goat Keepers; Maharashtra; Training Needs;

Among various livestock production enterprises, goat farming is one of the important enterprises, which supports the rural households by providing gainful employment and steady income for the rural masses. 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 (Landge, 2004). The issue of poor adoption and diffusion of latest technologies like management, breeding, feeding etc. must be effectively addressed at field conditions for improving production and productivity. Very frequently it is observed that, there is a gap between management practices followed by the farmers and the available scientific technologies. Hence, it is very essential to bridge this gap by using effective Extension tools and techniques to disseminate the necessary information to goat farmers at the earliest.

In this context, need based training programmes

are very essential for transfer of technologies at field conditions. The training is "systematized tailor made programme to suit the needs of a particular group for developing certain attitudes, actions, skills and abilities in individuals irrespective of their functional levels" (Bhattacharyya, 2006). Since training programme should start from knowledge level of the farmers, the first step would be to understand where the farmers stand with respect to any concerned enterprise or practice. Hence, identifying training needs involves establishing areas where individuals lack skills, knowledge and ability in effectively performing the operations and also identifying organizational constraints that are creating road blocks in the performance (Mirza, 2005). Hence, the studies on accessing training needs of goat farmers are of paramount importance to the extension agencies involved in rural development. So, an earnest effort was made to ascertain the training needs of goat farmers, preferred duration, season and place of training in Jalna District of Maharashtra.

METHODOLOGY

The present study was conducted in purposively selected Jalna district of Marathwada region in Maharashtra State due to the fact that goat population was declining over the years in this region (Govt. of Maharashtra reports). Due to fast growing industrialization in the region, the farmers neglected scientific goat farming which led to poor adoption and diffusion of technologies. Three blocks, Bhokardan, Ambad and Jalna were selected due to highest goat keeping farmers of the society. Four villages from each block were selected randomly and from each selected village, twenty goat keepers were selected in consultation with Livestock Development Officers, Livestock Supervisors and Village Level Functionaries making a sample size of 240 goat keepers. The study measure the training needs in 3 point continuum quantified by assigning the score of 2, 1 and 0 for 'most important', 'important' and 'not important' category of training needs in five selected areas viz., goat care and management, animal health care and disease control, feeding management, animal breeding, and marketing & record keeping. The collected data was analyzed with the help of statistical tools like frequency, percentage, mean and standard deviation. The relationship between personal and socio-economic characteristic with the training needs of the farmers was analyzed through correlation coefficient and multiple regression tests.

RESULTS AND DISCUSSION

Distribution of farmers based on overall training needs in goat production and management: According to Table 1, majority of the respondents (55.83%) had medium level of training needs, while 25.83 per cent and 18.34 per cent respondents had low and high level of training needs, respectively. This finding is in line with finding reported by *Gaikwad (2003)*

With regards to goat care and management practices, highest number of respondents (37.08%) perceived that training was 'not important' in the study area. Table 2 also depicts that about 35 per cent and 28

Table 1. Distribution of respondents based on overall training needs

Category	No.	%
Low (upto 24)	62	25.83
Medium (25 to 35)	134	55.83
High (36 and above)	44	18.34
Total	240	100.00

per cent goat keepers replied trainings as 'most important' and 'important' respectively. This might be due to lack of interest and unawareness about the importance of scientific practices. This finding is in conformity with *Dakhore et al. (2002)*. In the study region, about 41 per cent and 32 per cent of the goat keepers perceived training as 'important' and 'not important' respectively, while, 24 per cent respondents perceived the training as 'most important' in knowing the feeding management of goats. *Patil et al. (2009)* also reported similar findings. The importance of training need on goat breeding revealed that 38 per cent and 33 per cent farmers perceived training as 'important' and 'most important' while, about 29 per cent goat keepers felt training as 'not important' in the study region. With regards to goat health care and disease control, 45.42 per cent and 30.00 per cent farmers' perceived trainings as 'most important' and 'important' respectively while about 25 per cent goat keepers replied trainings as 'not important' in the study area. The findings are in line with the studies of *Patil et al. (2009)*. Table 2 depicts that about 36 per cent and 34 per cent goat keepers replied trainings as 'important' and 'most important' respectively while, remaining 28 per cent goat keepers felt trainings as 'not important' with regards to goat marketing and record keeping. The investigation conducted by *Braj et.al (2006)* revealed that health management was the first area of training followed by housing and nutritional management.

Training needs of goat keepers in different goat production and management practices: An attempt was made to identify the training needs of the respondents in major five areas viz., goat care and management, feeding, breeding, health care and disease control, and marketing and record keeping.

Table 2 depicted that 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. The study also revealed that, breeds of goats and their importance (59.17 %), importance of feeding colostrums (59.58%) and importance of housing and its cleaning (59.58%) were perceived as 'not important' training needs in goat care and management.

Table 2. Distribution of the respondents based on training needs in varourious managerial practices (N= 240)

Training areas varourious managerial practices	Most Important		Important		Not Important	
	No.	%	No.	%	No.	%
<i>Training needs on goat production and management practices</i>						
Care and management	85	35.42	66	27.5	89	37.08
Feeding management	57	23.75	98	40.83	85	32.42
Breeding management	80	33.33	90	37.5	70	29.17
Health care and disease control	109	45.42	72	30.00	59	24.58
Marketing and record keeping	82	34.17	90	35.5	68	28.33
<i>Training in goat Care and management</i>						
Methods of goat rearing and its importance	88	36.66	76	31.67	76	31.67
Breeds of goat and its importance	48	20.00	50	20.83	142	59.17
Care of does before, during and after kidding	127	52.92	84	35.00	29	12.08
Care and management of kids	117	48.75	63	26.25	60	25.00
Importance of colostrum	55	22.92	42	17.5	143	59.58
Care and management of milking does	98	40.83	68	28.34	74	30.83
Castration of kid for sale and its importance	108	45.00	87	36.25	45	18.75
Housing system and its cleaning	42	17.5	55	22.91	143	59.58
<i>Training in feeding management</i>						
Feeding of does and pregnant does and its importance	45	18.75	108	45.00	87	36.25
Care about feeding of does before and after kidding	100	41.66	80	33.67	60	25.00
Feeding of kids and its importance	46	19.16	115	47.92	79	32.92
Feeding of buck and its importance	69	28.75	80	33.33	91	37.91
Fodder production for goat and its importance	40	16.68	116	48.33	84	35.00
Storage of fodder and its benefits	63	26.25	111	46.25	66	27.50
Enrichment of poor quality roughages	44	18.33	94	39.17	102	42.5
Importance of mineral mixture in goat feeding	49	20.41	80	33.33	111	46.25
<i>Training in goat breeding management</i>						
Selection and its importance of male and female goat for breeding	96	40.00	77	32.08	67	27.92
Practices for increasing twinning and triplete percentage	146	60.83	76	31.67	18	7.5
Artificial insemination in goat and its importance	49	20.41	94	39.17	97	40.42
Methods of breeding for improving the good genetic potentiality	46	19.16	134	55.83	60	25.00
Flushing procedure for synchronization of estrus	65	27.08	71	29.58	104	43.34
<i>Training in health care and disease control</i>						
Vaccination for prevention of contagious Diseases and its importance	149	62.08	55	22.91	36	15.00
Information about disease i.e.ET, Pox, HS and Pneumonia	161	67.08	44	18.33	35	14.58
Information about cutting of Naval cord and its importance	61	25.41	84	35.00	95	39.58
Prevention and destruction of internal and external parasite	108	45.00	87	36.25	45	18.75
Diseases of goat and home remedies	65	27.08	90	37.5	85	35.42
<i>Training in Marketing and record keeping</i>						
Register of record keeping and its importance	100	41.66	79	32.91	61	25.41
Selling management of kids and its importance	50	20.83	103	42.91	87	36.25
Tools for profitable goat farm and its importance	95	39.58	87	36.25	58	24.16

Table 2 depicted that about 42 per cent of the 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. Among various practices, feeding of buck and its importance (37.91%), enrichment of poor quality roughages (42.5%) and

importance of mineral mixture in goat feeding (46.25%) were felt as 'not important' training needs by goat keepers.

Among goat breeding practices, male and female goat selection for breeding (40.00%) and practices for increasing twinning and triplet percentage (60.83%) were considered to be 'most important' training needs while methods of breeding for improving genetic potentiality (55.83%) was perceived as 'important' need in the study area. Similar finding was reported by *Gaikwad (2009)*. Table 2 also indicated that Artificial Insemination (AI) in goats (40.42%) and flushing procedure for synchronization of estrus (43.34%) were considered as 'not important' training needs. This might be due to farmers' satisfaction with natural service rather than AI in goats.

Table 2 reveals that, 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. Almost similar finding were reported by *Braj et.al (2006)* and *Gaikwad (2009)*. The study also indicated that information about cutting of naval chord and its importance (39.58%) was felt as 'not important' by goat keepers in the study area.

Table 2 also depicted that 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.

Training needs in terms of duration, place and season needs for training programme: Table 3 depicted that, 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. *Gaikwad (2003)* and *Patil (2009)* also reported similar findings.

The study also revealed that significant percentage of respondents (72.91%) preferred summer season for

Table 3. Distribution of farmers on the basis of training duration, place and preferred season for training programme (N= 240)

Category	No.	%
<i>Duration of training</i>		
1 week	191	79.58
2 week	35	14.58
3 week	14	5.83
<i>Place of training</i>		
<i>Veterinary college</i>	11	4.58
Govt. training centre	11	4.58
Own village	218	90.83
<i>Season</i>		
Summer	175	72.91
Rainy	28	11.66
Winter	35	14.58
Any time	2	0.83

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)*.

Relationship between personal and socio-economic characteristics with training needs: Table 4 depicts that correlation coefficient was determined to know the relationship between personal and socio-economic characteristic with the training needs of the farmers. It was interesting to note that all personal and socio-economic characteristics were positively correlated with the training needs of goat keepers.

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 improved 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 behaviour towards goat farming while, annual income had positive and significant

Table 4. Relationship between the selected independent variables and dependent variable

Independent variables	Correlation coefficient 'r' values
Age	0.082 NS
Education	0.382 **
Family size	0.163 *
Land holding	0.605**
Flock size	0.515 **
Annual income	0.508**
Social participation	0.525**
Knowledge	0.779**
Adoption	0.517**

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

NS = Non-significant

Table 5. Multiple regression analysis of training needs of goat keepers

Independent variables	'b' value	S.E.	Calculated 't' value
Age	0.1136	0.1136	5.63847
Education	0.2319	0.2319	0.85844
Family size	0.4163	0.4163	3.1213
Land holding	-0.00379	-0.00379	-1.8128
Herd size	1.2058	1.2058	5.045
Annual income	-0.00002	-0.00002	-1.50011
Social participation	0.6343	0.6343	6.6404
Knowledge	0.8924	0.8924	0.16464
Adoption	0.26253	0.26253	4.60641

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

NS – Non-significant $R^2 = 0.823$

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)*. 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.

CONCLUSION

The study concluded that, goat keepers needed training on feeding and health care management to a greater extent to improve the production potential of goats. The goat farmers preferred training of one week duration during summer season in their own village. Hence, Extension agencies should disseminate information based on training needs at the field conditions for livelihood security of the farmers.

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