

# Training Need Assessment of Tribal Farmers in Goat Rearing Practices in Kandhamal District of Odisha

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**Abstract:** Goat rearing had a huge potential to emerge as a very good source of income and employment for the rural people. In spite of having potential of good economic returns, goat farmers do not earn good income from such activities mainly due to lack of training. In order to know the training needs of tribal respondents in areas of goat rearing study was undertaken in Kandhamal district of Odisha. A total no. of 60 respondent was identified from 6 villages for data collection. In goat rearing practices training needs in disease management ranked I, in which training about preventive measures to control disease, information about first aid treatment were top priorities by majority (86% and 82%) of tribal farmers respectively. Followed by housing management where training on different housing parameters (76.7%), floor type and management (70%) were top priorities. "Training Needs Assessment" (TNA) is one such method of determining training needs and identifying what training is required to fill the knowledge gap, so that the present existing situation can be known well and accordingly training need could be identified in concerned areas which will ensure that the training is addressing the actual need of the tribal farmers.

**Keywords:** Training Need Assessment, Goat, Disease, Housing, Knowledge gap

## I. INTRODUCTION

Animal husbandry is one of the most important components of agriculture that contributes to the overall economic growth of India. This sector contributes 4.11 per cent of GDP and 25.6 per cent of total agriculture GDP. About 20.5 million people depend upon livestock for their livelihood. Livestock contribute 16 per cent to the income of small farm households as against an average of 14 per cent for all rural households (Livestock census report -2012). Goat rearing have huge potential to emerge as a very good source of income and employment for the rural people. The tribal farmers who cannot afford to maintain large animals like cow or a buffalo find goat as the best alternative source of supplementary income. In spite of having potential of good economic returns from goat rearing tribal farmers do not earn good income from such activities. So the rearing of goats for livelihood security of tribal farmers needs to be improved substantially to increase productivity and profitability. Keeping in view the importance of training, it is proposed to take up the training need assessment (TNA) of tribal farmers in goat rearing practices. "Training Needs Assessment" (TNA) is the method of determining training need and identifying what training is required to fill the knowledge gap. In goat rearing, the training need assessment can be done in areas such as care and management, feeding, breeding, housing, disease management, marketing and awareness about govt. scheme, so that the present existing situation can be known well and accordingly training need could be identified in concerned areas that will ensure to address actual training needs of the tribal farmers and will help in increasing the tribal farmers income.

## II. METHODOLOGY

The present study was undertaken in Kandhamal district of Odisha which is predominantly inhabited by tribal population, from this district two block and from each block three villages and from each village ten beneficiaries were selected as respondents for study. Thus a total no. of 60 respondents were identified from 6 villages for data collection. The tribal farmers selected were on the basis of their experience in goat rearing practices and number of goat being kept by them. The experience has been taken as a minimum of two years continuous rearing practices, as per the number is concerned farmers having at least five numbers of goats were selected as respondents, which would enable to study the true nature and dimension of training needs.

### III. RESULTS AND DISCUSSION

#### Overall training needs on different training areas in goat

The table 1 reveals that training needs on disease management of goats ranked I, followed by training on shed management of goats ranked II, training on care and management ranked III, feeding management of goats ranked IV, breeding management of goats ranked V, record keeping and marketing of goats ranked VI, and training on Government schemes of goats ranked VII, respectively. Similar findings were reported by Mohan *et.al.* (2006) that health management was the first area of training followed by housing management, nutritional management and products management in goat. The reason being for giving the priority on disease management might be due to high mortality of kids/goats for which they need to be trained on disease management. Similarly, reason for prioritizing housing management may be that the respondents were lacking the skill of goat shed construction, maintainance of hygienic floor etc. for which they need training. Similarly, they need training on care and management, feeding management, breeding management, record keeping and marketing and training on Government schemes of goat respectively for profitable goat farming.

Table 1. Overall training needs on different training areas in goats

Sl.No.	Training areas	Mean score	Rank
1.	Disease Management of Goat	2.445	I
2.	Shed Management of Goat	2.439	II
3.	Care & Management of Goat	2.431	III
4.	Feeding Management of Goat	2.364	IV
5.	Breeding Management of Goat	2.337	V
6.	Record keeping and marketing of Goat	2.333	VI
7.	Government schemes of Goat	2.329	VII

Table 2. Ranking of Training needs in different areas in goat rearing practices

Sl. No.	Training need areas	MOST IMP.		IMP.		NOT IMP.		Total score	Mean score	Rank
		f	%	f	%	f	%			
A	Training needs areas on Care and Management of goat									
1.	Care and management of kid	50	83.00	6	10.00	4	7.00	166	2.766	I
2.	Care of goats in different season	47	78.00	6	10.00	7	12.00	160	2.666	II
3.	Care of does before, after and at the time of kidding	44	73.00	7	12.00	9	15.00	155	2.583	III
B	Training needs areas on Feeding management of goat									
1.	Hay and silage making	53	88.30	5	8.30	2	3.30	171	2.850	I
2.	Training to make balanced ration	47	78.00	10	17.00	3	5.00	164	2.733	II
3.	Feeding of kids	40	67.00	18	30.00	2	3.00	158	2.633	III
C	Training needs areas on Breeding management of goat									
1.	Practice for increasing twinning and triplet percentage	50	83.40	8	13.30	2	3.30	168	2.800	I
2.	Selection and importance of breed	46	76.70	11	18.30	3	5.00	163	2.716	II
6.	Knowledge about superior male for mating	31	52.00	21	35.00	8	13.00	143	2.383	III

<b>D</b>	<b>Training needs areas on Shed management of goat</b>									
1.	Different parameters for housing	46	76.70	13	21.70	1	1.60	165	2.750	I
2.	Floor types and management	42	70.00	15	25.00	3	5.00	159	2.650	II
3.	Feeding watering space for shed.	34	56.70	22	36.70	4	6.60	150	2.500	III
<b>E</b>	<b>Training needs areas on Disease management of goat</b>									
1.	Various preventive measures to be taken against different disease	52	86.00	4	7.00	4	7.00	168	2.800	I
2.	Information about first aid treatment	49	82.00	9	15.00	2	3.00	167	2.783	II
3.	Vaccination for prevention of diseases	48	80.00	9	15.00	3	5.00	165	2.750	III
<b>F</b>	<b>Training needs areas on Record keeping and Marketing of goat</b>									
1.	Knowledge about, retailer, whole seller and purchaser	35	58.40	24	40.00	1	1.60	154	2.566	I
2.	Information about Marketing channels	32	53.00	22	37.00	6	10.00	146	2.433	II
3.	Selling and purchasing of kids and its importance	31	52.00	23	38.00	6	10.00	145	2.416	III
<b>G</b>	<b>Training need areas on Government schemes of goat</b>									
1.	Knowledge about loan and subsidies	44	73.00	12	20.00	4	7.00	160	2.666	I
2.	Information about state government schemes	38	63.40	21	35.00	1	1.60	157	2.616	II
3.	Information about various NABARD schemes	41	68.40	14	23.30	5	8.30	156	2.600	III

### Training need areas on Care and Management of goat

Basing on the finding of training needs of respondents in care and management of goat, respondents ranked I to the training need on care and management of kid followed by ranked II to the care and management of goat in different season, ranked III to the care of does before, after and at the time of kidding. Similar findings were reported by Mandavkar *et.al.* (2011) they found that tribal farmers were aware of some improved farming practices but did not have detail knowledge about them and also revealed that tribal goat keeping farmers reported maximum training need with respect to veterinary care of goat and care of pregnant goat. The reason for giving priority by the respondents on this subjects for training might be due to heavy mortality of kids at the time of kidding in different season put them in great loss.

### Training need areas on Feeding management of goat

The result reveals that the majority of tribal respondents ranked I to the training need on hay and silage making. Reason for giving priority of training on hay and silage making might be due to availability of good quantities of sugarcane hoovers. As observed the tribal farmers used to cultivate sweet corn as well as maize during rabi season due to which huge quantity of green leafs and hoovers were available. Further, the respondents gave priority for undergoing training on making balance ration and training on feeding of kids which rank II and III, respectively. Senthilkumar and Thanaseelan (2013) revealed that in small ruminants nutritional aspect was the most important area of training need in which specific sub area i.e. importance of mineral mixture in feed, colostrum feeding, Azolla feeding had top priority. The reason might be the farmers were interested for making more profit through better utilization of residues and also growth and production of the kids/goats through feeding balanced ration.

**Training need areas on Breeding management of goat**

The result reveals that the respondents ranked I the topic practice for increasing twinning and triplet percentage to undergo training. The reason being of assigning rank I to this training area might be for having more profit through increasing twinning and triplet percentage, this is followed by rank II selection and importance of breed. The reason for giving importance on this topic might be, the respondents were aware of fast growing goat breeds available in other states. Similarly, the topic on knowledge about superior male for mating ranked III by the respondents. Manzi *et.al.* (2013) found that most farmers preferred controlled natural mating and most male kids were castrated for sale in nearby markets. The reason might be they were interested in mate their local breed naturally with superior breeds.

**Training need areas on Shed management of goat**

The respondents ranked I the training topic on different parameters for goat shed construction. The reason might be the seasonal variations which effect the goat growth and production. Moreover, during winter season there is huge kid mortality that lead to huge loss to the farmers. This might be the reason for which farmers were interested to acquire the knowledge on techniques of construction of goat shed to reduce the goat mortality. Similarly, floor types and management ranked II by the respondents. The reason being farmers needs hygienically managed goat shed floor so that there will be less spread of diseases. Training area on Feeding and watering space for shed ranked III, reason may be more or less is technical subject that the farmers were interested to learn.

**Training need areas on Disease management of goat**

The result from table 2 reveals that respondents ranked I to the subject vaccination for prevention of diseases to undergo training, followed by ranked II to the subject on information about first aid treatment in poultry, ranked III to preventive measures to be taken against various disease. The reason for giving top priority to this area may be due to the respondents were interested to tackle the severity of disease spread by taking some preventive measures at their shed level. Similarly, farmers were also interested to know some of the basics of first aid treatment to avoid the future health complication of the goats.

**Training need areas on Record keeping and Marketing of goat**

As revealed from the table 2 that respondents ranked I to the selling and purchasing of poultry birds and its importance to undergo training, followed by ranked II to information about marketing to undergo training and training about retailer, whole seller and purchaser ranked III. The reason might be there was no systematic and organized goat marketing in the district. Goat farmers were selling their goats to unknown person nearby and were exploited by the middle men.

**Training need areas on Government schemes of goat**

The result reveals that respondents ranked I to the training subject on knowledge about loan and subsidies. The reason might be that sanctioning process of the loan is complex for which they need to know about the process of loan sanctioning. The respondents also prioritize to information about state government schemes that spelt out that they did not have sufficient information about different government schemes in the district. Similarly, they were also in need of undergoing training on information about various NABARD schemes.

**IV. CONCLUSION**

Basing on priority training areas as indicated in this study, there should be systematic and strategic training intervention in the respective area planned by the government or voluntary organization among the tribal for not only economic development of tribal but also overall socio-economic and socio-cultural, development of the tribal communities.

**REFERENCES**

- [1]. Mandavkar, P. M., Sawant, P. A., and Mahadik, R. P. 2011. Training needs of tribal in relation to agricultural occupation, *Raj. J. Extn. Edu.*, 1(19): 80-84.
- [2]. Manzi, M., Mutabazi, J., Hirwa, C.D., and Kugonza, D.R. 2013. Assessment of indigenous goat production system in rural areas of bugesera district in Rwanda, *Livestock Research for Rural Development*, 25(11): 51-53.
- [3]. Senthilkumar, S., and Thanaseelaan, V. 2013. Training needs assessment of small ruminant farmers in southern Tamil Nadu, *Indian Journal of Small Ruminants*, 19(2): 232-234.
- [4]. Mohan, B., Sagar, R.L., and Singh, K. 2006. Study on evaluation of training needs of goat Farmers, *Indian Journal of Small Ruminants*, 12(1):211-213.