Impact of Training on Knowledge Levels of Goat Rearing Farmer's in Bundi District of Rajasthan

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ABSTRACT

Goat husbandry is one of the important enterprises that enhance the income of rural households by providing gainful employment. To measure the farmer's knowledge towards goat farming study was conducted in Bundi District of Rajasthan. Seventy-two trainees of goat farming were selected for pre and post training evaluation test. All the goat farmers were imparted 10 day's trainings on different aspects of goat farming. The study revealed that before training, only 2.94 per cent of the trainees were having high level of knowledge and 79.41 per cent low level of knowledge on goat farming. After acquiring training 70.58 per cent of farmers possessed high level of knowledge and 23.52 per cent moderate level of knowledge towards improved goat husbandry practices. The awareness perceived by farmers about breeding, feeding, health, marketing and housing management was significantly ($P<0.05$) higher after training. The study suggested that such training programme proved beneficial to farmers for improving their knowledge and attitude towards goat farming in the district.

Key Words: Goat farming, Impact, Knowledge, Practices, Training.

INTRODUCTION

Goat farming plays a vital role in the economic development of rural household and upliftment of weaker sections of society. In present scenario, India is facing the food and nutritional insecurity and rural youth also facing the problems of unemployment. According to Global hunger index report 2021(Anonymous, 2021), country slipped at 101th palace among 116 countries, this is indicating the challenges in our country in reference to food and nutrition. Goat meat known as chevon is an excellent source of animal protein which can eradicate the problems of malnutrition among the country. Well planned and structured trainings programs are needed for successful and profitable goat enterprise. Training and development lead to improved profitability and more positive attitudes towards profit orientation (Singh, 2012). Keeping in this view, the present study was undertaken to study the impact of goat farming training programmes on improvement of knowledge level of goat rearing farmers and entrepreneurs.

MATERIALS AND METHODS

The present study was conducted on the goat rearing farmers of Bundi District of Rajasthan, those who participated in the trainings organized by KVK Bundi during 2020 and 2021. Seventy-two trainees of goat farming were selected and pre and post training evaluation testing performed. All the goat farmers were imparted 10 days trainings on goat farming. Trainings were designed to cover all aspect of theory classes and leaning by doing through practical and also conducted exposure visit of CSWRI Avikanagar Tonk and progressive goat farmers of Bundi District. These trainings were designed according to need based of trainees and focused on goat breeding management, health

Table 1. Effect of education on change in knowledge level due to training.

Parameter	Level of Education	Number of trainees (n=72)	Per centage
Education	Middle	21	29.16
	Matric	29	40.27
	Senior secondary level	16	22.22
	Graduation	6	8.33

management, feeding management, housing management, reproduction management and marketing strategy of goat farming. A set of 34 questionnaire containing information on different aspects of goat farming were presented to goat farmers. The data were analyzed through paired' test/ANOVA (Snedecor and Cochran, 1994) using the software package SPSS version 16 (SPSS, 2007).

RESULTS AND DISCUSSION

The results revealed that 26.16, 40.27 and 22.22 per cent respondents were educated up to middle, metric and senior secondary level, respectively and only 8.33 per cent trainees were graduate (Table 1). The data regarding knowledge level of goat trainees about goat farming (Table 2) indicated that 79.41 per cent trainees belonged to low level of knowledge category. After acquiring training on goat farming, 70.58 per cent (P<0.01) goat keepers possessed high level of knowledge and 23.52 per cent trainees possessed moderate level of knowledge about improved goat husbandry practices (Table 2). It indicated that farmer's trainings were an efficient way to improve their knowledge. Sharma *et al* (2014) also found that knowledge of the farmers enhanced after training.

Well planned and proper breeding techniques played a key role in successful goat farming. The knowledge of trainees (Table 3) about Indian and exotic breeds of goat (69.44 %) improved significantly (P<0.05) after training (95.83 %). Only 61.11 per cent trainees knew about age of puberty in goats, which is improved significantly (P<0.05) after training (94.44%). Knowledge about age of first kidding, gestation period, kidding interval and age of breedable bucks were 52.77, 58.33, 62.5 and 41.66 per cent which was improved significantly (P<0.05) to 97.22, 83.33, 95.83 and 100 per cent, respectively after training. Trainees (34.72%) didn't know about proper method of heat detection in animals which was improved after training (80.55 %). Balanced and economical feeding was the base of successful goat farming. The study on knowledge of farmers regarding feeding practices revealed that in pre training evaluation, 36.11 per cent were knowing about method of correct feeding, after training 98.61 per cent farmers learned about proper feeding methods. The data revealed that before training, knowledge about time of offering water, concentrate, types of offering feed grain, time of offering feed and types of goat manger were 58.33,

Table 2. Distribution of goat owners based on their knowledge levels.   (n=72)

Knowledge level	Number of participants	
	Pre -Training	**Post -Training**
Low (<17 score/<50%)	27 (79.41%)	2 (5.88%)
Moderate (17 to 25.5 score/50%-75%)	6 (17.6%)	8 (23.52%)
High (>25.5 score/>75%)	1 (2.94%)	24 (70.58%)

Table 3. Impact of training on knowledge levels of trainees on different aspects of goat farming.

Sr. No	Parameter	Correct responses (%)		Mean correct responses	
		Pre training	Post training	Pre training	Post training
A.	**Breeding Management**				
1.	Breeds of goat	50 (69.44%)	69 (95.83%)	0.694	0.958
2.	Age of puberty	44 (61.11 %)	68 (94.44%)	0.611	0.944
3.	Age of first kidding	38 (52.77 %)	70 (97.22%)	0.527	0.972
4.	Gestation period	42 (58.33%)	60 (83.33%)	0.583	0.833
5.	Kidding interval	45 (62.5%)	69 (95.83%)	0.625	0.958
6.	Age of breedable bucks	30 (41.66%)	72 (100%)	0.416	1.00
7.	Detection of heat	25 (34.72%)	58 (80.55%)	0.347	0.805
B.	**Feeding management**				
8.	Concentrate required	21 (29.16%)	43 (59.72%)	0.291	0.597
9.	Method of feeding	26 (36.11%)	71 (98.61)	0.361	0.361
10.	Time of offering water	42 (58.33%)	68 (94.44%)	0.583	0.944
11.	Protein content of concentrate	15 (20.83%)	35 (48.61%)	0.208	0.486
12.	Types of feed grain	20 (27.77%)	67 (93.05%)	0.277	0.930
13.	Times of offering feed	18 (25.00%)	65 (90.27%)	0.250	0.907
14.	Types of goat manger	30 (41.66%)	67 (93.05%)	0.416	0.930
C.	**Health Managements**				
15.	Vaccination schedule	03 (4.16 %)	50 (69.44%)	0.416	0.694
16.	External parasite control	10 (13.88%)	42 (58.33%)	0.583	0.833
17.	Internal parasite control	04 (5.55%)	38 (52.77 %	0.555	0.527
18.	Symptoms of diseases	05 (6.94%)	42 (58.33%)	0.694	0.583
19.	Seasonable diseases	07 (9.72%)	40 (55.55%)	0.555	0.361
20.	Treatment of sick animal	04 (5.55%)	35 (48.61%)	0.555	0.486
21.	Knowledge about veterinary services	03 (4.16 %)	52 (72.22%)	0.416	0.722
22.	Source of infestation	04 (5.55%)	62 (86.11%)	0.555	0.861
23.	Quarantine of sick animals	05 (6.94%)	69 (95.83%)	0.694	0.958
24.	Deworming Schedule	10 (13.88%)	68 (94.44%)	0.138	0.944
D.	**Housing Management**				
25.	Direction of shed	18 (25.00%)	65 (90.27%)	0.250	0.907
26.	Space requirement	10 (13.88%)	50 (69.44%	0.138	0.694
27.	Cleaning method of shed and floor	30 (41.66%)	67 (93.05%)	0.416	0.930
28.	Site selection of shed	30 (41.66%)	68 (94.44%)	0.416	0.944
E.	**Marketing Knowledge**				
29.	Time of selling	21 (29.16%)	70 (97.22%)	0.291	0.972
30.	Age of selling for meat purpose	34 (47.22%)	70 (97.22%)	0.472	0.972
31.	Age of selling for breeding purpose	09 (12.5%)	67 (93.05%)	0.125	0.930
32.	Selling according to weight	55 (76.38%)	71 (98.61%)	0.763	0.986
33.	Selling according to breed	10 (13.88%)	68 (94.44%)	0.138	0.944
34.	Selling of milk for medicinal purpose	22 (30.55%)	71 (98.61%)	0.305	0.986

20.83, 27.77, 25 and 41.66 per cent respectively, which were not appropriate for well nourishment of goats whereas after acquiring training, knowledge level of goat farmers increased to 94.40, 48.61, 93.05, 90.27 and 93.05 per cent, respectively. Data (Table 3) indicated that knowledge about common health management practices like vaccination schedule, external parasite control, internal parasite control, symptoms of diseases, seasonable diseases, treatment of sick animal, knowledge about veterinary services, source of infection, quarantine of sick animals and deworming schedule was low but there was a significant (P<0.05) improvement in their knowledge after training on various aspects of goat keeping. Singh and Jadoun (2013) also reported positive improvement in the knowledge status of the respondents after getting the training.

The knowledge on housing management practices like direction of shed, space requirement, cleaning methods and site selection of shed revealed very low in pre training evaluation, in assessment of post training the knowledge of trainees about these practices increased significantly (P<0.05) to 90.27, 69.44, 93.05 and 94.44 per cent, respectively. Noor and Doha (2011) also reported that training had positive effect on the farmer's perception and performance. Proper marketing skills and techniques were also very necessary to make a profitable goat enterprise. The knowledge of farmers in term of marketing was found very low. Before training the basic marketing knowledge like time of selling, age of selling for meat purpose, age of selling for breeding purpose, selling according to breed and selling of milk for medicinal purpose was 29.16, 47.22, 12.5, 13.88 and 30.55 per cent, respectively and found a significant (P<0.05) improvement to 97.22, 97.22, 93.05, 94.44 and 98.61 per cent, respectively after training. Aparna and Hundal (2016) reported significantly high knowledge score on breeding, feeding and management aspects after acquiring training.

CONCLUSION

The scientific and proper knowledge is needed for any successful enterprise. The present study revealed that knowledge levels of farmers towards scientific goat farming was low and there was significant (P<0.05) improvement in their knowledge after attending training on various aspects of goat farming, traditionally as well as scientifically. Hence, this study suggests that the frequency of such training programmes should be increased.

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