

Knowledge of goat rearing practices

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ABSTRACT

The study was conducted in two blocks of Osmanabad district of Maharashtra State to know the knowledge of goat rearing practices and relation with profile of goat rearers. Data were collected from ten randomly selected villages from two blocks. The sample of 120 respondents was interviewed with specially developed interview schedule. From the study it was found that majority of the goat rearers were from old age group, having Higher secondary education, with small family size and medium level of income, having marginal land holding, 'goat rearing + farming' as a main occupation with small flock size. Whereas most of the goat rearers had low social participation, medium use of sources of information and extension contacts. Regarding knowledge, majority of rearers had medium knowledge of improved goat rearing practices. From the relational analysis it was found that all the variables except land holding, shows positive and significant relation with knowledge of goat rearing practices, while age, sources of information, extension contact and flock size were crucial variables in determining knowledge of goat rearing practices.

INTRODUCTION

India is the leading country in the world in livestock population and ranks first in goat population. Goat population of the world is 767.9 million and India contributes 124.4 million. The milk production of India is 88.1 million tones and in which goat contributes 3.70 million tones (FAOSTAT-web site 2003). The meat production of India is 5.89 million tones and contribution of goat to it is about 0.473 million tones. Goats are reared for milk, meat, skin, mohair and play a significant role in the economy and nutrition of small farmers, marginal farmers and landless labours. In short, goat rearing is advantageous because it requires low initial investment, goats are prolific in nature, efficient converter of low quality forages into valuable products for family and market, provides good returns in quick time and employment to the rural people. Goat excreta and urine are reach source of nitrogen, potash and phosphorous than other reared animals. Goat milk has medicinal value useful for patients suffering from peptic, ulcers and jaundice. Goat milk is good source of mineral, calcium, phosphorous and Vitamins like A, E, and B.

Goat meat has unique flavour, palatability, less tender and leaner than other meat. India has several breeds of goats like Barberi, Mehasana, Kutchi, Gaddi, Black Bengal, Sirohi, Ganjam, Osmanabadi, Jamunapari, Beetal etc.

Keeping this background in mind and importance of goat in livestock the study was

conducted to assess the knowledge level of goat rearing practices by the goat rearers with the following objective to study the personal and socio-economic characteristics of the goat rearers to knowledge of the goat rearers about goat rearing practices and to study the relationship of personal and socio-economic characteristics with knowledge of improve goat rearing practices.

METHODOLOGY

This study was conducted in two blocks of Osmanabad. Five villages from each block were randomly selected for the study and from each village, twelve goat rearers were randomly selected which contributed the sample size of 120 respondents. The data were collected with the help of interview schedule which was specially developed to assess the knowledge of goat rearing practices by the goat rearers. The data on such aspects were collected with the help of interview schedule by personal interviews. For the analysis of data, statistical tools such as frequency, percentage, correlation coefficient, multiple regression were used.

RESULTS AND DISCUSSION

Socio-economic and personal characteristics of the goat rearers:

Age:

It was revealed that majority (36.67 %) of the goat rearers were from old age group followed by middle age group (32.50 %) and

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young age group (30.83 %) (Table 1).

Education:

It was observed that majority (22.50 %) of the respondents received the education up to Higher secondary school level, while comparatively very few (15.83) % of the goat rearers were illiterate, 19.16 % of them had Primary education followed by 21.67 % and 20.84 % of the respondents had received Secondary level and College level of education, respectively. (Table 1)

Family size:

It was revealed that majority (41.67 %) of the goat rearers belonged to the small family size followed by 40.00 % from medium family and 18.33 % from big family size. (Table 1)

Land holding:

Majority of the goat rearers (56.66 %) had marginal land holding followed by 25.84 % had small land holding and 16.66 % of the goat rearers had no land holding. Remaining 00.84 % of the goat rearers had semi-medium land holding. (Table 1)

Annual income:

The data revealed that 69.16 % goat rearers had medium level of annual income, 18.34 % had high level of annual income and only 12.50 % had low level of annual income. (Table 1)

Occupation:

The information presented in Table 1 shows that majority of the respondents (32.50 %) were engaged in 'Goat rearing + Farming', followed by 27.50 % and 18.34 % in 'Goat rearing + Labour' and 'Goat rearing + Labour + Farming', respectively. Only 05.84 % and 04.16 % of the goat rearers were engaged in 'Goat rearing' and 'Goat rearing + Other', respectively (Table 1).

Social participation:

It was observed from Table 1 that majority of the goat rearers *i.e.*, 36.36 % had low social participation followed by 32.50 % of the goat rearers had medium social participation and remaining 30.84 % of them had high social participation.

Use of sources of information:

It was revealed that larger proportion (60.00 %) of the respondents had medium use of sources of information followed by 34.16 % of the goat rearers had more use of sources of information. Only 05.84 % goat rearers had

Table 1: Distribution of the goat rearers according to their personal and socio-economic characteristics (n=120)

Sr. No.	Characteristics	Frequency	Percentage
1.	Age		
	Young age	37	30.83
	Middle age	39	32.50
	Old age	44	36.67
2.	Education		
	Illiterate	19	15.83
	Primary education	23	19.16
	Secondary education	26	21.67
	Higher secondary	27	22.50
	College education	25	20.84
3.	Family size		
	Small size of family	50	41.67
	Medium size of family	48	40.00
	Large size of family	22	18.33
4.	Land holding		
	Landless	20	16.66
	Marginal holding	68	56.66
	Small holding	31	25.84
	Semi-medium holding	01	00.84
	Medium holding	00	00.00
	Big holding	00	00.00
5.	Annual income		
	Low	15	12.50
	Medium	83	69.16
	High	22	18.34
6.	Occupation		
	Goat rearing	07	05.84
	Goat rearing + Labour	33	27.50
	Goat rearing + Farming	39	32.50
	Goat rearing+Labour+Farming	22	18.34
	Goat rearing + Other	05	04.16
	Goat rearing + Labour + Other	06	05.00
	Goat rearing+Farming + Other	06	05.00
	Goat rearing+Labour+Farming + Other	02	01.66
7.	Social participation		
	Low	44	36.66
	Medium	39	32.50
	High	37	30.84
8.	Use of sources of information		
	Less use	07	05.84
	Medium use	72	60.00
	More use	41	34.16
9.	Extension contact		
	Low	24	20.00
	Medium	70	58.34
	High	26	21.66
10.	Flock size		
	Small flock size	45	37.50
	Medium flock size	42	35.00
	Large flock size	33	27.50

Table 2: Distribution of goat rearers according to the knowledge and adoption of improved goat rearing practices (n=120)

Sr. No.	Improved Goat Rearing Practices	Knowledge					
		Complete		Partial		No	
		frequency	per cent	frequency	per cent	frequency	per cent
1.	Breeds of goats	33	27.50	10	8.34	77	64.16
2.	Goat rearing systems	96	80.00	00	00.00	24	20.00
3.	Kidding management	87	72.50	14	11.66	19	15.84
4.	Kid management	62	51.66	21	17.50	37	30.84
5.	Breeding management	61	50.84	26	21.66	33	27.50
6.	Kid feeding	28	23.34	52	43.33	40	33.33
7.	Doe Feeding	25	20.83	46	38.33	49	40.84
8.	Buck Feeding	21	17.50	54	45.00	45	37.50
9.	Heath management	28	23.34	35	29.16	57	47.50
10.	Marketing management	74	61.66	25	20.84	21	17.50

less use of sources of information. (Table 1)

Extension contact:

From Table 1 it is noticed that majority of the respondents (58.34 %) had medium extension contacts, 21.66 % of the goat rearers had high extension contacts and very meagre, 20.00 % of the respondents had low extension contacts.

Flock size:

It was observed that majority of the goat rearers (37.50 %) had small flock size followed by 35.00 % having medium flock size and 27.50 % had large flock size of goats (Table 1). Similar findings were also reported by Bhosle (2000), Kausidikar (2000), Mane (2001), Rakshe (2002) and Patil (2003).

Knowledge of improved goat rearing practices:

Practicewise knowledge of goat rearing practices :

The data from Table 2 show percentage of the respondents having knowledge about different practices such as goat rearing systems (80.00 %), kidding management (72.50 %), marketing management (61.66 %), kid management (51.66 %), breeding management (50.84 %), breeds of goats (27.50 %) and 23.34 % of them had complete knowledge about kid feeding and health management.

Overall knowledge of goat rearing practices:

It is observed from Table 3 that majority of the goat rearers (65.00 %) had medium level of knowledge followed by 22.50 % and 12.50 % of the respondents were having high and low level of knowledge about goat rearing practices, respectively. The present results are in line with the findings of Shinde (2002) and Marwale *et al.* (1995) while contradictory to findings of Bhosle (2000)

Table3 : Distribution of the goat rearers by their knowledge level about goat rearing practices

Sr. No.	Level of knowledge	Frequency	Percentage
1.	Low (score up to 128)	15	12.50
2.	Medium (score 129 to 159)	78	65.00
3.	High (score 160 and above)	27	22.50
	Total	120	100

and Patil (2003).

Relationtional analysis :

Correlation coefficient :

It is observed from Table 4 that age of goat rearers was related negatively significant with knowledge about goat rearing practices. Whereas variables like education, family size, annual income, occupation, social participation, sources of information, extension contact and flock size were found to be positively and highly significant relation with knowledge about goat rearing practices at 0.01 % of probability. While, variable land holding was non significantly related.

Multiple regression:

It may be observed from Table 4 that ten variables explained variation in knowledge to the extent of 62.00 %. The unexplained variation (38.00) % may be attributed to the factors not included in the study.

The ‘t’ value indicates that in multiple regression analysis, the knowledge was found significantly related with variables namely age (7.785), sources of information (3.629), extension contact (2.633) and flock size (2.768) at 0.01 level of probability. The regression coefficient for these variables were 0.582, 3.921, 1.915 and 1.999, respectively indicating that one unit change in these variables *viz.* age, family size, social participation,

Table 4 : Relationship between the selected independent variables and knowledge

Sr. No.	Independent variables	Knowledge correlation coefficient (r)	'b' value	't' value
1.	Age	-0.581**	-0.582	-7.785**
2.	Education	0.359**	-0.923	-0.724NS
3.	Family size	0.311**	0.578	1.474NS
4.	Land holding	0.037NS	-1.200	-0.736NS
5.	Annual income	0.414**	1.656	1.268NS
6.	Occupation	0.545**	0.1846	1.245NS
7.	Social participation	0.473**	0.231	1.723NS
8.	Sources of information	0.456**	3.921	3.629**
9.	Extension contact	0.537**	1.915	2.633**
10.	Flock size	0.455**	-1.999	-2.768**

** indicate significance of value at P= 0.01 level of probability.

NS= Non-significant.

R² = 0.620

extension contact and flock size would effect 0.582, 3.921, 1.915 and 1.999 unit change in knowledge of improved goat rearing practices, respectively.

Conclusion:

From the study it is concluded that majority of the goat rearers were from old age group, having higher secondary education, with small family size and medium level of income, having marginal land holding, 'goat rearing + farming' as a main occupation with small flock size. Where as most of the goat rearers had low social participation, medium use of sources of information and extension contacts.

Regarding knowledge, majority of goat rearers had medium knowledge of improved goat rearing practices. From the relational analysis it was found that all the variables except land holding, showed positive and significant relation with knowledge of goat rearing practices. While age, sources of information, extension contact and flock size were crucial variables in determining knowledge of goat rearing practices.

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