

## **Production and Management Practices of Goat Farming In Sirohi District, India**

### **ABSTRACT**

Total 80 respondents from Sirohi tehsil of Sirohi district from 4 randomly selected villages were used for this study. Total 80 respondents were used in this study. The results indicated that most of goat owners took extra care at the time of kidding (75.00%) and pregnant doe (81.25%). 55.00 per cent respondents used 20-40 breedable goat per breeding buck for service. Results showed that 60.00 per cent goat owners gave extra ration to buck during breeding season. 40.00 per cent respondents change the breeding buck every year to avoid inbreeding and 47.50 per cent goat owners bred the goat during rainy season and half of goat owners selected the breeding buck on the basis of body weight. Majority of goat owners practiced semi stall-feeding (60.00%), 4-6 hours grazing (40.00%) and grazing on community type pasture land (56.25%). All goat owners protected the pasture land. Balance ration was feed by 37.50 per cent and 62.50 per cent did not know regarding balance feeding. Majority of respondents offered green fodder feeding (65.00%), looping of trees (93.75%), feeding dry fodder (68.75%), out of them result showed that 36.25 per cent feeding of concentrate and 63.75 per cent did not know regarding feeding of concentrate, give extra ration to kids for meat purpose (65.00%). Data showed that feeding of pregnancy ration for pregnant animal (32.50%), feeding of mineral mixture (77.50%), feeding of common salt (45.00%) and most of goat owners were used clean water for drinking purpose (93.75%).

**Key words:** Management practices, Breeding, Feeding, Housing, Goat, Sirohi

### **INTRODUCTION**

India has largest livestock population in the world. The total livestock population of India makes up a huge number of 535.78 million and India stands first in buffalo population (109.85million), second in cattle (192.49 million) and goats (148.88 million), third in sheep (74.26 million) and fifth in Poultry (851.81 million). In India Telangana stands first in sheep population (19.1 million), followed by Rajasthan (7.9 Million), and Karnataka (11.1 million) according to livestock census 2019.

Rajasthan state has livestock population of 56.80 million (11 per cent) of India contributing nearly 41.5 million Kg. of wool and 187 million tons of milk and 7.4 Million

tons of meat production to the country during year 2019. In Rajasthan, livestock population comprises large and small ruminants. Cattle and buffaloes are the main large animals while sheep and goats are the major small ruminants. According to livestock census 2019, the share of cattle population was about 21 per cent and buffaloes constitutes about one-fifth of the total population.

Rajasthan is having 3 well known breeds of goats viz.: Jakhrana, Sirohi, and Marwari breeds. The goat population of Rajasthan is more than 216 million. Goat, being a valuable and renewable resource, occupy an important position in livestock sector of the country. Rearing of Goat contributes greatly to the agrarian economy, especially in areas where crop and dairy farming are not economical, and plays an important role in the livelihood of a large proportion of small and marginal farmers and landless laborers n. Goat can be raised profitably with low investment by the economically weaker and socially backward section of the society (Bhatia *et al.*, 2005).

## METHODOLOGY

The study was conducted in Sirohi District, Rajasthan, which was selected purposively. The district comprised of of 5 tehsils, out of which one tehsils Sirohi was selected. Further, four villages selected from tehsil were identified. From each village 20 respondents were selected randomly. Thus, the entire sample consists of 80 respondents from selected four villages in Sirohi tehsil of Sirohi District, Rajasthan. A list of goat owners of selected villages was prepared with the help of village Sarpanch and Patwari with the criteria to select from all strata, was divided in three categories according to herd size viz. small, medium,large.

The interview method used for data collection. Interview schedule was divided into major parts. First section included profile of respondents and second section was I question related to management practices of goat owners.

## RESULTS AND DISCUSSIONS

### Breeding management practices

The results obtained on different breeding aspects of goats in study area from 80 respondents are summarized in the following sub heads and detail information's are presented int table 1.

**Table 1: Breeding management practices followed by goat owners**

S. No.	Breeding Practice	F	%
1	Heat detection		
	Yes	80	100

	No	0	0
<b>2</b>	<b>Method of heat detection</b>		
	By symptoms	80	100
	By teaser buck	0	0
<b>3</b>	<b>Method of breeding</b>		
	By natural service	80	100
	By artificial insemination	0	0
<b>4</b>	<b>Type of breeding buckuse</b>		
	Improve	13	16.25
	Desi	67	83.75
<b>5</b>	<b>Pregnancy diagnosis</b>		
	Yes	31	38.75
	No	49	61.25
<b>6</b>	<b>Number of breedable goat per breeding buck for service</b>		
	<20 goats	12	15.00
	20-40 goats	44	55.00
	>40 goats	24	30.00
<b>7</b>	<b>Extra care at the time of the kidding</b>		
	Yes	60	75.00
	No	20	25.00
<b>8</b>	<b>Extra care of pregnant doe</b>		
	Yes	65	81.25
	No	15	18.75
<b>9</b>	<b>Extra ration for breeding buck</b>		
	Yes	48	60.00
	No	32	40.00
<b>10</b>	<b>Castrate in the male kids</b>		
	Yes	28	35.00
	No	52	65.00
<b>11</b>	<b>Change of breeding buck every year</b>		
	Yes	32	40.00
	No	48	60.00
<b>12</b>	<b>Breeding season of goat</b>		
	Summer	19	23.75
	Rainy	38	47.50
	Winter	23	28.75
<b>13</b>	<b>Selection criteria of breeding buck</b>		
	By body weight	14	17.50
	By dam milk yield	4	5.00
	By physical appearance	6	7.50
	I & II	8	10.00
	II & III	13	16.25
	I & II & III	35	43.75
<b>14</b>	<b>Culling of unproductive goats</b>		
	Yes	0	0
	No	80	100

Does in heat were detected by symptoms, commonly used the natural method of breeding and culling of goat. Majority (83.75%) of goat owners used desi buck. Most of goat owners took extra care at the time of kidding (75.00%) and pregnant doe (81.25%). 55.00 per cent respondents used 20-40 breedable goat per breeding buck for service. Results showed

that 60.00 per cent goat owners gave extra ration to buck during breeding season. 40.00 per cent respondents change the breeding buck every year to avoid inbreeding and 47.50 per cent goat owners bred the goat during rainy season and half of goat owners selected the breeding buck on the basis of body weight.

### Feeding management practices

The data on different feeding practices were collected from 80 respondents and results are presented in Table 2.

**Table 2: Feeding management practices followed by goat owners**

S. No.	Feeding practice	F	%
<b>1</b>	System of feeding		
	Stall feeding	10	12.50
	Semi stall feeding	48	60.00
	Complete pasture grazing	22	27.50
<b>2</b>	Duration of grazing		
	<4 hours	25	31.25
	4-6 hours	32	40.00
	>6 hours	13	16.25
<b>3</b>	Site of grazing		
	Own pasture land	15	18.75
	Community pasture land	45	56.25
	Harvested/ fallow field	20	25.00
<b>4</b>	Protection of pasture land		
	Yes	80	100
	No	0	0
<b>5</b>	Method of protection of pasture land		
	By construction stoneboundary wall	5	6.25
	By bio-fencing	22	27.50
	By bared iron wire fencing	11	13.75
	By dry bushes	42	52.50
<b>6</b>	Feeding of balance ration		
	Yes	30	37.50
	No	50	62.50
<b>7</b>	Feeding of green fodder		
	Yes	52	65.00
	No	28	35.00
<b>8</b>	Feeding looping of tree		
	Yes	75	93.75
	No	5	6.25
<b>9</b>	Feeding of dry fodder		
	Yes	55	68.75
	No	25	31.25
<b>10</b>	Feeding of concentrate		
	Yes	29	36.25
	No	51	63.75
<b>11</b>	Extra ration to kids reared for meat purpose		
	Yes	52	65.00

	No	28	35.00
<b>12</b>	Feeding of pregnancy ration		
	Yes	26	32.50
	No	54	67.50
<b>13</b>	Feeding of mineral mixture		
	Yes	18	22.50
	No	62	77.50
<b>14</b>	Use of clean drinking water		
	Yes	62	77.50
	No	18	22.50
<b>15</b>	Feeding of common salt		
	Yes	36	45.00
	No	44	55.00
<b>16</b>	Preservation of tree leaves		
	Yes	48	60.00
	No	32	40.00

Majority of goat owners practiced semi stall-feeding (60.00%), 4-6 hours grazing (40.00%) and grazing on community type pasture land (56.25%). All goat owners protected the pasture land. Balance ration was feed by 37.50 per cent and 62.50 per cent did not know regarding balance feeding. Majority of respondents offered green fodder feeding (65.00%), looping of trees (93.75%), feeding dry fodder (68.75%), out of them result showed that 36.25 per cent feeding of concentrate and 63.75 per cent did not know regarding feeding of concentrate, give extra ration to kids for meat purpose (65.00%). Data showed that feeding of pregnancy ration for pregnant animal (32.50%), feeding of mineral mixture (77.50%), feeding of common salt (45.00%) and most of goat owners were used clean water for drinking purpose (93.75%).

### Housing management practices

The results obtained on different housing and management practices of goats in research area from 80 respondents are summarized in following sub heads and detail information's are presented in Table 3.

**Table 3: Housing management practices followed by goat owners**

S. No.	Housing management practice	F	%
<b>1</b>	<b>Location of goat house</b>		
	Shed attached to own house	38	47.50
	At farm	0	0
	Any other place away from house	42	52.50
<b>2</b>	<b>Type of housing</b>		
	Open	40	50.00
	Closed +kaccha flooring	22	27.50

	Closed + puccaa flooring	18	22.50
<b>3</b>	Materials used in floor		
	Bricks	19	23.75
	Stover	3	3.75
	Gobar& clay	58	72.50
<b>4</b>	Separate housing for sick animal		
	Yes	35	43.75
	No	45	56.25
<b>5</b>	Provide manger		
	Yes	42	52.50
	No	38	47.50
<b>6</b>	If yes, type of manger		
	Cemented	21	26.25
	Iron	01	1.25
	Wooden	58	72.50
<b>7</b>	Water trough		
	Yes	80	100
	No	0	0
<b>8</b>	Type of water trough		
	Cemented	11	13.75
	Iron	05	6.25
	Plastic	64	80.00
<b>9</b>	Ventilation facility		
	Yes	70	87.50
	No	10	12.50
<b>10</b>	Cleaning and washing ofgoat house		
	Yes	80	100
	No	0	0
<b>11</b>	Disinfectant spray		
	Yes	45	56.25
	No	35	43.75
<b>12</b>	Direction of goat house		
	East-West	42	52.50
	North-East	24	30.00
	South-East	14	17.50
<b>13</b>	Proper housing for winter season		
	Yes	68	85.00
	No	12	15.00
<b>14</b>	Separate housing for breeding buck		
	Yes	13	16.25
	No	67	83.75

Most of goat owners had shed away from own house (52.50%), open type house (50.00%) and used Gobar and clay for floor purpose (72.50%). 43.75 goat owners provided separate housing for sick animals to prevent infectious and contagious diseases. 52.50 per cent goat owners offered manger feeding, wooden type (72.50%), cemented type (36.47%) and iron type (6.25%). All the goat owners used water trough in the goat house. Most of goat

owners provided ventilation facility in the goat shed (87.50%). Cleaning and washing of goat house and use of disinfectant spray (56.25%) was in practice. 52.50 per cent goat owners constructed the house in East-West orientation. Most of goat owners gave proper housing for winter season (85.00%) to protect from cold stress.

## CONCLUSION

It may be concluded that goat farmers poor knowledge about housing breeding feeding management. These may be due to lack of awareness, orientation and training to the goat keepers it's there for suggested that more number of training program be organized for the client system so as to improve their skills in performing significant goat management practices

## REFERENCES

- AHD, (2015-16).** Animal husbandry department, Rajasthan. State livestock development policy. [www.animalhusbandry.rajasthan.gov.in](http://www.animalhusbandry.rajasthan.gov.in)
- Bhatia, J., Pandey, U.K. and Suhag, K.S. (2005).** Economic analysis of sheep and goat rearing in rain fed region of Haryana, India. *Indian Journal of Animal Science*,75(12): 1423-1432.
- Dandapat, A. and Choudhury, K.B.D. (2009).** Socio-economic profile, management practices and constraints of goat and poultry keeping in Tripura state, INDIA. *Indian Journal of Animal Production Management*,25(3-4): 99-102.
- Deshpande, S.B., Sabapara, G.P. and Kharadi, V.B. (2009).**A study on breeding and healthcare management practices followed by goat keepers in south Gujarat region.*Indian Journal of Animal Research*, 43(4): 259-262.
- Dossa, L.H., Rischkowsky, B., Birner, R. and Wollny, C. (2008).**Socioeconomic determinants of keeping goats and sheep by rural people in southern Benin.*Agriculture human values*,25: 581-592.
- Gurjar, M.L., Pathodiya, O.P., Sharma, M.C. and Sharma, S.K. (2011).**Studies on goat housing practices in Mewar region of southern Rajasthan.*Indian Journal of Animal Production Management*,27(3-4): 203-206.