



## Socio-economic Characteristics of Goat Rearing Farmers in Guntur District of Andhra Pradesh

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Received: 28 May, 2022

Revised: 01 July, 2022

Accepted: 07 July, 2022

### ABSTRACT

In a field study covering 240 farmers spread over 60 villages in 15 mandals, data were collected on socio-economic characteristics of goat rearing farmers. Majority of goat rearers belonged to backward castes (59.17%) followed by scheduled tribes (17.50%), other castes (12.50%) and scheduled castes (10.83%). Most of the goat keepers belonged to Hindu religion. Majority of respondents belonged to middle age (62.08%) followed by old age (20%) and young age (17.92%). Majority were illiterate (80.42%) and remaining were low literates (19.58%) with primary education. Majority of the goat rearers (51.25%) were landless people followed by marginal farmers (41.25%) possessing less than 2.5 acres of dry/ rainfed land. Most of the goat rearers (61.25%) had large family size. Majority of goat rearers (53.75%) possessed medium flock size (21-40) followed by large flock i.e. 41-70 goats (31.25%) and small flock less than 20 goats (15%). The overall mean flock size was  $37.16 \pm 1.34$  per farmer. It was significantly ( $P < 0.01$ ) higher in Narasaraopeta division ( $47.91 \pm 2.62$ ) than that in Guntur ( $34.73 \pm 2.03$ ) and Tenali ( $28.85 \pm 1.70$ ) divisions of Guntur district.

### HIGHLIGHTS

- Socio- economic profile of goat rearing farmers showed majority belonged to middle age, illiterate and landless with large family size.
- The flock size was higher in Narasaraopeta division of study area.

**Keywords:** Socio-economic characteristics, Guntur district, Goats, goat farmers

India is a rich repository of goat genetic resources in the form of 34 well defined breeds (NBAGR). Andhra Pradesh ranks 11<sup>th</sup> place in the country with goat population of 5.37 million and Vizianagaram district has non-descript goat population of 2,71,205 (DAHD, 2019). The non-descript goats are popularly known as Vizianagaram goats, though yet to be recognized as breed, are well known for their production potential (Naidu *et al.*, 2015). Very less information is available regarding the socio-economic characteristics of goat rearing farmers in Guntur district. Hence a study was conducted to analyse their socio-economic profile.

### MATERIALS AND METHODS

The study was carried out among 240 goat rearing farmers in Guntur district of Andhra Pradesh. The three Animal Husbandry divisions of the district *viz.*, Tenali, Guntur and Narasaraopeta were considered for the study and five mandals were selected at random from each division. Four villages were randomly selected from each mandal, taking the goat population of the villages into account. Four goat

**How to cite this article:** Reddy, K.S., Anitha, A., Rao, S.J. and Sudhakar, K. (2022). Socio-economic Characteristics of Goat Rearing Farmers in Guntur District of Andhra Pradesh. *J. Anim. Res.*, 12(04): 547-552.

**Source of Support:** None; **Conflict of Interest:** None



rearing farmers were selected from each village at random resulting in a total number of 80 goat rearing farmers from Tenali division, 80 from Guntur and 80 from Narsaraopeta Animal Husbandry divisions of the district. The farmers were interviewed by pretested schedule and required information was collected on the socio-economic characteristics of the goat farmers. The questions and statements were asked in vernacular language *i.e.* Telugu. The goat rearing farmers were personally interviewed by the investigator which enabled him to get first hand information personally. The data collected during the period of study were scrutinized and tabulated. The data were subjected to frequency, percentages, arithmetic mean, standard error and chi-square analysis wherever applicable.

## RESULTS AND DISCUSSION

### Socio-economic characteristics of goat rearing farmers in the study area

#### Social status

It was found that 11.25, 6.25 and 15.00 per cent of respondents belonged to Scheduled castes in Tenali, Guntur and Narasaraopeta divisions, respectively and 1.25, 20.00 and 31.25 per cent belonged to Schedule tribes in Tenali, Guntur and Narasaraopeta divisions, respectively. (Table 1). It was found that 60, 67.50 and 50.00 per cent belonged to Backward castes in Tenali, Guntur and Narasaraopeta divisions, respectively, while 27.50, 6.25 and 3.75 per cent belonged to other castes in Tenali, Guntur and Narasaraopeta divisions, respectively. It was found that majority of goat rearing farmers belonged to backward castes (59.17%) followed by scheduled tribes (17.50%), other (General) castes (12.50%) and scheduled castes (10.83%) in the study area. Most of the goat keepers were backward castes (Singh *et al.*, 2014; Bimal *et al.*, 2017; Hegde and Deo, 2017) whereas Ahir caste was the principal goat keepers in south Gujarat (Sorathiya *et al.*, 2013). Most of the respondents belonged to general castes (Sabapara *et al.*, 2010a; Deshpande *et al.*, 2010a). The results in the present study indicated that goat and sheep rearing was still practiced as a caste (yadava/kuruma) based occupation. Under privileged communities prefer goat rearing due to their lower socio-economic status,

low initial investment and maintenance cost. The persons belonging to general castes (OC) are also preferring sheep and goat rearing because of increased demand for chevon and mutton in the study area.

#### Religion

Overall, it was observed that most of the goat keepers belonged to Hindu religion (87.50%) followed by Christian (9.58%) and Muslim religion (2.92%) in the study area as Hindu population is more in A.P. Majority of respondents belonged to Hindu religion (93.3%) in U.P. (Vijaykumar *et al.*, 2015a) whereas most of the goat keepers were Muslims (66.2%) in South Gujarat (Sorathiya *et al.*, 2013). It varies from region to region in the country. In general, it was noticed that the goat and sheep rearing farmers belonged to Hindu religion and meat selling persons belonged to Muslim religion in A.P.

#### Age of goat rearers

Overall, it was found from Table 1 that most of the goat rearers belonged to middle age (62.08%) followed by old age (20%) and young age (17.92%) in the study area which was similar to previous findings (Bimal *et al.*, 2017; Deepak *et al.*, 2017), whereas majority belonged to old age group (Deshpande *et al.*, 2010a). The present study indicated that middle aged group involved more actively in goat rearing. The reason could be that middle aged persons had more awareness and energy regarding maintaining the livestock as compared to old age people. The reluctance of the young generation in goat rearing might be due to hardships involved in this occupation.

#### Education

Majority of goat rearers were illiterate (80.42%) and remaining goat keepers (19.58%) were low literates with primary education in the study area. Most of the goat rearers were illiterate and low literates (Singh 2001; Safer *et al.*, 2008; Deepak *et al.*, 2017; Hegde and Deo, 2017). Illiteracy and low literacy might be due to their socio-economic conditions and lack of awareness about the importance of education. It is a major problem for the goat rearers to take up scientific method of goat and sheep rearing and to accept new practices in small ruminants.

**Table 1:** Socio-economic characteristics of goat rearing farmers in the study area

Sl. No.	Category	Tenali division		Guntur division		Narasaraopeta division		Overall	
		(N = 80)	%	(N = 80)	%	(N = 80)	%	(N = 80)	%
<b>Social status</b>									
1	Scheduled castes	09	11.25	05	6.25	12	15.00	26	10.83
2	Scheduled tribes	01	1.25	16	20.00	25	31.25	42	17.50
3	Backward castes	48	60.00	54	67.50	40	50.00	142	59.17
4	Other castes	22	27.50	05	6.25	03	3.75	30	12.50
<b>Religion</b>									
1	Hindu	73	91.25	72	90.00	65	81.25	210	87.50
2	Christian	06	7.50	05	6.25	12	15.00	23	9.58
3	Muslim	01	1.25	03	3.75	03	3.75	07	2.92
<b>Age</b>									
1	Young age (upto 30 years)	09	11.25	12	15.00	22	27.50	43	17.92
2	Middle age (31 to 55 years)	53	66.25	46	57.50	50	62.50	149	62.08
3	Old age (above 55 years)	18	22.50	22	27.50	08	10.00	48	20.00
<b>Education</b>									
1	Illiterate	67	83.75	61	76.25	65	81.25	193	80.42
2	Literate	13	16.25	19	23.75	15	18.75	47	19.58
<b>Main occupation</b>									
1	Agriculture	17	21.25	18	22.50	14	17.50	49	20.42
2	Goat rearing	31	38.75	41	51.25	55	68.75	127	52.92
3	Agricultural labour	32	40.00	21	26.25	11	13.75	64	26.66
<b>Land holding</b>									
1	Land less	34	42.50	36	45.00	53	66.25	123	51.25
2	Marginal farmers (up to 2.5 acres)	42	52.50	38	47.50	19	23.75	99	41.25
3	Small farmers (2.5 to 5 acres)	04	5.00	06	7.5	08	10.00	18	7.50
<b>Family size</b>									
1	Up to 4 members (small)	35	43.75	31	38.75	27	33.75	93	38.75
2	Above 4 members (large)	45	56.25	49	61.25	53	66.25	147	61.25
<b>Livestock owned</b>									
1	Only goat	22	27.50	32	40.00	49	61.25	103	42.92
2	Goat and sheep	21	26.25	10	12.50	05	6.25	36	15.00
3	Goat and buffalo	11	13.75	24	30.00	19	23.75	54	22.50
4	Goat, sheep and buffalo	26	32.50	14	17.50	07	8.75	47	19.58
<b>Goat flock size</b>									
1	Small flock (1-20)	24	30.00	10	12.50	02	2.50	36	15.00
2	Medium flock (21-40)	43	53.75	50	62.50	36	45.00	129	53.75
3	Large flock (above 40)	13	16.25	20	25.00	42	52.50	75	31.25
<b>Goat rearing experience</b>									
1	Less than 10 years	41	51.25	38	47.50	57	71.25	136	56.66
2	10-30 years	24	30.00	19	23.75	15	18.75	58	24.17
3	Above 30 years	15	18.75	23	28.75	08	10.00	46	19.17

Extension contact									
1	Veterinarian	17	21.25	10	12.50	09	11.25	36	15.00
2	Paraveterinarian	56	70.00	62	77.50	32	40.00	150	62.50
3	Others	07	8.75	08	10.00	39	48.75	54	22.50
Mass media exposure									
1	Television	78	97.50	72	90.00	30	37.50	180	75.00
2	Radio	01	1.25	0	0	0	0	01	0.40
3	News paper	0	0	01	1.25	0	0	01	0.40
4	No exposure	01	1.25	07	8.75	50	62.50	58	24.20
Exposure to training in Animal Husbandry									
1	Exposed	16	20.00	11	13.75	18	22.50	45	18.75
2	No exposure	64	80.00	69	86.25	62	77.50	195	81.25

N = number of goat rearing farmers.

### Main occupation

The main occupation of the respondents was goat rearing (52.92%) followed by agriculture labourer (26.66%) and agriculture (20.42%) in the study area. Goat rearing was the major source of livelihood followed by agriculture and agriculture labour because of possessing very small extent of cultivable land, and goat and sheep rearing is a traditional occupation for some communities in the rural areas (Yogi *et al.*, 2014; Hegde and Deo, 2017).

### Land holding

Majority of the goat keepers (51.25%) were land less people followed by marginal farmers (41.25%) possessing less than 2.5 acres of dry/ rainfed land. Very few goat rearers (7.5%) were small farmers possessing less than 5 acres of land in the study area which was similar to the previous findings (Singh and Rai 2006; Safeer *et al.*, 2008; Nandi *et al.*, 2011; Bimal *et al.*, 2017). As the support from agricultural land is meagre, the livestock land ratio was higher in case of marginal farmers. Mostly, the families of goat rearers depended on goat rearing, other livestock and agricultural labour for their livelihood in the rural areas of Guntur district.

### Family size

Majority of goat rearers (61.25%) had large family size having more than four members in the family in the study area which was similar to previous findings (Singh, 2001; Yogi *et al.*, 2014). The family size was medium and large

in goat rearing families because of illiteracy and not much aware of importance of small family size less than four in a family.

### Livestock owned

It was observed from Table 1 that majority of goat rearers (57.08%) owned goat along with other livestock *i.e.*, sheep and local dairy animals, where as 42.92 per cent of goat rearers maintained only goats in the study area. Most of the goat keepers (71.25%) were also having sheep flocks and small number of cattle and buffaloes (Singh *et al.*, 2009a). It is a common practice of maintaining goat along with sheep and one or two local cattle in several places in the country. Integration of various livestock species along with agriculture proved more viable regarding income and employment generation to landless and marginal farmers.

### Goat flock size

It was found that majority of goat rearers (53.75%) possessed medium flock size (21-40 goats) followed by large flock *i.e.*, 41-70 goats (31.25%) and small flock less than 20 goats (15%) in the study area. It indicated that flock size varied from place to place depending on grazing/ browsing resources in a particular area. Majority of goat farmers (83.5%) had a small flock size of goat (<10) and only 1.1% farmers had more than 30 goats in their flocks in U.P. (Deepak *et al.*, 2017) whereas 58 per cent farmers maintained 26 to 50 goats per flock in Mahabubnagar district of Telangana (Ekambaram *et al.*, 2011b).

### Goat rearing experience

It was noticed from Table 1 that 56.66 per cent of respondents had goat rearing experience of less than 10 years. The remaining respondents had more than 10-30 years experience in goat rearing. Mostly, rearing of small ruminants in the hands of traditional communities since long time. Now, other farming communities are also preferring goat rearing because of its prolificacy, less mortality and low investment as compared to other livestock.

### Extension contact

Majority of respondents (62.50%) had extension contact with paraveterinarian for technical guidance and services in health care practices for the goats. About 22.50 per cent of respondents were availing technical services for health care of goats from non technical persons available in the village. It was also noticed that some of the goat rearers (15%) learnt certain skills regarding vaccination and deworming of goat and sheep in the study area.

### Mass media exposure

It was noticed that majority of respondents (75%) had mass media exposure with television mostly for entertainment in the study area. The goat rearers may be educated to view television to get information about livestock rearing from T.V. channels telecasting agriculture and animal husbandry programmes.

### Exposure to training in Animal husbandry

Overall, it was observed from Table 1 that only 18.75 per cent of respondents were exposed to training in animal husbandry programmes, particularly dairying and sheep rearing.

### CONCLUSION

The study revealed that majority of the goat rearers belonged to Backward castes (59.17%) and Hindu religion (87.50%). Most of the goat rearers belonged to middle age (62.08%) and were illiterate (80.42%). The main occupation of respondents (52.92%) was goat rearing followed by agricultural labour (26.66%) and agriculture (20.42%) in the study area. Most of the goat rearers were

landless (51.25%) followed by marginal farmers (41.25%). Majority of goat rearers (61.25%) had large family size (more than 4). Majority of the respondents (57.08%) reared goat along with other livestock and 42.92 per cent of respondents maintained only goats. Majority of the respondents (53.75%) had medium flock size (21-40 goats) followed by large flock (31.25%). The overall mean flock size was 37.16±1.34 per rearer in the study area. Most of the respondents (62.50%) had extension contact with para veterinarians and had mass media exposure with Television (75%).

### REFERENCES

- Bimal, P. and Venkata Chalapathy, T.R. 2017. Rearing systems of Malabari goats in northern Kerala. *Indian J. Small Rumin.*, **23**: 248-252.
- DAHD, 2019. Provisional key results of 20<sup>th</sup> Livestock census, retrieved from <http://dadf.gov.in/sites/default/files/Key%20Results%2BAnnexure%2018.10.2019.pdf>.
- Deepak, S., Priscilla, K., Kumar, A. and Neeraj. 2017. Assessment of management practices followed by small ruminant farmers in Uttar Pradesh. *Indian J. Small Rumin.*, **23**: 132-135.
- Deshpande, S.B., Sabapara, G.P. and Kharadi, V.B. 2010a. Socio economic status of goat keepers in south Gujarat region. *Indian J. Small Rumin.*, **16**: 92-96.
- Ekambaram, B., Gupta, B.R., Gnana Prakash, M., Sudhaker, K. and Reddy, V.R. 2011b. Housing, breeding and management practices of Mahabubnagar goats. *Indian J. Anim. Sci.*, **81**: 875-879.
- Hegde, N.G. and Deo, A. 2017. Current status of goat husbandry and scope for improving its productivity in Bihar, Odisha and Uttar Pradesh. *Indian J. Anim. Sci.*, **87**: 1018-1025.
- Pradeep Naidu, B., Jagadeeswara Rao, S., Prasad, R.M.V. and Anitha, A. 2015. Morphological Characteristics of Vizianagaram goats. *Indian J. Anim. Prod. Mngmt.*, **31**: 49-51.
- Sabapara, G.P., Deshpande, S.B., Kharadi, V.B. and Malik, P.K. 2010a. Housing and feeding managemental practices for goats followed in South Gujarat. *Indian J. Anim. Sci.*, **80**: 385-387.
- Safeer, A., Singh, P.K. and Khan, B.U. 2008. Morphological studies and management of Beetal goats in its native tract. *Indian J. Anim. Sci.*, **78**: 1127-30.
- Singh, M.K. and Rai, B. 2006. Barbari breed of goat: reasons for dilution in its home tract *Indian J. Anim. Sci.*, **76**: 716-719.
- Singh, M.K., Rai, B., Dixit, A.K., Rusthan, S. and Singh, S.K. 2014. Management practices of goats in Bundelkhand region. *Indian J. Small Rumin.*, **20**: 99-105.



- Singh, M.R. 2001. Comparative resource structure of goat keeping of landless labourers and marginal farmers in rural Mathura, U.P. *Indian J. Small Rumin.*, **7**: 41-44.
- Sorathiya, L.M., Fulsoundar, A.B., Tyagi, K.K. and Patel, M.D. 2013. Effect of social groups and flock size on economic returns from traditional goat rearing in South Gujarat. *Indian J. Anim. Prod. Mngmt.*, **29**: 102-109.
- Vijay Kumar, Singh, B.P., Rupasi, T., Sanjay K. and Goel, A.K. 2015a. Socio-economic Profile of goat farmers in Uttar Pradesh. *Indian J. Small Rumin.*, **21**: 317-321.
- Vijay Kumar, Singh, B.P. and Goel, A.K. 2015b. Sample survey of Population status of native breeds of goats in semi-arid Uttar Pradesh. *Indian J. Small Rumin.*, **21**: 364-366.
- Yogi, R.K., Verma, N.K., Singh, S.R. and Gurjar, L.R. 2014. Constraint analysis of goat rearing households in Rajasthan. *Indian J. Small Rumin.*, **20**: 92-95.