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Socio-economic characteristic of tribal goat keepers of dungarpur district of Rajasthan state

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Abstract

The present study was conducted in Dungarpur district of Rajasthan selected purposely keeping in view the fact that the district has highest population of tribal's and goat population. Out of Five tehsils two tehsils i.e. Bichhiwara and Dungarpur were purposively selected. Two villages were selected from each panchayats thus total eight villages were selected. Therefore 20 respondents were randomly selected from each selected villages. The total sample size for this study was 160 goat keepers. The study revealed that the majority (61.88%) of the respondents had middle age group followed by youth, 23.12 per cent and veteran's age group 15.00 per cent. Majority (96.88%) of the respondents were male and while only 3.12 per cent were female. It was observed that the majority (68.75%) of respondents were illiterate followed by above primary level 21.88 per cent and up to primary level 9.37 per cent. The average family size was 5.76 ± 0.12 members. The study revealed that majority (95.00%) of the respondents belongs to the nuclear family composition, while as 5.00 per cent had joint family in the study sample. Average land holding was 5.88 ± 0.26 hectares. It was observed that almost (91.88%) respondents had Agriculture + Animal husbandry followed by Animal husbandry (8.12%) as their occupation for their livelihood. The average flock size was 16.89 ± 0.36 in the study sample. Majority (68.75%) of the respondents had low income, whereas, 21.88 per cent had medium income and remaining 9.37 per cent respondents had high income from goats rearing practices in the study area. The overall average goats per household in the study area were 16.89 ± 0.36 .

Keywords: Tribal goat keeper, age, education, socio economic status

Introduction

India is the home of large number and diverse nature of indigenous people, who are still untouched by the lifestyle of the modern world. These people are the poorest in the country that is still dependent on goats and agriculture. All these tribal people have their own culture, tradition, language and lifestyle ^[1]. Livestock play a vital role in the agricultural and rural economics of the developing country. The 19th livestock census revealed that India accounts India is endowed with the largest livestock population in the world which included 140.5 million goats in India ^[2].

Goat is the poor man's cow and it contributes significantly in income and employment generation for rural masses. Goat farming as low cost enterprises mainly because of the unique characteristics of goat like small size, clean habits, thrives on tree leaves, grasses etc. Goats play a vital role by providing milk and meat for nutrition and manure for agriculture. Goat rearing is an important enterprise not only for the livelihood of weaker sections of society, but it also helps in meeting nutritional requirement of farm families. Goat is generally maintained on feeding of locally available crop residues and agro-industrial by-products. Goat can consume a variety of vegetation, which are not useful for other species of livestock. Goat rearing is well suited to a rural weaker section of the society with small land or community based free grazing resources ^[3].

In Rajasthan state goat farming has become an income generating activity for every class of society whether they are landless or land holder, resource poor or progressive farmer and irrespective of their occupation. Hence, with this background the present study was conducted to know the personal socio economic characteristics of goat keepers of Dungarpur district of Rajasthan.

Materials and Methods

The present study was conducted in Dungarpur district of Rajasthan selected purposely keeping in view the fact that the district has highest population of tribals and goat population.

Dungarpur district accounts 10, 89,600 lac total livestock population. In Dungarpur district total goat population is 4, 16, 729 and contributes around 38.24 per cent (19th Livestock Census Rajasthan-2012), in which Dungarpur tehsil goat population is 1, 51, 281 and contributes around 36.30 per cent whereas, Bichhiwara tehsil goat population is 94,165 and contributes around 22.59 per cent [4].

Out of Five tehsils two tehsils i.e. Bichhiwara and Dungarpur were selected due to large population density of goats and the more dependability of the farmers on goat keeping for their livelihood. Out of the total 37 gram-Panchayat of the Bichhiwara Tehsil and 32 gram-panchayats of the Dungarpur Tehsil, Total 4 gram-panchayats i.e. 2 gram-panchayats from each selected tehsils were selected on the basis of maximum goat population. Two villages were selected from each panchayats thus total eight villages were selected. Therefore 20 respondents were randomly selected from each selected villages. The total sample size for this study was 160 goat keepers. The data were collected with the help of pretested structured interview schedule by holding personal interview with goat keepers by the researcher.

Results and Discussion

The results of data regarding personal characteristics viz., age, sex, education, size of family and type of family of the respondents. The results have been presented in following subsequent tables.

General profile of goat owners

1. Personal characteristics

In this section, data regarding personal characteristics viz., age, sex, education, size of family and type of family of the respondents have been presented. The results have been presented in subsequent tables.

1.1. Age of respondents

On the basis of their age, the respondents were classified into three categories i.e., youth (<33 years), middle (33-61 years) and veterans (>61 years).

Table 1: Distribution of respondents on the basis of age (n=160)

S. No.	Age Category	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Youth (<33 Years)	10	12.50	27	33.75	37	23.12
2	Middle (33-61 Years)	50	62.50	49	61.25	99	61.88
3	Veterans (>61 years)	20	25.00	4	5.00	24	15.00
Total		80	100	80	100	160	100
Mean ± SE		40.38±1.08		44.38±1.08		42.38±0.78	

F=frequency, %=per cent,

The data presented in table 1 depicts that the majority (61.88%) of the respondents had middle age group followed by youth, 23.12 per cent and veteran's age group 15.00 per cent. Dungarpur tehsil had more goat owners in middle age. The average age of respondents was around 42.38±0.78 in both of the tehsils. Dungarpur tehsil had more goat owners in middle age is associated with less involvement of veteran farmers as compared to Bichhiwara tehsil. The findings are in agreement with Bhatiya *et al.*, (2005) [5] and Sorathiya *et al.*, (2016) [6], whereas, contradictory with the study by Sharma (2005) [7] and Tanwar *et al.*, (2008) [8].

1.2 Sex of respondents

On the basis of type of sex, the respondents were grouped in

to two categories viz, male and female. Table 2 indicate that majority (96.88%) of the respondents were male and while only 3.12 per cent were female. The results indicate that a lot of concrete effort would be required to bring to rural women entrepreneur in goat husbandry enterprise on if it is suppose that women can reared goat entry. These observations are in agreement with the reports of Nipane *et al.*, (2016) [9].

Table 2: Distribution of respondents on the basis of sex (n=160)

S.No.	Sex	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Male	79	98.75	76	95.00	155	96.88
2	Female	1	1.25	4	5.00	5	3.12
Total		80	100	80	100	160	100

F=frequency, %=per cent

1.3 Education level of respondents

The level of education of selected respondents was classified into three categories, viz, illiterate, up to primary level and above primary level. Their frequencies were counted and converted into percentage for all the categories of respondents. It was observed that the majority (68.75%) of respondents were illiterate followed by above primary level 21.88 per cent and up to primary level 9.37 per cent. (Table 3). The majority (68.75%) of the respondents were illiterate. These results are in agreement with the findings of Bhatiya *et al.*, (2005) [5], Tanwar *et al.*, (2008) [8], Mishra *et al.*, (2012) [10] and Koli and Koli (2016) [11].

Table 3: Distribution of respondents on the basis of level of education (n=160)

S. No.	Education	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Illiterate	62	77.50	48	60.00	110	68.75
2	Upto primary level	16	20.00	19	23.75	35	21.88
3	Above primary level	02	2.50	13	16.25	15	9.37
Total		80	100	80	100	160	100

F=frequency, %=per cent,

1.4 Family size of respondents

On the basis of number of members in the family, the respondents were classified into three categories viz., small family (up to 4 members), medium family (4-8 members) and large family (above 8 members).

The data in table 4 indicates that the average family size was 5.76±0.12 members. The study also revealed that majority of respondents (68.13%) was living in medium size of family (4-8 members). These results are in agreement with the findings of Tanwar *et al.*, (2007) [12], Tanwar *et al.*, (2008) [8], Mishra *et al.*, (2012) [10] and Koli and Koli (2016) [11].

Table 4 Distribution of respondents on the basis of size of family (n=160)

S. No	Size of family	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Small (Upto 4 members)	18	22.50	14	17.50	32	20.00
2	Medium (4-8 members)	53	66.25	56	70.00	109	68.13
3	Large (>8 members)	09	11.25	10	12.50	19	11.87
Total		80	100	80	100	160	100
Mean±SE		5.63±0.18		5.89±0.16		5.76±0.12	

F=frequency, %=per cent,

1.5 Type of family

On the basis of type of family, the respondents were classified

into two categories viz., joint family and nuclear family.

Table 5 Distribution of respondents on the basis of type of family (n=160)

S.No.	Type of family	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Joint	5	6.25	3	3.75	8	5.00
2	Nuclear	75	93.75	77	96.25	152	95.00
Total		80	100	80	100	160	100

F=frequency, %=per cent

The data in table 5 indicates that majority (95.00%) of the respondents belongs to the nuclear family composition, while as 5.00 per cent had joint family in the study sample. These results are in agreement with the findings of Mishra *et al.*, (2012) [10].

2. Socio-Economic Characteristics

In this section, data regarding socio-economic characteristics viz., size of land holding, main occupation, flock size and income from goat rearing of the respondents have been presented. The results have been presented in subsequent tables.

2.1 Land holding

On the basis of size of land holding, the respondents were classified into three categories viz., small (up to 1 ha.), medium (1-2 ha.) and large (above 2 ha.). Their frequencies were counted and converted into percentage for all the categories of respondents. The data recorded in table 6 indicates that, average land holding was 5.88±0.26 hectares. The majority of the respondents (70.63%) had small size of land holding, whereas 15.62 per cent had medium size of land holding and remaining 13.75 per cent respondents had large size of land holding. Most of the goat owners were poor and had no ancestral land assets. The higher small land holding (82.50%) was possessed by goat owners of Dungarpur tehsil as compared to Bichhiwara tehsils. The observed land holding pattern showed that majority of respondents (70.63%) had small land holders. These results are in close to the findings of Singh and Rai (2006) [13] and Tanwar *et al.*, (2008) [8].

Table 6: Distribution of respondents on the basis of land holding (n=160)

S. No	Land holding	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Small (Upto 1 ha.)	47	58.75	66	82.50	113	70.63
2	Medium (1-2 ha.)	19	23.75	06	7.50	25	15.62
3	Large (>2 ha.)	14	17.50	08	10.00	22	13.75
Total		80	100	80	100	160	100
Mean ± SE		6.07±0.41		5.70±0.37		5.88±0.26	

F=frequency, %=per cent

2.2 Main occupation

On the basis of size of main occupation, the respondents were classified into two categories viz., Animal husbandry and Agriculture + Animal husbandry alone. Their frequencies were counted and converted into percentage for all the categories of respondents. The results are presented in table 7. It was observed that almost (91.88%) respondents had Agriculture + Animal husbandry followed by Animal husbandry (8.12%) as their occupation for their livelihood. These results are in agreement with the findings of Sharma (2005) [7] and Nipane *et al.*, (2016) [9].

Table 7: Distribution of respondents on the basis of main occupation (n=160)

S. No.	Main occupation	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Animal Husbandry	6	7.50	7	8.75	13	8.12
2	Agriculture+Animal Husbandry	74	92.50	73	91.25	147	91.88
Total		80	100	80	100	160	100

F=frequency, %=per cent

2.3 Flock size

On the basis of number of goats in the flock, the respondents were classified into three categories viz., small flock (<15 goats), medium flock (15-30 goats) and large flock (above 30 goats). Their frequencies were counted and converted into percentage for all the categories of respondents.

The data recorded in table 8 showed that the majority (69.38%) of the respondents had medium flock size, whereas 18.75 per cent had small flock size and remaining 11.87 per cent respondents had large flock size. The average flock size was 16.89±0.36 in the study sample.

Table 8: Distribution of respondents on the basis of flock size of goat (n=160)

S.No	Flock size	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Small (<15 goats)	17	21.25	13	16.25	30	18.75
2	Medium (15-30 goats)	51	63.75	60	75.00	111	69.38
3	Large (>30 goats)	12	15.00	07	8.75	19	11.87
Total		80	100	80	100	160	100
Mean ± SE		17.88±0.51		15.91±0.48		16.89±0.36	

F=frequency, %=per cent

Majority of respondents (69.38%) had medium flock size of goats followed by small flocks less than 15 goats. The results are agreement with the finding of Sharma (2005) [7], Jayashree *et al.*, (2014) [14] and Gebreyesus *et al.*, (2014) [15], respectively.

2.4 Income from goat rearing

On the basis of income from goat rearing, the respondents were classified into three categories i.e., low income (<15000`), medium income (15000-30000`) and high income (above 30000`). Their frequencies were counted and converted into percentage for all the categories of respondents.

The data recorded in table 9 showed that majority (68.75%) of the respondents had low income, whereas, 21.88 per cent had medium income and remaining 9.37 per cent respondents had high income from goats rearing practices in the study area.

Table 9: Distribution of respondents on the basis of goat income (n=160)

S. No.	Income	Bichhiwara		Dungarpur		Total	
		F	%	F	%	F	%
1	Low (<15000)	60	75.00	50	62.50	110	68.75
2	Medium (15000-30000)	12	15.00	23	28.75	35	21.88
3	High (>30000)	8	10.00	7	8.75	15	9.37
Total		80	100	80	100	160	100

F=frequency, %=per cent

Overall analysis of the data reveals that the majority (75.00%) goat owners had low income group in Bichhiwara tehsil as compared to Dungarpur tehsil. About two-third (68.75%) goat owners earned less than 15000` Per annum from goats. Very few goat owners (9.37%) earned more than 30000` per annum. These findings are contradictory to the reports of

2.5 Distribution of respondents on the basis of livestock composition

The study shows that respondents in the study area had maximum number of goats, compared to other livestock.

Table 10: Livestock composition of goat owners (n=160)

S. No.	Livestock	Bichhiwara	Dungarpur	Overall Mean
		Mean ± SE	Mean ± SE	
1	Cattle	2.51±0.12	2.31±0.11	2.40±0.08
2	Buffalo	2.15±0.11	1.74±0.10	1.94±0.07
3	Sheep	0.56±0.17	0.32±0.13	0.44±0.11
4	Goat	17.88±0.51	15.91±0.48	16.89±0.36
5	Donkey	0.01±0.01	0.01±0.01	0.01±0.01
6	Horse	0.04±0.03	0.04±0.02	0.04±0.02
7	Camel	0.01±0.01	0.04±0.03	0.03±0.02

SE=standard error

The overall average goats per household in the study area were 16.89±0.36. The average holdings of cattle, buffalo, sheep, horse, camel and donkey were 2.40, 1.94, 0.44, 0.04, 0.03 and 0.01, respectively in the study area (Table 10). The results are agreement with the findings of Gurjar (2006) ^[16] and Asefa *et al.*, (2015) ^[17].

Summary and Conclusion

The study revealed that the majority (61.88%) of the respondents had middle age group followed by youth, 23.12 per cent and veteran's age group 15.00 per cent. Majority (96.88%) of the respondents were male and while only 3.12 per cent were female. It was observed that the majority (68.75%) of respondents were illiterate followed by above primary level 21.88 per cent and up to primary level 9.37 per cent. The average family size was 5.76±0.12 members. The study revealed that majority (95.00%) of the respondents belongs to the nuclear family composition, while as 5.00 per cent had joint family in the study sample. Average land holding was 5.88±0.26 hectares. The average flock size was 16.89±0.36 in the study sample. Majority (68.75%) of the respondents had low income, whereas, 21.88 per cent had medium income and remaining 9.37 per cent respondents had high income from goats rearing practices in the study area.

References

1. Meena, S, Meena NPS. Historical perspectives of different tribal groups in India. *International journal of Interdisciplinary and Multidisciplinary Studies (IJIMS)*. 2014; 1(10):48-57.
2. AHD. Animal husbandry department, Rajasthan, 19th Livestock census Rajasthan-2012. 2012. animalhusbandry.rajasthan.gov.in/livestock_census.aspx.
3. Rohilla, PP, Chand K. Effect of supplemental feeding on growth of kids and milk yield of Marwari goats. *Indian Journal of Small Ruminants*. 2004; 10:136-140.
4. Farmers' portal. Department of agriculture and cooperation and farmer's welfare, ministry of agriculture and farmer's welfare. Government of India. 2015; 2. Farmers.gov.in
5. Bhatia J, Pandey UK, Suhag KS. Economic analysis of sheep and goat rearing in rain fed region of Haryana, India. *Indian Journal of Animal Science*. 2005; 75(12):1423-1432.
6. Sorathiya LM, Fulsoundar AB, Tyagi KK, Patel MD,

Dhamsaniya HB. Management Practices of goats followed by ahirs in heavy rainfall zone of Gujarat. *Indian Journal of Small Ruminants*. 2016; 22(1):92-96.

7. Sharma MC. Genetic investigation of body weight and Morphometry traits of Sirohi goats in the field. Ph.D. Thesis submitted to MPUAT, Udaipur (Raj.), 2005.
8. Tanwar PS, Vaishanava CS, Sharma V. A study on socioeconomic aspects of goat keepers and Management practices prevailed in the tribal area of Udaipur district of Rajasthan. *Indian Journal of Animal Research*. 2008; 42(1):71-74.
9. Nipane SF, Basunathe VK, Bankar SS, Seth P, Singh N. and Singh NK. Socio-economic status of goat keepers in Bhandara district of Maharashtra state. *International Journal of Science, Environment and Technology*. 2016 5(5):3615-3622.
10. Mishra Am, (Smt.) Mishra A, Jabbar MF. A Motivation and Innovation Profile of Tribal Goat Production System in Pakur District of Jharkhand State. *Indian Research Journal of Extension Education special issue*. 2012; 1:326-329.
11. Koli RT, Koli SR. Study of relationship between personal, situational, psychological and socio-economical characteristics with adoption of goat farming technology by the goat keepers. *Research Journal of Animal Husbandry and Dairy Science*. 2016; 7(1):11-15.
12. Tanwar PS, Vaishanava CS, Jain LS. Studies on housing and breeding management Practices adopted by goat owners in Tribal area of Udaipur district. *Indian Journal of Animal Research*. 2007; 41(1):59-61.
13. Singh MK, Rai B. Barbari breed of goat: Reasons of dilution in its home tract. *Indian Journal of Animal Sciences*. 2006; 76(9):716-719.
14. Jayashree R., Jayashankar MR, Nagaraja CS, Satyanarayana K, Isloor S. Goat rearing practices in southern Karnataka. *International Journal of Science Environment*. 2014; 3(4):1328-1335.
15. Gebreyesus G, Haile A, Dessie T. Ethno-veterinary knowledge and practices of issa-somali pastoralists around dire dawa, eastern Ethiopia. *International Journal of Research and Reviews in Pharmacy and Applied science*. 2014; 4(1):910-921.
16. Gurjar ML. Goat husbandry practices in Mewar region of the southern Rajasthan. Ph.D Thesis submitted to R.C.A. Campus, MPUAT, Udaipur (Raj.), 2006.
17. Asefa B, Kebede K, Effa K. Assessment of production and reproduction system of indigenous goat types in Bale Zone, Oromia, Ethiopia. *Academia Journal of Agricultural Research*. 2015; 3(12):348-360.