

Socio-Personal and Socio-Economic Profile of Goat Owners in India

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ABSTRACT

The study was carried out with the objective to determine the socio-economic characteristic of the goat owners of India. The study was purposively conducted in the state of West Bengal and Uttar Pradesh due to its high goat population. The socio-personal study shows that the mean age of the goat owners was around 41 years; they were mostly illiterates with medium family education status, low social participation but had high experience in goat farming. Agriculture was the main occupation of the goat owners; annual family income was about 0.77 lakhs where in 0.16 lakhs came from goat farming. Average flock size was about 18 goats and they mainly reared it for meat purpose but there was big difference in flock size between the two states. The goat owners possess negligible numbers of other large animals too.

Keywords: Socio-personal profile, socio-economic profile, goat owners

INTRODUCTION

Goats are reared mainly by poorest of the poor in developing countries. In India too, the small and marginal farmers, including landless agricultural labourers, mostly in non-green revolution areas where irrigation facilities are poorly developed, prominently rear goats (Rekib, 1998). Goat plays an important role and livestock production is an instrument for socio-economic change, improved income and quality of life (Panin and Mahabile, 1997). The role of goat farming in the upliftment of small, marginal farmers including landless agricultural laborers in India is well recognized. The goat population in India has increased at faster rate than that of other species of farm animals and during the last 40 years the increases is by 140 per cent. Singh *et al.*, (2015) and Manhas *et al.*, (2016) were also confirm the findings of the study. The success of any project aiming at the enhancement of the production potential of the animals at the farmers' flock through introducing superior technologies for mass adoption mainly depend on the socioeconomic status of the farmers. The past researches have also shown that education family education status, farm experiences, annual income from goat farming were vital for adoption of the improved practices for achieving desired production performances. Therefore, the present study was conducted to document the socio-personal and socio-economic, profile of the goat owners which will help researcher and policy makers for further improvement in their status.

METHODOLOGY

The study was purposively conducted in West Bengal (WB) and Uttar Pradesh (UP) states which were selected on the basis of high goat population in these states in the country. North 24 Parganas district from WB and Mathura district from UP were randomly selected for the study. Again, two blocks were randomly selected from the district and three villages were randomly selected from the block. List of farmers engaged in goat farming was not available, so key informants were contacted within the villages who can provide name of the farmers engaged in goat farming. Among the list provided by the key informants, 15 farmers were randomly selected from each villages for data collection. Thus, 45 farmers were randomly selected from 3 villages per block. Therefore, 90 farmers were selected from each state and 180 respondents form the total sample size of the study. Data were collected through personal interview methods with the help of a well- structured, comprehensive and pretested interview schedule on socio-personal and socio-economic profile of the goat owners.

RESULTS AND DISCUSSION

Socio-personal characteristic

The selected respondents in the present study ranged between 15 to 70 years of age with an average age of 41.46 years. The average age of goat farmers in WB and UP was

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40.74 and 41.56 respectively. Majority of the respondents were illiterates (51.67%) followed by primary school (19.44%), Junior high school (13%) and high school (13%) level of education. Similar findings were reported by mean family education status was medium (2.03) in the study area. Family education status was found to be higher than overall mean in WB (2.34) and lower in UP (1.71). This might be due to the fact that overall literacy rate in WB is higher than UP and this is also reflected among the goat farmers in these states. The study also shows that majority (56.72%) of the respondents had medium family education status. Kumar (2013) also reported similar finding among goat farmers in UP where he mentioned mean family education status was 1.98. The 't' test also shows that there was highly significant difference between family education status of goat farmers in two states. Majority (71.11%) of respondents were possessing nuclear families followed by joint families (28.89%). Mean family size of the goat farmers were 7.16 members. The mean family size of goat farmers in WB and UP was 6 and 8 members respectively. Similar finding was reported by Kumar (2013) in Uttar Pradesh where he reported that average family size was 7.2 members. The 't' test shows that there was highly significant difference between two states with respect to family size of goat owners. Majority (71.67%) of the respondents Hindu and the rest were Muslims. Chi-square test revealed that there was no significant difference between states with respect to religion of the goat owners. Majority (41.67%) of the respondents belong to general category followed by schedule caste (30.00%), other backward class, (16.11%) and schedule tribes (11.11%). Chi-square test depicts that there was highly significant difference between two states with respect to caste of the goat owners. Male (53.89%) was more engaged in goat farming than female (46.11%). But, female (63.33%) were more engaged in goat farming in WB whereas male (71.11%) were more engaged in UP. Chi-square test revealed that there was a highly significant difference between states with respect to gender of the goat owners. Majority (80%) of the respondents engaged in goat farming were married. Mean social participation of goat farmers in the study area was 0.33, while it was 0.44 in WB and 0.23 in among goat farmers of UP.

The result also shows that majority of the goat farmers had no participation (74.44%) followed by member in one organization (18.33%), member in more than one organization (3.33%) and office bearer of any organization (3.89%). The 't' test shows that there was no significant difference between two states in respect to social participation of goat owners.

It is clear that experience since their childhood (ancestral) was found among majority (75.56%) of the respondents, as their parents were rearing goats. At the same time a sizeable mass (24.44%) have started rearing goats at later part of their life. This indicates the adoption of goat husbandry as a preferred livelihood alternative in the study area. Chi-square test revealed that there was a significant difference between two states with respect to experience in goat rearing. It is evident from the study that the overall average farming experience was about 14 years. The 't' test shows that there was significant difference among goat owners between states with respect to experience in goat rearing. Majority (95.56%) of the respondents had not received any kind of formal training in goat farming. It might be due to illiteracy, lack of awareness, unavailability of training facility and unorganized goat farming sector.

Table 1: Distribution of the goat owners according socio- personal characteristic

Socio-personal characteristic	WB (n=90)	UP (n=90)	Total (N=180)
Age			
Young (15-33)	29 (32.22)	24 (26.67)	53 (29.44)
Middle (34-52)	38 (42.22)	48 (53.33)	86 (47.78)
Old (53-70)	23 (25.56)	18 (20.00)	41 (22.78)
Mean ± SD	40.74±13.82	41.56±12.64	41.46±13.21
't' value = 0.416			
Education			
Illiterate	40 (44.44)	53 (58.89)	93(51.67)
Primary	13 (14.44)	22 (24.44)	35(19.44)
Junior	16 (17.78)	8 (8.89)	24(13.33)
High	17 (18.89)	7 (7.78)	24(13.33)
Intermediate	2 (2.22)	00	2 (1.11)
Graduate	2 (2.22)	00	2 (1.11)
Family education status			
Low (0.6-1.73)	14(15.54)	44(48.84)	58(32.25)
Medium (1.74-2.86)	59(65.49)	43(47.73)	102(56.72)
High (2.87-4.0)	17 (18.87)	3(3.33)	20(11.12)
Mean ± SD	2.34± 0.61	1.71±.59	2.03±0.68
't' value = 7.109**			
Family Type			
Nuclear	70 (77.78)	58 (64.44)	128(71.11)
Joint	20 (22.22)	32 (35.56)	52(28.89)
$\lambda^2 = 3.894^*$			
Family Size			
Small (4-8)	84 (93.33)	58(64.44)	142(78.89)
Medium (9-12)	4 (4.44)	24(26.67)	28(15.56)
Large (13-16)	2 (2.22)	8 (8.89)	10 (5.56)
Mean ± SD	6.31±1.63	8.01±2.88	7.16±2.48
't' value = 4.869**			
Religion			
Hindu	65 (72.22)	64 (71.11)	129(71.67)
Muslim	25 (27.78)	26 (28.89)	51(28.33)
$\lambda^2 = 0.27$			
Caste			
General	38 (42.22)	37(41.11)	75(41.67)
OBC	9 (10.00)	22 (24.44)	29(16.11)
SC	23(25.56)	31 (34.44)	54(30.00)
ST	20 (22.22)	00	20(11.11)
$\lambda^2 = 26.650^{**}$			
Gender			
Male	33 (36.76)	64 (71.11)	97(53.89)
Female	57 (63.33)	26 (28.88)	83(46.11)
$\lambda^2 = 21.486^{**}$			

Marital Status			
Single	23 (25.56)	13 (14.44)	36(20.00)
Married	67 (74.44)	77 (85.56)	144(80.00)
$\lambda^2 = 3.472$			
Social Participation			
No participation	58 (64.44)	76 (84.44)	134(74.44)
Member in one organization	24 (26.67)	9 (10.00)	33(18.33)
Member in more than one organization	3 (3.33)	3 (3.33)	6(3.33)
Office bearer of any organization	5 (5.56)	2 (2.22)	7(3.89)
Mean \pm SD	0.44\pm0.81	0.23\pm.62	0.33\pm0.73
't' value = 1.966			
Experience			
Ancestral	62(68.89)	74(82.22)	136(75.56)
Non-ancestral	28(31.11)	16(17.78)	44(24.44)
$\lambda^2 = 4.332^*$			
Low (<5 years)	10(11.11)	6(6.67)	16(8.89)
Moderate (5 to 9 years)	17(18.89)	16(17.78)	33(18.33)
High (10 to 19 years)	37(41.11)	33(36.67)	70(38.89)
Very high (>20 years)	26(28.89)	35(38.89)	61(33.89)
Mean \pm SD	13.54\pm7.74	17.17\pm11.69	14.05\pm9.88
't' value = 4.449**			
Training			
No	87(96.67)	85(94.44)	172(95.56)
Yes	3(3.33)	5(5.56)	8(4.44)
$\lambda^2 = 0.830$			

Figures in parenthesis indicate percentage; **p<0.01, *p<0.05

Agriculture was the primary occupation for majority (50%) of the respondents, followed by labour (23.33%) and animal husbandry (13.89%). In WB, majority (60%) of the respondents had agriculture as the primary occupation followed by labour (17.78%) and self-employed (12.22%). Only 3.33percent of the respondents. Chi-square test revealed that there was a highly significant difference between two states with respect to primary occupation of the goat owners.

The mean land holding of the goat owners were 0.592 hectares in the study area. It needs to be mentioned that mean land holding of the goat owners in WB and UP were 0.396 hectares and 0.789 hectares respectively. The 't' test reveals that there was highly significant difference between land holding of goat farmers in two states.

The mean annual income from goat farming was low. The mean income from goat farming in WB was 10367 per year where as it was 19022 in UP. The result also shows that majority (60%) of the goat owners had a very low annual income (\leq 12000) from goat farming followed by 21.11 percent had low annual income (12001-24000).

The 't' test reveals that there was highly significant difference between annual income of goat farmers in two states.

The mean annual family income of the goat owners was low (*i.e.*, ₹ 76,544 \pm 49,594). The mean annual family income was low both in WB (*i.e.*, ₹ 65,744) as well as in UP (*i.e.*, ₹ 87,344). The results also shows that majority (45%) of the goat owners had a low annual family income

(₹ 50001-100000) per year followed by 36.11percent who had very low (\leq ₹ 50000), 13.33 percent had medium (₹100001-150000) and 3.33 percent had high (₹150001-200000) annual family income. Only 2.22 per cent had very high (\geq ₹ 200001) annual family income. It needs to be mentioned that majority (46.67%) of the goat owners in WB had very low annual family income while majority (48.89%) of the goat farmers in UP had low annual family income. The average flock size was small (*i.e.*, 18.11 \pm 38.02) and range varied from 5 goats per family to more than 150 goats. Average flock size in WB was very small (*i.e.*, 7.18 goat) while in UP it was medium (*i.e.*, 26.12 goat). The 't' test reveals that there was highly significant difference between two states in flock size of goat owners. The goat owners in UP were having higher flock size as compared to WB. The average herd size of cattle maintained by goat owners was small (*i.e.*, 0.86) and range varied from 0-8 cattle. Average herd size of buffalo was small (*i.e.*, 0.56) and range varied from 0-6 buffaloes. Average flock size of sheep was small (*i.e.*, 3.85) and range varied from 5-56 sheep. Average herd size of pig was small (*i.e.*, 0.06) and range varied from 2-3 pigs. All the goat owners in WB were found to be rearing the native Black Bengal breed. Only 2.22 percent of the respondents from WB had recently started rearing Jamunapari because of huge size and milk producing qualities compared to Black Bengal. Majority of the farmers in UP were found to be rearing non-descript breed (53.33%) followed by Jamunapari (26.67%), Barbari (25.56%), Majority (66.11%) of the respondents reared goat for meat purpose followed by dual purpose (33.89). It needs to be mentioned that almost all the respondents from WB rear goat for meat purpose and the respondents who reared goat for dual purpose (65.56%) were mainly from UP. Majority (90.56%) of the respondents were found to be having mobile phone. The study also shows that 86 percent of the respondents had bicycle, 68.33 per cent had electricity connection, 60.56 per cent had television, 20.56 per cent had radio and 11.11 per cent had motorcycle/moped. Chaff cutter was found to be possessed by 8.89 per cent of the respondents. Chaff cutter was found only among the respondents in UP who had a good number of dairy animals along with goat.

Table 2: Distribution of the goat owners according socio-economic characteristic

Socio-Economic Characteristic	WB (n=90)	UP (n=90)	Total (N=180)
Occupation			
Agriculture	54 (60.00)	36 (40.00)	90(50.00)
Animal Husbandry	03 (3.33)	22 (24.44)	25(13.89)
Labour	16 (17.78)	26 (28.89)	42(23.33)
Self Employed	11 (12.22)	06 (6.67)	17(9.44)
Service	06 (6.67)	00	06(3.33)
$\lambda^2 = 21.554^{**}$			

Land holding			
Landless	23 (25.56)	39 (43.33)	62(34.44)
Marginal (0.1-7.5bigha)	39 (43.33)	17 (18.89)	56(31.11)
Small (7.5-15bigha)	15 (16.67)	6 (6.67)	21(11.67)
Medium (15-22.5bigha)	7 (7.78)	8 (8.89)	15(8.33)
Large (\geq 22.5bigha)	6 (6.67)	20 (22.22)	26(14.44)
Mean \pm SD	6.39\pm 5.78	12.72\pm14.97	9.56\pm11.75
‘t’ value = 3.744**			
Income in goat farming (lakhs)			
Very low \leq (0.120)	64 (71.11)	44 (48.89)	108 (60.00)
Low \leq (0.121-0.240)	25 (27.78)	13 (14.44)	38 (21.11)
Medium \leq (0.241-0.360)	01 (1.11)	06 (6.67)	7 (3.89)
High \leq (0.361-0.480)	00	10 (11.11)	10 (5.55)
Very high \leq (0.481)	00	17(18.89)	17 (9.44)
Mean \pm SD	0.10\pm0.48	0.19\pm0.19	0.16\pm0.17
‘t’ value =6.204**			
Annual family income (lakhs)			
Very low \leq (0.5)	42 (46.67)	23(25.56)	65(36.11)
Low \leq (0.51-1)	37 (41.11)	44 (48.89)	81 (45.00)
Medium \leq (1.01-1.5)	9 (10.00)	15 (16.67)	24 (13.33)
High \leq (1.51-2)	0	06 (6.67)	6(3.33)
Very high \leq (2.01)	2 (2.22)	02(2.22)	4(2.22)
Mean \pm SD	0.66\pm0.37	0.87 \pm 0.56	0.77\pm 0.50
‘t’ value =2.986**			
Assets possession			
Mobile phone	85(94.44)	78(86.67)	163(90.56)
Radio	24(26.67)	13(14.44)	37(20.56)
Electricity	67(74.44)	56(62.22)	123(68.33)
Television	58(64.44)	51(56.67)	109(60.56)
Bicycle	82(91.11)	74(82.22)	156(86.67)
Motorcycle/Moped	02(2.22)	18(20.00)	20(11.11)
Tractor	00	02(2.22)	2(1.11)
Car	00	02(2.22)	2(1.11)
Refrigerator	24(26.67)	39(43.33)	63(35.00)
Computer	00	00	00
Internet	00	00	00
Chaff cutter	00	16(17.78)	16(8.89)

Figures in parenthesis indicate percentage; **p<0.01, *p<0.05

CONCLUSION

The study shows that there was a highly significant difference in the socio-personal and socio-economic profile of the goat owners between the two state with high goat population. A universal policy and plan may not work for all the goat owners in the country. Hence, while planning project aiming at the enhancement of the production potential of the animals for improvement of the small scale goat farming the difference in socio-personal, socio-economic and financial aspects of the goat owners need to be kept in mind by policy makers and researchers.

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