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Socio-Economic Status and Flock Management Practices of Sheep Farmers in Telangana Region of Andhra Pradesh

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Abstract: A study on socio-economic status of sheep farmer and flock management practices of sheep in Telangana region of Andhra Pradesh was carried out in 576 households in 96 villages in Telangana region of Andhra Pradesh. The study revealed that the mean age group of sheep farmer was 42.69 years and majority (70.31%) of the respondents belonged to middle age and illiterate category (74.65%). Majority (77.26%) of the sheep farmers had agriculture as their main occupation and the average sheep farming experience of 29.14 years. The study revealed that 71.53% possessed medium family size with overall mean land holding of 2.47±0.09 acres. Majority (45.66%) were marginal farmers and generated mean annual income ≤54957. About 42.88% of farmers possessed 50-100 sheep with mean flock size of 113.50±2.7 under field condition. In the study area, majority (59.03%) of sheep farmers followed the combination of stationary and migratory type of sheep rearing.

Key words: Socio-economic, farmer, households, sheep, Hyderabad, Andhra Pradesh

INTRODUCTION

According to 2008 census sheep population in Andhra Pradesh are 255.39 lakhs and ranks first in the country. The state has 34.5% of Indian sheep population.

Sheep is one of the important species of livestock contributing to the livelihood of resource poor farmers in rural areas, especially where crop and dairy farming are not economical in arid and semi arid regions. Sheep production is still in the hands of traditional shepherd community or economically weaker sections that are following traditional extensive system of rearing. The information on socio-economic status and management practices pursued by farmers are scanty in under field conditions hence, the present study was carried.

MATERIALS AND METHODS

The study was conducted in Telangana region of Andhra Pradesh based on sheep population according to livestock census of Andhra Pradesh, 2008. Telangana region is divided into three zones based on agro-climatic conditions. Selection of respondents was made by multistage stratified random sampling technique. In the first stage two districts from each zone were selected and in the second stage from each district, four mandals and from each selected mandal, four villages were selected based on sheep population. From each village 6 respondents were selected randomly for the present study. Information on housing and health management practices were collected through formal interviews using a structured questionnaire from 576 farmers maintaining sheep flocks in Telangana region and spread over 24 mandals and 96 villages.

RESULTS AND DISCUSSION

Age and literacy level: In the present study it was observed that majority (70.31%) of the respondents belonged to middle age followed by old age (17.53%) and young age (12.16%) in Telangana zone of Andhra Pradesh. The mean age group of sheep farmer was 42.69 years (Table 1). It apparently indicated that most of the young people have been choosing new vocations rather than traditional way of sheep keeping which they also think as an important social status while old age groups continued to be in sheep farming in the study area. Similar results were reported by Balusamy (2004) and Mishra *et al.* (2004). In contrary to these findings, Geeta *et al.* (1999) reported that 31.61% of sheep farmers were of young age group and only 25.51% were of middle and old age groups. Education plays a key role in adoption of improved management practices in livelihood enterprises particularly in sheep rearing. It was evident from the study that majority (74.65%) of sheep farmers belonged to illiterate category. The existing sheep

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Table 1: Socio-economic status of sheep farmers in Telangana region of Andhra Pradesh

Characters	Category	n (576)	Percentage
Age of sheep farmers (years)	Young	70	12.15
	Middle	405	70.31
	Old	101	17.53
	Mean	42.69	-
Level of literacy	Illiterate	430	74.65
	Literate	146	25.35
Occupation	Agriculture	445	77.26
	Animal husbandry	131	22.74
Sheep farming experience	Low	43	17.92
	Medium	155	64.58
	High	42	17.50
	Mean	29.14	-
Family size	Low	43	7.47
	Medium	412	71.53
	High	121	21.01
	Mean	5.69	-
Type of family	Joint	426	73.96
	Nuclear	150	26.04
Land holding (acres)	Landless (0 acres)	82	14.24
	Marginal farmers (0-2.5 acres)	263	45.66
	Small farmers (2.6-5 acres)	191	33.16
	Large farmers (>5 acres)	40	6.94
	Mean±SE	2.47±0.09	-
Annual household income	Low	23	3.99
	Medium	494	85.76
	High	59	10.24
	Mean	≤54957	-
Type of farmer's residence	Kutcha	465	80.73
	Pucca	111	19.27
Sheep farmer's caste	BC	561	97.40
	SC	3	0.52
	ST	7	1.22
Religion	Forward caste	5	0.87
	Hindu	572	99.32
	Christian	3	0.52
	Muslim	1	0.17

production system is discouraging them from attending school and taking any interest in education in the study area. The literacy rate has to be improved for early adoption of improved management practices by government and the voluntary organization. Similar findings were observed by Dhyani *et al.* (2000), Arora *et al.* (2007), Rao *et al.* (2008) and Suresh *et al.* (2008) in Uttaranchal, Rajasthan, Andhra Pradesh and Rajasthan, respectively.

Occupation and sheep faming experience: Majority (77.26%) of the households in Telangana region had agriculture as their main occupation and 22.74% of the respondents had animal husbandry as their main occupation. These findings were in accordance with earlier reports wherein 90.82% of the sheep keepers had agriculture as their main occupation in Mecheri sheep breeding tract (Thiruvenkadan *et al.*, 2004). Whereas Kuldeep *et al.* (2006) in Western Rajasthan reported that animal husbandry activities were the main occupation of the sheep owners.

In the study area majority (64.58%) of the sheep farmers had medium (17-41.3 years) experience in sheep farming and the average experience of 29.14 years. The investigation area was endowed with highest sheep population which encouraged them to undertake sheep farming. The present findings associates well with that of Maheswaran (1993) who had reported 64% of sheep farmers r with medium experience.

Family size and type: The average family size in the study area was 5.69±2.12. Majority of sheep famers (71.53%) possessed medium family size (3.58-7.81). It was the general perception of sheep growers to prefer bigger family which helps to share the work load. These results were in concurrence with Thilakar and Krishnaraj (2010) who found that about one half of the respondents had 4-5 members in their family. In Telangana region of Andhra Pradesh, majority (73.96%) of the sheep farmers' belonged to joint family followed by nuclear family type (26.04%). These results were in accordance with earlier findings of Kathirchelvan (1996), Rao *et al.* (2008) and Suresh *et al.* (2008).

Land holding and annual income: Majority of the sheep farmers in the study area were marginal farmers (45.66%) followed by small (33.16%), landless (14.24%) and only 6.94% farmers belonged to large farmers category. This indicated that almost all sheep farmers had land for agriculture and allied operations. The mean land holding of Telangana sheep farmers was 2.47±0.09 acres. Similar results were reported from West Bengal and Rajasthan by Bose *et al.* (1999) and Kuldeep *et al.* (2006), respectively.

In the investigation it was found that ≤54957 was the average income and 85.76% of farmers generated medium annual income (≤54,957 to Rs. 90,750/) and 10.24% of farmers had high annual income above ≤90,750. Rajapandi (2005) reported ≤30, 928.84 year^{-1} of Coimbatore sheep farmers in Tamil Nadu.

Sheep farmer's residence, caste and religion: Majority of the shepherds (80.73%) possessed kutcha house followed by pucca house (19.27%) made up of RCC and stone structure. Low economic status preventing them to have good housing facilities with permanent and minimum essential things. These findings were in accordance with Kuldeep *et al.* (2006) in Western Rajasthan and Roa *et al.* (2008) in Andhra Pradesh. Majority (97.40%) of sheep farmers belonged to backward community followed by S Scheduled Tribe (1.22%), Forward caste (0.87%) and Scheduled Caste (0.52%). This indicated that backward communities like Kurma and Golla (Yadavas) were found

Table 2: Flock management practices of sheep farmers in Telangana region of Andhra Pradesh

Characters	Category	n	Percentage
Flock ownership	Absolute	564	97.92
(n = 576)	Rental	12	2.08
Flock size	Up to 50	39	6.77
(n = 576)	50-100	247	42.88
	100-150	165	28.65
	>150	125	21.70
	Mean±SE	113.50±2.7	-
Flock managed by	Self	564	97.92
(n = 576)	Hired labour	4	0.69
	Both	8	1.39
Sheep rearing system	Stationary only	236	40.97
(n = 576)			
	Stationary+migratory	340	59.03
Source of rams	Farm bred	493	85.59
(n = 576)	Purchased	83	14.41
Among source of purchase	Shandy	9	10.84
of rams (n = 83)	Other farms	21	25.30
	Government	53	63.86
Source of ewe (n = 576)	Farm bred	0	00.00
	Purchased	576	100.00

to be the traditional sheep keepers in Telangana region of Andhra Pradesh. Similar results were observed by Thiruvenkadan *et al.* (2004), Kandasamy *et al.* (2006) and Kumar *et al.* (2006). About 99.32% of the sheep farmers in the survey area were Hindus followed by Christians (0.52%) and Muslims (0.17%). This could be due to by virtue of geographical distribution of the population. Kuldeep *et al.* (2006) reported in his study that Muslim formed the second category after Hindus in Western Rajasthan.

Flock management: It was found that majority (97.92) of the farmers in Telangana region had possessed their own sheep units while 2.08% farmers reared sheep on rental basis. This might be due to that sheep rearing was a traditional occupation and the animals were transferred from parents to their offspring.

Flock with more than one owner was observed by Kandasamy *et al.* (2006) in 33.30% of the Coimbatore sheep flocks. Kathirchelvan (1996) also reported a similar trend among 20% of goat rearers in Nagapattinam district of Tamil Nadu (Table 2).

The overall flock size observed under field condition was 113.50±2.7. It was found that 42.88 and 28.65% farmers maintained 50-100 and 100-150 flock size, respectively and 21.70% had >150 and only 6.77% maintained flock size up to 50. Similar results was observed on flock size by Kumaravelu (2007) in Southern zones of Tamil Nadu whereas Geeta *et al.* (1999) observed that majority (80%) of the sheep breeders had a flock size up to 30 sheep where as 20% had flock size up to 50 sheep with a mean of 28 sheep per flock. Chandran *et al.* (2009) reported that the average flock size of Vembur sheep was ranged from 20-68 sheep with a mean size of 38.6.

The present survey revealed that majority (97.92%) of sheep farmers involved themselves in sheep rearing whereas only 0.69% shepherds hired the services of labour but 1.39% followed combination of sheep farmer himself with hired labour. This might be due to the traditional occupation of sheep farmers. These results corroborated with the findings of Saravanakumar (2003), Thiruvenkadan *et al.* (2004) and Kuldeep *et al.* (2006).

In the study area, majority (59.03%) of sheep farmers followed the combination of stationary and migratory type of sheep rearing. Deficiency of fodder compelled the farmers to undertake migration and it was common during drought season. The results were in conformity with Anandarao (2010) who reported that 72.81% sheep farmers were stationary and migratory. Whereas 40.97% sheep flock were stationary in Telangana region of Andhra Pradesh. This might be due to cropping pattern and abundant availability of gazing material from forest, pastures, etc. which in accordance with the report on Muzaffarnagri sheep, Kumar *et al.* (2006) reported 89% of sheep flocks were stationary.

CONCLUSION

About 85.59% of sheep farmers replaced breeding rams from their own flock (farm bred) whereas 14.14% of respondents purchased breeding rams from different sources as a replacement stock in the study area. This indicated that sheep farmers were not aware of inbreeding effects in the flock. This could be due to lack of availability of superior breeding rams in the study area. Among the source of purchase, majority (63.86%) of shepherds' purchased breeding rams under different government schemes while 25.30 and 10.84% shepherds purchased from neighboring farms and shandy, respectively. This indicated that most of the shepherds benefitted by the ongoing government schemes in the study area. All the farmers in the study area replaced ewes from their own flock.

These results were in conformity with findings of Mehta *et al.* (1995) in the breeding tract of Sonadi and Malpura sheep and Thiruvenkadan *et al.* (2004) in the breeding tract of Mecheri sheep.

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