Indian J. Anim. Prod. Mgmt. Vol. 30(1-2) 58-62 (2014)

FEEDING AND BREEDING MANAGEMENT PRACTICES OF SHEEP IN TELANGANA REGION OF ANDHRA PRADESH*

N. RAJANNA[1], M. MAHENDER[2] AND T. RAGHUNANDAN[3]

Department of Livestock Production Management
Sri Venkateswara Veterinary University, College of Veterinary Science,
Rajendranagar, Hyderabad, Andhra Pradesh

Received : 21.04.2014 ***Accepted : 22.05.2014***

ABSTRACT

A survey on a study on feeding and breeding management practices adopted by sheep farmers in Telangana region of Andhra Pradesh was carried out with a sample size of 576 farmers across three zones by using multistage stratified random sampling technique. The survey revealed that farmers of these three zones mainly depend on grazing under extensive system to rear their flocks and the mean grazing time (hrs) and distance (km) in summer was 7.80 ± 0.04 and 6.00 ± 0.04 whereas mean grazing time (hrs) and distance other than summer months was 5.29 ± 0.05 and 3.76 ± 0.03, respectively. A Significant ($P<0.01$) association was observed between ram to ewe ratio among zones. Majority of the sheep famers (81.25%) reported that most of the sheep came into heat during autumn season followed by spring (13.84%) and summer seasons (4.86). Majority (82.47%) of sheep farmers harvested one lamb crop in a year.

Key words : Sheep, Feeding and breeding practices, Telangana region, Andhra Pradesh.

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 semiarid regions. Out of 25.23 millions, Telangana region contributes 52 per cent of sheep population in the state. In Telangana, sheep production is still in the hands of traditional shepherd community or economically weaker sections who are following traditional extensive system of rearing.

The knowledge on various sheep husbandry management practices followed by the farmers is of great importance as it may help in filling the gap between the existing practices and the recommended scientific practices. Hence, the present study was taken up on feeding and breeding management practices adopted by sheep farmers in Telangana region of Andhra Pradesh.

MATERIALS AND METHODS

The study was undertaken in Telangana region of Andhra Pradesh during 2010-2011. This region was divided into three zones viz., Northern Telangana Zone (NTZ), Central Telangana Zone (CTZ) and Southern Telangana Zone (STZ) on the basis of the agro-climatic conditions. Selection of respondents was made by multistage stratified

*Part of Ph.D thesis of 1st author

[1]Associate Professor & Head & corresponding author, Dept.of LPM, CVSc, SVVU, Korutla, Karimnagar, A.P

[2]Professor, Dept.of LPM, CVSc, SVVU, Rajendranagar, Hyderabad, A.P

[3]Professor & Head, Dept. of ILFC, CVSc, SVVU, Rajendranagar, Hyderabad, A.P

random sampling technique. In the first stage two districts from each zone were selected and in the second stage four mandals, from each district, and four villages, from each mandal were selected based on sheep population. From each village 6 respondents were selected randomly for the present study. Information on feeding and breeding practices were collected through personal interview method, using a structured questionnaire, from 576 farmers maintaining sheep spread over 24 mandals and 96 villages in Telangana. Data was tabulated frequency and percentages were calculated by using SPSS version 18.0.1 (Statistical package for social sciences). Chi-square test was employed to study the relationship between zones.

RESULTS AND DISCUSSION

It was observed (Table 1) that farmers of these three zones exclusiley depend on grazing under extensive system to rear their flocks. The findings were in conformity with other workers[7, 12].

Barren lands, road side lands and forest lands were being utilized as grazing resources for sheep by 72.05%, 24.13% and 3.82%, respectively in all the Telangana. Highly significant difference (P< 0.01) was observed between grazing sources and zones.

Majority (97.92%) of sheep farmers employed self or family labor to graze their own flock followed by (1.39%) employed combination of the family and hired labor. Few (0.69%) completely depend upon hired labor to graze and manage the flock. Similar finding was observed by other researcher[6] who reported that majority of sheep farmers employed self or family labour to graze their own flock (88.24 %) while only 11.76 per cent employed hired labour for the same.

Results (Table 2) indicated that in Telangana region of Andhra Pradesh, mean grazing time (hrs) and distance (km) in summer were 7.80 ± 0.04 and 6.00 ± 0.04, respectively whereas corresponding values for months were 5.29 ± 0.05 and 3.76 ± 0.03, respectively. The mean grazing time and distance in both seasons were significantly (P<0.01) higher in CT zone compared to NT and ST zones. It could be interpreted that when sheep flocks were deprived of vegetation from grazing sources they tend to walk longer distance in search of vegetation, hence higher grazing time and distance was noticed in summer. The present findings were in concurrence with earlier reports[9, 11,5].

23.61% of shepherds maintained optimum ram to ewe ratio (21 to 30 females for each breeding ram). Significant (P<0.01) association was observed between ram to ewe ratio among zones (Table 3). Earlier workers[9, 5] reported mean ram and ewe sex ratio was1:20 and 1:24, respectively in Nellore and migratory Coimbatore breeds of sheep.

In the study area majority (57.47%) of sheep farmers retained the breeding rams less than 5 years while 42.53 per cent farmers retained breeding rams more than 5 years in their flocks for breeding. Significant (P<0.01) association was observed between retention of breeding ram in the flock among zones. This might be due to the lack of availability of superior breeding rams besides to low adoption of scientific management practices among three zones in the study area.

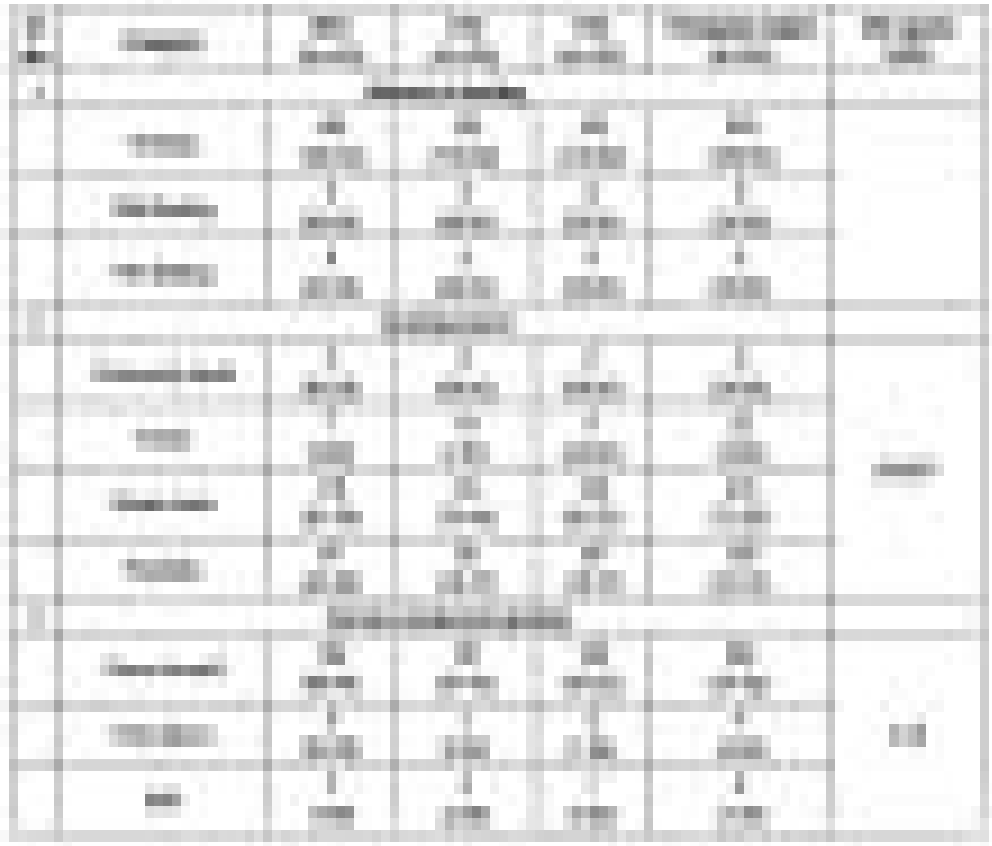
It was apparent from the table 3 that all the shepherds in the sample area gave preference to keep breeding rams throughout the year instead of keeping it during breeding seasons. All the sheep keepers were following flock mating and none of them followed controlled breeding, A.I and rotation of breeding rams. These results were corroborated with the findings of other researchers[10, 2]. On the contrary, one study[13] reported that adult rams were replaced after 3 to 4 years from the flocks.

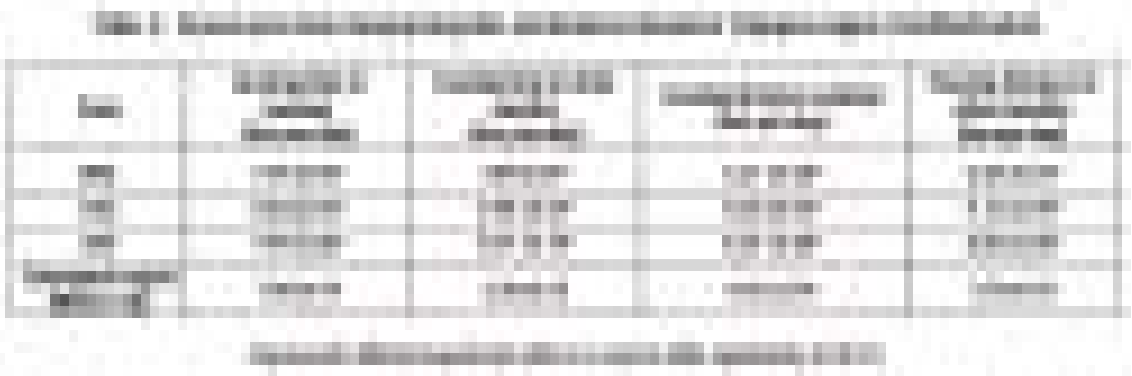
Majority of the sheep famers (81.25%) reported that most of the sheep came into heat during autumn season followed by spring (13.84%) and summer seasons (4.86) (Table 3). The findings gained the support of other workers[3, 4].

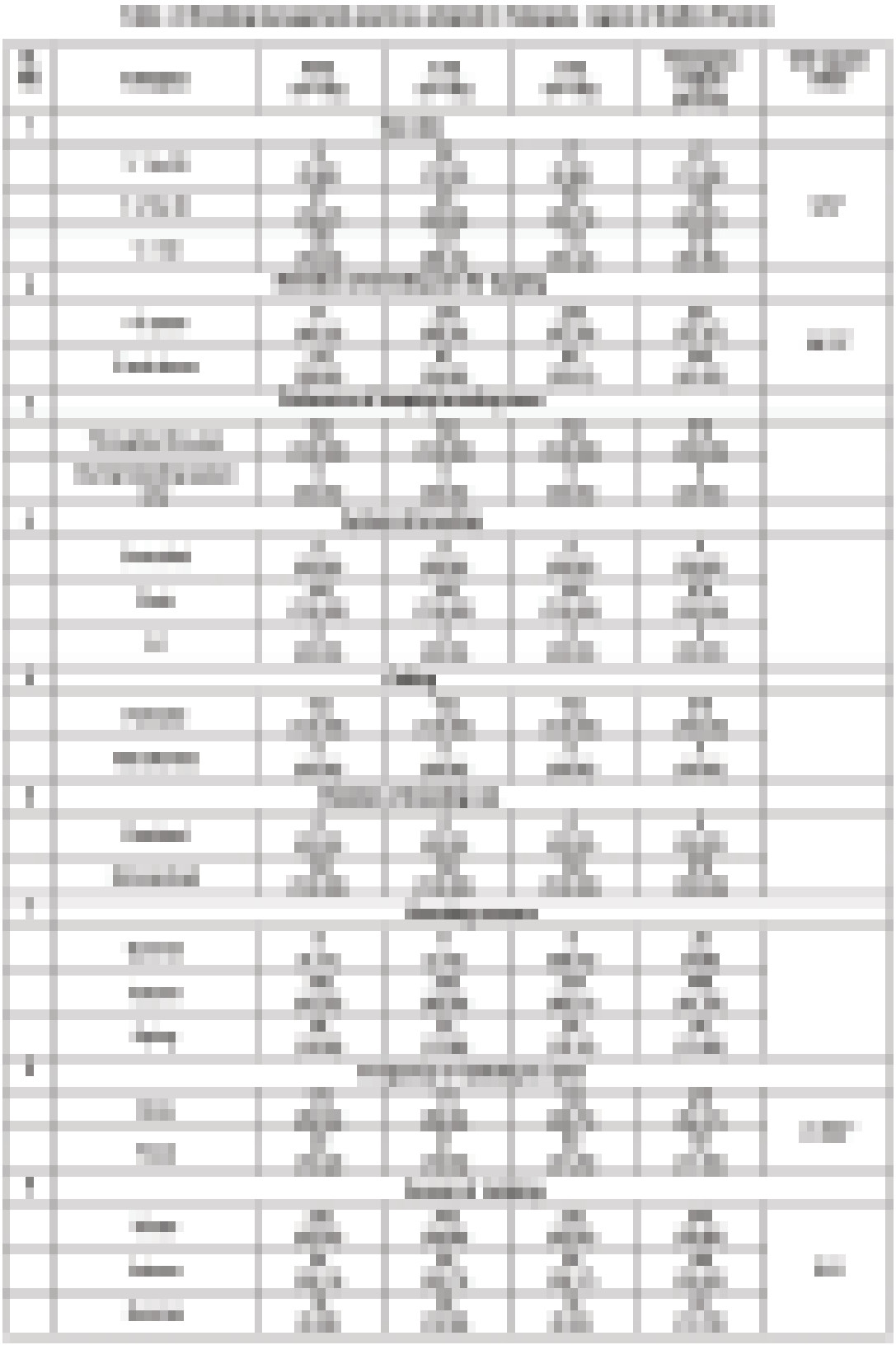
The findings pertaining to number of lambing in a year inferred that majority (68.75 to 89.58%)

of sheep farmers harvested one lamb crop followed by two lamb crops (10.42 to 31.25%) in a year in three zones (Table 4). Highly significant (P<0.01) association was observed between frequency of lambing among zones. The present result was not in conformity with the finding of earlier worker[6] who reported 90.59 per cent of the respondents harvested three lamb crops in two years while 9.41 per cent harvested only one crop / year, this might be due to regional climatic variations in which the animals was reared.

The present findings indicated that winter as major lambing season followed by two minor seasons in the study area (Table 4). The findings were in concurrence with the observations of earlier studies[8, 1].







CONCLUSION

The study on feeding and breeding management practices adopted by sheep farmers in Telangana region of Andhra Pradesh indicated that majority of the shepherds following extensive system of sheep rearing. Barren lands, road side land and forest lands were being utilized as grazing resources for sheep by 72.05%, 24.13% and 3.82%, respectively in the study area. Most (97.92%) of the shepherds themselves or their family members were employed in grazing and managing their sheep flocks. Significant (P<0.01) association was observed between ram to ewe ratio among zones. All the farmers were following flock mating and none of them followed controlled breeding, A.I and rotation of breeding rams. Significant (P<0.01) association was observed between frequency of lambing among zones.

REFERENCES

1. Anandarao, K. (2010). Analysis of Sheep production systems of North Coastal Zone of Andhra Pradesh. *Ph.D. Thesis*, Sri Venkateswara Veterinary University, Tirupati
2. Devendran, P., Kandasamy, N., Panneerselvam, S. and Thiruvenkadan, A. K., (2010). Rearing environment and husbandry practices of Coimbatore sheep. *Indian J. Anim. Sci*. 80: 470–72
3. Dineshkumar, Gurmej Singh and Anand Jain 2006. Characterization and evaluation of Muzaffarnagari sheep. *Indian J. Small Rum.* 12: 48-55.
4. Gopaldass, (2007). Production performance and management practices of Pugal sheep in the home tract. *Indian J. Anim. Sci.* 77: 763-766.
5. Kandasamy, N., Pannerselvam, S., Devenran, P. and Thiruvenkadan, (2006). Final report on survey, evaluation and characterization of Coimbatore sheep breed, Department of Animal Genetics and Breeding, VC&RI, Namakkal.
6. Kuldeepporwal, Karim, S. A., Sisodia, S. L., and Singh, V. K. (2006). Socio-economic survey of sheep farmers in western Rajasthan. *Indian J. Small Rum*. 12: 74-81.
7. Mishra, P. K., Barik, N., Pateo, B. N. and Nayak, S. (2004). Production potentiality of ganjam sheep under extensive management. *Indian J. Small Rum.* 10: 171-172.
8. Sahana, G., Jain, A. and Maity, S. B. (2004). Characterization and evaluation of Jalauni sheep. *Animal Genetic Resource information Bulletin*, 34: 67-73.
9. Saravanakumar, A. K. (2003). A study on the migratory pattern of Nellore sheep and their performance. *M.V.Sc., Thesis* submitted to Acharya N.G.Ranga Agricultural University, Hyderabad, Andhra Pradesh.
10. Suresh, A., Gupta, D. C. and Mann, J. S. (2008). Farmers management practices and economics of sheep farming in eastern semi-arid region of Rajasthan. *Indian J.Small Rum.* 14: 236-242.
11. Sushilkumar, Sharma, R. C., Mishra, A. K. and Arora, A. L. (2003). Production performance of sheep and certain management practices in farmer's flocks of south East Rajasthan. *Indian J.Small Rum.* 9: 103-105.
12. Thiruvenkadan, A. K., Karunanithi, K. and Purushothaman, M. R. (2004). Socio-economic Status of the Mecheri sheep farmers and economics of rearing under farmer's management. *Indian J.Small Rum.* 10: 117-122.
13. Verma, P.K., Anil Joshi and Satish kumar. (2005). Reproduction performance of Marwari sheep reared by farmers in hot arid environment. *Indian J.Small Rum.* 11: 135-139.

★ ★ ★