Routine Sheep housing Management activities followed by rural sheep farmers at Nellore district of Andhra Pradesh

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Abstract

The present study was undertaken at Nellore district of Andhra Pradesh , a total of 150 sheep farmers were selected from the study area. Majority of shepherds (75 %) provided shelter adjacent to their residence for easy monitoring purpose . Most of the farmers (98%) follows cost effective extensive system of management and 50 % flocks had 28-53 animals. The sheep farmers (50%) provided of closed with run space shelter and most of the sheep sheds (95%) were mud floor. Half of the sheds were (52 %) made with thatched roofing material with gable roof type (75 %) . The lambs mostly reared along with ewes (85%) and no special house made for lambs. The cleaning of sheds practiced (35%) twice daily. About 56-70 % of the sheds had no facility of waterers and mangers. Sheep farmers (30%) replaced top soil layer in their sheds once in a year. Most of the farmers (96 %) stored manure in the form of open heap. The housing of sheep was based on traditional knowledge and experience. Providing inputs such as short term loans to shepherds, efficient use of available resources and scientific management of breeding programme will improve the living standard of sheep farmer. To create awareness about scientific housing by periodical training and conducting demonstration are essential to improve the productivity and profitability of the region.

Key words : Sheep housing management, routine sheep housing activities, rural sheep farmers

Introduction

Small ruminants play an important role in Indian economy as it provides livelihood to two third of rural community. Sheep with its multi faced utility for wool , meat, milk, skin and manure form an important component of rural economy particularly in the arid, semi arid and mountainous areas of the country. For Landless labourers sheep rearing are the main source of occupation as their livelihood depends on this activity. Prabhu *et al*. (2009) and Jodha (2008) reported that extensive system of grazing of sheep is the cheapest way of feeding . The grazing lands are reducing drastically over the years and productivity of grazing lands declined due to improved strains of grass and legumes are becoming vanished from grazing lands resulted in decrease in availability of good quality fodder to sheep during most of the season. According to the 20 th Livestock census (2020) the total sheep population in the country 74.26 million, increased by 14.1 % over previous census .

Nellore sheep breed is mostly seen in this area and it is the tallest sheep breed well adapted to the hot and humid conditions. Most of the sheep farmers in the region were landless. This sheep serves as a source of livelihood for several small, marginal and landless livestock farmers.

Materials and Methods

Farmers were selected at random for the collection of necessary information. The inputs on various aspects of sheep housing practices adopted by each respondent were collected through a formal and personal interview using a interview schedule.

Statistical analysis

The data were tabulated frequency and percentage was calculated as per standard procedure.

Results and Discussion

It was observed from this study among the shepherds majority of them the location of the shed was (78 %) nearer to their residence within the close proximity of owners dwelling places were just adjacent to their homes. And 15% of farmers were housed their agriculture fields. It was agreement with the findings of Guriprasad et al., (2019). They were rearing sheep integration with other animals 75 % rearing cattle along with sheep, 25 % rearing along with buffaloes and majority 80 % of them rearing goat along with sheep

Table : Housing management of sheep in the field flocks of Nellore Jodipi at Nellore district

S.No	Category		Percentage
1.	Location of the shed	Near the residence	75
		Away from the residence	15
		Both	10
2.	Integration with other animals	Integration with cattle	73
		No cattle	27
		Integration with buffalo	25
		No buffalo	75
		Integration with goat	80
		No goat	20
		Integration with poultry	54
		No poultry	46
3.	Flock size	1 - 25	15
		26 - 50	50
		51 - 100	25
		101 - 150	8
		$\geq$150	2
4.	Sheep rearing system	Semi intensive system	2
		Extensive system	98
5.	Housing type	Open	17
		Closed	3
		Closed with open space	50
		Both open and closed	30
6.	Orientation of shed	East - west	90
		North – south	10
7.	Structure	Kutcha (mud)	90
		Pucca	10
8.	Support	Wood	54
		Stone	10
		Steel	36
9.	Wall	Wood	32
		Stone	18
		Brick	50
10.	Type of floor	Mud	90
		Elevated	10
11.	Roof type	No roof	11

		Gable roof	72
		Lean to type	17
12.	Roofing material	No roof	11
		Thatched	52
		Asbestos	15
		Galvanized iron	2
		Tiles	1
		Tarpaulins	2
		Thatched with Tarpaulin sheet	17
13.	Manger	Stone	12
		Cement	10
		Wood	9
		Other	14
		None	55
14.	Waterer	Cement	20
		Other	28
15.	Drainage	Mud	57
		Stone	39
		None	4
16.	White washing	Yes	60
		No	40
17.	Frequency of White washing	None	14
		6 months	40
		12 months	30
		Other	16
18.	Housing of lamb	House separately	20
		Along with ewe	80
19.	Type of lamb enclosure	No special house	81
		Movable structure	9
		Partition inside ewe shed	4
		Kept in farmers house	6
20.	Shed cleaning	Once	40
		Twice	55
		Weekly	5
21.	Soil replacement	No replacement	20
		Once a year	50
		Twice a year	12
		Weekly a year	8
22.	Disinfection	Yes	40
		No	60
23.	Method of storage of manure	Kept as open heap	92
		Applied directly in agriculture field	8

Among this farmers 15 % of the flocks are having less than 25 animals. 50 % of the farmers having 26 to 50 animals and 25 % having 51 to 100 animals in flock 8 % of farmers having 101 to 150 animals and 2 % were having flock size more than 150 animals. Similarly varying flock size were reported in other sheep breeds in Nellore sheep was ranged from 25 – 30 (Viroji rao *et al*., 2008), Prabhu *et al* ., 2009 reported the higher sheep flock size 46 % was observed in the landless labourers category in Tamilnadu.

Majority of the sheep shepherds 98 % followed in extensive system of management and only 2 % maintained in semi intensive system of management. Similar results were observed by Karthik *et al*., (2021) in Nellore sheep. The most of

sheep sheds (90 %) were constructed in east west orientation . Due to heat stress in the tropics this type of orientation protected the animals from direct sunlight (Sastry and Thomas 2015). Reddy *et al*., (2020) were also reported similar to housing practices observed North coastal sheep of Andhra Pradesh were housed mostly during nights and lambs were housed in special enclosure. Half of shepherds 50 % provided closed with run space shelter followed by 30 % both open and close type shelter, open type with tree shade and fencing 17 % and closed type 3 % of the shelter. Most of the sheep sheds were kutcha floor (90 %). The kutcha type of floor was more predominant in this region and it was cheaper by using locally available gravel, stone and sand. Reddy *et al*., (2020) observed the shelter is more of kutcha type (82 %) rather pucca type , limiting the latter housing system to 15 %in Andhra Pradesh. The boundary of the house was covered by cut branches of thorny bushes and woods.this was lead to unhygienic condition during rainy season. Though this type of floor was unhygienic this may be more beneficial in quick absorbing the moisture due to urine and manure. These observations were in conformity with the findings of Rajanna et al., (2013). Similarly Tailor *et al*., (2010) reported that all farmers 99 % had Kutcha flooring in their sheds and Guruprasad *et al*., (2019) at Hassan district. There was no basement (85 %) of the sheep shed and mostly support with wood (54 %) and walls are constructed with bricks (50%) and this results agreement Guruprasad *et al*., (2019) in Karnataka.

Most of the house were gable roof (72 %) followed by no roof (28 %). Coconut tree leaves, Paddy straw , Jowar stovers , bushes from forest and grasses were used as roofing materials. Though it was found to be more advantageous , it was less durable and poor in hygiene predispose to diseases Rajanna *et al*., (2013). The analysis of housing design revealed that most 80 % of the shepherds constructed their sheds with a ridge height of 5- 10 feet and only 10 % of them constructed with ridge height more than 10 feet. In sheep houses about 52 and 55 % of the sheds had no facility of waterers and mangers respectively. The fact that the sheep were rearing exclusively extensive system of management and fed and watered while they were grazed.

Conclusion

The present study revealed that the sheep farmers have poor level of knowledge about housing and intensity of importance of sheep housing. It was based more on traditional knowledge and experience rather than with modern scientific housing with minimal requirements. Factors like type of housing and roofing material were showing overall better performance of sheep. Creation of awareness in sheep farmers to pursue improved scientific management practices for better housing by periodical training and conducting demonstration are essential to improve the productivity of this region . Providing inputs such as short term loans to shepherd, efficient use of whatever available resources and scientific management will improve the living standard of sheep farmer. It is observed that lack of fodder for grazing was considered to be a highlighting constraint which could be overcome by supply of fodder at subsidized rate to the farmers and improved common pasture land for grazing through rural Government organizations to the sheep farmers.

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