

WOOL SHEARING PRACTICES AND GREASY FLEECE YIELD OF DECCANI SHEEP UNDER FIELD CONDITION IN TELANGANA REGION OF ANDHRA PRADESH*

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ABSTRACT

A survey was conducted to study the wool shearing practices of Deccani sheep followed by sheep farmers under field condition and GFY in Telangana region of Andhra Pradesh. Majority (55.59%) of the sheep farmers shorn sheep twice (83.71 %) in a year manually by hired labour. Most (95.53%) of the farmers felt that no market was available for wool in the study area. Zone had significant ($P < 0.01$) influence on GFY. The GFY was significantly ($P < 0.01$) higher in male (362.54 ± 2.95 g) compared to female (322.29 ± 2.12 g) in the study area. Two-toothed animals had the highest wool production (388.72 ± 3.22 g) in the study area compared to other ages.

Key words: Wool shearing practices, GFY, Deccani sheep, Telangana.

Andhra Pradesh state is known for its diversified livestock resources in nine well defined agro climatic zones. Andhra Pradesh state is divided into three geopolitical regions viz., Coastal Andhra, Telangana and Rayalaseema. Telangana region consists of ten districts accounting for 41.76 per cent of the states geographical area with mainly semi-arid tropical climate with an average rain fall of 800 mm. Out of total sheep population in the state, 40% of sheep belong to Deccani breed, and it is the predominant breed in Telangana region followed by Nellore breed. To meet the surging domestic and international

demand for mutton and wool products, it is necessary to improve the production and productivity of sheep. The present study was undertaken in 2011 to document the wool shearing practices adopted by sheep farmers and GFY of Deccani sheep in Telangana region of Andhra Pradesh.

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 subdivided into three zones based on agro-climatic conditions viz., Northern Telangana Zone (NTZ), Central Telangana Zone (CTZ) and Southern Telangana Zone (CTZ) (Table 1). The information on wool shearing practices was collected through formal interviews, using a structured questionnaire, from 313 farmers randomly maintaining Deccani sheep flocks in three zones of Telangana region. Data on Greasy Fleece Yield (GFY) was recorded by visiting places of shearing during 2010-2011. The data on GFY was collected only for single clip as the traceability of animals is difficult in the field². The amount of greasy fleece yield was measured with the help of pedestal balance with accuracy of 10

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gms. The data on wool shearing practices and GFY were statistically analysed by chi square (χ^2) test⁷ using SPSS, version 18.0.1 (Statistical package for social sciences) and by least squares analysis method⁵, respectively.

RESULTS AND DISCUSSION

From the Table 2 it was found that majority (55.59%) of farmers used the services of hired labour followed by combination of hired and own family labours (42.17 %) and own family labour (2.24%) to clip their sheep. Usually shearing was done by only Kurma community hence majority of the shepherds depend on their services for shearing of wool in the present study. Similar finding was observed in⁶.

In the present study, 83.71 % of farmers shorn their flock twice in a year followed by once (16.29%) in a year manually (100%) by locally made hand scissors. The study was in line with the findings of ^{7,3}.

Majority (95.53%) of Telangana sheep farmers felt that no market was available for wool. This is probably one of the main reasons to gradual shift towards Nellore breed from the native Deccani breed. Similar finding were reported by ⁸ who found the introduction of Nellore rams into the Deccani breeding tract as the shepherds of

Telangana region are losing interest in Deccani breed due to lack of demand for coarse wool.

The overall least-squares means for GFY (g) per clip were significantly ($P<0.01$) higher in NT zone (360.06 ± 2.39) followed by ST zone (349.91 ± 2.96) and CT zone (317 ± 4.09 ., Table 2). This could be attributed to variation in biomass availability in the zone and prevailing environmental condition. The present findings were lower than the reports of ⁷ for Malpura sheep, ¹ for Jaisalmeri sheep and ² for Coimbatore sheep and variation was attributed to genetic constitution of the breeds.

The least square means for GFY was significantly ($P<0.01$) higher in male (362.54 ± 2.95 g) compared to female (322.29 ± 2.12 g) in the study area. Higher wool production in males than females might be attributed to more surface area (body size) in males compared to females for wool growth. The findings were in consonance with the report of ^{4,2} for males and females in Pugal and Coimbatore sheep, respectively in its home tract.

The least squares mean GFY (g) in different ages groups were 388.72 ± 3.22 , 338.66 ± 3.37 , 344.09 ± 3.50 and 298.19 ± 3.71 for 2, 4, 6 and 8-teeth, respectively (Table 3). Two-tooth animals had the highest wool production as most of them were shorn for the first time. Similar findings were reported by ² in Coimbatore sheep of Tamil Nadu.

Table 1. Agro-climatic condition of different zones of Telangana

Feature	NTZ	CTZ	STZ
Latitude	170 5' -190 56'N	160 45' -180 36'N	1570 55' -170 60'N
Longitude	770 29' – 800 22'E	770 28' – 800 43'E	770 15' – 800 05'E
Geographical area (m. ha)	3.58	3.85	4.03
Maximum Temp (^o C)	30-37	32-37	28-34
Minimum Temp (^o C)	21-25	20-24	22-23
Average rainfall(mm)	1054	995	728
Relative humidity (%)	65	58	68

Wool shearing practices and greasy fleece yield

Table 2. Wool shearing practices followed by sheep farmers in Telangana region of Andhra Pradesh

S.No	Category	NTZ (n=161)	CTZ (n=53)	STZ (n=99)	Telangana region (n=313)	Z ² value
1	Persons involved in shearing					
	Hired	121 (75.16)	16 (30.19)	37 (37.37)	174 (55.59)	52.81**
	Self	1 (00.62)	2 (3.77)	4 (4.04)	7 (2.24)	
	Both	39 (24.22)	35 (66.04)	58 (58.59)	132 (42.17)	
2	Number of times sheared					
	Once a year	22 (13.66)	7 (13.21)	25 (25.25)	51 (16.29)	31.68**
	Twice a year	139 (86.44)	46 (86.79)	74 (74.75)	262 (83.71)	
3	Method of shearing					
	Hand shearing	161 (100.00)	53 (100.00)	99 (100.00)	313 (100.00)	4.20
	Machine shearing	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	
4	Wool market availability					
	Yes	0 (00.00)	0 (00.00)	14 (14.14)	14 (4.47)	3.03
	No	161 (100.00)	53 (100.00)	85 (85.86)	299 (95.53)	

Paranthesis in the table indicates percentages

** Significant (P<0.01)

Table 3. Greasy Fleece Yield of Deccani sheep in under field condition

S.No	Category	Number	Greasy Fleece Yield (g)	
			Mean	SE
1	Overall mean	613	342.41	1.92
2	Zone			
	NTZ	314	360.06 ^a	2.39
	CTZ	101	317.27 ^c	4.09
	STZ	198	349.91 ^b	2.96
3	Sex			
	Male	205	362.54 ^a	2.95
	Female	408	322.29 ^b	2.12
4	Age			
	2-teeth	177	388.72 ^a	3.22
	4-teeth	157	338.66 ^b	3.37
	6-teeth	147	344.09 ^b	3.50
	8-teeth	132	298.19 ^c	3.71

Means with different superscript(s) differ columnwise significantly (P<0.01)

CONCLUSION

In the Present survey it was found that the wool of Deccani sheep was shorn manually twice in a year. There is a need for strong extension activities to increase awareness among the sheep farmers regarding machine shearing of wool. Government should initiate steps to fix minimum support price for wool on the same lines of other commodities prevalent in the state. Zone, sex and age had great role expression of GFY. Hence, better management practices are to be adopted in order to bring about improvement in GFY.

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