

Mortality Pattern in Surti Goats under Field Condition

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Abstract

The mortality pattern under different age groups (0-3 M, 3-12 M and Adult) of Surti goats under field condition were studied in 11 towns/ cities of Bharuch, Surat and Navsari districts of South Gujarat region during 2006-2009. The overall mortality was recorded as 8.42 per cent while average mortality in the three groups was 11.75, 8.09, 6.04 per cent in 0-3 M, 3-12 M and Adult age group respectively during the three years period in the field condition. The major causes of mortality were recorded as enteritis (38.24 %) and pneumonia (38.24%). The mortality rate was high among all the groups in first year of study and decreased during subsequent years due to scientific and technical intervention.

Key Words: Surti Goat, Mortality Pattern

Introduction

Surti goat is a precious dual purpose breed of south Gujarat region and is mostly reared by Muslim community in one or two (Maximum 3) numbers in towns and cities situated on western coastal belt from Bharuch to Navsari districts. Among the surti goat keepers, majority belong to land less labour community and earn their livelihood through working in various places hence the other family members play major role in surti goat management. Majority of surti goat keepers rear the kids especially males up to one year of age and later sale at high price ranging from Rs. 6000-8000 during Eid festival. As the animals are reared in small number by each goat keeper, the mortality of goats affects their economic gain every year through sale of surti kids. No reports are available regarding mortality pattern of surti goat in field condition and hence the present investigation was planned.

Materials and Methods

The present study was conducted on registered surti goats and their followers in 11 small towns and cities in Bharuch, Surat and Navsari districts under Net work Project on Animal Genetic Resources (ICAR/NBAGR) entitled "In situ Conservation of Surti Goats" stationed at Navsari Agricultural University, Navsari during 2006-07, 07-08 and 08 - 09. The technical guidance regarding management practice, health coverage and first aid were provided to registered animals and followers during the period of study. The data recorded during the three year period on

mortality were analysed as per the standard method of Thrusfield (1995) and year wise data were arranged according to different age groups.

Results and Discussion

The results of mortality pattern during the study period are presented in Table-1 and 2 respectively.

The over all mortality in surti goats for the three years was recorded as 8.42 per cent. Amongst the different age groups, it was observed that the mortality rate was highest (11.75 %) in 0 to 3 months age group followed by 3-12 month age group (8.09%) and was least among adult group i.e. 6.04 per cent respectively (Table-1). The per cent mortality rate in present investigation was higher than those reported by Singh et al. (2009) and Sharma et al. (2007) in Zalawadi and Sirohi breed and lower than the findings of Alam et al. (2008) in Beetal goats under field condition.

The year wise analysis indicated that the mortality among the young age (0-3 months) was highest (15.15 %) during 2006-07 and lowest (10.00 %) during 2008-09. Similarly, the mortality rate among the kids of 3-12 months age group and adult animals also decreased to 6.94 % and 4.85 % respectively during the year 2008-09 from 10.53 % and 06.25 % in 2006-07 (Table-1). The similar trend in mortality pattern under different age groups has been reported by Singh et al. (2009), Alam et al. (2008) and Sharma et al. (2007) in Zalawadi, Beetal, and Sirohi breeds respectively.

The studies on causes of mortality pattern on 34 animals during 2008-09 revealed that the major cause

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of death were enteritis (38.24 %) and pneumonia (38.24 %) in registered surti goats. Singh et al. (2009, Alam et al. (2008) and Sharma et al. (2007) also reported that enteritis and pneumonia as major causes of kid mortality in Zalawadi, Beetal and Sirohi breeds respectively.

The decrease in mortality rate among goats of different age groups of Surti goats in present study might be due to technical intervention, guidance and support provided to the goat keepers under the project. However, goat keepers were advised to pay more attention to the new born kid to avoid mortality due to nteritis and pneumonia in early age.

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Table-1. Year Wise Mortality in Surti Goats under Different Age Group

Year	Age group	Total population (Number)	Number of Death	Mortality per cent
2006-07	0-3 month	66	10	15.15
	3-12 month	57	06	10.53
	Adult	112	07	06.25
	Total	235	23	09.79
2007-08	0-3 month	123	15	12.19
	3-12 month	108	09	08.33
	Adult	170	12	7.06
	Total	401	36	8.98
2008-09	0-3 month	160	16	10.00
	3-12 month	144	10	6.94
	Adult	165	8	4.85
	Total	469	34	7.25
Overall	0-3 month	349	41	11.75
	3-12 month	309	25	8.09
	Adult	447	27	6.04
	Total	1105	93	8.42

Table-2. Disease Wise Causes of Mortality in Surti Goat

Causes	0-3month	3-12month	Adult	Total No.	Per cent
Enteritis	8	4	1	13	38.24
Pneumonia	7	4	2	13	38.24
Plant poisoning	0	0	2	2	5.88
Tympany	0	2	2	4	11.76
others	1	0	1	2	5.88
Total	16	10	8	34	100.00
