CONSTRAINT PERCEIVED BY GIR CATTLE BREEDERS IN CONSERVATION OF GIR CATTLE IN AJMER DISTRICT OF RAJASTHAN[#]

V. Singh[1], S.C. Goswami, A.K. Jhirwal, V. Kumar, D.S. Manohar[2], K. Mohan, S. Meel[2] and P. Choudhary[3]

Department of Livestock Production Management, College of Veterinary and Animal Science
Rajasthan University of Veterinary and Animal Sciences, Bikaner-334 001, Rajasthan, India

ABSTRACT

A field survey was conducted to collect the first hand information on the constraints being perceived by Gir cattle breeders in conservation of Gir cattle in Ajmer district of Rajasthan. The data were collected from 160 Gir cattle breeders randomly selected from two tehsils of Ajmer district. As inferred from pooled percentage analysis, the distant location of veterinary hospital was one of the main constraints faced by Gir cattle owners on pooled percentage basis. The frequency and per cent value of this constraint was 146 and 91.25, respectively and this constraint was ranked second in Bhinay while first in Bijainagar tehsil. Abundance of stray animal was the second most serious constraint identified (Pooled per cent value, 89.37) in the study area. Based on tehsil wise percentage, the constraint was ranked first in Bhinay while second in Bijainagar tehsil, respectively. Lack of good breed-able Gir cattle bulls is 86.25 and ranked third on overall basis and ranked third in both Bhinay and Bijainagar tehsil.

Key words: Survey, Gir cattle breeders, constraint, veterinary hospital, stray animal

Introduction

Livestock sector is significantly contributing to the national economy and its growth rate is increasing. Due to liberalization and globalization policies, the demand for livestock products has increased. The rising per capita income, urbanization and lifestyle, women involvement in labour market and change in taste and preference are the important causes for the growth of livestock related products. The demand for animal related products such as milk, meat, wool and eggs have increased faster in India. The demand of livestock products has not only increased in urban area but also increased in rural area. The domestic demand and export enterprise has put huge pressure on the supply.

The Gir is a famous milch cattle breed of India. The native tract of the breed is Gir hills and forests of Kathiawar including Junagadh, Bhavnagar, Rajkot and Amreli districts of Gujarat. The breeding tract lies between 20°5' and 22°6' north latitude and 70° and 72° east longitude. In Rajasthan small pouch of gir cattle breeding track were found in Ajmer district where it is locally called as Ajmeri cow or Desi Reendi. The body of Gir animals is well proportioned. Udder in cows is well developed and round. The body weight at one year of age was 138 kg in males and 136 kg in females. Adult body weight, height at withers, body length and heart girth in cows averaged 313 kg, 120 cm, 125 cm and 160 cm, respectively (Gaur *et al.,* 2003) Average dry period and inter-calving period were 123 and 423 days, respectively. Total lactation milk yield averaged 2063 litres in an average lactation period of 326 days. Average milk yield in 300 days was 1 930 litres. Milk yield per day of calving interval was 4.98 litres. Average fat percentage in the milk ranged between 4.69±0.04 and 4.97±0.02. Gir animals are considered as hardy with low overall mortality 3.63 per cent (Gaur *et al.,* 2003)

Materials and Methods

A field survey was conducted to collect the information on constraint being perceived by Gir cattle breeders in conservation of Gir cattle in Ajmer district of Rajasthan (India). Two tehsils Bhinay and Bijainagar were selected randomly. Further four villages (Ganaheda, Champaneri, Laambagarh, Nemdi) from Bhinay and four villages (Dolatpura, Lor di, Kalayanpura, Bhagwanpura) from Bijainagar tehsil were identified and from each villages 20 respondents were selected randomly. The entire sample was consisting 120 respondents. The data were collected through personal interview technique from each selected respondents.

For measuring constrains in management practices of Gir cattle a simple frequency system was applied. The respondents were asked to give the information about the constraints faced by them. There after the frequency of each constrains countered by the respondents were ascertained and the frequency was converted into percentage. The simple comparisons were made on the basis of percentage.

Results and Discussion

Pooled and tehsil wise percentage values for two tehsils are presented in Table 1 and 2. As evident from the results, the distant location of Veterinary hospital was one of the main constraints faced by Gir cattle owners on pooled per centage basis. The frequency and per cent value of this constraint was 146 and 91.25, respectively and this constraint was ranked second in Bhinay while first in Bijainagar tehsil. Abundance of stray animal was the second most serious constraint identified (Pooled per cent value, 89.37) in the study area. Based on tehsil wise percentage, the constraint was ranked first in Bhinay while second in Bijainagar tehsil, respectively.

The pooled per cent values for the constraints lack of

good breed-able Gir cattle bulls is 86.25 and ranked third on overall basis and ranked third in both Bhinay and Bijainagar tehsil. These findings are contrary with the findings of Manohar *et al.* (2015) and Kumar *et al.* (2014). Lack of knowledge about importance of animal biodiversity was the fourth ranked serious constraint in the surveyed area. Based on district wise per cent values the constraint was ranked fourth in both Bhinay and Bijainagar tehsil. The pooled per cent value for this constraint was 83.75.

Table1**:** Distribution of the Gir cattle owners in Ajmer district by their constraints faced in Gir cattle conservation

Constraints code	Constraints	Rank	Ajmer	
			Frequency	Per cent
1.	Repeat breeder	5	122	76.25
2.	Distant location of veterinary Hospital	1	146	91.25
3.	Lack of A.I. centers, ill equipped and poor service at A.I. center	7	106	66.25
4.	Lack of knowledge about concentrate feeding according to milk production	9	75	46.87
5.	Abundance of stray animal	2	143	89.37
6.	Lack of knowledge about importance of animal biodiversity	4	134	83.75
7.	Lack of good breed-able Gir cattle bulls	3	138	86.25
8.	Lack of knowledge about proper sanitation and hygiene	10	58	36.25
9.	Lack of health care awareness and livestock production improvement programme in area	8	97	60.62
10.	Lack of Gosala's, NGO and conservation society in area for livestock conservation	6	121	75.63

Table 2: Tehsil wise per cent values of different constraints

Bhinay			Bijai nagar		
Constraints Code	Per cent	Rank	Constraints code	Per cent	Rank
1.	75.00	6	1	77.50	5
2.	90.00	2	2	92.50	1
3.	68.75	8	3	63.75	7
4.	50.00	9	4	43.75	9
5.	91.25	1	5	87.50	2
6.	81.25	4	6	86.25	4
7.	85.00	3	7	87.50	3
8.	18.75	10	8	17.50	10
9.	62.50	7	9	58.75	8
10.	78.75	5	10	72.50	6

Repeat breeder was ranked as fifth serious constraint, with a per cent value of 76.25 on pooled basis. Based on distribution of percentages, this constraint was ranked sixth in Bhinay while fifth in Bijainagar tehsil, respectively. These findings are contrary with the findings of Manohar *et al.* (2015) and Yadav *et al.* (2014) but in conformity with the findings of Meena *et al.* (2009). Other constraints like Lack of Gosala's, NGO and conservation society in area for livestock conservation, Lack of A.I. centres, ill equipped and poor service at A.I. centre, Lack of health care awareness and livestock production improvement programme in area, Lack of knowledge about concentrate feeding according to milk production, Lack of knowledge about proper sanitation and hygiene were ranked 6, 7, 8, 9, 10, respectively.

References

Gaur GK, Kaushik SN and Garg RC (2003) The Gir cattle breed of India-Characteristics and present status. *Anim. Gen. Res. Info.* **33**: 21-29.

Kumar U and Dahiya NS (2014) Constraints perceived by dairy animal in Sikar district of Rajasthan. *Vet. Pract.* **15**(2): 346-348.

Manohar DS, Manohar MS, Choudhary D and Rathore VS (2015) Constraints perceived inadoption of recommended management practices by buffalo owners in the Jaipur district of Rajasthan. *J. Dairy Vet. Anim. Res.* **2**(1): 00022.

Meena BS, Singh AK, Chauhan J and Sankhala G (2009) Farmers' knowledge on feeding practices of dairy animals in Jhansi district. *Indian Res. J. Ext. Edu.* **9**(1): 28-31.

Yadav DS, Chahal VP, Kumar A and Singh U (2014) Entrepreneurial behaviour and constraints encountered by farm women in dairy enterprise. *Indian J. Anim. Sci.* **84**(10): 1127-1132.