HOUSING AND BREEDING PACTICES FOLLOWED BY PROFESSIONAL GIR CATTLE OWNERS OF ANAND DISTRICT

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ABSTRACT

Data were collected from 100 professional Gir cattle owners from rural area covering 12 villages in Anand, Borsad and Umreth talukas of middle Gujarat which are densely populated with this community. The information was collected from respondents on housing and breeding management of dairy animals by a questionnaire. Majority of professional Gir cattle owners were landless and 94 % of them tied their animals in front of house on kuccha floor without providing shed/roof. Normally on an average length and width of floor space provided to animal was 7.0 ft and 3.55 ft. Housing management practices adopted in majority of cases were unhygienic, unhealthy and not according to the scientific recommendation. All (100.00 %) Gir owners surveyed followed natural method of breeding. Majority of Gir owners identified their animals in estrus by signs of mounting (53.00 %) followed by bellowing (49.00 %), frequent urination (13.00 %) and uneasiness (3.00 %). Majority (83.00 %) of them did not get confirmed the pregnancy in their animals. Majority (80.00 %) of the Gir owners had no knowledge about the signs of parturition. 42 per cent of them faced abortion as the major abnormality during calving followed by prolapse (34.00 %) and placental retention (22.00 %).

KEY WORDS: Gir cattle, Professional breeders, Housing, Breeding management

INTRODUCTION

Housing and breeding management along with scientific feeding play a key role for exploiting the potential of cattle and buffaloes for milk production. To utilize the feeding materials more efficiently housing management becomes an important factor to be considered (Dubey and Singh, 1975). Housing pattern reduces thermal stress and helps in increasing the productivity of animals. The reduced efficiency of animals due to extreme environmental condition is compounded to some extent by the change in intake and/or digestibility of feeds. Reproductive efficiency of milch animals largely depends on genetic make up, reproductive management, nutrition, common diseases, housing etc. Poor acceptability of AI in the field is also indicated by Tripathi (1995). For increasing the milk production and making the dairy business more remunerative it is essential to go for adoption of improved breeding through AI. Housing and breeding management adopted by most of nomadic professional cattle breeders is not scientific. Hence, there is need to provide knowledge of scientific housing and breeding practices to the Gir cattle owners through extension education programme. Keeping this fact in view, the present study was conducted in Anand district.

MATERIALS AND METHODS

This study was conducted in 3 talukas of Anand district of middle Gujarat to identify methodology of housing and breeding practices followed by professional Gir cattle owners. The data were collected through questionnaire and personal interviews of 100 professional Gir cattle owners of 12 villages. Four villages each of Anand, Borsad and Umreth talukas having higher number of Gir cattle owners were included in the study. The Gir owners were asked about the nature and type of housing and breeding management practices followed by them in rearing and breeding their animals as stated in the Table 1 and 2. The data generated were analyzed to find out frequency distribution of various scientific housing and breeding management practices followed by them. Based on the outcome of study, suggestions for improvement were passed to the animal owners.

RESULTS AND DISCUSSION

Housing Management

The findings presented in Table 1 reveal that majority of Gir cattle owners (94 %) did not provide shed to their animals and kept them in open round the clock. Hardly 6 % of Gir owners provided shed to their animals. This finding is in conformity with the observations of Kharadi (2004). Majority of Gir cattle owners (85 %) kept their animals in front of residence and 15 % kept their animals in back yard. Lal (1999) also reported similar observations..

Majority of Gir cattle owners (94 %) provided kuccha floor and only 6 % provided pucca floor to their animals. They provided earthen floor with the belief that it increases comfort and fitness of animals during sitting and standing. This finding was in agreement with the observations of Sastri et al. (1981), Dhiman et al. (1990), Malik and Nagpal (1998), Deoras et al. (2004) and Patel et al. (2005).

About roofing materials, majority (94 %) of Gir owners did not provide any roof to their animals and kept them in open or under the tree shade, while 6 % Gir owners used asbestos or galvanized sheets. Only 6 % of Gir owners provided pucca manger in shed who have pucca shed and also among this 5 % used cement pillar and only 1 % used wooden pillar for pucca shed (Table 1).

For better animal health and comfort an ideal size of floor space should be provided to each animal. Only 6 % of Gir owners who tied their animals inside the house provided pucca floor, the average length and width of floor was 7 ft and 3.55 ft per animal, respectively (Table 1). This result is in line with the finding of Deoras et al. (2004). All the Gir owners used water tank to provide drinking water two times a day to their animals. Deoras et al. (2004) also made similar observations. Majority of animal sheds in rural areas had improper drainage and dampness due to muddy floor.

Table 1: Distribution of Gir cattle owners (100) accor

Sr.	Categories
1	Placement in housing Inside / Out side
2	Type of shed Open / Close
3	Location of shed (a) Separate (b) Part of residence: Front / Back
4	Type of floor Kutcha / Pucca
5	Type of roof Asbestos / Galvanized
6	Manger availability No / Yes (a) Kutcha / Pucca (b) Manger dimension Length/Width Depth
7	Floor space per animal (i) Length/Width (ii) No. of animals tied/shed

Breeding Management

The improvement in dairy herd depends upon the regular and efficient breeding. All the Gir cattle owners surveyed in the area followed natural method of breeding (Table 2). They have belief that animals which are bred naturally become pregnant and those which did not return to next heat after service are invariably pregnant. Belli and Manjulla (1997) and Singh and Singh (1999) also reported similar observations regarding breeding practices followed by the professional nomadic breeders. Majority of the Gir owners identified their animals in estrus based on signs of mounting (53.00 %), bellowing (49.00 %), frequent urination (13.00 %) and uneasiness (3.00 %). These results are in accordance with the reports of Kokate and Tyagi (1991) and Dhammu and Gill (2002). Majority (83.00 %) of Gir owners did not go for confirmation of pregnancy in their animals. They were under wrong impression that rectal palpation induces abortion in animals. Rao and Rao (1985) and Singh and Singh (1999) also recorded similar views for professional breeders. Majority (80.00 %) of professional nomadic breeders had poor knowledge about the signs of parturition. Many of the Gir owners were facing abortion as the major abnormality (42.00 %) during calving followed by prolapse (34.00 %) and retention of placenta (22.00 %; Table 2).

Table 2: Distribution of Gir cattle owners (100) according to their breeding practices

Sr.	Categories	Frequency (%)
1	Breeding method	
	Natural / A.I.	100 / 00
2	Knowledge of signs of estrus	
	(i) Mounting	53
	(i) Bellowing	49
	(ii) Frequent urination	13
	(iii) Uneasiness	03
3	Pregnancy confirmation	
	Yes / No	17 / 83
4	Knowledge of signs of parturition	
	Yes / No	80 / 20
5	Abnormality during calving	
	(i) Prolapse	34
	(ii) Abortion	42
	(iii) Placental retention	22
	(iv) Uterine torsion	02

It was recorded that housing management practices adopted in majority of cases were unhygienic, unhealthy and not according to the scientific recommendation. Similarly, professional breeders also did not adopt scientific breeding technique/AI. This finding is also supported with the observations of Verma and Sastri (1994). The results, in general, showed that there is a need to provide knowledge of scientific housing and breeding management practices to the Gir cattle owners through extension education programme to improve their animals' genetic make up, health and productivity, and thereby their living standard.

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