



Constraints of tribal dairy animal owners of South Gujarat

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Received: 13 January 2011; Accepted: 19 January 2012

Key words: Breeding, Dairy animal, Healthcare, Management practices, Tribal

Adoption of improved animal husbandry practices by the tribal people is one of the important pre-requisites to substantially improve the quality of their life, but there are various constraints which hinders its adoption. Hence, present study was planned to identify constraints that hinders the tribal dairy animal owners to adopt recommended scientific management practices in housing, feeding, breeding, milking and healthcare management of dairy animals in the Vansada taluka of Navsari district of South Gujarat.

A field study was conducted from Oct-2008 to Jan-2009 to document constraints experienced by the tribal dairy animal owners of Vansada taluka of Navsari district of south Gujarat in rearing of their dairy animals. This taluka is spread over 95 villages and majority of the population is tribal (Anonymous 2006). Out of 95 villages in the taluka, 20 villages having functional primary milk producers' co-operative societies were selected randomly viz. Pratapnagar, Bhinar, Navatad, Mola amba, Khambhala, Kansariya, Dholumbar, Jamliya, Limbapada, Manapur, Bartad, Vasiyatalav, Vaghabari, Motivalzar, Kavadej, Dubal faliya, Mindhabari, Motibhamti, Khataamba and Navanagar. Dairy animal owners (10) from each selected villages were randomly selected with the help of Talati cum Mantri (Tehasildar), which represented a total of 200 respondents. These selected respondents were interviewed regarding major constraints in housing, feeding, breeding, milking and healthcare management practices of dairy animals. The respondents were asked about the nature and type of constraints faced by them in adoption of various management practices. The number of respondents indicating the same constraint was counted in frequency and then converted into percentage.

The major constraints observed related to housing were lack of own capital (92.50%) followed by high construction

cost (89%), high interest rate (22%) and lack of credit facility (6.50%) as shown in Table 1. This may be due to the fact that majority of the respondents in the survey area were poor, belonged to tribal area and they were unable to provide adequate housing to their dairy animals. Similar findings were reported by Mohi and Bhatti (2006) and Kumar *et al.* (2006) who observed lack of own capital as the major constraints for housing whereas, Vyas and Patel (2001) and Gour and Patel (2003) identified high construction cost as major constraints for animal housing.

The major constraints related to feeding of dairy animals were high cost of feed (91%) followed by non- availability of green fodder round the year (84%), lack of knowledge of balanced ration (45.50%), lack of knowledge about silage preparation (30%), lack of awareness about treatment of poor quality straw to improve its nutritive value (19%) and lack

Table 1. Distribution of the dairy animal owners according to problems faced by them in adoption of housing and feeding management practices

Particulars	Frequency	Percentage	Rank
<i>Constraints on housing</i>			
Lack of own capital	185	92.50	I
Lack of credit facility	13	6.50	IV
High interest rate	44	22.00	III
Lack of adequate space	01	0.50	V
High construction cost	178	89.00	II
<i>Constraints on feeding</i>			
High cost of feed	182	91.00	I
Lack of knowledge of balancing ration	91	45.50	III
Lack of availability of fodder crop seeds	11	5.50	VI
Non availability of green fodder round the year	168	84.00	II
Lack of awareness about treatment poor quality straw to improve its nutritive value	38	19.00	V
Lack of knowledge about silage preparation	60	30.00	IV

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of availability of fodder crop seeds (5.50%) as shown in Table 1. The results are in agreement with the findings of Chinnadurai *et al.* (2002), Manoharan *et al.* (2003), Singh *et al.* (2004), Kumar *et al.* (2006), Mohi and Bhatti (2006) and Prakash *et al.* (2011) who also observed that the major constraint was high cost of feed. Non availability of green fodder round the year as major constraint in feeding of animal was reported by Sirohi and Sirohi (1997), Chinnadurai *et al.* (2002) and Singh *et al.* (2004) and lack of knowledge of balanced ration was indicated by Mohi and Bhatti (2006) and Kumar *et al.* (2006) in their studies in different areas of India.

Breeding is one of the important pillars of production. Regular calving results in economical maintenance of dairy animals. However in the survey area the constraints observed were repeat breeding (81%), low conception rate through AI (54.50%), belief that pregnancy diagnosis (PD) through rectal palpation is harmful for pregnant animals (23.50%), lack of availability of insemination in time (7%), lack of improved bulls for breeding in villages (3%) and lack of knowledge of signs of heat (2.50%) as shown in Table 2. The results are in agreement with that of Kumar *et al.* (2006) who also identified repeat breeding as the major constraint. The results regarding low conception rate through AI are similar to that of Selvaraj *et al.* (2003), Singh *et al.* (2004), Kumar *et al.* (2006), Mohi and Bhatti (2006) and Singh and Fulzele (2006) in their studies in various areas of India. Looking to the constraints in breeding, the repeat breeding is of much more significance because of very high %. While examining the intercalving period and repeat breeding problem together the calving intervals seem to be higher in crossbred (53.85%) and in buffaloes (90.42%).

Good health is prerequisite for the optimum production in dairy animals. The constraints faced by respondents related to the healthcare were high cost of veterinary medicine (80.50%) followed by problem of mastitis in crossbred cows (73.50%), inadequate knowledge of diseases and their control (50.50%), non availability of services of veterinary doctor regularly (17%), non-availability of vaccine in time (6%) and distant location of veterinary hospital (3%) as depicted in Table 2. High cost of veterinary medicine is a world wide phenomenon. During discussion with them it came to the notice that in general the animals remain fairly healthy except for mastitis, which is a real problem. The results are in agreement with that of Meena and Fulzele (2004), Singh *et al.* (2004) and Kumar *et al.* (2006) for high cost of veterinary medicine, for problem of mastitis in crossbred cow with that of Singh *et al.* (2004) and for inadequate knowledge of diseases and their control with that of Selvaraj *et al.* (2003), Meena and Fulzele (2004), Kumar *et al.* (2006), Mohi and Bhatti (2006) and Singh and Fulzele (2006).

Milking is skillful work and requires speed. However the respondents faced constraints (Table 2) as non-remunerative price for milk (84.50%), lack of knowledge in clean milk

Table 2. Distribution of the dairy animal owners according to problems faced by them in adoption of breeding, milking and healthcare management practices

Particulars	Frequency	Percentage	Rank
<i>Constraints on breeding</i>			
Lack of knowledge of heat detection	05	2.50	VI
Low conception rate through A.I.	109	54.50	II
Repeat breeding	162	81.00	I
Lack of availability of insemination in time	14	7.00	IV
Belief that PD through rectal palpation is harmful for pregnant animals	47	23.50	III
Lack of improved bulls for breeding in villages	06	3.00	V
Preference of natural service in buffalo	00	00	-
<i>Constraints on healthcare</i>			
Problem of mastitis in crossbred cow	147	73.50	II
High cost of veterinary medicine	161	80.50	I
Non availability of vaccine in time	12	6.00	V
Inadequate knowledge of diseases and their control	101	50.50	III
Distant location of veterinary hospital	6	3.00	VI
Non availability of services of veterinary doctor regularly	34	17.00	IV
<i>Constraints on milking</i>			
Non remunerative price for milk	169	84.50	I
High cost of utensils	01	0.50	IV
Lack of preservation facilities for milk	13	6.50	III
Lack of knowledge in clean milk production	37	18.50	II

production (18.50%), lack of preservation facilities for milk (6.50%). It is well known that the price of milk either for sale or for purchase has remained sensitive issue. The only consolation is the marketing system which provides opportunity to sell the milk right at the village. The co-operative system of milk marketing is day by day developing in the tribal belt and is the healthy sign of progress. The results are in agreement with that Vyas and Patel (2001), Chinnadurai *et al.* (2002), Manoharan *et al.* (2003) and Kumar *et al.* (2006) who also observed that the major constraints was the non-remunerative price for milk in their studies. Similar findings were reported by Selvaraj *et al.* (2003), Meena and Fulzele (2004) and Kumar *et al.* (2006) who also found lack of knowledge in clean milk production as one of the constraint for milking management practices. Majority of respondents (81.5%) had the knowledge about procedure of clean milk production still they were not following it. Thus there is a need of creating awareness among

the farmers in this sphere of management. All other constraints are of lower magnitude and are not really troubling them to any great extent.

SUMMARY

A field study was conducted to identify constraints that hinder the tribal dairy animal owners to adopt recommended scientific management practices in the Vansada taluka of Navsari district of South Gujarat region. Majority of the respondents in the survey area were poor and major constraints observed related to housing, feeding, breeding and milking management practices were lack of own capital, high cost of feed, incidence of repeat breeding, and non-remunerative price for milk, respectively. For capital intensive management practices like high construction cost, interest rate, cost of feed and high cost of veterinary medicine milk union and Animal Husbandry Department can provide financial credit at lower interest to farmers through village co-operative societies or other appropriate agencies to uplift the socio-economic status of these resource poor people through dairying. Meanwhile, for the constraints like lack of knowledge of balanced ration, belief that PD through rectal palpation is harmful for pregnant animals, problem of mastitis in crossbred cows, inadequate knowledge of diseases and their control extension agencies (department of animal husbandry, milk cooperatives, KVKs etc) need to put in more efforts to educate the dairy animal owners to reduce the knowledge gap.

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