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Study on Constraints being Perceived by the Cattle Respondents in Non Tribal Area of Udaipur District of Rajasthan

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ABSTRACT

The present investigation was conducted in Mavli and Vallabhnagar tehsils of Udaipur district of Rajasthan. The study group included 160 cattle rearers which were selected randomly from four villages of above two tehsils. The problem of repeat breeding was the main constraint faced by the cattle rearers on pooled RBQ basis. The RBQ value of this constraint was 94.33 and the constraint was ranked first in both tehsils. Lack of A.I centres, ill equipped and poor service at A.I centres was ranked as second most serious constraint, with a RBQ value of 81.66 on pooled RBQ basis. Based on distribution of RBQ values, this constraint was ranked second in both tehsils. Distant location of veterinary hospital was the third most serious constraint in the area surveyed with the RBQ value of 75.85. This constraint ranked third in Mavli tehsil and fourth in Vallabhnagar tehsil.

Key words: *Constraints, Repeat breeding, RBQ, Non-tribal area, Udaipur, Rajasthan.*

INTRODUCTION

In view of the fact that the agro-climate conditions of India are too diverse from one region to another, a clear-cut breeding, feeding and managerial strategy is to be formulated for each region. The major hurdles for Indian Livestock rearers include unawareness of breeding, feeding, housing, milking, health care and marketing management practices. Due to lack of detailed information on existing breeding, feeding, housing and other managerial practices adopted for different categories of livestock, it has not been possible for the policy planners to give full attention to these important aspects of cattle production.

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An efficient management needs a strong database. Efforts should be aimed to collect and correlate all available information. Few efforts are known to have been made to study systematically the cattle management practices in rural areas. The information available and the notation prevalent on the subject have been based on assumptions, usual observations, experience and reports of some specialists and professional workers. This is hardly adequate to serve as the basis on which valid guidelines for developing programs of introducing improved and scientific management practices and for solving the problems encountered. Therefore, it is imperative to document first-hand information on the existing cattle husbandry practices being followed by the cattle keepers in Udaipur district of Rajasthan.

MATERIALS AND METHODS

In the present study two tehsils Mavli and Vallabhnagar of Udaipur district of Rajasthan were selected. Further, four villages (Gadoli, Garda ki Bhagal, Golwara, Rahmi) from Mavli and four villages (Ranchhorpura, Siyakheri, Roopawali, Netawala) from Vallabhnagar tehsil were identified and from each village 20 respondents were selected randomly. Thus, the entire sample consists of 160 respondents from selected eight villages in two tehsils of the district. The data was collected through personal interview technique from each selected respondent by a pre prepared interview schedule. The schedule covered constraints which prevents the adoption of improved cattle rearing practices by the respondent. For this, with the help of experts and literature, constraints relating to housing, feeding, breeding, health care and other management practices were enlisted. The schedule also included economic condition, literacy and availability of loan facilities, which may also act as constraints. In each selected village, five cattle respondents with cattle rearing experience were interviewed. Firstly, the five respondents were collectively asked to identify the constraints in their village in relation to cattle rearing. Based on pooled information finally 14 constraints were considered for present study. Each respondent was asked separately to rank the constraint without having interaction with the remaining farmers. Thus, each respondent had his/her own independent opinion regarding the seriousness of the constraints he/she faced.

On the basis of ranks provided by the farmers, rank based quotient (RBQ) for each constraint was calculated at village level on basis of the formula[7].

$$RBQ = \sum_{i-1}^{n} \frac{fi(n+1-i)}{Nn} \times 100$$

Where,

fi = the frequency of farmers for the ith rank of the constraint

N = thes numbers of farmers

n = the number of ranks

Similarly, the RBQ values at tehsil level and the pooled RBQ values of the 2 tehsils were calculated using weighted average of village and tehsil level values.

RESULTS AND DISCUSSION

Table 1: Pooled Rank Based Quotient (RBQ) Values of different constraints

Constraints	Constraint Code	Values	Rank
Repeat breeding	1	94.33	1
Distant location of veterinary hospital	2	75.85	3
Lack of A.I centres, ill equipped & poor service at A.I centres	3	81.66	2
Lack of knowledge about concentrate feeding according to milk production	4	63.84	5
Lack of proper marketing of milk	5	14.51	14
Lack of knowledge about deworming practices	6	44.92	10
Lack of good breedable bulls	7	20.05	13
Lack of knowledge about full hand milking	8	53.80	6
Farmers negligence in vaccination	9	75.72	4
Lack of knowledge about proper sanitation & hygiene	10	44.29	11
Poor economic condition	11	51.07	8
Illiteracy	12	47.46	9
Lack of vaccination facilities	13	52.19	7
Unavailability of bank loan facility	14	32.91	12

As evident from the results, the problem of repeat breeding was one of the main constraints faced by cattle rearers on pooled RBQ basis. The RBQ value of this constraint was 94.33, highest among all constraints. Lack of A.I centres, ill equipped A.I centres and poor service at A.I centres was ranked as second highest serious constraint, with a RBQ value of 81.66 on pooled basis. Distant location of veterinary hospital was the third most serious constraint in the area surveyed. It had the RBQ value of 75.85. Farmers negligence in vaccination was the fourth serious constraint identified (Pooled RBQ value is 75.72) in the study area. Lack of knowledge about concentrate feeding according to milk production was the fifth ranked constraint in the surveyed area. The pooled RBQ value for this constraint was 63.84. The pooled RBQ value for the constraint lack of knowledge about full hand milking was found at 53.80 and ranked at sixth.

Lack of vaccination facilities constraint ranked seventh and pooled RBQ value was 52.19. For poor economic condition, pooled RBQ value was 51.07 and ranked at eighth. The pooled RBQ value for the constraint illiteracy ranked ninth was 47.46. Lack of knowledge about deworming practices constraint ranked tenth in overall pooled RBQ value (44.92). Lack of knowledge about proper sanitation and hygiene constraint was ranked eleventh with RBQ value of 44.29. Unavailability of bank loan facility constraint with RBQ vale of 32.91 ranked twelth. The pooled RBQ value of constraint lack of good breedable bulls was 20.05 with rank thirteen and lack of proper marketing of milk constraint ranked fourteenth in overall pooled RBQ value (14.51) in the district.

Table 2: Tehsil wise RBQ values of different constraints

Tehsils					
Vallabhnagar			Mavli		
Constraint Code	Values	Rank	Constraint Code	Values	Rank
1	94.82	1	1	93.84	1
2	76.07	4	2	75.63	3
3	81.79	2	3	81.52	2
4	65.36	5	4	62.32	5
5	15.09	14	5	13.93	14
6	45.63	9	6	44.20	11
7	19.11	13	7	20.98	13
8	53.66	6	8	53.93	6
9	76.79	3	9	74.64	4
10	43.93	10	10	44.64	10
11	50.89	8	11	51.25	9
12	42.86	11	12	52.05	7
13	52.86	7	13	51.52	8
14	32.68	12	14	33.13	12

On the basis of Tehsil wise RBQ values of different constraints (Table 2) in Vallabhnagar tehsil, repeat breeding was the major constraint with RBQ value 94.82. Lack of A.I centres, ill equipped A.I centres and poor service at A.I centres was ranked second and Farmers negligence in vaccination was ranked as third major constraint with RBQ values 81.79 and 76.79, respectively. Distant location of veterinary hospital had a RBQ value of 76.07 and ranked fourth at Vallabhnagar. On the basis of tehsil wise RBQ values lack of

knowledge about concentrate feeding according to milk production was ranked fifth and lack of knowledge about full hand milking was ranked sixth with RBQ values 65.36 and 53.66, respectively.

Lack of vaccination facilities had a RBQ value of 52.86 and ranked seventh. Poor economic condition was ranked eighth with RBQ value of 50.89. Lack of knowledge about deworming practices was ranked ninth and lack of knowledge about proper sanitation and hygiene was ranked tenth with RBQ values 45.63 and 43.93, respectively. Illiteracy constraint was ranked eleventh with RBQ value of 42.86. Unavailability of bank loan facility was having RBQ value of 32.68 with rank twelth. Lack of good breedable bulls was ranked thirteenth and lack of proper marketing of milk was ranked fourteenth with RBQ value of 19.11 and 15.09, respectively.

In Mavli tehsil, problem of Repeat breeding was the major constraint with RBQ value 93.84. Lack of A.I centres, ill equipped A.I centres and poor service at A.I centres was ranked second and distant location of veterinary hospital was ranked as third major constraint with RBQ values 81.52 and 75.63, respectively. Farmer's negligence in vaccination had a RBQ value of 74.64 and ranked fourth at Mavli. On the basis of Tehsil wise RBQ values lack of knowledge about concentrate feeding according to milk production was ranked fifth and Lack of knowledge about full hand milking was ranked sixth with RBQ values 62.32 and 53.93, respectively. Illiteracy had a RBQ value of 52.05 and ranked seventh. Lack of vaccination facilities was ranked eighth with RBQ value of 51.52.

Poor economic condition was ranked ninth and lack of knowledge about proper sanitation and hygiene was ranked tenth with RBQ values 51.25 and 44.64, respectively. Lack of knowledge about deworming practices was ranked eleventh with RBQ value of 44.20. Unavailability of bank loan facility having RBQ value of 33.13 was ranked twelth. Lack of good breedable bulls problem was assigned rank thirteen with RBQ value of 20.98 and lack of proper marketing of milk ranked fourteenth with RBQ value of 13.93.

From the current study it is evident that repeat breeding was the most serious constraint faced in surveyed area of Udaipur. Repeat breeding was also found as a major constraint by Tailor *et al.*[9] in tribal belt of Udaipur and Yadav *et al*[10]. Problem of repeat breeding was also reported by Singh *et al.*[8], Meena and Malik[3], Rathore *et al.*[6] and Dhayal *et al*[2]. This constraint might had flourished because of poor nutrition (negative energy balance), improper detection of oestrous, prevalent non scientific housing in the area and lack of feeding essential minerals and vitamins for breeding.

Lack of A.I centres, ill equipped A.I centres and poor service at A.I centres was found to be second most serious constraint. Similar findings were also reported by Quddus[5] , Rathore *et al.*[6] and Meena and Malik[3].

Distant location of veterinary hospital, farmers negligence in vaccination, lack of knowledge about concentrate feeding according to milk production, lack of knowledge about full hand milking, lack of vaccination facilities, poor economic condition, illiteracy, lack of knowledge about deworming practices, lack of knowledge about proper sanitation and hygiene, unavailability of bank loan facility, lack of good breedable bulls and lack of proper marketing of milk were other constraints faced by cattle rearers. All these constraints faced were also reported in earlier studies by Mohi and Bhatti[4], Meena and Malik[3], Rathore *et al.*[6], Tailor *et al.*[9], Bhattu *et al.*[1] and Yadav *et al*[10].

The constraints encountered by cattle rearers accounts for low production in comparison to population of cattle. Similar studies have documented several common constraints faced by the rural strata. These constraint areas require urgent attention of the planners and researchers in order to give a boost to the economy of cattle rearing sector.

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