CONSTRAINTS ANALYSIS OF DAIRY FARMING IN BANSWARA DISTRICT

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ABSTRACT

A study was conducted to identify the constraints faced by milk producer households in Banswara district of Rajasthan with a sample of 90 households. The data were analyzed by Garrett's ranking technique. The findings of study indicated that major constraints faced by milk producer households were high cost of green fodder, dry fodder and concentrates (with score of 76.98) in feeding of animals, repeat breeding of animals (with score of 68.96) in breeding, lack of scientific housing (with score of 71.41) in health management, low price of milk offered by cooperative societies and milk vendors (with score of 60.12) in milk marketing, lack of number of hospitals (with score of 57.76) in infrastructure and poor knowledge about feeding and health care (with score of 63.06) in technical in the study area.

INTRODUCTION

In India, dairy occupies an important place in agriculture economy. Dairying is a supplementary and complementary enterprise to crop farming and highly integrated with the crop production sector. It has been considered as part of the mixed crop live-stock farming system in India for centuries. It is the backbone of the farmers and landless labourers in rural areas. Today, Rajasthan has second position in milk production. Since crop farming by erratic rainfall and limited area under irrigation, dairying has received special emphasis in solving the problem of poverty and un-employment in the Rajasthan in general and in the district of Banswara in particular. Thus, dairying activities with crop production are more helpful for milk producer households of Banswara district to increase their income and employment because of poor productivity of crops and low availability of per capita arable land. The milk producer households had to depend on limited resources available. Still milk producer households face a lot of constraints in dairying with respect to infrastructure, breeding, feeding, milk production, health management and marketing of milk. Keeping this in view, the present study was conducted to identify the dairying constraints perceived by milk producer households in Banswara district of Rajasthan.

RESEARCH METHODOLOGY

Banswara district of Rajasthan has been purposely selected for the present study. Three tehsils were selected from the Banswara district and Further; two villages from each tehsil were selected. Thereafter, 15 households were selected from each tehsil. Thus, total 90 milk producer households were considered to study the constraints in dairying. The selected respondents were interviewed personally in order to get relevant information with the help of structured interview schedule. The detailed information required for the study was collected from each of selected households for the year 2012-13. Then, the data collected were tabulated and analyzed by using Garrett ranking technique to interpret the results. By using this technique, the order of the merit given by the respondents was transformed into ranks using the following formula.

$$\text{Per cent position} = \frac{100 \, (R_{ij} - 0.50)}{N_j}$$

Where,

R_{ij} - Rank given for the ith factor by the jth individual

N_j - Number of factor ranked by the jth individual.

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The per cent position was converted into scores as per table given by Garrett and Woodworth (1969). Then, for each factor the scores of the individual household were added together and divided by the total number of households. The mean scores for all the factors were arranged in descending order and the most influencing factors were identified through the ranks assigned.

RESULTS AND DISCUSSION

In this study, an attempt was made to assess the constraints in dairying in the study area, Commonly occurring constraints were enlisted and the milk producer households in the study area were asked to rank the constraints related to feeding, breeding, health management, milk marketing, infrastructure and technical etc., and the same has been analysed by using Garrett ranking technique the result of which are presented as below.

Feeding constraints

The constraints faced by milk producer households in the feeding of animals are presented in Table 1 in the order of seriousness. Table 1 clearly exhibits that high cost of green fodder, dry fodder and concentrates was very serious constraint and ranked as first with the highest Garrett score of 76.98, unavailability of green fodder throughout the year ranked second most serious constraint (Garrett score of 62.69) and the least serious constraint was unavailability of cattle feed and fodder seed (with the least Garrett score of 33.62). Other constraints like, inadequate knowledge about proper/scientific feeding of dairy animals, lack of knowledge about mineral mixture and lack of sufficient pasture land for grazing the animals were ranked as third, fourth and fifth constraints, respectively.

Table 1: Feeding constraints

Constraints	Garrett's Rank Score	
1. High cost of green fodder, dry fodder and concentrates	76.98	1
2. Unavailability of cattle feed and fodder seed	33.62	6
3. Unavailability of green fodder throughout the year	62.69	2
4. Inadequate knowledge about proper/scientific feeding of dairy animals	57.81	3
5. Lack of sufficient pasture land for grazing the animals	48.83	5
6. Lack of knowledge about mineral mixture	49.04	4

Breeding constraints

The details of ranks for various constraints in breeding of animals are given in Table 2. The overall analysis of milk producer households revealed that first and foremost constraints in breeding were repeat breeding of milch animals with a Garrett score of 68.96. Similarly finding was also reported by Tailor *et al* (2012). This might be due to under feeding of milch animals. The milk producer also ranked that poor services available at artificial insemination centres (with Garrett score of 50.32) and lack of pedigree bulls for natural services (with Garrett score of 46.47) and inadequate knowledge about artificial insemination (with Garrett score of 35.59) as the second, third and fourth constraints in breeding of dairy animals

Table 2: Breeding Constraints

Constraints	Garrett's Rank Score	
1. Lack of pedigree bulls for natural services	46.47	3
2. Inadequate knowledge about Artificial Insemination	35.59	4
3. Poor services available at Artificial Insemination centres	50.32	2
4. Repeat breeding in dairy animals	68.96	1

Health Management Constraints

The constraints faced by milk producer households in health management of dairy animals are presented in Table 3 with their scores as well as ranks. Lack of scientific housing (with Garrett score of 71.41) was ranked as first and serious constraint in health management. Similar finding was also reported by Tailor *et al* (2012). Milk producer households could not afford to made huge amount of investment which was needed in preparing the scientific housing for dairy animals. Lack of knowledge about vaccination

against contagious diseases (with Garrett score of 68.32), lack of knowledge about isolation of sick animals (with Garrett score of 51.78), inadequate knowledge about deworming & dehorning of animals (with Garrett score of 46.71) and inadequate knowledge about cleaning/grooming of animals (with Garrett score of 35.87) were ranked as second, third, fourth and fifth constraints, respectively. The inadequate knowledge about these practices might be due to illiteracy. Inadequate knowledge about cleaning of cattle shed (with Garrett score of 26.74) was observed as least serious constraint.

Table 3: Health Management Constraints

Constraints	Garrett's score	Rank
1. Inadequate knowledge about cleaning/grooming of animals	35.87	5
2. Inadequate knowledge about deworming & dehorning of animals	46.71	4
3. Inadequate knowledge about cleaning of cattle sheds	26.74	6
4. Lack of scientific housing	71.41	1
5. Lack of knowledge about vaccination against contagious disease	68.32	2
6. Lack of knowledge about isolation of sick animals	51.78	3

Milk Marketing Constraints

The constraints of milk marketing faced by milk producer households are depicted in Table 4 with their scores as well as ranks. The analysis revealed that low price of milk offered by cooperative societies and milk vendors (with Garrett score of 60.12) was the first and major constraint in milk marketing in the study area. Irregular payment made by cooperative societies (with Garrett score of 53.73), irregular payment made by milk vendors (with Garrett score of 53.16), lack of number of cooperative societies (with Garrett score of 52.02) and unavailability of sufficient quantity of milk for market (with Garrett score of 43.14) were ranked as second, third, fourth and fifth constraints, respectively.

Table 4: Milk Marketing Constraints

Constraints	Garrett's score	Rank
1. Lack of number of cooperative societies for milk marketing	52.02	4
2. Low price of milk offeread by cooperative societies and milk vendors	60.12	1
3. Irregular payment made by cooperative societies	53.73	2
4. Irregular payment made by milk vendors	53.16	3
5. Unavailability of sufficient quantity of milk for market	43.14	5

Infrastructural Constraints

The infrastructural constraints faced by milk producer households are presented in Table 5. The overall analysis of milk producer households revealed that first and foremost constraint in infrastructural was lack of number of hospitals with a Garrett score of 57.76. This might be due to proportionally high ratio of animals followed by number of veterinary hospitals in study area. The milk producer also ranked that lack of number of artificial insemination centres (with Garrett score of 52.18), lack of marketing infrastructure (with Garrett score of 47.71) and unavailability of animal insurance (with Garrett score of 46.31) as the second, third and fourth constraints, respectively.

Table 5: Infrastructural Constraints

Constraints	Garrett's Score	Rank
1. Unavailability of animal insurance	46.31	4
2. Lack of marketing infrastructure	47.71	3
3. Lack of number of hospitals	57.76	1
4. Lack of number of artificial insemination centres	52.18	2

Technical Constraints

Technical constraints in dairying faced by milk producer households are presented in Table 6. The

overall analysis revealed that the poor knowledge about feeding and health care was the most serious constraints with highest Garret score of 63.06 and unavailability of semen at artificial insemination centre was least serious constraint with lowest Garrett score of 29.22. Unavailability of vaccines/medicines (with Garrett score of 57.56) and poor conception rate through artificial insemination (with Garrett score of 40.61) were ranked as second and third constraints, respectively.

Table 6: Technical Constraints

Constraints	Garrett's Rank Score	
1. Poor conception rate through artificial insemination	40.61	3
2. Unavailability of semen at artificial insemination centre	29.22	4
3. Unavailability of vaccines/ medicines	57.56	2
4. Poor knowledge about feeding and health care	63.06	1

CONCLUSION

Thus, it can be concluded from the result of study that the major constraints faced by milk producer households in feeding, breeding, health management, milk marketing, infrastructural and technical were high cost of green fodder, dry fodder and concentrates, repeat breeding of animals, lack of scientific housing, low price of milk offered by coopera-tive societies and milk vendors, lack of number of hospitals and poor knowledge about feeding and health care, respectively in study area.

REFERENCES

Chinnadusarai, S., Parimalom, Chinnadusarai and Markandau, J.C. 2001. Farm women in commercial dairy farming. *J. of Dairying, Food and Home Science,* **21** (1): 63-65.

Garrett, E. H. and Woodworth, R.S. 1969. Statistics in psychology and education. Vakils, Feffer and Simons Pvt. Ltd., Bombay, pp. 329.

Kumar, A., Singh, M., Suman, M. and Sharma, P. 2009. Constraints faced by farmers and their effect on milk production in rural areas of Jhansi district of Uttar Pradesh. *Indian J. Dairy Sci.,* **62** (2): 135-139.

Patil, A. P., Gawande, S. H., Nande, M. P. and Gobade, M. R. 2009. Constraints faced by the dairy farmers in Nagpur district while adopting animal management practices. *Indian J. Veterinary Sci.,* **2** (3): 111-112.

Tailor, R., Meena, G.L., Sharma, L. and Sharma, F.L. 2012. Constraints faced by the tribal farmers in dairy farming in Udaipur district. *Raj. J. Extn. Edu.,* **20** (1-3): 187-189.

Umar, J., Kumar, B. and Kumar, S. 2011. Constraints perceived by farmers in adopting scientific dairy farming practices in Madhuni district of Bihar. *Res. J. Agril. Sci.,* **2** (1): 142-145.

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