CONSTRANTS PERCEIVED BY THE DAIRY FARMERS IN ADOPTION OF SCIENTIFIC DAIRY FARMING PRACTICES

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ABSTRACT

The present study was carried out to find the constraints perceived by the respondents in practicing the dairy farming, scientifically. The study was conducted in the Karnal district of Haryana state in the 3 adopted villages of Dairy Extension Division of NDRI. From each village 40 dairy farmers who were having at least 2 milch bovines were randomly selected. Thus a total sample size happened to be 120 dairy farmers. In breeding practices majority of dairy farmer (57.50%) had perceived inadequate knowledge of breeding practices as their major constraint while the least important constraint perceived by the dairy farmer is faulty pregnancy diagnosis (40.00%). Regarding feeding practices major constraint is high cost of concentrates feeding feeds and fodder (83.33%) while the least reported constraint is poor resources for green fodder cultivation (44.16%). In management practices the major constraint is disinterest in maintaining simple records (85.00%) while the least important constraint is shortage of labour, lack of credit facilities and lack of cold storage facilities (48.33%). In health care practices (79.16%) of the respondents reported high cost of treatment / veterinary medicines given by veterinarians as their major constraint while (51.66%) of the respondents identified veterinary hospitals are poorly equipped, lack of facilities for disease control and diagnostic purpose, surgical operations and specialized treatments as the least important constraint.

Key words: Constraint, Dairy farmers, Karnal district, Scientific practices.

INTRODUCTION

India has one of the largest stocks of cattle and buffaloes: more than 50 per cent of the world's buffaloes and 20 per cent of its cattle. The Indian dairy sector contributes a large share of the agricultural gross domestic product (GDP). Although the contribution of agriculture and allied sectors to the national GDP has declined during the past few decades, the contribution of the livestock sector has increased from less than 5 per cent in the early 1980s to over 6 percent in the late 1990s. Milk and milk products constitute a major share of the value of output from the livestock sector; their share increased from less than 50 per cent in 1950-51 to about 65 per cent in the late 1990s. India is currently the largest producer of milk in the world. In last decade there was significant progress in milk production, but still there is a wide gap between the demand and supply.

This is due to low productivity of our milch animals, as the productivity in advanced countries is about 20 times higher as compared to our indigenous cows. We have the best breeds of buffaloes in the world, yet the productivity of buffaloes is less than that in some of the other Asian countries.

There is a need to develop the Dairy sector of our country by making a significant progress in the milk productivity in comparison with the other developed countries, and this can the achieved by taking the help of science in the field of dairying. In the field of dairying, there is a need to develop scientific attitude of farmers towards the dairy farming. There is a need to reach the tools, techniques and scientific methodology of farming to the farmer. But practically, there are several constraints which hinder the farmer in scientifically practicing the dairy farming. So, the present study...
was carried out to find the constraints faced by the dairy farmer in scientifically practicing the major areas of dairy farming i.e. breeding, feeding, management and healthcare.

MATERIALS AND METHODS
The present study was undertaken in Karnal district of the Haryana state. The dairy farmers of this district are having the privilege of having National Dairy Research Institute (NDRI), an institute of international reputation, in their vicinity, for getting valuable / timely guidance and / or inputs required for scientific dairying. Therefore it was assumed that the farmers of this district were practicing the dairy more scientifically. Three adopted villages of Dairy Extension Division, namely Budhakheda, Kulwheri and Subhri were selected purposively because the Dairy farmers of these adopted villages can be considered as having relatively more scientific knowledge than the others, since they remain more in contact with the Dairy Development activities of NDRI. From each village, 40 dairy farmers having at least 2 milch bovines were selected, randomly. Thus, a total sample size of 120 respondents was covered under the study. For finding out the constraints, 4 major areas of dairy farming i.e. breeding, feeding, management and health care were selected for the study. The basic instrument used for the study was interview schedule. The open ended questions were used for finding out the constraints in different area of dairy farming. An inventory of various constraints in the adoption of dairy farming practices was formulated for the study in consultation of available literature. Accordingly, 28 constraints were identified and sub-divided into breeding, feeding, management and health care practices for arriving at the responses from the farmers. The responses of the individual respondents on each item of these four areas were taken as ‘agree’ and ‘disagree’. For each ‘agree’ response with respect to each item of constraint, the score 1 was given; while the ‘disagree’ response received a 0 score. The score for each constraint was summed up. Higher the score, the more severe was the constraint, as perceived by the respondents.

RESULTS AND DISCUSSION
On the basis of herd size, dairy farmers were classified into marginal dairy farmers (up to 3 herd), small dairy farmers (4-6 herd), medium dairy farmers (7-9 herd) and large dairy farmers (more than 10 herd). Since the constraints faced by different categories of farmers were different so it was trust to find out the major constraints in each category of dairy farmers.

A. Constraints perceived by dairy farmers in Breeding practices
It was found that maximum constraints experienced by the marginal dairy farmers included lack of Artificial Insemination (AI) centers, ill - equipped AI centers, lack of services at AI centers and non availability of veterinary staff in centers. These constraints were experienced by 75.00 per cent of the marginal dairy farmers. Similar results were also reported by other researchers like Sharma (1980) and Gurnani (1985). Lacks of knowledge about pregnancy diagnosis was experienced by 62.50 per cent of marginal farmers. This shows that marginal farmers were also quite aware about the benefits of AI and pregnancy diagnosis and would like to have the advantage of this facility.

In the category of small dairy farmers, maximum constraints experienced by the majority of dairy farmers (61.36%) include inadequate knowledge of breeding practices, 54.55 per cent of the small dairy farmers experienced constraint of poor conception - rate in animals through AI while 52.27 per cent experienced constraint of faulty pregnancy diagnosis.

Maximum number of constraints was experienced by the medium category of dairy farmers such as inadequate knowledge of breeding practices (53.06%), followed by repeat breeding in crossbred cows/buffaloes by 51.02 per cent of dairy farmers. The third major constraint experienced by 46.94 per cent of respondents was lack of Artificial Insemination (Al) centers, ill equipped Al centers, lack of services at Al centers,

In the category of large dairy farmers, majority (73.68%) experienced constraint of lack of Artificial Insemination (Al) centers, ill - equipped Al centers, lack of services at Al centers followed by poor conception rate in animals through Al as reported by 68.42 per cent dairy farmers.

Overall constraint faced by all dairy farmers in breeding practices is inadequate knowledge of breeding practices 57.50 per cent while least
important constraint perceived by the dairy farmer was faulty pregnancy diagnosis (40.00%).

**B. Constraints perceived by dairy farmers in Feeding practices**

It was found that regarding the feeding practices, the major constraints faced by marginal dairy (87.50%) farmers were: lack of knowledge about balanced ration, lack of credit supply for the purchase of cattle feed and mineral mixture. The second major constraint faced by three-fourth i.e. 75.00 per cent of this category of farmers included non-availability of compound feeds and lack of quality feeds, high cost of concentrates feeding, feeds and fodder. Similar finding were also reported by Verma (1993). The marginal farmers are mainly facing the lack of credit supply and high cost of concentrate feeding may be due to they are having less resources for purchasing the costly feeds and fodder.

Among small category of farmers, the major constraint experienced by 86.36 per cent of respondents was high cost of concentrates feeding, feeds and fodder, followed by lack of credit supply for the purchase of cattle feed and mineral mixture by 81.82 per cent of the respondents. Minor constraints which were experienced by this category of farmers included disinterest in feeding animals due to low price of milk, lack/shortage of availability of HYV fodder seeds, and poor resources for green fodder cultivation.

In medium category of dairy farmers, the major constraint faced by 81.63 per cent of the dairy farmer includes high cost of concentrates feeding, feeds and fodder. After that, the major constraint faced by 73.47 per cent of the respondents was non-availability of compound feeds and lack of quality feeds. Minor constraint faced by 57.14 per cent of the respondents was lack/shortage of availability of HYV fodder seeds and disinterest in feeding animals due to low price of milk.

Among the categories of large dairy farmers 84.21 per cent felt the major constraint vis-a-vis high cost of concentrates feeding, feeds and fodder as well as easy availability of local substitutes. The second major constraint perceived by 73.68 per cent of large farmers were non-availability or poor availability of green fodder and lack/shortage of availability of HYV fodder seeds. These findings were in conformity of the finding of Fulzele (1994). Many of the large dairy farmers’ did not perceive poor resources for green fodder cultivation, lack of credit supply for the purchase of cattle feed and mineral mixture and disinterest in feeding animals due to low price of milk as their major constraints.

The overall major constraint faced by all dairy farmers in feeding practices was high cost of concentrates feeding feeds and fodder by 83.33 per cent while the least reported constraint was poor resources for green fodder cultivation 44.16 per cent. In all the four categories of farmers the major constraint found was high cost of concentrate feeds and fodder might be due to farmers were aware about the impact of feeding the concentrate feeds on increase of milk production.

**C. Constraints perceived by dairy farmers in Management practices**

Regarding management practices in the category of marginal farmers having up to 3 animals, all of the respondents (100%) felt lack of proper housing and high capital investment for scientific housing of animals as their major constraints. Only 37.50 per cent of the respondents felt shortage of labour, lack of credit facilities and lack of cold storage facilities as constraints.

In the category of small farmers having 4-6 herd size, majorities of the respondents (88.64%) perceived lack of proper housing as their major constraint, while 86.36 per cent of the respondents felt lack of knowledge of management practices such as weaning of new-born calf, dehorning of calves, etc., among the farmers and disinterest in maintaining simple records as their important constraints. The results are in consonance with Chauhan and Singh (2006).

In medium category of dairy farmers having 7-9 herd size, majorities of them (85.71%) felt disinterest in maintaining simple records as their very important constraints. Further, 77.55 per cent of them experienced lack of proper housing as constraint to them.

In large category of dairy farmers having more than 10 animals, majority of them (78.95%) perceived disinterest in maintaining simple records as major constraint, similar in the case of medium
category farmers also. Only 26.32 per cent in the category of large farmers experienced shortage of labour, lack of credit facilities and lack of cold storage facilities as important constraints.

Overall major constraint in management practices is disinterest in maintaining simple records (85.00%) while the least important constraint is shortage of labour, lack of credit facilities and lack of cold storage facilities (48.33%). Here also the overall major constraint found in all categories in disinterest in maintaining the records and lack of proper housing which shows the farmers' interest in carrying out the dairying in scientific way.

D. Constraints perceived by dairy farmers in Health - care practices

In the health - care practices, among marginal category of dairy farmers, all of them (100%) felt high cost of treatment / veterinary medicines given by veterinarians as a very important constraint. The second major constraint perceived by three - fourth i.e. (75.00%) of the respondents was non-availability of cheap and timely medicine. This may be due to the reason that farmers in this category are not having sufficient money resources but they want to provide the medication facilities to the dairy animals.

Among small category of farmers, a very large majority (90.91%) perceived high cost of treatment/veterinary medicines given by veterinarians as a major constraint. Further, 86.36 per cent of them felt lack of knowledge of disease - control measures as important constraint.

In medium category of dairy farmer 79.59 per cent experienced non-availability of cheap and timely medicine and high cost of treatment / veterinary medicines given by veterinarians as a very important constraint. Further, (73.47%) perceived non-availability of cheap and timely medicine as a constraint.

In large category of dairy farmers, majority of them (73.68%) felt lack of knowledge of disease - control measures as an important constraint. Further, 57.89 per cent experienced veterinary hospitals are poorly equipped, lack of facilities for disease control diagnostic purpose, surgical operations and specialized treatments as important constraint to them.

Under health care practices among all dairy farmers 79.16 per cent of the respondents reported high cost of treatment / veterinary medicines given by veterinarians as their major constraint which were in consonance with the results of Pandey (1996) while 51.66 per cent of the respondents identified veterinary hospitals are poorly equipped, lack of facilities for disease control & diagnostic purpose, surgical operations and specialized treatments as the least important constraint.

Here also the overall major constraint is high cost of treatment / medicines means farmers want to give the proper treatment to their animals which shows the outlook of farmers towards scientifically carrying out the dairying.

CONCLUSION

From the present study it was concluded that: Regarding the constraints in dairy farming practices, major constraints experienced by the dairy farmers included inadequate knowledge of breeding practices, lack of Artificial Insemination (AI) centers, ill equipped AI centers, lack of services at AI centers, poor conception - rate in animals through AI in breeding practices. There is need to improve the facility of AI services for animal in the villages. In feeding high cost of concentrates feeding, feeds and fodder, non-availability of compound feeds and lack of quality feeds and lack of credit supply for the purchase of cattle feed and mineral mixture was the major constraint, which showed farmers awareness towards concentrate feeding and there was a need to make available concentrate feeds to the farmers at a cheap rate. Lack of proper housing, disinterest in maintaining simple records was the major constraint in management practices, so there was need to provide the proper scientific information to the farmers regarding the different housing and how to manage the proper records. High cost of treatment / veterinary medicines given by veterinarians was the major constraint in health care practices, so to solve this problem veterinary officer could take the help from the state Animal Husbandry Department and should try to provide the medication facilities to the farmers at the cheap rate.
REFERENCES


