Assessment of Constraints Faced by the Dairy Farmers in Firozabad District of Uttar Pradesh while Adopting Animal Management Practices

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Abstract

The present study was carried out to analyses the constraints faced by the dairy farmers in Firozabad district. This survey work was held to collect the data from eight villages i.e. four each from randomly selected two blocks of Firozabad district by personally interviewing 120 dairy farmers. The problems associated with adoption of feeding practice (65.6%) health care practices (63.8%) milking practices (59.7%), breeding practices (57.3%) and housing practices (56.2%). Inadequate facilities of artificial insemination centre (54.6%), high price of concentrate mixture (79.4%), lack of capital for housing (62.7%). low economic gains (75.2%) and high cost of medicines (61.6%) were major stumbling block in adoption of the improved breeding, feeding, housing, milking and health care practices, respectively. As regards technical constraints, majority of the respondents (63.6%) have stated their constraint as inadequate knowledge of diseases, their prevention and control while 63.8% have referred their constraint as non-availability of veterinary services.

Key words: Constraints, dairy, breeding, commercial dairy farmers

Introduction

India continues to be the largest producer of milk in world. Several measures have been initiated by the Government to increase the productivity of livestock, which has resulted in increasing milk production significantly. Milk production during 2019-20 and 2020-21 is 198.44 million tonnes and 209.96 million tonnes respectively showing an annual growth of 5.81%. The per capita availability of milk is around 427grams/day in 2020-21. Uttar Pradesh is the highest milk-producing state in India. Uttar Pradesh contributes around 18% of the total milk produced in India. Dairy farming is considered as an important mean that can alleviate the poverty and also has remained one of the most important components in the traditional farming system of the country (Yankam, 2016). However, the business in India stands as the best example of production by masses rather than mass production (Srivastava, 2015).

Reproductive health may be considered as the back–bone of dairy industry; but some reproductive disorders have been found to be major reasons for decreased reproductive efficiency of dairy animals (Abdisa, 2018). Reproductive disorders in dairy animals like anoestrus, repeat breeding, dystocia, retention of placenta and prolapse affect profitability of the herd by lowering milk production (short term drop) and total number of calves produced, by increasing expenditure in term of veterinary service charge and medicine cost, increased culling rate and increasing inter-calving period. Profitability of the dairy herd, good heat detection and conception rate are influenced by an important factor i.e. reproductive performance (Grohn and Rajala – Schultz, 2000).

The rapid growth of milk production in India has been mainly because of the increase in the number of animals rather than that of improved productivity. The low productivity of dairy animals is of great concern and average productivity of Indian cow is only 987 Kg/ lactation as against the world average of 2038 Kg/ lactation. The gradual breed deterioration generally occurs from negligence over centuries and consequent rise in the population of non-descript cows (80%) and buffaloes (50%) along with the chronic shortage of feed and fodder coupled with their nutritive values and low fertility of our dairy animals has resulted in the low productivity. India possesses enormous bovine wealth, but their per capita production is one of the lowest in the world due to reasons that the farmers do not adopt improved dairy management practices at the desired level. Constraints are the circumstances or the causes which prohibit the dairy farmers from adoption of the improved management practices (Rathod et al., 2011). The widespread adoption of artificial insemination in the farmers was not possible due to wrong notions (Rath, 1977) as well as may be due to technical difficulty in getting successful conception rates due to

improper understanding of the technical details on the part of farmers and inability of workers to deliver technical goods as promised by the technique.

MATERIALS AND METHODS

The constraints in adoption of dairy farmers were studied through pre- designed and pre-tested questionnaire. 120 dairy farmers were selected with stratified random sampling method from eight villages i.e. four each from randomaly selected two blocks of Firozabad district. Fifteen farmers keeping livestock in varying sized were selected from each village. These households were distribution into three categories viz. small (< 2 animals), medium (2-5 animals) and large farmers having more than 5 animals. The basic instrument used for the study was the interview schedule. The questions were related to different constraints faced by the farmers while adopting animal husbandry practices. It was cross checked with experts from the Department. The information regarding constraints faced by dairy farmers in adoption of recommended practices as well as their general constraint perceptions were collected through personal interview method. The data was analyzed with standard statistical methods to drawn the results

Results and Discussion

The study revealed that 49.2% of the farmers were middle aged, 32.8% were old aged and the remaining 18% belonged to young age group. Majority of the dairy farmers (38.6%) had education level upto higher secondary followed by 32.3 % up to matriculation level and 29.1 % of the farmers were graduates. The constraints experienced by commercial dairy farmers of Firozabad district of Uttar Pradesh are discussed in two ways: domain wise and item wise. The study revealed (Table 1) the problems associated with adoption of feeding practice (65.6%) health care practices (63.8%) milking practices (59.7%), breeding practices (57.3%) and housing practices (56.2%). The item wise distribution of constraints experienced by commercial dairy farmers are given in Table 2. Inadequate facilities of artificial insemination (AI) centre were the major constraint faced by 69.1% of farmers, the high prices of the imported semen straw (65.3%) followed by unsatisfactory results of AI (48.8%), lack of staff at Government hospital (47.3%) and inexperienced staff at AI centers (31.8%). The results are in agreement with Podikunju et al. (2001) and Dabas et al. (2004). The study (Table 2) indicated that high price of concentrate mixture was the main constraint faced by majority (79.4%) of farmers followed by shortage of feed and fodders (63.9%), non availability of input for production and enrichment of green fodder (41.8%) and non availability of concentrates and mineral mixture in villages (33.6%). These results are in conformity with the findings of Rathod et al. (2011). There is a need to

educate the farmers about enrichment of fodder as well as balanced and economical feed preparation. The reasons for low adoption of improved housing practices for dairy farming were lack of capital followed by high cost of construction, lack of sufficient space and inconvenience practices in descending order (Table 2). Narmatha et al. (2010) also found high capital demand as major constraint in adoption of modern housing practices. Sharma et al. (2000) also reported that low knowledge level, high cost of construction and lack of sufficient space were main constraints in adoption of improved housing practices. High capital and high cost of construction are always an issue for farmers when they want to start a dairy as enterprise. In respect of adoption of milking practices, major perceived constraint was low economic gains. It was followed by problem of labour, time consuming and lack of knowledge (Table 2). The findings are in agreement with Maity and Sidhu (2001). Jayalaxami et al. (1997) also reported low price of milk as a major constraint. Among the constraints in adoption of health care practices, the majority of farmers admitted that nonavailability of adequate veterinary services was the major problem. It was followed by non-availability and high cost of medicines, less economic returns and no provision for testing of animals (Table 2). Rathod et al. (2011) also highlighted the non-availability of adequate veterinary services and high cost of medicine as major constraints among health care services. The study conclusively revealed that inadequate facilities of AI centre, high price of concentrate mixture, lack of capital for housing, low economic gains and non availability of adequate veterinary services were major stumbling block in adoption of the improved breeding, feeding, housing, milking and health care practices, respectively. There is dire need to frame policy a government level to remove bottlenecks faced by commercial dairy farmers in order to adopt dairy as entrepreneurship.

Table 1. Domain-wise distribution of constraints experienced by dairy farmers

Sr. No.	Constraints	**Percentage**
1	Constraints in adoption of feeding practices	65.6
2	Constraints in adoption of health care practices	63.8
3	Constraints in adoption of milking practices	59.7
4	Constraints in adoption of housing practices	56.2
5	Constraints in adoption of breeding practices	57.3

Table 2. Item-wise distribution of constraints experienced by dairy farmers

Sr. No.	Items	Percentage
Constraints in adoption of breeding practices		
1	High prices of the imported semen straw	65.3
2	Unavailability of A.I. services	69.1
3	Lack of staff at Government hospitals	47.3
4	Inexperienced staff at AI centres	31.8
Constraints in adoption of feeding practices		
1	High price of concentrate mixture	79.4
2	Shortage of feed and fodders	63.9
3	Non-availability of input for production and enrichment of green fodder	41.8
4	Non-availability of concentrates and mineral mixture in villages	33.6
Constraints in adoption of housing practices		
1	Lack of capital	62.7
2	High cost of construction	59.4
3	Lack of sufficient space	41.6
4	Inconvenience practice	32.5
Constraints in adoption of milking practices		
1	Low economic gains	75.2
2	Problem of labour	56.6
3	Time consuming	57.3
4	Lack of knowledge	43.8
Constraints in adoption of health care practices		
1	Non-availability of adequate veterinary services	63.8
2	Non-availability and high cost of medicines	61.6
3	Less economic returns	59.2
4	No provision for testing of animals	38.4

Conclusion

Indian dairy industry stands at the top of the list of the leading dairy industry players; low milk production by local breeds, shortage of green fodder, lack of clean water and shortage of milk

preservation facility in order of its nature and severity. The study conclusively revealed that inadequate facilities of AI centre, high price of concentrate mixture, lack of capital for housing, low economic gains and non availability of adequate veterinary services were major stumbling block in adoption of the improved breeding, feeding, housing, milking and health care practices, respectively

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