CONSTRAINTS FACED BY DAIRY FARMERS OF KHEDA DISTRICT OF MIDDLE GUJARAT IN ADOPTION OF IMPROVED ANIMAL HUSBANDRY PRACTISES

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ABSTRACT

Present study was taken up with the specific objectives to identify constraints faced by the dairy farmers in adoption of improved animal husbandry practices and their suggestions/responses to resolve them. Investigation was carried out through personal interviews and questionnaires in the randomly selected 5 villages of Matar Taluka of Kheda district of Middle Gujarat involving 50 respondent dairy farmers. Most of the respondents had medium to high level of knowledge regarding improved animal husbandry practices, i.e. water management practices, reproductive practices, breed improvement, nutritional management, scientific milking and disease control practices. Majority of dairy farmers had economic problem and problems related to management practices, feeding practices. Few of the respondents faced problems regarding marketing. Most of the dairy farmers made suggestions regarding facility of preservation of vaccine and semen at milk co-operatives and loan/subsidy facilities for construction of animal shed, purchase of dairy animals, and regular trainings.

KEYWORDS: Constraints, Adoption, Improved Animal Husbandry Practises, Dairy Farmer,

INTRODUCTION

Livestock sector, an important segment of agrarian society in India, has provided sustainable income to millions of rural people since the time immemorial. During the last one decade India has achieved an enviable position as the highest producer of milk in the world. This achievement has been possible through the involvement of nearly 70 million rural farmers spread over 5,80,000 villages across the country. Livestock rearing in India is mainly practiced as a backyard production system, wherein the farmers rear a few livestock specially for meeting the household requirements and the excess milk is sold in such units. India possesses enormous bovine wealth, but their per capital production is one of the lowest in the world due to reasons that the farmers do not adopt improved animal husbandry practices at the desired level.

As per 18th livestock census of year-2007 of Gujarat State, the total livestock population of Kheda district is 854905, of which 227082 are cattle and 627823 buffaloes. Average estimated daily milk yield of milking crossbred cow is 8.23 kg, nondescript cow 3.48 kg and Buffalo 4.39 kg. The improved animal husbandry practices of dairying not only bridge the gap between adopted practices and recommended practices, but also increase the impact on extent of adoption of the same by dairy farmers. Keeping the above problems in view, the present study was taken up with the specific objectives to identify constraints faced by the dairy farmers in adoption of improved animal husbandry practices.

MATERIALS AND METHODS

The investigation was carried out in the randomly selected 5 villages of Matar Taluka of Kheda district of Middle Gujarat. The dairy farmers having dairying as their major or subsidiary occupation were randomly selected from the selected villages. A comprehensive list of dairy farmers was prepared with the help of local Secretaries of milk co-operative societies, Artificial Insemination workers, Sarpanch shrees and village Extension workers. From this list, 10 respondents were

selected randomly from each village. Thus, the sample size of randomly selected respondents comprised of 50 dairy farmers. The data was collected through the personal interviews and questionnaires to get most authentic first hand information keeping in view the objectives of the study. The results were interpreted in terms of frequencies and percentages of respondents.

RESULTS AND DISCUSSION

Distribution of the dairy farmers on the basis of adoption of improved AH practices

The data in Table 1 reveal that most of the respondents had adopted water management practices and reproductive practices equally and had highest adoption level (86 %) of the same. Dairy farmers provided clean, fresh and hygienic drinking water 3-4 times a day to the animals and also increased the frequency during summer. Respondents adopting artificial insemination as a breeding tool for their animals used to have reduced calving intervals of almost 14-16 months. Only 14 per cent dairy farmers waited for more than 5-6 months for breeding of animal after calving due to their misconception that the milk production of their animals will go down if they conceive within 90 to 120 days of calving. Majority of the respondents (84 %) selected their animals on the basis of milk production, lactation, health and breed characteristics. 78 per cent dairy farmers followed the scientific feeding practises of young heifers, lactating and pregnant animals. Feeding of mineral mixture and common salt on regular basis to the animals was not found in practice of 22 per cent respondents. Less importance was given to the young growing heifers by providing only paddy straws and least quality of green grasses throughout the year. 76 per cent of dairy farmers had scientific milking methods with all the principles of clean, hygienic milk production, while 24 per cent dairy farmers did not adopt scientific milking management. Around 76 per cent of dairy farmers adopted disease control practises by regularly vaccinating their animals against the Foot & Mouth Disease and Haemorrhagic Septicaemia, and by deworming their animals before and after

Table 1: Distribution of the dairy farmers (n=50) on the basis of adoption of improved animal husbandry practices

Sr. No.	Improved Animal Husbandry Practices	Adoption		Adoption Gap	
		No.	%	No.	%
1	Breed improvement	42	84	8	16
2	Calf management	36	72	14	28
3	Nutritional management	39	78	11	22
4	Water management	43	86	7	14
5	Animal shed management	34	68	16	32
6	Milking management	38	76	12	24
7	Disease control practices	38	76	12	24
8	Reproductive practices	43	86	7	14

monsoon. Majority of dairy farmers (72 %) were found to feed colostrum to their new born calves within one hour of birth and taking care of all hygienic practices of umbilical cord, deworming, vaccination and feeding management of calves. 68 per cent dairy farmers followed scientific housing management like regular cleaning of sheds, providing sufficient housing space to the animals, drainage facility, ventilation, manger etc. These findings are in conformity with the findings of Gangasagare and Karanjkar (2009).

Constraints faced by the dairy farmers regarding improved AH practices:

The results in Table 2 reveal that majority (84 %) of dairy farmers faced financial problems like, high price of animals, animal feed, construction of animal sheds etc. They also faced problems of getting loans, their high interest rates and short duration of loan. Hence this constraint was ranked first by the dairy farmers.

About 56 per cent dairy farmers had problems related to management practices, like unavailability of skilled labour, unavailability of grazing land, comfortable housing systems for animals, low milk production of local animals, poor quality of drinking water. Therefore, management practices were ranked as second important constraint by the respondents. 52 per cent dairy farmers had problems of knowledge regarding scientific dairy management practices, low price of milk, women unawareness, unavailability of literature/books, religious taboo to discard the low productive animals, and lack of linkage between dairy farmers, veterinarians, extension department, social leaders, village cooperative society, government department etc. So, these were collectively ranked third.

Fourth important constraint perceived by the respondents was feeding practices. Around 48 per cent dairy farmers were not having knowledge of urea treatment and silage making, and were facing

Table 2: Constraints faced by the respondent dairy farmers (n=50) in adopting modern animal husbandry practices

Sr. No.	Constraints	Severity of constraints								Overall ranking
		Very much		Much		Less		Overall		
		No.	%	No.	%	No.	%	No.	%	
1	Problems in animal reproduction	7	14	6	12	5	10	18	36	V
2	Problems in feeding practices	8	16	9	18	7	14	24	48	IV
3	Problems in disease control practices	7	14	3	6	8	16	18	36	V
4	Problems in manage-ment practices	8	16	10	20	10	20	28	56	II
5	Economic problems	31	62	9	18	2	4	42	84	I
6	Problems regarding marketing	7	14	4	8	3	6	14	28	VII
7	Other problems	10	20	9	18	7	14	26	52	III

problems of green fodder scarcity during the months of summer and early monsoon. Equal number of respondent perceived reproductive problems and disease control practices (36 % each) as constraints and therefore these were jointly ranked fifth important constraint.

Problems of silent heat in buffalo, timing of AI, poor conception rate in crossbred cows, unavailability of good quality bulls for natural service, lack of knowledge of first aid treatment, quality of vaccines and emergency veterinary services were also observed as constraints. Only 28 per cent of respondents faced problems of marketing, like low price of milk fat by village co-operatives and milk storage problems in summer seasons. This was found least important constraint as perceived by the respondents and ranked last. This might be due to the strong co-operative structures. These findings are in accordance with the findings of Rathore et al. (2009) and Patil et al. (2009).

Suggestions by dairy farmers to overcome limitations and problems in adoption of modern AH practices:

The data in Table 3 suggest that how dairy farmers can overcome limitations and problems of adoption of improved animal husbandry practices. Most of the dairy farmers (88 %) made suggestion regarding facility of preservation of vaccine and semen, and strongly opined that every milk co-operatives should have appropriate and adequate facility of preservation of vaccine and semen. Therefore, majority of respondent expressed this suggestion as very much important.

Majority of dairy farmers (84%) suggested to provide loan/subsidy facilities for construction of animal shed, purchase of dairy animals and more subsidies should be given on inputs for succession of their dairying practices and expressed it as very much important suggestion. Eighty per cent

Table 3: Suggestions by dairy farmers to overcome limitations and problems in adoption of modern animal husbandry practises

Sr. No.	Suggestion	Need of the farmers					
		Very Much		Much		Less	
		No.	%	No.	%	No.	%
1	Regular visit of veterinary doctor and extension specialist will be helpful	34	68	11	22	5	10
2	Loan/Subsidy facilities should be available for construction of cattle shed and purchase of animals	42	84	4	8	4	8
3	At least five members of dairy co-operative societies should be trained to solve the problem of AH	29	58	19	38	2	4
4	The co-operatives should have facility of preservation of vaccine and semen	44	88	4	8	2	4
5	Regular training should be provided to farmers to improve the knowledge for better adoption	40	80	7	14	3	6

respondents suggested that regular trainings should be provided to farmers to improve their knowledge level for better adoption of improved animal husbandry practices.

Majority of respondents (68 %) made suggestion that visits of veterinary doctor and extension specialist should be arranged at regular interval for technical support and facilitation at doorsteps of the dairy farmers. Some of the respondents made suggestion that at least five members of the dairy co-operatives should be trained to solve primary problems of animal husbandry. Similar suggestions were also recorded from respondents by Patil et al. (2009) in Maharashtra.

Study revealed that adoption levels of most of the modern animal husbandry practices were fairly good in the area with major constraint of financial support. The suggestions perceived by the farmers in solving their problems coming in the way of adopting modern animal husbandry practices are worth considering in implementing newer policies in the area.

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