

KNOWLEDGE LEVEL OF DAIRY COOPERATIVE MEMBERS AND NON-MEMBERS ABOUT IMPROVED ANIMAL HUSBANDRY PRACTICES

Shivpal Kumhar*, Sangram Singh, M. K. Jangid* and B. L. Dhayal***

ABSTRACT

Although India ranks as the world's largest milk producer, our per capita milk consumption is one of the lowest in the world despite having a large cattle (live-stock) population. The level of knowledge possessed by both members and non-members of dairy cooperative societies play a very important role in improving the milk production of their cattle. The present study was conducted in Jaipur district of Rajasthan. Jaipur district was selected purposely. A sample of 144 respondents, consisting of 72 members of dairy co-operative societies and 72 non-members of dairy co-operative societies was drawn. The respondents for study group were selected randomly from 24 dairy co-operative societies of 12 randomly selected milk procurement routes. Non-members were selected randomly from village of the same dairy co-operative societies. The data were collected with the help of face-to-face interview technique on a well structured and pre-tested schedule. The data were classified, tabulated and statistically analyzed. It was found that majority of members (73.61 percent) had medium knowledge level. Whereas, 8.33 per cent and 18.06 per cent members were having low and high knowledge level about improved animal husbandry practices. In case of non-members it was found that 72.22 per cent, 15.28 per cent and 12.50 per cent non-members belonged to low, medium and high knowledge level, respectively.

It was also reported that the level of knowledge in members was 51.76, 76.39, 64.45, 67.87, 80.36, and 67.73 mean per cent score (MPS), whereas, in case of non-members it was found to be 39.82, 47.39, 54.36, 43.43, 70.83 and 42.81 mean per cent score (MPS) in the practices of improved breeds, breeding, feeding, management, milking and health care, respectively. The overall level of knowledge of members and non-members was 68.09 and 49.77 mean percent score (MPS), respectively.

INTRODUCTION

India ranks number one in milk production in the world. The total milk production in India in 2012-13 is 121.00 mt. The per capita availability of milk in 2004-05 was 232 gm/day, which is less than the minimum recommended level of 280 gms/day recommended by the Indian Council of Medical Research (ICMR).

Considering the rapid increase in the human population of our country, achieving minimum per capita level is a real challenge. Not only, we have to

increase our milk production in near future, but also we have to concentrate our efforts on improving the quality of milk and milk production with better management. The study of level of knowledge possessed by both members and non-members of DCSs will bring a clear picture of their respective knowledge about improved animal husbandry practices with this background, the present investigation has been undertaken.

RESEARCH METHODOLOGY

The present study was undertaken in Jaipur district of Rajasthan. The investigation was concerned with Jaipur dairy. The Jaipur dairy is one of the largest milk collecting union and consist of 120 milk procurement routes out of these, twelve routes were selected randomly. Further, two dairy co-operative societies were selected randomly from each identified milk procurement routes. Thus, a total of twenty four dairy co-operative societies were selected for present investigation. For the selection of respondents from each selected dairy co-operative society

* Research Scholar, Department of Extension Education, S.K.N. College of Agriculture, Jobner, Jaipur.

** Professor, Department of Extension Education, S.K.N. College of Agriculture, Jobner, Jaipur.

3 members of DCSs were selected by applying simple random sampling technique. This way, total 72 members of DCSs were included in the sample of study. A control group of 72 non-members (3 cattle owner respondents from each DCSs area) was selected randomly for the comparative study. In this way the total sample consisted of 144 respondents *i.e.* 72 member and 72 non-member respondents. Face to face interview technique was employed for the collection of data from the respondents. The data were classified, tabulated and inference was drawn after subjecting the data to appropriate statistical analysis, which led to the following findings.

RESULTS AND DISCUSSION

Knowledge level of dairy member respondents about improved animal husbandry practices

According to methodology the minimum and maximum score, a respondent could secure on the knowledge level was 0 to 110, respectively. It was revealed that the dairy members secured knowledge score between 50 and 85. The members were grouped into three categories, using mean $(75.24) \pm$ standard deviation (7.83) . Members who scored below 67.41 were grouped under low knowledge level, the members who scored from 67.41 to 83.06 were considered under medium knowledge level and those who obtained score above 83.06 knowledge score were categorized under high knowledge level about improved animal husbandry practices.

Table 1: Knowledge level of dairy member respondents about improved animal husbandry practices (n=72)

Knowledge Score	Knowledge Level	frequency	Per cent
Below 67.41	Low	6	8.33
From 67.41 to 83.06	Medium	53	73.61
Above 83.06	High	13	18.06
	Total	72	100

$\bar{X}=75.24$, $\sigma=7.83$

The data in Table 1 reveals that majority of dairy members (73.61 per cent) had medium knowledge level, whereas 8.33 per cent and 18.06 per cent dairy members were having low and high knowledge level about improved animal husbandry practices, respectively.

Knowledge level of non-member respondents about improved animal husbandry practices

The minimum and maximum score obtained by non-member respondents were 40 and 82. The non-members were grouped into three categories, using mean $(52.79) \pm$ standard deviation (7.07) . Non-member respondents who scored below 45.72 knowledge scores were grouped into low knowledge level, the non-members who scored from 45.72 to 59.85 were grouped under medium knowledge level and those who secured above 59.85 knowledge score were categorized under high knowledge level about improved animal husbandry practices.

Table 2: Knowledge level of non-member respondents about improved animal husbandry practices (n=72)

Knowledge Score	Knowledge Level	frequency	Per cent
Below 45.72	Low	11	15.28
From 45.72 to 59.85	Medium	52	72.22
Above 59.85	High	9	12.50
	Total	72	100

$\bar{X}=52.79$, $\sigma=7.07$

On the basis of above data it was inferred that majority of the respondents in both the categories possessed medium knowledge level about improved animal husbandry practices. It was further concluded that the existing knowledge of member respondents about improved animal husbandry practices was comparatively higher than the non-member respondents.

Knowledge level of member and non-member respondents about improved animal husbandry practices in terms of MPS

Individual practice wise knowledge of member and non-member respondents was measured in mean percent score (MPS) was calculated. As many as six practices were included to assess the knowledge level of respondents as given in Table 3.

The Table 3 indicates that both (member and non-member respondents) type of respondents possessed maximum knowledge about milking of animals with mean per cent score 80.36 and 70.83, respectively and ranked first by both the categories of respondents.

Table 3: Knowledge level of member and non-member respondents about improved animal husbandry practices in terms of MPS

S.No.	Improved practices	Members of DCSs (n=72)		Non-members of DCSs (n=72)	
		MPS	Rank	MPS	Rank
1.	Improved breeds	51.76	VI	39.82	VI
2.	Breeding	76.39	II	47.49	III
3.	Feeding	64.45	V	54.36	II
4.	Management	67.87	III	43.43	IV
5.	Milking	80.36	I	70.83	I
6.	Health care	67.73	IV	42.81	V
	Overall	68.09		49.77	

Similarly they possessed less knowledge about improved breeds of animals with mean percent score 51.76 and 39.82 respectively and ranked six by both the categories of respondents.

The table indicates that knowledge of member respondents regarding other aspects like breeding, management; health care and feeding were found to be 76.39, 67.87, 67.73 and 64.45 MPS, respectively.

In case of non-member respondents 54.36, 47.49, 43.43 and 42.81 MPS of knowledge were reported with regard to feeding, breeding, management and health care, respectively.

The overall knowledge of member and non-member respondents about improved animal husbandry practices was 68.09 and 49.77 MPS, respectively.

Comparison of knowledge level among member and non-member respondents about improved animal husbandry practices Hypothesis

The data related to level of knowledge of both member and non-member respondents incorporated in Table 4 showed that calculated 'Z' value was higher than the tabulated value at 1 per cent level of significance in all the six improved practices of animal husbandry.

This calls for rejection of null hypothesis ($H_{0,1}$) and acceptance of alternative hypothesis ($H_{1,1}$) leading to conclusion that there is significant difference in knowledge level with regard to all six improved practices of animal husbandry in member and non-member respondents.

The mean value further indicates that members of DCSs had higher knowledge mean than non-member respondents in all improved animal husbandry practices. This reveals that member respondents possessed more knowledge than non-member respondents about all improved animal husbandry practices. Findings of the study are in the conformity with the findings of Sankhala and Chand (2002), Sharma and Saini (2003), Khan *et al.* (2004), and Sharma and Intodia (2010).

Table 4: Comparison of knowledge level among member and non-member respondents about improved animal husbandry practices (n=144)

S.No	Improved practices	Members of DCSs (n=72)		Non-members of DCSs (n=72)		'Z' value
		Mean	± SD	Mean	± SD	
1.	Improved breeds	7.76	1.36	5.97	1.36	7.90**
2.	Breeding	25.97	3.25	16.11	3.90	16.48**
3.	Feeding	14.18	1.73	11.96	1.30	8.70**
4.	Management	10.18	2.00	6.51	1.91	11.26**
5.	Milking	5.63	0.61	4.96	0.81	5.60**
6.	Health care	11.51	1.63	7.28	2.11	13.46****

Significant at 1% level of significance,

CONCLUSION

It may be concluded that members had more knowledge level than non-members about all the improved practices. It was also found that there was significant difference between level of knowledge with regard to members and non-members about all the improved animal husbandry practices.

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