

Adoption of Improved Dairy Farming Practices among Members and Non-members of Milk Co-operative Societies

Hanuman Ram¹ and B.S.Meena²

ABSTRACT

The present investigation was carried out in Hanumangarh district of Rajasthan with 120 members and non-members of dairy cooperatives societies to find out adoption level of dairy farming practices. The study found that in case of member dairy farmers, majority of them (71.66%) possessed medium adoption level followed by low (16.67%) and high (11.67%) adoption level, respectively regarding improved dairy farming practices whereas, in case of non-member dairy farmers, majority belonged to medium adoption level (83.33%) followed by low (11.67%) and high (5.00%) adoption level, respectively regarding improved dairy farming practices. The study that indicated significant association of variables like social participation and extension contact with adoption level of both member and non member dairy farmers of MPCSS. Further, variables like milk production and milk consumption showed non significant association with adoption level.

Keywords: Dairy, adoption, correlation.

INTRODUCTION

The cooperatives are playing a significant role in dairy development in the country. There are about 174 milk sheds covering about 63,100 milk producers' cooperatives with a membership of 7.5 million. Agriculture is the keystone of economic activity in Rajasthan state. About three-fourths of its total working force is engaged in agriculture, which constitutes about 40 per cent of the state income. The state is in the grip of draught and famines, and frequent occurrence affects the state's economy adversely. In this environment, where agriculture depends on the pattern and distribution of rainfall and does not keep the farmer busy all the year around, the dairying can prove not only an effective instrument for supplementing cash income and employment to the cultivator at the time of need, but can also serve as a suitable means to diversify agriculture.

Dairying is a major economic activity in Rajasthan contributing over 12 per cent to the total domestic income. It is the main source of income for majority of the rural population particularly the weaker section. The animals kept in the state are mostly non-descript and are low yielding associated with longer dry period, higher age at first calving and higher calving interval. Improved dairy farming practices have been proved the best means for creating awareness of new development in technology generation and to assess the various socio-economic variables for affecting the knowledge level of farmers as the regular feedback is a necessary component of improved technological practices. Keeping in view these facts, the present study was conducted with the following

specific objectives; to study the adoption level of dairy farming practices among members and non-members of MPCSS and to find out the association of various variables with that of adoption level.

METHODOLOGY

The research was conducted purposely in Hanumangarh district of Rajasthan. Two blocks namely Hanumangarh and Tibi were selected randomly for the investigation. From the above mentioned two blocks, two villages from each block have been selected randomly. One was within the radius of 8 km from the block headquarter and another was 8 km far from the block headquarter. Thus, there were four villages from two blocks. Fifteen members of dairy cooperative societies and fifteen non-members were selected randomly from the four villages. Members were those who were supplying milk to MPCSS at least for two hundred days in a year, for two continuous years. Non-members were those who have at least one milch cattle or buffalo but not selling milk through MPCSS. Thus, total 120 respondents (60 members and 60 non-members) were studied. Data were collected through personal interview of the selected respondents by the investigator in a pre-structured schedule prepared for the purpose. The data collected were tabulated and analysed by suitable statistical tools in the light of the objectives of the study.

RESULTS AND DISCUSSION

Extent of adoption of dairy farming practices

The level of adoption of improved dairy farming

¹Associate Professor, Extension Education, College of Agriculture, Swami Keshwanand Rajasthan Agricultural University, Bikaner, Rajasthan

²Associate Professor, Extension Education, Agricultural Research Station, Sriganganagar (Rajasthan)

practices by the dairy farmers would give an indication about the changes taken place in the study area due to milk co-operative societies. The level of scientific practices adopted by the members and non-members of MPCS has been presented in Table 1.

Table 1: Distribution according to extent of adoption of dairy farming practices

Adoption category	Members (n=60)		Non-members (n=60)		Pooled (n=120)	
	f	%	f	%	f	%
Low (<25)	10	16.67	7	11.67	17	14.17
Medium(25-34)	43	71.66	50	83.33	93	77.50
High (>34)	7	11.67	3	5.00	10	8.33

Results presented in Table 1 showed that majority (71.66%) of member dairy farmers had medium level of adoption followed by low (16.67%) and high adoption level (11.67%). Further, among the non-member dairy farmers, majority (83.33%) belonged to medium adoption category followed by low adoption category (11.67%). Only 5.00% non-member dairy farmers belonged to high adoption category regarding improved dairy farming practices. On pooled basis, the study found that 8.33 per cent farmers were high adopters, 77.50 per cent farmers were medium level adopters and 14.17 per cent farmers were in the category of low adoption of improved dairy farming practices in the study area. This showed that dairy farmers have average adoption of dairy farming practices. The findings of the study supported by Kumar *et al.* (2001).

Under the study, level of adoption was also studied in various aspects of dairy farming. The results presented in Table 2 revealed that in breeding practices, 53.33 per cent of the farmers belonged to medium adoption category, whereas, 13.34 and 6.66 per cent were appeared in low and high categories, respectively. While, in case of non-member dairy farmers, 60 per cent were in medium adoption category, whereas, 35 and 5 per cent fell in the low and high adoption categories, respectively. In feeding practices, majority (60.00%) of the member dairy farmers belonged to high adoption level followed by medium (26.66%) and low (13.34%) adoption level, respectively. In case of non-member dairy farmers, 46.66 per cent of the farmers belonged to high adoption level followed by medium (43.34%) and high (10.00%) adoption level, respectively. These findings are in line of the findings of Kaur *et al.* (2008) and Pankaj (2010).

Table 2 further revealed that 38.34, 56.66 and 5.00 per cent the member dairy farmers, were having low, medium and high levels of adoption in management practices, respectively. Whereas, in case of non-member dairy farmers, 20.00, 73.34 and 6.66 per cent were having

low, medium and high level of adoption in management aspect of improved dairy practices, respectively. In health care aspect, majority of member as well as non-member dairy farmers belonged to medium adoption level followed by low and high level of adoption in both categories of the farmers. Further, in fodder production aspect of improved dairy practices, it divulges that around two-third of the member as well as non-member dairy farmers belonged to medium adoption level followed by low level of adoption in both the categories. It is interesting to note that only four member dairy farmers fell in the high adoption category while, none of non-member dairy farmers belonged to the category of high adoption level. It might be due to lack of awareness regarding dairy farming among them. The findings of the study were supported by Mahipal & Kherde (1988) and Sharma and Singh (2009).

Table 2: Distribution of farmers according to level of adoption of different improved practices in dairy farming

Adoption	Members (n=60)		Non-members (n=60)	
	f	%	f	%
Breeding				
low (< 4)	24	40.00	21	35.00
Medium (4-6)	32	53.33	36	60.00
High (>6)	4	6.66	3	5.00
Feeding				
low (< 4)	8	13.34	6	10.00
Medium (4-6)	16	26.66	26	43.34
High (>6)	36	60.00	28	46.66
Management				
low (< 6)	23	38.34	12	20.00
Medium (6-9)	34	56.66	44	73.34
High (>9)	3	5.00	4	6.66
Health Care				
low (< 4)	6	10.00	11	18.34
Medium (4-7)	49	81.66	44	73.33
High (>7)	5	8.34	5	8.33
Fodder Production				
low (< 5)	18	30.00	20	33.34
Medium (5-6)	38	63.33	40	66.66
High (>6)	4	6.67	0	0.00

Correlation between adoption and various traits of members and non-members of dairy cooperative societies

The data presented in Table 3 is divulged that education, extension contact, mass media exposure and attitude towards MPCS were significantly associated with adoption level of the member as well as non-member dairy farmers. Further, variables like age, family size, land holding and milk sale were non-significantly associated with the adoption level of both categories of the farmers.

Table 3: Correlation between adoption and various traits of members & non-members of dairy Cooperative societies

Traits	'r' value of members	'r' value of non-members
Age	-0.2026 ^{NS}	-0.1400 ^{NS}
Education	0.6977**	0.7970**
Family Size	0.0322 ^{NS}	-0.0454 ^{NS}
Social participation	0.3768**	0.2490 ^{NS}
Land holding	0.0205 ^{NS}	0.2251 ^{NS}
Herd Size	-0.3061*	0.4515**
Milk Production	0.04958 ^{NS}	0.3750**
Milk Consumption	0.1305 ^{NS}	0.2821*
Milk Sale	0.0015 ^{NS}	0.2482 ^{NS}
Extension contact	0.4843**	0.3032*
Mass Media exposure	0.4444**	0.5209**
Attitude towards MPCs	0.4533**	0.5234**

*= Significant at five per cent level of probability
**= Significant at one per cent level of probability
NS= Non-significant

Results in Table 3 further revealed that in case of member dairy farmers, variables like, social participation and extension contact were also found significantly associated with the adoption level. The variables like, milk production and milk consumption were non-significantly associated with the adoption level. In case of non-member dairy farmers, herd size and milk production were significantly associated with the adoption level at one per cent level of significance, while milk consumption and extension contact were significantly associated with the adoption level at 5 per cent level of significance. It is interesting to note that social participation was non-significantly associated with the adoption level of non-member dairy farmers. These findings were supported by the findings of the Mahipal & Kherde (1988).

CONCLUSION

From the findings of the study, it is concluded that of the member dairy farmers, majority were categorized in medium adoption level of improved dairy farming practices followed by low and high adoption levels respectively. Whereas, in case of non-member dairy farmers, majority belonged to medium adoption level followed by low and high adoption levels respectively. Almost there were similar patterns of adoption of dairy farming practices among members and non-members of MPCs. The study indicated significant association of variables like education, extension contact, mass media exposure and attitude towards MPCs with the adoption of dairy practices among both members and non members of MPCs.

Further, variables like age, family size, land holding and milk sale were non-significantly associated with the adoption level of both categories of the farmers. The study emphasized for conducting awareness programmes by the Animal Husbandry Department for dairy farmers to enhance their adoption in scientific dairy farming practices.

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