

## FACTORS ASSOCIATED WITH ADOPTION OF DAIRY MANAGEMENT PRACTICES BY DCS MEMBERS

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India needs to increase milk production which is possible by narrowing down the gap between the existing technology and its adoption. This undoubtedly requires a technological break through in the areas of animal sciences, veterinary and dairying and much depends upon the rate and speed of dissemination of such information to dairy entrepreneurs.

Livestock rearing which was a way of life in the past, is now assuming the form of a gainful business occupation. Livestock production and dairy development have been viewed by planners and policy makers as an affective instrument of social and economic change in the rural areas, as they provide employment to the weaker sections and thereby help them in augmenting their incomes.

Efficient transfer of innovations and their practical application to field situation is key to the economic development of India, where the back of population depends on agriculture and livestock. Animal husbandry extension services in India today has a large number of professional extension workers at national, state, district, block and village levels. Several livestock development programmes to help dairy farmers to adopt the animal husbandry practices are in operation throughout the country. Still there exists a wide gap between the technology available at the research and its adoption particular in animal rearing. This

has resulted in poor adoption of during practices by Des Members. Therefore the present investigation was undertaken with objective.

To determine the association if any between the attributes of members and their extent of adoption of recommended dairy management practices.

### METHODOLOGY

The study was conducted in Shahpura block of Jabalpur district in Madhya Pradesh. The Shahpura block comprises of 17 registered Dairy Cooperative Society (DCS). Out of the which 11 DCS has been purposively selected because these DCS are functioning smoothly in the area. Eleven DCS were selected from Shahpura block viz; Jamkher, Kuwakheda, Mankedi, Pipariyaka, Bhita, Kirsod, Fular, Marwara, Noini, Matanpur and Sundradehik.

Here were 754 members of DCS in those 11 DCS. From the list of members of each DCS, 15 per cent respondents were selected on the basis of proportionate random sampling method for the purpose of study. Thus the total of 115 respondents were the sample of study. The data were collected through the personal interview with the help of structure interview schedule.

### RESULTS AND DISCUSSION

Data with regards in the end of adoption and its association with different selected characters have been depicted in Table-1.

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**1. Age and Adoption**—It is evident from the data that of the total young aged members, 48.94 per cent had medium adoption, 28.53 per cent low and 25.53 per cent high. Similarly in middle aged members, 43.48 per cent had medium, 28.26 per cent low and 28.26 per cent high. In the case of old aged members, 45.45 per cent had medium, 31.82 per cent low and 22.73 per cent high adoption.

The association between age and adoption of selected dairy management practice was found to non-significant. This indicates that age was not found to be a differentiating character in the level of adoption.

**2. Level of Education and Adoption**—The data presented in the Table 2. shows that of the total middle passed members 58.62 per cent had medium adoption. Similarly, in above middle passed members 50 per cent had high while in case of illiterate members, 48.15 per cent had low level of adoption of recommended dairy management practices.

The  $X^2$  value 18.215 is found to be significant at 0.05 level of probability. Hence, the conclusion can be drawn that there is significant association between educational level of members and their extent of adoption of recommended dairy management practices.

**3. Family Type and Adoption**—The association between type of family of members and their extent of adoption of recommended dairy management practices. It is evident from the data of the total nuclear family type, 48.48 per cent had medium adoption, whereas in joint family type, 42.86 per cent had medium adoption.

There is no significant association between type of family members and their extent of adoption of recommended dairy management practices.

**4. Family Size and Adoption**—The data shows that of the total small family size group, 54.39 per cent had medium adoption, whereas in large family size, 48.57 per cent had medium

adoption and in the medium family size, 43.48 per cent had high adoption of recommended dairy management practices.

There is no significant association between family size of members and their extent of adoption of recommended dairy management practices.

**5. Occupation and Adoption**—The data indicates that of the total cultivation category of members, 53.66 per cent had medium adoption, whereas in labourer category, 39.14 per cent had low adoption and in the case of service category, 60 per cent had high adoption.

It was therefore, concluded that the adoption of selected practices had positive relationship with occupation.

**6. Total Annual Income and Adoption**—The data indicates that of the total low annual income category, 40.82 per cent had low adoption, whereas medium annual income category, 42.11 per cent had medium adoption and high annual income category 60.71 per cent had medium adoption. Hence, it could be concluded that the adoption of selected practices had association with income.

**7. Social Participation and Adoption**—As regards the social participation of the total membership of one organisation, 47.14 per cent had medium, whereas in the membership of more than one organisation, 44.44 per cent had medium adoption. The highest adoption was found in the category of one organisation membership. This shows that majority of the members had no interest in social organisation which were very few in sampled villages. Dairy farmers have very little time to avail in social participation. The association between social participation and adoption of selected practices was found to be significant at 0.05 level of probability. This finding is supported by Shinde *et al.* (1998) who reported that association between social participation and adoption of selected practices by the dairy farmers was found to be significant.



**Table 2. Association of selected characteristics with adoption of practices**

S. No	Variables	Adoption (n=115)			Total	X <sup>2</sup> value
		Low	Medium	High		
1.	<b>Age in year</b>					
	Young age (20-36 years)	12 (25.53)	23 (48.94)	12 (25.53)	47 (100.00)	0.554
	Middle age (37-53 years)	13 (28.26)	20 (43.48)	13 (28.26)	46 (100.00)	
	Old age (54-70 years)	7 (31.82)	10 (45.45)	5 (22.73)	22 (100.00)	
	Total	32 (27.83)	53 (46.09)	30 (26.08)	115 (100.00)	
2.	<b>Educational Level</b>					
	Illiterate	13 (48.13)	9 (33.32)	5 (18.52)	27 (100.00)	8.215
	Upto middle	14 (24.14)	34 (58.62)	10 (17.24)	58 (100.00)	
	Above middle	5 (16.17)	10 (33.33)	15 (50.00)	30 (100.00)	
3.	<b>Family type</b>					
	Nuclear family	21 (31.82)	32 (48.48)	13 (19.70)	66 (100.00)	3.819
	Joint family	11 (22.45)	21 (42.86)	17 (34.69)	49 (100.00)	
4.	<b>Family size</b>					
	Small (upto 4 members)	16 (28.70)	31 (54.39)	10 (17.54)	57 (100.00)	8.891
	Medium (5 to 8 members)	8 (34.78)	5 (21.74)	10 (43.48)	23 (100.00)	
	Large (above 8 members)	8 (22.86)	17 (48.57)	10 (28.57)	35 (100.00)	
5.	<b>Size of land holding</b>					
	Small (upto 5 acres)	24 (34.78)	26 (37.68)	19 (27.54)	69 (100.00)	6.951
	Medium (6 to 15 acres)	5 (20.83)	14 (58.34)	5 (20.83)	24 (100.00)	
	Large (above 15 acres)	3 (13.64)	13 (59.09)	6 (27.27)	22 (100.00)	
6.	<b>Occupation</b>					
	Cultivation	22 (26.83)	44 (53.66)	16 (19.57)	82 (100.00)	8.315
	Labour	9 (39.14)	6 (26.08)	8 (34.78)	23 (100.00)	
	Service	1 (10.00)	3 (30.00)	6 (60.00)	10 (100.00)	
7.	<b>Total annual income</b>					
	Low (below Rs. 25,000)	20 (40.82)	20 (40.82)	9 (18.36)	49 (100.00)	10.869
	Medium (Rs. 25,000 to 50,000)	7 (18.42)	16 (42.11)	15 (39.47)	38 (100.00)	
	High (Above Rs. 50,000)	5 (17.86)	17 (60.71)	6 (21.43)	28 (100.00)	
8.	<b>Social participation</b>					
	Members of one organisation	24 (34.29)	33 (47.14)	13 (18.57)	70 (100.00)	6.599
	Members of more than one organisation	8 (17.78)	20 (44.44)	17 (37.78)	45 (100.00)	
9.	<b>Herd size</b>					
	Small (upto 5 animals)	27 (31.76)	41 (48.24)	17 (20.00)	85 (100.00)	6.771
	Large (above 5 animals)	5 (16.67)	12 (40.00)	17 (43.33)	30 (100.00)	
10.	<b>Milk production per day</b>					
	Low (upto 5 liters)	25 (30.49)	42 (51.22)	15 (18.29)	82 (100.00)	9.016
	High (above 5 liters)	7 (21.21)	11 (33.33)	15 (45.46)	33 (100.00)	
11.	<b>Use of information sources</b>					
	Low (upto 3 sources)	17 (39.54)	20 (46.57)	6 (13.95)	43 (100.00)	16.278
	Medium (upto 6 sources)	8 (17.78)	24 (53.33)	13 (28.89)	45 (100.00)	
	High (above 6 sources)	7 (25.93)	9 (33.33)	11 (40.74)	27 (100.00)	
12.	<b>Risk preference</b>					
	Low (7 to 18 score)	14 (56.00)	6 (24.00)	5 (20.00)	25 (100.00)	15.520
	Medium (19 to 30 score)	11 (22.92)	27 (56.25)	10 (20.83)	48 (100.00)	
	High (31 to 42 score)	7 (16.67)	20 (47.62)	15 (35.71)	42 (100.00)	
13.	<b>Scientific Orientation</b>					
	Low (7 to 18 score)	13 (43.33)	11 (36.67)	6 (20.00)	30 (100.00)	12.367
	Medium (19 to 30 score)	8 (16.67)	21 (43.75)	19 (39.58)	48 (100.00)	
	High (31 to 42 score)	11 (29.73)	21 (56.76)	5 (13.51)	37 (100.00)	
14.	<b>Knowledge level</b>					
	Low (61 to 75 score)	15 (53.57)	8 (28.57)	5 (17.86)	28 (100.00)	17.118
	Medium (76 to 90 score)	11 (23.40)	27 (57.45)	9 (19.15)	47 (100.00)	
	High (91 to 105 score)	6 (15.00)	18 (45.00)	16 (40.00)	40 (100.00)	



**8. Herd Size and Adoption**—It was noted that of the total small herd size group, 48.24 per cent had medium adoption and in large herd size, 43.33 per cent had high adoption of dairy management practices. The association between total animals and adoption of selected practices was found to be significant at 0.05 level of probability.

**9. Milk Production per day and Adoption**—It is evident from the data that of the total low milk production category, 51.22 per cent had medium adoption and in the case of high milk production category, 45.66 per cent had high production. The Chi-square test revealed that there was significant association between milk production and adoption.

**10. Use of Information Sources and Adoption**—The members were assured about the sources of obtaining information on dairy management practices. It was observed that the total member of medium category of information sources, 53.33 per cent had medium adoption whereas in the case of low category of information sources, 46.81 per cent had medium and in the high uses of information sources, 40.74 per cent high adoption of dairy management practices. The association between sources of information and adoption of selected practices was found to be highly significant at 0.05 level of probability, village level workers emerged as important source of information. The village level workers has given information so half of the respondent about recommended dairy management practices.

**Risk Preference and Adoption**—About risk preference it was observed that among the medium risk preference, 56.25 per cent had medium adoption. In the case of high risk preference category, 47.62 per cent had medium and in low risk preference category

56.00 per cent had low adoption of dairy management practices.

The  $X^2$  value 15.520 is found to be significant at 0.05 level of probability. Hence, the conclusion can be drawn that there is highly significant association between risk preference of members and their extent of adoption of dairy management practices.

**11. Scientific Orientation and adoption**—Of the total medium scientific oriented category, 43.75 per cent had medium adoption. Whereas, in high scientific orientation category, 56.76 per cent had medium adoption and in the case of low scientific orientation category, 43.33 per cent had low adoption of recommended dairy management practices. There is significant association between scientific orientation of members and their extent of adoption of recommended dairy management practices.

**Knowledge level and adoption**—The that of the total medium category of knowledge, 57.45 per cent had medium data indicates adoption. In the case of high knowledge category, 45.00 per cent had medium and in low knowledge category, 53.57 per cent had low adoption of dairy management practices.

Knowledge level of recommended dairy management practices showed a significant association with extent of adoption the finding finds support from the work of Shirsat *et al.* (1993).

## CONCLUSION

The empirical finding of the study indicated that majority of the members were medium adoptions. However still there was medium and low adoption of improved dairy management practices, like feeding practices breeding practices, disease control and general management. This may be because of ignorance and lack of knowledge. Therefore it may be suggested that there is need to

organic frequent training programme in areas of breeding practices, disease control, feeding practices and general management aspect respectively. So as to make people aware about the improved dairy management practices.

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