

An Analysis of Socio-Psycho and Communicational Dynamics in a Progressive and Non-progressive Dairy Village

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1. Introduction

The rural development programme in India had been given prime consideration in the national plans. However, in the recent past the introduction of scientific dairy farming practices seems to have added new dimensions in Indian farming system particularly for rural poor, who command limited land resources. Hence, the magnitude of dairy development programme has been reflected in the creation of additional man days, employment and remunerative source of income through dairy enterprise. Besides, it has also been observed that the farmers' socio-personal, psychological and communicational correlates play an important role in the adoption of dairy innovations. But all these correlates of farmers have not been studied together sufficiently particularly with two sets of progressive and non-progressive dairy village in the past. Therefore, it was felt necessary to analyze the important role played by the different correlates of the farmers in the two sets of above stated villages. Keeping this in view the present study was planned with the following objectives:

To study some selected socio-personal, psychological and communicational correlates of farmers in a progressive and non-progressive dairy village.

To study the adoption of dairy innovations of farmers in both the groups of villages.

To determine relationship between the selected correlates and adoption of dairy innovations by farmers.

2. Methodology

The present study was conducted in ten villages serving as field laboratory for dairy development programme of dairy extension division of National Dairy Research Institute, Karnal. Out of ten villages, two village namely, Phusgarh and Nagla Farm were selected as progressive and non-progressive dairy village respectively. The sample of the study consisted of 100 farmers, 50 from the non-progressive and 50 from the progressive village. Thus, a total of 100 respondents were selected randomly from these two villages. The data for dependent and independent variables were collected with the help of the structured interview schedule by personally interviewing the respondents. The dependent variable of the study was the adoption of dairy innovations by the farmers. The independent variables i.e. socio-personal characteristics were, age, education, caste, social participation, occupation, operational land holding, herd size, family size, total milk production, milk consumption, milk marketing, total annual income and the psychological variables were, extension contacts and exposure to mass media. The dependent variable was measured with the help of adoption index developed by (Sharma, 1980). The independent variables namely, age-chronological age of the respondent, education and social participation scale was developed Trivedi, (1963), caste and occupation Singh, (1978), land holding, herd size, family size, total milk production, milk consumption, milk marketing and total annual income was measured with the help of scales developed by the investigator. To measure the psychological variables, scale developed by earlier researches were used, namely, for measuring knowledge (Subramaniam, 1982), attitude towards dairy innovations (Gupta, 1976) and level of aspiration (Ramchand, 1980). The communicational variables viz. extension contact and exposure to mass media were measured with the help of the schedule developed by the investigator.

Hence, the data so collected were analyzed by computing mean, standard deviation, percentages, 't' test and correlation.

3. Results and Discussion

3.1. Socio –personal, Psychological and Communicational Co-relates of Progressive and Non-progressive Farmers

Comparisons were made between the mean scores of the respondents of the progressive and non-progressive village with regard to selected independent and dependent variables. The analysis of variables were based on the scores obtained by the respondents of the each of the two villages. The results of the analysis have been discussed and presented below:

Table 1 Comparison of the Mean Scores in Respect of Socio-personal Correlates of the Farmers of the Progressive Dairy Villages

Variables	Progressive village		Non-progressive		Difference in means	Computed 't' value
	Mean	S D	Mean	S D		
Age	45.95	12.00	42.09	11.86	3.86	26.08*
Education	3.56	1.28	1.76	1.76	1.80	2.96*
Caste	2.34	0.91	1.84	0.99	0.50	1.34
Social participation	2.84	1.01	0.80	0.90	2.04	5.34*
Occupation	4.08	0.48	2.40	1.48	1.68	4.28*
Operational land holding	4.05	5.24	1.93	6.19	2.12	0.92
Herd size	11.12	5.97	3.82	2.29	7.84	4.74*
Family size	5.46	1.56	8.43	3.11	2.97	3.17*
Total milk production	20.28	9.36	6.54	4.11	13.74	5.10*
Milk consumption	2.46	0.99	3.09	1.56	0.63	1.24
Milk marketing	17.84	8.60	3.54	3.01	14.30	6.16*
Total annual income	31530.68	0.03	6247.93	0.58	25282.75	207235.65*

*Significant at 0.01 level of probability

Table 2 Comparison of the Mean Scores in Respect of Psychological Correlates of the Farmers of the Progressive and Non-progressive Dairy Village

Variables	Progressive village		Non-progressive		Difference in means	Computed 't' value
	Mean	S D	Mean	S D		
Knowledge	11.00	1.94	7.82	2.80	3.18	3.35*
Attitude towards dairy farming	18.86	2.85	16.46	3.12	2.40	2.01**
Risk orientation	26.20	6.61	19.04	5.18	7.16	3.04
Economic motivation	28.80	0.52	20.16	5.12	8.64	7.66*
Empathy	11.48	2.10	6.40	1.35	5.08	7.36*
Level of aspiration	3.60	0.64	3.86	0.35	0.26	1.31

* Significant at 0.01 level of probability

** Significant at 0.05 level of probability

A perusal of the results in Table 2, indicates that the variables viz. knowledge, attitude, risk orientation economic motivation and empathy of the farmers of progressive village were significantly higher than the farmers of non-progressive village. This means higher the knowledge, favourable attitude, higher risk orientation leads to higher economic motivation and empathy which ultimately leads to prosperity of the village as a whole. These results of the study are in agreement with regard to knowledge, attitude, risk orientation, economic motivation and empathy that of Chouhand (1979), Gupta (1976), Subramanian (1982) and Chandra (1979) respectively. However, the findings of the study with regard to risk orientation did not correspond with that of Schachidananda (1972) who reported negative and significant correlation between risk preference and adoption. The level of aspiration of progressive village farmers was found higher as compared to the farmers of the non-progressive village though the resultant 't' value was found to be non-significant. This implied that the farmers of the progressive

village had higher level of aspiration with regard to number of milch animals as compared to the farmers of the non-progressive village.

Table 3 Comparison of the Mean Scores in Respect of Psychological Correlates of the Farmers of the Progressive and Non-progressive Dairy Villages

Variables	Progressive village		Non-progressive		Difference in means	Computed 't' value
	Mean	S D	Mean	S D		
Extension contacts	21.30	4.75	13.44	4.73	7.86	4.14
Exposure to mass media	19.96	4.95	13.84	4.68	6.12	3.17

* Significant at 0.01 level of probability

The results in Table 3 depicts that there was a significant difference in extension contacts and exposure to mass media of the farmers of the progressive as compared to the non-progressive village farmers. This implies that the extension contacts and the exposure to mass media of the progressive village farmers were significantly better than that of the farmers of the non-progressive village. These findings of the study are in line with the results of the study conducted by Subramanian (1982) with regards to contacts with extension agency and also tallies with the findings of Malik (1978) and Singh (1978) in respects of exposure to mass media. They reported significant and positive relationship between exposure to mass media and adoption of dairy innovations.

The scores of adoption of dairy innovations of the respondents of both villages i.e. progressive and non-progressive villages were analyzed separately. For which mean and standard deviation values are given below.

Table 4 Comparison of the Mean Scores of the Adoption of Dairy Innovations of the Progressive and Non-progressive Village Farmers.

Village	Mean	S D	Difference in means	Computed 't' value
Progressive	43.96	8.29	10.26	3.63*
Non-progressive	33.70	5.85		

* Significant at 0.01 level of probability

The results in Table 4 indicates that the mean adoption score of the respondents of the progressive village was significantly more than that of the non-progressive village. This findings resembles with the study conducted by Ramchandran (1969), who found that the progressive farmers were higher adopters of farm practices as compared to non-progressive village.

3.2. Relational Analysis of the Selected Dependent and Independent Correlates

To find out the relationship between dependent variables, viz. Adoption of dairy innovations and the selected independent correlates, correlation coefficient values were computed for both the group of villages which are given below.

The examination of results in Table 5 indicates that the adoption of dairy innovations of farmers of both the group of villages were found to be positively and significantly correlated with variables viz. operational land holding, herd size, family size, total milk production, milk consumption, milk marketing and total annual income. However, the variables caste and social participation were found to be positive and significantly correlated with the adoption of dairy innovations of the progressive village farmers, whereas, age was found to be positively and significantly correlated with the adoption of dairy innovations among non-progressive village farmers.

Table 5 Correlation Between Adoption of Dairy Innovations and Selected Socio Personal Correlates of Farmers of Progressive and Non-progressive Village.

Socio-personal variables	Correlation of diary Innovations	
	Progressive village	Non-progressive village
Age	0.1413	
Education	0.1847	0.3000*
Caste	0.5277	0.2417
Social participation		0.1003
Occupation	0.4298	0.6689*
Operational land holding	0.1773	0.5858*
Herd size	0.8050*	0.6866*
Family size	0.7374*	0.5568*
Total milk production	0.6357*	0.6392*
Milk consumption	0.5939*	0.5945*
Milk marketing	0.6240*	0.6354*
Total annual income	0.6409*	0.6368*

* Significant at 0.01 level of probability,

** Significant at 0.05 level of probability

It can be observed from Table 6 that the adoption of dairy innovations of the progressive as well as non-progressive farmers were found to be positively significantly associated with their knowledge, attitude, risk orientation, economic motivation and empathy. However, the level of aspiration in case of progressive village was found to be positive and significant, whereas, it was found to be non-significant in case of non-progressive village farmers with their adoption of dairy innovations. This means that the level of aspiration of non-progressive village farmers towards more number of milch animal should be increased for higher adoption of dairy innovations which may ultimately lead to higher progressiveness of the village towards scientific dairy farming.

Table 6 Correlation Between Adoption of Dairy Innovations and Selected Psychological Independent Variables of Respondents of Progressive and Non-progressive Village

Psychological variables	Correlation coefficients values of adoption of diary innovations	
	Progressive village	Non-progressive village
Knowledge	.8147*	.8006*
Attitude towards daring farming	.6007*	.6757*
Risk orientation	.7494*	.8101*
Economic motivation	.8560*	.5969*
Empathy	.6978*	.3883*
Level of aspiration	.3937*	.2675*

* Significant at 0.01 level of probability

Table 7 Correlation Between Adoption of Dairy Innovations and Selected Communication Variables of Farmers of Progressive and Non-progressive Village.

Communication variables	Correlation of adoption of diary innovations	
	Progressive village	Non-progressive village
Extension contacts	.8502*	.7197*
Exposure to mass media	.8362*	.6807*

* Significant at 0.01 level of probability

The results in Table 7 shows that in both the progressive and non-progressive village, the correlation coefficients of the extension contacts and exposure to mass media were found to be positively and

significantly correlated with the adoption of dairy innovations. This implies that in both the groups of villages, communication variables, viz. extension contacts and exposure to mass media were important factors in determining the adoption of dairy innovations.

4. Conclusion

Based on the results of the study it can be concluded that the farmers of the non-progressive village had poor milk production and milk marketing due to their poor adoption of dairy innovations which affected their total annual income. This means that dairy extension workers need to pay more attention to such a village in the study area and else where with similar conditions so that it may come up to the level of adoption of improved dairy practices by the milk producers of progressive village. Besides, mean score values of psychological correlates namely, knowledge, attitude, risk orientation, economic motivation and empathy of the farmers of the non-progressive village were also found to be low as compare to the farmers of the progressive village. In addition, the extension contacts and exposure to mass media were also found to be low in the non-progressive village. Keeping in view these correlates of the non-progressive village farmers, it is suggested that more emphasis should be given in educating the farmers towards dairy innovations. On the other hand it is also suggested that the dairy development programme should be carried out more vigorously in the study area as well as in other areas with similar conditions for enhancing the milk production and increased annual income of the dairy farmers, which may ultimately result in higher dairy progressiveness of the village.

5. References

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