

RESEARCH NOTE**Prediction Potentialities of Socio-Personal Attributes on Adoption Level of Dairy Farmers****Pankaj Kumar¹, Saroj K. Rajak² and M. S. Meena³**

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The study was carried out in randomly selected Patna district to understand the effect of prediction potentialities of socio-personal variables of dairy farmers. Data were solicited from 100 milk producers following random sampling method. The findings of study reveal a wide variation in prediction potentialities of the selected variables. Variables such as cosmopolitanism followed by education emerged as potential predictors towards the dependent variable. Therefore, study recommends for enhancing the level of education of milk producers along with providing the better opportunities of information sources other than they have in order to enhance the adoption level of Improved Animal Husbandry Practices.

Key words: *Improved Animal Husbandry Practices; Adoption; Socio-personal Attributes;*

Adoption of a specified practice is not the result of a single decision to act but series of actions and thought decisions. According to *Rogers (1995)*, “adoption process is the mental process through which an individual passes from hearing about an innovation to final adoption”. Adoption has been the central point of research endeavors in the field of extension education. But in real sense, adoption is a very complex phenomenon and is affected by a number of overt and covert factors in the real field situation. It is more so in the field of animal husbandry because there is wide gap between the recommended and real practices of improved animal husbandry practices (IAHPs). In Bihar, these seem to be more alarming owing to the fact that cattle owners still consider animal husbandry as a subsidiary occupation. Keeping in view the importance of milk in human diet at the one hand and growing population at the other, it was expedient to conduct a systematic study to ascertain the factors which are playing dominant role in affecting the level of adoption of IAHPs *sin-qua-non* for boosting milk yield. The present study was designed to assess the prediction potencies of a set of variables with a view to provide feedback to field functionaries to take advantage of the findings in the best possible manners.

METHODOLOGY

The study was carried out in randomly selected Patna district of Bihar state. Out of Patna district, four villages namely Danapur, Ramjichak, Digha and Mainpura were selected randomly. Twenty-five milk producers were selected from each village on random sampling basis. Hence, one hundred milk producers constituted the total sample. The segments of IAHPs were measured with the help of a suitable measuring instrument developed for the purpose. The independent variables namely age, education, cosmopolitanism, occupation and size of land holding were measured following the scale developed by *Trivedi (1963)* and the remaining two variables cosmopolitanism and occupation were quantified by developing suitable indices for the study. The data were solicited from the respondents in face to face situation with the help of the suitable schedule and subjected to correlation and regression analysis to study the association and prediction potentialities of the variables, respectively.

RESULTS AND DISCUSSION

The study reveals that the age of respondents did not emerge to bear significant association with the

dependent variable (i.e. adoption of different Animal Husbandry practices viz. improved feeding, breeding, and management practices) under study in all the selected villages (Table 1). Other variables such as education, cosmopolitaness and size of land holding were found to be positively and significantly associated with adoption of IAHPs in all the villages. In case of caste, no clear picture was emerged because it was found to hold significant association in village Digha and Mainpura but was non-significant in Danapur and Ramjichak. However, on the pooled sample basis, this variable was found to bear non-significant association with adoption level regarding IAHPs. Table 2 shows the results of analysis carried out to ascertain the prediction potentialities of the variables. Out of six variables, cosmopolitaness and education emerged as potential predictors because the *t*-value was found to be statistically significant in both cases. The remaining variables were not found to be contributing significantly towards the dependent variable. It may be suggested that in order to enhance the adoption the adoption behavior of milk producers improved practices of feeding, breeding and management, cosmopolitaness can profitably be manovoeured. The different steps of extension teaching in fact is to be strictly followed in the context of educating the milk producers regarding technological adoption of improved A. H. practices, because the world view, attitude and outlooks of rural cattle owners are limited. They have less external contact and exposure. This could be looked through mass media exposure and education. Pooled variables explained 81.70 % variability towards the adoption level of dairy farmers. In the case of remaining variables, the b-coefficient were found insignificant, which lead to the fact that these variables have shown marginal contribution in enhancing the adoption behavior of the respondents.

Table 1. Association of variables and level of adoption of dairy farmers in Patna district, Bihar (N=100).

Independent Variables	Villages				
	Danapur	Ramjichak	Digha	Mainpura	Pooled
Age	0.055	0.432	0.483	0.131	0.154
Education	0.8499**	0.900**	0.875**	0.849**	0.860**
Cosmopolitaness	0.799**	0.954**	0.978**	0.943**	0.929**
Size of Holding	0.106*	0.507*	0.902**	0.952**	0.574*
Occupation	0.165	0.400	0.549*	0.478	0.364
Caste	0.077	0.498	0.573*	0.528*	0.452

P* < .05 *P* < .01

Table 2. Regression co-efficient showing prediction potentialities of variables on adoption level of dairy farmers, in Patna district, Bihar (N=100).

Variables	a-value	b-value	S.E	t-Value	r ²
Age	1.0459	1.702	3.479	0.489	0.817
Education	1.0459	6.278	3.560	1.760*	0.817
Cosmopolitaness	1.0459	7.090	8.813	8.712**	0.817
Size of holding	1.0459	6.557	1.531	0.428	0.817
Occupation	1.0459	1.232	2.305	0.535	0.817
Caste	1.0459	7.378	3.875	0.190	0.817

P* < .05 *P* < .01

CONCLUSION

The study in question brought to the sharp focus that variable cosmopolitans and education played the dominant role in affecting the level of adoption of dairy farmers. The findings of study reveal a wide variation in prediction potentialities of the selected variables. Variables such as cosmopolitaness followed by education emerged as potential predictors towards the dependent variable. Therefore, study recommends for enhancing the level of education of milk producers along with providing better opportunities of information sources other than they have in order to enhance the adoption level of Improved Animal Husbandry Practices.

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