RESEARCH NOTE

Sway of Selected Factors on Change in Socio-economic conditions of the Dairy Farmers

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INTRODUCTION

The average production of milk in India is about 43.9 million tonns per year and the average productivity is 175 kg per cow per year. According to Government estimate in 16.1 million tonns of milk annually and 210 grams of milk per capita. And as such, India is always deficit in 16.1 million tonns of milk annually and 100 grams of milk per capita. This deficit is being met by importing milk products from abroad at the cost of valuable foreign exchange. In order to meet the deficiencies in milk production the present productivity must have to be increased upto 4000 kg per cow per year. The increase in milk productivity is not an easy task. It needs careful and deliberate efforts, especially the need for ascertaining the changes in socio-economic conditions of the dairy farmers can not be ignored. However, no indepth and systematic study has so far been reported in India in determiningthe change in socio-economic conditions of the dairy farmers. The present study was, therefore, undertaken on the change in socio-economic conditions of dairy farmers around Udgir block of Latur district with the objective of determining the influence of independent variables on change in socio-economic conditions of dairy farmers.

METHODOLOGY

The present study was conducted in Udgir block of Latur district in Maharashtra state. Udgir taluka was selected mainly because it is a prominent milk producing area in Latur district. The research design followed in the study was ex-post-facto and three stage sampling technique was used. On the basis of coefficient of variability, the sample size was estimated for farmers using the formula suggested by Singh and Choudhary (1989). The sample size selected for the study was 200 dairy farmers. The respondents were selected by lottery method from following dairy co-operatives viz., Manki, Hanchanl, Tondar, Vilegaon, Deoni, Borol, Shirol Janapur, Lohara, Sawargaon and Batanpur.

There were 8 major indicators like food, clothing, housing, furniture and utensils, education, health, marriage. family norms and 40 sub-indicators for measuring the socio-economic impact of dairy

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development programme on dairy farmers. The care was taken that atleast 2-3 years have been lapsed after availment of benefits of programme, so that it can reflect on the indicators of change. The respondents were asked to mention whether the change is due to availment of dairy programmes or otherwise. The responses pertaining to availment of dairy development programme were scored. One score was given for change occurred in an item in question and zero score for no change.

RESULTS AND DISCUSSION

Path Analysis Results

Path analysis was carried out in order to have better understanding of how change in socio-economic conditions of the dairy farmers was influenced by the indepentdent variables directly as well as through other variables (indireclty).

Direct effect

A look at the Table makes it clear that the highest positive influence on socio-economic change was exerted by source of information (0.395) followed by socio-economic status (0.341), managerial ability (0.237), extension contact (0.224), annual income (0.194), achievement motivation (0.175), economic motivation (0.171), land holding (0.171), animal possession (0.144), and knowledge (0.134). Remaining variables namely, education (0.096), risk orientation (0.078), attitude (0.068), innovation proneness (0.065),

social participation (0.059), type of family (0.047), size of family, occupation (0.014), progressive attributes (0.007) and age (-0.005) had trivial effect on socio-economic change.

Total indirect effect

It is interesting to note that attitude exerted positive highest total indirect effect (0.891) on socio-economic change, more indirectly than directly. Other variables having positive total indirect effect on socio-economic chage were in the following sequence: risk orientation (0.886), innovation proneness (0.882), social participation (0.873), knowledge (0.842), education (0.838), economic motivation (0.807) and animal possession (0.790). The impact of other variables like age, land holding, achievement motivation, extension contact, managerial ability, occupation, socio-economic status, source of information, progressive attributes, annual income, type of family and size of family was comparatively negligible.

Substantial indirect effect

The substantial indirect effect of independent variables is also presented in Table. It is evident from the table that the first largest indirect effect was exercised by source of information, socio-economic status, managerial ability, extension contact, achievement motivation, economic motivation, land holding, animal possession, knowledge and annual income in order of sequence. The impact of education, risk orientation, attitude, type

Table : Path coefficient of independent variables with socioeconomic change

(N=200)

Sr. No.	Independent variables	'r' value	Direct effect	Total indirect effect	Substantial indirect effect
X_1	Age	-0.793**	-0.005	-0.788	-0.004 (X_3)
X_2	Education	0.934**	0.096	0.838	0.086 (X_6)
X_3	Type of family	0.263**	0.047	0.216	0.017 (X_7)
X_4	Size of family	0.253**	0.035	0.214	0.015 (X_6)
X_5	Social participation	0.932**	0.059	0.873	0.054 (X_7)
X_6	Progressive attributes	0.502**	0.007	0.495	0.004 (X_5)
X_7	Socio-economic status	0.961**	0.341	0.620	0.331 (X_1)
X_8	Occupation	0.667**	0.014	0.653	0.018 (X_7)
X_9	Land holding	0.948**	0.171	0.777	0.161 (X_7)
X_{10}	Animal possession	0.934**	0.144	0.790	0.139 (X_5)
X_{11}	Annual income	0.595**	0.194	0.401	0.108 (X_1)
X_{12}	Achievement motivation	0.950**	0.175	0.775	0.171 (X_4)
X_{13}	Economic motivation	0.978**	0.171	0.807	0.168 (X_{20})
X_{14}	Risk orientation	0.964**	0.078	0.886	0.077 (X_1)
X_{15}	Innovation proneness	0.947**	0.065	0.882	0.063 (X_3)
X_{16}	Managerial ability	0.898**	0.237	0.661	0.228 (X_3)
X_{17}	Knowledge	0.976**	0.134	0.842	0.132 (X_5)
X_{18}	Attitude	0.959**	0.068	0.891	0.066 (X_1)
X_{19}	Extension contact	0.970**	0.224	0.746	0.216 (X_5)
X_{20}	Source of information	0.976**	0.395	0.581	0.387 (X_6)

Figures in parentheses indicate number of independent variables through which it effect.
** Significant at 0.01 level of probability.

of family, size of family and progressive attributes was comparatively negligible. While age exerted the negative indirect effect. It was also interesting to note that majority of the substantial indirect effects were routed through socio-economic status, social participation and age.

The correlation of coefficient values were put to path analysis to determine the direct, total indirect and substantial indirect effects of independent variables on the dependent variable. It was found that source of information was the most important variable affecting directly and positively the socio-economic change. It had also provided a way for the variable economic motivation in exerting its substantial indirect effect on socio-economic change. The farmers those who were better in source of information were better in their socio-economic conditions and the study has also shown a significant and positive relationship between source of information and socio-economic change.

Source of informaiton was thus a crucial variable leading towards higher change in socio-economic conditions of fairy farmers which was further strengthened by the fact that independent variable namely, economic motivation exerted its effect on socio-economic change through source of information. This fingding was in line with findings reported by Bansode (1986).

CONCLUSION AND IMPLICATONS

It can be concluded from this study that the source of information exerted highest positive direct and substantial indirect effects on change in socio-economic conditions of dairy farmers. This indicates that source of information plays an important role in controlling behavioural characteristics of the farmers. Hence, if source of information of the farmers could be in creased by any means (through training, tours, dicussions, demonstrations, etc.) that could lead to their higher change in socio-economic conditions of the dairy farmers. Concerned administrators and policy makers should, therefore, give due cognizance of this fact and should take necessary steps to increase the sources of information of the dairy farmers.