

RELATIONSHIP BETWEEN THE ADOPTION BEHAVIOR AND CHARACTERISTICS OF SUGARCANE GROWERS

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ABSTRACT- A study was conducted to study the extent of adoption of recommended sugarcane technologies by the different categories of sugarcane growers in selected six blocks of Cuddalore district of Tamil Nadu. The selected six blocks were Keerapalayam, Kammapuram, Kattumannar Koil, Annagramam, Kurinjipadi and Mangalooore. The respondents were pre-stratified into marginal, small and big farmers consisting of 80 respondents in each categories. Altogether, 240 respondents were selected from six villages proportionately using, simple random sampling.

The attributes like mass media exposure and information source utilization of marginal farmers, extension agency contact, mass media exposure and information source utilization of small farmers and educational status, extension agency contact, mass media exposure and information source utilization of big farmers were found to be positively significant their adoption level. Hence, these features may be taken into consideration in the transfer of sugarcane technologies.

Key word: Adoption, Sugarcane growers, Sugarcane technologies.

Introduction

The growth and development of Agriculturally pre-dominant nation like India mainly depends on the progress in sciences and technology. In the developing world today, it is not the lack of technology that worries, but is the rate of transfer of technology from the points of production to the units of its utilization. So, there is an increasing gap between innovations in the laboratories and their adoption of technology is a complex pattern of mental and physical activities. Several personal, psychological, economic and social factors largely determine the extent of adoption and also continuance of the technology (Yadav *et al.*, 2005).

Keeping these points in mind, the present study was attempted to study the extent of adoption of different categories of sugarcane growers and to study the relationship of socio-economic and psychological characteristics with extent of adoption of marginal, small and big sugarcane growers.

Methodology

The study was conducted in selected six blocks of Cuddalore district. The selected blocks were Keerapalayam, Kattumannar koil, Annagramam, Kammapuram, Kurinjipadi and Mangalore. The respondents were pre-stratified into marginal, small and big farmers consisting of 80 respondents in each categories. Altogether, 240 respondents were selected from six villages proportionately using simple random sampling. Fourteen personal, socioeconomic and psychological variables were selected for determining their relationship with the extent of adoption of sugarcane growers. A well-structured and pre-tested interview schedule was used to collect the data from the selected respondents. The collected data were analysed by using the percentage analysis, cumulative frequency method, zero order correlation and chi-square test.

Results and Discussion

From Table it could be concluded that more than one third of the respondents were found under low (35.83 percent) and medium (35.00 percent) categories. The remaining 29.17 percent of the respondents were found to be high in their extent of adoption.

The calculated chi-square value indicated that there was significant difference between the different categories of sugarcane growers regarding their extent of adoption. In case of marginal their extent of adoption. In case of marginal and small farmers, the extent of adoption was comparatively lesser than big farmers. Larger farm size of big farmers might have enhanced them to increase the number of farm activities, whereas this could not be possible in the case of marginal and small farmers. This finding was supported by the finding of Jayasankar (2000).

Table1: Distribution of respondents according to their extent of adoption

Sl. No.	Extent of adoption	Marginal (n=80)		Small (n=80)		Big (n=80)		Total (n=240)	Chi-square value
		No.	%	No.	%	No.	%		
1.	Low	36	45.00	29	36.25	21	26.25	86	54.13**
2.	Medium	34	42.00	38	47.50	12	15.00	84	
3.	High	10	12.50	13	16.25	47	58.75	70	
Total		80	100.00	80	100.00	80	100.00	240	

Table: 2 Zero order correlation of characteristics with extent of adoption of marginal, small and big sugarcane growers

Sl. No.	Variables	Y value		
		Marginal	Small	Big
1.	Age	-0.104NS	-0.2203 NS	-0.206 NS
2.	Educational status	-0.104NS	0.201 NS	0.365**
3.	Occupational status	0.166 NS	-0.181 NS	0.107 NS
4.	Area under sugarcane cultivation	-0.181 NS	-0.082 NS	0.018 NS
5.	Farming experience	-0.050 NS	-0.039 NS	-0.158 NS
6.	Experience insugarcane cultivation	-0.109 NS	-0.213 NS	-0.211 NS
7.	Annual income	-0.059 NS	0.076 NS	0.090 NS
8.	Social participation	0.129 NS	-0.178 NS	-0.025 NS
9.	Extension agency contact	-0.048 NS	0.644**	0.490**
10.	Decision making	-0.187 NS	-0.089 NS	-0.244 NS
11.	Mass media exposure	0.587**	0.419**	0.490**
12.	Scientific orientation	0.188 NS	0.008 NS	-0.001 NS
13.	Information source utilization	0.653**	0.579**	0.529**
14.	Innovativeness	0.16 NS	-0.033 NS	-0.074 NS

Relationship of socio-economic and psychological characteristics with the extent of adoption of marginal, small and big sugarcane growers:

It might be seen from the Table 2 that out of fourteen independent variables, two variables viz., mass media exposure and information source utilization were found to have positive and significant relationship with the extent of adoption of all the three categories of sugarcane growers, whereas extension agency contact was found to have positive and significant relationship with the extent of adoption of the two categories of sugarcane growers, namely small and big growers. Educational status was found to have positive and highly significant relationship, whereas decision-making was found to have negative and significant relationship with the extent of adoption of the big sugarcane growers.

Mass media exposure and information source utilization were found to have positive and significant relationship with the extent of adoption of sugarcane growers. Farmers get the information from different sources like official, non-official and mass media sources which might have resulted in greater knowledge and higher adoption. Extension agency contact was found to have positive and significant relationship with the extent of adoption. Contact with extension agency might have provided the opportunities to contact the authenticated sources of information and gain knowledge, which might have resulted in higher adoption. Educational status was found to have positive and significant relationship with the extent of adoption. Educated people may have better perceptual ability to grasp the things. This might have enabled them to gain and possess higher adoption. Decision making was found to have negative and significant relationship with the extent of adoption of big sugarcane growers. Big farmers with more consultative decision in sugarcane cultivation are mostly aged persons with low level of knowledge, which might have enabled the respondents to take joint consultative decisions.

CONCLUSION :

In the light of the present investigation, it can be concluded that significant difference could be observed between the marginal, small and big sugarcane growers on the extent of adoption. The adoption level of marginal and small farmers was found to be comparatively low. Hence, there is more scope to concentrate more and improve the adoption level of the marginal and small sugarcane growers. The attributes like mass media exposure and information source utilization of marginal farmers, extension agency contact, mass media exposure and information source utilization of small farmers and educational status, extension agency contact, mass media exposure and information source utilization of big farmers were found to be positively significant their adoption level. Hence, these features may be taken into consideration in the transfer of sugarcane technologies.

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