

Characteristics of Farmers in Relation to Adoption of Recommended Practices of Hybrid Sorghum*

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ABSTRACT

This study was conducted in Chamarajanagar taluk of Mysore district to identify the relationship between the adoption of recommended practices of hybrid sorghum and farmers' characteristics like their age, education, economic status, social participation, contact with extension agency and media of participation based on the data collected from randomly selected 100 farmers. It was observed that except age other variables were positively related with the adoption of recommended practices.

INTRODUCTION

High yields are obtained only by following a specific technology that goes with every crop. As no two individuals can think and believe alike in absolute term even if provided with the same stimulus at a given point of time, the decision making process of the farmers with regard to the adoption of new innovations is bound to vary because of their difference in age, education, economic status, social participation, contact with extension agency, media of participation and other such social and economic factors. In the present study, an attempt has been made to identify the relationship between farmers' characteristics and adoption.

MATERIALS AND METHODS

The study was conducted in one taluk of Nanjangud sub-division, Mysore district, where hybrid sorghum was cul-

tivated more extensively. Stratified two stage sampling method was adopted for sampling purpose; village level workers' circle within the taluk as strata, the villages as primary units and the holdings as secondary units. A list of all the villages in each V. L. W's circle wherein at least five farmers who had harvested a minimum of two crops of hybrid sorghum was prepared with the assistance of extension officer and gramasevaks of the taluk. A total of 20 villages, one from each V. L. W's circle was selected by random method. A list of the names of the farmers who had harvested a minimum of two crops of hybrid sorghum in each of these villages was made. Five farmers from each of this list were randomly selected which formed 100 respondents in total. The respondents were interviewed with the help of a structured schedule.

The study was confined to ten recommended practices for hybrid sor-

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ghum. The extent of adoption was measured in terms of the adoption quotient. The concept of adoption quotient developed by Sengupta (1967) was used. Farmers were classified as low adopters (A.Q. = 1—40 per cent) medium adopters (A. Q. = 41—80 per cent) and high adopters (A.Q. = 81—100 per cent).

In this study only 6 variables namely age, education, economic status, social participation, contact with extension agency and media of participation were selected and quantified based on the weightages given by Trivedi (1963). Farmers were grouped under low, medium and high group based on the score. In case of variables namely contact with extension agency and media of participation none of the farmers came under high group.

RESULTS AND DISCUSSION

Age and adoption : The data in Table 1 points out that 62 per cent among low adopters, 63 per cent among medium adopters and 47 per cent among high adopters belonged to middle age group. As such it is seen in this study that middle aged farmers adopted more number of recommended practices than young and old farmers which is contrary to the belief that young farmers are more progressive. The non-significant chi-square value showed that age of the farmer and the number of practices adopted by him have no association. Similar findings were observed by Coleman (1951) who reported that farmers of age group 30 to 41 years were high adopters of farm practices.

This implies that high adopters are to be found in all age groups and that the extension workers showed approach all farmers irrespective of their age.

Education and adoption: Among low adopters category, 57 per cent of the farmers belonged to low education level group and only 9 per cent belonged to high education level group (Table 1). But in case of high and medium adopters categories only 12 per cent and 19 per cent respectively belonged to low education level group. It is interesting to note that 70 per cent among high adopters category and 37 per cent among medium adopters category belonged to high education level group. Therefore, it can be said that adoption of recommended practices increased with the rise in educational level. Rai (1965) and Das and Sarkar (1970) reported that adopters of improved farm practices were better educated.

Economic status and adoption: Adoption of the improved practices is conditioned with the economic status of the farmer. Sixty five per cent among high adopters, 61 per cent among medium adopters belonged to medium economic status group and the percentage was 24 in case of low adopters (Table 1). Sixtytwo per cent of the farmers among low adopters belonged to low economic status group while among medium and high adopters 34 per cent and 12 per cent respectively belonged to low economic status group. The significant Chi-square value revealed that the economic status and the number of practices adopted were interdependent factors. Similar findings were re-

Table 1. Characteristics of farmers in relation to adoption of recommended practices of hybrid sorghum

Characteristics	Adopters category						X ² Value
	Low		Medium		High		
	No.	Per cent	No.	Per cent	No.	Per cent	
Age							
Young	4	19	14	23	6	35	1.983*
Middle	13	62	39	63	8	47	
Old	4	19	9	14	3	18	
Level of education							
Low	12	57	12	19	2	12	22.281**
Medium	7	34	27	44	3	18	
High	2	9	23	37	12	70	
Economic status							
Low	13	62	21	34	2	12	19.888**
Medium	5	24	38	61	11	65	
High	3	14	3	5	4	23	
Social participation							
Low	21	100	47	75	8	47	Contact with extension agency and adoption: The significant Chi-square value reveals that contact of farmers with extension agency and the number of practices adopted by them have positive relation. A strong MANOVA test indicates that low adopters (53 per cent of the farmers) had low contact with extension agency, only 10 per cent of the farmers had medium contact whereas in case of medium adopters 80 per cent had medium contact and 47 per cent had low contact with extension agency.
Medium	—	—	10	16	5	29	
High	—	—	5	9	4	24	
Contact with extension agency							
Low	19	90	52	84	8	47	13.290**
Medium	2	10	10	16	9	53	
Media of participation							
Low	21	100	46	74	7	41	JALIHAI, K. A. 1960. Some implications of the social participation and adoption of farm practices and other application to extension education. Unpub. M. S. Thesis. Univ. of Tennessee, U.S.A.
Medium	—	—	16	26	10	59	

* Not Significant

** Significant at 0.01 level

ported by Jalihal (1960) and Bose (1964) who have observed that higher economic status of the farmers was positively related with adoption of improved farm practices.

Social participation and adoption: The data in the Table 1 reveals that none of the low adopters belonged to the medium and high social participation groups, while 16 per cent and 9 per cent of medium adopters belonged to medium and high social participation groups respectively. In the case of high adopters 29 per cent and 24 per cent belonged to medium and high social participation groups respectively. This shows that farmers who had higher social participation adopted more number of recommended practices. Reddy (1962) and Rotanchand and Gupta (1966) concluded that social participation was significantly associated with adoption of improved practices.

Contact with extension agency and adoption: The significant Chi-square value reveals that contact of farmers with extension agency and the number of practices adopted by them have positive association. Among low adopters, 90 per cent of the farmers had low contact with extension agency, only 10 per cent of the farmers had medium contact whereas in case of medium adopters 84 per cent of the farmers had low and 16 per cent had medium contact with extension agency (Table 1). But in case of high adopters 53 per cent of the farmers had medium contact and 47 per cent had low contact with extension agency.

Similar findings have also been reported by Bose (1961) and Sohal and Ranjit Singh (1968) who concluded that farmers with more contacts with extension workers adopted more number of practices.

Media of participation and adoption: It is surprising to note that among low adopters, 100 per cent of the farmers had low media of participation. In case of medium and high adopters 26 per cent and 59 per cent of the farmers had medium media of participation (Table 1). It implies that adoption of recommended practices increases with the increases in the level of media of participation.

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