

A Critical Study of the Innovativeness of Farmers Associated with Adaptive Research Trials

By

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ABSTRACT

The study was conducted in the Intensive Agricultural Area Programme district of Thanjavur of Tamil Nadu among the farmers in whose filed Adaptive Research (AR) trials were laid out by the extension Personnel. The study revealed that all the farmers involved in AR belonged to the category of high innovativeness. Among the twelve independent variables studied in this investigation for their influence on the innovativeness of the farmers, it was seen that media participation, contact with research station, age and social participation had highly significant association with innovativeness of the farmers and also had normal strength of association. The other four variables *v/z.*, contact with extension agency, education, economic status and caste though exhibited significant association had only below normal strength of association with innovativeness. The remaining four variables i.e., distance from block headquarters to the farmers' residence, participation in extension activities, number of trials conducted and occupation did not show any significant association with innovativeness.

INTRODUCTION

Innovativeness of farm operator is often rated by the number of recommended farm practices one adopts either as innovator or as an adopter. In the absence of overt behaviour denoting innovativeness, socio-psychological scaling technique can be used to ascertain the extent to which an individual has acquired an awareness of the need to innovate. Therefore the farmer who feels the greatest need to change would be first to innovate. Consequently, if a farmer expresses dis-

satisfaction with his present farming situation and activity, speaks of trying new ways of farming, one could expect him to change more readily than a person who is contented with the *status quo*. Thus, a positive attitude towards innovation and change can be taken to denote innovativeness and a propensity to adopt non-traditional farm practices. The innovativeness of farmers has also been found to be influenced by a number of personal and situational variables. Rahim (1961) concluded that persons with higher education would have higher inno-

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vativeness. Rogers and Burdge (1962) found younger age higher social and economic status associated with innovativeness. They also found that the innovative farmers were more cosmopolite.

MATERIALS AND METHODS

The locale of the study was Thanjavur district of Tamil Nadu. Out of 36 blocks in the district, twelve blocks were selected at random. The farmers who had conducted the varietal trials so far in the selected blocks were first listed and a total number of 70 farmers were selected as respondents for the study adopting the probability proportion to size sampling technique. The scale was administered to each respondent separately by the researcher and the total number of farmers interviewed came to 69. In this scale each item was rated on a five point continuum. The negative items followed 1, 2, 3, 4 and 5 scores for 'strongly agree', 'agree', 'undecided', 'disagree' and 'strongly disagree' responses respectively. Scoring procedure for positive items followed the reversable of negative items. The innovativeness scores for each respondent theoretically ranged from twelve to sixty. A respondent of medium innovativeness would obtain a score of 36 for each item, the theoretical mid point on the scale therefore being 36.

For quantifying the personal and situational factors of farmers i. e., education, economic status, social participation, media participation, contact with extension agency and participa-

tion in extension activities, weightages were given for each sub-item under each variable, with necessary changes to suit the local conditions. Scores were given for the remaining six variables namely, age, contact with research station, caste, distance from block headquarters, number of trials conducted and occupation based on common sense arbitrary method. The chi-square tests of significance and 't' test were worked out to find out the association and degree of association respectively.

RESULTS AND DISCUSSION

The observations on the influence of twelve independent variables on the innovativeness of farmers are furnished in the Table 1.

Out of the twelve variables considered in this study for their influence on the innovativeness of the farmers involved in adaptive research, it was found out that the first four variables have highly significant and the remaining four were not significant for their influence. The independent variables which were highly associated with the innovativeness were media participation, contact with research station, age and social participation in the descending order of degree of association. This is understandable that media participation, the way in which an individual acquires maximum knowledge on any aspect of human life including science and technology should have motivated the farmers towards improved and scientific farm practices thereby exhibiting a high degree of innovativeness.

Table 1. The degree of association between independent variables and the innovativeness of the farmers involved in adaptive research

| Rank | Independent variable | Degree of association (t^2 value) | Remarks (X^2 significance) |
|------|---------------------------------------|---|----------------------------------|
| 1. | Media participation | 0.233 | ** |
| 2. | Contact with research station | 0.144 | ** |
| 3. | Age | 0.137 | ** |
| 4. | Social participation | 0.122 | ** |
| 5. | Contact with extension agency | 0.085 | * |
| 6. | Education | 0.078 | * |
| 7. | Economic status | 0.071 | * |
| 8. | Caste | 0.058 | * |
| 9. | Distance from block head-quarters | 0.025 | NS |
| 10. | Participation in extension activities | 0.020 | NS |
| 11. | Number of trials | 0.009 | NS |
| 12. | Occupation | 0.000 | NS |

Similarly contact with research station which ranked second for its influence on innovativeness is a variable which makes the farmer aware of the latest development in agricultural research, inspiring him to try these findings in his own fields. It is quite often seen that young farmers show a degree of aptitude towards improved practice. The same trend has been observed with those farmers associated with high innovativeness. Social participation ranked fourth among the independent vari-

ables influencing the innovativeness of the farmers.

The other independent variables which exhibited significant association with the innovativeness of farmers were contact with extension agency, education, economic status and caste. It is clear that contact with extension agency and education will mainly act towards innovativeness by their involvement in the acquisition of knowledge. The eco-

nomie status and caste can be related with innovativeness of the farmers due to their influence on the status of the farmers in the social system.

The variables, distance from block headquarters to the farmers' residence, participation in extension activities, number of trials conducted and occupation did not show any significant relationship with the innovativeness of the farmers involved in this study.

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