ABSTRACT

HOUSEHOLD DETERMINANTS OF TECHNOLOGY UTILIZATION
BY LIMITED-RESOURCE RICE BASED FARMERS IN TRINIDAD

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This study was designed to examine the technology utilization behaviour of limited resource rice based farmers. For the theoretical base, aspects of the diffusion model were combined with decision making theory and viewed from a farming systems perspective. This framework was used to establish and explain the role of the farm household in the utilization of agricultural technologies by the targetted category of farmers.

One hundred (100) limited resource farm households were selected by a two-stage simple random sampling procedure from within a specified recommendation domain, and thirteen (13) household related variables categorised as intra-household, extra-household and psychological factors were investigated. A structured interview schedule was used to collect the data, and analysis involved the use of chi square statistics, Pearson’s correlation coefficient (r), and stepwise multiple regression techniques.
Data analysis to establish the determinants of technology utilization included chi square statistics, Pearson’s correlation coefficient ($r$), and stepwise multiple regression analysis.

This study found that household psychological factors were the more important determinants of the behaviour of households, with extra-household factors showing some measure of importance. Intra-household factors were relatively unimportant. The goal orientations of the households, their attitude towards the technology and their perceptions of risk associated with the technology were found to be significantly related to the dependent variable.

The study also showed that the utilization of the package of practices was influenced by different household factors compared to the two components, weed control and double cropping examined in detail. The evidence suggests that while the study of the utilization of the package of practices is necessary, it is not sufficient to fully understand the behaviour of limited resource farmers.

Another survey conducted as part of this study using the RAAKS methodology revealed that the Agricultural knowledge and Information System (AKIS) was characterised by strong informal relationships which served to enhance the utilization of the technologies.