ABSTRACT

Modernisation of agriculture is urgently needed for the achievement of self-sufficiency in food production. The major problem of increasing the food supply by inducing farmers to adopt new practices still exists. This study, therefore, focuses on the central problem of identifying, analysing and reporting the incentives and disincentives related to the adoption behaviour of food crop farmers on the Crown Lands Development Programme in Trinidad and Tobago.

The behavioral differential theory advanced by J. P. Leagans, that the adoption behaviour of farmers is influenced by the creation of an imbalance between the valence of incentives and disincentives for adoption currently in his environment and perceived by him as an influencer, forms the theoretical framework for analysing the adoption behaviour of a sample of food crop farmers.

The sample was drawn from a population of food crop farmers under a Partial Development Scheme of the Crown Lands Development Programme. A procedure of stratified random sampling ensuring proportional allocation was employed to select the sample. Data were collected by personal interviews conducted by the author. Hypotheses were formulated based on the study's theoretical framework and objectives. Data analysis included percentages, histograms, chi-square statistics to determine association between variables, correlation coefficient to determine direction and strength of relationship and multiple regression analysis to determine amount of variance explained in adoption behaviour.
The socio-economic factors of age, formal education, household size and organisational membership were not significantly associated to adoption behaviour. However, income, family labour, time spent in agriculture, level of knowledge of innovations and ethnicity were found to be significantly associated. The socio-psychological factor of perception of profitability was also significantly associated with adoption. The situational factors of praedial larceny, availability of irrigation and difficulty experienced in home to farm travel were significantly associated with adoption behaviour. The communicational factors of frequency of contact with extension officer, amount of advisory information received and dependability of information received were significantly associated with adoption. A discussion and possible explanations for results have been provided.

The differential perception of valence of four incentives identified by farmers were responsible for variations in adoption behaviour. These are increase in crop yield, advice from extension officer, neighbours using and saves labour. The differential perception of valence of two disincentives identified by farmers were responsible for variations in adoption behaviour. These are lack of knowledge and inadequate supply of inputs.

The data collected supported the Behavioral Differential Theory advanced by Leagans that ultimately it is the differential or net effect of cumulative valence of incentives and disincentives that determine adoption behaviour.