SMALLHOLDER CONTRACT FARMING DECISIONS IN KENYA'S SUGAR INDUSTRY: A CASE STUDY OF NZOIA SUGAR SCHEME

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ABSTRACT

This study has attempted to apply discrete choice theory to smallholder contract farming decisions in Kenya's sugar industry. The broad objective of the study is to analyse smallholder contract farming decisions in Kenya's sugar industry. The specific objectives of the study were fourfold: (i) determination of the pattern of smallholder contract farming in the sugar industry, (ii) identification of key factors of the observed contract farming pattern, (iii) estimation of the effects of these factors based on cross-sectional data, and (iv) based on the study's findings, policy implications have been discussed.

Primary data was used in the study. This was collected from Nzoia sugar scheme during the months of January and February 1987 using a structured questionnaire. Data was collected and a random sample of 60 contracted and non-contracted farmers were interviewed personally. Test of hypothesis regarding the differences of the means of a number of variables of contracting and non-contracting farmers were performed using the data. The difference between the means of such variables as family size, income sources, Farmers' experience in cane production, cost of production and gross margins were found to be statistically significant at 5 per cent level of significance. We would
not reject the null hypothesis of there being no difference between the means of contracting and non-contracting farmers for a number of variables including age, education, income and farm distance at the same level of significance. For qualitative variables, perceptional patterns were studied and it was found that the observed patterns with respect to access to credit, market assurance, access to inputs, service inefficiency and necessity for inputs, appeared somewhat different for the two types of farmers.

Because of software problems, a modified log linearized logistic function, itself a variation of the logit model, was estimated. The regression results showed that not all variables considered had a statistically significant effect on contract farming decisions at the 0.05 level of significance. Variables such as income sources, family size and farm distance had a statistically significant effect on contract farming decisions at the same level of significance. Lastly, policy implications have been discussed; and in particular, suggestions on the removal of zonal boundaries between sugar schemes and flat-rate transport charges have been made.