

Thesis Title Peasants' Response to Agricultural Innovation :
 A Case Study in Nang-rong District, Buriram
 Province.

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ABSTRACT

The purpose of this study is to understand the extent to which socio-economic characteristics of the peasant households effect adoption of agricultural innovation, and to analyze the economic impact of different levels of adoption measured in terms of difference in the paddy yields.

Secondary data used for this purpose are drawn from the survey of the CBIRD Evaluation Project (CEP) conducted in 40 villages of Nang-rong District between 1984 and 1988 by the Institute for Population and Social Research. For the purpose of analysis the only the baseline data (from Round I survey, 1984) and the data from Impact survey (Round III, 1988) are used. Statistical analysis includes frequency distributions, percentage, Chi-square test, analysis of variance for one-way classification and multiple comparison by the Scheffe' method.

Important findings and conclusion are given below:

In terms of their socio-economic characteristics, the sample households are small farming families producing mainly for consumption in the family. Most of the household heads have 4 years of primary education. They have simple and limited media and production equipment such as radios, bicycles and pull carts. Use of ploughing machines is rare. Due to severe drought in the year before the impact survey, the sample households are generally facing constraints. Number of households using paddy land of small size seems to be increasing, and the yields are lower. Obviously the farming households in the sample are poorer as indicated in reducing number of the households taking agricultural credits for production of any kind.

Adoption of agricultural innovation is found to be correlated with the household income. However, this is true only for those households which have insufficient water for farming and those which have no problem in selling their produces. Among the former, high income households are found to be more innovative, but among the latter low income households are more innovative.

Other socio-economic variables are found to have no significant correlation with agricultural innovation.

Surprisingly, there is a reverse relationship between adoption of new rice farming technology and the rice yields among the study households. This is evidenced in their average rice yields : The households which did not adopt the introduced technology at all have the highest average of rice yield (483.5 kg/rai) while those which fully adopted the new technology have the

lowest yield (279.72 kg/rai). Between these two groups are those farming households which partially adopted the technology; their average yield is 329.02 kg/rai. Explanation for this unanticipated finding is not possible with limited data in hands now. One possible explanation may be that this is the result of drought which damaged the crop prior to the impact survey. Full explanation may be better realized with the help of qualitative data.