

Impact evaluation of alternative crops for a water short irrigation system: a case study of "Kirindi Oya Irrigation and Settlement Project"

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Periodical water scarcity may occur, in many irrigation and settlement projects in the country but in some projects, scarcity is acute, to the extent that they are called "water short" irrigation systems. Though the settlers prefer to grow rice, in these schemes the planners are compelled to promote crops other than rice, as a remedial measure in order to optimize on water use.

Scope of this study is to evaluate impact of alternative crops cultivation on socio economic conditions of farmers in such irrigation and settlement projects. For this study *Kirindi Oya Irrigation and Settlement Project* (KOISP) which was located in south east dry zone was selected. It was divided into three basic geo irrigation units namely Left Bank (LB), Right Bank (RB) and *Ellegala* system. Stratified samples were employed as proportionately to the number of alternative crops cultivating farmers in those units. Data were gathered using a pre-tested questionnaire. The study demonstrates that a positive relationship between introduction of alternative crops and socio-economic conditions of the settlers. Product movement correlation coefficient (r) used to analyze the changing nature of one variable (Socio Economic Conditions of settlers) with another variable. (Factors determine the socio economic conditions of settlers)

Most of the farmers in all three units have selected banana as their main alternative crop. The reasons for such preference in order are lesser water requirement, marketability and stable price. The Product movement correlation co-efficient for alternative crops and time demonstrates a positive value (*Ellegara* System .58, LB .77, RB .60) indicating a preference for such crops. With respect to savings new settlers in LB have shown a positive trend than other categories of farmers with the cultivation of alternative crops. In order to continue farming in the area and invest on such activity, farmers requested for irrigation, subsidies, extension, and farm equipments. Both LB and RB farmers are more interested in educating their younger generations than the *Ellegala* farmers.