

**FARMERS PARTICIPATION IN IRRIGATION
MANAGEMENT: THE CASE STUDY OF FARMER
ORGANIZATION BASED SMALL-SCALE IRRIGATION
SCHEMES IN TRINCOMALEE DISTRICT SRI LANKA**

Mohamed Thajudeen Mohamed Zuhail

138433V



University of Moratuwa, Sri Lanka.
Degree of Master of Science
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Department of Building Economics

University of Moratuwa

Sri Lanka

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ABSTRACT

Agricultural intensification is presumed to be a necessary pre-condition for the development of the agricultural sector in Sri Lanka in general and in Trincomalee district in particular. The Agricultural policy of Sri Lanka gives high priority to the promotion of food sufficiency and security through irrigated agriculture. To this end, governmental and non-governmental organizations (NGOs) initiated small-scale irrigation schemes throughout the country including Trincomalee. Despite these efforts, however, smallholder farmers in the study area were found to be reluctant to participate in small-scale irrigation schemes. Therefore, the aim of this study was to analyse major demographical, socio-economic and institutional factors influence the participation of farmers in small-scale irrigation and income. The data were collected by distributing structured questionnaire among farmers. The overall sample size was 100 households, 50 from irrigation participant and 50 households from non-irrigation participant. Trincomalee district consists of 11 divisions. Each division 5 households were selected for irrigation participants and 5 for non-irrigation participants using stratified random sampling except Trincomalee, Town and Gravets division as it contains less number of farmers. Descriptive statistics and likert-scale analysis methods were used to analyse the data.

Factors affecting farmers' irrigation participation included gender, age, education, labour force, size of cultivated land, access to market, distance to water source, extension service and credit facilities. The respondents' individual characteristics; labour force, extension service and distance to water source had strong statistically significant relationship with the irrigation participation and age, gender, access to market, and credit facilities had moderately significant relationship. On the other hand, size of cultivated land, education did not have a statistically significant relationship with the irrigation participation. It disclosed further that irrigation participants had the higher income level than non-irrigation participants. Extension service, Distance to water source, Labour force, Access to market, Gender, Credit facilities, Age, Education, and Size of cultivated land were found in descending order of level significant factors which influence in small-scale irrigation participation with income. Hence, the study suggests that communities need to put emphasis on implementing projects by involving farmers in irrigation participation. Extension services such as advice, training, and demonstration should be made available to farmers by providing the required assistance to agricultural related projects. Communities need to be encouraged to establish saving and credit facilities to help them finance agricultural related activities and in addition, governments should establish organized marketing channels.

Keywords: Farmers; Small-scale Irrigation; Irrigation participants; Non-irrigation participants; Income; Trincomalee.

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LIST OF ABBREVIATIONS

Abbreviation	Description
DAS	Department of Agrarian Services
FAO	Food and Agriculture Organization
FMIS	Farmer Managed Irrigation Systems
FO	Farmer Organization
IFAD	International Fund for Agriculture Development
IIMI	International Irrigation Management Institute
km	Kilometer
ME	Man Equivalent
NGO	Non-Government Organization
OFC	Other Field Crop
RII	Relative Important Index
UNDP	United Nation Development Programme
UNCED	United Nations Conference on Environment and Development



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