ABSTRACT

As per *Mahinda Chintana* (Government's Development Policy) policy document the Government of Sri Lanka continued the promotion of micro irrigation technology under the Sustainable Agriculture Water Management Project (SAWMP) operated under the Ministry of Agriculture since 2004. The objective of the project was to uplift the living conditions especially of the dry zone marginal farmers through providing the modern water application technology called Solar Powered Drip Irrigation (SPDI). The second phase of this project was implemented in 2011 distributing 5000 SPDI kits among farmers under a loan scheme repayable within a period up to ten years, by paying more attention to the Northern and Eastern provinces, using a different approach compared to the one adopted in the phase 1. The major objective of this study is to evaluate the efficacy of providing solar powered drip irrigation kits and their impacts with changes done in the phase 2.

The SPDI phase 2 was implemented in seventeen dry zone districts. However, for this study only seven districts (Ampara, Badulla, Jaffna, Kurunegala, Matale, Mullaitivu, and Polonnaruwa) were selected by considering the availability of large number of beneficiaries. Total sample size was 368 beneficiaries. Multiple methods were adopted to gather necessary information and data for the study namely; key informant interviews, focus group discussions, and questionnaire survey. Field surveys were carried out in between June to September, 2012.

According to the findings only 14 percent of the beneficiaries had used the complete set of SPDI and majority of beneficiaries (53%) had used the SPDI without drip containing laterals. More than 35 % said that income had increased due to decrease of cost of production. Especially in the Kurunegala district, shifting from subsistence agriculture to water intensive high-value cash crops such as papaw, tomatoes, and banana were observed. The responsibilities of the stakeholders were not met with set criterion of the agreement signed. Many shortfalls could be observed in promotion, selecting beneficiaries, implementation, operation and maintenance, after sales services and the re-payment of the loan. Only about 11% of the beneficiaries had paid any instalment after the down payment, but nobody was making regular payment of instalments. The main reasons for the non-payment of the instalment were; non-payment of instalments by other farmers (55%), failure to generate sufficient income (27%), and expectation of loan write off from government as the government did for agricultural credits in the past (28%).

Beneficiary selection had not been properly done with the set criteria in this project. It is a vital factor for the success of the project and therefore in future interventions it is strongly recommended to pay more attention and to strengthen the beneficiary selection procedure. Strong monitoring and evaluation process is essential to guide all the stakeholders to fulfill their duties and responsibilities to achieve the project goals. Modifications in the second phase had no significant impact on the use of SPDI and the collection of loan repayments. Therefore, it is recommended that authority of installment collection be given to grass root level government officers with an incentive payment to encourage efficient loan installment collection.