Adoption of Micro Irrigation System Technology in Dry Zone of Sri Lanka: A Case Study in Vavuniya District

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Micro irrigation systems technology was introduced in the dry zone of Sri Lanka nearly two decades ago and the farmers in the dry zone were facilitated to adopt this technology in the dry zone through subsidy and loan schemes. Yet, it was not popularized among farmers because of its high initial cost. Realizing this fact some Non-Governmental Organizations were trying to promote this technology through subsidy schemes. The objective of this study was to assess the current status of utilizing micro irrigation technology and to identify the problems encountered by the farmers in using this technology. Sixty five farmers were randomly selected from the sampling frame in which all the farmers who were given micro irrigation systems through subsidy scheme in Vavuniya district were included. A questionnaire survey was conducted from the sampled farmers. The study revealed that 77% of the farmers were utilizing the micro irrigation systems, whereas the rest, 23% farmers had permanently abandoned the use of micro irrigation system. Further the study revealed that though the farmers understood the advantages of using this technology, it was hardly found anyone investing his capital on this technology. This study also depicts the problems reported by the farmers such as frequent repairs in the micro irrigation systems by coil-burning of electric motors, melting of pipelines by intense sunlight and blockages by debris and salt clogging in nozzles. This study recommends that continuous monitoring and provision of training for the farmer beneficiaries for the efficient adoption of this technology are needed. Appropriate demonstration plots using this technology would also enhance the adoption of this technology by the farmers. Further research on this line is essential for the sustainable adoption and efficient utilization of micro irrigation technology. Sustainable usage of this technologyconserve water resource and thereby the environment.

Key words: Adoption, Dry Zone, Micro Irrigation Technology, Subsidy, Sustainability