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DETERMINANTS OF ADOPTING MICRO IRRIGATION TECHNOLOGIES (MIT) BY FARMERS IN ANURADHAPURA DISTRICT

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The growing challenge faced by the agricultural development is growing more food using less water. Micro irrigation technology (MIT) has been spreading in Sri Lanka since the late 1990s as an efficient irrigation technology though its rate of spread is fairly low. Therefore this research is focused on investigating the adoption behavior of MIT by farmers in Anuradhapura district. This study was carried out with 40 adopters and 31 non adopters selected purposively. A questionnaire survey was administered to collect data. Data were analysed using a binary-logistic regression model.

Result shows that government institutions (95 %) and progressive farmers (77.5 %) were the main sources of information for the adopters. Mass media (90.3 %) and progressive farmers (87 %) were the main sources of non-adopters in the awareness process. This explains that regardless of adopter category the significance of institutions, progressive farmers and mass media in the awareness stage. Of the adopters, 65 percent adoption rate was recorded within a two years period. This was basically attributed to the subsidy programmes launched by the government in disseminating MIT. From the adopters 57.5 percent of drop out rate was recorded mainly because of clogging, lack of access to spare parts and damages caused by rats and other wild animals. Results of logistic regression show a positive relationship of pretraining and age of house hold head to the adoption process while power of the pump affect negatively. Because with the age and training farmers gain enough experience. Once the power of the pump goes up farmers are shifted to other types of irrigations.

Failures of early adopters caused by clogging, damages cased by rats, lack of proper training on system management and lack of access to spare parts are

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the main contributors of poor adoption in the sample area. Effective training and placing the technology on the hands of experienced farmers would enhance the rate of adoption.

Key words: Adopters, Micro-irrigation technology, Non-adopters

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