

ABSTRACT

To satisfy the global demand for food by 2025, water requirements for agriculture is expected to be increased by 1.2 times (IGES, 2003). Therefore, it is extremely important to adopt an appropriate irrigation technology which maximizes water use efficiency to meet the anticipated water demand. Micro Irrigation (MI) technology which includes both drip and sprinkler systems is proved to be an efficient method of water saving in irrigated agriculture. Governments with majority of resource poor farmers, after recognizing the importance of adopting MI and realizing the financial and technical constraints of the farmers has implemented many subsidy schemes investing large amounts of money to promote MI technology. Government is paying more attention to support drip irrigation considering its higher efficiency in water saving compared to sprinkler irrigation. Therefore present study is aimed at identifying the current status of drip irrigation adoption and the problems and options for increasing the area under drip irrigation in Sri Lanka.

According to the research findings, only 45 per cent of beneficiaries in the government sponsored subsidy schemes have adopted drip irrigation, while 63 per cent who have invested their own funds to purchase drip systems have adopted the technology. Extent under cultivation, access to ground water and amount of money spent by the farmer to obtain the drip system were found to be significantly affecting the adoption decision of drip irrigation. It was found that major constraints faced by the farmers to continue drip irrigation were frequent clogging of the emitters, and non availability of spare parts easily access. However, farmers have perceived increased production, higher quality yield and water and labour saving due to drip irrigation.

In future projects aiming to increase the extent under drip irrigation, more emphasis should be given to farmers who cultivate perennial crops with more than 2 acres of land extent. Access to a permanent water source should be considered as a mandatory factor to received drip irrigation systems. Availability of low cost spare parts at local level should be ensured. Further, by providing required technical knowledge on installation and maintenance of drip systems to the field level officers, farmers would benefit getting much needed technical support services. Selection of cluster farmers as beneficiaries is recommended as it will facilitate easy monitoring & provision of after sales services.