

Green - Blue

**STUDY ON THE USE OF HOUSEHOLD RAIN WATER  
HARVESTING SYSTEM IN BATTICALOA AND AMPARA  
DISTRICTS**



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## ABSTRACT

Water is a very vital resource for every living organism. The demand for fresh water is increasing day by day due to many reasons. In Sri Lanka, districts that are in dry zone have severe drought in dry season and heavy flood in raining days. Coastal areas face difficulties in quality of drinking water as seasonal salination due to the seepage. The East coast of Batticaloa and Ampara districts faced water crisis immediately after the Tsunami in 2004 December. For that, Sri Lanka Government and Non Governmental organizations initiated domestic rain water harvesting system to improve water supply as a post Tsunami activity and completed. After the project has been completed, in some villages, no one has monitored the use of those harvesting tank to increase the sustainability. In this view, this study was conducted at six villages namely Kalugolla, Thandiyadi, Kavadippiddi in the Ampara district and Mankeni, Ayiththiyamalai, Vadduvan in the Batticaloa district to find the present status and sustainability of the rain water harvesting project. Information was gathered by a household survey using a structured questionnaire, personal interview, direct observation and the secondary data from relevant departments. Data were analysed using Statistical Package for Social Sciences (SPSS).

The results showed that maintenance and usage of these tanks in most of the villages were good even without the monitoring team of the implementing organizations. However, it was found that, the people from Thandiyadi are not using the rainwater harvesting tank in most of the days in a year due to the water supply system by the national water supply and drainage board. The project was successful in other research areas except Thandiyadi because, they didn't have any alternative source for drinking water. However, in all areas, the capacity of existing tanks is insufficient to

store rainwater to meet the drinking water demand during dry period. Though the project is not successful in these days, it served a lot to the people residing in the study areas in providing drinking water immediately after Tsunami. The quality of the harvested rainwater has never been checked at research conducted villages. Therefore, it is necessary to check the qualities of water periodically or to fix the filters with regular maintenance are very important as far as their health is concerned. A complete study of the areas including groundwater potential and possibilities for future water supply scheme, length of dry spell and potential family size should also be considered in selecting the location during planning and implementation of the Rain water harvesting tank to the success of rainwater harvesting System.

**Key words:** rainwater harvesting, water supply, water quality, questionnaire.

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