

Developments in harvesting and storage of rain water for domestic needs

Water requirements for domestic purpose in Sri Lanka are met from various sources. It is common for users to go an alternate source when the supply from one source becomes insufficient or unsuitable.

The objective of this study was to examine the extent to which rain water is utilized for domestic purpose and to observe the trends and future potential of rain water usage. Natural resources of potable water are dwindling progressive due to pollution through increasing human activity on the one hand and due to salinity prevalent in some areas, on the other. In view of this, attempts have been made to find alternate sources of water for domestic use. Many countries have recognized the use of rain water as one alternative despite its drawbacks. In Sri Lanka too there has been a tradition of rain water utilization for domestic purpose, although in a limited way.

This study was carried out in the Madurankuliya area in Puttalam District. The area covered contained approximately 200 houses. Nearly all households resorted to one or more rain water harvesting methods indicated here. The common storage methods are : tanks at ground level, tanks partly below ground level, tanks supported on pillars, tanks on sun- shades, and natural and man made wells and ponds, and large containers.

The harvesting methods commonly used are collection from the roof, collection from tress, use of large polythene sheets or other material in open spaces and the diversion of rain water on surface to storage ponds.

The efficiency of these harvesting and storage methods varies, depending on the amount of rain fall, rate of evaporation, capacity of tanks and the usage of rain water. More attention should be given to improve efficiency of collecting and storage methods.