## **A geographical study about rainwater harvesting strategies**

## **in Jayarajapura Grama Niladari Division**

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Abstract

Approximately three quarters of Sri Lanka, lies in what is widely known as the 'Dry Zone', where average annual rainfall in this region is generally between 1,200-1,800 mm. Hence the availability of adequate water not enough for communities to satisfy their needs and creates crisis. This situation creates communities either had no access to safe drinking water or the available groundwater is too brackish to drink and satisfy their need. As a solution there have been used rainwater harvesting strategies in Dry Zone area to fulfill human needs. Jyarajapura GND is one of the area situated in Puttalam District where the water crisis is visible and practicing rainwater harvesting strategies. The main target of this study is to find out how the rainwater harvesting strategies fulfill the human needs in Jyarajapura GND. This research is a mix method research. Hence to achieve the target, 30 households were selected through simple random sampling method. Observation and surveying techniques were used to collect data while other data gained from secondary data sources such as Department of Meteorology. Descriptive statistics including percentage and mean score measures used to analyze the data. This analysis revealed that the amount of rainwater collection was not adequate since the inability to receive rainfall on time in past five years. The collected rainwater can only be used for a period of six months. Hence most of the people who are living in that area, have to pay for the drinking water and have to reach free water distribution points. If one rainwater harvesting tank enough for six months, it is better to establish another water tank and keep the water storage for next 06 months. As Puttalam District is closer to Indian Ocean, there is a chance for sea water refinery plant and distribution of refined water to the water crisis area in the District.

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