



A study on the factors that contribute to the water shortage in the Tissawa Grama Niladhari Division

Dharmasena W.M.H.U.¹; Arunashantha H.A.S.²

Abstract

Drought is one of the major natural disasters that affect human beings. It results in the drinking water crisis as well as livelihood disruption. Tissawa Grama Niladhari Division belongs to the East Panduwasnuwara DSD. Hence the main objective of this research is to identify the natural and human facts that cause the water crisis that affect Thissawa village during the period of North-East Monsoon. In this study, the primary data was obtained through questionnaires and unstructured interviews with villagers of Thissawa, from observations. A group of thirty people was selected using a non-random sampling method. Secondary data were obtained through research papers, books, and the internet. Microsoft Excel was used for data analyzing and processing. Geological Information System (GIS) was used for creating maps and data were analyzed quantitatively and qualitatively through graphs and tables using Excel. The majority of the sample taken for the survey is engaged in agriculture as their livelihood. Hence, cultivation hazards caused by drought directly impact on the annual income of the villagers. Since tanks are not capable of providing the water requirement, lack of rainfall has become the prominent factor for the failure of cultivation. When the soil is dry due to the intense sunshine, the soil is left with water. The small tanks are filled with mud and can not hold much water. Human activities that affect water shortage include clearing the jungles of the area and using them for cultivation. Even though villagers have a trend to cultivate beetle, vegetables, and banana, they are discouraged by the lack of water. Water should be stored in this area. If the mud is removed, the tanks can be deepened to collect more water. The water of Kolamunu oya which flows through this area can be reserved in an anicut or a tank through a canal. Through this people can be encouraged to cultivate crops that are suitable for this climate. Such remedies can be applied to this problem.

Keywords; Drought, Natural disaster, Water shortage

¹Department of Geography, Faculty of Social Sciences, University of Kelaniya, Sri Lanka. (hiru.dharmasena@gmail.com)

² Lecturer, Department of Geography, Faculty of Social Sciences, University of Kelaniya, Sri Lanka (sampathgeo@kln.ac.lk)