

The perception of drought among households living in small wewa ecosystem in North Central Province

Extended Abstract

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Background

Drought is the consequence of lack of rainfall over an expected period of time. Drought means various to various people depending on their specific interest. Drought is different from the rapid-onset environmental hazards. It is called a 'creeping' hazard because droughts develop slowly and have a pro-longed existence, sometimes over several years. (Smith, 2004). According to Keith Smith 2004, drought is the most important environmental hazard in semi-arid regions for two reasons. First, a low mean annual rainfall is associated with high variability. Second the duration of drought is longer in the drier lands. The meaning of drought can be changed from person to person, country to country or region to region. Mainly four types of drought can be identified as meteorological, hydrological, agricultural and famine or socio economic drought. Natural and human effects are causing drought. Perceptions vary from person to person. Different people perceive different things about the same situation. Perception is the organization, identification, and interpretation of sensory information order to represent and understand the environment.

A small wewa system is a network of inter-connected manmade reservoir built in the drought prone areas in order to provide water all year round. North Central Province (NCP) of Sri Lanka has a high-risk of drought because NCP is wholly within the Dry Zone and main livelihood of area is agriculture (Ministry of Environment and Natural Resources, 2007). Though there are ancient cascade systems in the Dry Zone, people in the area are suffering from lack of water for agriculture and safe water for drinking and other domestic purposes.

Drought is different from other hazards because it is not a rapid onset hazard and there is no direct loss of lives due to drought but it may cause vast impacts to the society creating socio economic and environmental problems. Due to the secondary data can be identified global perception of drought.

When using the open ended questionnaire survey data researcher can be assessed the perception of drought among households in small wewa ecosystem in North Central Province.

Objectives

The overall aim of the study was to assess the perception of drought among households living in small wewa ecosystem in North Central Province. Specific objectives of this research were; to understand about drought perception in the world through second resources, understand nature of drought perception in the North Central Province and identify spatial variation of drought perception within the province.

Methodology

Both of primary and secondary data were used for this study. Primary data collected by using open ended questionnaire survey. 540 household surveys used random sample in eight Divisional Secretariat Divisions. There are Galenbidunuwewa, Padaviya, Horowpothana, Palugaswewa, Kebithigollewa, Madawachchiya, Mahavilachchiya. Data were analyzed qualitatively and quantitatively. As secondary data books, magazines, newspaper articles leaflets and internet were used. Graphs, charts and tables in Excel were used to analysis the data.

Results

Small wewa systems in Galenbindunuwewa and Kebithigollewa divisions show the lowest level of drought hazard. Small wewa system in Mahavilachchiya division shows the highest level of drought. 60% of people in the North Central Province identify drought due to lack of expected rainfall. 40% of people in the North Central Province identify drought is aridity.

Conclusion

Highest level of drought hazard show Mahavilachchiya and low level of drought hazard show Galenbidunuwewa and Kebithigollewa. Most of people identify drought due to lack of expected rainfall in North Central Province. Drought effected to households in small wewa ecosystem in North Central Province.

Recommendation

This open ended questioner's survey data shows perception of drought among households in small wewa ecosystem in North Central Province. And

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also the researcher basically introduces most appropriate adaptation methods through the human perception about the drought in NCP.

Key Words: Drought, Small wewa ecosystem, Perception

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