

Drought



Definition

A drought is a slow onset hazard which consists of a prolonged period of abnormally low rain fall which results in reduced groundwater, surface water and reservoir levels.

Drought is a condition of climatic dryness, which is severe enough to reduce soil moisture and water below the minimum necessary for sustaining plant, animal and human life.

Because drought is a slow onset hazard it can be predicted. Within the Caribbean Region, the CariCOF Drought Outlook produced by the Caribbean Institute for Meteorology and Hydrology is an early warning tool that identifies the region's ongoing and emerging drought concerns.

Effects of Drought

A prolong drought can have serious impact on countries. Drought can lead to water and food shortages and can have a long-term environmental, economic and health impact on the population. The shortage of water for drinking, sanitation and irrigation will have an impact on the ability to sustain agriculture, livestock and livelihoods and can lead to food insecurity, malnutrition and starvation, spread of diseases and economic losses.

Types of Drought

The United States National Oceanic and Atmosphere Administration (NOAA) has distinguished four (4) types of drought; meteorological, agricultural, hydrological and sociological.

+ Meteorological Drought

Is based on the degree of dryness and the duration of the dry period.

+ Agricultural Drought

Is based on the impacts to agriculture by factors such as rainfall deficits, soil water deficits, and reduced ground water or reservoir levels needed for irrigation.

+ Hydrological Drought

Is based on the impact of rainfall deficits on the water supply, such as stream flow, reservoir and lake levels, as well as ground water table decline.

✚ Sociological Drought

Is based on the impact of drought conditions on supply and demand of the economic goods. This occurs when the demand for an economic good exceeds supply as a result of weather-related deficit in water supply.

Drought 2009 – 2010

Most Caribbean countries including Barbados experienced a severe to extreme drought during 2009 and 2010. Severe impacts were particularly harsh on the farming community. The country was forced to implement water use restrictions.

Barbados is classified as a water scare country and due to its heavy dependence on groundwater, drought will have severe implications for the country especially within the agriculture and tourism industry. Tourism is the main economic industry and is very water intensive.

For more information on Drought call the Department of Emergency Management at 246-438-7575

OR

For additional reading visit the following websites:

www.cimh.edu.bb

www.barbadoswaterauthority.com

www.drought.gov

www.cpc.ncep.noaa.gov/products/Drought