

Climate change is expected to increase mean temperatures with more warm days and warm nights, with significantly more warming at night. Annual rainfall is expected to decline by the end of this century, particularly during the wet season. The combined effect of higher temperatures, associated increase in evaporation, and less rainfall means that the Caribbean is likely to experience more intense and frequent droughts. Recent trends in temperature are consistent with these projections. However, changes in rainfall are less consistent with only weak positive trends in intensity, particularly daily intensity. So the projection of declining rainfall is not yet being experienced.

The alternating wet and dry seasons mean that the region already experiences droughtlike events every year, often with low water availability impacting agriculture and water resources, and a significant number of bush fires. But the Caribbean also experiences intense dry seasons particularly in years with El Niño events. The impacts are usually offset by the next wet season, but wet seasons often end early and dry seasons last longer with the result that annual rainfall is less than expected.

The Caribbean islands vary in population, size, income, and ethnic composition, but they all share a common heritage in agriculture. In the past, the economies of the Caribbean islands were based on cultivation of tobacco and cotton, but were later transformed to sugarcane-based economies.

Weather and climate impacts are added stresses to this vulnerable sector, but there is insufficient information on hazards, like drought, being made available to reduce the risk associated with these events or to take advantage of more suitable conditions.

The most frequently occurring natural hazards in the Caribbean are climate related. The region's vulnerability to climate related hazards is manifested in loss of life, and annual economic and financial losses that result from strong winds, flooding, and drought.

Drought which originates from an anomalous decline in precipitation enhances the potential for such crises.