



GOJ/EU/UNEP CLIMATE CHANGE ADAPTATION  
& DISASTER RISK REDUCTION PROJECT

# Hot Topic- Climate Change & Adaptation



## What is climate change?

Our climate is changing because as human beings we have increased the amount of certain gases, called greenhouse gases, in our atmosphere.

We burn oil, coal and gas to produce energy for homes, factories and businesses and for our transportation needs. Burning these fossil fuels also produces greenhouse gases like Carbon Dioxide, Methane and Nitrous Oxide.

Excess greenhouse gases in our atmosphere are trapping too much heat around the earth. This heat makes our earth warmer, like a greenhouse. This is what is known as global warming. It is this increase in temperature over time which results in climate change. We have to change the way we live, work and play in order to cope with the changing climate. We have to adapt.

## Why adapt?

Climate variability and climate change have significant impacts on the driving forces of weather and weather events. Climate change therefore has, and will continue to have, wide-ranging effects on the environment, and on Jamaica's various social and economic related sectors, including water resources, agriculture, health, terrestrial ecosystems and biodiversity and coastal zones. Because of the widespread and far reaching impacts of climate change on these sectors, Jamaicans must learn to cope in a sustainable way with these changes –We need to adapt.

## What is Adaptation?

The Intergovernmental Panel on Climate Change (IPCC) defines climate change adaptation as “**the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.**” In addition, it may refer to measures and/or actions geared at reducing climate vulnerability.

### Main Types of Climate Change Adaptation:

1. **Autonomous adaptation** is change that takes place separate from planning or outside involvement.
2. **Reactive adaptation** is an emergency response to conditions usually after impacts are felt.
3. **Planned anticipatory adaptation** uses specific action to address environmental change.
4. **No regrets adaptation** refers to measures and/or actions that will be beneficial irrespective of the level of damage sustained from climate change impacts.

Climate change adaptation measures can be implemented through different approaches- technological, behavioural, managerial and policy. Adapting to climate change involves taking the right measures to reduce the negative effects of climate change (or exploit the positive ones) by making the appropriate adjustments and changes.

## Some recent adaptation initiatives in Jamaica:

- GOJ/EU/UNEP Climate Change Adaptation and Disaster Risk Reduction (CCADRR) Project 2010-2013.
- Adaptation Fund Project—Enhancing the Resilience of the Agricultural Sector and Coastal Areas for Livelihoods Protection and Food Security
- Reducing Climate Change-Driven Erosion and Landslide Risks through Sustainable Agriculture (JCDDT)
- Programme on Promoting Rain Water Harvesting and Small Scale Irrigation in South St. Elizabeth (FAO/GOJ)
- Pilot Program for Climate Resilience (PPCR)
- Rural Economy and Ecosystems Adapting to Climate Change (REEACH) Project being funded by USAID and implemented by ACDI/VOCA
- Increasing Community Adaptation and Ecosystem Resilience to Climate Change in Portland Bight (GEF Small Grants Programme/CCAM)
- Climate Change Adaptation in the Communities of Moore Town & Bellevue, Rio Grande Watershed (GEF Small Grants Programme/PEPA)
- Land and Preservation Measures to Combat Climate Change Pressures in Cockpit Country's Martha Brae Watershed (GEF Small Grants Programme/ Bunkers Hill CDC)
- Glengoffe Climate Change Adaptation Project (GEF Small Grants Programme/ Glengoffe CDC)
- Reducing Climate Change-Driven Erosion and Landslide Risks through Sustainable Agriculture for Safer Slopes (GEF Small Grants)



## Does Jamaica need to adapt?

Over the last decade alone, damage from intense climatic conditions has cost the Caribbean region, including Jamaica, in excess of half a trillion US dollars (Caribbean Community Climate Change Centre 2009). This is because countries like Jamaica rely heavily on climate sensitive socio-economic activities such as agriculture, fisheries and tourism. Since it is predicted that under climate change hurricanes may increase in intensity, and the occurrence of extreme weather events (e.g. floods and droughts) will intensify, preparedness is important. Jamaica must adapt so that it is better able to cope with an uncertain future.

### Sources:

CARIBSAVE. 2011. *The CARIBSAVE Climate Change Risk Atlas (CCRA) Jamaica*. Final Draft Country Risk Profile.

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*This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the Climate Change Adaptation and Disaster Risk Reduction Project and can in no way be taken to reflect the views of the European Union.*

