Decision making and adaptation planning decision support tools for the Caribbean

CDKN-funded research has provided decision makers in the Caribbean with access to climate data specific to the region.

Climate adaptation in the Caribbean: Climate data

44+
Weather stations provide historical data for two 30-year time periods. Climate variables include...

1. Users can access historical climate data
- Rainfall
- Sunshine duration and number of dry days
- Temperature
- Wind speed
- Vapour pressure

2. The portal also provides future projections
Data from 2 Global Climate Models (GCMs) is downscaled...

3. The portal provides data simulations that can help decision makers better understand climate risks to the region
- Weather Generator (WG)
  This tool provides daily weather time series that can be used in impact assessment. Projections can be generated at single locations at the site of available weather stations
  - In Belize the tool was used to assess how climate change might affect dengue fever

- Tropical Storm Model (TSM)
  The TSM allows users to run simulations of tropical storms over pre-defined storm tracks. The model generates precipitation rates and wind speeds on grids at 15 minute intervals
  - In Jamaica the model was used to assess river discharge in the event of a category 5 hurricane

- The CARIDRO drought tool
  CARIDRO allows users to process observed and modelled climate data to assess both atmospheric and hydrological drought
  - In Cuba the model was used to assess the frequency of drought under climate change
  - According to the research, Cuba’s Las Tunas province can expect between 12-18 moderate to extreme droughts between 2011 and 2050

4. Climate projections are a useful tool for decision makers, but uncertainty over the nature of climate impacts is inevitable. CDKN-funded research provides guidance on how to make decisions under uncertainty
- As climate projections are uncertain
  Caribbean decisions makers should focus on identifying and implementing adaptation actions that perform well over a wide range of conditions experienced now and potentially in the future

To access CARIWIG data and simulations visit: cariwig.caribbeanclimate.bz and caridro.caribbeanclimate.bz. To access CCORAL visit: ccoral.caribbeanclimate.bz

To learn more and access the Caribbean research on which this infographic is based visit: www.CDKN.org/caribbean