# CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM





# APRIL 2019 • VOLUME 2 • ISSUE 11

A joint bulletin of the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Institute for Meteorology and Hydrology (CIMH).

## **KEY MESSAGES**

As the region transitions from the dry to the wet season the persistence of a weak El Nino could increase the chances of drought and recurrent dry spells. In some territories surface irrigation resources such as streams, small rivers and ponds may be impacted with shorter-term drought. In others, long-term drought may be of a concern, impacting ground water supplies and large rivers. Interests should continue to pay special attention to their water resources.

Flash flooding potential could arise from extreme wet spells, especially across the Guianas.

## **FEBRUARY IN REVIEW**

Normal to below normal rainfall was experienced for the month in the islands of the eastern Caribbean. Trinidad, Barbados and Dominica were normal to moderately dry; Grenada, St. Lucia and Antigua were slight to moderately dry; Tobago normal to slightly dry; St Vincent severe to extremely dry; Martinique moderate to extremely dry; Guadeloupe, St. Kitts, St. Croix and St. Thomas normal; and St. Maarten moderately dry. Conditions in the Guianas ranged from exceptionally dry in central French Guiana to normal from the eastern half of Guyana across to central Suriname. Aruba and Curacao were moderately dry.

Both Puerto Rico and Hispaniola were predominantly normal, apart from western Puerto Rico that was slight to moderately dry, southern Hispaniola that was slight to moderately dry and eastern Hispaniola that was slight to exceptionally dry. Conditions in Jamaica ranged from slightly dry in the north to moderately wet in the east, while Grand Cayman was slightly wet. Rainfall in Cuba was predominantly normal apart from central areas that were slight to moderately wet and the extreme northwest that was slightly dry, but northern Bahamas was slight to very wet. Conditions in Belize ranged from moderately wet in the north to moderately dry in eastern and central areas. The month of February has seen increased rainfall across some territories. Others, especially the Guianas, Cayman Islands and Cuba received less rainfall in February in comparison to January.



## **AGRI-NEWS**

The Caribbean region must boost efforts to prepare for increased drought. *Read more* <u>https://www.caribbeanclimate.bz/caribbean-region-must-boost-efforts-to-prepare-for-increased-drought-un-report/</u>

The Caribbean Industrial Research Institute (CARIRI) and the Inter-American Institute for Cooperation on Agriculture (IICA) partner to boost agri-food development in the region. *Read more* https://caribbeannewsservice.com/now/category/agriculture/

#### **ABOUT CariSAM**

The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises, and more. *Visit us at:* <u>www.carisam.cimh.edu.bb</u>

## **REGIONAL OUTLOOKS**

RAINFALL, WET/DRY SPELLS AND TEMPERATURE (APRIL TO JUNE)

Rainfall totals are likely to be normal to below normal in Belize, Cuba, Hispaniola and the US Caribbean territories, but as wet as usual (or above) in the Cayman Islands and the Guianas.

Flash flood and long-term flooding potential from



very wet and extreme spells may become a concern from late April onwards, in particular in the Guianas.

A favourable chance of the region receiving at least three 7-day dry spells continue, with the occurrences increasing across the north-west sections of the region. Territories such as Cuba and the ABC Islands could experience up to three 15-day dry spells.



Day and night time temperatures are likely to be normal to above normal across the region. However, day time temperatures in Guyana may be cooler than normal.



## DROUGHT

Currently, severe (or worse) short-term drought has developed in Antigua, Aruba, Barbados, Southern Belize, Curacao, Northern Guyana and parts of French Guiana, Southern Hispaniola and the Windward Islands (except Grenada). Long-term drought has developed in Southern Hispaniola and Trinidad and Tobago.



By the end of April short-term drought may affect the ABC Islands, Grenada and Suriname.

Long-term drought is evolving in Antigua, Barbados, West-central Belize, Northern Dominican Republic, Grenada, Northeastern Guyana, St. Lucia, and Tobago.

*Visit* <u>https://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/</u>.

## **CLIMATE-SMART ADVISORIES**

Water conservation techniques (e.g. mulching) as well as water management practices (e.g. irrigation) may need to be employed in areas with low water availability.

Consider planting drought tolerant varieties and adequately manage planting areas.

Ensure that adequate water and shade are provided for livestock.

Farmers should also protect themselves from heat exposure as daytime temperatures are likely to be higher.

In places where flash flooding might be likely, farmers are advised to maintain drains around crop beds and/or plant crops on raised beds; house animals on high ground and/or on raised pens; and store fertilizer away from moisture and water sources.

Please also take into consideration your local weather and climate advisories.

## Disclaimer

The information contained herein is provided with the understanding that the CARDI, and the CIMH make no warranties, either expressed or implied concerning the accuracy, completeness, reliability or suitability of said information. This bulletin provides a broad overview of climate conditions up to 6 months in advance. It is recommended that stakeholders should use this information in combination with nearer term weather forecasts to guide operational decision making. The bulletin may be freely used by the public with appropriate acknowledgement of its source but shall not be modified in content and then presented as original material.

**Shontelle Stoute** Technical Officer, CIMH Rasheeda Hall-Hanson CARDI

CONTACT US: Adrian Trotman Agro-meteorologist/ Chief of Applied Meteorology and Climatology, CIMH Email: atrotman@cimh.edu.bb

Email: sstoute@cimh.edu.bb Email: rhhanson@cardi.org