CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM





SEPTEMBER 2020 • VOLUME 4 • ISSUE 4

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

KEY MESSAGES

The peak of the 2020 wet season in Belize and the Islands is forecast to feature particularly high flooding, flash flood and landslide potential, but also strong tropical cyclone activity. However, copious rains should continue to ease drought concerns.

Until October, heat stress will likely be higher than in most years due to very high humidity and temperatures. However, copious rains should ease drought concerns during this period for most. The Guianas are in their hot, dry season until late November.

JULY IN REVIEW

Mixed conditions were experienced throughout the eastern Caribbean during the month of July. Trinidad ranged from very wet in the south east to exceptionally dry in the west; Tobago normal to severely dry; Grenada slight to moderately dry; St Vincent moderately dry; Barbados, Guadeloupe and St Croix normal; Saint Lucia normal in the south to severely dry in the northwest; Martinique slightly wet to slightly dry; Dominica normal to slightly dry; Antigua very wet; St Kitts, St Maarten and Anguilla slight to moderately wet; and St. Thomas moderately wet. Conditions in the Guianas ranged from moderately wet in north eastern French Guiana, southwest and central Guyana and north western Suriname to severely dry in the vicinity of the central Suriname/ French Guiana border. Aruba and Curacao were moderately wet.

Puerto Rico ranged from slight to exceptionally wet. Hispaniola ranged from normal in western Haiti to extremely wet in west and east central Dominican Republic. Jamaica ranged from moderately dry in the south to extremely wet in the west, and to slightly wet in the north east. Grand Cayman was moderately wet. Cuba ranged from exceptionally wet in central areas to moderately wet in the west and normal in the east. Northern Bahamas ranged from exceptionally wet to slightly dry in the north. Belize ranged from moderate to exceptionally dry from south to north. A 12-month review of rainfall across the region shows severely to exceptionally dry conditions continue to persist across some territories.

JULY 2020 SPI (left) and 12-month SPI AUGUST 2019 TO JULY 2020 (right)



SPI Difference (June and July 2020)



The month of July brought more rains for many territories than the month of June. However, for Belize, Barbados and some territories of the Eastern Caribbean, June was notably relatively wetter than July.

Read more at https://rcc.cimh.edu.bb/spi-monitor/

AGRI-NEWS

Belize: Green Climate Fund Approves Project Preparation Facility to Build Adaptive Capacity of Sugarcane Farmers. Read more <u>https://edition.channel5belize.com/archives/207364</u>

Jamaica: RADA CEO says farmers must adapt to changing weather patterns. Read more <u>https://jis.gov.jm/rada-ceo-says-farmers</u> <u>-must-adapt-to-changing-weather-patterns/</u>

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

DROUGHT

As at the end of July 2020, severe (or worse) shorter term drought had developed in Dominica, southern Guadeloupe, far southwestern French Guiana, southeast and southwest Hispaniola, Martinique, Saint Lucia, western Trinidad and eastern Tobago. Severe (or worse) long term drought had developed in the northernmost and southeastern Bahamas, Belize, Cayman Islands, Dominican Republic, eastern Guadeloupe, western French Guiana, the Windward Islands (excluding Dominica and Grenada), southwestern Puerto Rico, St. Croix, and western Trinidad.



By the end of November 2020, there is likely to be no concern regarding surface soil wetness, and stream and river flow (though there is some chance over Trinidad and southwest Belize.

However, concerns for long-term drought (by end of November 2020) could present a challenge in farming, especially where water supply is sourced from larger reservoirs, large rivers or groundwater, across Martinique, Suriname, Trinidad and possibly western Belize, Dominica, coastal French Guiana, northernmost Guyana, Saint Lucia, St. Vincent, and Tobago.

Interests across the region should continue to monitor their water status.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (SEPTEMBER-NOVEMBER 2020)

Rainfall totals from September to November are likely to be at least as high as usual in the western parts of the Guianas, as well as, in much of the Antilles. Flash flood and longterm flooding potential, as well as, land slide and soil erosion could be a significant



concern in Belize and the Islands due to recurrent very wet and some extreme wet spells.

The occurrence of at least three 7-day dry spells is favourable particularly across the Greater Antilles, the ABC Islands and the Guianas.

Adrian Trotman CONTACT US:

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



Night-time (minimum) and day-time (maximum) temperatures are likely to be at least as warm as usual across most of the Caribbean. Frequent heat waves and high humidity will likely cause significant heat discomfort until late September (in the north) or late October (in the south).

Visit http://rcc.cimh.edu.bb/climate-outlooks/ to access the latest climate outlooks.

CLIMATE-SMART ADVISORIES

- Review hurricane preparations as strong tropical cyclone activity is likely during the second half of the season.
- To enhance food security in the event of a tropical cyclone, farmers may want to consider planting more resilient crops (e.g. root crops)
- Provide shade and ample water for livestock during periods of heatwaves. Farmers should also pay attention to their health and protect from heat-stroke-consume lots of water; wear appropriate clothing; adjust times of field activities where necessary.
- With the possibility of flood producing rains: ٠
- Maintain drains around crop beds and/or plant crops on raised beds \Rightarrow
- House animals on high ground and/or on raised pens \Rightarrow
- Store fertilizer away from moisture and water sources \rightarrow
- Agricultural pest and diseases may increase after excess periods of precipitation. Monitor and employ recommended treatment as necessary. ٠

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

The information contained herein is provided with the understanding that the CARDI, and the CIMH make no warranties, either expressed or implied concerning the accura-cy, 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

Kistian Flemming Climate Change Development Specialist, CARDI

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