# CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM







**JUNE 2024 • VOLUME 8 • ISSUE 1** 

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

#### **KEY MESSAGES**

An intense Heat Season with recurrent heatwaves, a (hyper-)active Atlantic Hurricane Season and an intense wet season are forecast.

Frequent and intense shower activity could result in high potential for flooding, flash floods, cascading hazards and associated impacts.

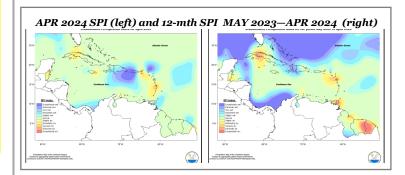
Should the intrusion of dry Saharan air (which usually peaks through July) be more frequent than usual, storm and shower activity may be more erratic, delaying relief from any water shortages arising from low rainfall and high evapotranspiration rates observed during the dry season.

#### **APRIL IN REVIEW**

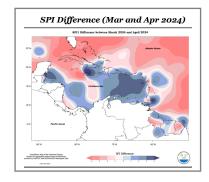
Predominantly normal to below normal conditions were experienced throughout the islands of the eastern Caribbean during the month of April. Trinidad, Tobago and St Maarten were normal to moderately wet; Grenada and St Vincent moderately dry; Barbados, Guadeloupe and Antigua normal; Saint Lucia, St Croix and St Thomas moderate to severely dry; Martinique severely dry; Dominica, moderate to slightly dry; St Kitts slightly dry to normal and Anguilla moderate to extremely wet. In the Guianas, conditions were predominantly normal ranging to slightly dry in northeastern Guyana and eastern French Guiana to moderately wet in northern French Guiana. Aruba was slightly dry and Curacao ranged from normal to predominantly slightly dry.

Puerto Rico ranged from exceptionally wet in the west to normal in the east. The Dominican Republic ranged from exceptionally wet in the southeast to slightly wet in the northwest. Jamaica ranged from slightly wet to moderately dry from west to east. Grand Cayman was normal. Cuba ranged from moderately dry in west central areas to normal in western and eastern areas. Northern Bahamas was normal and Belize ranged from normal in the south to moderately dry in the north.

Predominantly normal conditions prevailed across the Caribbean Islands during the 12-month period (May 2023 to April 2024). However, notably The Bahamas and Haiti was exceptionally wet and parts of Suriname and French Guiana exceptionally dry.



Predominantly relatively wetter conditions in April than March were observed across most of the region, with the exception of The Bahamas, most of Cuba, parts of the Guianas and some territories of the Eastern Caribbean.



Read more at <a href="https://rcc.cimh.edu.bb/spi-monitor/">https://rcc.cimh.edu.bb/spi-monitor/</a>

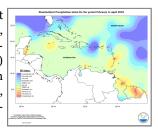
### **ABOUT CariSAM**

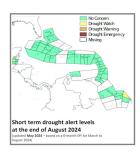
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

#### **REGIONAL OUTLOOKS**

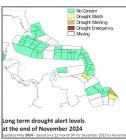
#### **DROUGHT**

Severe (or worse) short-term drought has developed for Belize, Martinique, eastern French Guiana, northern Guyana, and Suriname .Severe (or worse) long term drought has developed in central Cuba, eastern French Guiana, Guadeloupe, northern Guyana, Trinidad, and Suriname.





There may be some concern over shortterm drought that can impact small rivers, streams and ponds by the end of August in western Belize and northern French Guiana. Interests in these regions should monitor their water resources.



There could possibly be some concern for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming by the end of November 2024 across northern French Guiana and possibly develop or continue in central French Guiana and Trinidad. Interests in these countries should closely monitor their water resources.

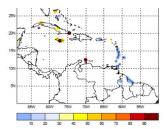
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JUNE - AUGUST 2024)



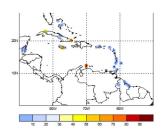
Rainfall totals from June through August are likely to be the usual or higher across most of the region.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells could be high to extremely high.

Probability of at least THREE 7-day dry spells in JJA

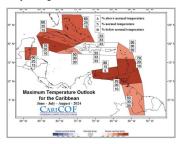


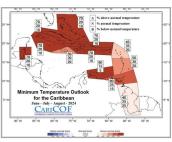
MAXIMUM number of 15-day dry spell in JJA



The occurrence of at least three 7-day dry spells remain favourable across the ABC Islands, Jamaica, and Cuba.

Day-time (maximum) and night-time (minimum) temperatures, as well as air humidity, will likely be considerably higher than usual in most areas. Frequent episodes of heat stress are expected as the region is likely to continue to be in a potentially record Heat Season. Heat stress may ramp up even more if incursions of Saharan air are very frequent.





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

#### **CLIMATE-SMART ADVISORIES**

#### In the event of drought and heatwaves:

- Ensure regular weeding to reduce competition and further stress to crops
- Utilize irrigation techniques to apply the right amount of water for the crop and to avoid water logging or runoff
- Avoid transplanting in prolonged dry conditions this may trigger transplant shock, yield reduction and in severe cases death.
- Avoid planting in extreme hot conditions, this may affect germination rate and percentage. However, if planting, take into consideration water resource availability.
- Ensure proper ventilation, shading and adequate water for your animals.
- Monitor poultry for signs of heat stress (e.g., spreading out of wings, panting etc) and in ruminants (e.g., panting, drooling, sweating)

#### In the event of flooding:

- Ensure that livestock are housed on high grounds (where possible); evacuate animals in low lying areas and pastures which are prone to flooding and erosion.
- Certain pest and diseases such as blossom end rot will increase during and after extreme wet conditions, implement appropriate disease and pest management practices.

Maintain proper records of inputs and the crop under cultivation and/or livestock being reared.

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

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