CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM

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

KEY MESSAGES

Concerns continue over available water for agriculture as soil moisture, stream flow and river flow may be impacted (by the end of March 2020) especially for The ABC Islands, Barbados, Guadeloupe, and eastern Puerto Rico. Moreover, larger rivers and reservoirs, and groundwater may be impacted by the end of the 2020 dry season particularly in much of Belize, The Cayman Islands, central Cuba, central and southern Dominican Republic, St. Kitts and Nevis, Barbados, Grenada, The ABC Islands, and Trinidad and Tobago.

Interests across the region should closely monitor their water status.

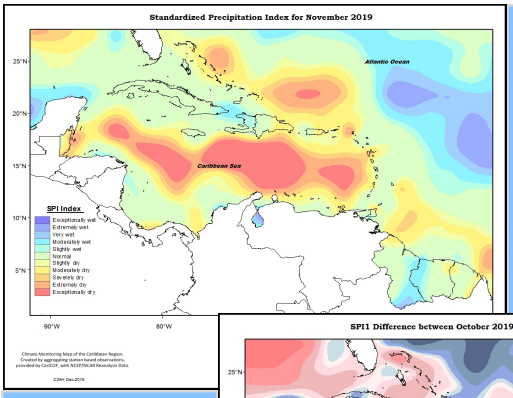
NOVEMBER IN REVIEW

Rainfall in the islands of the eastern Caribbean was predominantly normal to below normal for the month of November, with the exception of Trinidad, which was severely dry to slightly wet from the north east to the south west. Tobago, Barbados, St. Kitts, St Lucia and Martinique were normal to slightly dry; Grenada and Antigua normal; St Vincent and Dominica slight to moderately dry; Guadeloupe moderate to severely dry; St Maarten severe to extremely dry; and St Croix and St. Thomas slightly dry. In the Guianas, with the exception of northern Guyana, northern Suriname/French Guiana border and eastern French Guiana which were slight to moderately dry, conditions were normal to very wet. Curacao was moderate to severely dry.

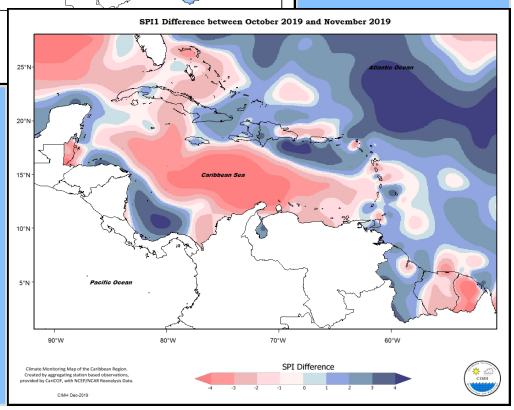
Puerto Rico was normal to moderately dry from west to east. In Hispaniola, conditions ranged from moderately wet in the extreme north western areas of Haiti to moderately dry in eastern and the extreme southern areas of the Dominican Republic, as well as in the extreme southwestern tip of Haiti. Jamaica was predominantly normal with the exception of the extreme west which was slightly dry. Grand Cayman was normal. Cuba was mostly normal with the exception of the extreme east which was slight to moderately wet.

Northern Bahamas was normal to severely dry, whereas conditions in Belize were normal in the North West to severely dry in the east.

The last month of the 2019 wet season brought more rains to most of the region than the previous month. The notable exceptions were Belize, portions of Cuba, The Bahamas, some territories of the Leeward Islands, French Guiana and Suriname.



NOVEMBER 2019 SPI (left) and SPI Difference (below)



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

AGRI-NEWS

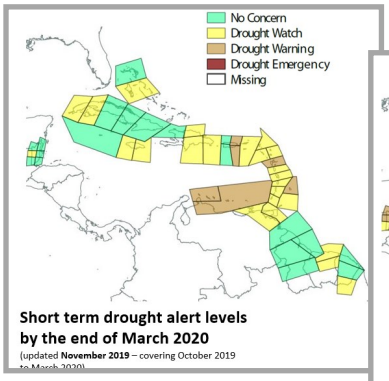
Jamaica: New water strategies for Jamaica in response to deteriorating water conditions. Read more *https://www.fluencecorp.com/jamaica-weighs-decentralized-desalination/*

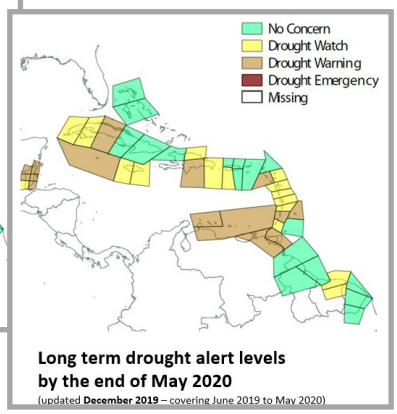
ABOUT CariSAM

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





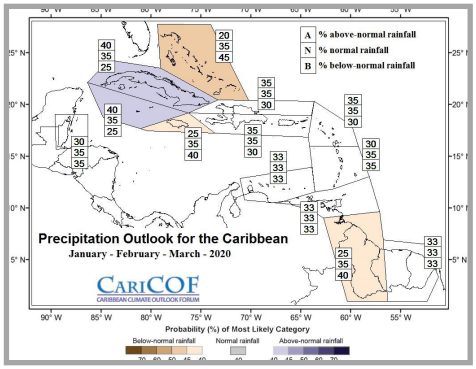
Surface, soil wetness, and stream and river flow is expected to decrease across much of the region by the end of March 2020, especially across The ABC Islands, Barbados, Guadeloupe, and eastern Puerto Rico.

By the end of the 2020 dry season drought conditions could be a challenge in farming especially where water supply is sourced from larger reservoirs, large rivers or groundwater, affecting much of Belize, The Cayman Islands, central Cuba, central and southern Dominican Republic, St. Kitts and Nevis, Barbados, Grenada, The ABC Islands, and Trinidad and Tobago.

Interests across the region should closely monitor their water status.

RAINFALL, WET/DRY SPELLS and TEMPERATURE (JANUARY—MARCH 2020)

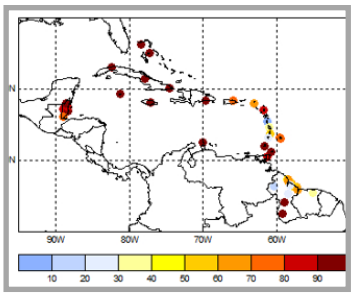
January to March may be drier than normal across Belize, The Bahamas and Guyana as rainfall totals and the number of wet days decrease. This could impact available water for planting. Territories of the Greater Antilles and the Windward Islands could be wetter than usual, but could also experience fewer than normal wet days for the same period.



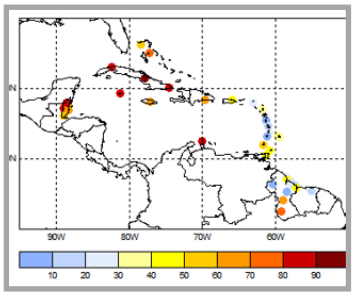
Even though there is no expected increase in flash flood potential the threat still remains in the event there is an extreme wet spell.

The probability for at least three 7-day dry spells remain high across the region whereas the probability for at least one 15-day dry spell is favourable across the Greater Antilles, Belize, The ABC Islands and the Guianas.

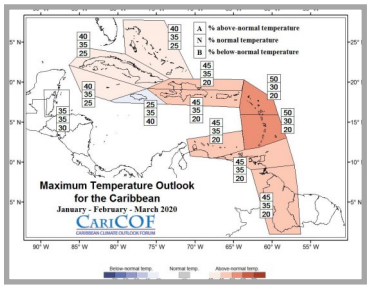
Probability of at least THREE 7-day dry spells in JFM

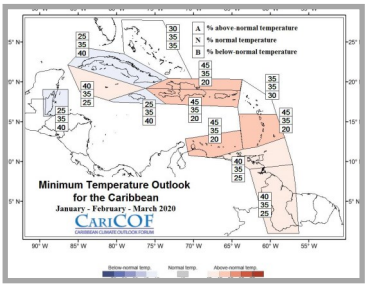


Probability of at least ONE 15-day dry spell in JFM



Day (maximum) and night (minimum) time temperatures even though they could be warmer than usual, would be comfortable for this season thus reducing any concern for heatwaves.





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

CLIMATE-SMART ADVISORIES

- With decreasing rainfall totals after a drier than usual wet season for some territories, farmers may need alternate water sources for on-farm activities.
- Continue to carry out measures to conserve water, especially in areas where water reservoirs may be severely impacted. Water conservation techniques (e.g. mulching) as well as water management practices (e.g. irrigation) may be employed.
- In preparation for planting, farmers should consider planting based on the area their limited water resources would irrigate/ satisfy. Also, consider planting drought tolerant species and varieties.
- Irrigate in the early morning preferably. There is less chance of wind and lower evaporation rates.

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

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