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

Short-term drought conditions may be of concern across The Virgin Islands and Sint Martin by the end of May 2022.

Long-term drought conditions may be of concern across The ABC Islands, parts of Belize, Dominica, Guadeloupe, Martinique, Sint Martin, Saint Lucia and The Virgin Islands.

There is much uncertainty in rainfall totals over the March through May period across the region, particularly in the west of the region.

Increasing flood potential towards May, especially in the Lesser Antilles and coastal Guyana in view of the increased frequency of very wet spells.

At least three 7-day dry spells and one 15-day dry spell is favourable across most of the region from March to May.

Day and night time temperatures will warm towards April but will remain comfortably cooler across much of Hispaniola and the Lesser Antilles.

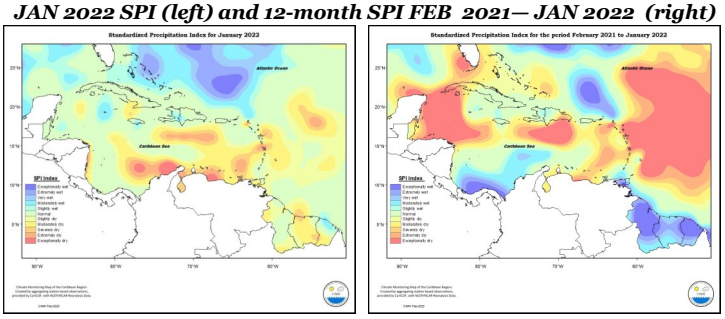
JANUARY IN REVIEW

Conditions throughout the eastern Caribbean were predominantly normal to below normal during the month of January. Trinidad and Antigua ranged from moderately dry to normal; Tobago and St Vincent slightly dry; Grenada, St Croix and St Thomas normal; Barbados moderately dry; Saint Lucia predominantly slightly dry ranging to moderately dry in the north; Martinique severe to exceptionally dry south to north; Dominica extremely dry to normal south to north; Guadeloupe and St Maarten normal to severely dry; St Kitts slightly wet in the south to predominantly normal and Anguilla slightly dry in the extreme south to predominantly normal. In the Guianas conditions ranged from severely dry to moderately wet. Aruba was moderately dry and Curacao ranged from severe to moderately dry.

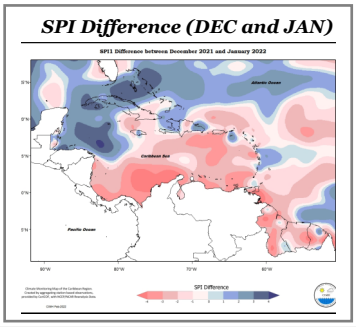
Puerto Rico was predominantly normal ranging to slightly dry in the southwest. The Dominican Republic was predominantly normal ranging to moderately wet in the southwest and to slightly dry in the north. Jamaica ranged from moderately wet in the south to moderately dry in the extreme northwest. Grand Cayman was moderately wet. Cuba was predominantly normal ranging to moderately dry in the southeast and slightly wet in the extreme north. Northern Bahamas ranged from extremely wet to normal and Belize was normal.

A review of the 12-month period (February 2021 to January 2022), showed exceptionally dry conditions across much of the Eastern Caribbean, easternmost Dominican Republic, and westernmost Cuba.

JAN 2022 SPI (left) and 12-month SPI FEB 2021— JAN 2022 (right)



SPI Difference (DEC and JAN)



The month of January has been predominantly drier as compared to December across most of the region.

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

AGRI-NEWS

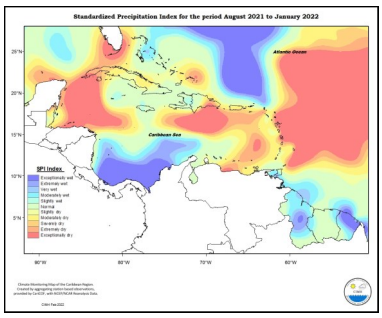
Jamaica: Farmers Must Become More Innovative And Climate Smart in light of the dangers of climate change. Read more *https://jis.gov.jm/farmers-must-become-more-innovative-and-climate-smart-minister/*

ABOUT CariSAM

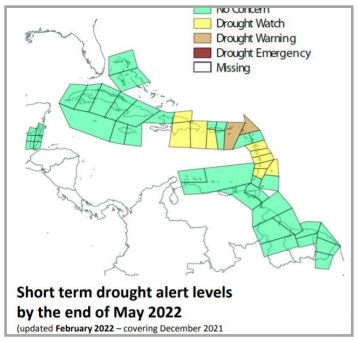
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

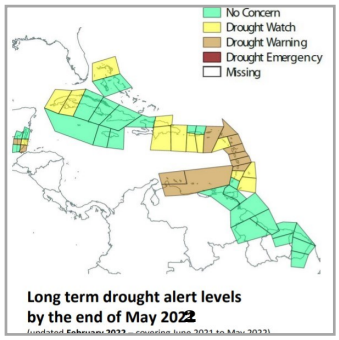
REGIONAL OUTLOOKS

DROUGHT



Moderate (or worse) shorter term drought has developed in western Cuba and across all areas east of and including The Dominican Republic, excluding the Guianas. Moderate (or worse) long term drought has developed in Belize, western Cuba, along the southern coast-line of the Dominican Republic, and along the Lesser Antilles excluding Trinidad and Tobago.



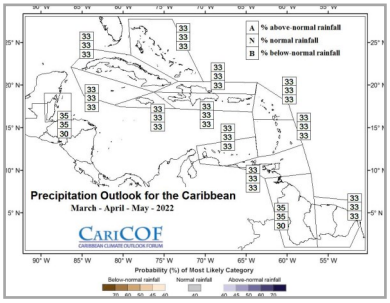


By the end of May 2022, impacts from short-term drought may be of a concern across The Virgin Islands, Sint Martin and possibly across Barbados, Dominica, The Dominican Republic, Guadeloupe, Martinique, southwest Puerto Rico, Saint Lucia and St. Vincent. Long-term drought that can impact large reservoirs, large rivers or groundwater would likely present a challenge in farming across the ABC Islands, Antigua, parts of Belize, Dominica, Guadeloupe, Martinique, Sint Martin, Saint Lucia, The Virgin Islands and possibly across northern Bahamas, Barbados, western Cuba, The Dominican Republic, southern Puerto Rico, St. Kitts, Trinidad and St. Vincent by the end of May 2022.

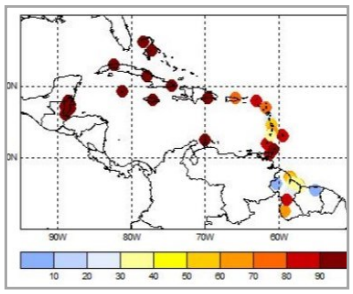
Interests across the region should continue to monitor their water status.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (MARCH—MAY 2022)

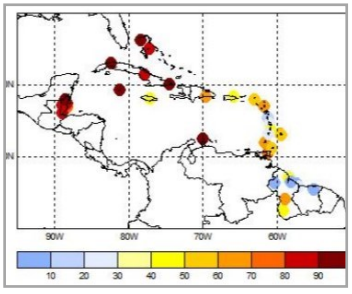
Rainfall totals (from March through May) across the region are uncertain. There is a high potential for surface dryness and wildfire along the northwestern part of the region. However, there is a rising flood potential towards May, especially in the Lesser Antilles and coastal Guyana in view of the increased frequency of very wet spells.



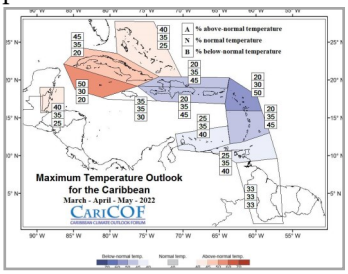
Probability of at least THREE 7-day dry spells in MAM

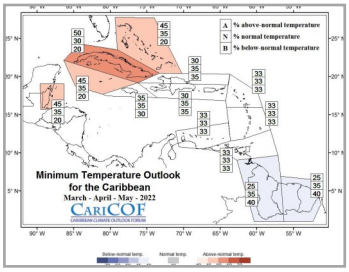


Probability of at least ONE 15-day dry spell in MAM



The occurrence of at least three 7-day dry spell and one 15-day dry spell is favourable across most of the region, with the exception of parts of the Guianas.





Night-time (minimum) and day-time (maximum) temperatures will progressively warm into April, but may remain comfortably cooler than usual throughout much of the Hispaniola and the Lesser Antilles. Night-time temperatures may be warmer than usual for The Bahamas, Belize, Cayman Islands, and Cuba.

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

CLIMATE-SMART ADVISORIES

Farmers should consider planting plots that their limited water resources would irrigate/satisfy in the event of frequent dry spells/drought**.**

Consider on-farm drought management plans in the event of a likely occurrence of dry spells and drought conditions. These may include:

- Selecting drought tolerant crops and varieties and planting them with careful thought of the availability of water resources.
- Identifying alternate water sources for irrigation and other on-farm activities; employing water management techniques such as irrigation scheduling and mulching; installing water-saving devices (e.g. drip lines & timers).

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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