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). As of May 2017, the previous monthly CAMI bulletin transitions into the Caribbean Agro-Climatic Bulletin of the CariSAM.

KEY MESSAGES

Concerns exist for both long and short term drought over the Guianas, in particular northern Suriname. With large catchments and groundwater possibly being impacted in Cuba and Antigua being relatively dry over the past few months, water resources should be monitored for long term drought as water availability concerns may develop in these countries by the end of the dry season, at least. Water availability in north and southeast Belize should also be monitored. Dry spells may also be a concern.

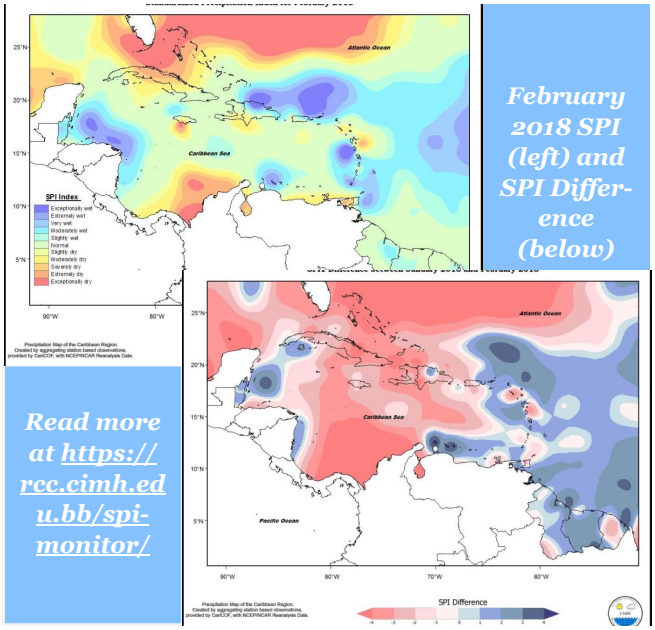
Flash floods may also be a cause for concern for farmers in some territories.

FEBRUARY IN REVIEW

Mixed conditions were experienced in the islands of the eastern Caribbean for the month of February. Trinidad was slightly dry to slightly wet; Tobago and St. Lucia slight to moderately wet; Grenada extremely wet; Barbados very wet; St. Vincent and St. Maarten slightly wet; Martinique normal to very wet; normal to exceptionally wet from northeast to southwest; Guadeloupe slightly dry to slightly wet; Antigua slightly dry; and St. Kitts moderately dry. In the Guianas, Guyana ranged from slightly dry in southwest Guyana to moderately wet in the northeast, with both Suriname and French Guiana both being normal to slightly wet. Aruba was very wet while Curacao was extremely wet.

Puerto Rico was predominantly normal apart from in the northeast that was slight to very wet. Conditions in Hispaniola ranged from moderately dry in the south to exceptionally wet in northern Dominican Republic. Conditions in Jamaica ranged from exceptionally dry in the south to slightly wet in the northwest, but Grand Cayman was slightly dry. Conditions ranged from exceptionally dry in northern Bahamas to normal in east and western Cuba. Belize ranged from extremely wet in the west to slightly wet in the south and to moderately wet in the north.

Increasing dryness has been observed in the month of February in comparison to January especially across the Greater Antilles and some islands in the east.



February 2018 SPI (left) and SPI Difference (below)

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

AGRI-NEWS

The FAO is assisting with irrigation and drought management in Jamaica. Read more at http://jis.gov.jm/fao-assisting-with-irrigation-and-drought-management-systems/

Caribbean Ministers and Deputy Ministers of Agriculture are seeking to partner with Argentina and Brazil to strengthen the agriculture industry particularly through the acquisition of knowledge and innovation. Read more at: https://www.breakingbelizenews.com/2018/03/19/caribbean-looks-to-partner-with-argentina-and-brazil-to-strengthen-agriculture-industry/

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*

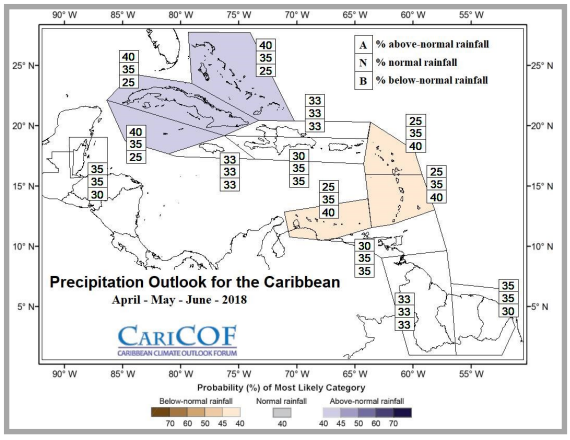
REGIONAL OUTLOOKS

Shorter term drought is evolving in coastal portions of Suriname, and might possibly develop in other portions of the Guianas.

Long term drought is evolving in southeastern Haiti, and might possibly develop in ABC Islands, Antigua, western Cuba, northern and south -eastern Belize, coastal portions of French Guiana, St. Maarten, and portions of eastern Suriname. *Visit https://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/*

APRIL—MAY—JUNE 2018

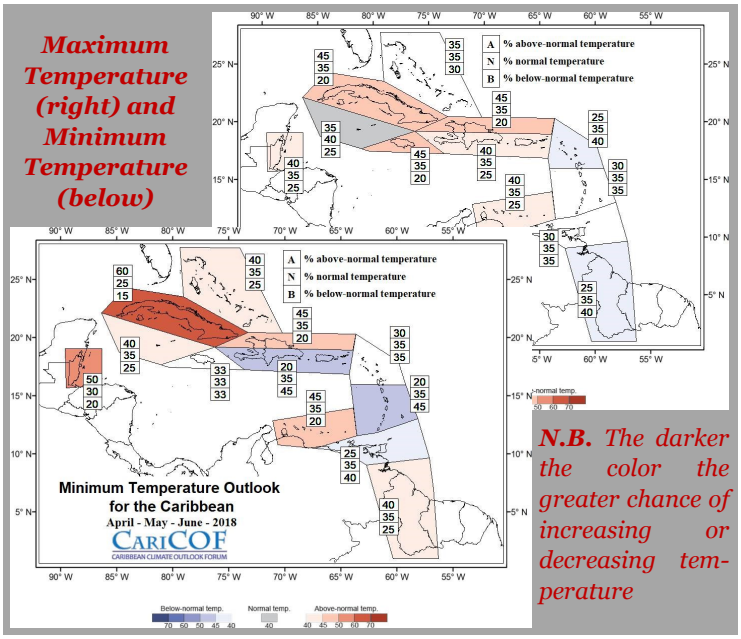
Rainfall for the period April-May-June is likely to be above- to normal in The Bahamas, Cayman, Cuba, but below- to normal in the ABC Islands and the Lesser Antilles.



Flash flood and long-term flooding potential from very wet and extremely wet spells (especially in May) could be concerning for farmers in the Greater Antilles and the Guianas. On the contrary, the increasing likelihood of 7-day dry spells, may be a cause for concern for farmers in some eastern territories and the ABC Islands.

Night-time (minimum) temperatures in the Caribbean may be below–to normal across portions of Hispaniola, Puerto Rico and islands southward to Trinidad and Tobago. Day-time temperatures may be below–to normal across Cayman Islands, the Leeward Islands and Guyana.

Maximum Temperature (right) and Minimum Temperature (below)



***N.B.** The darker the color the greater chance of increasing or decreasing temperature*

CLIMATE-SMART ADVISORIES

As moisture levels may increase across some territories, farmers may need to mitigate against the effects of flooding. 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
- Store fertilizer, feeds and pesticides away from moisture and water sources

The incidence of pests and diseases (e.g. bacterial leaf diseases and water mold) could be an issue in territories where there is above normal rainfall. Follow the guidelines from your local agricultural representatives to effectively control pests and diseases.

On the contrary, techniques such as mulching could be employed so as to conserve soil moisture in regions where rainfall amounts are likely to be below normal.

Cooler night-time temperatures may favour pollen viability and would also give rise to increased crop production. However in regions where higher day-time and night-time temperatures could be a reality, this could given rise to heat stress for crops and livestock. Therefore the farmer should take necessary precautions against heat stress.

Did you know???

The creativity and persistence of many farmers and researchers has led to the current situation in which a lot of knowledge and equipment exist to manage cover crops without the use of herbicides.

Vegetative material adequately managed

- Adds organic matter, which improves the quality of the seedbed and increases the water infiltration and retention capacity of the soil
- Fixes carbon by capturing carbon dioxide from the atmosphere and retaining it in the soil
- Buffers the pH of the soil and facilitates the availability of nutrients
- Feeds the carbon cycle of the soil
- Captures the rainfall and thus increases the soil moisture content
- Protects the soil from being eroded
- Reduces the evaporation of soil moisture

Read more at http://www.fao.org/ag/ca/2c.html

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