

**Issue: 62**  
**March 2018**

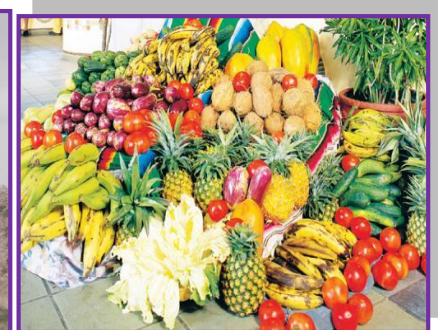
# Hydrometeorological Service of Guyana

## Farmer's Monthly Weather Bulletin

*This bulletin was prepared by the Hydrometeorological Service of Guyana. We welcome feedback, suggestions and comments on this bulletin. Correspondences should be directed to: The Chief Hydrometeorological Officer (Ag), and the Agronomist.*

### HIGHLIGHTS

- Northern Guyana has transitioned into its secondary dry season of 2018. This season is expected to conclude between mid to the end of April.
- Near normal rainfall is expected for March through May.
- There are increased chances that night-time temperatures are generally going to be cooler than normal for March through May.
- Daytime temperatures are expected to be cooler than normal for March through May.
- The likelihood of dry spells (consecutive days without rain) increases in Northern Guyana for March through mid-April. However, downpours are still expected.
- Dry spells (consecutive days without rain) are expected to continue in the Rupununi Region in coming weeks. Generally, dry conditions expected.
- La Niña is expected to transition to ENSO-neutral conditions during March to May 2018.



## Rainfall Review for February 2018

For the month of February, Moderately Dry (MD) conditions were experienced over most parts of Guyana. The highest monthly rainfall was recorded at Fort Island Essequibo River, Region 3, with a total of 451.3 mm of rainfall with 20 rain days. Crane, Region 3, recorded the highest one-day rainfall total with a value of 91.2 mm on February 11, 2018. Conversely, Deer Creek and Karaudarnua, Region 9, did not record any rainfall for the month. Most stations analysed recorded rainfall amounts above their long-term averages (Figure 1).

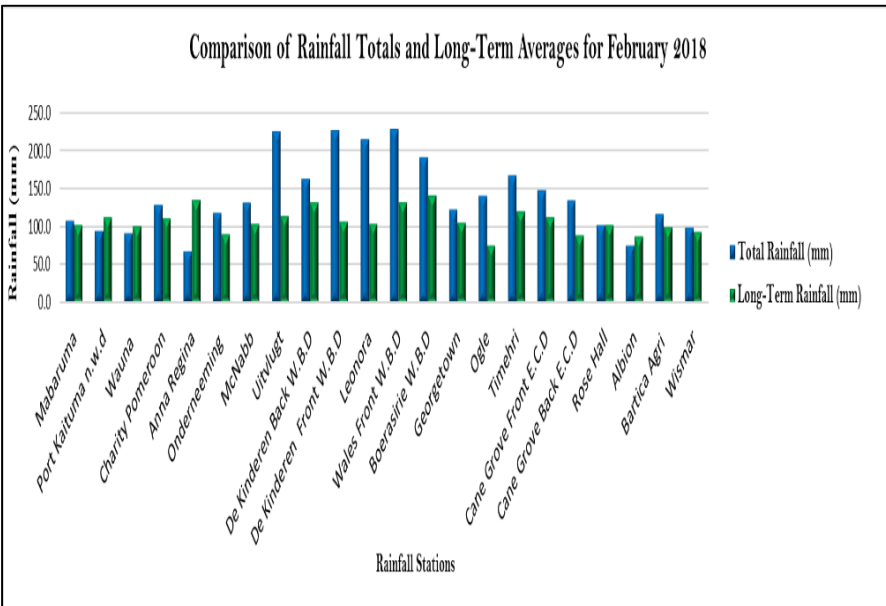


Figure 1: Comparison of the accumulated rainfall and the long-term averages of selected stations for February 2018

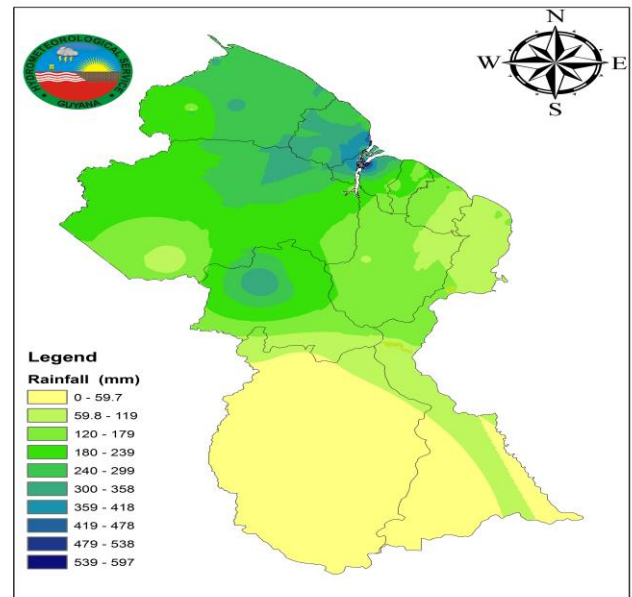


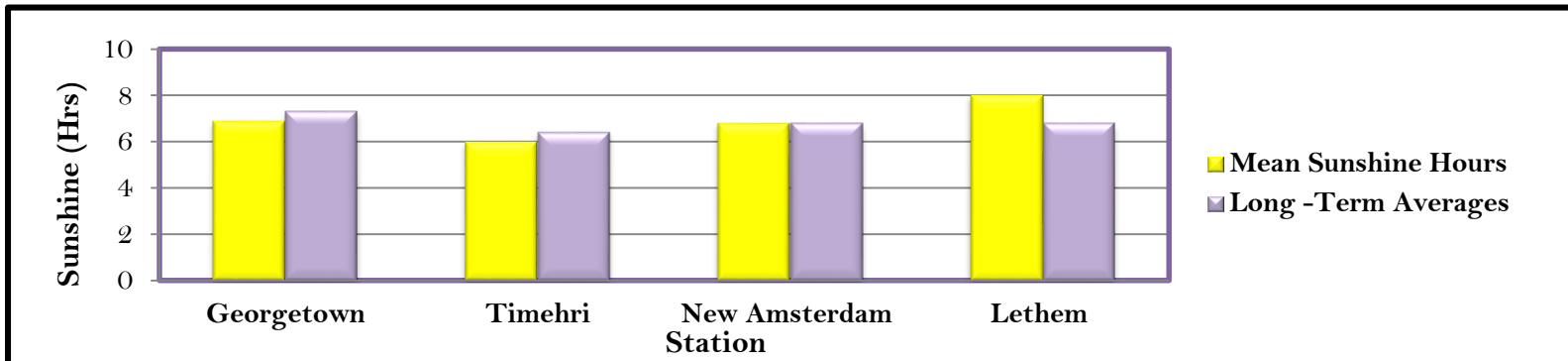
Figure 2: Rainfall Distribution Map for February 2018

Table 1: Regional Rainfall Classification for the Month of February 2018

Regions	Regional Average (mm)	Average Rain days	Classification	Remarks
1	99.4	14 days	Moderately Dry (MD)	Mabaruma recorded 106.5mm of rainfall with 16 rain days.
2	120.4	14 days	Moderately Dry (MD)	Supernaam Forestry recorded 181.5 mm of rainfall with 13 rain days.
3	206.4	15 days	Wet (W)	Hog Island Essequibo River recorded 233.3mm of rainfall with 16 rain days.
4	149.9	15 days	Moderately Dry (MD)	Land of Canaan recorded 230.9mm of rainfall with 17 rain days.
5	100.7	13 days	Moderately Dry (MD)	Pine Ground Mahaicony recorded 149.7mm of rainfall with 19 rain days.
6	81.0	10 days	Dry (D)	Johanna South recorded 105.mm of rainfall with 8 rain days.
7	93.4	13 days	Moderately Dry (MD)	Bartica Agri recorded 116.2mm of rainfall with 13 rain days.
8	241.4	15	Wet (W)	Mahdia recorded 241.4mm rainfall with 15 rain days
9	11.7	2 days	Dry (D)	Lethem recorded 2.0mm rainfall with 1 rain day.
10	93.9	14 days	Moderately Dry (MD)	58 Mile Road Mabura recorded 107.5mm of rainfall with 18 rain days.

## Sunshine Hours Review for February 2018

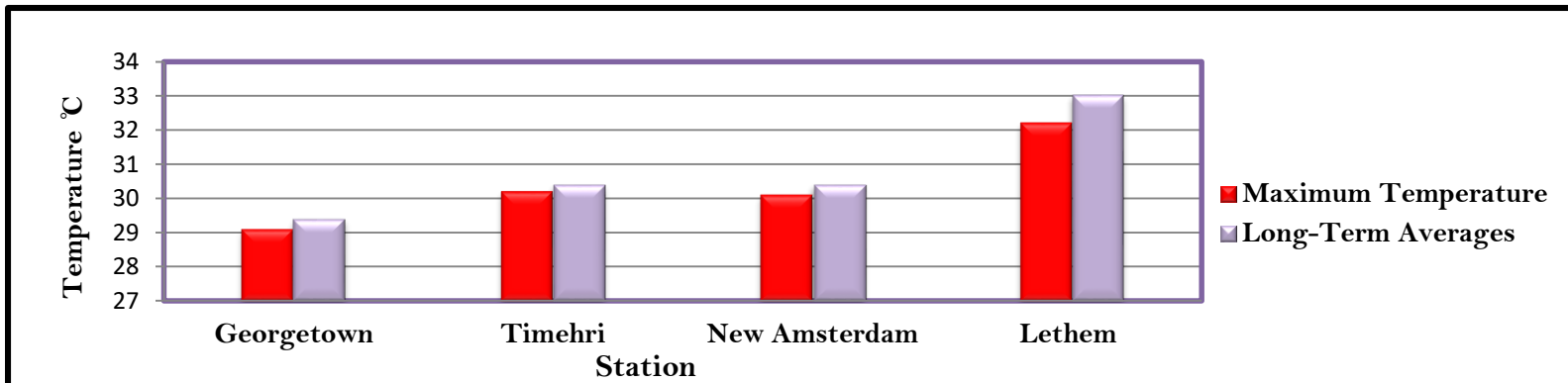
Lethem, Region 9 recorded the highest monthly mean sunshine of 8 hours, along with the highest one-day sunshine of 10.9 hours on February 28, 2018. Timehri, Region 4 recorded the lowest mean sunshine of 6.0 hours. Most stations recorded mean sunshine hours below or equal to their long-term averages with the exception of Lethem who recorded values of mean sunshine above its long-term average. (Figure 3).



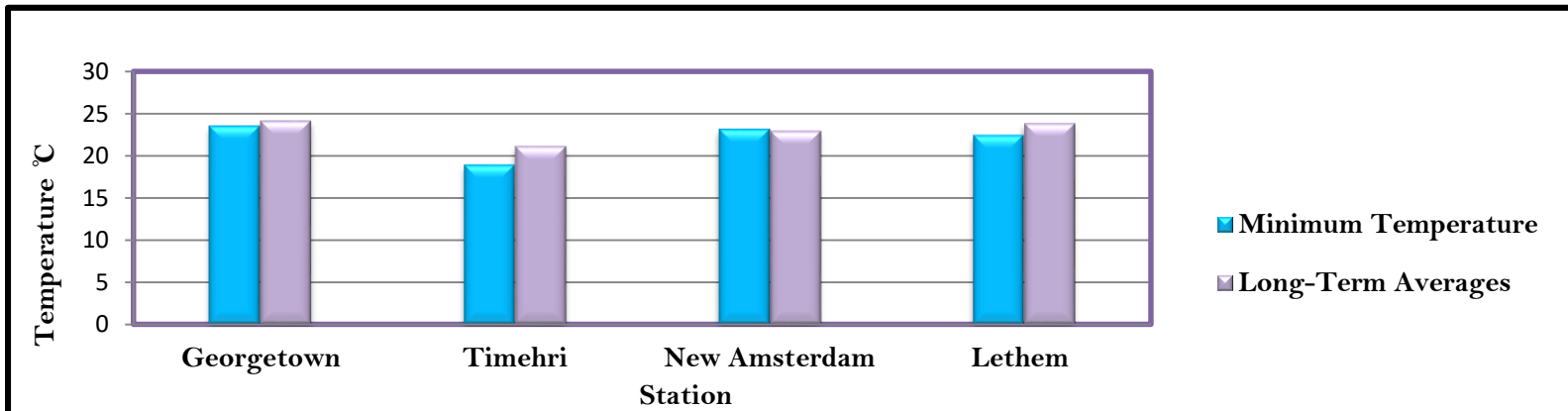
**Figure 3:** Comparison of the mean sunshine hours and the long-term averages of selected stations for February 2018.

## Temperature Review for the month of February 2018

For the month of February, the highest one-day maximum temperature was recorded at Lethem, Region 9 with a value of 35.7°C on February 28, 2018. This station also recorded the highest mean maximum temperature of 32.2°C for the month. Georgetown, Region 4 recorded the highest mean minimum temperature of 23.5°C. While, Timehri, Region 4 recorded the lowest daily temperature of 16.8°C on February 20, 2018. All stations recorded mean maximum temperatures below their long-term averages. (Figures 4 & 5).



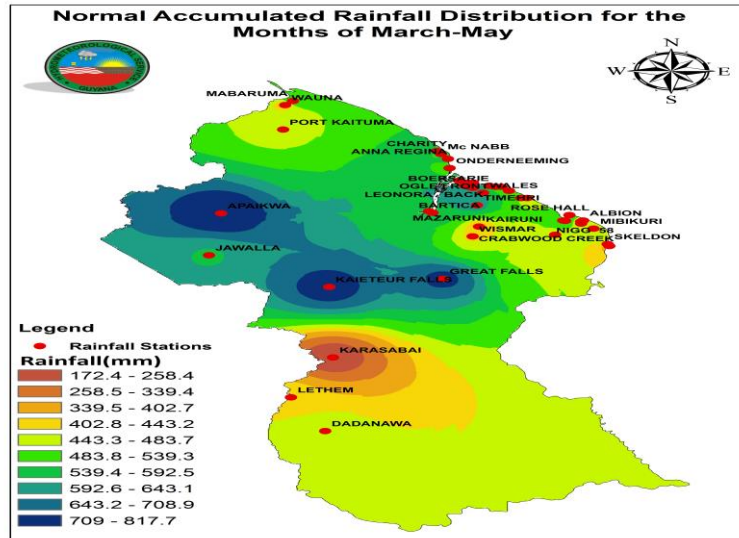
**Figure 4:** Comparison of the long-term averages and mean maximum temperatures of selected stations for February 2018



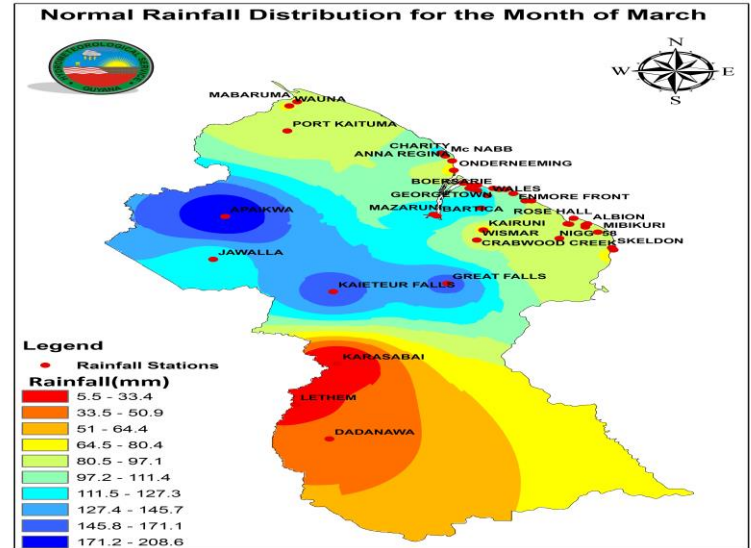
**Figure 5:** Comparison of the long-term averages and mean minimum temperatures of selected stations for February 2018.

## Seasonal Rainfall Outlook for Guyana (March-May 2018)

Guyana is likely to receive near-normal rainfall for March through May. During the first part of the period, both Northern and Southern (Rupununi) Guyana will be in their dry seasons. However, by mid to the end of April, both areas are expected to transition into their wet seasons. Therefore, from March to April the probability of more frequent dry spells (consecutive days without rain) in both regions will increase. The Rupununi region is expected to be generally dry until mid-April. However, downpours can still be expected more so over Northern Guyana. In Figure 6 below, the normal accumulated rainfall totals of selected stations are represented and Figure 7 represents the normal rainfall of selected stations for the month of March.



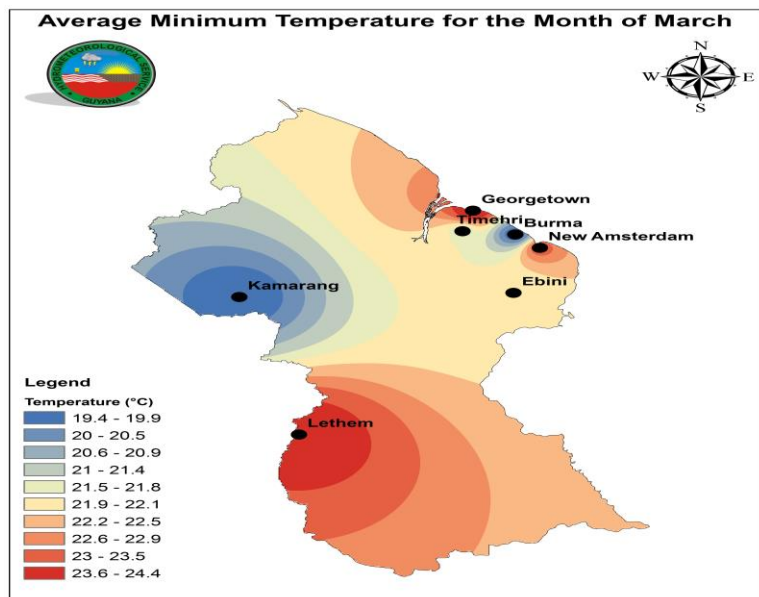
**Figure 6:** Normal Accumulated Rainfall Distribution for the months of March- May.



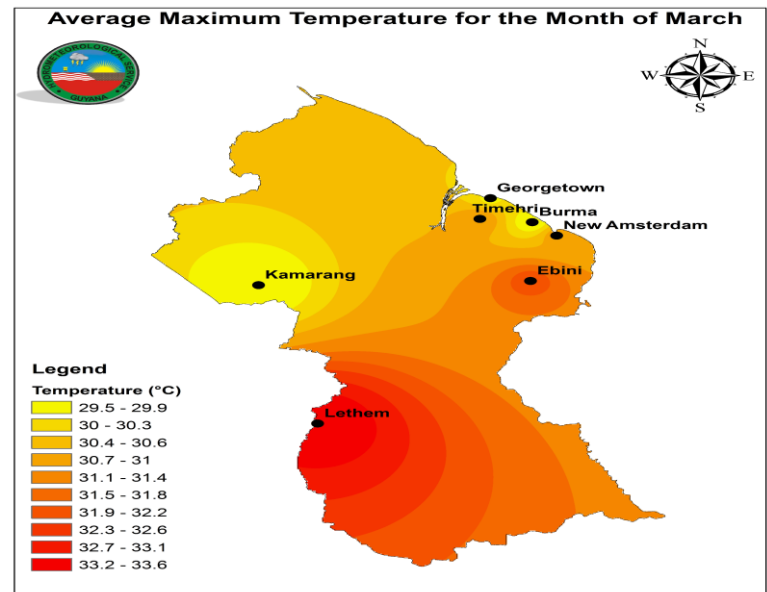
**Figure 7:** Normal Rainfall Distribution for the month of March.

## Seasonal Temperature Outlook for Guyana (March-May 2018)

For March through May generally cooler than normal day and night-time temperatures over most parts of Guyana is expected. The average minimum and maximum temperatures of selected stations for the month of March are represented in Figures 8 and 9 below.



**Figure 8:** Average minimum temperatures of selected stations for the month of March.



**Figure 9:** Average maximum temperatures of selected stations for the month of March.

Table 2: Average rain days for the months March-May of selected stations

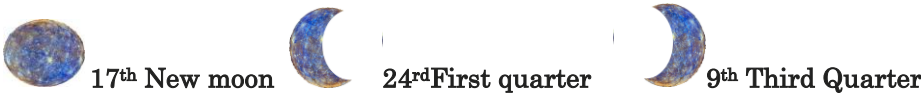
Station Name	March	April	May
Mabaruma	10 days	11 days	20 days
Anna Regina	7 days	7 days	15 days
Leonora	9 days	12 days	20 days
Georgetown Botanical Gardens	10 days	12 days	20 days
Timehri Meteorological Station	11 days	13 days	21 days
Blairmont	10 days	13 days	18 days
New Amsterdam	10 days	12 days	18 days
Kamarang	13 days	15 days	24 days
Lethem	3 days	9 days	18 days
McKenzie	11 days	13 days	19 days
Ebini	12 days	15 days	20 days

Note: A rain day is considered as a day with rainfall >= 1mm.

Table 3: Average wet days for the months March-May of selected stations

Station Name	March	April	May
Mabaruma	5 day	7 days	15 days
Anna Regina	4 days	5 days	11 days
Leonora	4 days	7 days	13 days
Georgetown Botanical Gardens	5 days	7 days	12 days
Timehri Meteorological Station	6 days	8 days	14 days
Blairmont	5 days	8 days	12 days
New Amsterdam	4 days	8 days	12 days
Kamarang	6 days	8 days	16 days
Lethem	1 day	7 days	11 days
McKenzie	6 days	9 days	13 days
Ebini	6 days	9 days	13 days

Note: A wet day is considered as a day with rainfall >= 5mm.



Lunar calendar for March 2018

**Table 4: SPRINGTIDE TABLE FOR MARCH 2018**

MARCH HIGH TIDE $\geq$ 2.74m		
DATE	TIME	HEIGHT (m)
3/1/2018	3:47	3.12
	15:39	3.2
3/2/2018	4:28	3.2
	16:24	3.24
3/3/2018	5:07	3.21
	17:06	3.21
3/4/2018	5:45	3.14
	17:47	3.11
3/5/2018	6:21	3.01
	18:27	2.95
3/6/2018	6:56	2.83
	19:06	2.76
3/14/2018	14:36	2.75
3/15/2018	15:13	2.87
3/16/2018	3:27	2.85
	15:49	2.98
3/17/2018	3:58	2.96
	16:26	3.05
3/18/2018	4:29	3.04
	17:03	3.07
3/19/2018	5:00	3.08
	17:42	3.04
3/20/2018	5:34	3.06
	18:22	2.95
3/21/2018	6:09	2.99
	19:05	2.81
3/22/2018	6:49	2.87
3/28/2018	2:00	2.84
	13:48	2.87
3/29/2018	2:45	3.01
	14:39	3.01
3/30/2018	3:26	3.13
	15:25	3.09
3/31/2018	4:04	3.19
	16:08	3.12

Source: Maritime Administration Department.

## **Possible implications of the Seasonal Outlook**

- An increase in the probability of dry spells (consecutive days without rain) as the season progresses.
- Possibility for the increase of pest and diseases associated with drier conditions (until mid to the end of April for both northern and southern Guyana).
- Sporadic downpours.
- A general increase in surface dryness is likely as the dry season progresses in some areas.

## **Farmers Advice for March 2018**

For the month of March, farmers are encouraged to take heed of the advisories from their regional agriculturists or extension officers, and to be vigilant and follow the Hydrometeorological Service's daily and three-day forecasts via the radio on 56.0 AM and on our website at [www.hydromet.gov.gy](http://www.hydromet.gov.gy). The following should also be taken into consideration;

- Northern Guyana has transitioned into its secondary dry season of 2018.
- Farmers in the Rupununi Region should note that they are still in their dry season thus, water conservation exercises such as mulching, and watering in the early morning or evening are recommended. Generally, dry conditions are expected. Longer periods of dry spells (consecutive days without rain) is also likely.

## **Advice for Crop Farmers**

- Harvest water during the wetter days of the season.
- Change the timing of farm operations- adjust sowing and harvesting period to avoid negative effects of dry spells. Water crops early in the morning and late in the evening to avoid the effects of evaporation.
- Use available water sparingly to ensure longer water availability for crop growing.
- Cultivate seedlings under a shaded area.
- Use mulching and trenching to prolong moisture in the crop root zone area.

## **Advice for Livestock Farmers**

- Construct water troughs where possible to provide water for livestock during dry periods.
- Monitor livestock for pests and diseases. This is an early intervention practice, since climate change can increase the incidence of pest and diseases that affect livestock.
- Provide shaded areas to decrease the effects of heat stress on animals.

Also, Fish Farmers are advised to work closely with Fisheries Officers and report any issues that they may have.

A few recommended crops for the March to May rainfall season are as follows:

- Corilla
- Bora
- Boulanger
- Pepper
- Corn
- Squash
- Lettuce
- Cantaloupe
- Cabbage
- Eshallot
- Cucumber
- Tomato
- Sweet Potato

## El Niño and La Niña Update

### ENSO Alert System Status: La Niña Advisory

- A transition from La Niña to ENSO-neutral is expected during March to May. After that, ENSO-neutral conditions are favored through fall 2018.

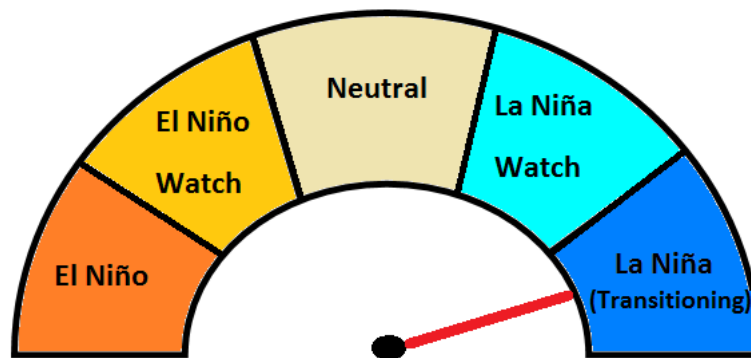


Figure 10: ENSO Forecast for March through May 2018

## La Niña Implications for Guyana

Normally, La Niña is associated with above-average rainfall over most parts of Guyana. However, the current La Niña is weak, thus it will likely have less influence on Guyana's rainfall than that which was observed with stronger events in the past.

## Agricultural Review for February 2018

Generally, dry conditions were experienced over most Administrative Regions during the month. It was reported that some agricultural areas did not record as much rainfall as expected, thus some farmers were forced to irrigate their crops. However, several cash crop farmers that the Service visited had reported that the rainfall received for the period under reviewed was sufficient for their crops thus far. The Rupununi area continued to be the driest region analyzed. However, no severe effect of the weather on agricultural production was reported to the Hydrometeorological Service.

**THE  
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SERVICE OF GUYANA**



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## Farmer of the Month



Name: Calvin Holder

Age: 53

Farming Group: Guarantee Farmers' Co-operative

Here is Mr. Calvin Holder, a farmer who hails from the community of Buxton. He has been farming since 2005. He is a member of a farmer's co-op in the community of Friendship. In the co-op, there are about eleven (11) members, and they farm about 10 to 15 acres of land. Some of the crops under cultivation are:

- Squash
- Calaloo
- Pak choi
- Cabbage

Around these crops, they plant perennial crops such as:

- Soursop
- Pear
- Lime
- Mangoes

Beside crops, he also has a livestock farm where he rears animals such as:

- Sheep
- Goat
- Chicken (Broilers & Layers)

The major challenge that he faces is insect attacks to his crops during the drier periods of the year. Moreover, the farm is usually open to the community for the purchasing of produce.



A few pictures taken by the Agromet Staff on a visit to Mr. Holder's farm.