Issue: 26

February, 2015

Hydrometeorological Service of Guyana

Farmer's Monthly Weather Bulletin

This bulletin is 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.

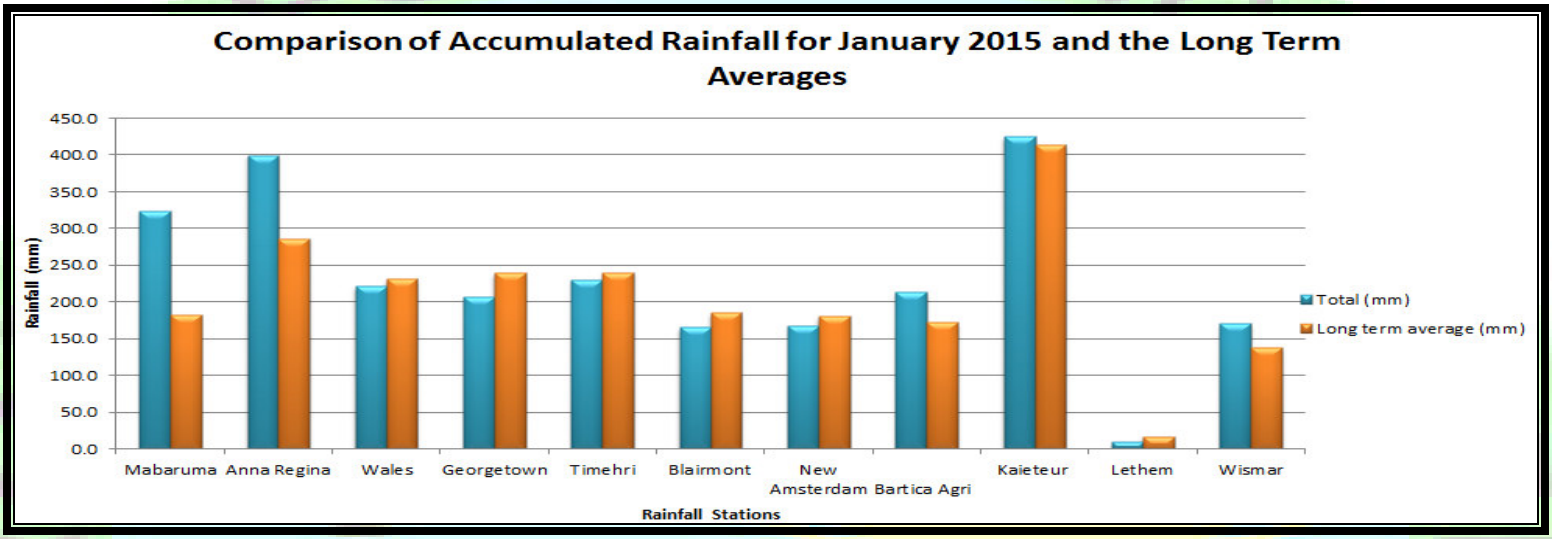
JANUARY HIGHLIGHTS

- Guyana was classified as Moderately Wet (MW) for the month of January 2014.
- Regional classification showed that Region 2 recorded the highest average rainfall total for the month with 361.0mm within 19 rain days.
- The highest one day rainfall total was recorded at Capoey Lake with 126.8mm of rainfall on January 15th 2015.
- Guyana is currently transitioning into its primary dry season of 2015.
- Normal rainfall conditions predicted for the months February through April.
- The Ministry of Agriculture's "El Niño Watch" still in effect.




Rainfall Overview for January, 2015

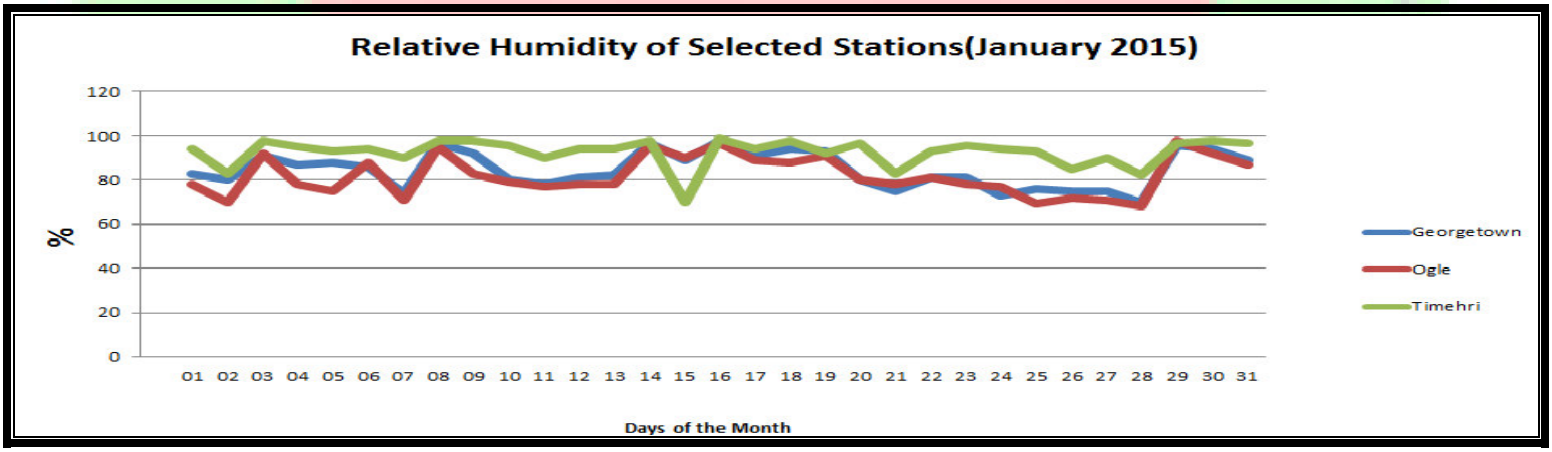
For the month of January Guyana averaged 198mm within 15 rain days .The highest monthly rainfall total was recorded at Capoey Lake, Region 2, with 527.3mm in 22 rain days. Regional classification showed that Region 2 recorded the highest total with 361.0mm in 19 rain days. The graph below shows comparison of selected stations and long-term averages.



Graph#1: Comparison of the Accumulated Rainfall and Long -term Averages for January 2015.

Relative Humidity Overview for January, 2015

For the month of January the stations analyzed recorded relative humidity that ranged between 68% and 99%, with the lowest and highest values being recorded on the 28th and 16th of January at Ogle and Timehri respectively. For the period Timehri recorded values of it relative humidity generally higher that the other stations. On the 16th of January, Ogle recorded 97%, Georgetown 98% and Timehri 99% of relative humidity, these values represented the highest totals for the month recorded by these stations. This was due mainly to low temperatures and high cloud coverage recorded on the day.



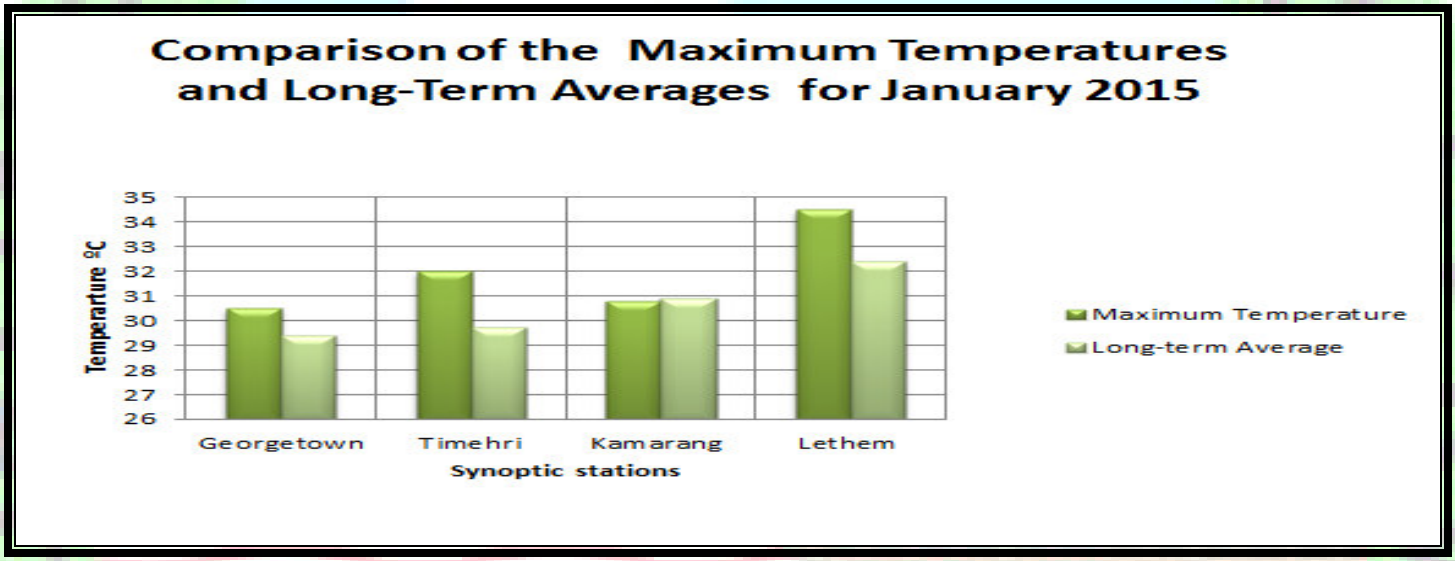
Graph#2: Relative Humidity for selected rainfall stations for January 2015.

Table #1: Classification of Regional Rainfall Data for the Month of January 2015

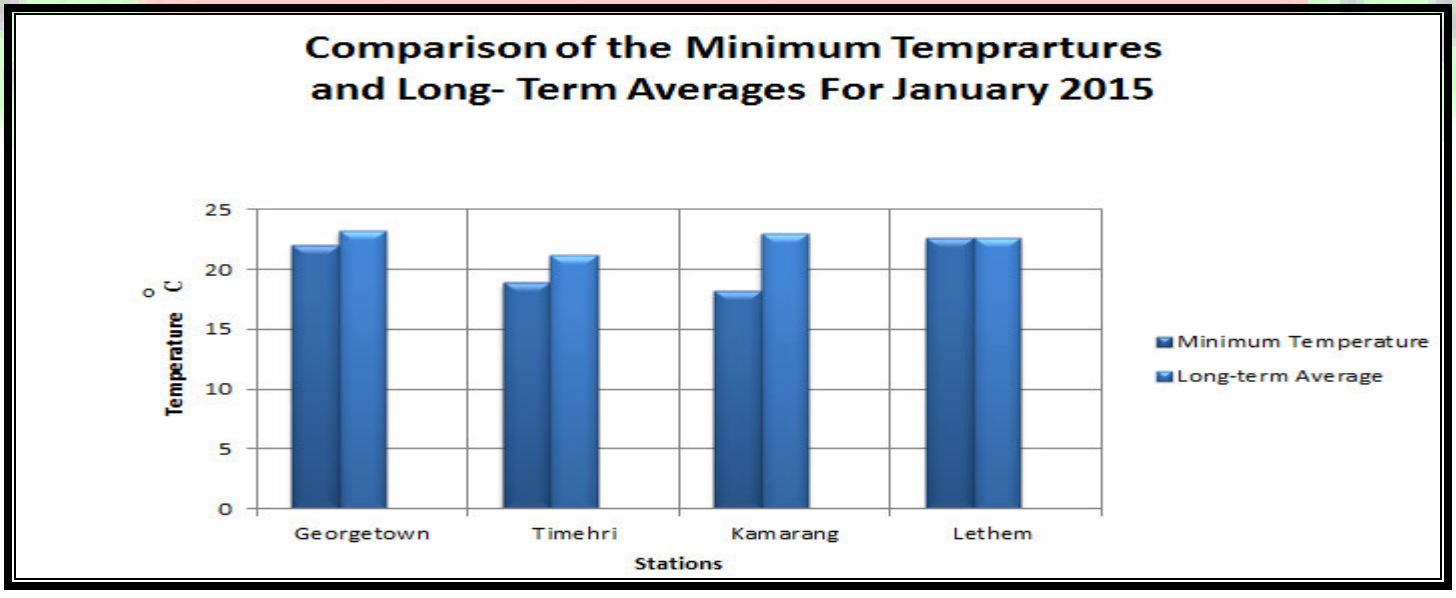
Region	Average Rainfall (mm)	Average Rain day	Classification	Remarks
1	222.0	17 days	Wet (W)	Hossororo recorded 251.0 mm of rainfall in 21rain days.
2	361.0	19 days	Very Wet (VW)	Supernaam Forestry recorded 301.1mm of rainfall in 11rain days.
3	313.6	17 days	Wet (W)	Wakenaam recorded 332.4mm of rainfall in 13 rain days.
4	187.1	16 days	Moderately Wet (MW)	Cane Grove Back recorded 186.0 mm of rainfall in 21rain days.
5	134.8	13 days	Moderately Dry (MD)	Railway line Mahaicony recorded 62.5 mm of rainfall in 7 rain days.
6	116.5	10 days	Dry (D)	Skeldon recorded 148.5 mm of rainfall in11 rain days.
7	145.8	15 days	Moderately Dry (MD)	Bartica Agri recorded 213.7 mm of rainfall in15 rain days.
8	Kaieteur recorded 424.6mm of rainfall in 25 rain days.			
9	23.0	5 days	Very Dry (VD)	Annai recorded 64.1mm of rainfall in 10 rain days.
10	202.0	17 days	Moderately Dry (MD)	Watooka recorded 177.9mm of rainfall in 21 rain days.

Temperature Overview for January 2015

In the month of January the highest maximum temperature was recorded at Lethem Region 9, with 34.5°C on the 17th of January; Lethem also recorded the highest average maximum temperature of 32.7 °C for the month of January. On the contrary, the lowest minimum temperature was recorded at Timehri with 18.2 °C, on the 24th of January, 2015.Analysis of the graphs below shows that of the four stations three recorded higher maximum temperatures than their long term averages and recorded values of their minimum temperatures below their climatological averages.



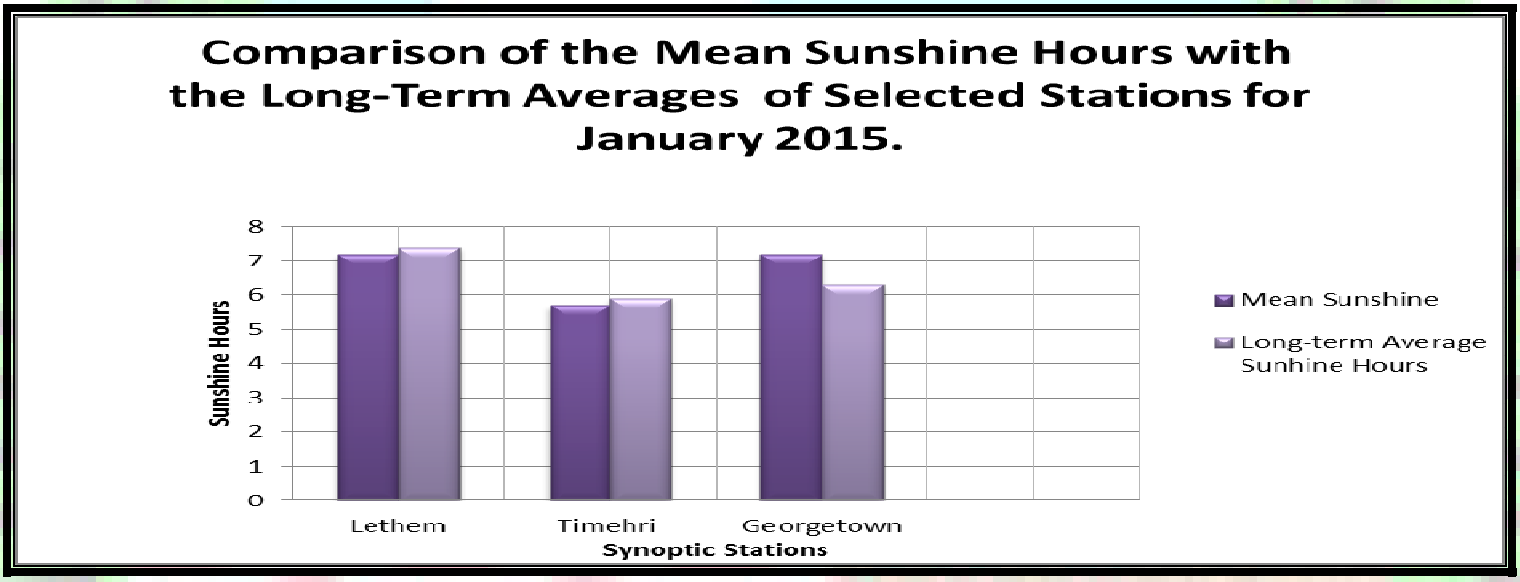
Graph # 3: Comparison of the Maximum temperatures and Long-term Averages for selected stations for January 2015.



Graph # 4: Comparison of the Minimum temperatures and Long-term Averages for selected stations for January 2015.

Sunshine Hours Summary for January, 2015

Lethem and Georgetown recorded the highest mean bright sunshine hours of 7.2 hours; further the highest one day total of sunshine hours was recorded at Lethem on the 17th of January with 11.1hrs. Timehri recorded the lowest average sunshine hours for the month with 5.7 hours.



Graph# 5: Comparison of the Mean Sunshine hours with the Long-term Averages for selected stations for January 2015.

Agricultural Review for January, 2015

Regionally dry to wet conditions were experienced over the month of January. However, flooding in agricultural and residential areas such as Hampton Court, Wisdor Castle and other surrounding villages along the Essequibo Coast was experienced on the weekend of the 16th of January.

Further, no significant impact of the weather on Agricultural production was reported, since most farmers welcomed the rain which supported their agricultural activities.

Official and residents at an Outfall on the Essequibo Coast

Picture Source: inewsguyana.com

Farmer's Note for February, 2015

The month of February climatologically marks the transition of Guyana into its primary dry season of 2015.Although periods of downpours are expected dry spells are also anticipated. Thus, farmers are advised to take the following precautions;

- Plant warm season vegetables that can withstand the dry periods such as; tomato, pepper, cucumber, ochro, boulanger, watermelon, pumpkin, sweet potato etc.
- Provide shade for plants that cannot withstand high temperatures and excess sunlight.
- Mulch around crops with decay organic matter or plant debris, so that moisture can be retain in the soil to maintain healthy crop growth.
- Transplanting should be done early in the morning and late in the afternoon.
- Farmers should conserve on their water usage.
- Water crops at least twice per day, early in the morning and late in the afternoon.
- Pesticide bottles and fertilizer containers should be properly disposed of to avoid contamination.

Seasonal Forecast from February – April, 2015

Currently Guyana is transitioning into its primary dry season of 2015.The recent statistical and forecast models are indicating high probabilities of normal rainfall during this period over most parts of the country. Periods of dry spells and periodic downpours can be expected.

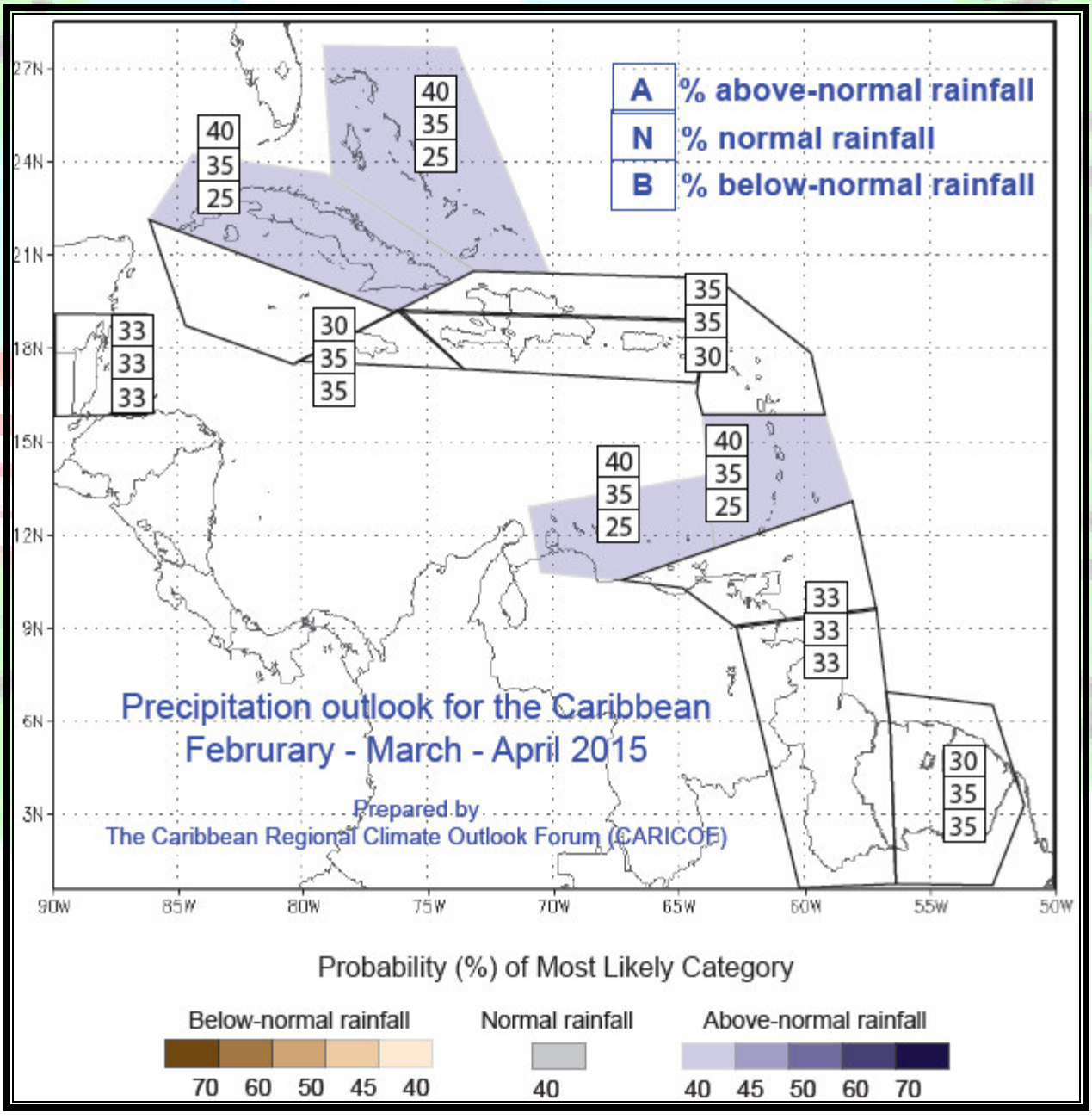


Figure # 1: Indicating the Percentages of Above Normal (A), Normal (N) and Below Normal (B) rainfall conditions for Guyana and the Caribbean.

Table#2 Rainfall Normals and Averages of selected rainfall stations

Region	Station Name	February	March	April	Region	Station Name	February	March	April
1	MABARUMA *	101.6	94.1	144.9	5	BLAIRMONT	94.6	95.1	160.7
	WAUNA	98.9	76.5	108.4		MARDS	100.7	116.1	147.5
	PORT KAITUMA	110.9	82.8	108.3	6	ALBION	85.7	93.5	144.8
2	ANNA REGINA*	133.6	75.3	159.6		SKELDON	97	105.5	147.8
	CHARITY	110.4	122.5	134.9		CRABWOOD CREEK*	70.4	50.5	82.5
	Mc NABB	102.4	109.3	130.8		ROSE HALL	101.4	102.5	169.1
	WAKAPOW	140.7	99.3	150.3		NIGG 58	77.31	91.2	156.1
	ONDERNEEMING	88.4	58.1	141.6		ALBION 33	78.2	77.4	142.1
3	BOERSARIE	140.2	114	194		#73 VILLAGE	110.7	97.5	154.4
	DeKENDEREN B	118.7	103.1	188.8		# 54 VILLAGE*	77.4	81.5	147.9
	DeKENDEREN F	104.9	107.5	185.9		ANKERVILLE	108.3	82.3	171.6
	LEORNORA F	103	95.6	179.4		MIBIKURI	89	91.4	147.6
	LEORNORA B	124.7	137.1	192.8		MARA LAND DEV. SCHEME*	60.5	90.1	147.1
	WALES	130.7	117.6	164.9		NEW AMSTERDAM	97	96.1	159.7
	UITVLUGT B	112.3	119.4	181.8	7	APAIKWA	220.5	208.6	266.3
	La BAGATELLE LEGUAN*	67.3	71.8	131.4		MAZARUNI	105.2	112.7	174.6
4	BOTANIC GARDENS	104.1	11.6	153.4		BARTICA DEM. STATION*	98.5	127.7	150.9
	TIMEHRI	118.1	119.9	188.9		JAWALLA	107.4	113.9	176.1
	CANE GROVE B	87.8	73.6	116.5	8	KAIETEUR FALLS *	218.1	162.4	
	CANE GROVE F	110.9	110.2	153.2	9	LETHEM	18.8	18.9	89
	L.B.I FRONT	88.1	86.0	140.8		KARASABAI	8	5.5	35.4
	OGLE FRONT	73.9	93.9	134.2		DADANAWA	26.1	42.2	126.4
	ENMORE FRONT	95.4	106.6	172.1	10	GREAT FALLS	125.6	154.6	222
	KAIRUNI*	70.8	72.1	116.4		WISMAR*	92.2	94.4	131.0

NOTE = The normals for various stations were calculated by the use of rainfall data from the year 1981- 2010 (30 years).
*** = Rainfall Averages (less than 30 years of data).**

Table # 3: Average rain days for the months February to April for selected stations

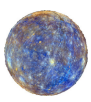
Station Name	February	March	April
Georgetown Botanical Gardens	11days	10days	20days
Timehri Meteorological Station	12days	11days	16days
Ogle	10days	9days	11days
Lethem	3days	3days	2days
Anna Regina	8 days	7days	7days
New Amsterdam	10days	10days	12days

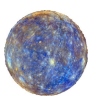
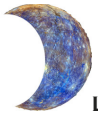
NOTE: Rain day = More than 1 mm of rainfall within a 24 hrs period.

TABLE#4: HIGH TIDE TABLE FOR FEBRUARY, 2014

FEBRUARY HIGH TIDE ≥2.74m		
DATE	TIME	HEIGHT(m)
2014/02/01	04:57	3.22
	17:22	3.33
2014/02/02	05:39	3.21
	18:09	3.22
2014/02/03	06:19	3.12
	18:55	3.05
2014/02/04	06:58	2.96
	19:44	2.82
2014/02/05	07:40	2.77
2014/02/13	03:34	2.75
	15:11	2.84
2014/02/14	04:05	2.83
	15:47	2.92
2014/02/15	04:34	2.88
	16:20	2.98
2014/02/16	05:03	2.90
	16:56	3.01
2014/02/17	05:29	2.90
	17:31	2.99
2014/02/18	05:57	2.86
	18:07	2.93
2014/02/19	06:27	2.78
	18:47	2.82
2014/02/25	12:54	2.74
2014/02/26	13:51	2.95
2014/02/27	02:25	2.89
	14:43	3.13
2014/02/28	03:10	3.08
	15:33	3.26

Tides Tables are provided by the Maritime Administration Department


NEW MOON 18TH PM

FIRST QUARTER 25TH PM

FULL MOON 3RD PM

LAST QUARTER 11TH PM

LUNAR CYCLE AND ITS POSITION BY DATE

The crop of the month: Ochro

February 2015

Introduction: Ochro, a commonly grown vegetable in Guyana, belongs to the family Malvaceae and its scientific name is *Abelmoschus esculentus*. The edible part of the ochro plant is along slender immature pod. The pod is generally ribbed and spineless. It is used as a cooked or steamed vegetable with a very good nutritive value.

Climate conditions: Okra is grown at elevations ranging from sea level to 1600m. The optimum temperatures for growth and production of high quality pods range between 24 and 30°C.

Cultivation: Ochro is cultivated by direct seeding with a spacing of 90cm between rows and 60cm along rows i.e. approximately 18,500 plants per hectare. The crop can be grown in both wet and dry seasons on any soil type, once the pH is between,(5.5 - 6.5). Irrigation is necessary for germination, which takes between 7-12 days after sowing. Thereafter, irrigation is required once weekly in the dry season.

Insect pests that affect Ochro:

1.Aphids: These are tiny brownish black insects feeding on the underside of the leaves and on the fruits. They also attract ant colonies. Insecticides such as Vydate L, Basudin and Fastac are used for controlling the pests.

2.Mealy Bugs: There are small white and pink bugs with a white coating over their bodies. They feed on the fruit and flowers resulting in fruit drop. Rouging infested plants and burning them is recommended. Spraying of Vydate L reduces the spread of the bugs.

Nutritional value of Ochro:

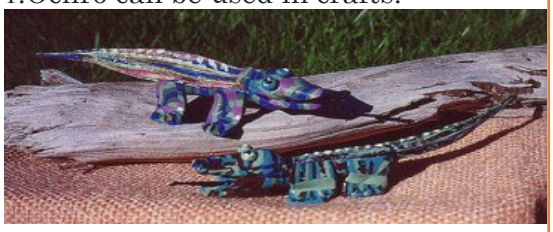
Besides being low in calories, it is rich with vitamins of the category A, Thiamin, B6, C, folic acid, riboflavin, calcium, zinc and dietary fiber. Eating okra is highly recommended for pregnant woman because of its richness in folic acid, which is essential in the neural tube formation of the fetus during 4-12 weeks of gestation period in the mother's womb.

Varieties:

There are many local ochro cultivars as well as imported varieties with good horticultural characteristics such as Clemson Spineless, Santa Cruz and Emerald Green Velvet which are cultivated. There is considerable diversity in size, shape and colour of the edible pods. Plants range in height from one metre (3 feet) in some cultivars to over 2.6 metres (8 feet) other cultivars.

Fun facts:

1.Ochro can be used in crafts.



2. Ochro is also known as lady fingers, Gombo, Bendi, Bhindi, Ochro, Bamieh, Gumbo and Quiabo.

3. Ochro plant was used to produce rope and paper.

4. The seeds of the Ochro plant were used as a substitute for coffee beans during the World War II.

THE
HYDROMETERORLOGICAL
SERVICE OF GUYANA

18 Brickdam Stabroek
Georgetown, Guyana

E-mails:
dianavmisir@yahoo.com,
d.david@hydromet.gov.gy
dwayne .lanferman@yahoo.com

Phone : 592-261-2284
592-261-2216
(24 hours National Weather Watch Centre numbers)
Or
Visit our Website:
www.hydromet.gov.gy

El Niño Update

- ENSO Alert System Status: El Niño Watch

- There is an approximately 50-60% chance of El Niño within the late Northern Hemisphere winter and early spring, with ENSO-neutral slightly favored thereafter.

Table #5: CPC/IRI Early-Month Consensus ENSO Forecast Probabilities

Season	La Niña	Neutral	El Niño
JFM 2015	~0%	43%	57%
FMA 2015	1%	46%	53%
MAM 2015	2%	48%	50%
AMJ 2015	3%	49%	48%
MJJ 2015	5%	48%	47%
JJA 2015	7%	48%	45%
JAS 2015	10%	49%	41%
ASO 2015	13%	47%	40%
SON 2015	15%	46%	39%


HYDROMETEOROLOGICAL SERVICE
GUYANA