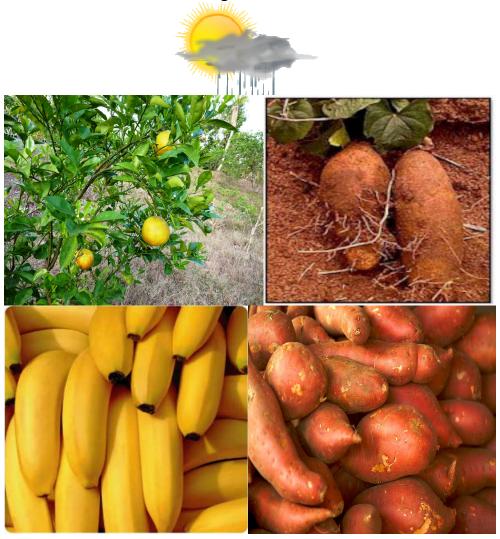
NATIONAL AGROMET BULLETIN



Issued by
Applied Meteorology, Climate Branch
Meteorological Service, Jamaica
65 ¾ Half Way Tree Road
Kingston 10

Telephone: 929-3700/3706

Email: datarequest@metservice.gov.jm

November 2012





- **♣** Precipitation outlook forecasts below normal rainfall.
- **♣** Drought conditions over some areas.

Weather Summary for month of November 2012

November generally signifies the end of the hurricane season for the Atlantic region. Throughout the month both Sangster International airport (Sangster) in the northwest and Norman Manley International airport (Norman Manley) in the southeast recorded below average rainfall. The most significant weather features to affect the island during the month of November were **Low Level Troughs**, most of which developed over the north-western Atlantic and affected mainly northern parishes.

During the month, Sangster in the northwest recorded 99.2 mm of rainfall, while Norman Manley in the southeast recorded 36.4 mm. There were five rainfall days reported for Sangster, while Norman Manley had only one rainfall day during the month. Both stations recorded below average rainfall, Sangster recorded approximately 93% of the 1971-2000 meanwhile Norman Manley recorded 41% of the 1971-2000 mean.

The highest maximum temperature recorded for Sangster Airport was 31.6°C (16th November) while 32.6°C (27th November) was reported for Norman Manley Airport.





The Standardized Precipitation Index (SPI), developed by T.B. McKee, N.J. Doesken, and J. Kleist in 1993, is based only on precipitation. One unique feature is that the SPI can be used to monitor conditions on a variety of time scales namely 1- month, 3-month, 6-month, 9-month and 12-month periods. This temporal flexibility allows the SPI to be useful in both short-term agricultural and long-term hydrological applications. SPI also allows monitoring of both extremes that is extreme dry and extreme wet conditions.

KEY

SPI Value	Category		
-0.50 to 0.50	Normal		
0.80 to 0.51	Abnormally wet		
1.30 to 0.81	Moderately wet		
1.60 to 1.31	Very wet		
2.00 to 1.61	Extremely wet		
≥ 2.01	Exceptionally wet		
-0.80 to -0.51	Abnormally dry		
-1.30 to -0.81	Moderately dry		
-1.60 to -1.31	Severely dry		
-2.00 to -1.61	Extremely dry		
≤ -2.01	Exceptionally dry		

Table 1. Rainfall and Drought Analysis for Selected Stations					
Parish	Station	November Monthly Total (mm)	Percent of 30 year Mean (%)	SPI for November	
St. Thomas	Serge Island	8	4	-1.98	
KSA	Langley	633	218	1.22	
St. Catherine	Tulloch	15	10	0.18	
Clarendon	Beckford Kraal	98	78	-0.09	
Manchester	Sutton	160	119	0.90	
St. Elizabeth	Y.S Estates	130	82	-0.14	
Westmoreland	Sav-la-mar	24	18	-1.14	
Hanover	Mount Peto	57	45	-1.03	
St. James	Sangster	99	97	0.18	
Trelawny	Orange Valley	n/a	n/a	n/a	
St. Ann	Cave Valley	69	57	0.41	
St. Mary	Hampstead	159	67	-0.32	
Portland	Shirley Castle	965	157	0.29	





Standardized Precipitation Index Discussion

Based on the indices for November and the trend from September there are currently two stations which are showing moderately dry conditions and trending to more severe conditions. The stations are Mount Peto in Hanover, Sav-la-mar in Westmoreland. Y.S Estates in St. Elizabeth and Beckford Kraal in Clarendon are showing normal drought conditions. The precipitation outlook for January through March is forecasting below normal rainfall and this coupled with the current status of these stations is indicating the need for intervention to prevent serious drought in the farming areas.

Precipitation Outlook – December 2012 to February 2013

Of a total of five stations that were examined, four of these stations indicated below normal rainfall while one station (Sangster) returned above normal rainfall. The forecast continues to show strong signals across most stations for below normal rainfall.

The overall average for Jamaica therefore, reflects a near normal to below normal rainfall pattern for the period January through to March 2013 with strong signals and high forecast confidence.

Table 2. Climate Predictability Tool (CPT) Outlook JFM2013.

Stations	Below (B) %	Normal (N) %	Above (A) %
Manley	44	30	26
Sangster	31	31	38
Savanna-la-Mar	71	21	8
Beckford Kraal	48	30	22
Serge Island	64	24	12
Jamaica	52	27	21

Volume 1. No. 2 Climate Branch October 2012

Key

- A: Above normal rainfall means greater than 66 percentile of the rank data
- N: Near normal rainfall means between 33 and 66 percentile of the rank data
- B: Below normal rainfall means below 33 percentile of the rank data

Summary and Expected Agricultural Impacts

Moderate drought conditions are indicated for the Mount Peto and Sav-la-mar stations at this time. The precipitation outlook is forecasting below normal to normal conditions over the next three months and there is high confidence in the forecast, therefore western parishes should now be considering irrigation and any water harvesting measures which are available to prevent worsening conditions in these areas.

In our next issue in Nov 2012.... Look out for:

• Findings, Results and achievements of this Research project so far.