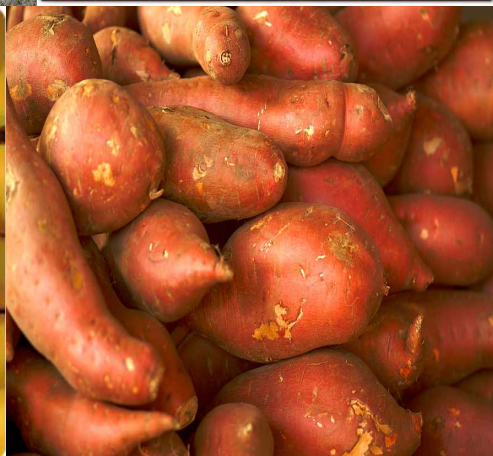
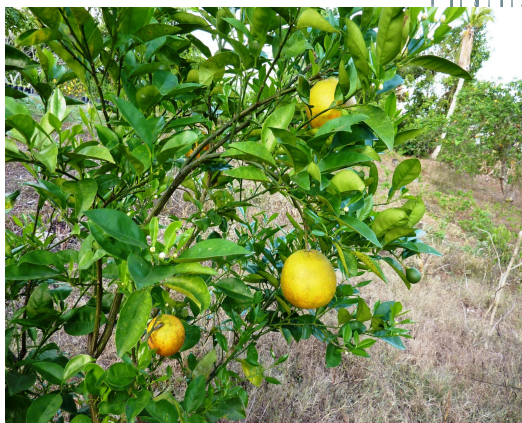


NATIONAL AGROMET BULLETIN



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Highlights for January 2013

- ✚ **Below normal rainfall expected to continue through April.**
- ✚ **Drought conditions worsen over some areas due to significant rainfall deficit.**

Weather Summary for month of January 2013

During the month of January no major rainfall events was recorded. Both Sangster International airport (Sangster) in the northwest and Norman Manley International airport (Norman Manley) in the southeast recorded well below the monthly rainfall average. The most significant weather feature which affected the island during the month of January were **Low Level Troughs**, most of which developed over the north-western Atlantic and affected mainly north-eastern parishes.

During the month, Sangster in the northwest recorded 18.9 mm of rainfall, while Norman Manley in the southeast recorded 1.0 mm. There were three rainfall days reported for Sangster, while Norman Manley had only one measured rainfall days during the month. Sangster recorded approximately 23% of the 1971-2000 mean while Norman Manley recorded 4% of the 1971-2000 mean. The lowest minimum temperature recorded for Sangster Airport was 20.5°C (4th January) while 21.5°C (22nd January) was reported for Norman Manley Airport.



Standardized Precipitation Index (SPI)

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

Parish	Station	January Monthly Total (mm)	Percent of 30 year Mean (%)	SPI for January
St. Thomas	Serge Island	21	24	-1.03
KSA	Langley	37	20	1.06
St. Catherine	Tulloch	15	22	-2.42
Clarendon	Beckford Kraal	21	34	-0.08
Manchester	Sutton	69	118	0.54
St. Elizabeth	Y.S Estates	40	47	-0.14
Westmoreland	Sav-la-mar	21	28	-1.81
Hanover	Mount Peto	49	57	-1.05
St. James	Sangster	19	23	-0.49
Trelawny	Orange Valley	20	26	-1.07
St. Ann	Cave Valley	0	0	0.04



St. Mary	Hampstead	82	46	-0.88
Portland	Shirley Castle	315	69	0.53

Standardized Precipitation Index Discussion

Nine of the thirteen stations used in the analysis are showing some level of drought however Savanna-la-mar in Westmoreland (extremely dry) and Tulloch in St. Catherine (exceptionally dry) are the worst cases based on the 3 month SPI.

Precipitation Outlook – February to April 2013

The statistical model is indicating a near normal to below normal rainfall season for all stations that were analyzed for the period February to April 2013. Of a total of ten stations that were examined, all stations indicated below normal rainfall for the period February through to April. The overall average for Jamaica therefore, reflects a strong near normal to below normal rainfall pattern for the period February through to April. Strong signals and high forecast confidence drive home the message for water conservations as the dry season is forecast to continue at least for the next three months.

Table 2. Climate Predictability Tool (CPT) Outlook FMA 2013.

Stations	Below (B) %	Normal (N) %	Above (A) %
Manley (Kingston)	48	30	22
Sangster (St. James)	48	29	23
Sav. (Westmoreland)	39	32	29
Beckford (Clarendon)	46	31	23
Serge Island (St. Thomas)	49	30	21
Cave Valley (St. Ann)	44	30	26
Tulloch Estate (St. Cath.)	46	31	23



Y.S. Estate (St. Elizabeth)	46	30	24
Hampstead (St. Mary)	45	31	24
Orange Valley (Trelawny)	47	30	23
Jamaica	46	30	24

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

Tulloch in St. Catherine is now at the lowest possible point in the SPI scale which is exceptionally dry and is one of the areas which feed into the Rio Cobre basin. For the drought in 2010 the figure was only **-1.66** which is severely dry but could be used as a guide as to possible impacts from the existing scenario (**-2.42**) if it is indicative of a trend in other communities in the parish.

The Precipitation outlook for the island remains below normal with very good confidence therefore, with very little expectation for significant rainfall activity before late April or early May the need may arise for irrigation initiatives in some areas and possible trucking of water if potable water resources become limited.