

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the Second dekad (21st to 30th) of June 2015

Term		Meaning
Dekad		10 day rainfall measuring period
Rain Day		A day with 1.0 mm or more of rainfall amount
Wet Day		A day with 10.0 mm or more of rainfall amount
Extremely Wet Day		A day with 25.0 mm or more of rainfall amount
Normal Rainfall		Between 75% and 125% of the average
Below Normal Rainfall		Rainfall below 75% of the average
Above Normal Rainfall		Rainfall in excess of 125 % of the average
Much below Normal Rainfall		Rainfall below 50% of the average
Much above Normal Rainfall		Rainfall above 150% of the average
Scanty Rainfall		Less than 1 mm
Moderate Rainfall		1-10 mm
Heavy Rainfall		10-50 mm
Very heavy Rainfall		Greater than 50 mm
Probability of 1-30 %		Low Chance
Probability of 30-70 %		Moderate Chance
Probability greater than 70%		High Chance
Term	Amount of Rain	Type of day
Scanty Rainfall	Less than 1 mm	Relatively dry day
Moderate Rainfall	1-10 mm	Relatively wet day
Heavy Rainfall	10-50 mm	Wet day
Very heavy Rainfall	Greater than 50 mm	Excessively wet day

Definitions used in the forecast and bulletin:

Weather Assessment for the Second dekad of June (11th – 20th) 2015

Heavy to very heavy rainfall occurred over Trinidad and Tobago during the second dekad (ten days) of June which improved the rain fed water availability to the farming community. In Trinidad, rainfall amounts varied during the dekad from scanty on fewer days to very heavy rainfall with days one, five and

<u>Disclaimer</u>



eight recording 33.7 mm, 50.7 mm and 11.8 mm respectively at Piarco, Trinidad. In Tobago, scanty to heavy rainfall occurred with day five recording 21.5 mm at Crown Point, Tobago.

Compared to the previous dekad, the average maximum temperature decreased by 1.4°C, while minimum temperatures increased by 0.3°C in Trinidad. In Tobago, maximum temperature decreased by 0.5°C while minimum temperatures increased by 0.3°C. Maximum temperatures peaked at 33.0 °C at Piarco and at 32.0 °C at Crown Point. Rain fall during the period would have been very beneficial to agriculture and would have significantly improved the agriculture water shortage experienced during the last few months.

Expected Weather for the Third Dekad $(21^{st} - 30^{th})$ of June, 2015 and Likely Impact on Agriculture

The forecast for the third ten days of June shows strong possibilities for weather which will continue to be favourable for agriculture with a mixture of dry and wet days with days four, six, seven and eight receiving the largest amounts of rain. Overall, there is a 75% chance for the total rainfall of the last ten days to range between 10.0 mm and 75.0 mm across varying districts of the country, with Tobago and parts of eastern Trinidad likely to receive the highest rainfall amounts. However, there is still a small chance (25%) for the total rainfall to be below 10 mm.

Throughout the dekad, average temperatures are expected to be warmer than usual to be near 28.6 °C in Trinidad and 28.5 °C in Tobago while maximum temperatures are likely to be near 33.0 °C in Trinidad and near 31.5 °C in Tobago. Minimum temperatures are likely to be above 24.0 °for both Trinidad and Tobago. Average relative humidity values are expected to range between the low seventies (70's) to mid eighties (80's) percentage in both island during daylight hours, with higher values during rainfall occurrence. Wind speeds are expected to be moderate (5 – 8 meters per second) at 2.0 meters from the surface.

During the third dekad, conditions are likely to be sufficient to meet crop water requirements. The rainfall will continue to assist with the green-up process of pastures but at the same time will encourage weeds to grow. The expected rainfall will decrease the need for irrigation, reduce the occurrence of heat and water stresses in plants and animals and improve water for agriculture. However, farmers must be reminded that the increase in water availability can also encourage fungal growth and development of pest and diseases.

Preliminary Rainfall and Temperature Outlook for First Ten Days of July 2015

The first dekad of July favour moderate rainfall for the first five days. Maximum temperatures will continue to be warmer than usual.

<u>Disclaimer</u>

This information is provided with the understanding that the Trinidad and Tobago Meteorological Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the forecast or outlook contained in this document. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.



Trinidad Rainfall Forecast for the Third Dekad of June $(21^{st} - 30^{th})$ 2015



Figure 1. Rainfall Map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the third ten days of June 2015 and percentage probability of occurrence.

Eastern and North-Eastern areas

Moderate chance (75 %) of mean daily rainfall up to 3.0 mm.

South-Eastern areas

Moderate chance (75 %) of mean daily rainfall up to 3.0 mm.

Southern areas

Moderate chance (75 %) of mean daily rainfall up to 3.0 mm.

South-Western areas

Moderate chance (75%) of mean daily rainfall up to 1.5 mm.

<u>Disclaimer</u>



Northern, North-Western areas

Moderate chance (75 %) of mean daily rainfall up to 2.0 mm.

Central, West-Central and inland areas

Moderate chance (75 %) of mean daily rainfall up to 2.0 mm.

Tobago Rainfall Forecast for the Third Dekad of June $(21^{st} - 30^{th})$ 2015



Figure 2. Rainfall Map of Tobago showing expected mean rainfall totals for districts across Tobago during the third ten days June 2015 and percentage probability of occurrence.

North-Eastern areas

Moderate chance (75 %) of mean daily rainfall up to 7.5 mm.

South-Western areas

Moderate chance (75%) of mean daily rainfall up to 5.0 mm.

<u>Disclaimer</u>



Temperatures

Trinidad Temperature Forecast for the third dekad of June (21st-30th) 2015

High chance (75 % chance) for above normal mean daily temperatures (warmer than 27.6 °C).

High chance (75 % chance) for the daily maximum temperature to exceed 32.5 °C.

High chance (70 % chance) for the minimum night-time temperature to remain above 24.5 °C.

Tobago Temperature Forecast for the second third dekad of June (21st-30th) 2015

High chance (75 % chance) for above normal mean daily temperatures (warmer than 27.2 °C).

High chance (75 % chance) for the daily maximum temperatures to exceed 31.0 °C.

High chance (70 % chance) of the minimum night-time temperatures remaining above 24.5 °C.

Summary

The forecast for the third ten days of June shows strong possibilities for weather which will continue to be favourable for agriculture with a mixture of dry and wet days with days four, six, seven and eight receiving the largest amounts of rain. Overall, there is a 75% chance for the total rainfall of the last ten days to range between 10.0 mm and 75.0 mm across varying districts of the country, with Tobago and parts of eastern Trinidad likely to receive the highest rainfall amounts. Average temperatures are expected to be warmer than usual to be near 28.6 °C in Trinidad and 28.5°C in Tobago while maximum temperatures are likely to be near 33.0 °C in Trinidad and near 31.5 °C in Tobago. Minimum temperatures are likely to be above 24.0 °for both Trinidad and Tobago. Farmers are reminded that the increase in water availability can also encourage fungal growth and development of pest and diseases.

<u>Disclaimer</u>