

Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the Second Dekad (11th - 20th) of February, 2019

Definitions used in the forecast and bulletin:

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 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

Weather Assessment for the First Ten Days (Dekad) of February (01 -10) 2019

Most areas in Trinidad received no measurable rainfall over the ten-day period February 01-10, 2019, while a few areas, particularly in northeastern and southwestern Trinidad received less than 0.5 mm of rainfall. Rainfall in Tobago was much better with some areas receiving as much as 20.0 mm over the ten day with most of the rain falling on the 05th.

Apart from the wet day in Tobago, the mostly hot and dry conditions were accompanied at times by breezy conditions, late-morning relative humidity values in the low 40's and relatively high day-time temperatures. Together, these conditions led to moderate to high pan evaporation rates at both Piarco and Crown Point, which suggests that soil moisture losses and crop evapotranspiration rates were also moderate to high during the period.

As a result, irrigation needs would have increased, as well as the potential for heat and water stress for most crops.

Disclaimer

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.

Without sufficient irrigation, the hot and dry weather could have a negative impact on crop yields, especially for crops that were in the sensitive stage of their growing seasons. The hot and dry conditions would have also affected some livestock in their sensitive stage of reproduction, as well as the high temperatures could have a negative effect on production in some livestock animals, in the absence of sufficient cooling. At the same time, these conditions were good for ripening of mature crops and fruits and also good for fieldwork including harvesting.

Expected Weather for the Second Ten days (Dekad) of February (11th – 20th) 2019 and Likely Impact on Agriculture

Total rainfall over the next ten (10) days (February 11-20, 2019) is expected to be less than the average for this time of the year. Less than 10.0 mm of rainfall is expected to fall over the period but useful rainfall is still expected on a few days. Farmers in Trinidad, particularly those on the eastern half of the island should expect scanty to moderate rainfall on the 12th, 16th, 18th and 20th, while Tobago farmers should expect useful rainfall on the 12th, 13th, 16th and 17th.

Day-time temperatures are expected to be warmer than average for all of Trinidad and Tobago. Maximum day-time temperatures are expected to peak near 32.0°C in Trinidad and near 31.0°C in Tobago. Minimum temperatures are expected to be between 20.5°C and 23.0°C in Trinidad and between 22.0°C and 23.5°C in Tobago. Farms in the immediate foothills of the northern range and other hilly areas can expect slightly lower night temperatures. Relative humidity values are forecasted to get as low as 43 % during the late-morning to early-afternoon on most days. Wind speeds are likely to be moderate to strong (between 20 to 35 kilometers per hour) during the day and close to calm (10 kilometers per hour and less) during the late evening and night. Water losses based on pan evaporation rates are expected to be moderate to high, ranging between 5.0 mm per day to 8.0 mm per day. This suggests, similar daily crop evapotranspiration rates are likely during the period.

Based on the forecast, farmers should expect to see an increase in heat and water stress especially among newly planted, germinating and developing plants and crops, and should take measures that protect against leaves and flowers-drop, due to the dryness. Over all, the mostly hot and dry conditions will require irrigation. Farmers are encouraged to prolong soil moisture by mulching crops after irrigation or rainfall. With a mixture of hot and dry conditions forecasted, farmers should watch out for increased incidence of some insect pests, such as sweet potato weevil, which favour these conditions. Even though the hot and dry conditions are expected to be buffered by the windy conditions, the conditions may still negatively affect some livestock in their sensitive stage of reproduction. Similarly, the high temperatures could have a negative effect on production in some livestock, if insufficient actions are taken to reduce their exposure to the heat.

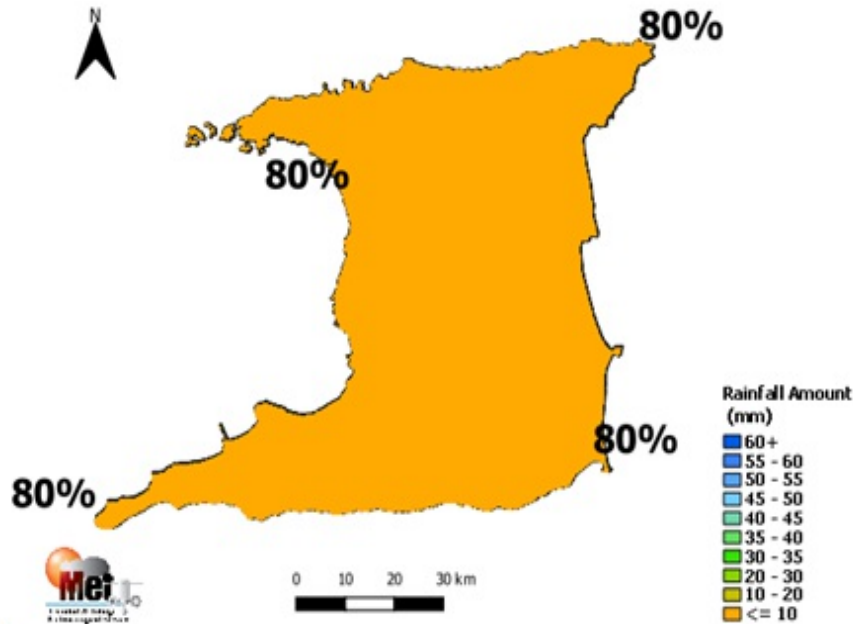
Preliminary Rainfall and Temperature Outlook for Third Ten Days of February

The outlook indicates a continuation of mostly dry conditions but scanty to moderate rainfall is expected during the first five days.

Disclaimer

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 Second Ten Days of February (11th -20th) 2019



Eastern and North-Eastern areas

Moderate chance (80 %) of mean daily rainfall up to 1.0 mm.

South-Eastern areas

Moderate chance (80 %) of mean daily rainfall up to 0.8 mm.

Southern areas

Moderate chance (80%) of mean daily rainfall up to 0.5 mm.

Central, West-Central and inland areas

Moderate to chance (80 %) of mean daily rainfall up to 0.8 mm.

South-Western areas

Moderate chance (80 %) of mean daily rainfall up to 0.3 mm.

Northern, North-Western areas

Moderate chance (80%) of mean daily rainfall up to 0.5 mm.

Figure 1. Rainfall Map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the second 10-days of February 2019.

Disclaimer

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.

Tobago Rainfall Forecast for the Second Ten Days of February (11th - 20th) 2019

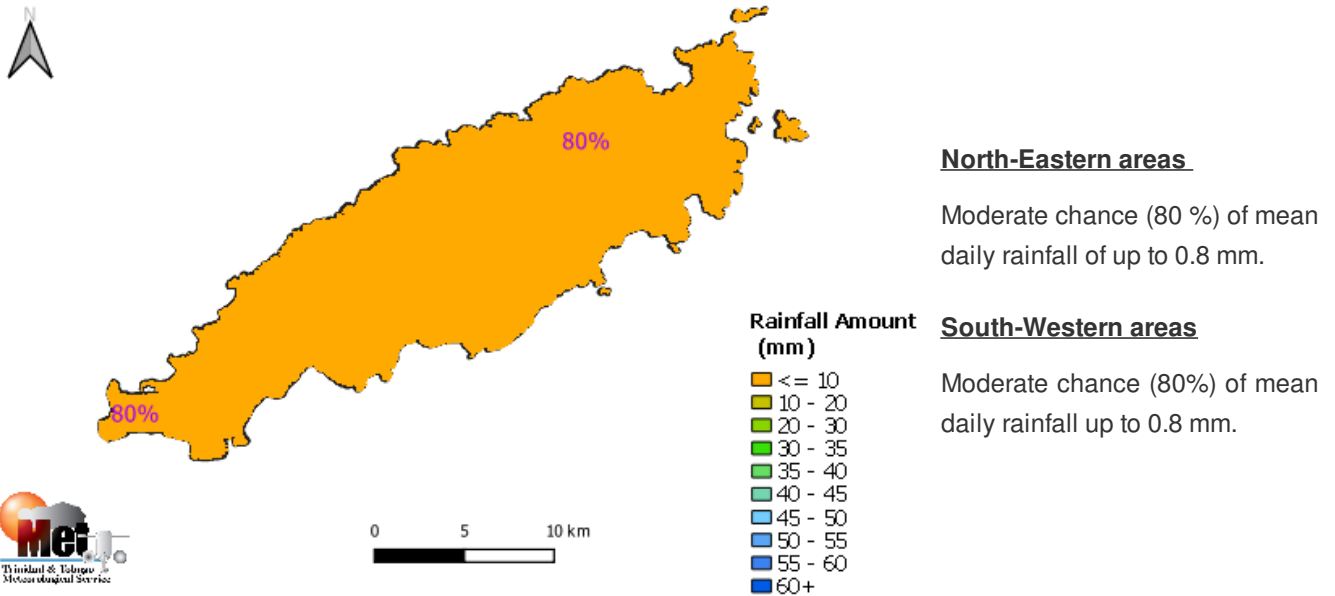


Figure 2. Rainfall Map of Tobago showing expected mean rainfall totals for districts across Tobago during the second 10-days of February 2019.

Temperatures

Trinidad: Temperature Forecasts for the Second Ten Days of February (11th-20th) 2019

High chance (80 % chance) of warmer than average daily mean temperatures (warmer than 26.3 °C).

High chance (80 % chance) for day-time maximum temperatures near 32.0 °C.

High chance (80% chance) for night-time minimum temperature below 23.0°C.

Tobago: Temperature Forecasts for the Second Ten Days of February (11th-20th) 2019

High chance (75 % chance) of warmer than average daily mean temperatures (warmer than 26.0 °C).

High chance (80 % chance) for day-time maximum temperatures near 31.0 °C.

High chance (80% chance) for night-time minimum temperature below 23.5°C.

Disclaimer

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.

Summary

The forecast for the second ten days of February indicates low rainfall amounts are likely to continue with less than average rainfall expected, as dry and hot weather is set to dominate. Scanty to moderate showers are expected on the 12th, 16th, 17th and 20th in Trinidad and on the 12th, 13th, 16th and 17th in Tobago. Ten-day rainfall totals are not expected to exceed 10.0 mm. Temperatures are expected to remain warmer than average with maximum temperatures likely to peak near 32.0°C in Trinidad and near 31.0°C in Tobago. Farmers should expect an increase in heat and water stress in newly planted, germinating and developing plants. Given the anticipated hot and dry conditions, farmers should protect crop root areas by mulching after wetting, and provide shade for livestock, where necessary.

Disclaimer

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.