

## Agro-meteorological Bulletin and Assessment for Farmers and Livestock Producers of Trinidad and Tobago for the First Dekad (1st - 10th) of February, 2022

### 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 Bulletin for Farmers and Livestock Producers of Trinidad and Tobago for the 15-day period (1<sup>st</sup>– 15<sup>th</sup>) of February 2022

Date	Weather	Temperature	Heat Real Feel	Day Moisture (Relative) (Humidity)	Wind

### 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.

Issue date: 2022-02-01

1 <sup>st</sup>		1.0 to 3.0 mm of rainfall is possible	Partly cloudy with one or two showers	Warm  Max/Min Temperatures 31.8/21.0°C	Feels like 35-39°C	55-68%	 Moderate easterly 20 km/h Gust 40 km/h
2 <sup>nd</sup>		1.0 to 2.0 mm of rainfall is possible	Partly cloudy with one or two showers	Warm  Max/Min Temperatures 31.8/21.5°C	Feels like 34-38°C	50-65%	 Moderate easterly 20 km/h Gust 40 km/h
3 <sup>rd</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	Warm  Max/Min Temperatures 32.0/21.5°C	Feels like 34-38°C	48-64%	 Moderate easterly 20 km/h Gust 40 km/h
4 <sup>th</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	Warm  Max/Min Temperatures 32.0/19.5°C	Feels like 32-37°C	40-59%	 Moderate easterly 20 km/h Gust 40 km/h
5 <sup>th</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	Warm 	Feels like		 Moderate easterly 20 km/h
















## 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.

	of a shower		shower	Max/Min Temperatures 31.5/19.5°C	32- 35°C	40-57%	Gust 40 km/h
6 <sup>th</sup>	 20% chance of a shower	Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.8/20.0°C	Feels like 34- 38°C	48-64%	 Moderate easterly 20 km/h Gust 40 km/h
7 <sup>th</sup>	 40% chance of showers	1.0 to 2.0 mm of rainfall is possible	Partly cloudy with one or two showers	<b>Warm</b>  Max/Min Temperatures 31.8/21.5°C	Feels like 36- 40°C	56-69%	 Moderate easterly 20 km/h Gust 40 km/h
8 <sup>th</sup>	 20% chance of a shower	Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.5/20.0°C	Feels like 35- 37°C	56-62%	 Moderate easterly 20 km/h Gust 40 km/h
9 <sup>th</sup>	 40% chance of showers	1.0 to 2.0 mm of rainfall is possible	Partly cloudy with one or two showers	<b>Warm</b>  Max/Min Temperatures 31.5/21.5°C	Feels like 36- 38°C	55-59%	 Moderate easterly 20 km/h Gust 40 km/h
				<b>Warm</b>			




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.

10 <sup>th</sup>		1.0 to 3.0 mm of rainfall is possible	Partly cloudy with one or two light showers	 Max/Min Temperatures 31.0/21.0°C	Feels like 38-41°C	71-81%	 Moderate easterly 20 km/h Gust 40 km/h
11 <sup>th</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.8/22.0°C	Feels like 34-38°C	48-64%	 Moderate easterly 20 km/h Gust 40 km/h
12 <sup>th</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.5/22.0°C	Feels like 34-38°C	59-64%	 Moderate easterly 20 km/h Gust 40 km/h
13 <sup>th</sup>		Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.8/21.5°C	Feels like 34-38°C	42-59%	 Moderate easterly 20 km/h Gust 40 km/h
14 <sup>th</sup>		1.0 to 2.0 mm of rainfall is possible	Partly cloudy with one or two light showers	<b>Warm</b> 	Feels like		 Moderate easterly 20 km/h

## 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.

	of showers		showers	Max/Min Temperatures 32.0/21.0°C	33- 36°C	42-56%	Gust 40 km/h
15 <sup>th</sup>	 20% chance of a shower	Less than 1.0 mm of rainfall is possible	Patchy cloudy skies with a light shower	<b>Warm</b>  Max/Min Temperatures 31.8/21.5°C	Feels like 34- 38°C	58-64%	 Moderate easterly 20 km/h Gust 40 km/h

## Trinidad Rainfall Forecast for the 15-Day period of February (1<sup>st</sup>-15<sup>th</sup>) 2022

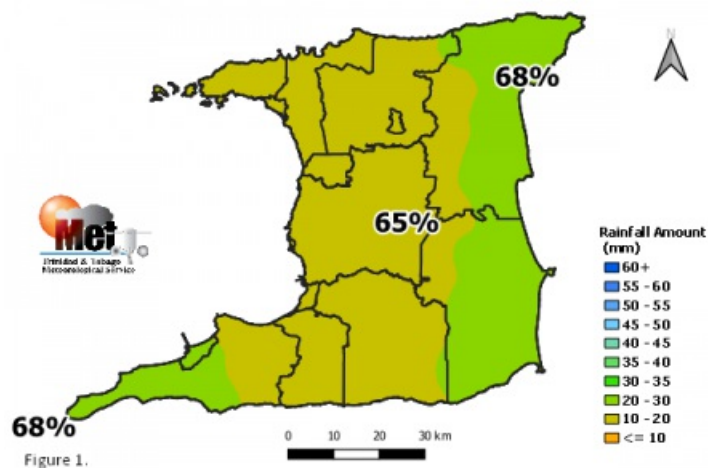


Figure 1. Rainfall map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the 15-day period (1<sup>st</sup> -15<sup>th</sup>) February 2022 and percentage probability of occurrence.

### Eastern, and North-Eastern areas

#### 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.

Moderate chance (68%) of mean daily rainfall up to 2.5 mm.

## South-Eastern areas

Moderate chance (68%) of mean daily rainfall up to 2.5 mm.

## Southern areas

Moderate chance (65%) of mean daily rainfall up to 2.0 mm.

## South-Western areas

Moderate chance (68%) of mean daily rainfall up to 2.5 mm.

## Central, West-Central, and inland areas

Moderate chance (65%) of mean daily rainfall up to 1.0 mm.

## Northern, North-Western areas

Moderate chance (65%) of mean daily rainfall up to 1.0 mm.

## Tobago Rainfall Forecast for the 15-Day period of February (1<sup>st</sup> - 15<sup>th</sup>) 2022

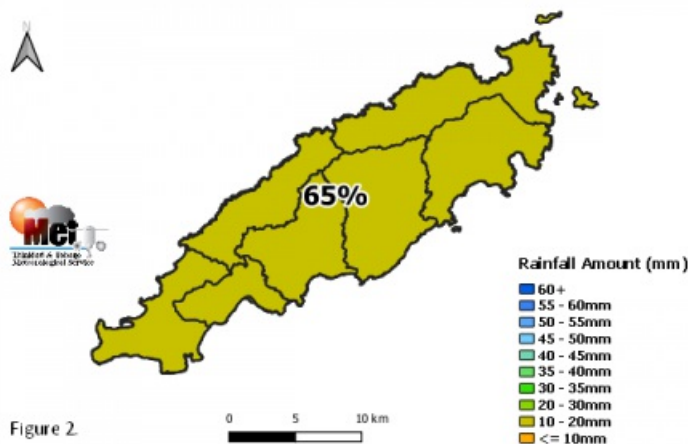


Figure 2. Rainfall map of Tobago showing expected mean rainfall totals for districts across Trinidad during the 15-day period (1<sup>st</sup> - 15<sup>th</sup>) February 2022 and percentage probability of occurrence.

## North-Eastern areas

Moderate chance (65%) of mean daily rainfall up to 1.0 mm.

## 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.

### **South-Western areas**

Moderate chance (65%) of mean daily rainfall up to 1.0 mm.

### **Sun and Moon Positions in the Sky February (1<sup>st</sup>–15<sup>th</sup>) 2022**

The sun is presently at 17.25 degrees South latitude and with this position, the day-length or number of sunlight hours in Trinidad and Tobago from February 1<sup>st</sup> will be 11 hours and 42 minutes, increasing slowly to 11 hours and 48 minutes by 15<sup>th</sup> February 2022. According to the moon phases 2<sup>nd</sup>, 3<sup>rd</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> (First Quarter Phase), 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> of February are good days for planting aboveground crops. However, 1<sup>st</sup> (New Moon Phase), 4<sup>th</sup>, 5<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> February 2022, are poor planting days. These days should be used for removing weeds, clearing land and ploughing fields.

### **Highlighted Possible Impacts on Agriculture:**

Farmlands in Trinidad and Tobago received low amounts of rainfall during the third dekad (21<sup>st</sup>-30<sup>th</sup>) of January. During this third fifteen-day forecast period of (1<sup>st</sup> to 15<sup>th</sup>) February 2022, expect similar rainfall amounts to occur as compared to the third 15-day forecast period (21<sup>st</sup> to 4<sup>th</sup>) January/February 2022. Cloudy patches at times or partly cloudy periods with light showers will interrupt sunny days and clear cool nights. There is a high probability (70%) chance for crop irrigation measures to be implemented at this time due to the low rainfall amounts and low soil moisture content.

However, livestock should be provided with fresh cool water particularly on warmer periods to rehydrate. There is a low probability (10%) chance of heat stress in young livestock, newly germinated and transplanted seedlings onto fields. There is also a low probability (20%) chance for fungi spread, insect pests and warm weather diseases to develop in crop beds. There is also a low probability (10%) chance of root rot and fruit rot on crops due to the expected low rainfall amounts. Rivers will remain at low levels throughout the forecast period.

### **Weather Assessment for the period January (21<sup>st</sup> -30<sup>th</sup>) 2022.**

Mostly dry conditions occurred across Trinidad and Tobago during the 21<sup>st</sup> to 30<sup>th</sup> of January. A wet day occurred on January 27 over northeastern Trinidad, otherwise, there were mostly sunny conditions with one or two showers. Few warm days, warm winds, low river levels and low moisture content in soils may have hindered crop growth and development in general on agricultural lands and vegetation growth in pastures. The rainfall totals maps for the period 21<sup>st</sup> to 30<sup>th</sup> of January for Trinidad and Tobago are located below as figure 1 and figure 2.

### **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.

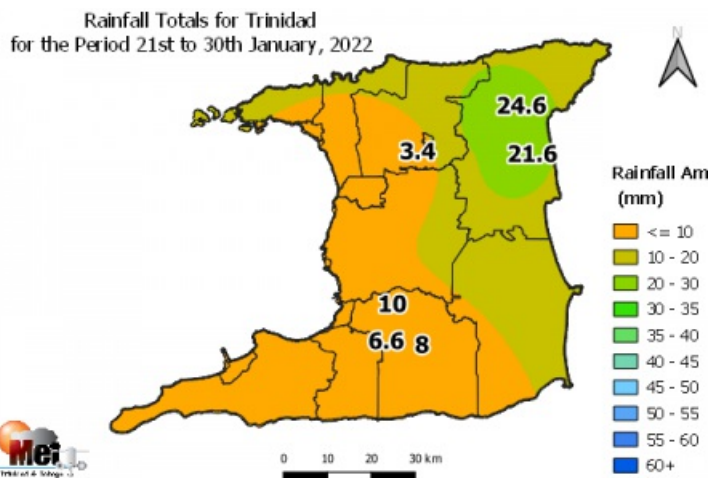


Figure 1. Rainfall map of Trinidad showing measured rainfall totals for varying districts during period 21<sup>st</sup> to 30<sup>th</sup> January.

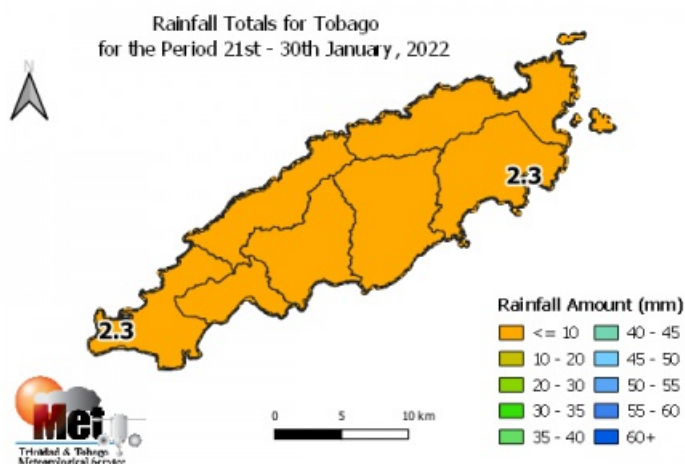


Figure 2. Rainfall map of Tobago showing measured rainfall totals for varying districts during the period 21<sup>st</sup> to 30<sup>th</sup> January.

## Temperatures:

Temperatures were cool to warm during the period with minimum temperature of 19.2 °C and maximum temperature of 31.6 °C, in Trinidad.

In Tobago, temperatures were cool to warm, with minimum temperature of 22.3 °C and maximum temperature of 30.7 °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

Summary of Expected Weather: Relatively wet days are expected on six of the fifteen days. Relatively wet days (rainfall amounts between 1.0 mm and 3.0 mm) are expected on the 1st, 2nd, 7th, 9th, 10th, 14th of February 2022, with higher amounts likely in northeastern, southeastern and southwestern parts of Trinidad. However, relatively dry days with rainfall amounts less than 1.0 mm are expected on the 3rd, 4th, 5th, 6th, 8th, 11th, 12th, 13th, 15th of February 2022. Trinidad: Patchy cloudy to partly cloudy skies are expected on the 1st, 2nd, 7th, 9th, 10th, 14th of February 2022, which will likely bring mostly light rainfall across Trinidad. The daily rainfall totals are forecast to range between 1.0 mm and 3.0 mm with greater amounts occurring over northeastern and southeastern and southwestern parts of Trinidad, with fifteen-day rainfall totals ranging between 10.0 mm and 25.0 mm. A few moderate rainfall events are expected over farmlands in the northeastern areas of Matura, Sangre Grande, Fishing Pond, Plum Mitan; southeastern areas of Manzanilla, Mayaro, Guayaguayare, Moruga and southwestern parts of Point Fortin, La Brea and Cedros. However, relatively dry days with rainfall amounts less than 1.0 mm are expected on the 3rd, 4th, 5th, 6th, 8th, 11th, 12th, 13th, 15th of February 2022. Tobago: Similar to Trinidad, Tobago will experience patchy cloudy to partly cloudy skies from the 1st, 2nd, 7th, 9th, 10th, 14th of February 2022, which will likely bring mostly light rainfall across farmlands across Tobago. The daily rainfall totals are forecast to range between 1.0 mm and 3.0 mm across different farmlands, with fifteen-day rainfall totals of 10.0 mm. However, relatively dry days with rainfall amounts less than 1.0 mm are expected on the 3rd, 4th, 5th, 6th, 8th, 11th, 12th, 13th, 15th of February 2022. Temperatures & Winds: The maximum temperatures are expected to remain warm, with temperatures ranging between 31.0oC to 32.0oC throughout the period. However, temperatures are expected to have a real-feel or feels-like between 34.0oC to 41.0oC on most days. The minimum temperatures will range between 19.5oC to 22.0oC during most nights/early mornings, dropping lower in rural areas and valleys. There is a moderate probability (60%) chance of thick mist or fog in patches in valleys, low-lying spaces, crop fields, pastures and savannahs. Moderate easterly winds of an average speed ranging between 10 km/h and 20 km/h are expected, with gusts ranging between 40 km/h and 50 km/h at times. Low rainfall totals, mostly average wind speeds, warm days and low feels-like temperatures will sustain average evapo-transpiration rates in crops ranging between 4.0 and 8.5 millimeters per day. Moisture levels: Over the fifteen-day period across Trinidad and Tobago, moisture levels are expected to be low, with average daytime relative humidity values in the lower-40s to lower-80s, in terms of percentage

## 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.