## Weather Forecast and Bulletin for Farmers and Livestock Producers of Trinidad and Tobago for the 15-day period

# (16th to the 31st) of July 2024.

Date	Weather			Temperature	Heat Real Feel	Day Moisture (Relative Humidity)	Wind
16 <sup>th</sup>	80% chance of showers	Up to 25 mm of rainfall is possible	Variably cloudy, showers with thunderstorms	Warm  Max/Min  Temperatures°C 31.5/24.0	Feels like 33℃	80-90%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h
17 <sup>th</sup>	80% chance of showers	Up to 25 mm of rainfall is possible	Cloudy, showers with thunderstorms	Max/Min Temperatures °C 30.5 /24.0	Feels like 35°C	70-80%	Gentle Southeasterly 18 km/h Gust 40 km/h
18 <sup>th</sup>	70% chance of showers	10 - 25 mm of rainfall is possible	Partly cloudy to cloudy with showers, thunderstorms	Max/Min Temperatures °C 30.5 /23.0	Feels like 35°C	70-80%	Gentle Southeasterly 18 km/h Gust 40 km/h
19 <sup>th</sup>	70% chance of showers	10 - 25 mm of rainfall is possible	Partly cloudy to cloudy with showers, thunderstorms	Max/Min Temperatures °C 30.0/23.0	Feels like 35°C	62-80%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h
20 <sup>th</sup>	11111	5 - 10 mm of rainfall is possible	Partly cloudy with showers.	Warm	Feels like 37°C	67-76%	Moderate Easterly

	40% chance			Max/Min			27-37 km/h
	of showers			Temperatures °C 31.5/24.0			Gust 40 km/h
21 <sup>st</sup>	40% chance of showers	5 - 10 mm of rainfall is possible	Partly cloudy with showers.	Max/Min Temperatures °C 32.5/25.0	Feels like 39°C	67-78%	Moderate Easterly 27-37 km/h Gust 40 km/h
22 <sup>nd</sup>	40% chance of showers	Up to 5 mm of rainfall is possible	Partly cloudy with showers	Max/Min Temperatures °C 33.0/25.0	Feels like 40°C	63-75%	Moderate SouthEasterly 27-37 km/h Gust 40 km/h
23 <sup>rd</sup>	60% chance of showers	Up to 20 mm of rainfall is possible	Variably cloudy with showers, thunderstorms	Warm  Max/Min Temperatures °C 31.0/25.0	Feels like 38°C	79-88%	Moderate East-northeasterly 18 - 27 km/h Gust 40 km/h
24 <sup>th</sup>	60% chance of showers	Up to 20 mm of rainfall is possible	Variably cloudy with showers, thunderstorms	Max/Min Temperatures °C 32.0/25.0	Feels like 38°C	71-82%	Moderate  East-southeasterly  18 - 27 km/h  Gust 40 km/h
25 <sup>th</sup>	40% chance of showers	5–10 mm of rainfall is possible	Partly cloudy to cloudy with showers	Max/Min Temperatures °C 32.0/25.0	Feels like 38°C	65-80%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h

26 <sup>th</sup>	40% chance of showers	5–10 mm of rainfall is possible	Partly cloudy to cloudy with showers	Max/Min Temperatures °C 30.5/25.0	Feels like 36°C	70-80%	Moderate Easterly 18 - 27 km/h Gust 27 km/h
27 <sup>th</sup>	60% chance of showers	Up to 10 mm of rainfall is possible	Partly cloudy to cloudy with showers, thunderstorms	Max/Min Temperatures °C 30.0/24.0	Feels like 35°C	70-80%	Moderate East-northeasterly 18 - 27 km/h Gust 40 km/h
28 <sup>th</sup>	60% chance of showers	Up to 10 mm of rainfall is possible	Partly cloudy to cloudy with showers, thunderstorms	Max/Min Temperatures °C 30.0/24.0	Feels like 35°C	70-80%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h
29 <sup>th</sup>	40% chance of showers	Less than 10 mm of rainfall is possible	Partly cloudy with showers	Warm  Max/Min  Temperatures °C 32.0/25.0	Feels like 38°C	65-75%	Moderate Easterly 18 - 27 km/h Gust 40 km/h
30 <sup>th</sup>	40% chance of showers	Less than 10 mm of rainfall is possible	Partly cloudy with showers	Warm  Max/Min  Temperatures °C 32.0/25.0	Feels like 38°C	65-75%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h
31 <sup>st</sup>	40% chance of showers	Less than 10 mm of rainfall is possible	Partly cloudy with showers	Warm  Max/Min  Temperatures °C  32.0/25.0	Feels like 38°C	65-75%	Moderate Southeasterly 18 - 27 km/h Gust 40 km/h

## Trinidad Rainfall Forecast for the 15-Day period of July (16th – 31st) 2024.

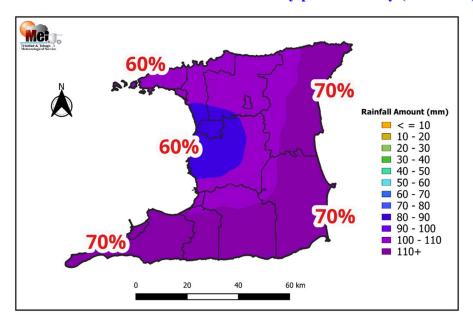


Figure 1. Rainfall map of Trinidad showing expected mean rainfall totals for districts across Trinidad during the 15-day period  $(16^{th}-31^{st})$  July 2024 and percentage probability of occurrence.

#### Eastern, and North-Eastern areas:

Moderate chance (70%) of mean daily rainfall up to 8.0 mm.

#### **South-Eastern areas:**

Moderate chance (70%) of mean daily rainfall up to 8.0 mm.

#### **Southern areas**

Moderate chance (70%) of mean daily rainfall up to 8.0 mm.

#### **South-Western areas**

Moderate chance (70%) of mean daily rainfall up to 8.0 mm.

#### **Central, West-Central, and inland areas**

Moderate chance (60%) of mean daily rainfall up to 5.3 mm.

#### Northern, North-Western areas

Moderate chance (60%) of mean daily rainfall up to 6.6 mm.

## Tobago Rainfall Forecast for the 15-Day period of July (16th – 31st) 2024.

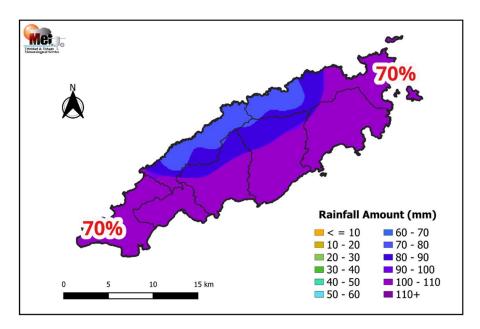


Figure 2. Rainfall map of Tobago showing expected mean rainfall totals for districts across Tobago during the 15-day period  $(16^{th}-31^{st})$  July 2024 and percentage probability of occurrence.

#### **North-Eastern areas**

Moderate chance (70%) of mean daily rainfall up to 7.0 mm.

#### **South-Western areas**

Moderate chance (70%) of mean daily rainfall up to 7.0 mm.

#### **North-Central areas**

Moderate chance (70%) of mean daily rainfall up to 5.0 mm.

## Sun and Moon Positions in the Sky July (16th – 31st) 2024.

The sun is presently at 21.2 degrees North latitude and with this position, the day-length or number of sunlight hours in Trinidad and Tobago on July 16<sup>th</sup> will be 12 hours, 40 minutes and 45 seconds decreasing to 12 hours, 35 minutes, 7 seconds on July 31<sup>st</sup>.

Full Moon occurs July 21<sup>st</sup> and Third Quarter on July 27<sup>th</sup>. According to the tradition of moon's phases: July 19<sup>th</sup> – 20<sup>th</sup> are good days for planting aboveground crops; July 23<sup>rd</sup> – 24<sup>th</sup>, 27<sup>th</sup> – 28<sup>th</sup> and 31<sup>st</sup> are good days for planting belowground crops; The remaining days are poor planting days and are useful for removing weeds, clearing land and ploughing fields.

#### **Summary of Expected Weather:**

#### Moderate to heavy rainfall amounts are expected during the fifteen days.

Wet days are expected during the second half of July: from  $16^{th}-19^{th}$  with the daily rainfall totals forecast up to 25.0 mm;  $23^{rd}-24^{th}$  with the daily rainfall totals forecast up to 20mm; and  $27^{th}-28^{th}$  with up to 10 mm forecast daily. Relatively wet days of less than 10.0 mm of rainfall are expected for the remainder of the period.

#### **Trinidad and Tobago:**

Wet days are expected during the second half of July: from  $16^{th}-19^{th}$  with the daily rainfall totals forecast up to 25.0 mm;  $23^{rd}-24^{th}$  with the daily rainfall totals forecast up to 20mm; and  $27^{th}-28^{th}$  with up to 10 mm forecast daily. Relatively wet days of less than 10.0 mm of rainfall are expected for the remainder of the period.

In Trinidad, the 15-day rainfall totals range between 80.0 mm and 120.0 mm across different farmlands favouring the southern, eastern and north-eastern areas of Trinidad: Sangre Grande, Fishing Pond; Plum Mitan, Nariva and Manzanilla and south-eastern areas of Mayaro, Guayaguayare, Moruga, Barrackpore and Penal. In Tobago, 15-day rainfall totals range between 75.0 mm and 105.0 mm favouring northern eastern and southwestern Tobago.

#### **Temperatures & Winds:**

Very warm, humid conditions are expected. Daily Maximum temperatures range between 30.0 °C to 33.0 °C throughout the period. However, temperatures are expected to have a real-feel or feels-like between 36.0 °C to 42.0 °C on most days. The minimum temperatures will range between 23.0 °C to 25.0 °C during most nights/early mornings.

In general, mostly moderate easterly to southeasterly winds with wind speed of 18–27 km/h are expected. Moderate to heavy rainfall totals, mostly moderate wind speeds, very warm days, and warm feels-like temperatures will sustain average evapotranspiration rates in crops ranging between 5.0 to 15.0 mm per day.

#### **Moisture levels:**

Over the fifteen-day period across Trinidad and Tobago, moisture levels are expected to be moderate to high with average daytime relative humidity values in the mid-60s to upper 80s, in terms of percentage.

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

Warm, wet conditions are expected for the first half of July: partly to mostly cloudy with very warm, humid conditions interrupted by showers with heavy and/or thundery outbreaks. The anticipated rainfall, moist and warm conditions are expected to increase soil moisture leading to saturation in places across Trinidad and Tobago. Land slippage is possible however especially during the wettest period. Scheduling of irrigation days on fields to maintain optimal soil moisture may be less necessary on some days. There is a moderate (40%) chance of heat stress in young livestock, newly germinated and transplanted seedlings onto fields. There is a moderate probability (40-60%) that strong winds and heavy showers may cause physical damage to young plants and flowering mature plants in exposed areas. There is also a low probability (30%) chance for fungi spread, insect pests and warm/moist weather diseases to develop in crop beds.

## Weather Assessment for the period July 1st to 15th 2024.

Extremely heavy rainfall occurred during the first half of July mainly due to the passage of Hurricane Beryl. Periods of rain and heavy showers from July 1<sup>st</sup> to 15<sup>th</sup> resulted in above normal cumulative rainfall amounts at Crown Point, 91.5 mm and exceeded 100mm elsewhere in Tobago, meanwhile Piarco observed 72.8 mm. The rainfall totals maps for the period 1<sup>st</sup> – 15<sup>th</sup> of July for Trinidad and Tobago are located below as figure 1 and figure 2.

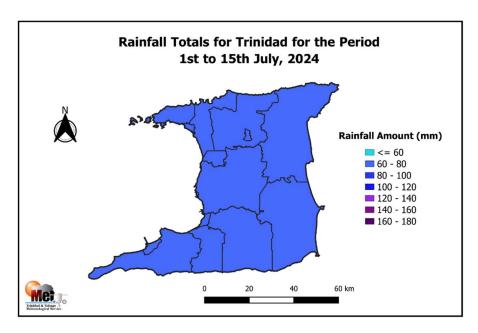


Figure 1. Rainfall map of Trinidad showing measured rainfall totals for varying districts during the period 1<sup>st</sup> to 15<sup>th</sup> of July 2024.

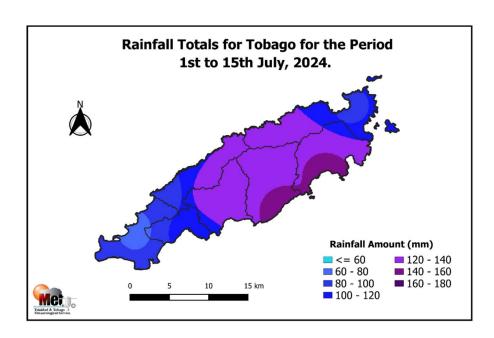


Figure 2. Rainfall map of Tobago showing measured rainfall totals for varying districts during the period 1<sup>st</sup> to 15<sup>th</sup> of July 2024.

### **Temperatures:**

Warm and humid conditions dominated the first half of July. In Trinidad, a maximum daytime temperature 33.6 °C was observed during the 1<sup>st</sup> to 15<sup>th</sup> of July. No hot days (maximum temperatures over 34.0 °C) occurred however, temperatures felt hotter factoring the relative humidity. The minimum night-time temperatures ranged from 23.5 °C to 25°C in Trinidad.

Similarly to Trinidad, Tobago experienced warm conditions from the 1<sup>st</sup> to 15<sup>th</sup> July as the maximum daytime temperature was 32.1 °C and the minimum night-time temperature ranged from 24.3 °C to 26.9 °C.

## Definitions used in the forecast and bulletin:

Tei	·m	Meaning			
Dek	ad	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 1	Rainfall	Between 75% and 125 % of the average			
Below Norn	nal Rainfall	Rainfall below 75% of the average			
Above Norn	nal Rainfall	Rainfall in excess of 125 % of the average			
Much below No	ormal Rainfall	Rainfall below 50% of the average			
Much above No	ormal Rainfall	Rainfall above 150% of the average			
Scanty I	Rainfall	Less than 1 mm			
Moderate	Rainfall	1-10 mm			
Heavy I	Rainfall	10-50 mm			
Very heavy	y Rainfall	Greater than 50 mm			
Probability	of 1-30 %	Low Chance			
Probability	of 30-70 %	Moderate Chance			
Probability gre	ater 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			