

GOVERNMENT OF TONGA



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MEDIA RELEASE

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A La Niña event is underway across the Pacific.

Majority of Tonga island groups remains in drought condition.

A La Niña event is underway across the Pacific Basin. This will be the third successive La Niña since and including 2020. Climate models indicate this La Niña event may peak over September to November 2022, with tropical Pacific temperatures returning to neutral early in 2023.

The drought warning remains based on significant rainfall deficit which still exists in most places since April to July in the Niuaus and May to September in most places. Refer to Table 1 & Table 2 below.

<i>Rainfall totals for April – September 2022 (mm)</i>						
	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>
<i>Niuafo'ou</i>	142.1	102.7	74.5	80.5	93.0	n/a
<i>Niuaatoputapu</i>	69.0	120.0	62.5	91.5	104.0	157.5
<i>Vava'u</i>	346.9	79.1	40.5	76.7	105.9	45.6
<i>Ha'apai</i>	206.4	72.8	18.5	21.2	32.0	64.0
<i>Fua'amotu</i>	276.1	22.3	32.3	22.5	91.6	43.0
<i>Nuku'alofa</i>	300.5	29.0	36.3	20.5	37.9	21.5
<i>'Eua</i>	180.0	n/a	29.5	25.5	62.0	65.5

Table 1 Rainfall recorded at the main centers during the months of April to September 2022

Rainfall Deficit in June to August 2022 (in mm)

Table 2 shows the rainfall deficit for June to August 2022 including the combined deficit. Comparing the combined deficit and the September average rainfall, only Niuaotoputapu has received above average rainfall and the rest of the stations, rainfall deficit still exist. Therefore, the current drought conditions and warning at most places remains.

Table 2 Rainfall deficit during June to August 2022

Island station	Jun-22	Jul-22	Aug-22	Combined rainfall deficit for May - July (mm)	Average September rainfall	September 2022 to date
Niuafoou	-70.7	-33.7	-30.1	-134.5	112.0	n/a
Niuaotoputapu	-76.5	9.2	10.4	-56.9	90.8	157.5
Vavau	-99.4	-16.8	26.4	-89.8	145.9	45.6
Haapai	-72.3	-71.3	-49.5	-193.1	113.2	64.0
Tongatapu (Nuk)	-52.5	-80.1	-74.6	-207.2	112	21.5

Rainfall Outlook for the next 3 to 6 months

Island	September to November 2022 chance of occurrence (%)	December 2022 to February 2023 chance of occurrences (%)
Niuafo'ou	42	36
Niuaotoputapu	48	42
Vava'u	51	49
Ha'apai	43	51
Tongatapu	52	55
Eua	49	54

Table 3 Rainfall prediction for the next 3 to 6 months. Above average (Green) and Average/Near average (Yellow)

The prediction for the coming 3 to 6 months is for average or above average rainfall throughout Tonga. However, if the dry conditions that are currently affecting Tonga persists for another month, water shortages will become problematic for communities throughout the country, especially with reference to drinking water availability and soil water content for agriculture. And it is also important to note that whilst predictions are for above average the confidence of occurrence is relatively low. Moreover, regardless of the above average rainfall forecast, Tonga is still in its dry season and transitioning into the wet season and the average rainfall is low anyway so particular caution should be exercised to ensure water is managed accordingly.

Some actions that can be taken during times of drought and water shortage

1. **Conserve water** – Use your water tank sparingly or implement water rationing saving water for essential needs only e.g. for drinking
2. **Harvest rainwater** - Encourage the collections of as much water as possible when there is rain
3. **Avoid ploughing** – Avoid ploughing and tilling the soil during drought to keep soil moisture
4. **Irrigation** – Consider irrigation or watering of gardens if you have a constant supply of water
5. **Mulching** – Apply mulching in gardens to keep and prevent of loss of soil moisture
6. **Boil Drinking Water** – Water is easily contaminated in times of drought. Make sure you boil the water thoroughly
7. **Coordination with Sectorial Authorities** – Coordinate with Sectorial authorities for more detailed guidance on actions related to preparing and safeguarding against drought and its effects.
8. **Plan your next steps** – Plan your next steps by following the climate predictions closely and the likely timing of the break of the drought.