GOVERNMENT OF TONGA



METEOROLOGY DEPARTMENT MINISTRY OF METEOROLOGY, ENERGY, INFORMATION, DISASTER MANAGEMENT, ENVIRONMENT, CLIMATE CHANGE & COMMUNICATIONS

P.O. Box 845, Domestic Terminal, Fua'amotu Airport, TONGA Tel: (676) 7400062/0800638 Fax: (676) 35123 Email: metstaff@met.gov.to

MEDIA RELEASE

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Niuafo'ou and Niuatoputapu are currently in drought A drought watch is now in force for all of Tonga

Niuafo'ou is currently experiencing drought ranked 17th most severe on record. This drought has been current for 1 month since June 2022. The first warning that this drought could occur was 2 months ago in May 2022. Niuatoputapu is also experiencing drought, ranked the 21st most severe on record. The drought has been current for 2 months since May 2022. That is, the first warning that this drought could occur was 2 months ago in May 2022.

A drought warning is now in force for the rest of Tonga. This drought warning is based on significant rainfall deficit experienced in consecutive months during May and June. Refer to Table 1 and Table 2 below.

Rainfall Total from April to June 2022 (in mm)					
Island	April 2022	May 2022	June 2022		
Niuafo'ou	142.4	102.7	74.5		
Niuatoputapu	69.0	120.0	62.5		
Vava'u	346.9	79.1	40.5		
Ha'apai	206.4	72.8	18.5		
Tongatapu	300.5	29.0	36.3		
'Eua	NA	NA	23.6		

Key	Below Average	Average or near	Above average
		average	

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

Rainfall Deficit in May and June 2022 (in mm)

Island	May 2022	June 2022	Combined rainfall deficit for May & June (in mm)	Average July rainfall
Niuafo'ou	-69.6	-74.7	-144.3	113.7
Niuatoputapu	-37.5	-76.5	-114.0	82
Vava'u	-94.3	-99.4	-193.7	100.6
Ha'apai	-39.2	-72.3	-111.5	92.5
Tongatapu	-86.3	-52.5	-138.6	100.6

Table 2 Rainfall deficit during May and June 2022

Table 2 shows the rainfall deficit for May and June 2022 including the combined deficit. Comparing the combined deficit and the July average rainfall, even if July receives average rainfall at all stations there will still be a rainfall deficit for all stations. This has triggered the current drought warnings so that communities are prepared.

Rainfall Outlook for the next 3 to 6 months

Island	August to October 2022 chance of occurrence (%)	November 2022 to January 2023 chance of occurrences (%)
Niuafo'ou	41	47
Niuatoputapu	43	52
Vava'u	42	63
Ha'apai	47	47
Tongatapu	44	55
Eua	36	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, the dry conditions that are currently affecting Niuafo'ou and Niuatoputapu and starting to emerge for the rest of Tonga if these drought conditions persist 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 in occurrence is relatively low. Moreover, regardless of the above average rainfall forecast, Tongan is in its dry season and the average rainfall is low anyway so particular caution should be exercised in-case the rains arrive late and current and emerging dry conditions are prolonged.

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.