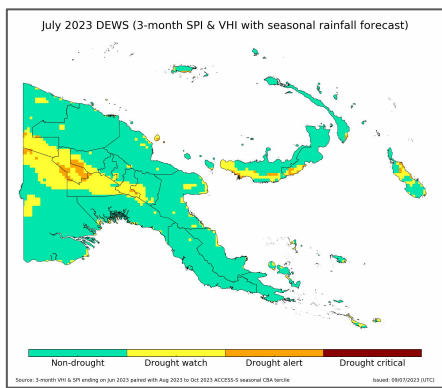


Key messages

Drought Critical no longer remains in parts of Enga and Southern Highlands provinces. Chimbu, Hela and Southern Highlands continues to remain on Drought Watch. Southern Highlands at Drought Watch with severe vulnerability and exposure levels. An El Niño Alert is now in place, when El Niño Alert criteria have been met in the past, an El Niño event has subsequently developed around 70% of the time.

Drought Early Warning Status (DEWS)

Derived from observed 3-month rainfall and vegetation health, along with 3-month forecasted rainfall.

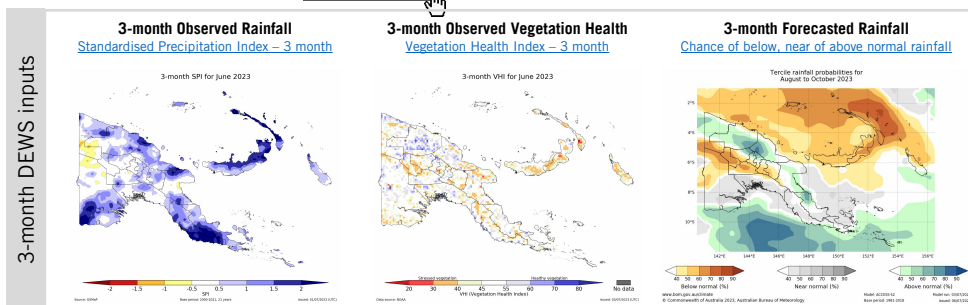


- Drought conditions persist for parts of Bougainville, Hela, Chimbu and Southern Highlands at 3-month timescales.
- East New Britain, Eastern Highlands, Enga, Gulf, Jiwaka, West New Britain and Western Highlands have received well above average rainfall in recent months – easing drought conditions at 3-month timescales.
- At the [12-month rainfall timescale](#), deficiencies linger for Bougainville, New Ireland, East New Britain and Manus as well as some areas in the Highlands and Momase provinces. Long term deficiencies will have different impacts to short term rainfall deficiencies. Low groundwater, brackish wells and reduced streamflow may be some impacts observed at this timescale.

3-month timescale provincial summary

(A province's overall status is given by its majority status on the map and is presented in this [summary table](#))

● Drought Watch	● Drought Alert	● Drought Critical
Below average rainfall or Stressed vegetation or Dry forecast	(Below average rainfall or Stressed vegetation) and Dry forecast	Below average rainfall and Stressed vegetation and Dry forecast
Bougainville, Hela, Chimbu, Southern Highlands	No provinces	No provinces



Links to other timescales:

- [1-month Drought Early Warning Status](#): Drought early warning status using 1-month rainfall, 1-month vegetation health and 3-month rainfall forecast.
- [1-month Standardised Precipitation Index](#): Rainfall over the last month.
- [1-month Vegetation Health Index](#): Vegetation health over the last month.
- [6-month Drought Early Warning Status](#): Drought early warning status using 6-month rainfall, 6-month vegetation health and 3-month rainfall forecast.
- [6-month Standardised Precipitation Index](#): Rainfall over the last 6 months.
- [6-month Vegetation Health Index](#): Vegetation health over the last 6 months.

Provinces at Risk if Drought Occurs

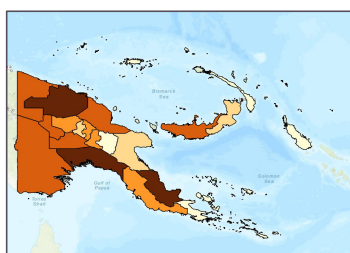
Contextualise drought early warning information with drought risk information.

Drought risk is the probability of harmful impacts resulting from interactions between drought hazard, exposure, and vulnerability. Hazard information is given by the Early Warning Status, with drought exposure and vulnerability levels shown in the maps below.

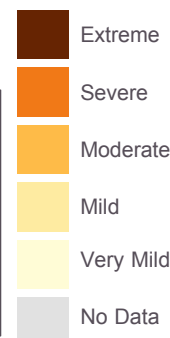
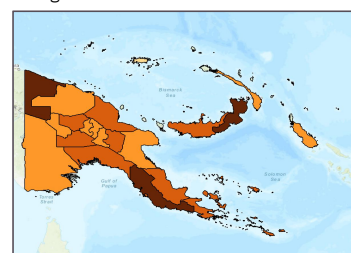
Provinces of concern:

- **Southern Highlands** has a majority Drought Watch status with severe exposure and vulnerability levels.
- **Hela** has a majority Drought Watch status with severe exposure levels and moderate vulnerability levels.
- **Chimbu** has a majority Drought Watch status with moderate exposure and vulnerability levels.

Exposure - Extent of exposed aspects of the total population and its livelihoods in an area which drought may occur.



Vulnerability - Likelihood of exposed factors to suffer negative impacts when drought occurs.



Climate Context

A summary of the relevant climate drivers affecting PNG over the coming months

- ACCESS-S outlook for August to October forecasts below average to average rainfall in the New Guinea Islands and Highlands provinces, also with Western province and lower half of Sandaun province. The rest of the country is forecasted to receive average to above average rainfall.
- An **El Niño Alert** is currently in place. When El Niño Alert criteria have been met in the past, an El Niño event has subsequently developed around 70% of the time. The sea surface temperatures in the central and eastern Pacific Ocean are higher than usual and are surpassing the thresholds for El Niño. According to models, there is a high probability of the temperatures continuing to rise and remaining above El Niño levels until at least around December. Some atmospheric indicators such as the Southern Oscillation Index (SOI) has recently returned to normal levels. So far, we haven't observed consistent changes in wind, cloud, and overall pressure patterns that are typical of El Niño. This means that the Pacific Ocean and the atmosphere have **not fully synchronized** as they do during El Niño events.
- El Niño events typically suppress rainfall across most of PNG, with frost risk increasing in the highlands region due to lower night time temperatures resultant of reduced cloud cover. These impacts are more extreme when El Niño events compound with positive Indian Ocean Dipole (IOD) events, like in 1997 and 2015. **IOD is currently neutral**. Climate models suggest that a positive IOD is possible in the coming months.
- A weakening Madden-Julian Oscillation (MJO) pulse lies over the Indian Ocean. The **MJO is currently weak** or indiscernible. Some models suggest a weak MJO passing through the Maritime Continent over the next couple weeks.