April 2026

Seasonal Monitoring in Cambodia

WFP World Food Programme

SAVING LIVES CHANGING LIVES

Key messages

April 2026 maintained **generally adequate water availability and favorable soil-moisture conditions**, despite **localized dryness and sustained heat stress**, which contributed to increasing **vegetation stress** across the country.

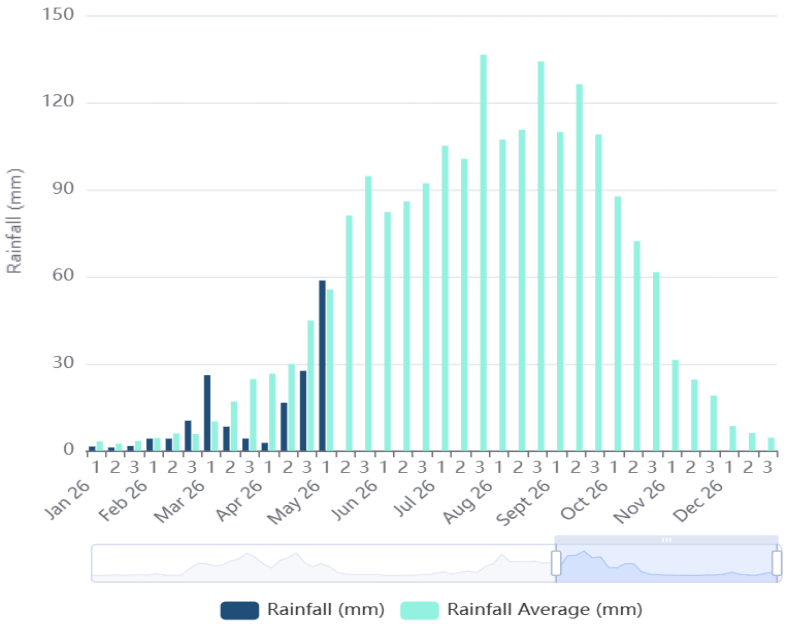
With **a high likelihood of El Niño developing** during May–July, seasonal climate conditions are expected to become increasingly erratic, combining **below-normal rainfall** (particularly in the western and northern regions), **localized extreme rainfall events** (especially in the southern and eastern areas), and **warmer-than-normal temperatures nationwide** during the early monsoon period (May–August 2026).

These evolving patterns are likely to **heighten the risk of alternating dry spells, heat stress, and localized flash flooding**, with implications for **health, water availability, agriculture, and livelihoods**, requiring close monitoring of MoWRAM weather updates and **proactive preparedness.**

RAINFALL DISTRIBUTION

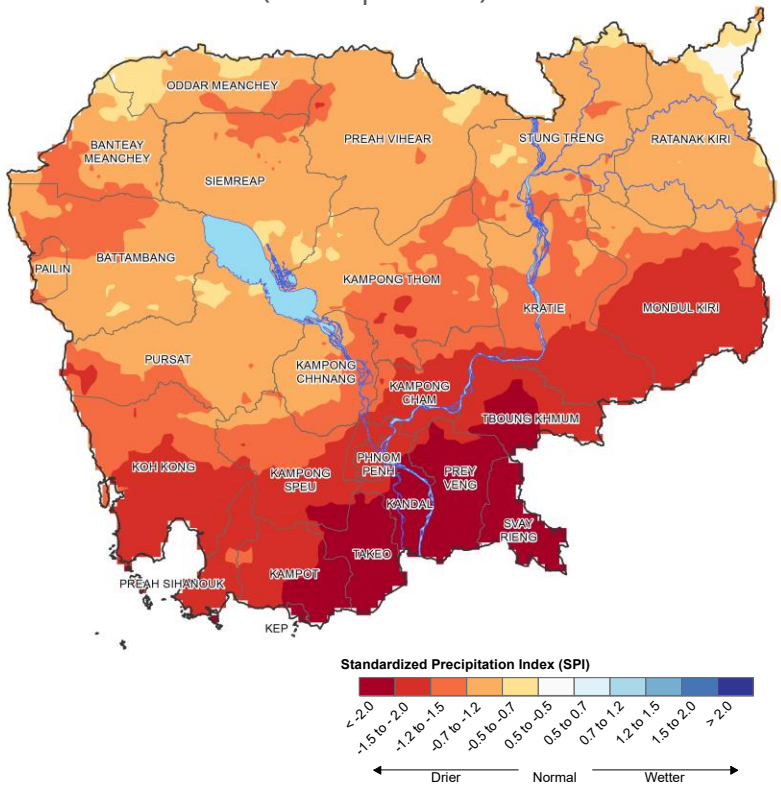
Cambodia experienced below-normal rainfall in April 2026 (see chart below), with the largest deficits observed in the southern provinces (see SPI-1 map below). On a seasonal basis, rainfall over the past three months (February–April) remained low to moderately below normal nationwide, with more pronounced dry conditions in the southern plains and coastal areas (see SPI-3 map below).

National-Average Rainfall Distribution
(From 1-30 April 2026)

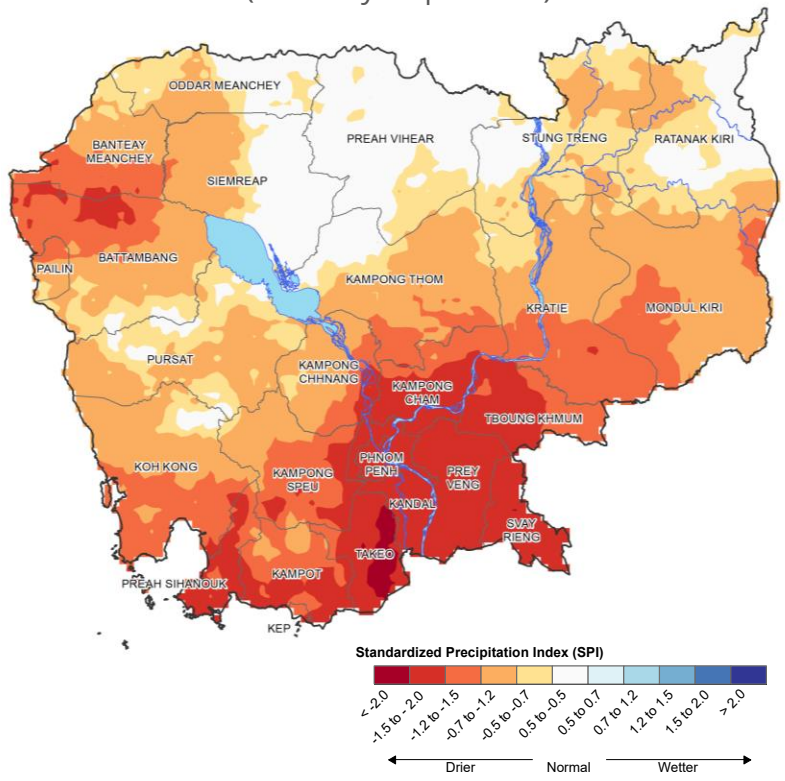


Source: Rainfall from CHIRPS and analysis by WFP.

1-Month Standardized Precipitation Index (SPI-1)*
(1–30 April 2026)



3-Month Standardized Precipitation Index (SPI-3)*
(February – April 2026)



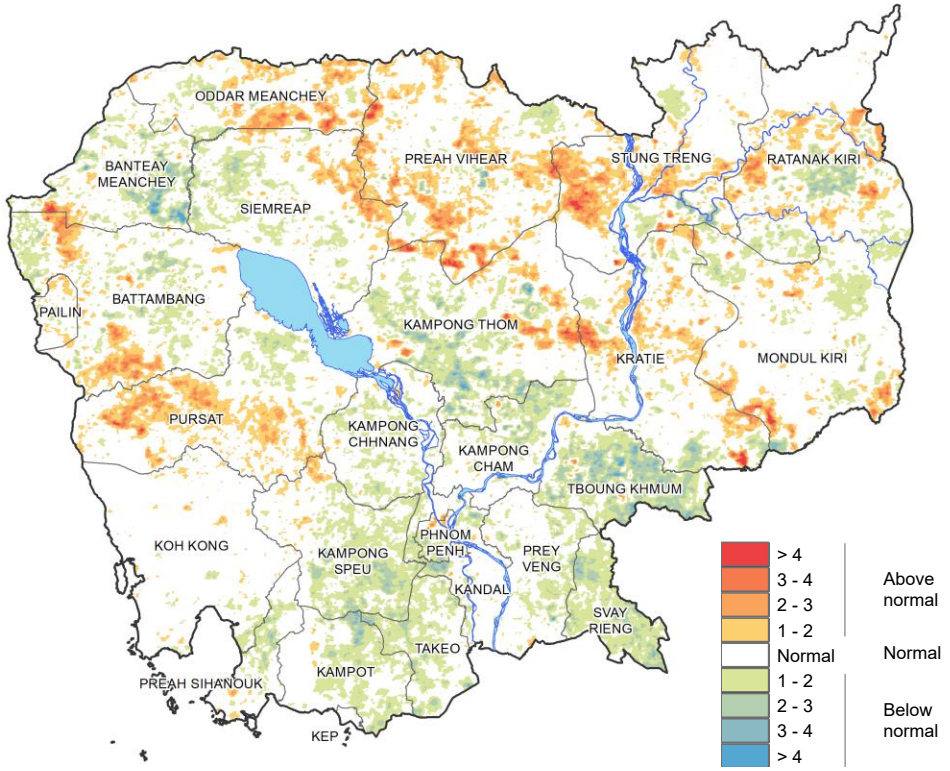
** Note: The Standardized Precipitation Index (SPI) is a gold-standard meteorological drought indicator. A 1-month SPI (SPI-1) identifies short-term rainfall anomalies impacting immediate soil moisture and crop stress, while a 3-month SPI (SPI-3) captures short- to medium-term moisture deficits and early water scarcity—both of which are critical for rainfed agriculture and rural drinking water access.*

TEMPERATURE PATTERN

Land Surface Temperatures (LST) in April were generally above the long-term average nationwide (map below, left). Heat-stress conditions (LST ≥ 35 °C) persisted for more than two weeks across most provinces, except along coastal zones (maps below, right). These prolonged heat episodes are likely to accelerate evapotranspiration and increase risks to human health and livestock wellbeing, particularly under suppressed rainfall conditions.

1-Month Land Surface Temperature (LST) Anomaly

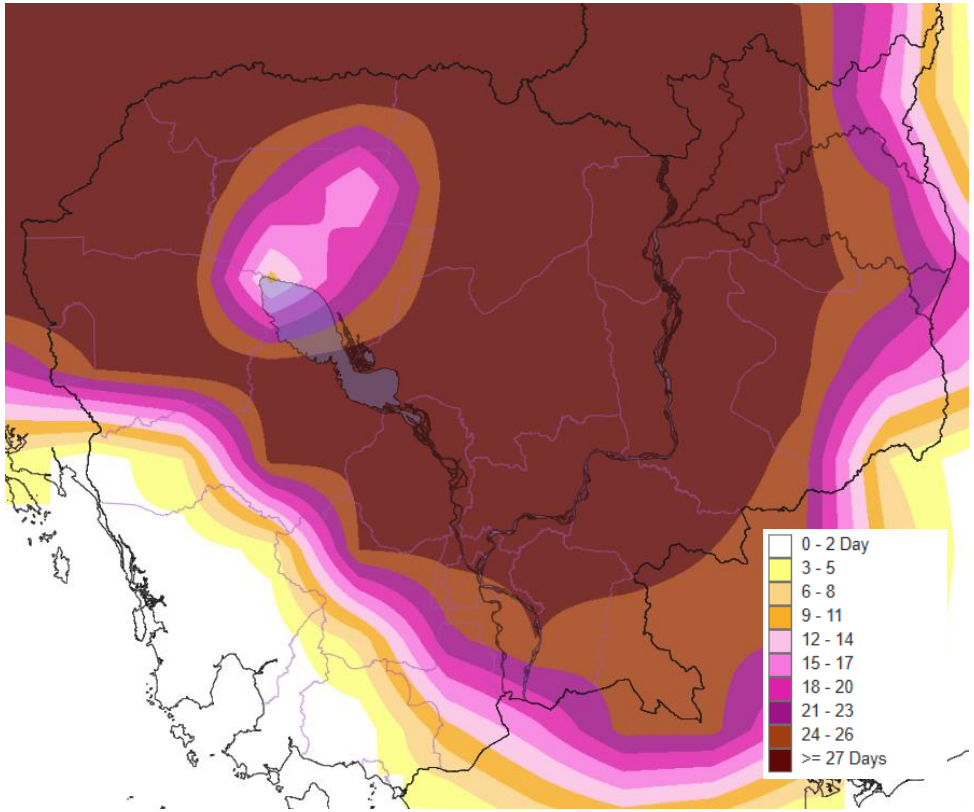
(1–30 April 2026)



Source: LST from MODIS and analysis by WFP

Heat Stress Days (>= 35 °C)

(1–30 April 2026)



Source: USDA (NOAA-CPC)

RIVER WATER LEVELS

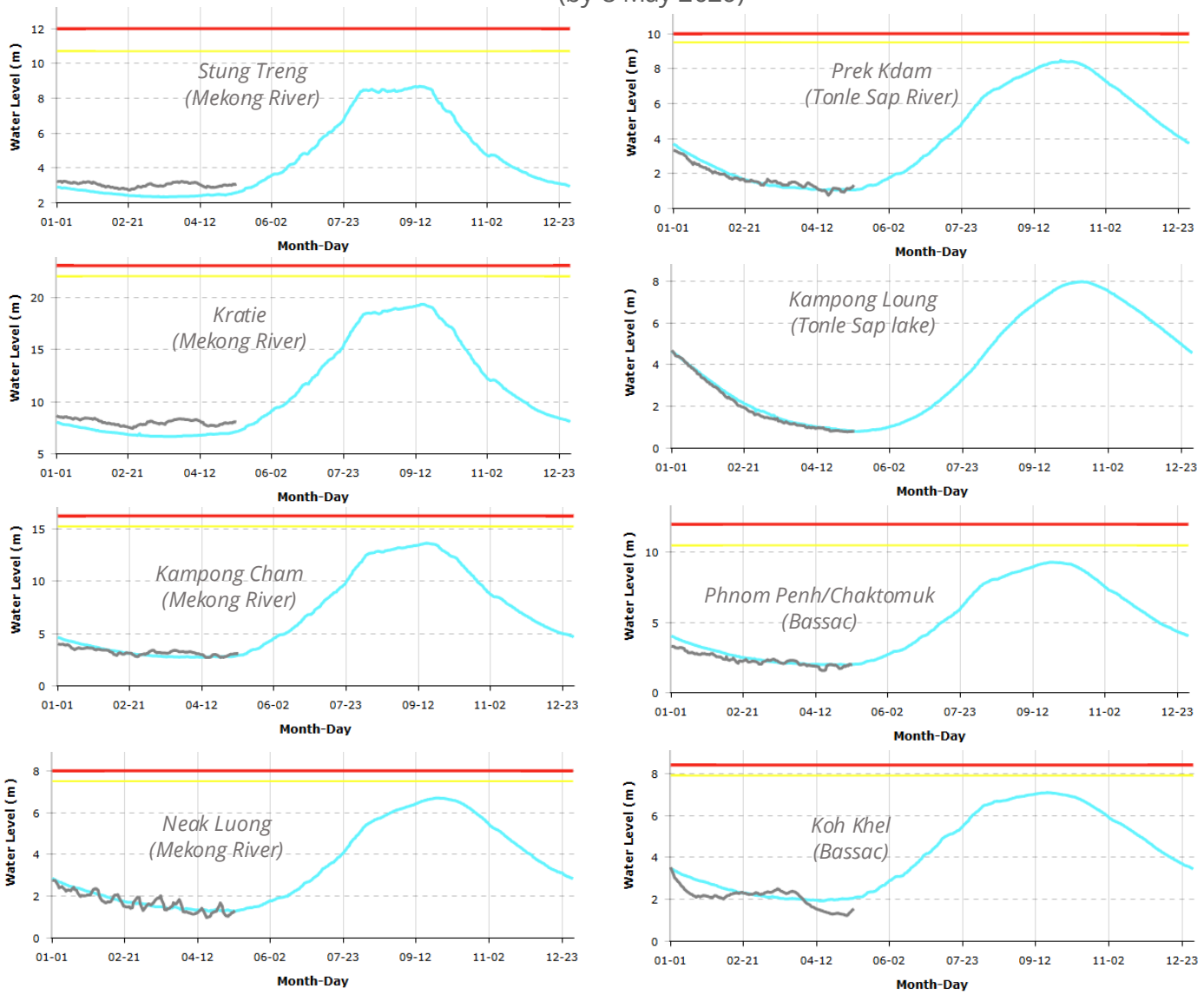
In April 2026, all eight river monitoring stations showed seasonal recession with minor deviations from long-term averages.

Along the Mekong River, water levels were near to above long-term averages at Stung Treng, Kratie, Kampong Cham, and Neak Loung.

The Tonle Sap Lake and River remained close to long-term averages, although total lake volume was approximately 6.5% below average by the end of April.

Along the Bassac River, water levels were near average at Phnom Penh but below long-term average at Koh Khel.

River water level observed in 8 monitoring stations in Cambodia
(by 8 May 2026)



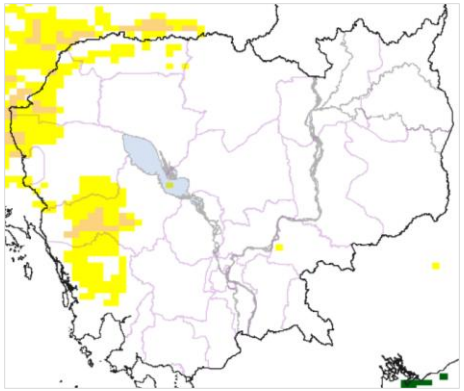
Source: MoWRAM's Department of Hydrology and River Works

SOIL MOISTURE CONDITIONS

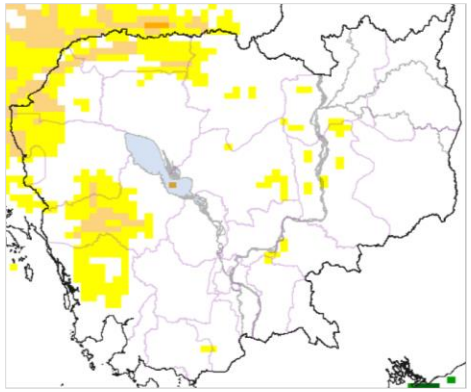
Soil moisture in April remained generally favorable nationwide, supporting dry-season crop production (maps below). However, the combined effects of reduced rainfall and elevated temperatures have increased localized moisture stress in the western and southern regions.

Soil Moisture (Root zone: 0-100 cm) Anomaly

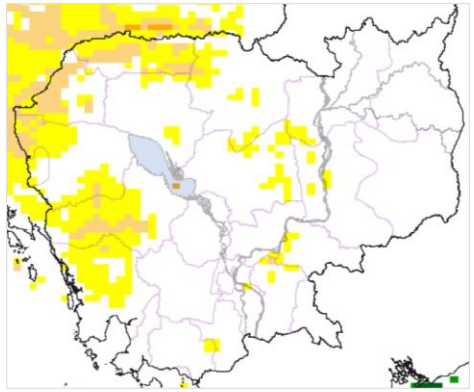
1 April 2026



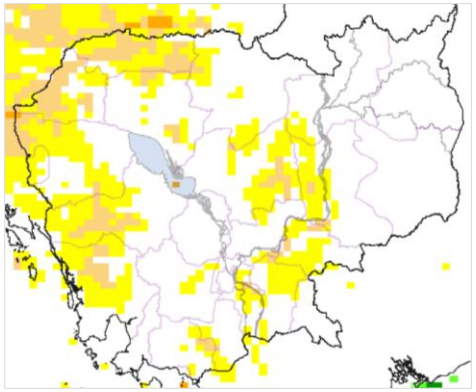
6 April 2026



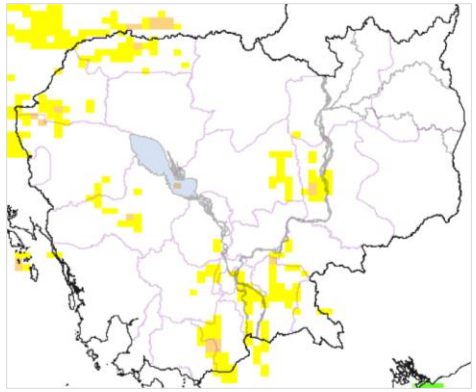
11 April 2026



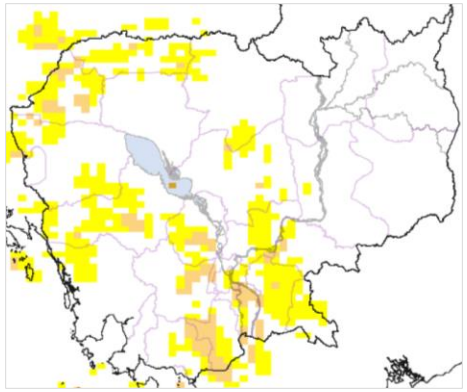
16 April 2026



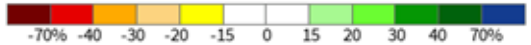
21 April 2026



26 April 2026



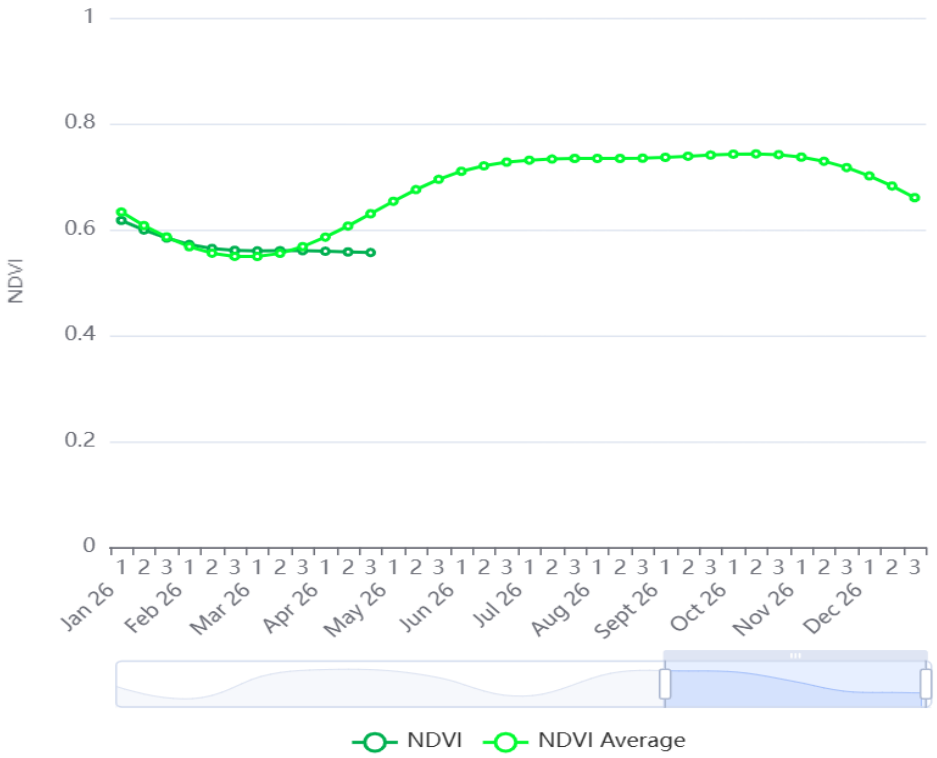
Source: USDA (NASA/GMAO SMAP)



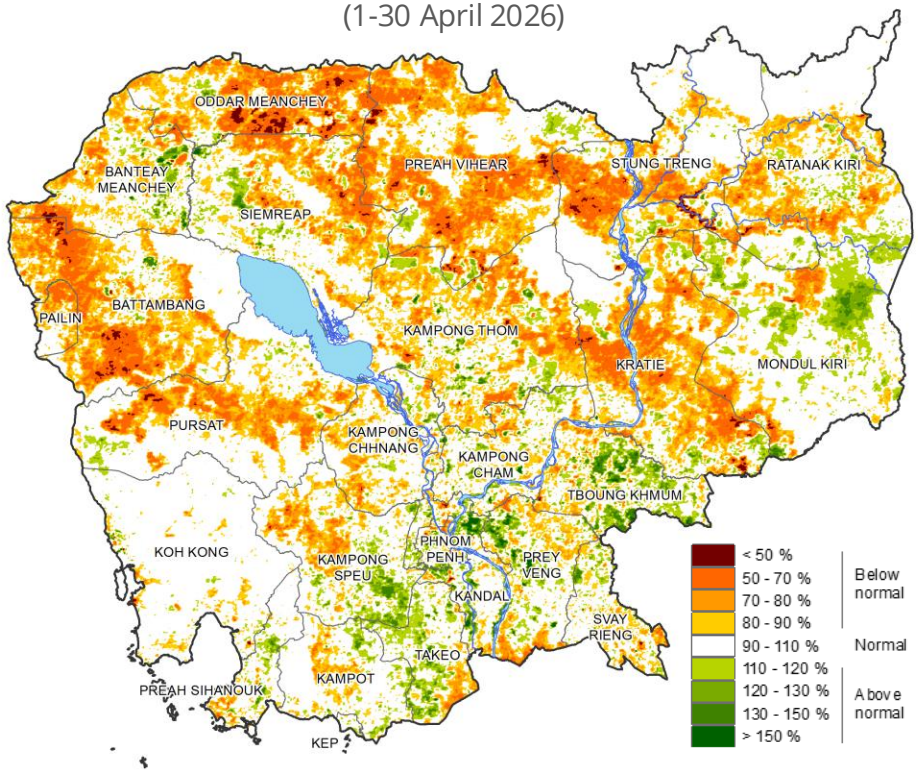
VEGETATION AND CROP CONDITIONS

Vegetation conditions were moderately below the long-term average nationwide (chart below, left), with greater reductions in the west, north, and east, where elevated temperatures and prolonged heat stress persisted (map below, right). Despite these declines, most dry-season paddy areas remained generally healthy—particularly in the Tonle Sap region and southern plains—supported by favorable soil-moisture conditions.

National-Average NDVI
(From 1-30 April 2026)



1-Month NDVI Anomaly
(1-30 April 2026)



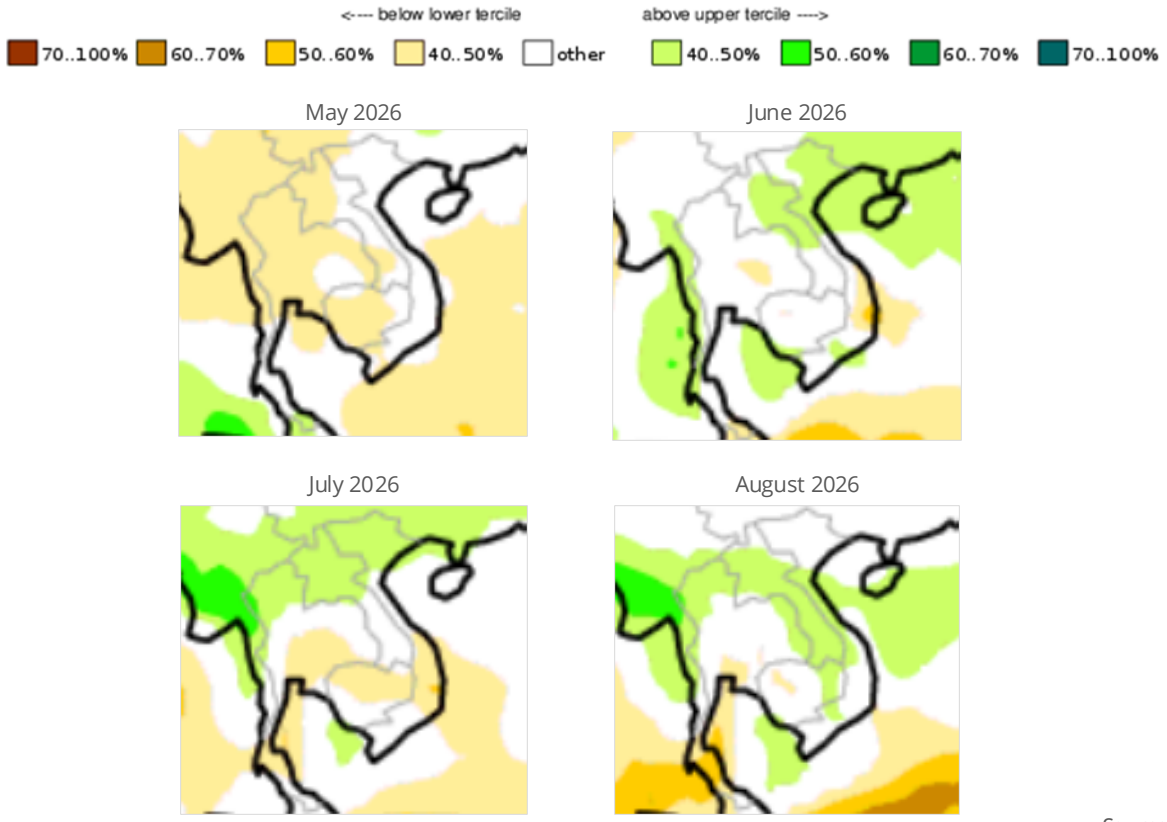
Source: NDVI from MODIS and analysis by WFP

SEASONAL OUTLOOK

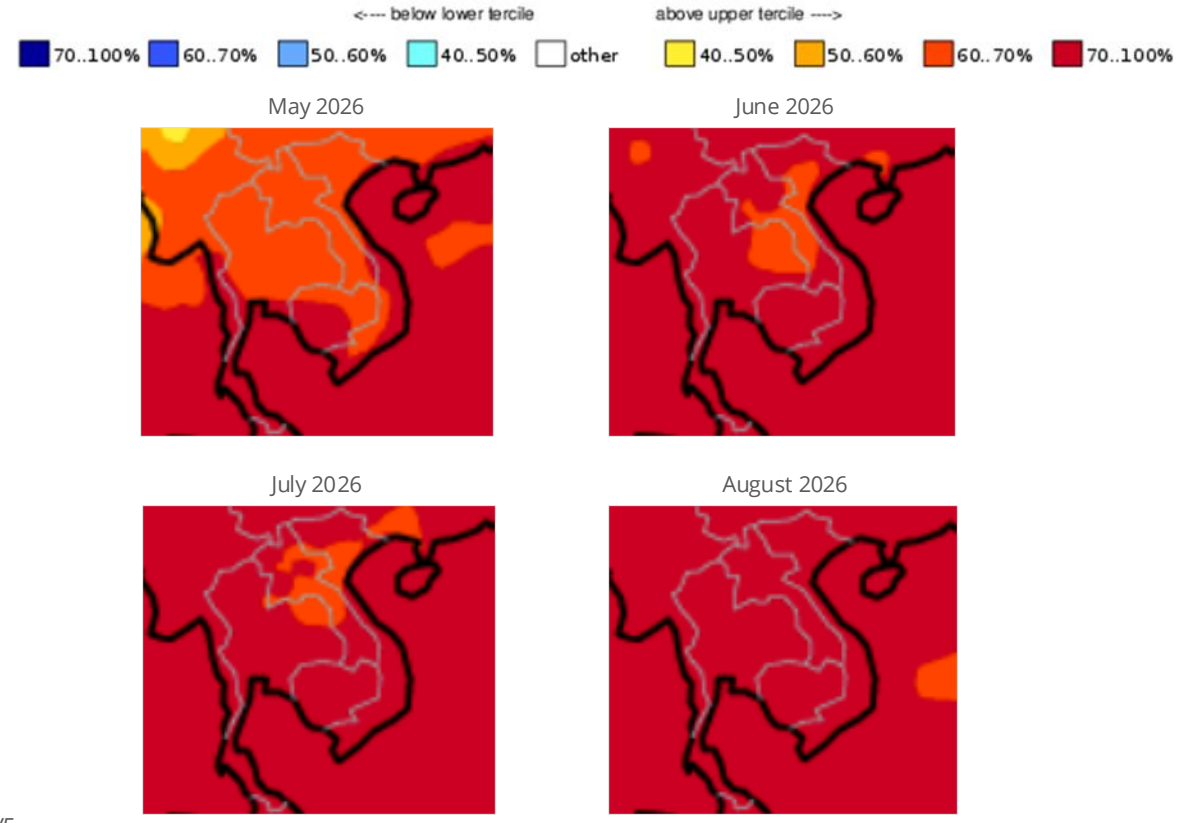
Recent forecasts of the El Niño–Southern Oscillation (ENSO) from CPC/NOAA indicate a very high probability that El Niño will develop during May–July 2026 and persist through the remainder of the year. Under these evolving conditions, Cambodia is expected to experience increasingly erratic rainfall and warmer-than-normal temperatures during the upcoming season (May–August 2026), characterized by:

- A higher likelihood of below-normal rainfall in parts of the country, particularly in the western and northern regions, heightening the risk of dryness.
- An increased probability of localized heavy rainfall events, especially in the southern and eastern areas, raising the risk of flash flooding.
- Above-normal temperatures nationwide, increasing the likelihood of heat-stress conditions.

Seasonal Rainfall Forecast



Seasonal Temperature Forecast



Source: ECMWF

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For further information:

WFP Cambodia - https://www.wfp.org/countries/cambodia