March 2026

WFP
World Food Programme
SAVING LIVES
CHANGING LIVES

# Seasonal Monitoring in Cambodia

## Key messages

Cambodia experienced localized **drier-than-normal rainfall conditions** alongside widespread **heat-stress episodes** in March 2026. However, **soil moisture remained generally adequate**, and **river water levels followed normal seasonal recession**. Vegetation conditions in **dry-season paddy areas remained largely healthy**, while other parts of the country recorded below-average vegetation, particularly in areas experiencing prolonged heat stress.

With the El Niño–Southern Oscillation (ENSO) currently in a neutral condition and likely transitioning toward El Niño during May–July, **rainfall in Cambodia is expected to become increasingly erratic while temperatures continue to rise**—heightening the risk of **localized extreme rainfall, dryness, and heat stress** during the late dry season and early monsoon.

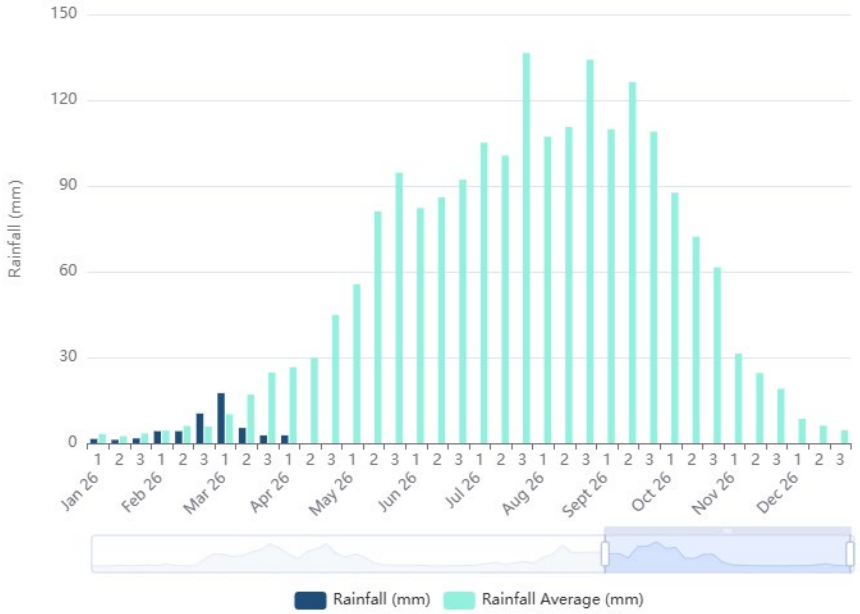
These evolving conditions raise concerns over potential impacts on **human and livestock health, timely planting, water availability and quality,** and **crop development** in the upcoming season. Continued close **monitoring of** MoWRAM weather updates, together with **proactive preparedness**—focused on heat-health prevention and water management by conserving water in dry-affected areas while ensuring rapid drainage where heavy rainfall occurs—will be essential.

# RAINFALL DISTRIBUTION



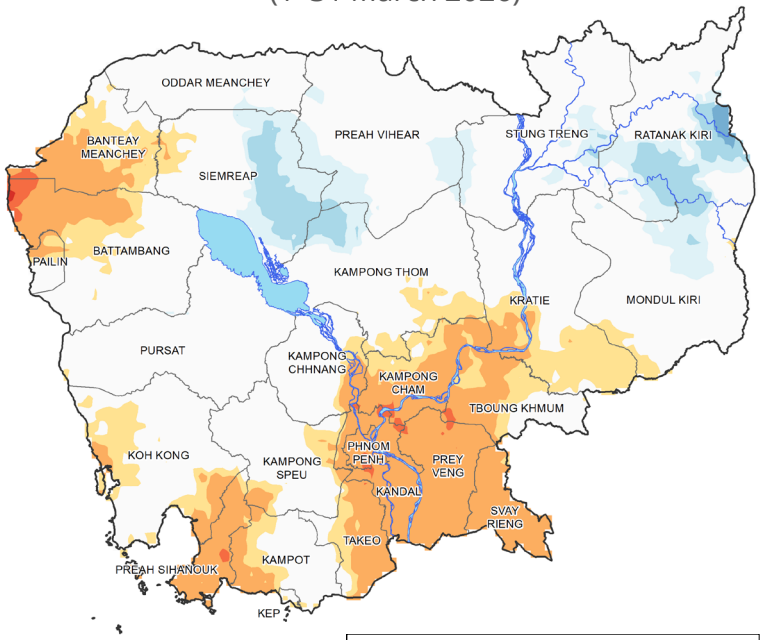
Cambodia experienced below-normal rainfall in March 2026 (see chart, below), with moderate shortages across north-western and southern provinces (see SPI 1 map, below). On a seasonal basis, rainfall over the past three months (January–March) was moderately drier-than-normal across the northwest, southern plains, and coastal areas, while northern and eastern provinces recorded wetter-than-normal conditions (see SPI 3 map, below).

**National-Average Rainfall Distribution**
(From 1-31 March 2026)

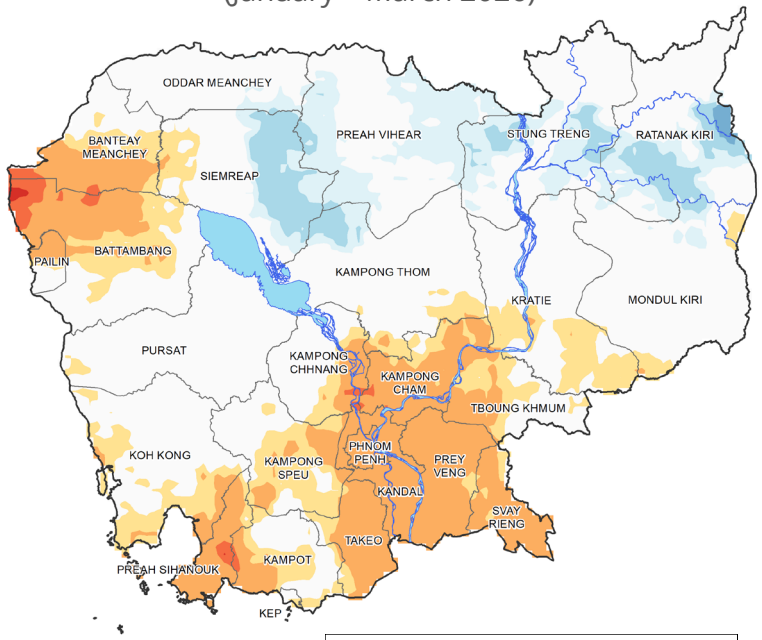



*Source: Rainfall from CHIRPS and analysis by WFP.*

**1-Month Standardized Precipitation Index (SPI-1)***
(1–31 March 2026)




**3-Month Standardized Precipitation Index (SPI-3)***
(January – March 2026)



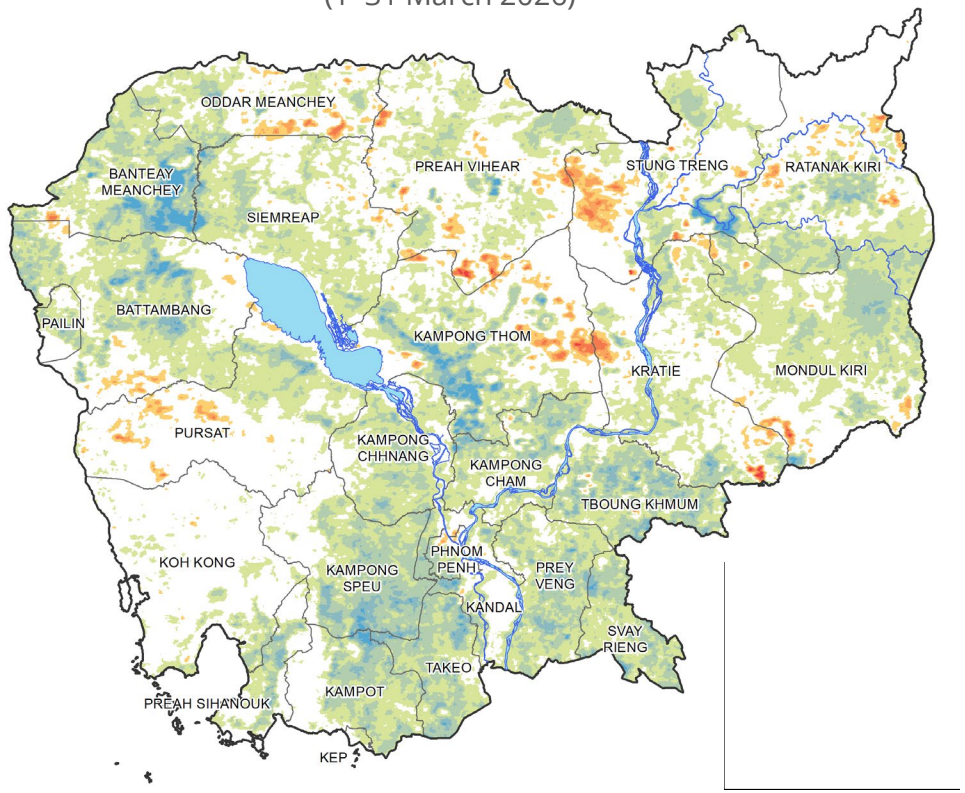

** Note: The Standardized Precipitation Index (SPI) is a gold-standard meteorological drought indicator. A 1-month SPI (SPI-1) identifies short-term rainfall anomalies impacting immediate soil moisture and crop stress, while a 3-month SPI (SPI-3) captures short- to medium-term moisture deficits and early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

# TEMPERATURE PATTERN

Although average Land Surface Temperatures (LST) in March were below long-term means (map below, left), heat-stress conditions (LST ≥ 35 °C) were observed across most provinces, persisting for more than two weeks in the northwest, north, and east (maps below, right). These prolonged multi day heat events are likely to accelerate evapotranspiration and increase risks to human health and livestock wellbeing.

**1-Month Land Surface Temperature (LST) Anomaly**

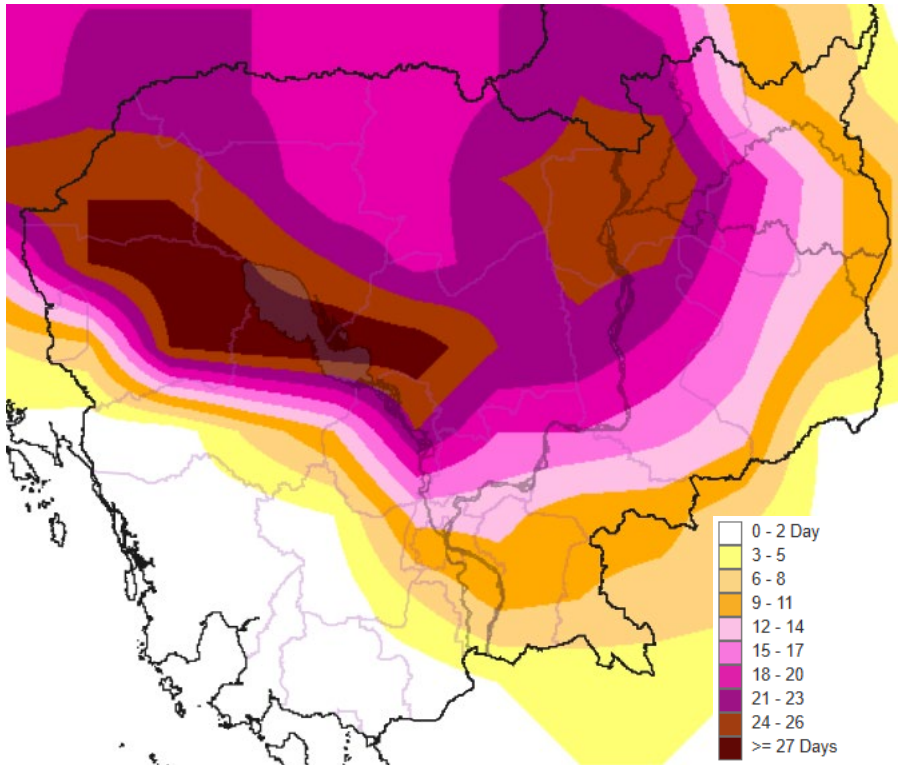
(1–31 March 2026)




*Source: LST from MODIS and analysis by WFP*

**Heat Stress Days (>= 35 °C)**

(1–31 March 2026)




*Source: USDA (NOAA-CPC)*

# RIVER WATER LEVELS



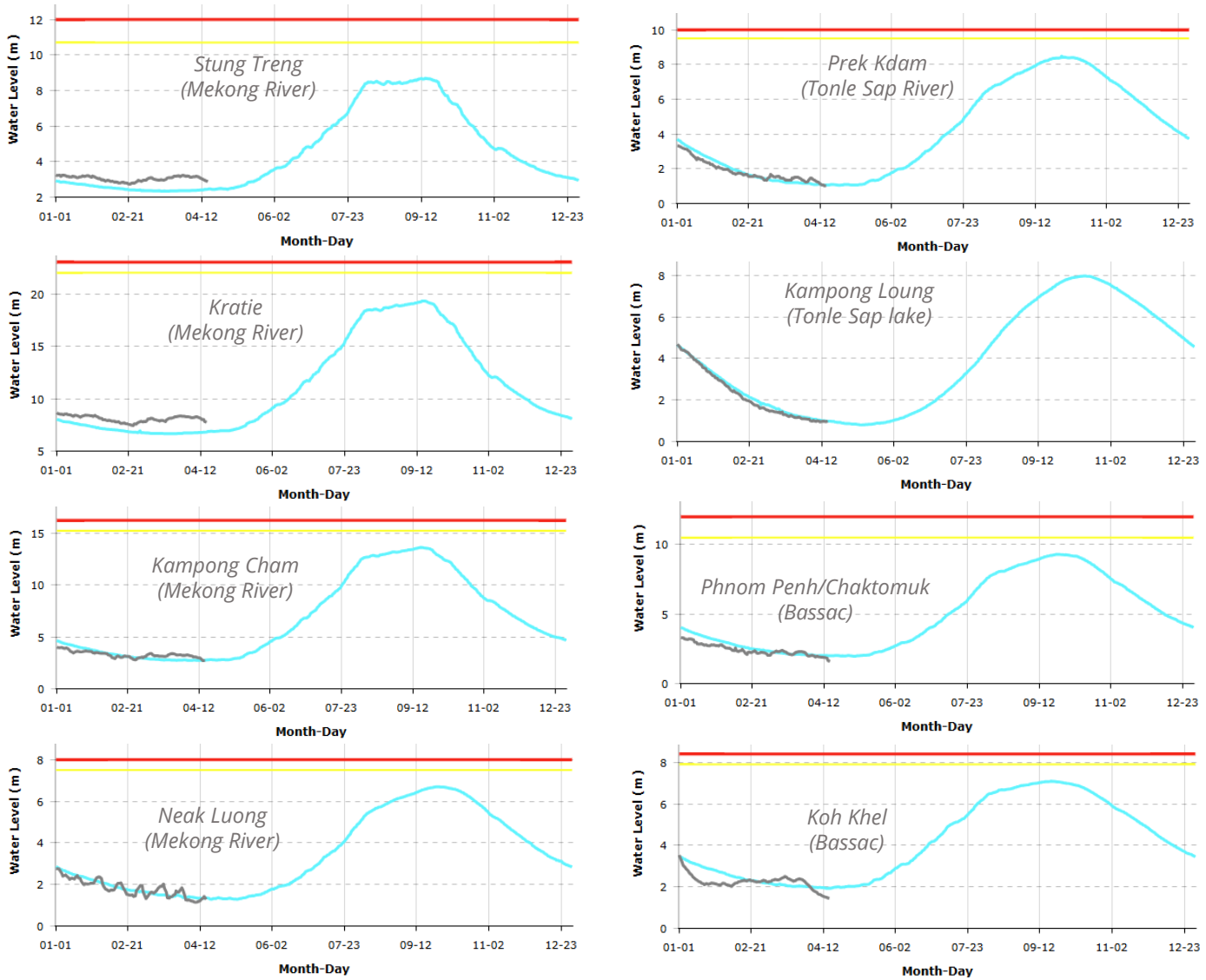
All eight river monitoring stations showed seasonal recession with minor deviations from long-term averages.

Along the Mekong River, water levels were near to above average at Stung Treng, Kratie, Kampong Cham, and Neak Loung, supported by upstream rainfall.

Tonle Sap Lake and River remained near long-term averages, while along the Bassac River, 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 12 April 2026)

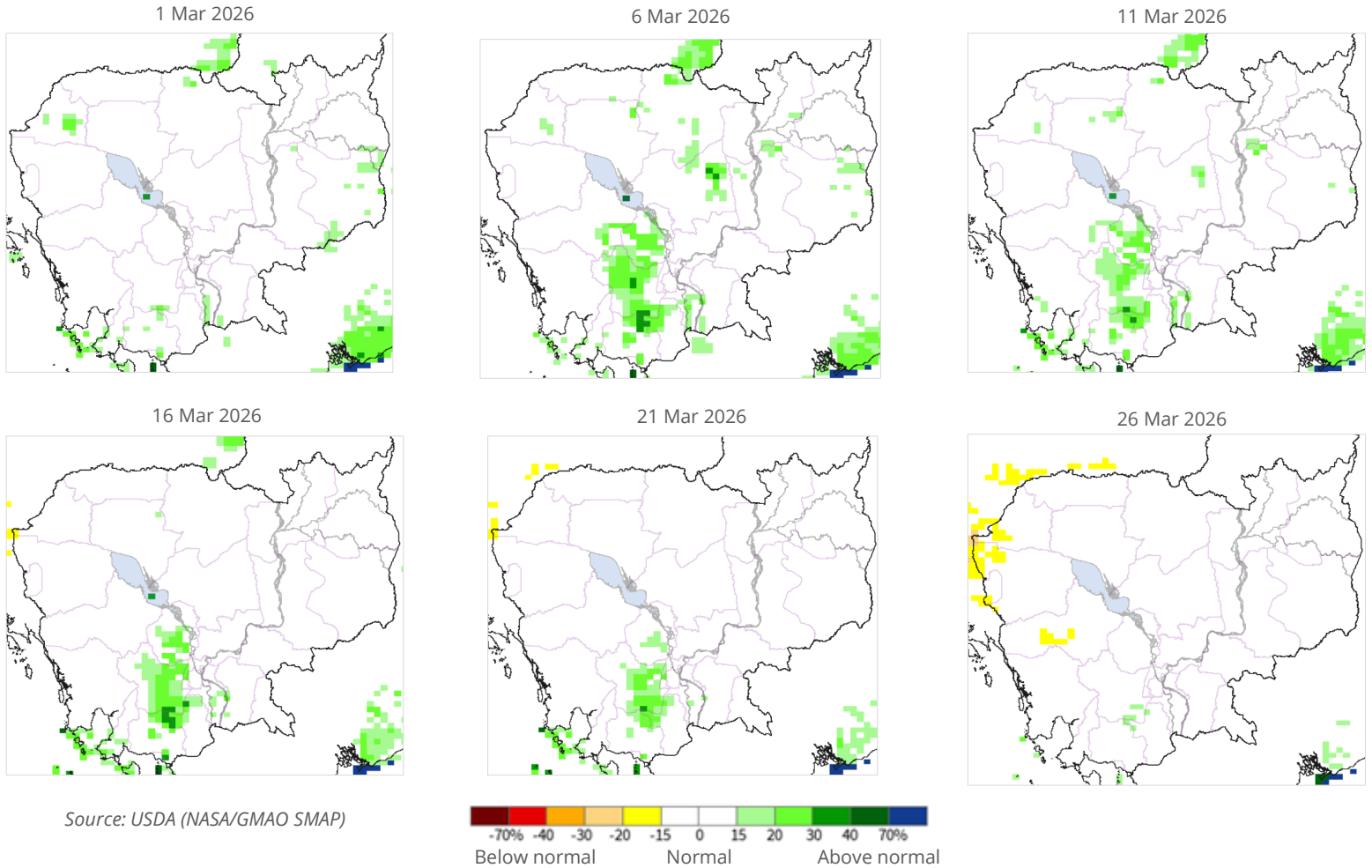



*Source: MoWRAM's Department of Hydrology and River Works*

# SOIL MOISTURE CONDITIONS

Soil moisture remained generally normal to above normal, supporting favorable dry-season crop production (maps below). While dry spells may not immediately reduce soil moisture, continued rainfall deficits combined with rising temperatures could rapidly reverse this balance.

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

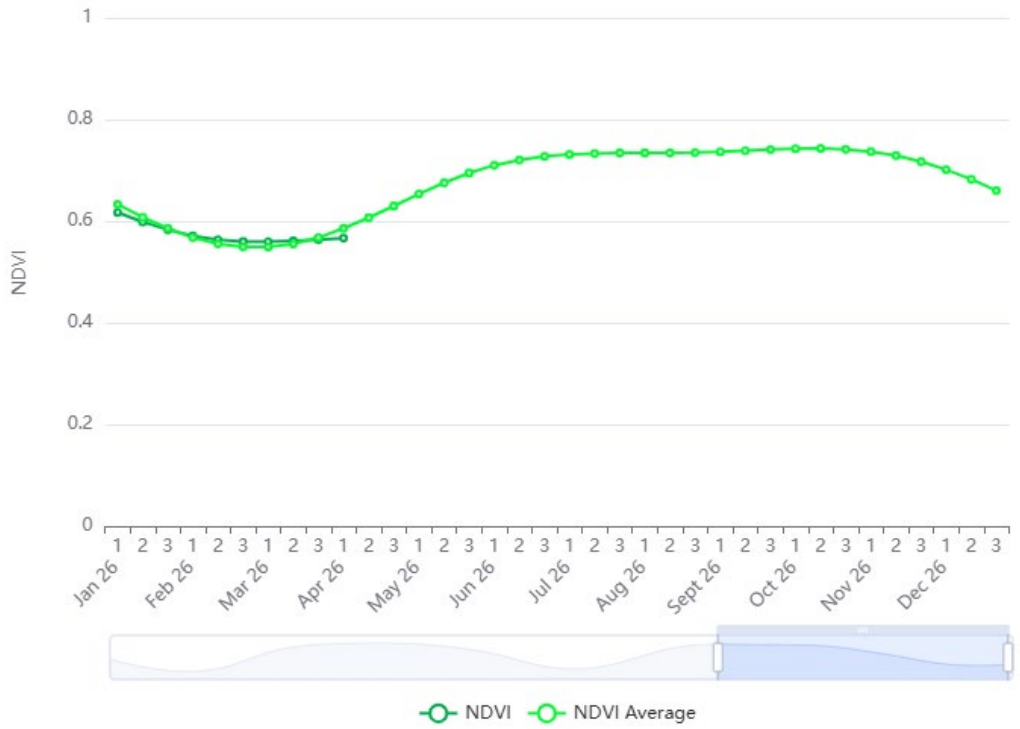



*Source: USDA (NASA/GMAO SMAP)*

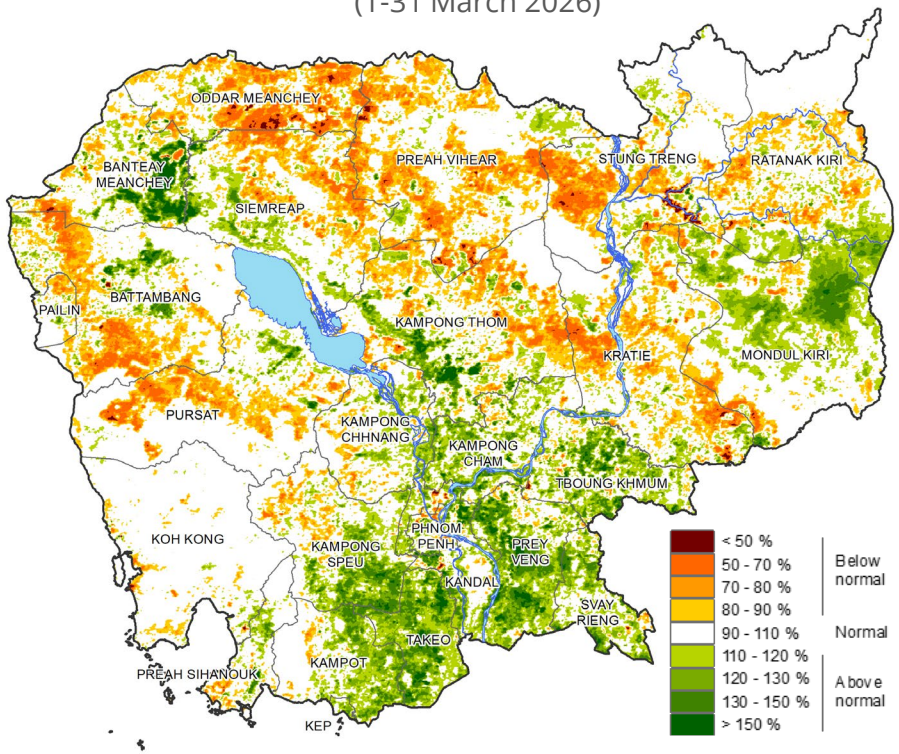
# VEGETATION AND CROP CONDITIONS

Vegetation conditions were slightly below the long-term average nationwide (chart below, left), with greater reductions in the northwest, north, and east, where heat stress persisted (map below, right). Despite these declines, most dry-season paddy areas—particularly the Tonle Sap region and southern plains—remained generally healthy.

**National-Average NDVI**
(From 1-31 March 2026)




**1-Month NDVI Anomaly**
(1-31 March 2026)



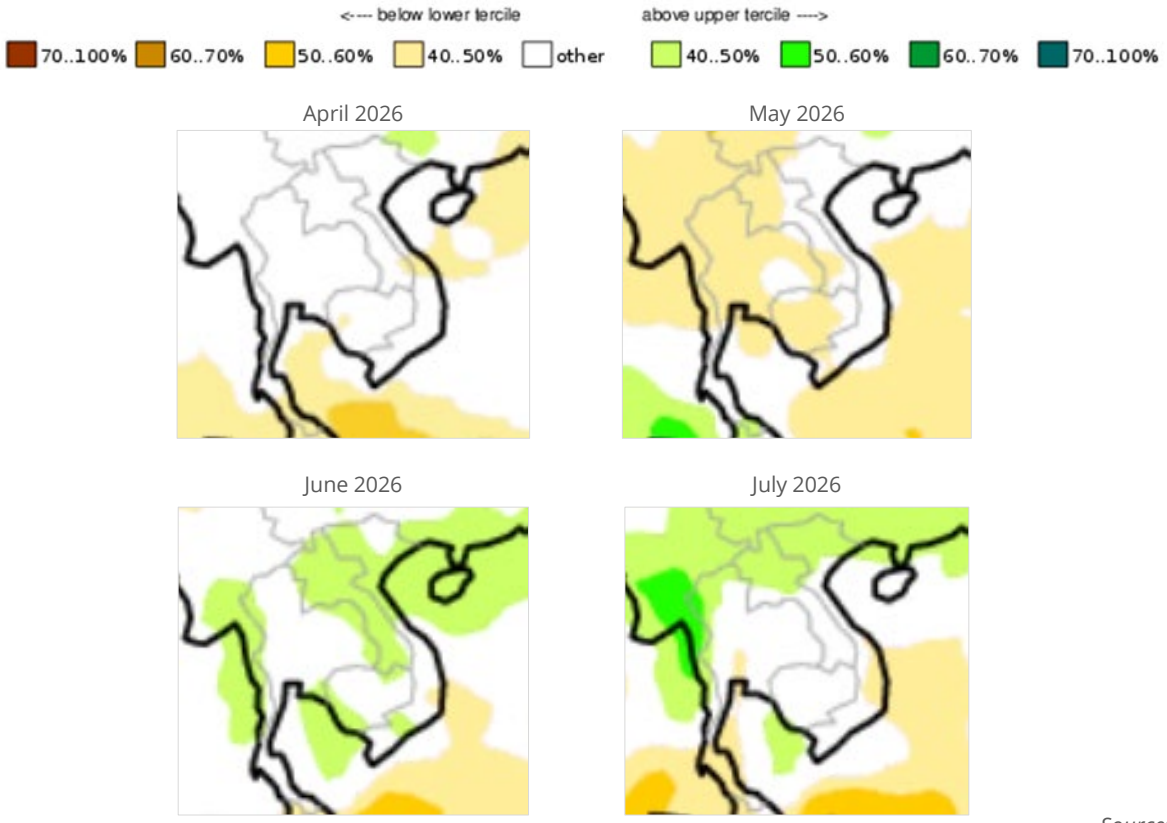

*Source: NDVI from MODIS and analysis by WFP*

# SEASONAL OUTLOOK

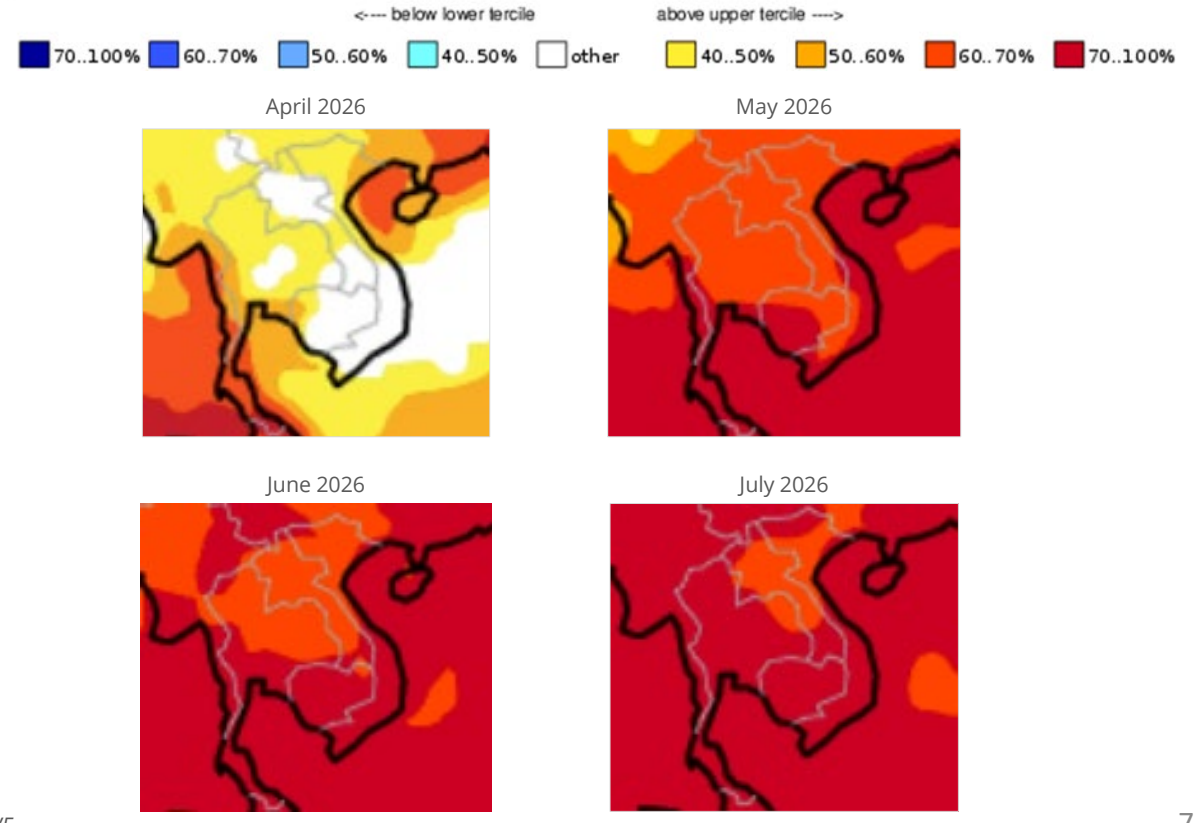


El Niño-Southern Oscillation (ENSO) outlooks indicate that ENSO-neutral conditions are favored through April–June 2026, with El Niño likely to occur during May–July and persist through at least the end of 2026. These transitional conditions are expected to bring uneven and less predictable rainfall patterns, including episodes of very dry or very wet conditions, while above-normal temperatures become increasingly likely—emerging first in the western provinces and expanding nationwide. This combination elevates the risk of localized extreme rainfall, dry spells, and heightened heat stress, raising concerns for human/livestock health, timely planting, water availability/quality, and crop development during the late dry season and early monsoon period.

## Seasonal Rainfall Forecast




## Seasonal Temperature Forecast




*Source: ECMWF*

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For further information:

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