



Seasonal Monitoring in Cambodia

July 2025

KEY MESSAGES



In July 2025, **dry-spell** and **heat stress conditions** occurred in western and northern provinces, notwithstanding nationally cooler-than-usual temperatures.



Major river stations reported significant increases in water levels, remaining **above long-term averages** and likely contributing to **localized flooding incidences in low-lying areas**.



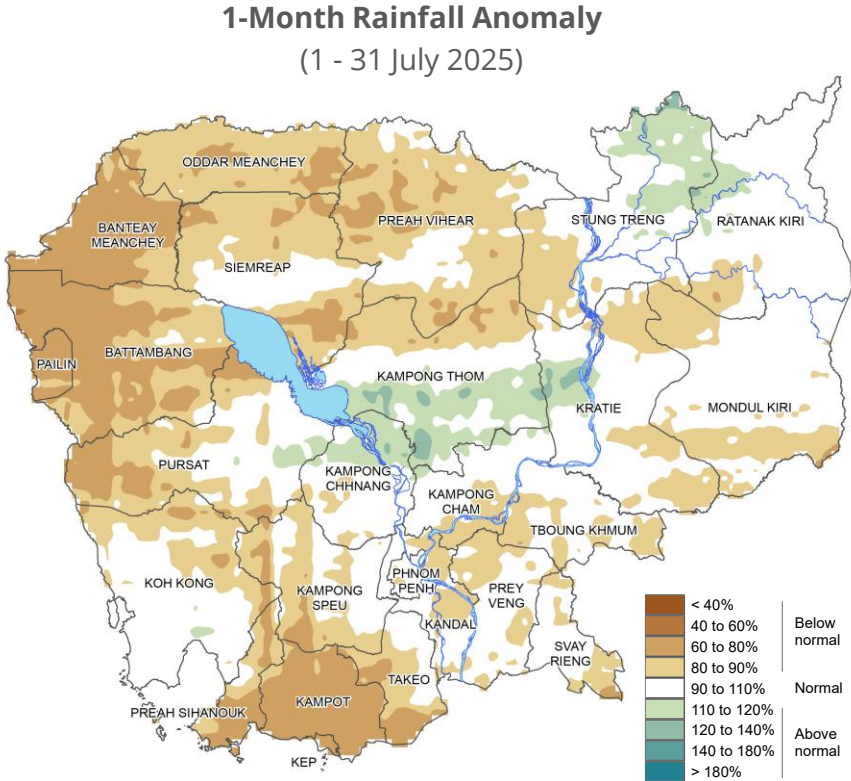
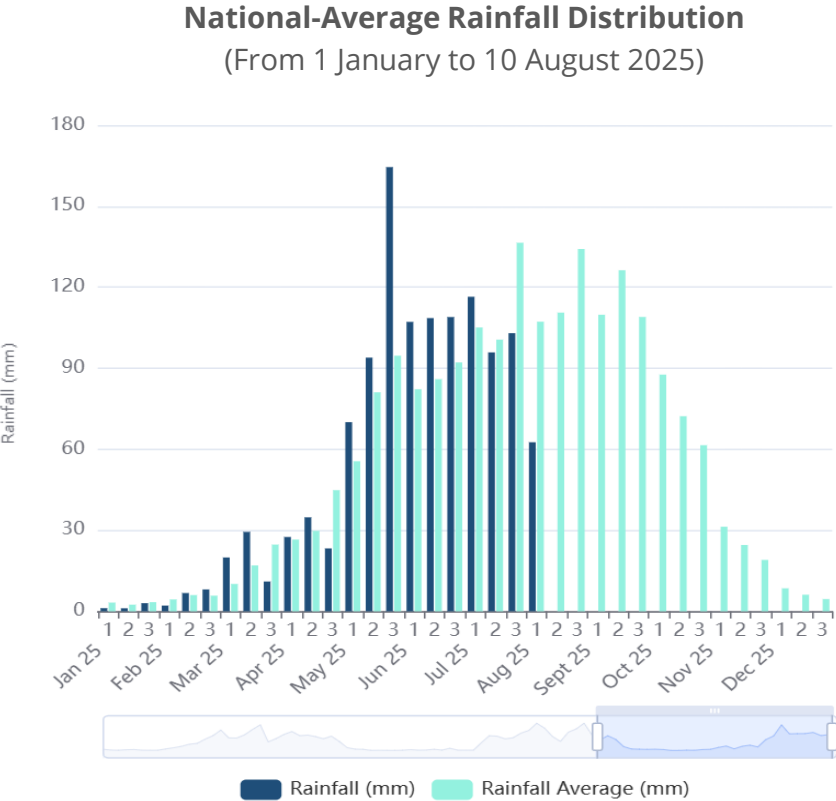
Soil moisture conditions remained favorable, supporting **healthy crop growth across most wet-season paddy cultivation areas**.



Looking ahead, Cambodia is forecasted to experience **wetter and warmer-than-average conditions** from **August to September**, transitioning to **wetter and cooler weather patterns** from **October through November**. Regular monitoring of MoWRAM's daily and weekly updates on weather and river levels is recommended to mitigate the impacts from potential heat stress and flash floods.

RAINFALL DISTRIBUTION

In July 2025, cumulative monthly rainfall across Cambodia was below the long-term average, with the most pronounced deficits occurring during the final 10 days of the month (see chart below, left). The less-than-average rainfall were obviously evident in the northern provinces (Siem Reap, Oddar Meanchey, and Preah Vihear), western provinces (Banteay Meanchey, Battambang, Pailin, and parts of Pursat), and coastal provinces (Kampot, Kep, Preah Sihanouk and parts of Koh Kong), indicating localized dry-spell conditions (see map below, right).



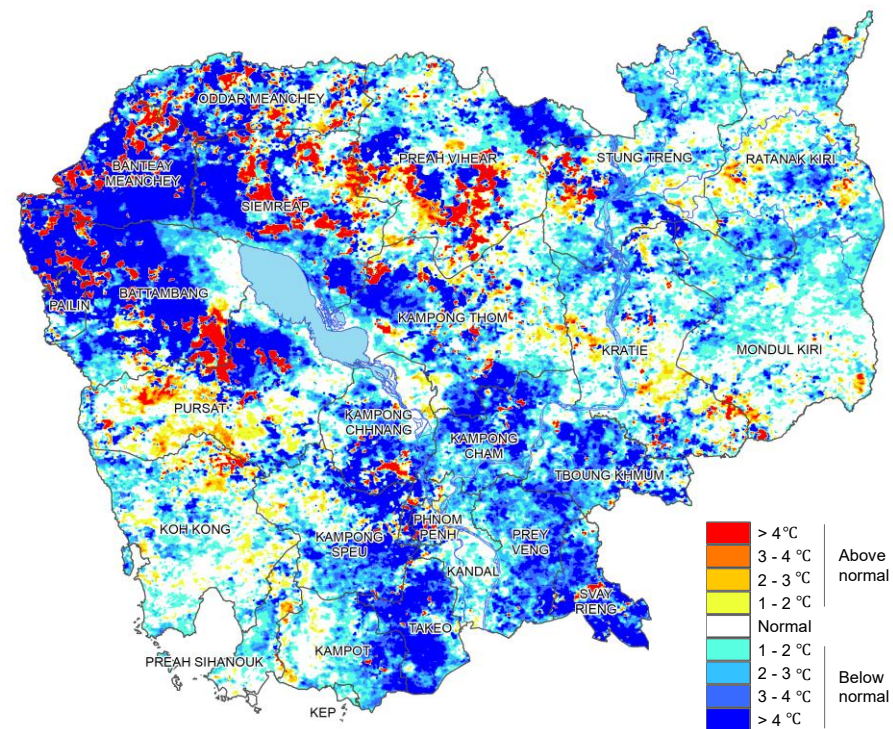
Source: Rainfall from CHIRPS and analysis by WFP.

TEMPERATURE PATTERN

Land surface temperatures (LST) were generally cooler than average across much of the country (see map below, left), with the most notable cooling observed around the Tonle Sap Lake and the southern plains.

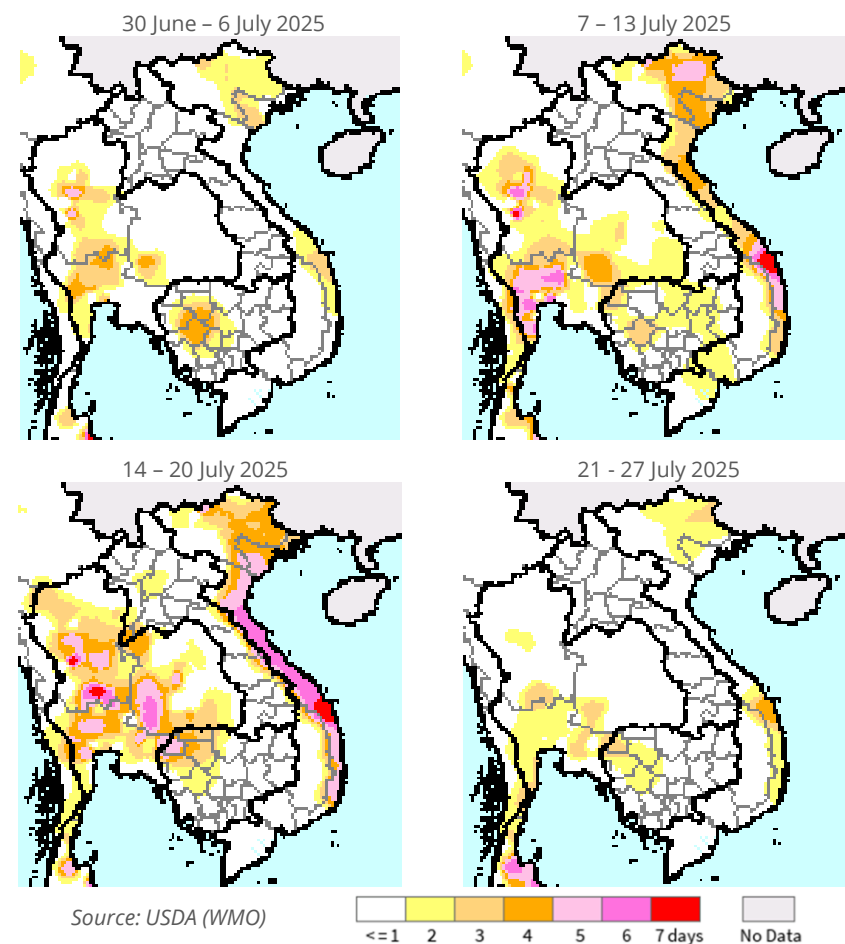
Despite this overall cooling trend, heat stress conditions ($\geq 35^{\circ}\text{C}$) were remarkably pronounced in the western and northern provinces, including Pursat, Battambang, Banteay Meanchey, Oddar Meanchey, and Siem Reap (see map below, right).

1-Month Land Surface Temperature (LST) Anomaly
(1 - 31 July 2025)



Source: LST from MODIS and analysis by WFP

Heat Stress Days ($\geq 35^{\circ}\text{C}$)



Source: USDA (WMO)

RIVER WATER LEVELS

Water levels at all eight river monitoring stations remained below flood alert thresholds, although they showed sharp upward trends and stayed above the long-term average throughout July. This increase was primarily driven by higher rainfall in upstream catchment areas.

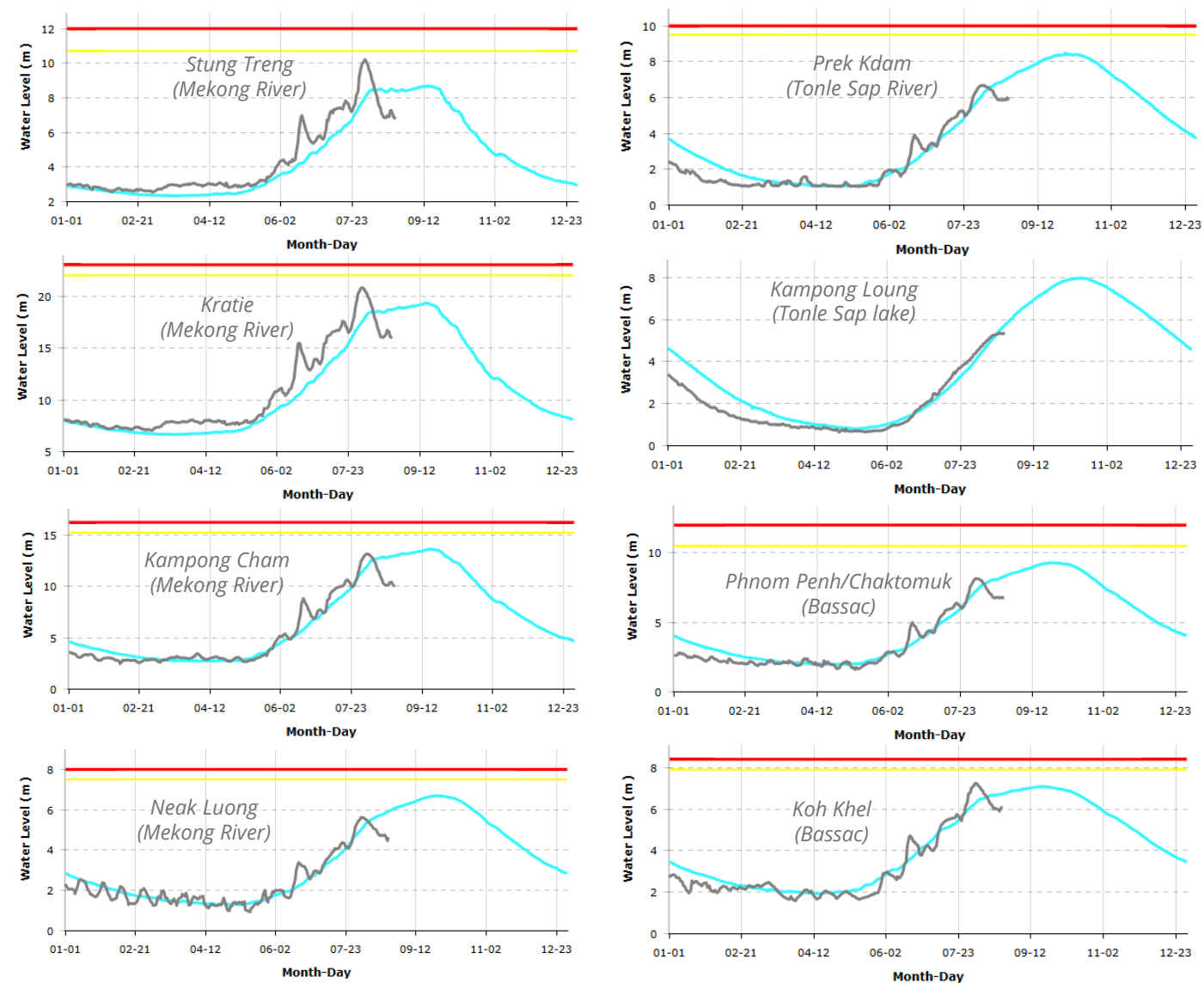
At Mekong River stations (Stung Treng, Kratie, Kampong Cham, and Neak Luong), water levels continued to rise and remained significantly above average.

On the Tonle Sap Lake/River, stations at Kampong Loung and Prek Kdam recorded higher-than-average water levels, with the lake's overall volume approximately 15.4% above the long-term average.

The Bassac River, monitored at Phnom Penh and Koh Khel, also reported above-average water levels.

These elevated water levels, while not yet reaching flood alert thresholds, likely caused localized flooding in low-lying areas along river basins.

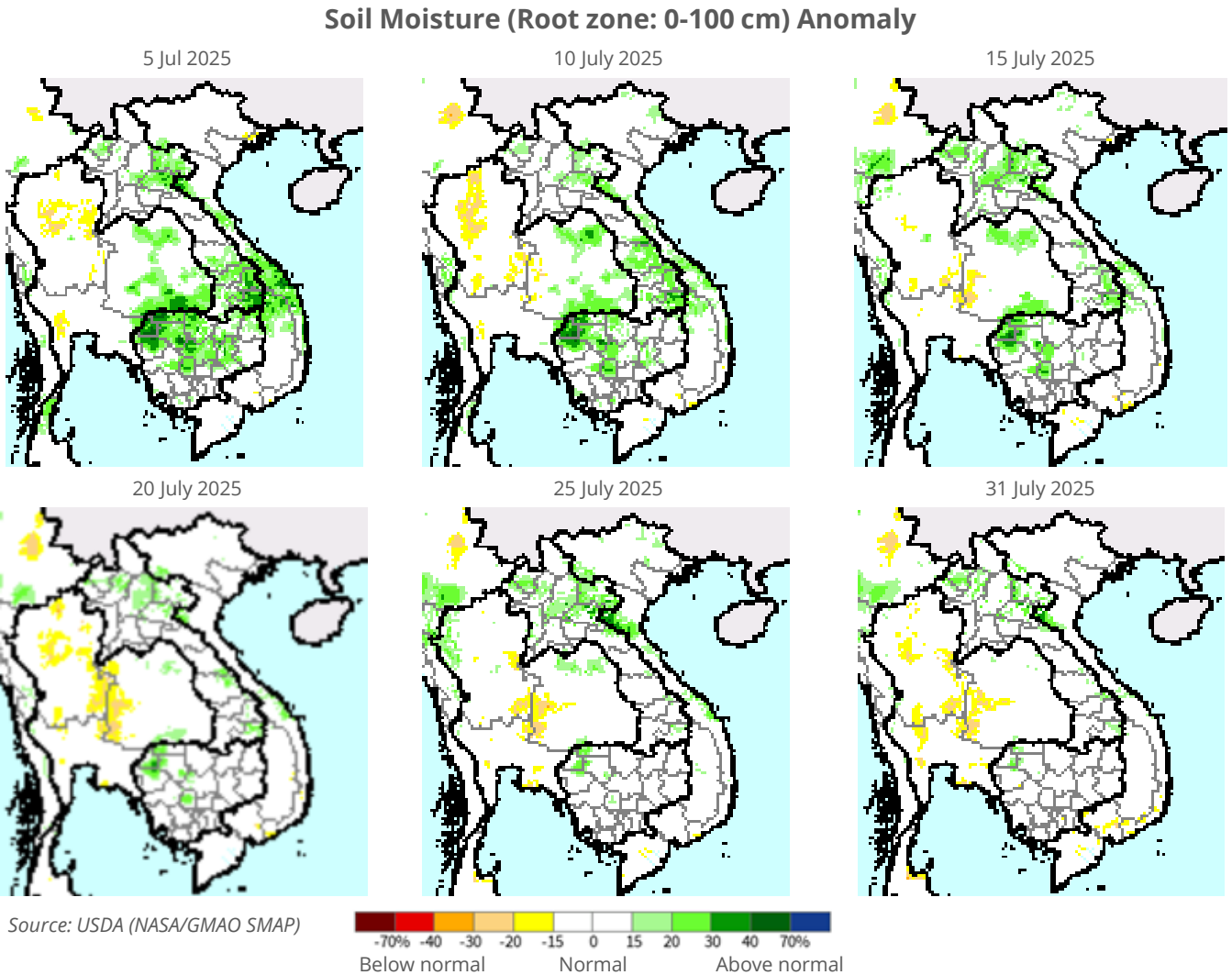
River water level observed in 8 monitoring stations in Cambodia
(by 23 August 2025)



Source: MoWRAM's Department of Hydrology and River Works

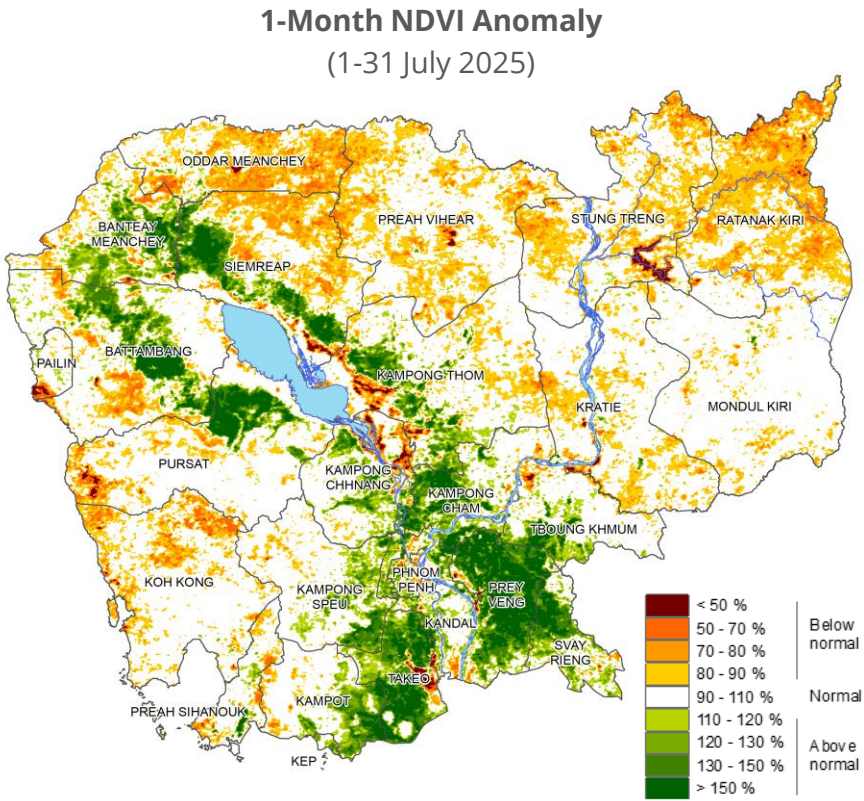
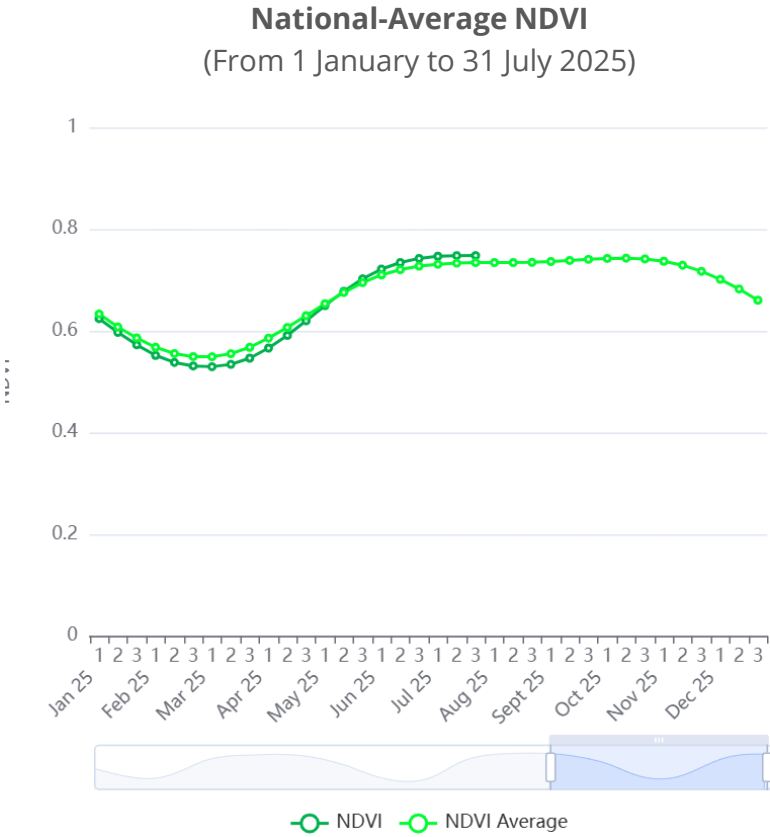
SOIL MOISTURE CONDITIONS

Despite the rainfall deficits, root-zone soil moisture (0–100 cm depth) remained normal to above-normal across most of Cambodia (see maps below). These conditions were favorable for wet-season crop growth.



VEGETATION AND CROP CONDITIONS

The advantageous soil moisture conditions continued to support above-average vegetation growth across Cambodia in July 2025 (see chart below, left). Healthy vegetation was observed in most provinces, particularly in wet-season paddy cultivation areas surrounding the Tonle Sap Lake and across the southern plains (see map below, right). However, below-average vegetation conditions were noted in parts of the eastern, northern and western provinces, likely due to insufficient rainfall and higher temperatures.



Source: NDVI from MODIS and analysis by WFP

SEASONAL OUTLOOK

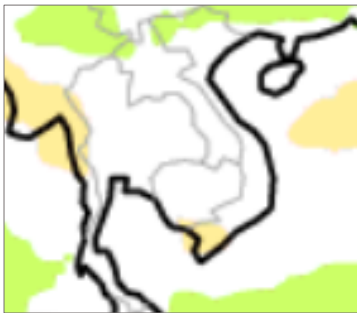
The seasonal forecast indicates a low to moderate likelihood of above-normal rainfall in the northern and eastern provinces from September to November 2025 (see map below, left). In contrast, there is a high probability of above-average temperatures from August to September 2025, while the likelihood of below-average temperatures increases slightly in October and November (see map below, right).

These outlooks suggest that Cambodia is likely to experience wetter and warmer-than-normal conditions from August to September, followed by a shift to wetter and cooler-than-normal conditions from October to November 2025.

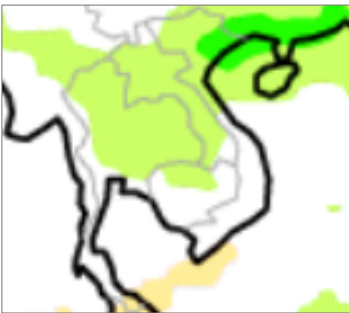
Seasonal Rainfall Forecast



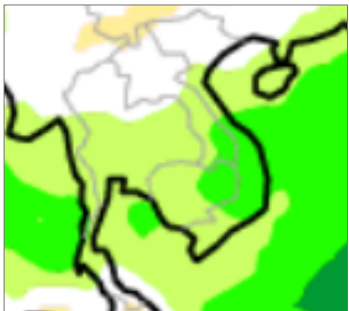
August 2025



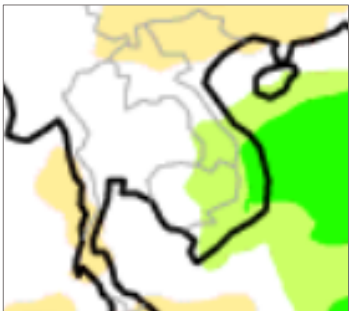
September 2025



October 2025



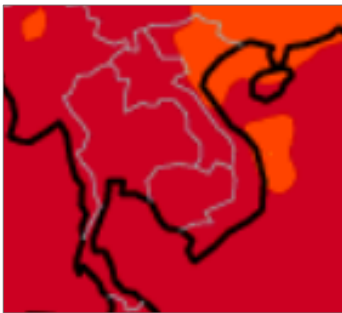
November 2025



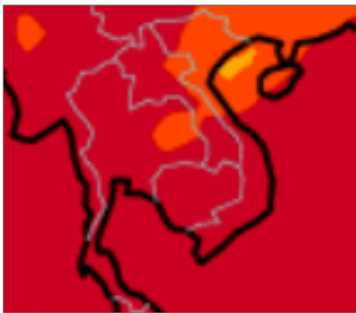
Seasonal Temperature Forecast



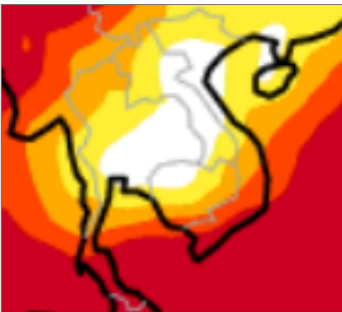
August 2025



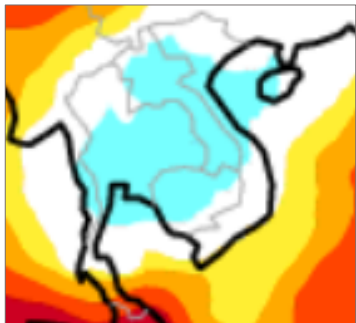
September 2025



October 2025



November 2025



Source: ECMWF



House 108, Street 63/corner Street 208, Sangkat Boeung Raing,
Khan Daun Penh, P.O Box 937, Phnom Penh

Research, Assessment, and Monitoring (RAM) Unit

Vulnerability Analysis and Mapping (VAM) Team

For further information please contact:

Jae Hwi KIM - jaehwi.kim@wfp.org

Chanvibol CHOEUR - chanvibol.choeur@wfp.org

Disclaimer: All content in this bulletin is based on the most recent remote sensing data available at the time of publication. As climate and weather conditions are dynamic, the information presented may not fully reflect actual on-the-ground situations.