World Food Programme

SAVING LIVES
CHANGING LIVES

Seasonal Monitoring in Cambodia

September 2025

KEY MESSAGES

Extremely high rainfall occurred, especially during the first and last ten days. **Floods affected 35,700 families and 20,600 hectares of agricultural land** across 12 provinces.

Land Surface Temperatures (LST) were generally below average, but **localized heat anomalies** were observed in nearly all provinces.

River water levels exceeded long-term averages and flood alert thresholds in early and late September, causing floods.

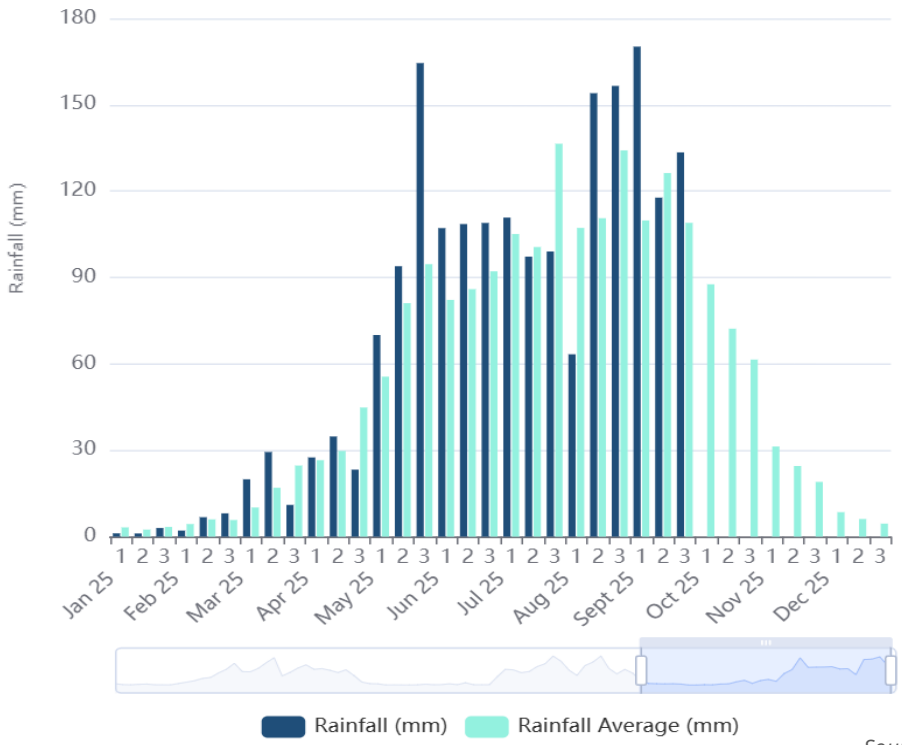
Vegetation health was slightly below average nationwide, which may have resulted from waterlogging and flooding. Despite this, **vegetation remained healthy in wet-season paddy areas** near Tonle Sap and southern plains.

Looking ahead, **above-average rainfall is expected in October and November**, raising risks of floods/waterlogging in lowland areas. Rainfall may return to normal in December 2025 and January 2026. **October may see higher temperatures, but cooler-than-normal conditions are likely in December**. Regular monitoring of MoWRAM's daily weather and river water level updates is advised to timely manage upcoming localized heat stress and flood risks.

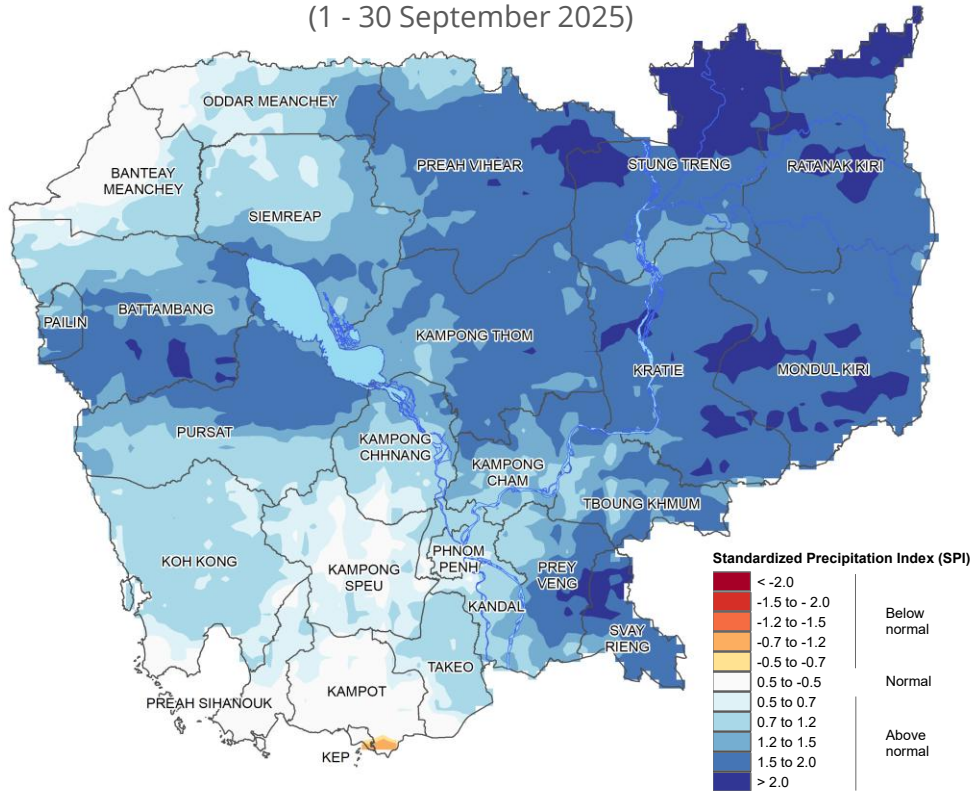
RAINFALL DISTRIBUTION

In September 2025, Cambodia experienced unusually heavy rainfall, particularly during the first and last ten days of the month *(see chart below, left)*. All provinces, especially those in the east, received rainfall well above average *(refer to map below, right)*, which led to rising water levels in rivers and basins. This resulted in flooding that impacted 35,650 families across 12 provinces, including Siem Reap, Kratie, Stung Treng, Mondulkiri, Kampong Thom, Prey Veng, Banteay Meanchey, Oddar Meanchey, Preah Vihear, Kampong Cham, and Tbong Khmum.

National-Average Rainfall Distribution
(From 1 January to 30 September 2025)



1-Month Standardized Precipitation Index (SPI)
(1 - 30 September 2025)



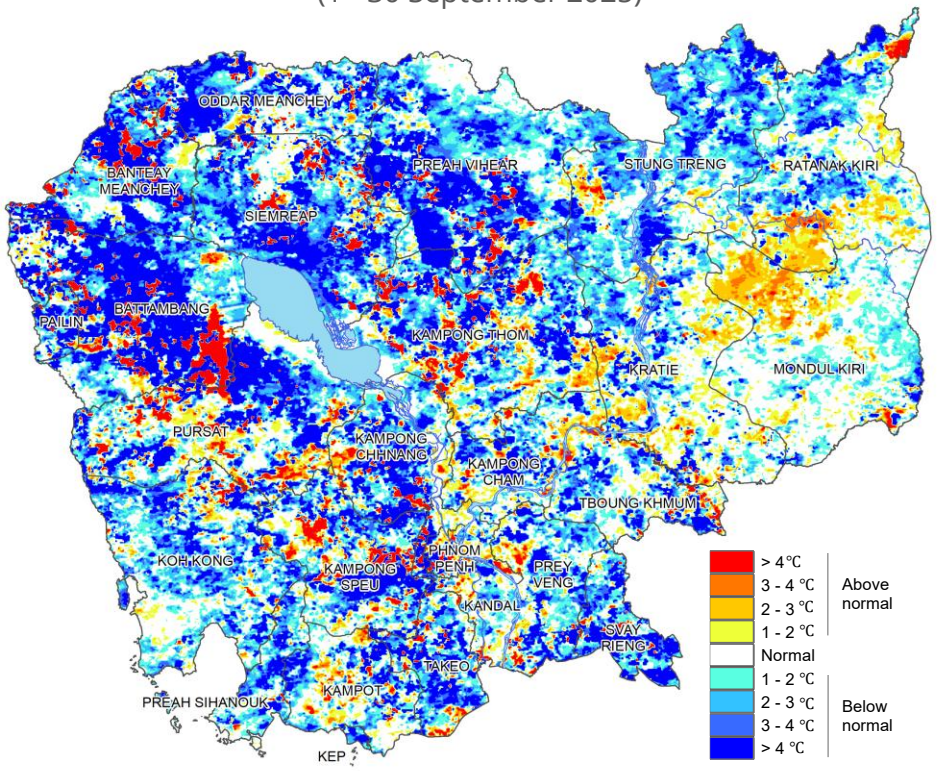
Source: Rainfall from CHIRPS and analysis by WFP.

TEMPERATURE PATTERN

In September, land surface temperatures (LST) were generally below average across the country *(see the map below)*. However, many areas in almost every province experienced notably higher temperature anomalies.

1-Month Land Surface Temperature (LST) Anomaly

(1 - 30 September 2025)



Source: LST from MODIS and analysis by WFP

RIVER WATER LEVELS

During early and late September, water levels at most of the eight river monitoring stations exceeded the long-term average and reached flood alert thresholds, likely due to higher-than-normal rainfall in upstream catchment areas. This resulted in flooding in low-lying communes along these rivers and their basins.

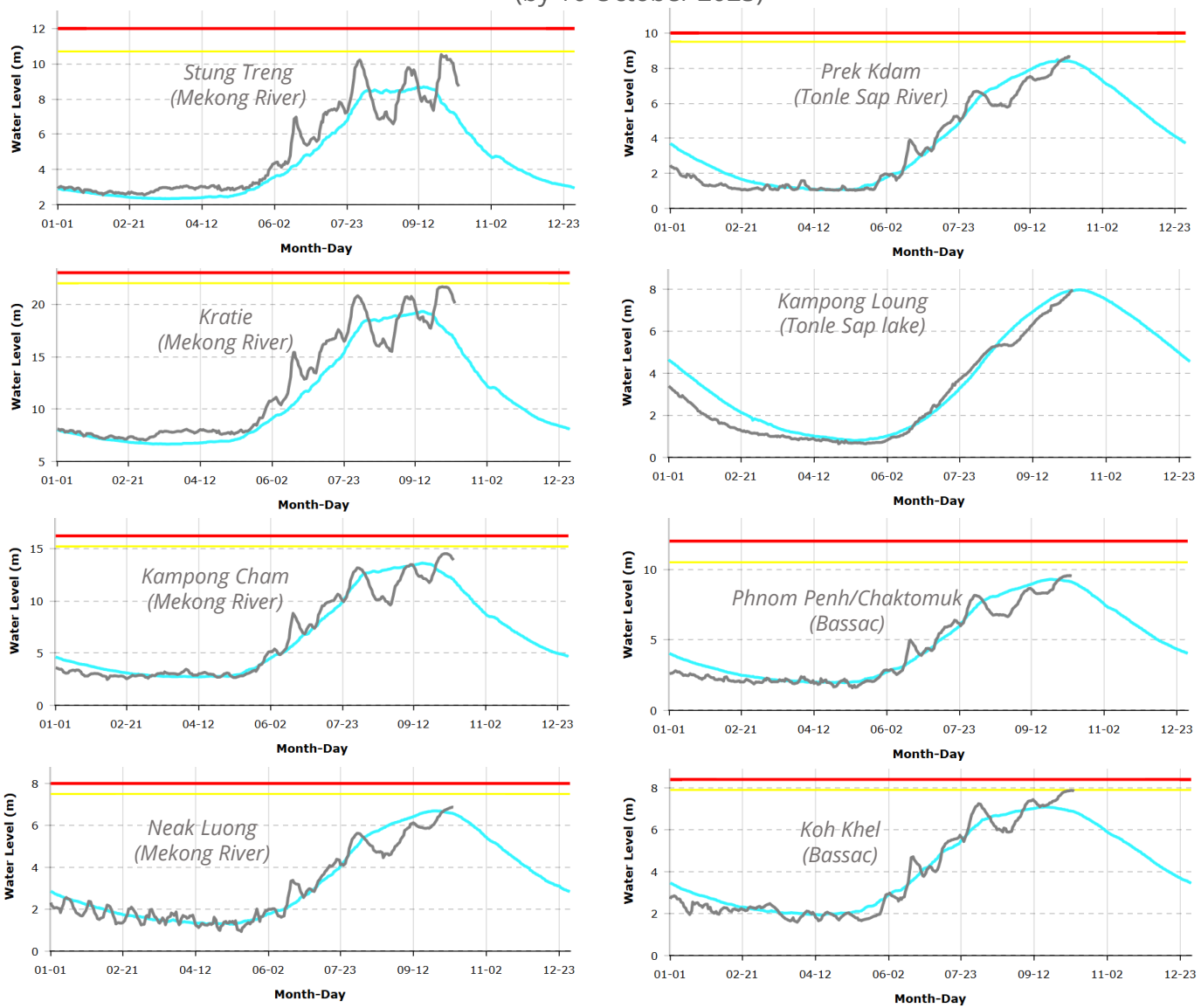
At the Mekong River stations—including Stung Treng, Kratie, Kampong Cham, and Neak Luong—water levels rose to flood alert levels and surpassed the long-term average in late September.

Water levels at the Kampong Loung and Prek Kdam stations, located in the Tonle Sap Lake and River, remained close to the long-term average; however, the total volume of the lake was still about 8.8% below its long-term average.

Similarly, the Bassac River stations at Phnom Penh and Koh Khel reported water levels above average, with the Koh Khel station reaching the flood alert level.

River water level observed in 8 monitoring stations in Cambodia

(by 10 October 2025)

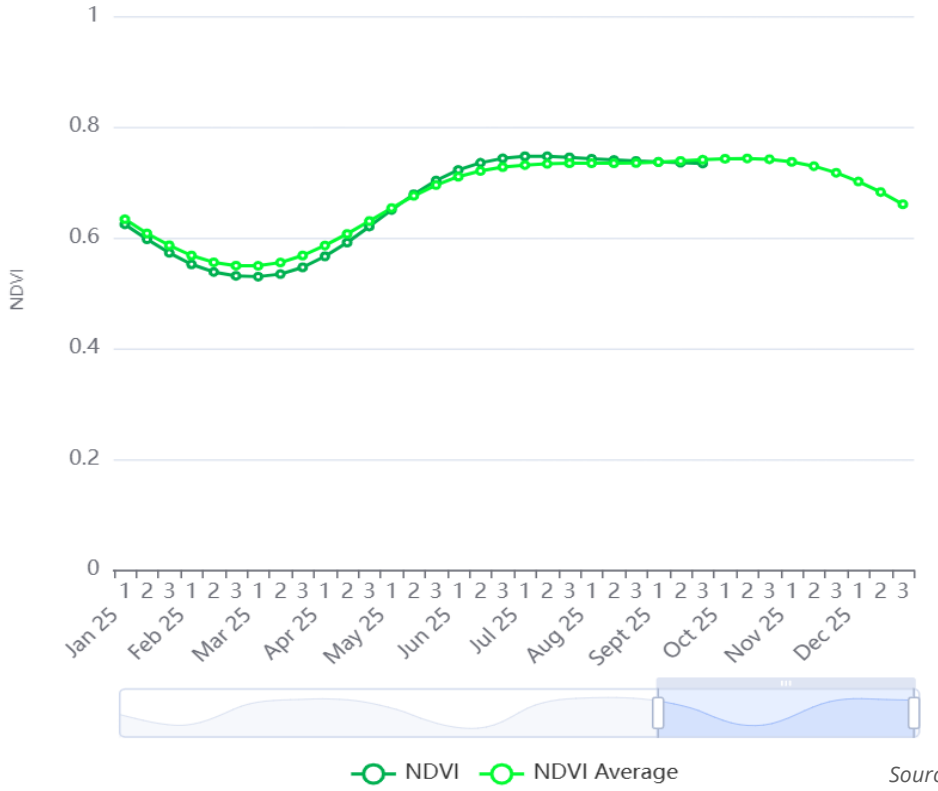


Source: MoWRAM's Department of Hydrology and River Works

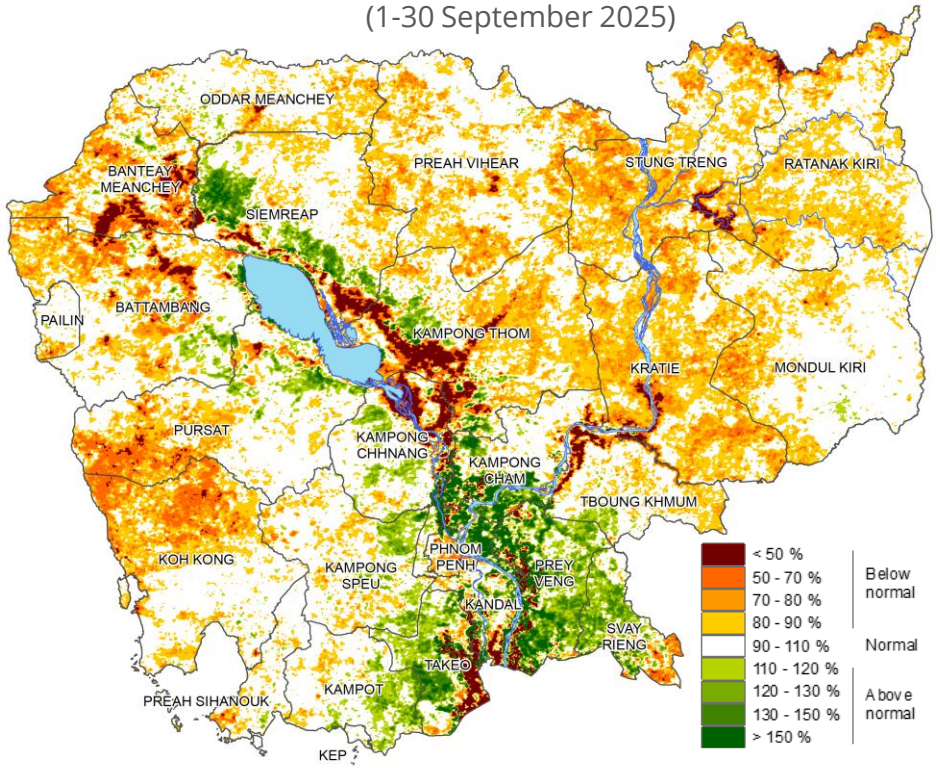
VEGETATION AND CROP CONDITIONS

Nationwide, vegetation conditions in September were slightly below the long-term average *(see chart below, left).* Many parts of almost provinces experienced below-average vegetation conditions, likely due to flooding and waterlogging caused by heavy rainfall *(see map below, right)*. Nevertheless, healthy vegetation was observed in wet-season paddy cultivation areas surrounding the Tonle Sap Lake and across the southern plains, despite floods impacting approximately 20,623 hectares of agricultural land.

National-Average NDVI
(From 1 January to 30 September 2025)



1-Month NDVI Anomaly
(1-30 September 2025)



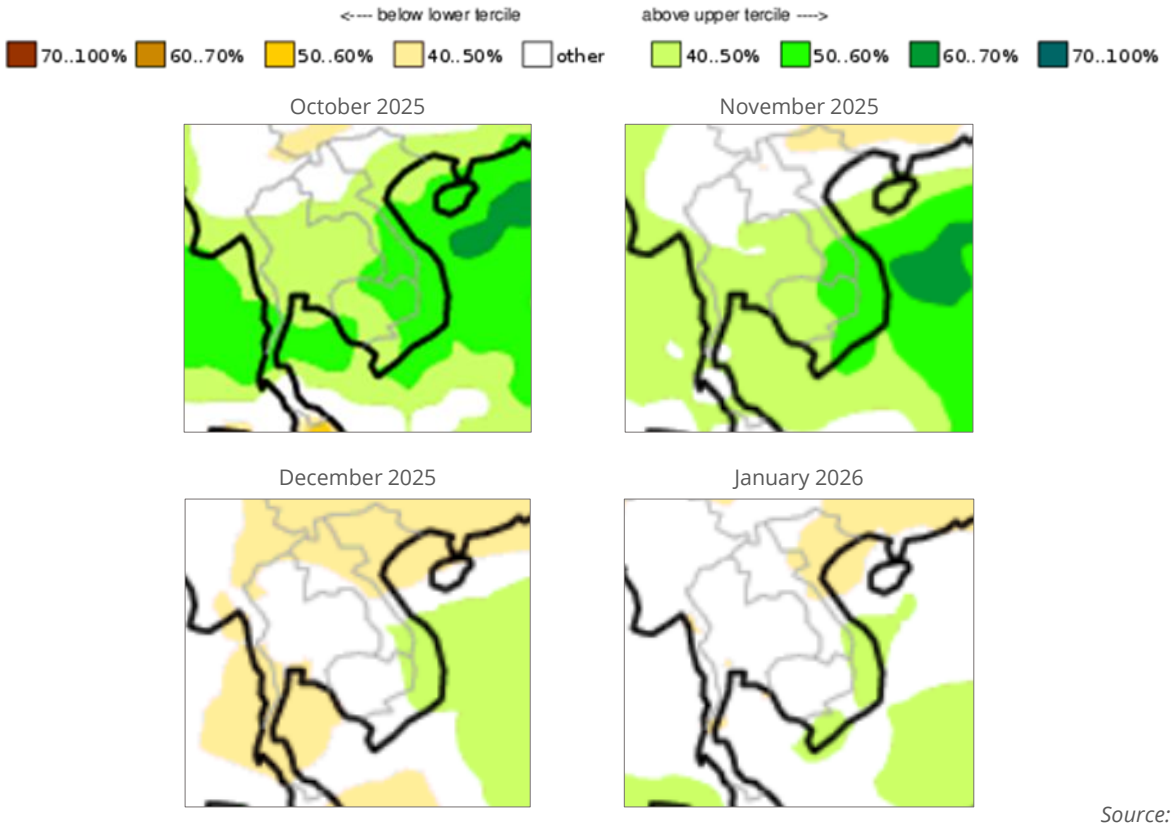
Source: NDVI from MODIS and analysis by WFP

SEASONAL OUTLOOK

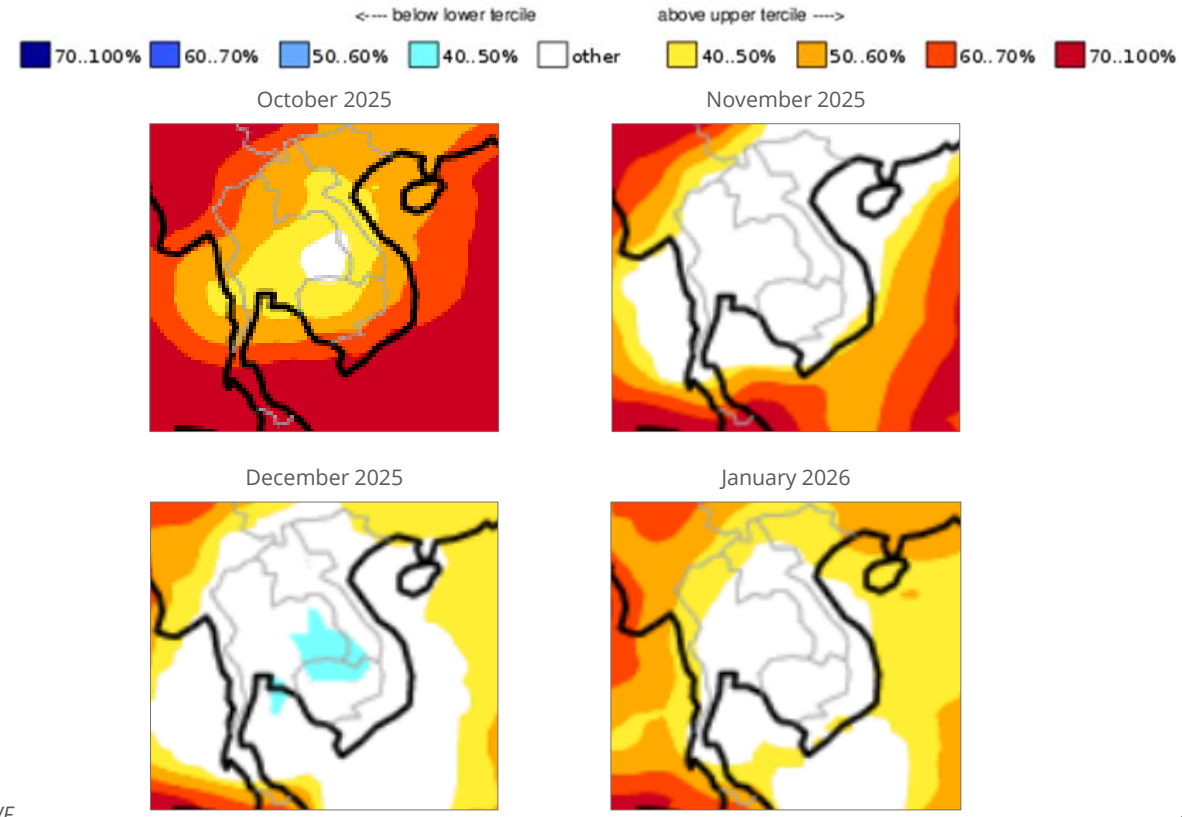
Seasonal forecasts indicate a higher likelihood of above-average rainfall across most provinces in October and November 2025 *(see maps below, left).* This suggests a continued risk of flash and riverine flooding, as well as waterlogging, particularly in lowland areas of the western, northern, and eastern provinces. In contrast, December 2025 and January 2026 are not expected to deviate significantly from normal rainfall patterns.

Temperature forecasts show a low likelihood of above-normal temperatures in October, with a slightly increased chance of near to below-normal temperatures from November through January *(see maps below, right)*. Some localized areas may still experience higher-than-normal temperatures in October, followed by a transition to cooler-than-average conditions in December, especially in the northern provinces.

Seasonal Rainfall Forecast



Seasonal Temperature Forecast



Source: ECMWF

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