

vam
food security analysis

Global Seasonal Outlook

April 2025



World Food
Programme

SAVING
LIVES
CHANGING
LIVES

KEY HIGHLIGHTS

ENSO OUTLOOK

ENSO-neutral conditions have returned and are likely to continue through the summer (August-October 2025).

MENA REGION

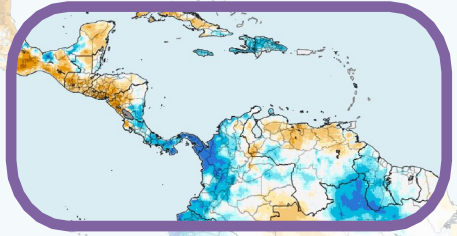
Drought persists across the Maghreb, Syria, and Iraq, worsening water shortages and threatening crop production and water supply

CENTRAL ASIA

Persistent drought continue to threaten water supply and crop prospects particularly in Afghanistan

SE & S.ASIA

The May–August forecast points to wetter-than-normal conditions across much of the region, with particularly heavy rainfall expected in the Philippines and Nepal, increasing flood risk.

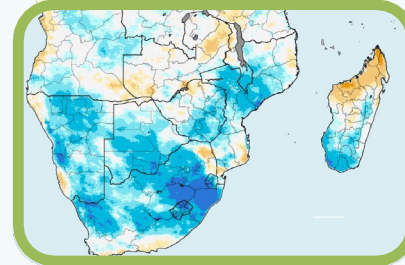


CENTRAL AMERICA & CARIBBEAN

The Primera season forecasts below-average rainfall in most of Central America. Haiti had above-average April rain, but drier conditions are expected through July.

WESTERN AFRICA

A likely dry season is expected in the Gulf region and western Sahel, while central-eastern Sahel is expected to see good vegetation growth, though with a risk of flooding



SOUTHERN AFRICA

Improved rainfall has supported crop development, but localized dry spells and high temperatures are likely to keep regional cereal production at average to slightly below-average levels.

EAST AFRICA

In the Horn of Africa, dry conditions are a concern in eastern Kenya and southern Somalia. In contrast, the main season in the Sudans and Ethiopia is expected to support good crop and pasture growth, though there is a heightened risk of flooding.

INDONESIA & PACIFIC

Favorable rainfall supports crop growth, while cyclone risks ease as ENSO shifts to neutral.

Rainfall (% of avg)
in the 3 months ending 30 Apr 2025

A Variable Season

The 2024–2025 rainfall season in Southern Africa has had a highly variable performance so far, reflecting an alternation of wet and dry periods that have shaped the agricultural outlook across the region.

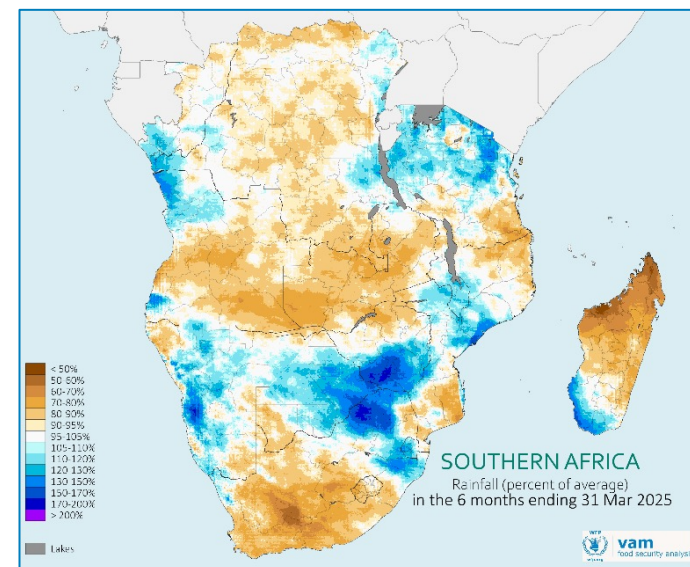
Under La Niña conditions, the season was expected to bring improved rainfall and support a recovery from the devastating 2023–2024 El Niño-driven drought. While improvements have been observed in several areas, erratic rainfall and localized extremes have persisted throughout the season.

The onset of the season was marked by a prolonged **dry spell** between **October** and **December** 2024, which delayed planting and suppressed early crop development across much of the region. Rainfall deficits during this period were particularly pronounced in Angola, Zambia, Zimbabwe, and central Mozambique.

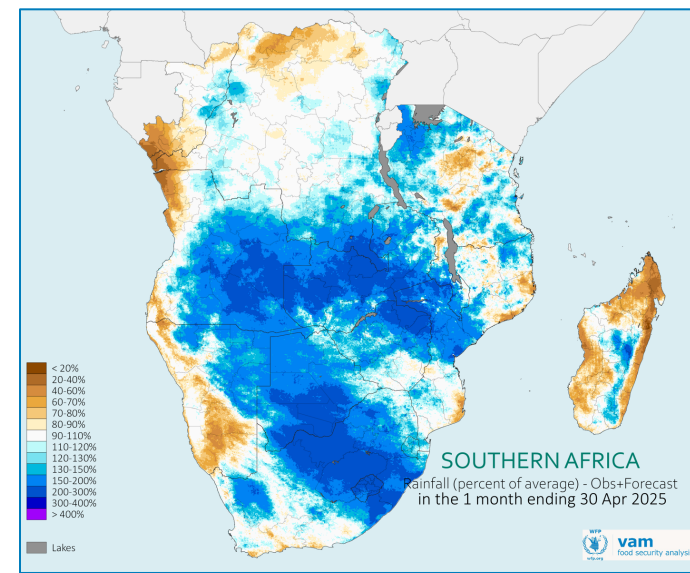
Conditions **improved significantly** in **January** and **February**, with widespread rainfall supporting replanting efforts and vegetation growth, averting widespread crop failure. However, excessive rainfall in localized areas, compounded by the passage of **Tropical Cyclone Jude** in March, resulted in flooding and damage to infrastructure and crops, particularly in Mozambique, Malawi, and parts of Zimbabwe. The increase in moisture also contributed to heightened pest pressure, including Fall Armyworm outbreaks, which were reported in eastern Zambia, central Malawi, and northern Mozambique. **March** brought a return to drier conditions across the central and southern parts of the region, raising concerns for the development of late-planted crops but the **timely rains in April** are expected to partially mitigate the stress on maturing crops.

Despite localized crop stress and variable conditions, the overall seasonal outlook remains significantly more favourable than the previous year. While harvests may be delayed and yields uneven in quality, overall production will surely exceed the historically low levels of the 2024 harvest. However, due to above mentioned early season problems, regional cereal production levels are estimated to be at best on **average to below average** (FAO). South Africa, the largest maize producer in the region, estimate its production to be 5% above last year's and 9% below the average of the previous 5 years.

For a deeper dive into the details, check out the [Southern Africa Seasonal Monitor report](#) from WFP Regional Bureau Johannesburg



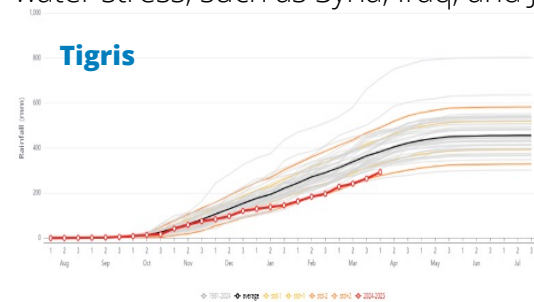
Rainfall from **October 2024 to March 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall



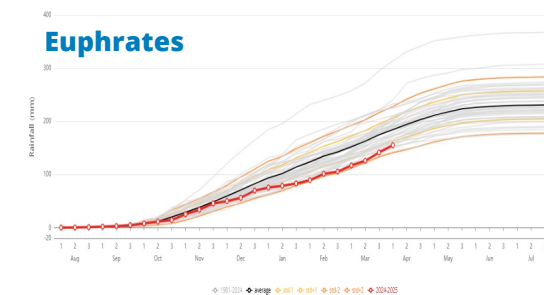
Observed and Rainfall forecast for the 1-month **until 30 Apr 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall

Rainfall Deficits Persist

The 2024–2025 rainfall season across the MENA region has been characterized by persistent and **widespread rainfall deficits**. While February and early March brought temporary improvements in some areas, particularly northern Jordan, parts of Iraq, and western Syria, these were not sufficient to offset the broader seasonal dryness observed across much of the region. Key river systems and reservoirs, including the **Tigris** and **Euphrates**, are at critically low levels, further undermining irrigated agriculture and limiting urban and rural water supply. The impacts are particularly severe in areas already affected by conflict, displacement, or chronic water stress, such as Syria, Iraq, and Jordan.

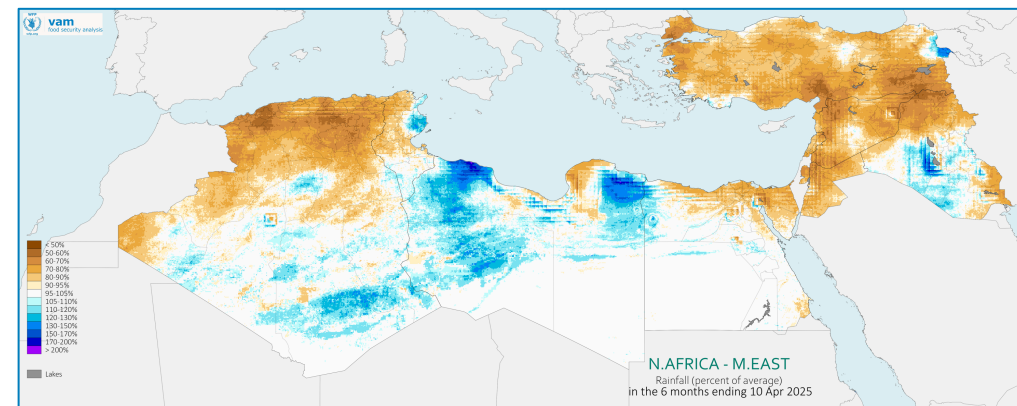


The Tigris and Euphrates Basin supports extensive agricultural activities across Turkey, Syria, Iraq, and Iran. Current data shows that cumulative basin rainfall is well below the historical average and tracking near 45 years historical lows.

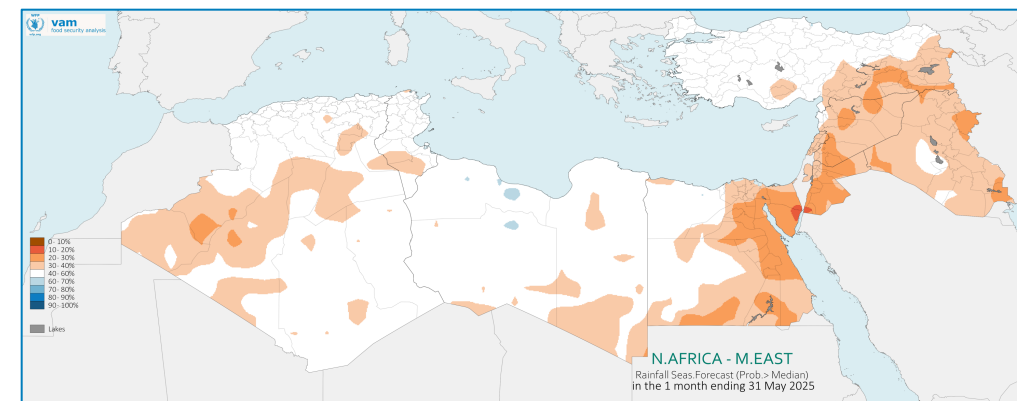


Outlook

Seasonal forecasts for May 2025 suggest a continued tendency toward below-average rainfall in many areas, including Iraq, Syria, and southern Turkey, with **no strong recovery** signals for the region. As the main cropping season progresses, the delayed onset and lack of sustained rainfall will likely have lasting effects on agriculture, pasture regeneration, and water supplies. Without significant rains in May, the season's deficits may become entrenched.



Rainfall **October 2024 to April 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall



Rainfall forecast for **May 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

An Uncertain Start of the Season

The previous Short Rains / Deyr season (Oct-Dec 2024) was marked by pronounced rainfall deficits that affected central Somalia, NE Kenya and southern Ethiopia (map top left). The region runs the risk of a second consecutive drought in case the Long Rains / Gu season now underway is also affected by drought.

The general consensus for the **Long Rains / Gu season** (March-May 2025) was for drier than average conditions as typical of La Nina dominated seasons. However, the season started early in late March across parts of southern Somalia, southern Ethiopia, and northeastern Kenya. While early April was below average in many areas, mid April brought plentiful rains while late April is likely to be drier than average across most of the region. Overall April is likely to be on or above average – things now hinge on whether late April dryness will continue into May.

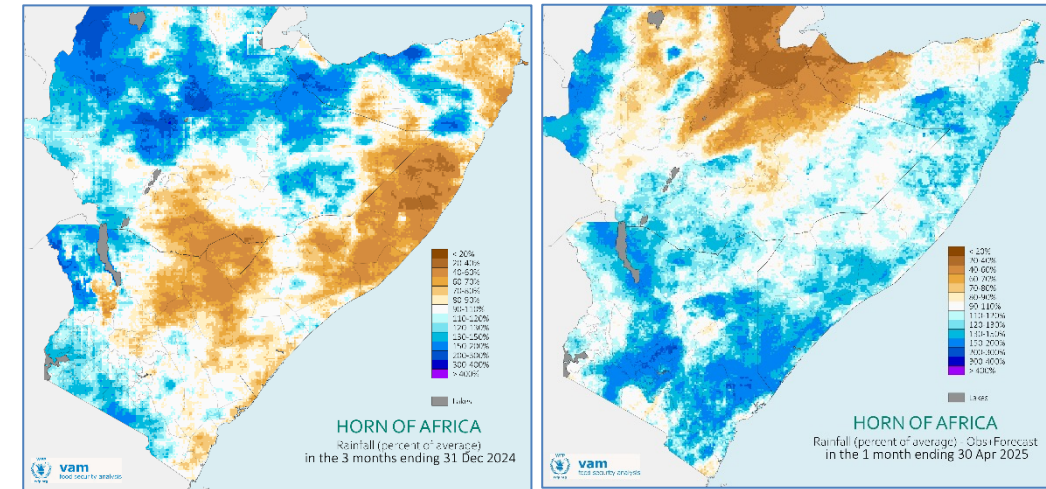
In **Somalia**, the onset of the Gu rains was early to timely in the south; however, rainfall distribution has been variable in the central and NW zones, alternating between drier and wetter patterns.

In **Kenya**, eastern and northeastern areas have so far had a reasonable rainfall season with a timely start and overall above average rainfall expected by end of April.

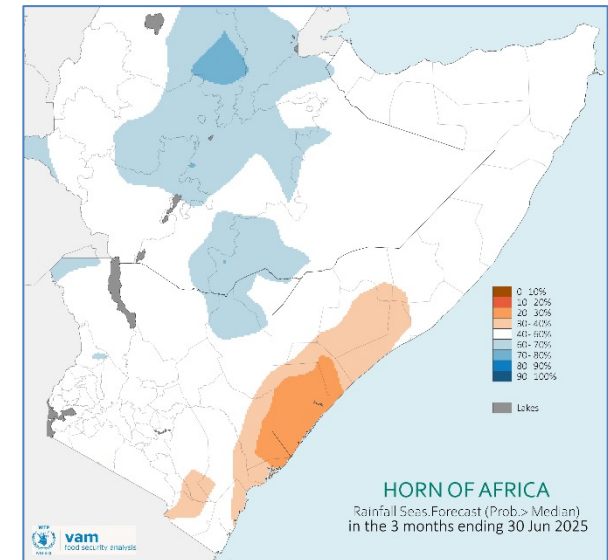
In **Ethiopia**, southern and southwestern regions experienced average to above-average rainfall during March, supporting land preparation and early planting activities. However, northern and eastern parts of the country (eastern Tigray and Afar) remain dry, with sustained water stress.

Outlook

The medium-term outlook (until June) is for **drier than average** conditions in eastern Kenya and southern Somalia, which may extend through to June. This raises concerns in areas still recovering from previous droughts and it may affect the remainder of the Long Rains / Gu season as well as the coastal rains that benefit these regions until the start of the Short Rains in October.



Rainfall in **October-December 2024** (left) and **Observed and Rainfall forecast** for the 1-month **until 30 Apr 2025**, (right), as a proportion of the long-term average. Blue and purple (orange and brown) shades for above (below) average rainfall



Rainfall forecast for the period **Apr-Jun 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

Favourable Perspectives but Flood Risk is Enhanced

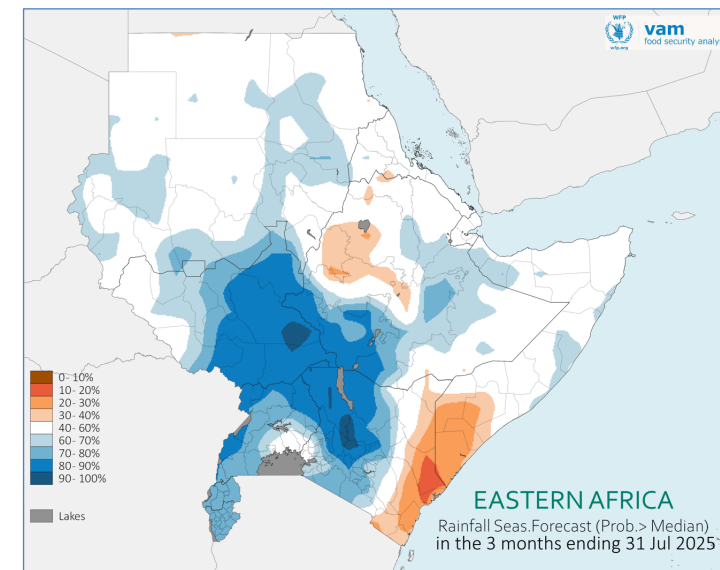
Seasonal forecasts for **May-July 2025** indicate a high likelihood of above-average rainfall across **Uganda, western Kenya, Rwanda and Burundi**. This period covers the second half of the main rainfall season in these regions and while the outlook is favourable for agriculture and water resources it also raises the risk of flooding in vulnerable areas. Last year, major floods occurred around Lake Tanganyika, and current water levels are already higher than at the same time in 2024. If the trend persists, flooding could occur during the May-June seasonal peak.

Much wetter than average conditions during this period are also likely to affect **northwestern Kenya and southeastern areas of South Sudan** (East Equatoria, in particular Kapoeta East). These semi-arid regions will benefit from enhanced availability of pasture and water resources. This patterns continues a multi-year trend for above average rainfall, increased vegetation cover and higher water levels of Lake Turkana.

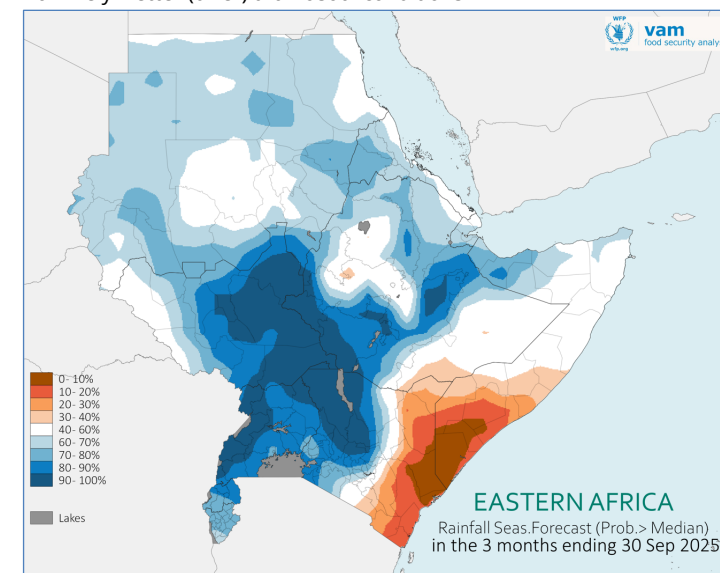
Enhanced rainfall during this period will also benefit agricultural production during the first cropping season in South Sudan's breadbasket Greenbelt region (Western and Central Equatoria and agricultural regions in Eastern Equatoria).

Much **wetter than average** conditions are forecast to continue during the core season of **July to September** across **Sudan, South Sudan** and northern and central Ethiopia. Good conditions for crop production and pasture development can be expected across the region.

However, the region will face an **enhanced risk of flooding**, in Sudan's flood prone areas along the Nile and its main tributaries, in the surroundings of lake Tanganyika and in particular in South Sudan where large scale multi-year flooding has been affecting vast areas in the centre and northern areas of the country – this is addressed in the next section.



Rainfall forecast for the 3-month periods **May-Jul 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions



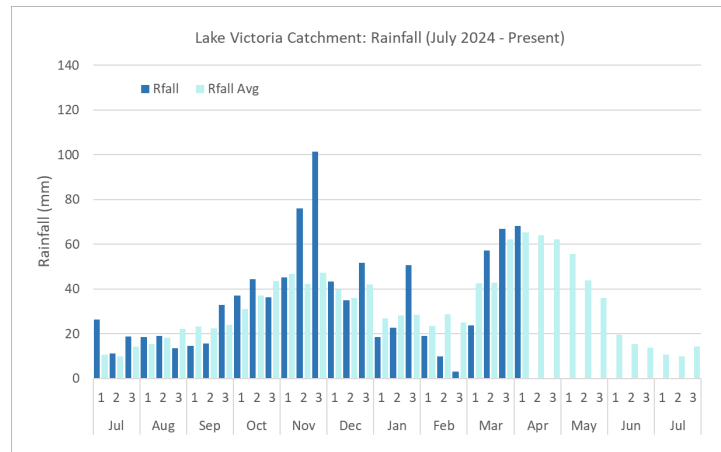
Rainfall forecast for the 3-month periods **Jul-Sep 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

Lake Victoria and the South Sudan Multi-Year Floods

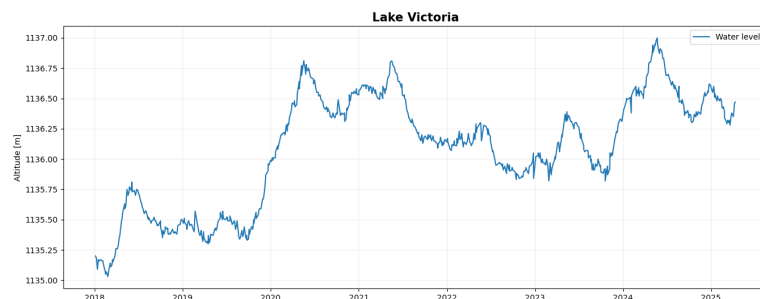
Since late 2019, South Sudan has been in the grip of much larger than usual seasonal floods along the Sudd wetlands. This was triggered by a major rise in Lake Victoria levels and resulting increased outflows of the White Nile. Large floods affected the country in 2024, though they did not reach the record extents of 2022. An outlook for the coming season is provided here:

Flood waters are now in the receding phase towards their seasonal minimum between May and June 2025 and will increase towards the seasonal maximum sometime in October-November 2025.

The extent of the coming seasonal maximum of 2025 depends on the water levels of Lake Victoria earlier in the year, how large the flood baseline (the minimum mid-2025 extent) will be and how wet the coming rainfall season will be across South Sudan and Uganda.



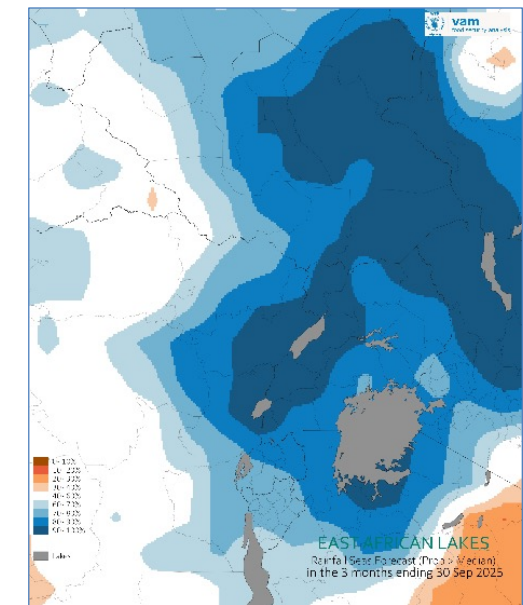
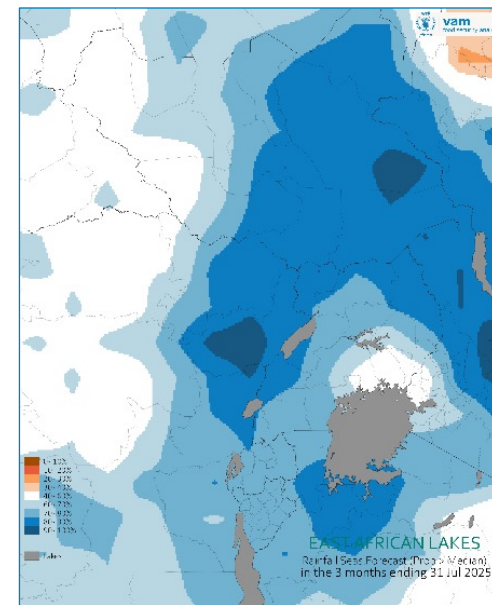
Lake Victoria catchment rainfall from **July 2024 to June 2025**. Note the two main rainfall peaks in Oct-Dec and Mar- May and the exceptional rainfall in November 2024 that led to a late increase in flood extent along the Sudd wetlands in late 2025.



Lake Victoria levels from 2018 to present. Note the sudden rise in lake levels from late 2019, the all-time record in the first half of 2024 and a recent peak arising from the November 2024 exceptional rainfall.

Lake Victoria water levels will remain historically high but unlikely to reach last year's record: lake catchment rainfall has been below average since early 2025 and the forecasted wetter than average conditions until September correspond to the seasonal minimum rainfall. However, the flood baseline is currently tracking at record levels and much above average rainfall is forecast for South Sudan and the upper Nile River basin for the core season of July-September.

Based on these indications, South Sudan should see **another major flood event in 2025**. This is likely to be at least similar to the 2024 extent, but larger extents cannot be ruled out, given the record baseline and enhanced rainfall across the country. The flood extent maximum is likely to occur in October as a fairly broad and flat peak.

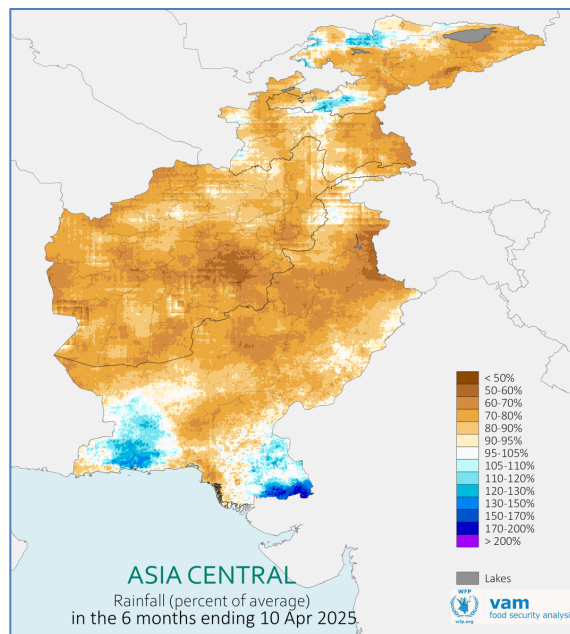


Rainfall seasonal forecasts for the 3-month periods **May- Jul 2025 (left)** and **Jul-Sep 2025 (right)** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

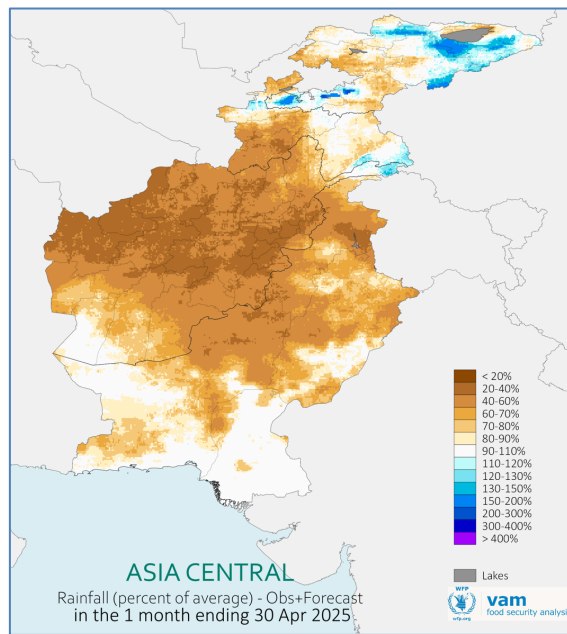
Persistent Drought as the Season Ends

The 2024–25 winter rainfall season is ending across Central Asia, having been marked by consistently **below-average precipitations**. From October through April, most areas recorded less than 70% of expected rainfall, with Afghanistan, Tajikistan, and Kyrgyzstan among the hardest hit. These deficits were largely driven by the presence of La Niña, which influenced regional circulation patterns during much of the season. Despite some short-lived rainfall events earlier this year, including localized flash floods in Afghanistan, conditions remain dry, and the accumulated volumes were insufficient to improve the drought situation.

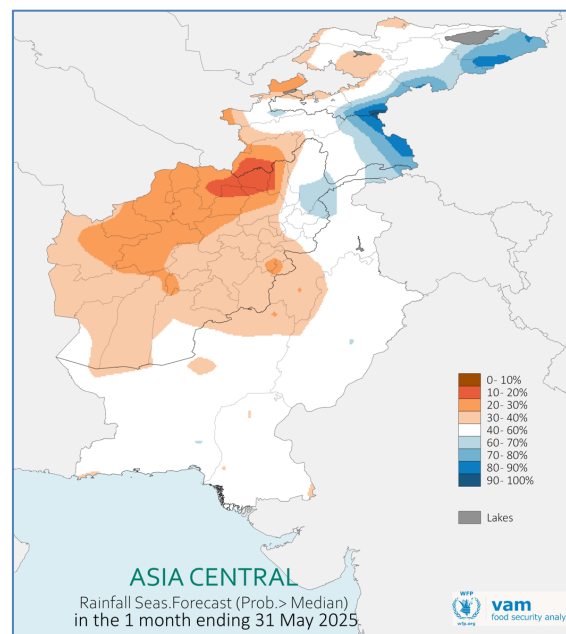
Snow accumulation has also been limited, leading to **reduced snowmelt** and water availability for the major **winter wheat** producing regions in the northern provinces of the country. Irrigated summer crops will also be negatively affected. The resulting low soil moisture levels, combined with above-average Summer temperatures, will drive worsening drought impacts on **summer crop** production and pasture and water availability.



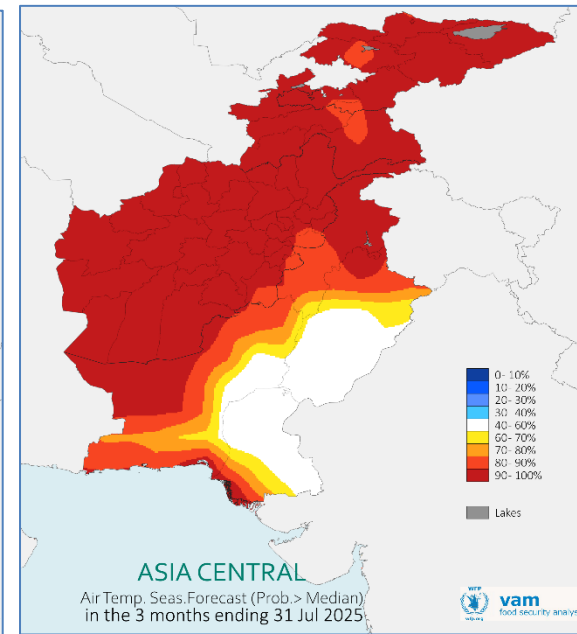
Rainfall **October 2024 to 10 April 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall



Observed and Rainfall forecast for the 1-month **until 30 Apr 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall



Rainfall forecast for **May 2025**, as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions



Temperature forecast for the 3-month **May-Jul 2025**, as the likelihood of exceeding the long-term median. Blue (red) shades for likely colder (hotter) than usual conditions

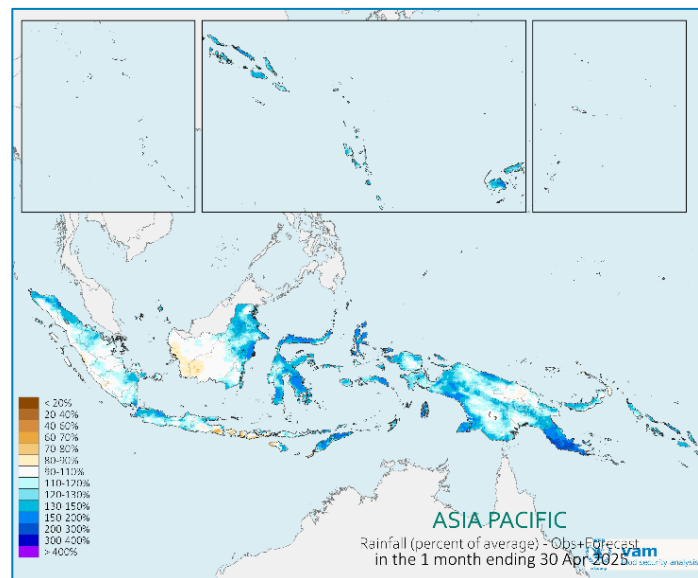
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

A Wetter Season Throughout

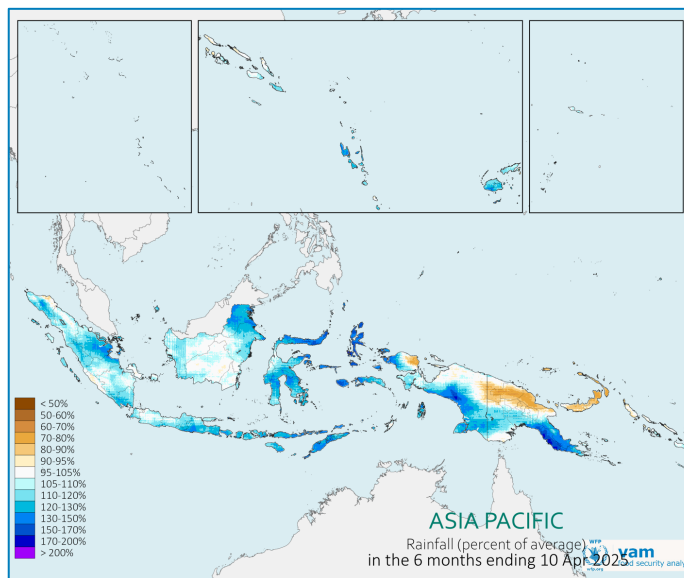
As the wet season approaches its final stages across Indonesia and Pacific, rainfall continues to follow **above-average pattern**, particularly in western Indonesia and Papua New Guinea, where recent anomalies remain positive. This sustained wetness has provided favorable conditions for crop growth and development, supporting key phases of the agricultural calendar.

After several months of La Niña influence, ENSO conditions have now shifted to neutral, marking a transition that is likely to shape regional rainfall patterns moving forward. Despite this shift, short-term forecasts still point to continued above-average rainfall in parts of the region through the end of the season.

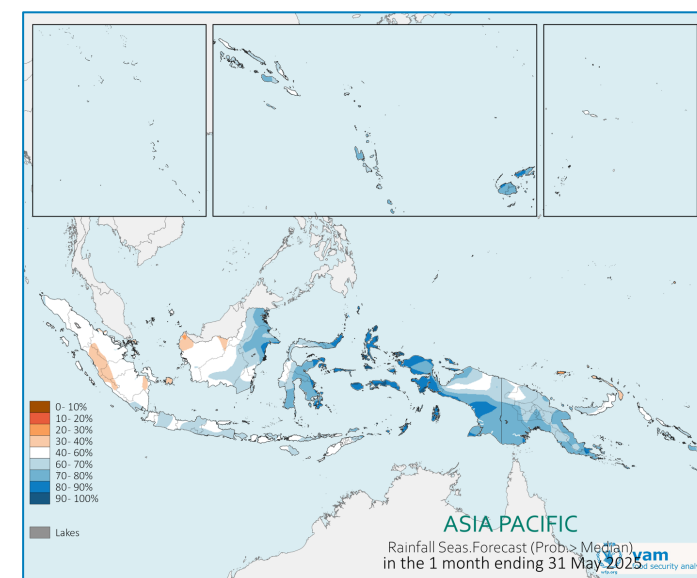
The tropical cyclone season remains active, but with ENSO-neutral conditions now prevailing, there is **no signal suggesting increased cyclone activity** in the near term.



Observed and Rainfall forecast for the 1-month **until 30 Apr 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions



Rainfall from **October 2024 to April 2025**, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall.



Rainfall forecast for the **1-month until 31 May 2025**, as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions.

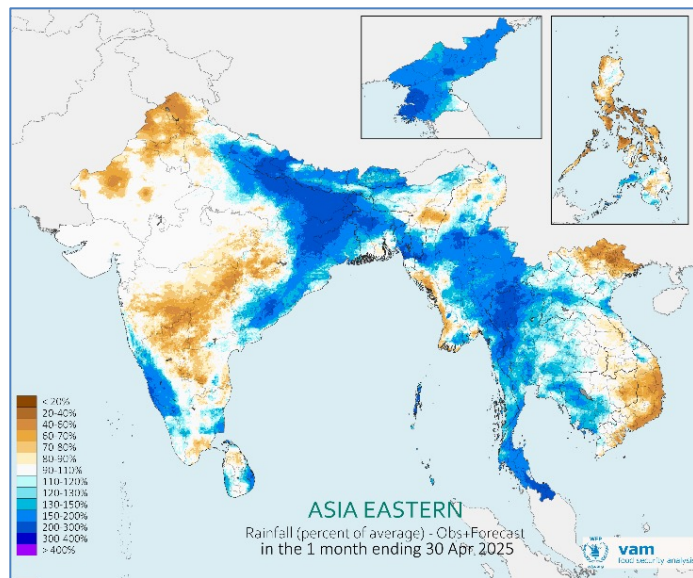


Wetter than Average Season Expected

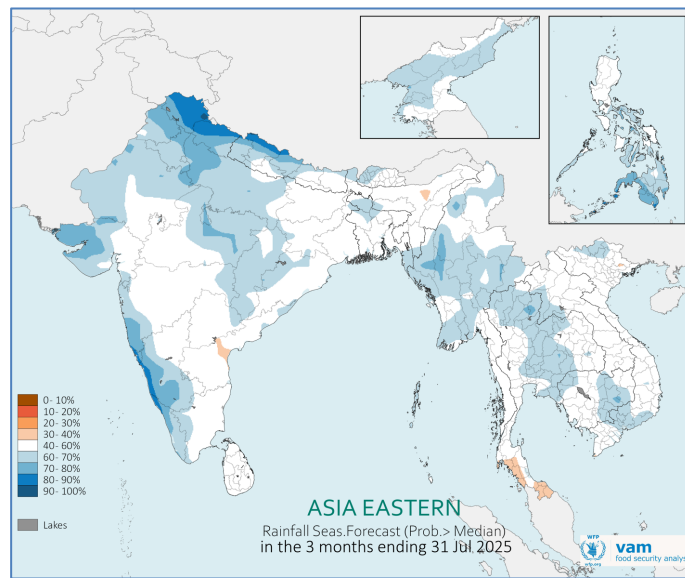
As the rainy season begins in Southeast Asia and approaches South Asia, early rains, especially in Myanmar, Thailand, Laos, and Bangladesh, have fallen slightly ahead of schedule, marking a promising start.

The latest outlook for May to August point to continued **wetter-than-normal** conditions across much of the region. Rainfall is expected to be particularly strong in the Philippines and Nepal, where seasonal totals could significantly exceed average level sincreasing **the likelihood of floods**. These patterns come as the region moves into ENSO-neutral conditions, meaning local and regional drivers are now more likely to shape rainfall behavior.

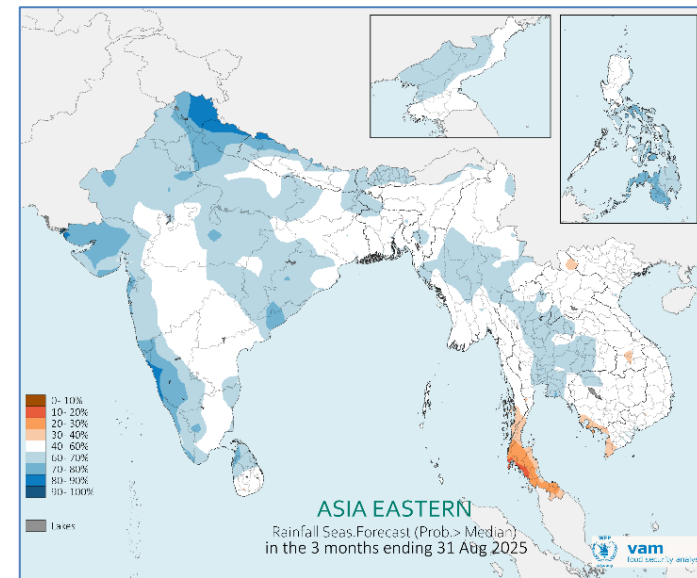
Most countries are currently in the land preparation and planting phase. While soil moisture is favorable, excessive rainfall could disrupt fieldwork or cause early flooding, especially in low-lying areas. If rains remain consistent, **crop prospects are positive**, but timing and intensity will be key in the coming months.



Observed and Rainfall forecast for the 1-month **until 30 Apr 2025**, as the proportion of the long-term mean. Blue (orange) shades for likely wetter (drier) than usual conditions



Rainfall forecast for the 3-month **May-Jul 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions



Rainfall forecast for the 3-month **Jun-Aug 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

Seasonal Rainfall Calendar

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Sahel
Gulf of Guinea

Contrasting Seasonal Outlook

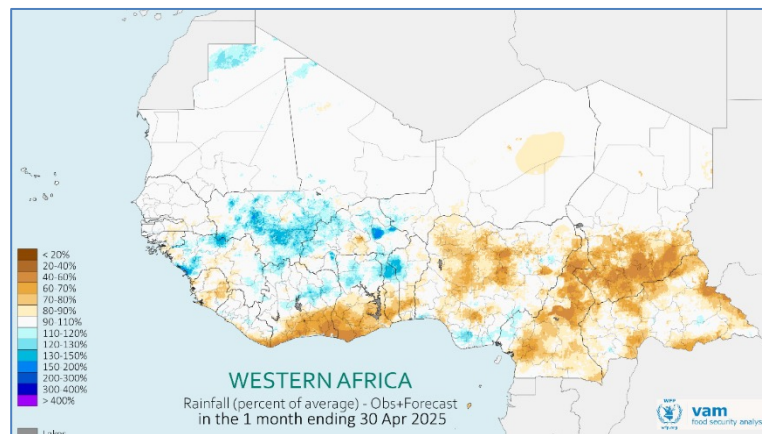
The rainy season has already started across the **Gulf of Guinea** countries, while the Sahelian region prepares for its onset in the coming weeks.

So far, rainfall in coastal areas has remained below average, and short-term forecasts suggest this trend is likely to continue in the near term.

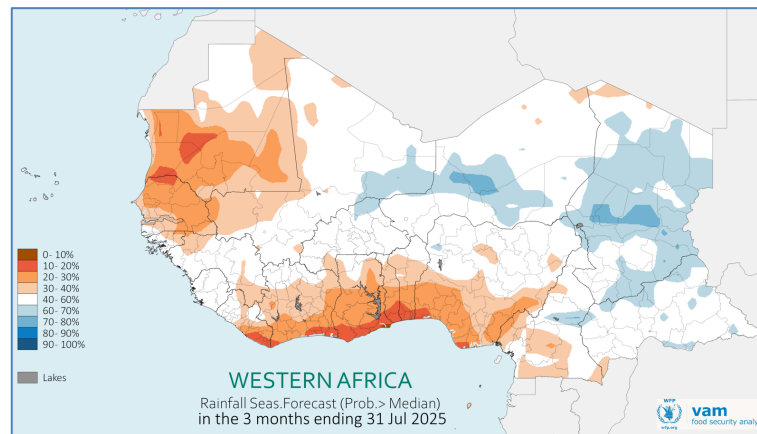
Furthermore, according to seasonal forecasts, these **drier than average** patterns are likely to continue across southern Nigeria, Ghana, Côte d'Ivoire, and other Gulf countries, throughout most of the 2025 season.

These rainfall deficits may prove disruptive for planting activities that will be underway soon while perspectives for the season ahead are also less than favourable.

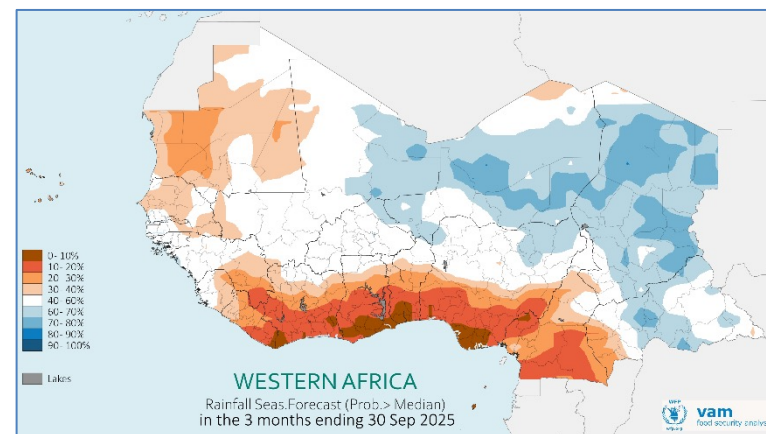
For the **Sahel**, the outlook varies across the region: Chad, Niger and eastern areas of Mali may see **above average rainfall** through the season. In contrast, early season dryness is likely in Senegal and Mauritania, which may continue into the main stages of the rainfall season.



Observed and Rainfall forecast for the 1-month **until 30 Apr 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions



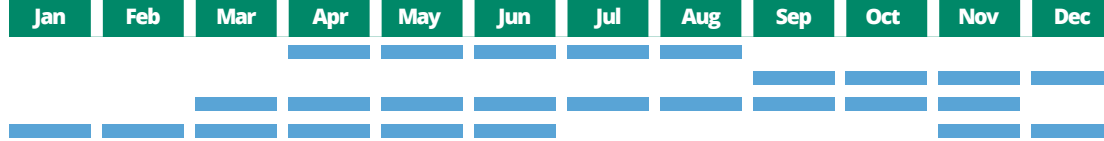
Rainfall forecast for the 3-month period **May-Jul 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions.



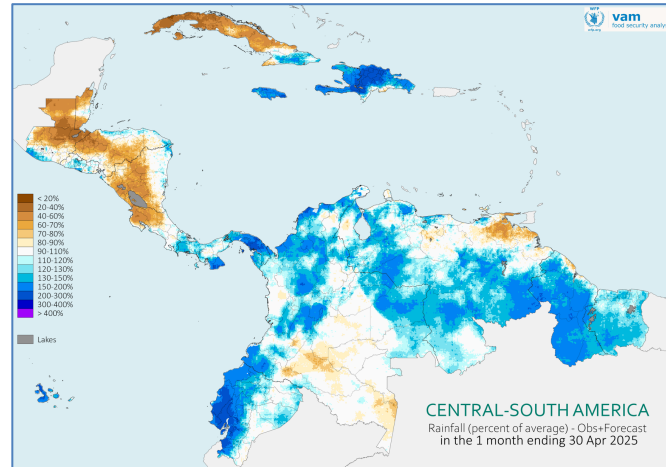
Rainfall forecast for the 3-month **Jul-Sep 2025** as the likelihood of exceeding the long-term median. Blue (orange) shades for likely wetter (drier) than usual conditions

Seasonal Rainfall Calendar

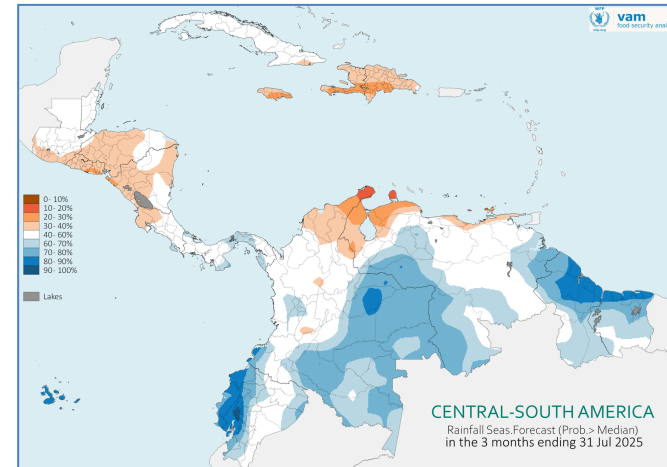
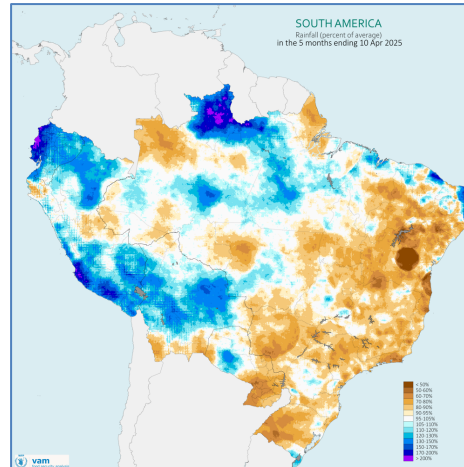
Central America Primera
Central America Postrera
South America (Northern)
South America (Southern)



A Drier Outlook for Central America



Observed and Rainfall forecast for **April 2025(right)**, Rainfall from **November to April 2025 (left)** as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (be-low) average rainfall



Rainfall forecast for May-Jul 2025 as the likelihood of exceeding the long- term median. Blue (orange) shades for likely wetter (drier) than usual condition

Central America and the Caribbean: After a much wetter than average previous season (Postrera, Sept–Dec 2024), seasonal forecasts for the 2015 Primera season (April–July) indicate below average rainfall across most of Central America, a pattern that is already visible in the April rainfall patterns. In contrast Haiti has faced above average rainfall during April, but the outlook is for drier conditions until July. A stronger Canícula (Mid-Summer dry period) in July–August could reduce soil moisture, impacting maize and beans.

Northern South America: The outlook for this region is mostly favourable with on or above average rainfall expected until July. In contrast, eastern Venezuela and Suriname may face delayed planting due to dryness, which may intensify during June–July, straining water resources,

Central and Southern South America: The 2024–2025 rainy season is ending under La Niña conditions, with mostly above-average precipitation across Brazil and western areas, and drier than average conditions in eastern Brazil and Paraguay – Uruguay.

METHODOLOGY

All satellite data (rainfall, vegetation index and land surface temperature) both current and historical are stored and processed at the WFP-HQ Humanitarian Data Cube AWS cloud system.

Rainfall: Primary dekadal data (CHIRPS) from Univ California St Barbara Climate Hazards Centre (<https://www.chc.ucsb.edu/data/chirps>)

Various accumulations are computed on a dekadal basis and anomalies derived relative to a 25 year-long mean (1994-2018). Rainfall charts from WFP Seasonal Explorer (https://dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/visualizations)

Land Surface Temperature: Primary data from MODIS-AQUA (NASA), cloud cleared and gap-filled, both daytime and nighttime images. Thermal amplitude derived from difference between the two. Long term averages 2002-2018 used to derive anomalies

Vegetation Index: Primary data from MODIS-AQUA and TERRA (NASA), cloud cleared and gap-filled. Long term averages 2002-2018 used to derive anomalies

Seasonal Forecast: [ECMWF seasonal forecasts](#) (SEAS5) | The forecast anomalies are presented as the probability of exceeding the median, indicating the likelihood that seasonal precipitation will be above the median of the 24-year climatological distribution. These anomalies are derived from a 51-member forecast ensemble and are calculated relative to a 24-year model climatology (based on a 25-member ensemble reforecast) spanning 1993–2016

Prepared by: Irene Ferrari, Diego Oliveira De Souza, Giancarlo Pini

For further information please contact:

hq.geospatial@wfp.org

