



Overview:

In northern **East Africa**, a delayed and below-average start to the *Belg* rains is impacting the start of the season in Ethiopia. In the south, there is concern for planting and development of main season cereals in most areas due to early season dry conditions that are forecast to continue during March to May. In West Africa, planting for the 2025/26 main cropping season is expected to begin in March. In the Middle East & North Africa, expanding dry conditions are causing concern for wheat in most areas, and significant production declines are expected in Morocco and northwestern Algeria. In Southern Africa, significant rainfall improvements since January have improved cropping prospects in parts of Namibia, Zimbabwe, Zambia, Malawi, and Mozambique. However, pockets of dry conditions remain in some areas, and poor rainfall outcomes are expected to degrade overall yield prospects in some main producing areas of South Africa. In Central & South Asia, conditions remain mostly favourable for winter wheat crops in the dormancy stage. In Southeast Asia, wet-season rice planting is nearing completion in the south while dry-season rice harvesting is just beginning in parts of the north. Recent high precipitation amounts have been generally conducive for cropping prospects, except in Brunei and parts of the Philippines where heavy rains could reduce yields. In Central America & the Caribbean, land preparation for the *Primera* season is ramping up, and planting will commence in April. Conditions in Haiti and Cuba have been upgraded to favourable despite last month's concerns regarding potential impacts from heavy rainfall and extreme events experienced in late 2024.





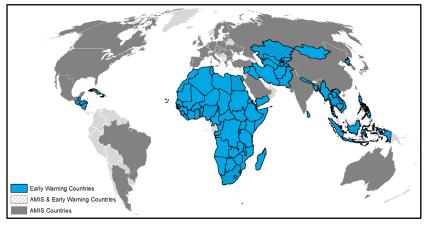














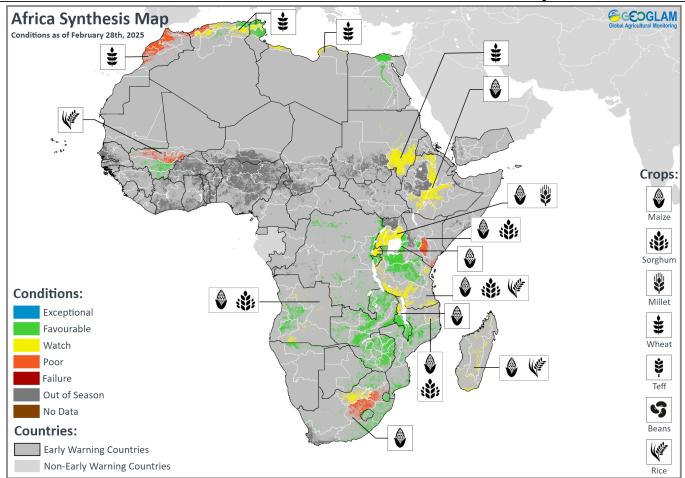
Contents:

Conditions at a Glance	2
Global Climate Outlook; Climate Influences	3
East Africa; Regional Outlook	4
West Africa	7
Middle East & North Africa; Regional Outlook	8
Southern Africa; Regional Outlook	10
Central & South Asia; Regional Outlook	13
Southeast Asia	15
Central America & Caribbean	17
Appendix – Terminology & Definitions	18



GEOGLAM Crop Monitor for Early Warning

Crop Conditions at a Glance based on best available information as of February 28th



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of February 28th. Crop conditions over the main growing areas are based on a combination of i4puts including remotely sensed data, ground observations, field reports, national, and regional experts. **Regions that are in other than favourable conditions are labeled on the map with a symbol representing the crop(s) affected.**

EAST AFRICA: In the north, harvesting of main season cereals finalized in January under mixed conditions, and there is concern for *Belg* season planting in Ethiopia due to a delayed and below-average start to seasonal rains. In the south, planting of second season cereals is underway with dry concerns in most areas. Forecast below-average precipitation across eastern East Africa could reduce the total area under cultivation (See Regional Outlook Pg. 6-7).

WEST AFRICA: Harvesting of 2024/25 season cereals is now complete with generally favourable outcomes in non-conflict affected regions, except in northern Ghana. Land preparation is underway for the 2025/26 main cropping season, and planting is expected to begin in March.

MIDDLE EAST & NORTH AFRICA: Winter wheat ranges from the vegetative to reproductive stage to dormancy, depending on regional temperature variations. Expanding dry conditions have degraded yield prospects in Morocco and northwestern Algeria and are now impacting more areas throughout the Middle East (See Regional Outlook Pg. 9).

SOUTHERN AFRICA: Growing conditions are mostly favourable for main season cereals as significant rainfall improvements since January have improved vegetation and soil moisture conditions, except in some main producing regions of

central South Africa where poor rainfall outcomes have degraded yield prospects and in parts of Angola, Malawi, and Madagascar where dry concerns remain (See Regional Outlook Pg. 12).

CENTRAL & SOUTH ASIA: Winter wheat is mostly in the dormancy stage, and overall conditions remain favourable except in some rainfed areas of Pakistan. Harvesting activities will begin in April, and dry conditions are expected through May in most areas (See Regional Outlook Pg. 14).

SOUTHEAST ASIA: Planting of wet-season rice is nearing completion in the south while dry-season rice is mostly in the vegetative stage in the north, and conditions are mostly favourable, except in Brunei and parts of the Philippines where recent high precipitation amounts could result in yield declines. In southern Viet Nam, conditions are favourable despite higher rates of saltwater intrusion into the Mekong Delta this year.

CENTRAL AMERICA & CARIBBEAN: Harvesting of *Segunda/Postrera* season cereals is now complete, and planting for the *Primera* season will begin in April. Conditions are favourable for second season rice in Honduras and *Apante* season beans in Nicaragua, and harvesting will conclude in March and April.

Global Climate Outlook: Two-week forecast of areas of above or below-average precipitation

The two-week forecast (Figure 1) indicates a likelihood of above-average precipitation over eastern Canada, western and the Great Lakes regions in the US, central Columbia, southern and eastern Venezuela, Guyana, Suriname, northern Brazil, western Ecuador, southern Peru, western Bolivia, northwest Argentina, coastal Norway, northern Sweden, Finland, the northern Russian Federation, northern Algeria, central Côte d'Ivoire, central Ghana, northern and central Tanzania, Madagascar, United Arab Emirates, central east Iran, Afghanistan, eastern India, Bangladesh, southwest China, southern Viet Nam, the Philippines, Malaysia, eastern Indonesia, southern Papua New Guinea, and northern Australia.

There is also a likelihood of below-average precipitation over the Great Plains in the US, Mexico, western Cuba, eastern and central Brazil, southern Chile, eastern Poland, eastern Czechia, Slovakia, Hungary, Romania, eastern Serbia, western and southeast Belarus, Ukraine, the central and southern Russian Federation, northern Georgia, coastal Sierra Leone, northern Angola, southern Malawi, central Botswana, central and southeast South Africa, western Kazakhstan, eastern Kyrgyzstan, central and northern India, Nepal, northwest and eastern China, Democratic Republic of Korea, Republic of Korea, northwest Japan, northeast Indonesia, northern Papua New Guinea, western Australia, and northern New Zealand.

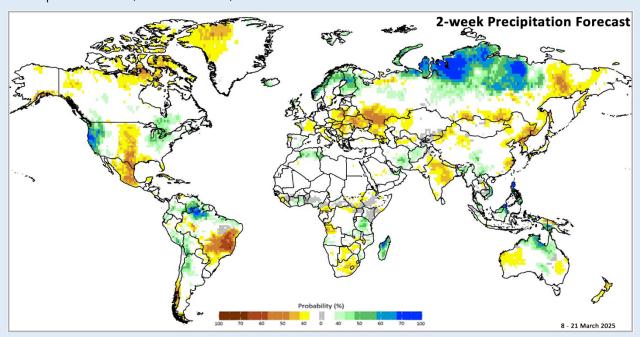


Figure 1: IRI SubX Precipitation Biweekly Probability Forecast for 8 – 21 March 2025, issued on 28 February 2025. The forecast is based on statistically calibrated tercile category forecasts from three SubX models. Source: IRI Subseasonal Forecasts Maproom

Climate Influences: La Niña conditions are present and a transition to ENSO-neutral is likely during March-May

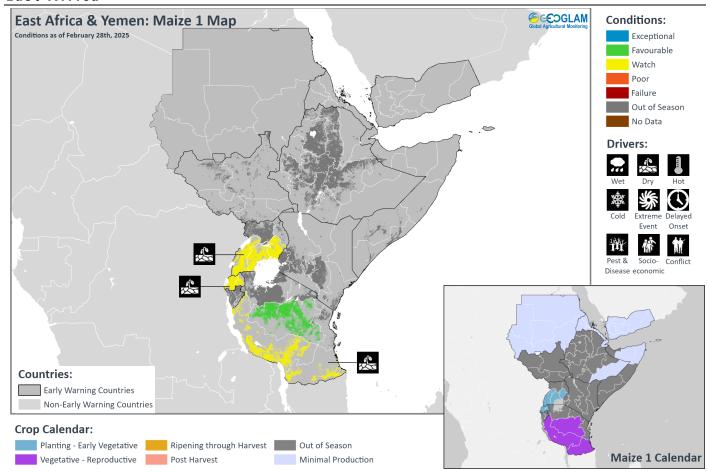
La Niña conditions are currently present. A transition to ENSO-neutral is likely during March-May 2025 (66 percent chance). Neutral ENSO conditions are most likely through November 2025, according to the CPC/IRI. At present, western Pacific Ocean conditions are extremely warm, and this warmth is forecast to continue, which would strengthen temperature gradients and potentially enhance or prolong La Niña's impacts.

La Niña typically raises the chances of below-average precipitation in eastern East Africa, central-southern Asia, southern South America, the southern United States, northern Mexico, and eastern East Asia. Above-average precipitation tends to become more likely in Southeast Asia, Southern Africa, and northern South America.

Global temperatures for January 2025 were the warmest on record, according to the Copernicus Climate Change Service <u>Climate Bulletin</u>. Forecast above-average temperatures during late February to mid-March raise the risk of heat stress during maize reproductive development in southern Brazil and northern Argentina and may exacerbate impacts of forecast below-average rainfall during early March. In East Africa, forecast hotter and drier-than-average conditions could challenge the establishment of rainfed crops.

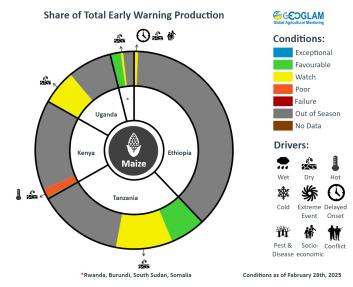
Source: UCSB Climate Hazards Center

East Africa



Crop condition map synthesizing Maize 1 crop conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled on the map with their driver.**

Across northern East Africa, harvesting of main season cereals mostly finalized in January under mixed conditions. Wheat crops continue to develop in **Sudan** with concern regarding the ongoing conflict situation. Additionally, planting of *Belg* season maize is just beginning in **Ethiopia** with concern due to a delayed and below-average start to the seasonal rains as well as ongoing socioeconomic concerns in the north. In **Yemen**, land preparation for sorghum crops is underway, and planting will begin in March.



For detailed description of the pie chart please see description box on Pg. 18

Across southern East Africa, harvesting of second season cereals finalized in Rwanda and Burundi under favourable conditions and is nearing completion in bimodal regions of eastern Kenya with below-average yields expected due to poor seasonal rainfall outcomes that were exacerbated by high temperatures. Additionally, planting of Vuli season sorghum is just beginning in the United Republic of Tanzania with dry concerns along the northern coast. Furthermore, planting and development of main season cereals continues in bimodal regions of Uganda, the bimodal region of northeastern Kenya, Rwanda, and throughout the **United Republic of Tanzania**. Conditions are mixed with ongoing dry concerns in most areas, except in the central and northern areas of the United Republic of Tanzania where rainfall outcomes have been generally average to above-average.

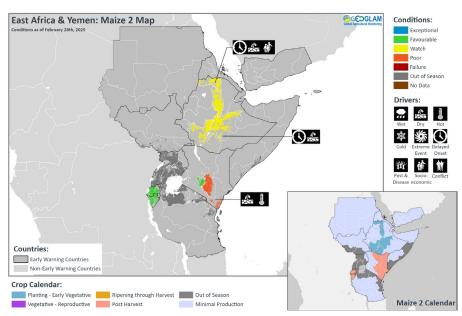
Throughout East Africa, forecast below-average March to May rains in many areas, particularly along the east, could worsen drought conditions and hinder the total area under cultivation this season (See Regional Outlook Pg. 6-7).

Northern East Africa & Yemen

In **Sudan**, wheat crops continue to develop and will be harvested in March and April. There is ongoing concern as conflict is expected to result in below-average output. In **Ethiopia**, planting of *Belg* season maize is just beginning, and there is concern due to the delayed and below-average start to the *Belg* rains, particularly in southern Oromia, as well as ongoing socio-economic concerns in the north. Precipitation is forecast to be below-normal throughout the duration of the growing season (See Regional Outlook Pg. 6-7).

Southern East Africa

In bimodal and minor production areas in the eastern half of Kenya, harvesting of short rains maize is nearing completion, and conditions have been downgraded to poor due to unfavourable rainfall outcomes this season, including a delayed start which resulted in late plantings, followed by an early cessation. High temperatures exacerbated the dry conditions, and crops at the vegetative stage were subjected to water and heat stress. In the central region, harvesting of short rains maize is also nearing completion, but favourable outcomes are expected due to more conducive rainfall received. Furthermore, sorghum planting is just beginning in the bimodal northeastern region with concern as no rains have been received, and a forecast continuation of below-average precipitation through May will likely impact crop planting and development (See Regional Outlook Pg. 6-7). In **Uganda**, planting of first season maize and millet crops is just beginning in bimodal areas with concern as a



Crop condition map synthesizing Maize 2 conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled on the map with their driver.**

poor start to the seasonal rains will likely affect crop germination and establishment. Below-average rains are expected to continue in bimodal areas through May (See Regional Outlook Pg. 6-7). In **Rwanda**, harvesting of Season A (60 percent of aggregate cereal production) maize crops finalized under favourable conditions. Planting of Season B (40 percent of aggregate cereal production) maize crops is just beginning, and there is concern regarding current dry conditions that could impact sowing activities and crop establishment. In **Burundi**, harvesting of Season A (35 percent of aggregate cereal production) maize crops finalized under favourable conditions. In bimodal areas of the north and northern coast of the **United Republic of Tanzania**, *Masika* season rice and wheat are in the vegetative to reproductive stage while planting of *Vuli* season sorghum is just beginning, and growing conditions are mixed as rainfall along the northern coast was below-average over the last month (See Regional Outlook Pg. 6-7). Elsewhere in unimodal areas of the country, *Msimu* season cereals continue to develop under mixed conditions with ongoing dry concerns in the south and west.

Regional Outlook: Forecast below-average MAM rains likely to worsen drought conditions in eastern East Africa

The dry season is coming to an end in eastern East Africa. The October-November-December 2024 rainy season ended with below-average rainfall in Somalia and parts of northeastern Kenya and southern Ethiopia.

In recent weeks, during January 26th to February 25th, areas with seasonal moderate to heavy rains remained mainly to the south, resulting in dry conditions in most of East Africa (Figure 1-left). Tanzania received much lower rainfall than usual during February, in southern, central, and northwestern areas. With the exception of portions of Kenya, where above-average rain occurred in late January, generally dry conditions prevailed in northern and equatorial areas of the region. In southwestern Ethiopia, where seasonal rains begin early in February, moderate rainfall deficits (25 to 50+ mm) developed, as of February 25th. Forecast rains into early March indicate that deficits will likely worsen in parts of southern Tanzania.

Much of East Africa experienced above-average <u>temperature</u> conditions in February 2025, with areas of eastern Kenya, southern Somalia, southeastern Ethiopia, and portions of South Sudan experiencing temperatures exceeding 40°C (Figure 1 middle-left). Temperature records were broken in parts of Kenya, Uganda and Tanzania. A <u>heat wave</u> reported in Juba, South Sudan, is likely to pose risks to human health and labor productivity. Overall, high temperatures during a period of no rains has led to moisture stress in cropping areas and rangelands, and below-normal vegetation conditions based on <u>NDVI</u>. According to a <u>report</u> by OCHA, drought conditions in areas of Hiraan, Somalia have led to failed crops, water shortages, and widespread migration of livestock to riverine areas.

Current forecasts anticipate modest above normal rains over the next few weeks, followed by a transition to below-normal rains for the rest of the season in the eastern part of the Horn of Africa. The Madden-Julian Oscillation (MJO) is forecast to be active over East Africa in early-mid March. Although there is uncertainty around the propagation and intensity of the MJO and associated rains in East Africa, these conditions will likely bring above-average rainfall to parts of the region during that time. The CHIRPS-GEFS forecast for February 27th to March 13th predicts above-average rainfall in central and western Kenya and below-average rains across much of Tanzania (Figure 1 middle-right). During March 3rd to March 10th, the ECMWF also indicates above-average rainfall in parts of Kenya, and also in central and eastern Ethiopia and Somalia. During March 10th to 17th, there are elevated chances of above-average rainfall in parts of Kenya, Tanzania, and Burundi. For eastern Kenya and Somalia, the actual value of the anticipated rainfall is very low, and will likely not be sufficient to provide an early start to the crop growing season. Following this, according to the February 27th ECMWF extended range forecast, a persistent below-average rainfall pattern will potentially develop during late March and affect equatorial areas into April. A transition to below-normal rainfall in eastern East Africa is consistent with the seasonal outlook in these areas.

During March-April-May (MAM) 2025, the WMO, C3S, NMME (Figure 1-right) multi-model ensembles and the UCSB CHC Western V Gradient-based forecasts from early February converged on a pessimistic outlook for the upcoming eastern East Africa long rains. These indicated increased chances of below-average rains in eastern Tanzania, eastern Kenya, northern, central and eastern Ethiopia, and most areas of Somalia. There is higher uncertainty in the western parts of the region. Current La Niña conditions are expected to transition to ENSO-neutral during March to May (66% chance, CPC/IRI). Very warm western Pacific sea surface temperatures (SSTs) observed in February are forecast to continue during MAM. This could prolong La Niña-like conditions, even with moderately cool Nino3.4 region SSTs in the central-eastern Pacific. The warmth helps produce a strong west-east SST gradient across the western and central-eastern Pacific region (a negative Western V Gradient, WVG). Such conditions can reduce the flow of moisture into eastern East Africa, and bring dry subsiding air down over the Horn, reducing the chances of bountiful rains.

(Continued Pg 7.)

Regional Outlook (continued): Forecast below-average MAM rains likely to worsen drought conditions in eastern East Africa

Prolonged dry conditions in eastern East Africa are concerning and will likely lead to long lasting impacts on food and water availability. According to a multi-agency report, more than 3 million people in Somalia are facing acute food insecurity with the number projected to rise from April through June 2025 to 4.4 million due to worsening drought conditions. In Kenya's arid and semi-arid counties, crop production for the 2024 short rains season was below average, and crops failed in some, due to poorly distributed rainfall, pests and disease, high costs of farm inputs, and other factors. The Kenya Food and Nutrition Security Assessment (February 2025) also reported that acute food insecurity had risen to 2.15 million people and was projected to increase to 2.8 million by June, due to anticipated below-average March to May rainfall and the shocks that a second failed season would have on livelihoods.

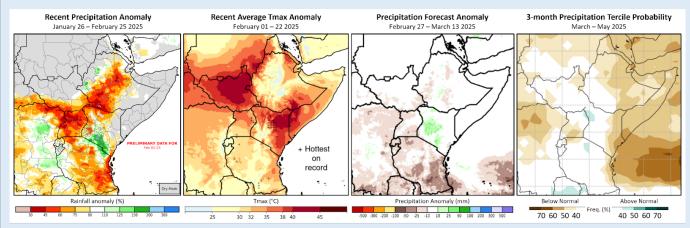


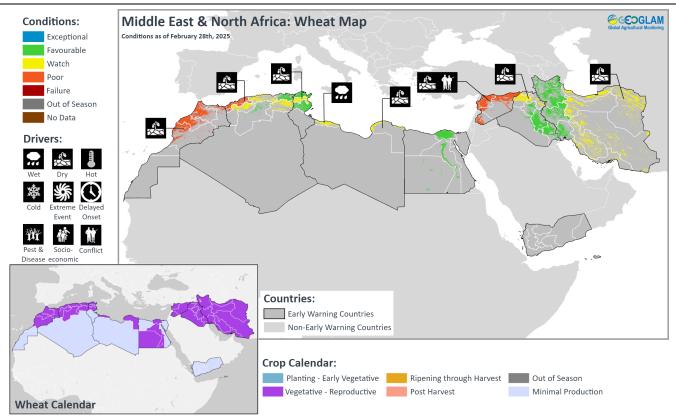
Figure 1: Recent rainfall and temperature anomalies and sub-seasonal and seasonal rainfall forecasts. Left: Percent of average rainfall for January 26th, 2025, to February 25th, 2025. Based on CHIRPS preliminary for February 2025. This compares the rainfall totals to the 1981-2024 CHIRPS average. From CHC Early Estimates. Middle-left: Average daily maximum temperatures for February 1st to 22nd, 2025, shown as the difference from average (1991-2020). Stippling shows locations where this value was higher than any previous values for the same time period, back to 1981. Data is from the CHIRTS-ERA5 Tmax product, which uses ECMWF ERA5 operational and CHIRTSmax monthly historical data. Middle-right: A 15-day CHIRPS-GEFS (unbiased GEFS) forecast from February 27th, 2025 with values indicating how the forecast compares to the CHIRPS average for this period. Right: Probabilistic forecast for March 2025 to May 2025 precipitation tercile, based on February initial conditions. Probabilities are derived from forecasts from seven North American Multi-Model Ensemble (NMME) models (February initial conditions). Colors indicate the forecast probability of each category, based on 124 ensemble members from 7 models and a 1991-2020 baseline. White indicates a high level of disagreement amongst forecasts.

Source: UCSB Climate Hazards Center

West Africa

In West Africa, harvesting of both main and second season cereals is now complete across the region. Despite mixed rainfall performance, final cropping outcomes were mostly favourable in non-conflict affected regions except in northern **Ghana** where drought resulted in below-average yields. Along the Sahel, harvesting of main season rice finalized in February in **Mali**, while harvesting of second season rice is now underway in **Mali** and **Mauritania**. Land preparation is underway for the 2025/2026 main cropping season, and planting is expected to begin in March in **Liberia**, southern **Cote d'Ivoire**, southern **Ghana**, southern **Togo**, southern **Benin**, southern **Nigeria**, southern **Cameroon**, and the **Central African Republic**.

Middle East & North Africa



Crop condition map synthesizing wheat conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are labeled on the map with their driver.**

Across the Middle East and North Africa, winter wheat ranges from the vegetative to reproductive stage in warmer areas to dormancy in cooler areas, and harvesting will commence in April. In North Africa, a severe water deficit has been impacting the region since November 2024, particularly from **Morocco** to northwestern **Tunisia** (See Regional Outlook Pg. 9). These dry conditions have worsened yield prospects in **Morocco** and northwestern **Algeria** where crops are unlikely to recover, and concern remains in most of **Algeria**, north-central **Tunisia**, and northeastern **Libya**. However, rainfall received in the second half of January partially offset deficits in coastal areas of northeastern **Algeria** and northern **Tunisia**. Additionally, in **Libya**, extreme high rainfall received in December may impact final yields in the northwest (See Regional Outlook Pg. 9). In the Middle East, dry conditions are expanding, with concern throughout **Lebanon**, **Syria**, northern **Iraq**, and much of **Iran**. Parts of **Iraq** and **Iran** have only received about half of normal rainfall amounts from December 2024 to February 2025.

In Morocco, the government reduced the cost of wheat and barley seeds in October 2024 by 5 and 3 percent respectively to encourage expanded plantings. However, prolonged drought in 2024 combined with low rainfall amounts received in November and December at the start of the winter season hindered land preparation and delayed winter crop planting. Several consecutive years of drought have resulted in limited planting opportunities and increased input costs, and sown area is below-average. Despite some improvement at the end of January, cumulative rainfall has been the lowest since 2001/2002 in many regions, particularly along cerealproducing areas of the Atlantic coast (Gharb, Rabat, Chaouia, Doukala-Abda, and Marrakech). Winter crop biomass is generally poor, except where irrigation has been available (parts of Tanger Tetouan and Taza). This season marks the sixth consecutive winter cropping season with a severe water deficit. Autumn drought conditions at the beginning of the season are typically precursors to low yields, and there is minimal expectation of recovery even if substantial rainfall is received in the coming weeks. Wheat yields are currently expected to be 28 percent below-average at the national level. In northwestern Algeria, record low rainfall received at the beginning of the season delayed sowing activities. A continuation of persistent dry conditions has resulted in below-average crop biomass (from Tlemcen to Chlef), and rainfall is needed to prevent crop failure. In the central coastal region, concern remains due to a moderate rainfall deficit, though biomass is currently near-average. In the northeast and parts of the centre-south, conditions are favourable, and crop biomass is above average. Wheat yields are currently expected to be 5 percent below-average at the national level. While wetter than average conditions are expected for April, no crop improvement is expected as it will be too late for significant recovery. In Tunisia, the start of the season was slightly delayed in the northwestern regions of Jendouba and Beja, and farmers likely chose to delay planting until precipitation was received in mid-January. However, winter crop conditions have since improved, and overall crop biomass is average to slightly above average, except in Le Kef located in the north-centre. Wheat yields are currently expected to be 3 percent above average at the national level. In Egypt, the government increased the procurement prices of wheat in October 2024 to be about 25 percent above global prices, incentivizing farmers to expand wheat cultivation in an effort to improve the country's wheat self-sufficiency and diversification of export crops. Overall growing conditions remain favourable.

In **Syria**, rainfall deficits since December continued into early February, resulting in low winter crop biomass in most regions, particularly in the main producing northern governorates (Hassakeh, Raqqa, and Aleppo) as well as in the centre (Idleb, Hama, and Dayr Az Zor) and south. Wetter than normal conditions are expected for March and April, but it may be too late for significant crop recovery following a poor start to the season, and residual conflict is expected to hinder yield outcomes. In **Iraq**, conditions are mixed despite prevailing dryness since December, with about half of normal rainfall received from December to February. Crop biomass is well below-average in the north (Ninewa and Dahuk) and average to above-average in the centre-east and south, likely due to irrigation. Wetter than normal conditions forecast in March and April may not be sufficient for crop recovery in the north. In **Iran**, prevailing dry conditions since late December, with about half of normal rainfall amounts received from December to February, have degraded winter cereal biomass across most regions, except in parts of the west (East and West Azarbayejan through Kermanshah and Khuzestan). Production prospects are uncertain as forecasts suggest mixed rainfall outcomes in the coming months. Additionally, rice planting has begun in Mazandaran and Gilan located along the northern coast.

Regional Outlook: Poor rainfall performance in western North Africa and the Middle East

Rainfall was below average across the Middle East during late January to late February, and conditions were mixed in North Africa. Ongoing rainfall deficits in Morocco and Algeria remain an issue of major concern.

Seasonal rainfall totals are substantially below average in Morocco and Algeria, due to mainly below-average rainfall during late January to late February (Figure 1-left) and earlier severe to moderate rainfall deficits. Rains received during the past month likely eased some dryness, however, the long lasting drier-than average conditions have suppressed vegetation productivity into mid-February, based on <u>below-average NDVI</u> in western and northeastern Morocco and western and inland areas of Algeria. In portions of western and central Morocco, western and central Algeria, northeastern Egypt, Syria, and Jordan, rainfall totals from November 1st to February 20th, are <u>among the lowest</u> of the CHIRPS 44-year record, based on preliminary data for February.

During the next two weeks, rainfall will be likely average to above-average, based on GEFS and ECMWF forecasts from February 26th. Figure 1-middle shows an outlook for November 1st, 2024, to March 10th, 2025, rainfall that includes the bias-corrected GEFS forecast. Rainfall totals range from 45 to 75 percent of average in western Morocco and eastern Algeria and from 60 to 90 percent of average in the Middle Eastern region. In Libya, seasonal rainfall totals will remain highly above average in some areas due to extreme high rainfall in December.

During March to May, some C3S models suggest that central areas of North Africa— including Libya and eastern Egypt— may receive above-normal rainfall. Some NMME models suggest that below-normal rains might continue in the ongoing deficit areas in the west. However, a low level of agreement among NMME, C3S, and WMO ensembles precludes a confident outlook. Spring 2025 temperatures are forecast to be <u>warmer-than-normal</u> in North Africa and the Middle East. Higher temperatures in spring would increase the risks of heat and moisture stress in crops, and more quickly evaporate soil moisture and surface water resources.

Recent soil moisture deficits are anticipated to continue, with relatively high chances of below-normal April soil moisture in Morocco, Algeria, Tunisia, and the northern Middle East, based on NASA's NMME-based soil moisture forecasts (Figure 1-right). Most of that outlook is attributable to the very dry conditions that already occurred. In western and central Libya, soil moisture will likely remain above normal.

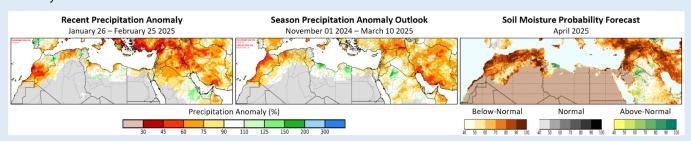
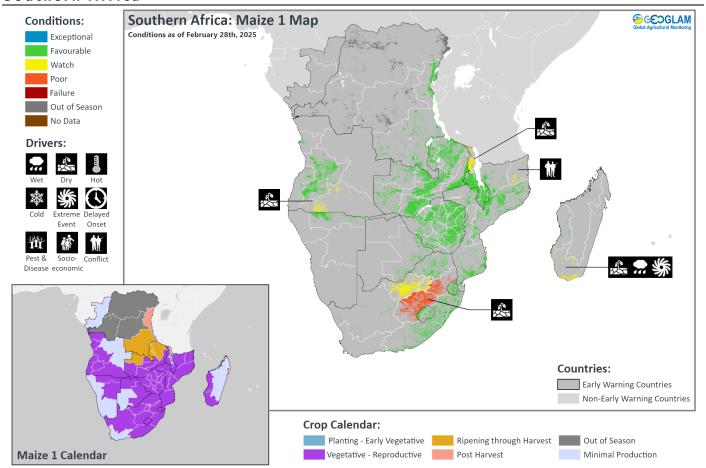


Figure 1. A recent precipitation anomaly, a seasonal precipitation anomaly outlook, and a probabilistic soil moisture forecast for April 2025

Left and middle: CHC <u>Early Estimates</u>, which compare recent precipitation totals to the 1981-2024 CHIRPS average for respective accumulation periods. The left panel shows the percent of average precipitation for January 26th to February 25th, 2025 using CHIRPS preliminary data for February 1st to 25th. The middle panel shows an outlook for percent of average precipitation for Nov. 1st, 2024, to Mar. 10th, 2025. Based on CHIRPS Final data through January, preliminary data in February, and the CHIRPS-GEFS 16-day bias-corrected GEFS forecast from Feb. 26th. Right: Probabilistic forecast for April 2025 root zone soil moisture tercile, from the <u>NASA Hydrological Forecast and Analysis System's FLDAS forecast.</u> The FLDAS forecast uses CHIRPS and MERRA-2 reanalysis data through January 2025 and forecasted meteorological conditions for February to April 2025 from the North American Multi-Model Ensemble (NMME) and the GEOSv2 model.

Source: UCSB Climate Hazards Center

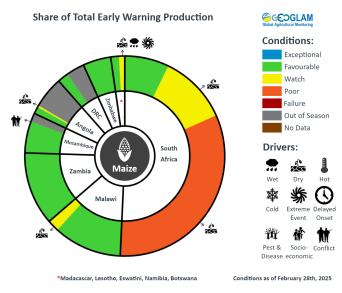
Southern Africa



Crop condition map synthesizing Maize 1 conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. Crops that are in other than favourable conditions are labeled on the map with their driver.

In Southern Africa, harvesting of main season cereals is just beginning in **Angola** while crops continue to develop in **Namibia**, **Botswana**, **Zimbabwe**, **Zambia**, **Malawi**, **Mozambique**, **Madagascar**, **South Africa**, **Lesotho**, and **Eswatini** for harvest from March. Growing conditions are mostly favourable, and significant rainfall improvements since January have improved vegetation and soil conditions in many central and eastern areas of the region, including in northwestern **Namibia**, northeastern **Zimbabwe**, central **Zambia**, central and southern **Malawi**, and central and southern **Mozambique**. However, torrential rains and flooding are now impacting several areas, particularly in **Madagascar** where recent storms resulted in widespread inundation and flooding. The rains have also contributed to the proliferation of pests and diseases. African Armyworm are present across parts of **Zimbabwe**, **Malawi**, **Botswana**, **Eswatini**, and **South Africa**, and a bacterial wilt disease is present in **South Africa**. Conversely, poor rainfall has raised concerns in some main producing areas of central **South Africa** where below-average yields are expected. Dry concerns also remain in southern **Angola** and northern **Malawi** as well as much of **Madagascar** where seasonal precipitation remains below-average despite the recent passage of several storms (See Regional Outlook Pg. 11).

In Angola, sorghum harvesting is now underway in most areas, while maize crops are nearing maturity for harvest from March. Concern remains in parts of the south and east due to low rainfall in late December and January, which caused crop wilting. Although February rainfall improved to average levels in most regions, some central and western provinces, including Benguela, Cuanza Sul, and Huambo, experienced a rainfall deficit. Many farmers in previously affected areas were unable to replant as the optimal planting window closed in early January. Additionally, high input prices such as fertilizers and fuel, compounded by a weaker currency, may further limit farmers' access to essential supplies and constrain yield prospects. Elsewhere in the country, growing conditions remain generally favourable. In Namibia, growing conditions remain favourable and have improved from early to mid-February. In Botswana and central and southern **Zimbabwe**, persistent rain received from December 2024 has resulted in saturated soils and flooding from early to mid-February. However, growing conditions remain favourable as the rains benefitted many previously dry areas, alleviating moisture deficits and replenishing water resources. In **Mozambique**, conflict continues to constrain agricultural output in Cabo Delgado province located in the northeast. In Madagascar, concern remains due to poor rainfall distribution and well below-average seasonal rainfall totals in most areas, except in parts of the west where conditions remain favourable. Conversely, the country was impacted by Tropical Storm Faida in early February and Tropical Cyclone Honde in late February and early March, resulting in heavy rainfall inundation and potential crop damage. Despite the recent storm activity, rainfall totals remain at record low levels in the north, with a likely negative impact to paddy production (See Regional Outlook Pg. 12). In South Africa, a late start to the rainy season followed by a dry period from mid-January to early February had a negative impact on production prospects in the main producing



For detailed description of the pie chart please see description box on Pg. 18.

regions, including in North West and Guateng provinces where there is ongoing concern for possible yield declines and in Free State and Mpumalanga provinces where yield prospects are below-average. Elsewhere, favourable outcomes are expected. Overall yields are expected to be about 7 percent belownormal. In **Lesotho**, rainfall has been generally below-average since the start of the season in October 2024 through January 2025, with more severe deficits in the minor-producing southwestern districts. The main cereal-producing northern districts also experienced moderate deficits, but current vegetation conditions suggest average yields. Forecast aboveaverage rainfall through May could improve yield outcomes. In Eswatini, while a late start of seasonal rains delayed planting, near-average rainfall and favourable distribution since January have since supported crop growth, with notable improvements in vegetation and soil conditions. While pockets of dry conditions remain, a forecast continuation of near-average rains through April could benefit crops. Additionally, the government continues to invest in input subsidies and irrigation projects to support domestic production and

enhance agricultural resilience. In the **Democratic Republic of the Congo**, harvesting of main season cereals finalized in the east while planting and development continues in the southeast and central regions. Additionally, planting and development of second season maize is underway in the southeast, central, and northern regions. Overall conditions remain favourable despite heavy rains and flooding received from early to late February in the east.

Regional Outlook: Wet conditions in central areas, rainfall deficits in Madagascar and northern areas, and cyclones in late February

Conditions were wetter than average across central and eastern areas in recent weeks, and below average in many southern and northern areas (Figure 1-left). During January 26th to February 25th, rainfall was above average in northeastern Namibia, Botswana, much of Zimbabwe, southern Malawi, central Mozambique, and southern and central-eastern Madagascar, the maize triangle of northern South Africa, and Angola's southeastern, southwestern, and northwestern areas.

Central areas have received above-average to average rainfall since late December 2024, and rainfall totals for October 1st 2024 to February 25th (Figure 1 middle-left) largely reflect this. Highly above-average December to February rainfall (150 to 200 percent of average) was observed in southern Zimbabwe (Matabeleland South province and southern areas of Midlands province), eastern Botswana (Central province), and northern South Africa (Limpopo province).

During late February to early March, Tropical Cyclone Honde traversed from near central Mozambique and across the Mozambique Channel, while Tropical Cyclone Garance neared Réunion island. Substantial, above-average rainfall occurred in southern Malawi, northern Zimbabwe, central Mozambique, and central-eastern and southwestern Madagascar in late February. Both cyclones were forecast to strengthen and bring heavy to very heavy rainfall, strong winds and storm surge across Réunion and southwestern Madagascar between February 28th to March 2nd (ECHO Daily Flash). Sea surface temperatures in both storm regions were much warmer than normal during February, and the additional heat likely fueled these storms. During mid-late February 2025, there was a large amount of storm energy across the southern hemisphere (130 percent of normal), due to six simultaneous tropical cyclones. These cyclones were active in very warm ocean regions.

Seasonal rainfall performance has been very poor in northern and central Madagascar, and totals for October 1st, 2024 February 25th, 2025, are among the lowest on record in the north, based on CHIRPS data and preliminary February estimates. Conditions have also been much drier than normal in central and southern South Africa and in northern parts of the region—in southern and western DRC, central and northeastern Angola, central and northern Zambia, and portions of northern Malawi and northern Mozambique. October to February rainfall is 75 to 90 percent of average in affected northern areas. Based on amounts received thus far, a two-week forecast, and March-April rainfall in past years, totals through April will likely end up being below normal. Lake Kariba water levels continue to be very low, due to minimal gains during recent weeks and the major impacts of the 2024 drought. As of February 20th the reservoir was only at 7.3 percent of capacity.

The wet pattern in central areas will likely be followed by average to below-average rainfall during March, based on a 30-day forecast from February 27th that uses SubC models (Figure 1 middle-right). Below-average rainfall may continue to impact central-northern Zambia and other northern rainfall deficit areas, and forecast above-average maximum temperatures (Figure 1 right) may increase risks of crop stress. Wetter-than-average conditions are forecast in Madagascar.

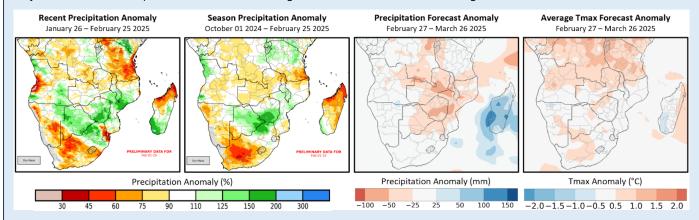
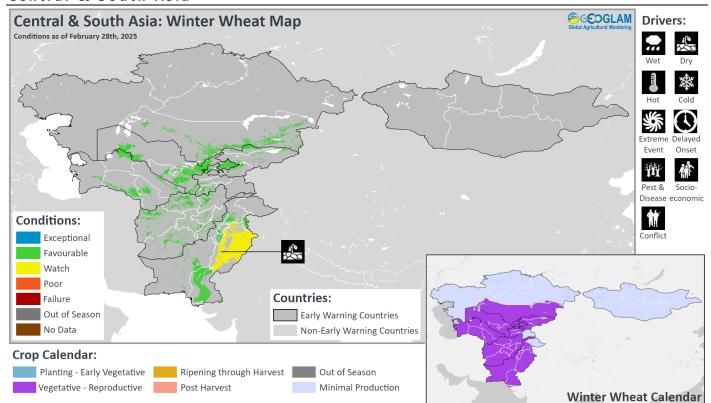


Figure 1. A recent precipitation anomaly, a seasonal precipitation anomaly outlook, and a 30-day forecast for precipitation and average maximum 2m temperatures.

Left and middle-left: Both panels are <u>CHC Early Estimates</u>, which compare current precipitation totals to the 1981/82-2023/24 CHIRPS average for respective accumulation periods. These show the precipitation anomaly (difference from average; [mm]) for January 26th to February 25th, 2025 (left), and for October 1st, 2024, to February 25th, 2025 (middle-left). Both use CHIRPS Prelim for February 1st to 25th. Middle-right and right: Average 30-day precipitation and 2m maximum temperatures (Feb. 27 - Mar. 26) forecast by Subseasonal Consortium (SubC) models, from February 27th, 2025. From https://chc.ucsb.edu/monitoring/subx.

Source: UCSB Climate Hazards Center

Central & South Asia



Crop condition map synthesizing Winter Wheat conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are labeled on the map with their driver.**

In Central and South Asia, winter wheat is mostly in the dormancy stage throughout **Turkmenistan**, **Uzbekistan**, southern **Kazakhstan**, **Kyrgyzstan**, **Tajikistan**, **Afghanistan**, and **Pakistan** (*Rabi* season), and overall conditions remain generally favourable with sufficient soil moisture levels, except in some rainfed areas of **Pakistan**. Land preparation for spring wheat is underway in **Tajikistan**, and planting will begin in March. Precipitation is expected to be below-average for March to May, which could hinder planting progress and crop emergence in rainfed areas (See Regional Outlook Pg. 14). However, the recent favourable rainfall likely enhanced water storage for irrigation, providing support for spring wheat cultivation.

In **Afghanistan**, winter wheat conditions remain favourable across most areas, and the distribution and frequency of rains in March and April will be crucial in the development of rainfed crops. Harvesting activities for irrigated winter wheat are expected to begin in April. Land preparation for spring wheat is just beginning, and planting has commenced in localized areas. Currently, adequate humidity levels are expected to benefit cultivation, and planting progress will be contingent on water availability. However, limited access to improved seeds and fertilizers may constrain plantings. Recent changes in the supply and demand of fertilizer for Central and South Asia have resulted in higher prices that could increase overall production costs and negatively impact yield and production amounts. Groundwater is still used as a cheap and easy substitute for water needs, and while recent precipitation has improved recharge levels compared to previous months, discharge levels are still high, and below-average rains are forecast for the coming months (See Regional Outlook Pg. 14). Furthermore, the cultivation of poppy is present in some localized areas of the south, and while it is not as prevalent as prior years, it remains a competitor to wheat and other crops. In **Pakistan**, conditions are generally favourable for the mostly irrigated *Rabi* season rice crop, to be harvested from mid-March, as crop biomass is above average despite low rainfall received in the last three months. However, concern remains in the *barani* area of northern Punjab, which is rainfed and accounts for about 20 percent of total wheat sowings. As a result, the 2025 wheat production outlook has been downgraded from 28.5 million to 28 million due to the dry weather impacts.

Regional Outlook: Elevated chances of above-average rains in early March across parts of Afghanistan followed by below-average March-May precipitation across the region

Seasonal precipitation totals, from October 1st, 2024, to February 25th, 2025, were below average in most central and southern areas and above average in northern areas (Figure 1-left). Most central and southern areas received 60 to 90 percent of average precipitation. Eastern parts of Pakistan received as low as 30 to 60 percent of average rainfall amounts. In Afghanistan, despite a slow start to the season, snow water equivalent in 2025 is relatively higher compared to 2024. However, it remains substantially below the long-term average (Figure 1 middle-right).

In recent weeks, much of the region was drier than average. From January 26th to February 25th, 2025, southern and eastern Afghanistan, eastern Uzbekistan, western Kyrgyzstan, and central areas of Tajikistan received 30 to 45 percent of average rainfall (Figure 1 middle-left). In Afghanistan, average late February precipitation in northwestern and central areas, and above-average amounts in southeastern areas, were a positive change from prevailing drier-than-average conditions, though seasonal totals still remained low in most of those areas. On February 25th, heavy rains and flash floods were reported in parts of western (Farah Province) and southern (Kandahar Province) Afghanistan resulting in casualties (ECHO Daily Flash).

Near-term rainfall conditions are expected to improve in parts of Afghanistan. In early March, the GEFS, ECMWF and <u>SubC</u> models forecast average to above-average precipitation in parts of Afghanistan, with uncertainty across the region. Based on the UCSB CHC <u>CHIRPS-GEFS</u>, precipitation in northern and eastern Afghanistan is forecast to be about 25 to 100 mm above average from February 27th to March 13th. Above-average precipitation may improve soil moisture levels for spring wheat planting. However, below-average rains and above-average temperatures forecast in the next several months raise concerns about rainfed crops in Afghanistan and surrounding regions. Below-average rainfall would have negative implications for groundwater recharge and lead to higher extraction rates.

In March to May, the WMO, C3S, and NMME (Figure 1-right) multi-model ensembles predict below-average precipitation and above-average temperatures across much of the region. Drier-than-average conditions will likely persist into summer based on the NMME June-August forecast. These forecasted conditions will likely impact wheat and other crops, significantly reducing yields. If very below-average precipitation occurs during the critical stages of rainfed wheat (flowering and grain filling which typically occurs in April and May in Afghanistan), we may see crop failure in some localized areas.

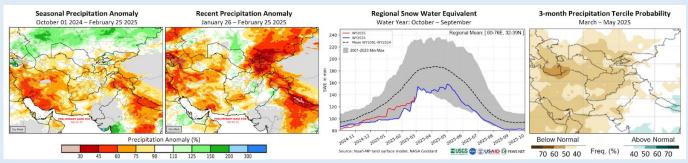
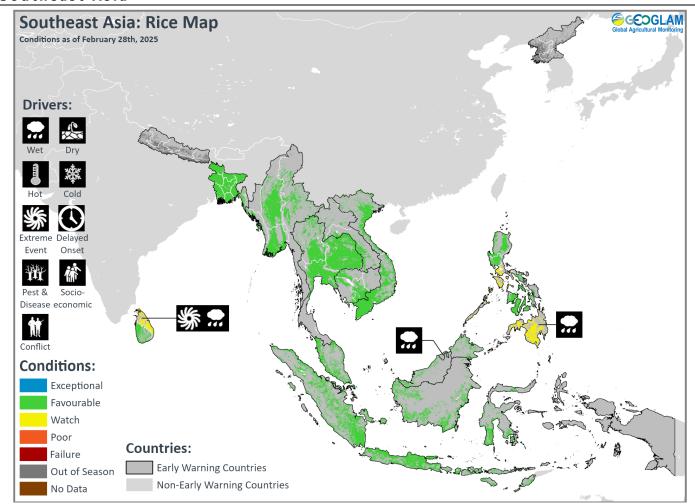


Figure 1. Seasonal and recent precipitation anomalies, regional snow water equivalent, and a 3-month probabilistic precipitation forecast

Left: A CHC Early Estimate, which compares recent precipitation totals to the historical CHIRPS average, for respective accumulation periods. This panel shows the percent of average precipitation for October 1st, 2024, to February 25th, 2025, using CHIRPS preliminary data for February 1st to 25th and a 1981/82-2023/24 average. Middle-left: Rainfall difference from average for January 26thto February 25th, 2025, based on CHIRPS preliminary data for February 2025. Middle-right: Variations in regional Snow Water Equivalent (SWE) for a region surrounding Afghanistan. The dotted line indicates the average SWE from 2002-2024. Blue line shows the SWE in 2024 (Oct. 2023 - Sep. 2024) and the Red line shows SWE in 2025. SWE estimates are from the NASA FLDAS Central Asia model. Right: Probabilistic forecast for March 2025 to May 2025 precipitation tercile, based on February initial conditions. Probabilities are derived from forecasts from seven North American Multi-Model Ensemble (NMME) models. Colors indicate the forecast probability of each category, based on 124 ensemble members from 7 models and a 1991-2020 baseline. White indicates a high level of disagreement amongst forecasts.

Source: UCSB Climate Hazards Center

Southeast Asia

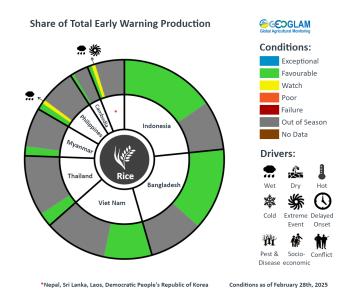


Crop condition map synthesizing rice conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are labeled on the map with their driver.**

In southern Southeast Asia, planting of wet-season rice is nearing completion, and the total planted area is expected to increase compared to the previous wet season due to significant rainfall received. Harvesting of earlier planted crops is underway with generally good yield outcomes, except in **Brunei** where heavy rain received during the harvest is expected to decrease yields. In northern Southeast Asia, the total planted area of dry-season rice is expected to increase compared to the previous dry season due to sufficient irrigation water for rice cultivation. Crops are mostly in the vegetative stage, and growing conditions are generally favourable, except in parts of the **Philippines** where there are concerns regarding high precipitation received in January. Harvesting is now underway in **Cambodia** and South **Viet Nam** with generally good yield outcomes. Elsewhere in Southeast Asia, including **Sri Lanka**, **Nepal**, and **Bangladesh**, conditions remain generally favourable, except in northeastern **Sri Lanka** where prior storm impacts and above-average precipitation this season could impact yield outcomes.

In **Indonesia**, planting of wet-season rice is in the final stage. The accumulated planted area is 5.6 million hectares, which is 11.5 percent higher than the last wet season, and it is steadily expanding due to intensive rainfall received from late January to mid-February. Moderate to high precipitation received in February has not resulted in crop damage, and growing conditions are generally favourable due to sufficient irrigation water. Additionally, February is the second month of the wet-season rice harvest, reaching 1.2 million hectares and progressing faster than the last wet season. Yield is expected to be favourable due to sufficient sunlight received during the growing period. In **Malaysia**, planting of wet-season rice is now complete, and 42 percent of the cultivated area has been harvested. Growing conditions are favourable, and most regions are expected to receive normal rainfall amounts. Despite high temperatures recorded in the north, reaching up to 37 degrees Celsius, no negative impact on rice crops has been observed. In **Brunei**, about 15 percent of the irrigated wet-season rice areas have been harvested, and crops in rainfed areas are mostly in the maturing stage and will be ready for harvest soon. However, there is concern as high precipitation in the past few weeks has resulted in lodging as well as pre-harvest sprouting of the grains and has delayed harvesting. This could result in a yield decline if the current weather pattern remains. In the **Philippines**, dry-season rice planted from November to December 2024 is now in the young panicle forming to heading stage. There is concern in southern Luzon and central Mindanao where high precipitation received in January resulted in flooding and landslide damage. The government is continuously assessing the damage and losses in affected areas. However, the yield is generally expected to be favourable due to good weather conditions in non-affected areas. In **Thailand**, the accumulated

planted area for dry-season rice is 1.8 million hectares accounting for about 58 percent of the national plan. Crops are now in the young panicle forming to grain filling stage. Some Northeast and Central regions experienced prolonged cold weather in January that affected crop growth. However, growing conditions remain generally favourable, and production is expected to increase compared to last year due to sufficient water resources and good weather outcomes in most areas. In northern **Viet Nam**, planting of dry-season (winter-spring) rice is now underway with a current sown area of 297 thousand hectares, which is 5 percent higher than last year. Sowing is progressing quickly due to good weather and better irrigation preparation. In the south, dry-season (winterspring) rice is in the sowing stage with a current sown area of 1.86 million hectares. Some provinces, primarily in the Mekong River Delta, have begun harvesting dry-season rice with generally favourable yield outcomes. While this year's saltwater intrusion along the Mekong Delta is expected to be higher than normal, so far there has been no significant damage to dryseason rice cultivation. In Laos, dry-season rice is in the seeding

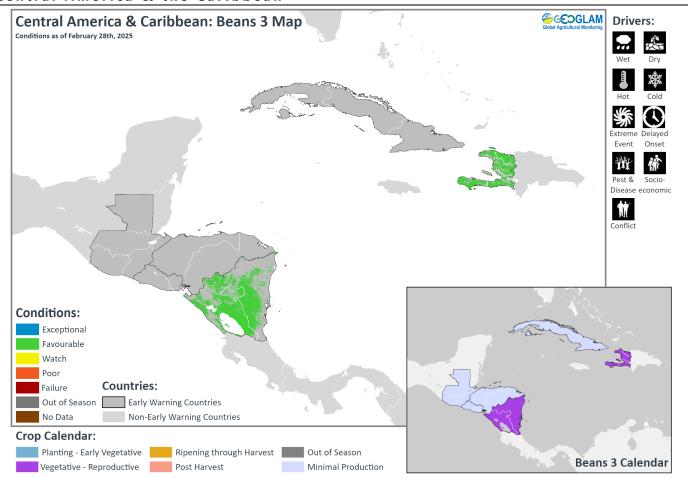


For detailed description of the pie chart please see description box on Pq. 18.

to tillering stage, and about 71 percent of the planned area has been planted. The final planted area is expected to be 93 thousand hectares, representing a slight decrease from the previous year. Growing conditions are favourable due to good weather outcomes and sufficient natural water resources. In **Myanmar**, planting of dry-season rice has reached over 840 thousand hectares, accounting for 72 percent of the national plan of 1.17 million hectares. Planting progress is slightly faster compared to the previous year due to better availability of irrigation water and good weather outcomes this season. Growing conditions are favourable, and most crops are now in the tillering to panicle forming stages. In **Cambodia**, planted area of dry-season rice is 903 thousand hectares, representing an 11 percent increase compared to the previous year. While growing conditions are favourable, water supply deficits are resulting in a slight yield decline, though the average yield is still expected to be 4.5 tons per hectare which is similar to the previous year. Harvesting progress has reached 34 percent of the total planted area.

In **Sri Lanka**, planted area of main *Maha* season rice (65 percent of annual rice output) is estimated to be above average due to high prices and government support. Vegetation conditions are favourable in most areas, though low rainfall received in Polonnaruwa district, located in the central-east and accounting for about 15 percent of total rice sowings, affected crop emergence. Plantings for *Maha* season maize (90 percent of annual maize output) are also estimated to be above average due to strong local feed demand. Harvesting of both *Maha* season maize and rice is just beginning and is expected to finalize in March, and concern remains in the northeast due to the passage of Storm Fengal in late November 2024, followed by a continuation of near to above-average precipitation through February. Forecast above-average precipitation through April is expected to benefit crop development but could negatively affect crop maturation and harvesting, and hotter than normal temperatures could exacerbate pest and disease risk. Furthermore, planting of secondary *Yala* season rice (35 percent of annual rice output) and maize (10 percent of annual maize output) will begin in April. In **Nepal**, winter wheat crops are in the vegetative to reproductive stage while planting of main season maize is just beginning, and growing conditions remain favourable. Land preparation is underway for second season rice crops, and planting will begin in March. In **Bangladesh**, *Boro* season rice (55 percent of annual rice production), winter/*Rabi* season maize, and winter wheat crops are all in the vegetative to reproductive stage under favourable conditions, and harvesting will commence in March. Land preparation is underway for *Aus* season maize (10 percent of annual rice production) and Summer/*Kharif* season maize (15 percent of annual maize production), and planting will begin in March.

Central America & the Caribbean



Crop condition map synthesizing Beans 3 (Apante) conditions as of February 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled on the map with their driver.**

In Central America, harvesting of *Segunda/Postrera* season maize and bean crops finalized in January, and most regions are now out of season. Land preparation for the *Primera* season is ramping up, and planting will begin in April. Above-average rains are needed to make up for moisture deficits from the previous season.

In **Honduras**, harvesting of second season rice crops is just beginning under favourable conditions, and harvesting activities are expected to finalize in April. In **Nicaragua**, *Apante* season bean crops (35 percent of annual bean production) continue to develop under favourable conditions, and harvesting will take place in March. In **Haiti**, harvesting of second season rice is just beginning while *Hiver* season beans continue to develop, and harvesting activities for both crops will conclude in March. Last month, there was concern regarding heavy rains and flooding in November and December 2024, which was mostly concentrated in the Grand Anse and North departments. However, vegetation conditions are normal to above-normal in most areas as of late February. Land preparation is underway for *Printemps* season cereals, and planting will begin in March. In **Cuba**, second season rice crops (1/3 of annual rice production) are in the vegetative to reproductive stage while planting of main season maize continues. Last month, there was concern regarding the potential impacts of hurricanes and earthquakes in late 2024. However, conditions have been upgraded to favourable as impacts to crops were minimal.



Sources and Disclaimers:

The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners FEWS NET, JRC, WFP, ARC, AFSIS, MESA, ICPAC, FAO GIEWS, Applied Geosolutions and UMD. The findings and conclusions in this joint multi-agency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts.

More detailed information on the GEOGLAM crop assessments is available at www.cropmonitor.org.

Pie Chart Description: Each slice represents a country's share of total regional production. The proportion within each national slice is colored according to the crop conditions within a specific growing area; grey indicates that the respective area is out of season. Sections within each slide are weighted by the sub-national production statistics (5-year average) of the respective country. The section within each national slice also accounts for multiple cropping seasons (i.e. spring and winter wheat) and are a result of combining totals from multiple seasons to represent the total yearly national production. When conditions are other than favourable icons are added that provide information on the key climatic drivers affecting conditions.

Information on crop conditions in the main production and export countries can be found in the Crop Monitor for AMIS, published March 6th, 2025.

Appendix

Crop Conditions:

Exceptional: Conditions are much better than average* at time of reporting. This label is only used during the grain-filling through harvest stages.

Favourable: Conditions range from slightly lower to slightly better than average* at reporting time.

Watch: Conditions are not far from average* but there is a potential risk to final production. The crop can still recover to average or near-average conditions if the ground situation improves. This label is only used during the planting-early vegetative and the vegetative-reproductive stages.

Poor: Crop conditions are well below-average. Crop yields are likely to be 10-25% below-average. This is used when crops are stunted and are not likely to recover, and impact on production is likely.

Failure: Crop conditions are extremely poor. Crop yields are likely to be 25% or more below-average.

Out of Season: Crops are not currently planted or in development during this time. **No Data:** No reliable source of data is available at this time.

"Average" refers to the average conditions over the past 5 years.

Note: In areas where conflict is a driver of crop condition, crop conditions are compared to the pre-conflict average rather than the average conditions over the past 5 years. In areas where conflict is protracted and based on expert analysis on a case by case basis, crop conditions will be compared to the average conditions over the past five years.



Drivers:

These represent the key climatic drivers that are having an impact on crop condition status. They result in production impacts and can act as either positive or negative drivers of crop conditions.

Wet: Higher than average wetness.

Dry: Drier than average. **Hot:** Hotter than average.

Cool: Cooler than average or risk of frost damage.

Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon,

frost, hail, winterkill, wind damage, etc.) **Delayed-Onset**: Late start of the season.

Pest & Disease: Destructive insects, birds, animals, or plant disease.

Socio-economic: Social or economic factors that impact crop conditions (i.e. policy

changes, agricultural subsidies, government intervention, etc.)

Conflict: Armed conflict or civil unrest that is preventing the planting, working, or

harvesting of the fields by the farmers.













Event Delayed





Socio- Pests & economic Disease



Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following charts identifies the national season name associated with each crop season within the Crop Monitor for Early Warning.

East Africa				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Burundi	Maize	Season B	Season A	
Burundi	Rice	Season B		
Ethiopia	Maize	Meher season	Belg season	
Kenya	Maize	Long Rains	Short Rains	
Rwanda	Maize	Season B	Season A	
Somalia	Maize	Gu Season	Deyr Season	
Somalia	Sorghum	Gu Season	Deyr Season	
South Sudan	Maize	First Season		
South Sudan	Millet	First Season		
South Sudan	Sorghum	First Season		
Uganda	Maize	First Season	Second Season	
		Bimodal: Masika		
United Republic of Tanzania	Maize	Unimodal: Msimu	Vuli	
		Bimodal: Masika		
United Republic of Tanzania	Millet	Unimodal: Msimu		
		Bimodal: Masika		
United Republic of Tanzania	Rice	Unimodal: Msimu		
		Bimodal: Masika		
United Republic of Tanzania	Sorghum	Unimodal: Msimu	Vuli	
		Bimodal: Masika		
United Republic of Tanzania	Wheat	Unimodal: Msimu		

West Africa				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Benin	Maize	Main season	Second season	
Cameroon	Maize	Main season	Second season	
Cote d'Ivoire	Maize	Main season	Second season	
Ghana	Maize	Main season	Second season	
Mauritania	Rice	Main season	Off-season	
Nigeria	Maize	Main season	Short-season	
Nigeria	Rice	Main season	Off-season	
Togo	Maize	Main season	Second season	

Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following charts identifies the national season name associated with each crop season within the Crop Monitor for Early Warning.

Middle East & North Africa				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Egypt	Rice 1	Summer-planted	Nili season (Nile Flood)	

Southern Africa					
Country Crop Season 1 Name Season 2 Name Season 3 Name					
Democratic Republic of the Congo	Maize	Main season	Second season		
Mozambique	Maize	Main season	Second season		

Central and South Asia				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Afghanistan	Wheat	Winter-planted	Spring-planted	
Kazakhstan	Wheat	Winter-planted	Spring-planted	
Kyrgyzstan	Wheat	Winter-planted	Spring-planted	
Pakistan	Rice	Kharif (summer)		
Pakistan	Wheat	Rabi		
Tajikistan	Wheat	Winter-planted	Spring-planted	

Southeast Asia				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Bangladesh	Maize	Winter (Kharif)	Summer (Rabi)	
Bangladesh	Rice	Boro	Aman	Aus
Cambodia	Rice	Wet-season	Dry-season	
Indonesia	Rice	Wet-season	Dry-season	
Lao People's Democratic Republic	Rice	Wet-season	Dry-season	
Myanmar	Rice	Wet-season	Dry-season	
Philippines	Rice	Wet-season	Dry-season	
Sri Lanka	Maize	Maha	Yala	
Sri Lanka	Rice	Maha	Yala	
Thailand	Rice	Wet-season	Dry-season	
		North: Other wet-season (summer-		
		autumn)		North: Main wet-season (seasonal)
		South: Other wet-season (autumn-		South: Main wet-season (summer-
Viet Nam	Rice	winter and seasonal)	Dry-season (winter-spring)	autumn)

Central America & Caribbean				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
El Salvador	Beans	Primera	Postrera	
El Salvador	Maize	Primera	Segunda	
Guatemala	Beans	Primera	Postrera	Apante
Guatemala	Maize	Primera	Segunda	
Haiti	Beans	Printemps	Été	Hiver
Haiti	Maize	Printemps	Été	
Honduras	Beans	Primera	Postrera	
Honduras	Maize	Primera	Segunda	
Nicaragua	Beans	Primera	Postrera	Apante
Nicaragua	Maize	Primera	Segunda	





Prepared by members of the GEOGLAM Community of Practice, coordinated by the University of Maryland Center for Global Agricultural Research and funded through NASA Harvest.



The Crop Monitor is a part of GEOGLAM, a GEO global initiative.

Cover Photo by: Benjamin Balazs

2024 Crop Monitor for Early Warning release dates:

6 February, 6 March, 3 April, 1 May, 5 June, 3 July, 7 August, 4 September, 2 October, 6 November, 4 December

Contributing partners





























*EC contribution is provided by the Joint Research Central of the European Commission