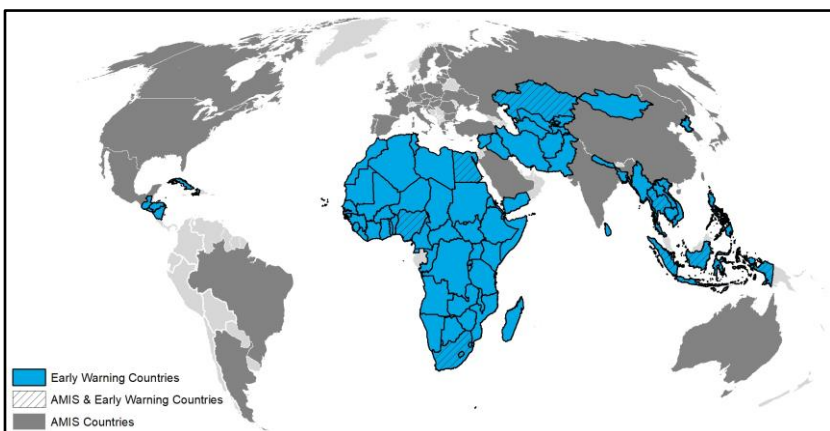


Crop Monitor

EARLY WARNING

Overview:

In **East Africa**, harvest is underway for secondary *Belg* crops in Ethiopia under poor conditions, and conditions are mixed for *Meher* season cereals due to rainfall deficits and ongoing insecurity. In the south of the subregion, several consecutive failed rainy seasons are impacting crops in many areas, and poor conditions have resulted in parts of Kenya, Uganda, and Somalia for main season crops. In **West Africa**, planting and development of main season cereals is underway, and conditions are generally favourable except in southern Mauritania where the rainfall season has yet to begin and in conflict-affected regions. In the **Middle East and North Africa**, harvesting of winter wheat is nearing completion. Crops have failed in Morocco, and below-average yields are expected in many areas due to persistent dryness throughout the season. In **Southern Africa**, harvesting of main season cereals mostly finalized last month with below-average yields in many areas due to persistent dryness throughout the season and tropical storm damage. In **Central and South Asia**, harvesting of winter wheat crops is underway while spring wheat crops continue to develop. Crops in Afghanistan are unlikely to recover from another below-average rainfall season, and concern remains in parts of Kazakhstan, Tajikistan, and Turkmenistan. In **Southeast Asia**, harvesting of dry-season rice finalized under generally favourable conditions in the north. In Indonesia, harvesting of wet-season rice is nearing completion with good yields and increased harvested area. In **Central America and the Caribbean**, planting and development of *Primera* season cereals is underway, and conditions are generally favourable. In Haiti, crops are unlikely to recover from irregular rainfall distribution and above-average temperatures throughout the country.



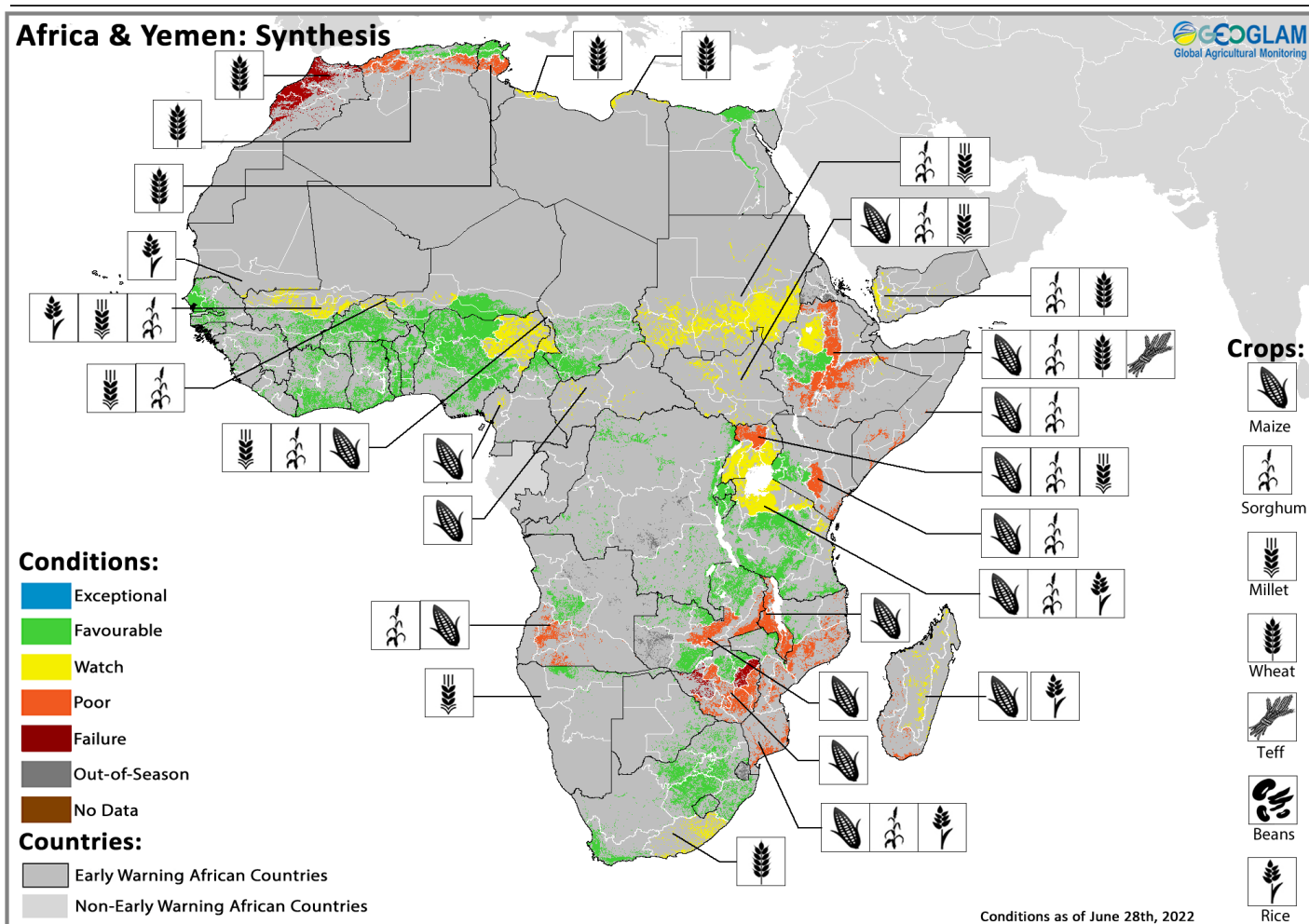
Contents:

- Conditions at a Glance.....2
- Global Climate Outlook; Climate Influences.....3
- East Africa & Yemen; Regional Climate Outlook.....4
- West Africa.....7
- Middle East & North Africa.....8
- Southern Africa.....9
- Central & South Asia; Regional Climate Outlook..... 11
- Southeast Asia; Regional Climate Outlook 13
- Central America & Caribbean; Regional Climate Outlook 16
- Appendix – Terminology & Definitions..... 18

GEOGLAM Crop Monitor for Early Warning

Crop Conditions at a Glance

based on best available information as of June 28th



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of June 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. **Regions that are in other than favourable conditions are labeled on the map with a symbol representing the crop(s) affected.**

EAST AFRICA: In Ethiopia, yield prospects are poor for secondary *Belg* season cereals, and conditions are mixed for main *Meher* season cereals due to below-average amounts in June in some areas and ongoing insecurity in the north. Across the south of the subregion, below-average yields are expected for main season cereals in areas impacted by several consecutive failed rainy seasons, and there is an increasing likelihood for a fifth consecutive below-average rainy season in October to December 2022 (See Seasonal Forecast Alert Pg. 4).

WEST AFRICA: Main season cereals are developing under favourable conditions along the Gulf of Guinea, and planting conditions are favourable along the Sahel except in southern Mauritania due to delayed rainfall onset. However, conflict continues to impact agricultural activities in affected regions.

MIDDLE EAST & NORTH AFRICA: Harvesting of winter wheat is nearing completion under mixed conditions due to persistent dryness throughout much of the season which has resulted in crop failure in Morocco and below-average yield expectations in parts of Algeria, Tunisia, Syria, and Iraq.

SOUTHERN AFRICA: Harvesting of main season cereals mostly finalized last month under mixed conditions with well below-

average yields in parts of Zimbabwe and below-average yields in parts of Angola, Namibia, Zambia, Zimbabwe, Malawi, Mozambique, and Madagascar due to persistent dryness and damage from tropical storms. Elsewhere, yields were favourable. Planting of winter wheat continues under favourable conditions.

CENTRAL & SOUTH ASIA: Harvesting of winter wheat is underway across the region while spring wheat is in vegetative to reproductive stage. Conditions are mixed as crops in Afghanistan are unlikely to recover, and concern remains in parts of northern Kazakhstan, Tajikistan, and Turkmenistan.

SOUTHEAST ASIA: Harvesting of dry-season rice finalized under generally favourable conditions in the north, and sowing conditions for wet-season rice are favourable despite localized flooding. High prices of fuel and fertilizer are likely to impact staple crop outcomes in Sri Lanka and Nepal.

CENTRAL AMERICA & CARIBBEAN: Planting and development of *Primera* season cereals continues under generally favourable conditions except in northern Honduras due to excessive rainfall and soil moisture. Harvesting of main season cereals is underway in Haiti, and crops are unlikely to recover from prevailing dry and hot conditions.

Global Climate Outlook: Two-week Forecast of Areas with Above or Below-Average Precipitation

The two-week forecast (Figure 1) indicates a likelihood of above-average rainfall over Columbia, Venezuela, Guyana, French Guiana, northwest Brazil, southern Italy, northern Algeria, Oman, northeast Kazakhstan, Pakistan, northern and central west India, central and western China, eastern Indonesia, and Papua New Guinea.

There is also a likelihood of below-average rainfall over the western Prairies in Canada, the northern Great Plains in the US, northeast Mexico, Haiti, the Dominican Republic, western Brazil, Uruguay, eastern Argentina, southern Chile, Southern United Kingdom, northern Europe, Ukraine, central and southern districts of the Russian Federation, Georgia, Azerbaijan, Armenia, Turkey, northern Iran, southern Mauritania, Mali, Senegal, northern Côte d'Ivoire, Burkina Faso, northern Ghana, Togo, Benin, Nigeria, Chad, Sudan, Eritrea, southern Cameroon, Equatorial Guinea, Gabon, the Republic of the Congo, The Democratic Republic of the Congo, Uganda, southern Madagascar, western and southern Kazakhstan, Uzbekistan, Kyrgyzstan, western Tajikistan, western Turkmenistan, southern India, Sri Lanka, northern Bangladesh, Bhutan, northern Myanmar, Mongolia, northwest and southern China, southern and central Japan, Malaysia, western Indonesia, and Western Australia.

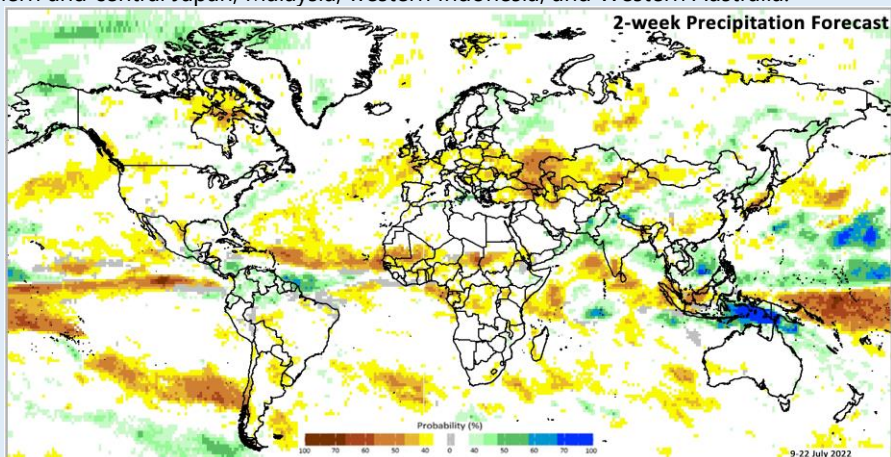


Figure 1: IRI SubX Precipitation Biweekly Probability Forecast for 9 - 22 July 2022, issued on July 1st, 2022. The forecast is based on statistically calibrated tercile category forecasts from three SubX models. Source: [IRI Subseasonal Forecasts Maproom](https://climate.geog.udel.edu/iri/subseasonal-forecasts/)

Climate Influences: La Niña Advisory and outlook for a Negative IOD

The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase and is expected to remain as La Niña through at least August (69% chance), according to the IRI/CPC. Long-range forecasts show higher-than 58% chances of La Niña, and very low chances of El Niño, through the end of 2022.

If La Niña conditions persist or redevelop in late 2022, it would be the third year in a row with a La Niña event, which is uncommon. La Niña could elevate risks of repeated dry conditions in negatively affected regions, such as eastern East Africa, southern South America, Central and Southern Asia, and southern North America, where multiple rainfall seasons have been below-average since late 2020.

Negative Indian Ocean Dipole (IOD) conditions are forecast to develop in July and last through October or longer. Models indicate that this may be a strong IOD event. Negative IOD and La Niña conditions often happen in tandem, and are associated with above-average rainfall in Australia and southeast Asia, and below-average rainfall in East Africa. Severe drought impacts across the Horn of Africa, and heavy rainfall and flooding in Australia and southeast Asia, have occurred during La Niña and negative IOD conditions. Source: UCSB Climate Hazards Center

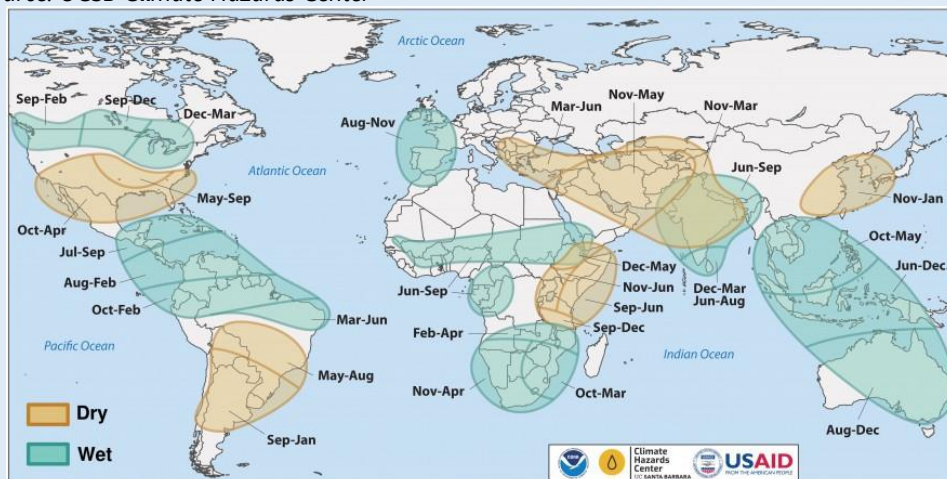


Figure 1. Timing of wet and dry conditions related to La Niña <https://fews.net/la-ni%C3%B1a-and-precipitation>. Source: NOAA & CHC & FEWS NET

Seasonal Forecast Alert: Fifth consecutive below-normal season forecast in eastern East Africa for OND 2022

In eastern East Africa, agropastoralist and pastoralist communities are facing extreme hardships, exacerbated by multiple failed rainfall seasons during the past two years. A late onset, inconsistent rainfall, and low totals impacted the OND 2020, MAM 2021, and OND 2021 rainfall seasons, and widespread and severe drought conditions during MAM 2022 worsened the situation. People are struggling with reduced crop and livestock production, limited access to food and water, disease outbreaks, reduced labor opportunities, and high market prices. According to the Multi-Agency Joint Statement from June 9th, 2022, and new IPC figures for Kenya, at least 18.4 million people in southern and southeastern Ethiopia, Kenya, and Somalia currently need humanitarian food assistance to prevent [high levels of acute food insecurity](#). These numbers are projected to increase during the July through August lean period, according to the latest regional FSNWG update from June 30th. In southern Somalia, hunger-related child and adult mortality is increasing, and multiple areas are at [risk of famine](#).

During June 1st to 25th, conditions were drier than average across most southern and eastern areas (Figure 1 left). This led to intensification and expansion of severe rainfall deficits that have impacted Kenya, Somalia, southern and central-eastern Ethiopia, northern Uganda, and southern South Sudan since March, and central-northern South Sudan since May. Northwestern Ethiopia, Sudan, and northwestern and northeastern South Sudan received mainly average to above-average rainfall in June.

An estimate for observed and forecast March 1st to July 10th rainfall percent of average (Figure 1 middle-left), which includes a two-week forecast from June 26th, shows the severe, widespread rainfall deficits, ranging from 75% of average to localized areas of 30% of average, that have accumulated across the region and are forecast to be present as of July 10th. Below-average rainfall is forecast in key maize-growing areas of western Kenya, Uganda, southwestern Ethiopia, and southern South Sudan. If forecasted drier-than-average conditions materialize, many locations in these areas could experience a 40-day period of persistently below-average rainfall, which could increase risks of crop water stress during vegetative and critical reproductive maize crop development. Above-average rainfall is forecast in northwestern Ethiopia, and portions of central-eastern Sudan and northwestern South Sudan during that period. During July to September, there are elevated chances of wetter-than-average conditions in northern and western East Africa, and associated risks to flood-prone areas of Ethiopia, Sudan, and South Sudan, based on WMO (Figure 1 middle-right) and C3S ensemble forecasts from June and the earlier-released GHACOF 61 for June-to-September 2022.

A 5th consecutive below-normal season in eastern East Africa is anticipated. Forecasts have consistently indicated, since May, that October-to-December (OND) 2022 rainfall will most likely be below-normal in eastern, equatorial, and southern areas (50% to 80% chance). That outlook is supported by WMO (Figure 1-right), ICPAC, NMME, and C3S multi-model ensemble forecasts and is attributed to elevated chances for strong [negative Indian Ocean Dipole](#), moderate [La Niña](#), and strong [West Pacific Gradient](#) conditions. These large-scale climate modes are historically associated with drier-than-normal conditions in East Africa. Dynamical models often simulate OND precipitation impacts reasonably well. In eastern areas, until the onset of OND rains, forecast warmer-than-normal temperatures may deplete available pasture and water resources earlier than normal during this dry season. In the context of the severe humanitarian situation currently impacting livelihoods and health in these areas, the elevated threat of below-normal OND 2022 rainfall is extremely concerning. The situation could be catastrophic, coupled with layered macroeconomic shocks, ongoing conflict, and decreased resources for humanitarian response.

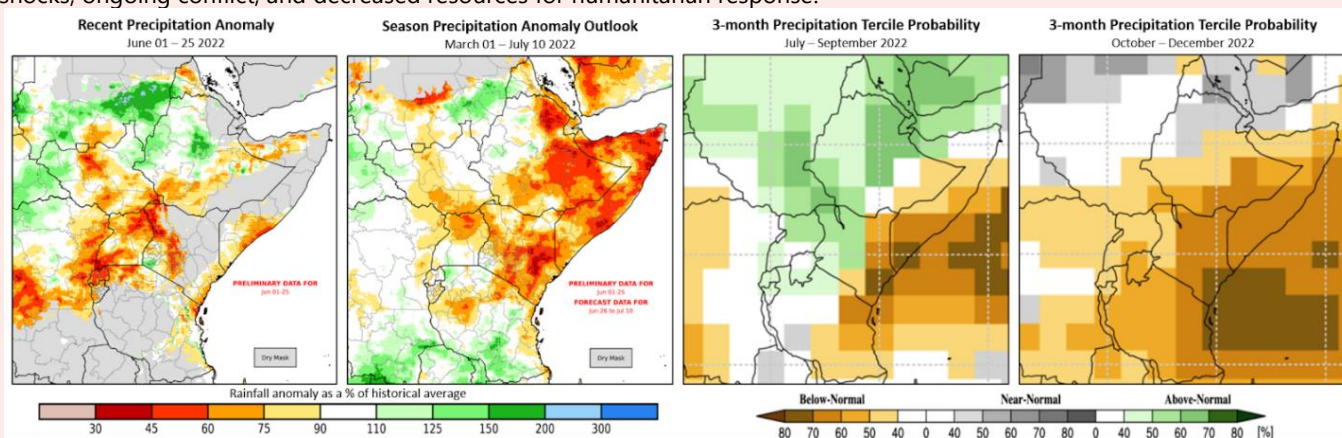
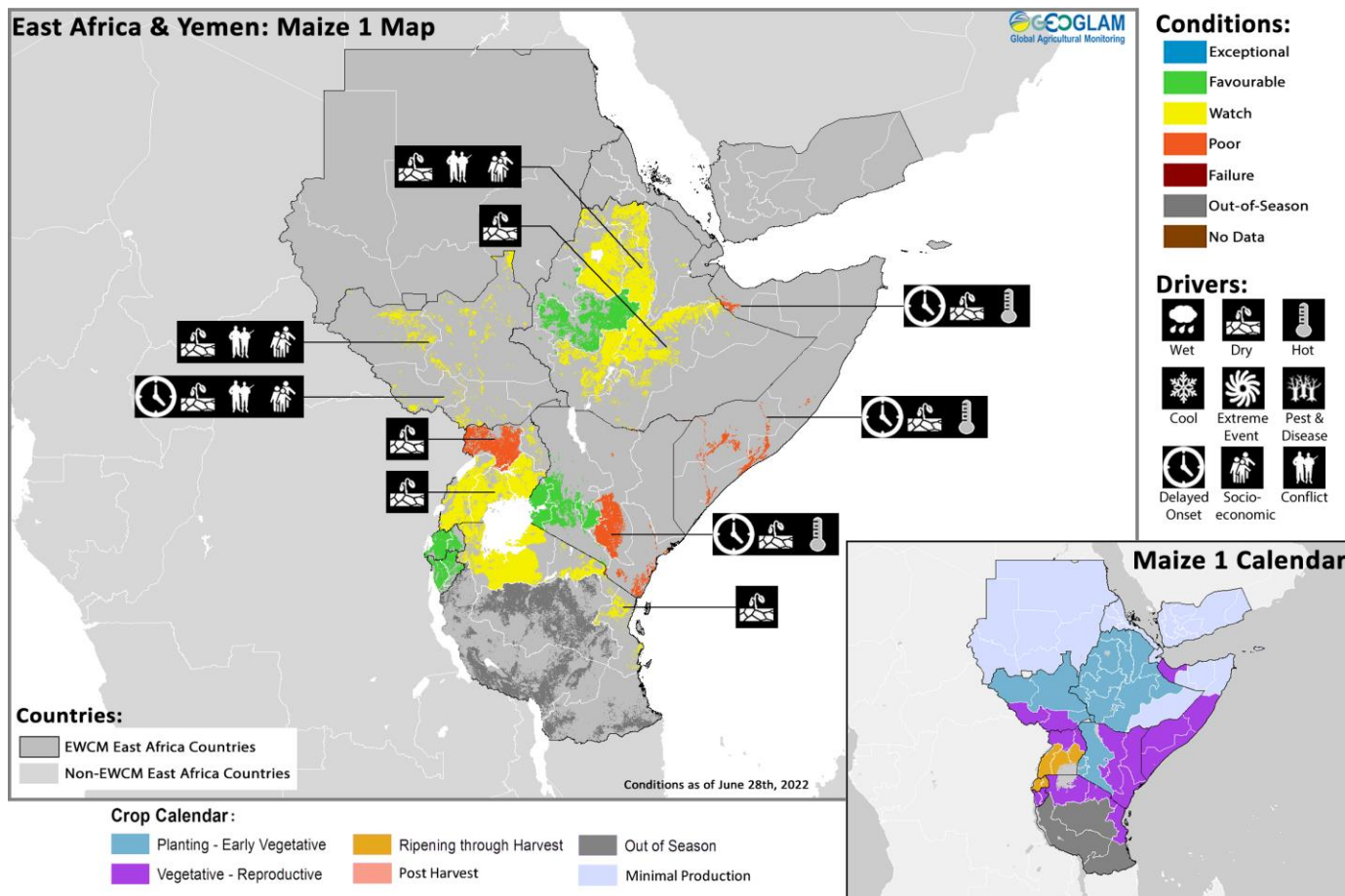


Figure 1. June 1st to 25th and March 1st-to-July 10th, 2022 precipitation anomalies, and 3-month probability forecasts for July-to-September and October-to-December 2022 precipitation. The left two panels are CHC Early Estimates, which compare current precipitation totals to the 1981-2021 CHIRPS average for their respective accumulation periods. These show the percent of average for June 1st to 25th, 2022 based on preliminary CHIRPS data (left), and March 1st -to-July 10th based on CHIRPS final data through May, preliminary June data, and a two-week bias-corrected GEFS forecast for June 26th to July 10th (middle-left). The right two panels show WMO probabilistic forecasts for July-to-September (middle-right) and October-to-December (right) 2022 precipitation, based on models initialized in June. From the WMO Lead Centre Long-Range Forecast Multi-Model Ensemble. Source: UCSB Climate Hazards Center

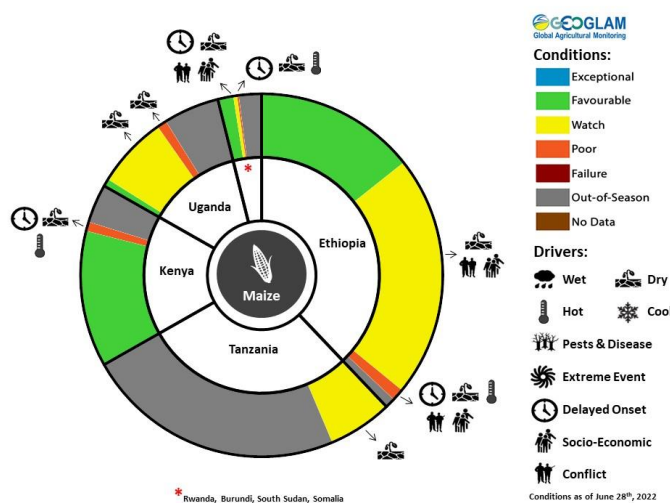
East Africa



Crop condition map synthesizing Maize 1 crop conditions as of June 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.**

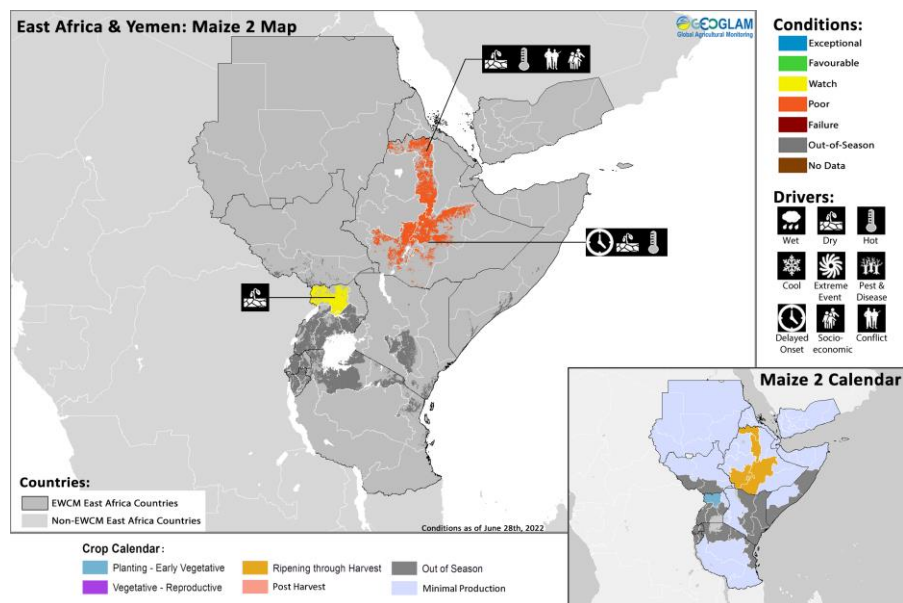
Across the north of the subregion, planting and development of main season cereals continues in **Sudan, South Sudan, and Yemen** with concern throughout all countries due to persisting insecurity and related socio-economic challenges as well as currently delayed rainfall onset and dry conditions. However, average to above-average June rainfall in **Sudan** and northern areas of **South Sudan** may benefit crop development (See Seasonal Forecast Alert Pg. 4). In **Ethiopia**, harvesting of secondary *Belg* season maize crops is nearing completion, and production prospects are poor as crops were affected by severe rainfall deficits. Planting of main *Meher* season cereals continues under mixed conditions due to rainfall deficits in June in some areas. Additionally, ongoing insecurity continues to hamper agricultural operations in parts of Tigray, Amhara, and Afar regions.

Across the south of the subregion, harvesting of main season cereals is nearing completion in **Rwanda, Uganda, and the United Republic of Tanzania** while crops continue to develop in **Burundi, Kenya, and Somalia**. Below-average yields are expected in northern bimodal areas of the **United Republic of Tanzania** as well as in **Somalia** and bimodal and minor producing areas of **Kenya** due to the late, poorly distributed, and generally below-average 2022 March to May (MAM) seasonal rains. Across the Horn of Africa, four consecutive failed rainy seasons since late 2020 across large areas of south and southeastern **Ethiopia**, north and eastern **Kenya**, and **Somalia** have resulted in the worst drought in at least 40 years. Current water deficits have also been worsened by high temperatures that are expected to continue through September. Conditions in June were drier than average across most south and eastern areas, intensifying severe rainfall deficits since March in many areas. The forecast of a possible fifth below-average rainfall season for October to December 2022 is likely to exacerbate these challenges (See Seasonal Forecast Alert Pg. 4).



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

Across the subregion, record high fertilizer prices in global and domestic markets are likely to impact agricultural outcomes in many areas. Within two months of the start of the conflict in Ukraine, fertilizer prices more than doubled from the previous year and at a time when 2022 main season planting was just beginning. Steep fuel price increases, particularly in **Burundi, Somalia, Kenya, Ethiopia, and South Sudan**, have also decreased farmers' ability to utilize farm machinery and transport.



Crop condition map synthesizing Maize 2 conditions as of June 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.**

Seasonal Forecast Alert Pg. 4). In northern areas, including Tigray and neighbouring regions of Afar and Amhara, impacts of conflict and related socio-economic challenges, including limited access to inputs such as seeds and fertilizers, are likely to impact planting activities and seasonal outcomes. In **Sudan**, planting of main season millet and sorghum crops is now underway, and there is concern due to below-average rains during the first dekad of June. Additionally, concern remains throughout the country due to the current macro-economic situation that may affect access to agricultural inputs and fuel for farming in mechanized areas. In **South Sudan**, main season cereals are in vegetative to reproductive stage in southern bimodal rainfall areas while planting continues in northern unimodal rainfall areas. There is concern as a delayed start to the season in southern bimodal areas and dry spells throughout the country affected crop planting, and some areas in the south have below-average rains. Additionally, persisting conflict and socio-economic challenges continue to impact agricultural activities. Furthermore, the 2021 flooding remains the worst ever recorded in the country. Flood waters are yet to recede in some areas as of early June, and the start of the rainy season in April is worsening the situation, particularly in Jonglei, Unity, and Upper Nile states. In **Yemen**, main season sorghum crops are in vegetative to reproductive stage while planting of spring wheat crops is just beginning, and there is concern due to persisting dry conditions as well as conflict and socio-economic challenges which are likely to impact seasonal outcomes. However, the parties involved in the conflict have agreed to renew the current truce, which first came into effect on April 2nd, for another two months.

Southern East Africa

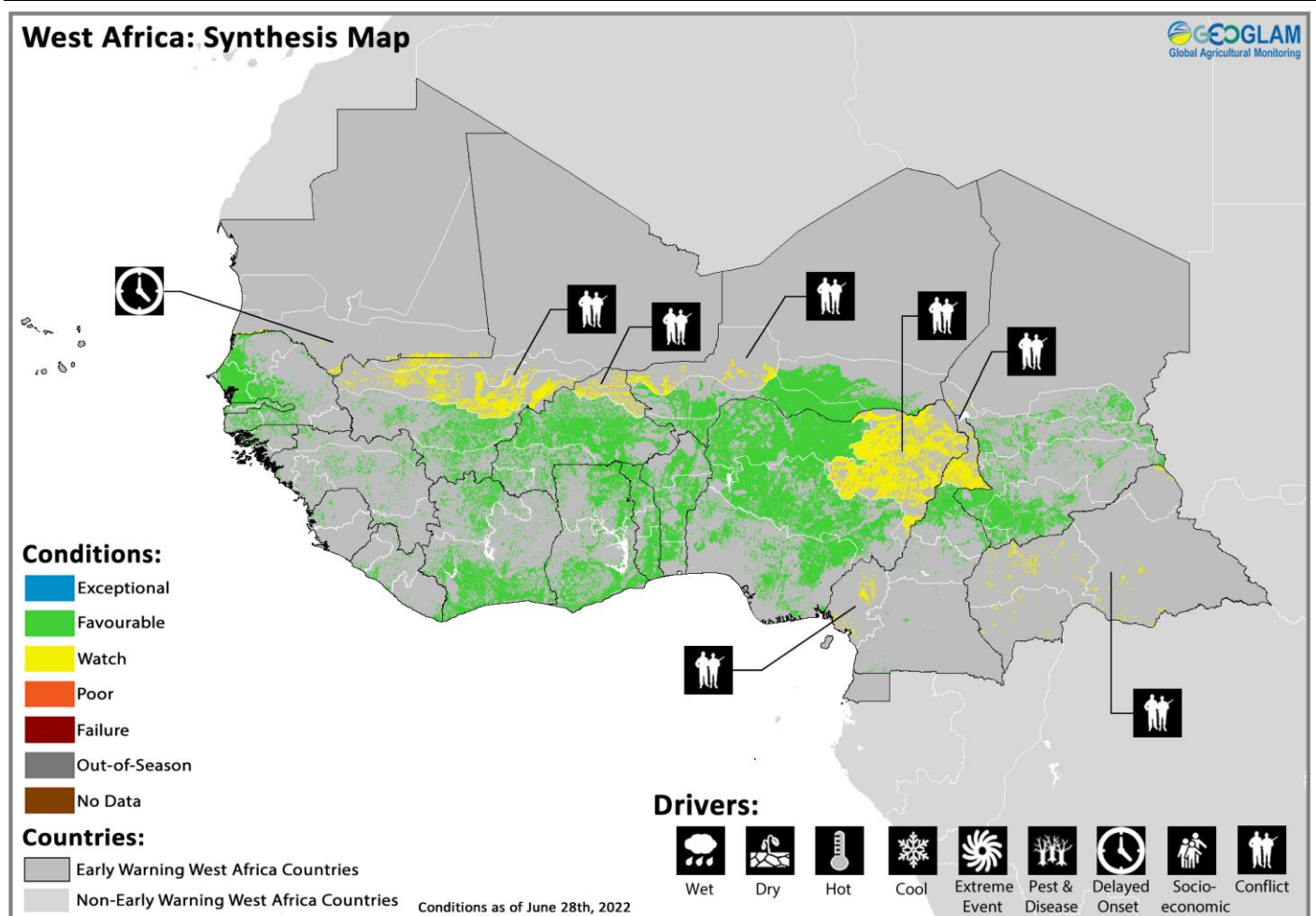
In **Somalia**, *Gu* season maize and sorghum crops are in vegetative to reproductive stage for harvest from mid-July, and crops have been negatively impacted by the combined impacts of a delayed start to the seasonal rains, below-average precipitation, hot temperatures, and an early end to the rains before late-planted crops reached maturity. The *Gu* season harvest is expected to be 40 to 60 percent below-average. In some areas worst affected by water shortages, water prices have increased by 72 percent since November 2021. In **Uganda**, harvesting of first season cereals is underway, and there is ongoing concern in most parts of the country due to generally below-average rainfall performance with widespread germination failures reported. Pockets of above-average rainfall may result in some crop recovery in the southern half of the country; however, crops in the northwest are unlikely to recover. While the season extends through August and September in the northwest, limited rainfall since May has resulted in severe deficits that are likely to affect crop development. In **Kenya**, Long Rains maize crops are in vegetative to reproductive stage in bimodal southeastern and coastal marginal agriculture areas, and crops have been affected by a very poor March-May rainy season. However, conditions along the coastal strip appear to be slightly better due to recent rainfall. This rainfall season is now the fourth consecutive below-average rainfall season since the October to December 2020 Short Rains and has resulted in the longest drought in at least 40 years in many marginal producing areas. Hot temperatures compounded the impacts of dry conditions, and long-range forecasts also indicate a likelihood of an unprecedented fifth consecutive below-average October to December 2022 Short Rains season (See Seasonal Forecast Alert Pg. 4). In unimodal and major producing areas of the West and Rift Valley as well as in the central region, planting and development of main season cereals continues under favourable conditions. However, mixed rainfall performance in the Rift Valley, including below-average rainfall in June, may affect crops at later development stages. Additionally, areas with mechanized

Northern East Africa & Yemen

In **Ethiopia**, secondary *Belg* season maize crops were affected by severe rainfall deficits, and cereal production is expected at well below-average levels. However, in southern parts of SNNPR, farmers were able to harvest due to some rainfall received. La Niña conditions are expected to continue into late 2022, resulting in a continuation of low rainfall and compounding impacts from recent dry seasons (See Seasonal Forecast Alert Pg. 4). Planting of main *Meher* season cereals continues with concern in several areas, except for the central-west, as rainfall during May and June remained below-average, and low soil moisture in May and June could affect crop establishment. However, *Kiremt* 2022 seasonal rainfall from June through September is forecast to be well distributed spatially, with most parts of the country expected to receive normal to above-normal rainfall, with the exception of some eastern areas bordering Somalia (See

agriculture may face challenges related to limited fuel and fertilizer availability. Furthermore, in Nakuru County, which is located in the Rift Valley, swarms of African armyworms have invaded over 10,000 hectares of land in Rongai and Subukia sub-counties. In **Rwanda**, harvesting of Season B maize crops began in June under favourable conditions, and harvesting activities will finalize in August. In **Burundi**, Season B maize and rice crops are in vegetative to reproductive stage under favourable conditions, and harvesting activities will begin in July. However, forecast dry conditions may impact crop development (See Seasonal Forecast Alert Pg. 4). In the **United Republic of Tanzania**, harvesting of *Msimu* season rice crops is underway in unimodal and key-producing areas of the centre and south under favourable conditions. Harvesting of *Masika* season cereals is underway in bimodal northern areas with ongoing concern due to below-average rains.

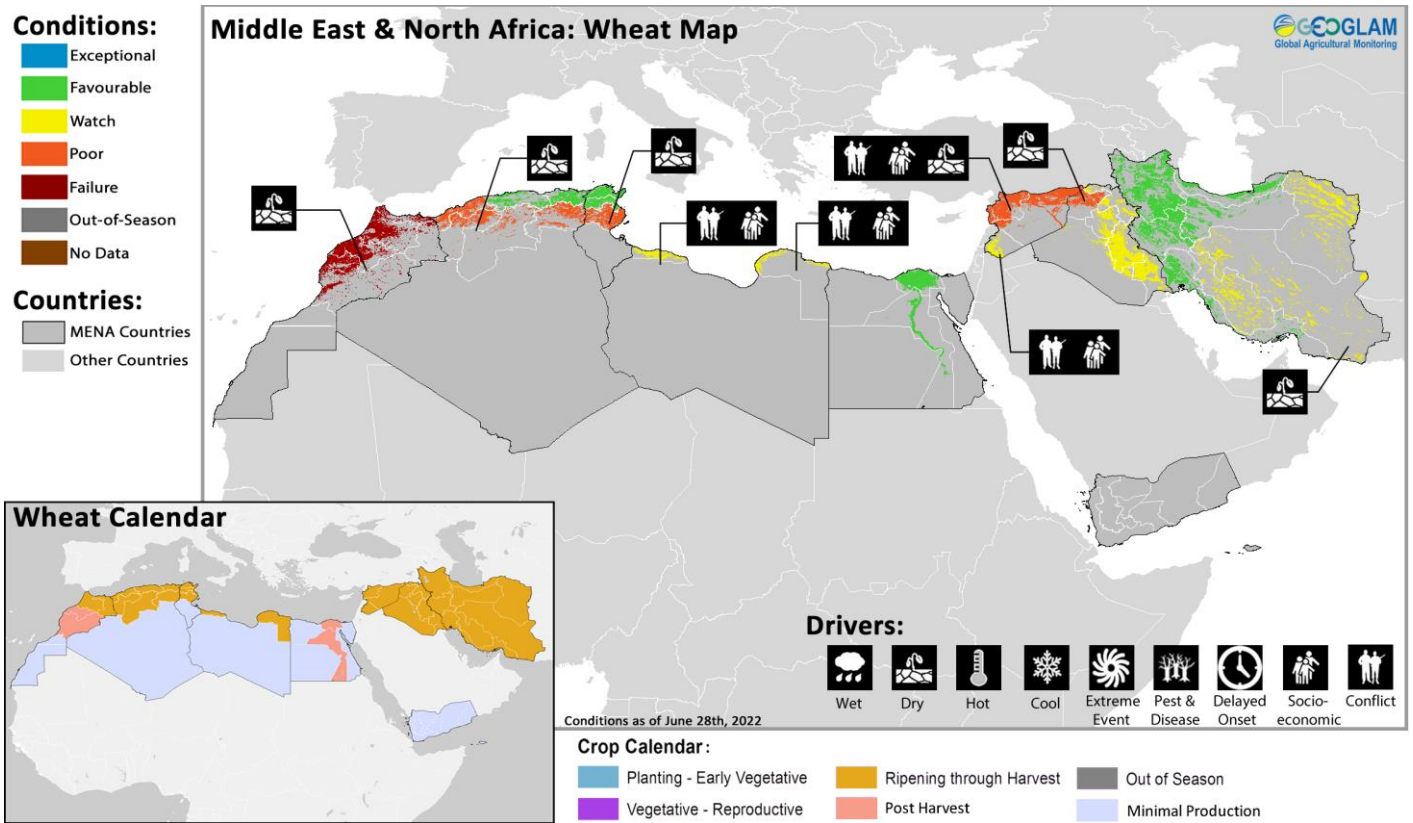
West Africa



Crop condition map synthesizing crop conditions as of June 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 West Africa, main season cereals are in vegetative to reproductive stage along the Gulf of Guinea, including in **Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Togo, Benin, Nigeria**, and central **Cameroon**, while planting continues along the Sahel, including in **Senegal, Gambia, Guinea-Bissau, Guinea, Mali, Burkina Faso**, northern **Ghana, Niger**, northern **Cameroon, Chad**, and the **Central African Republic**. Across the northern Sahel, from **Senegal to Chad**, the growing season will start in July. Agro-climatic conditions are favourable for crop planting and development except in southern **Mauritania** where rainfall onset is delayed. However, ongoing conflict continues to impact agricultural activities and production outcomes in central **Mali**, northern **Burkina Faso**, western **Niger**, northeastern **Nigeria**, Lac region in **Chad**, the Far North and southwestern regions of **Cameroon**, and the **Central African Republic**. In **Cape Verde**, land preparation is underway for main season maize crops, and planting will begin in July. However, the country's production will likely still be constrained due to high prices and limited access to agricultural inputs, labour, and fuel.

Middle East & North Africa

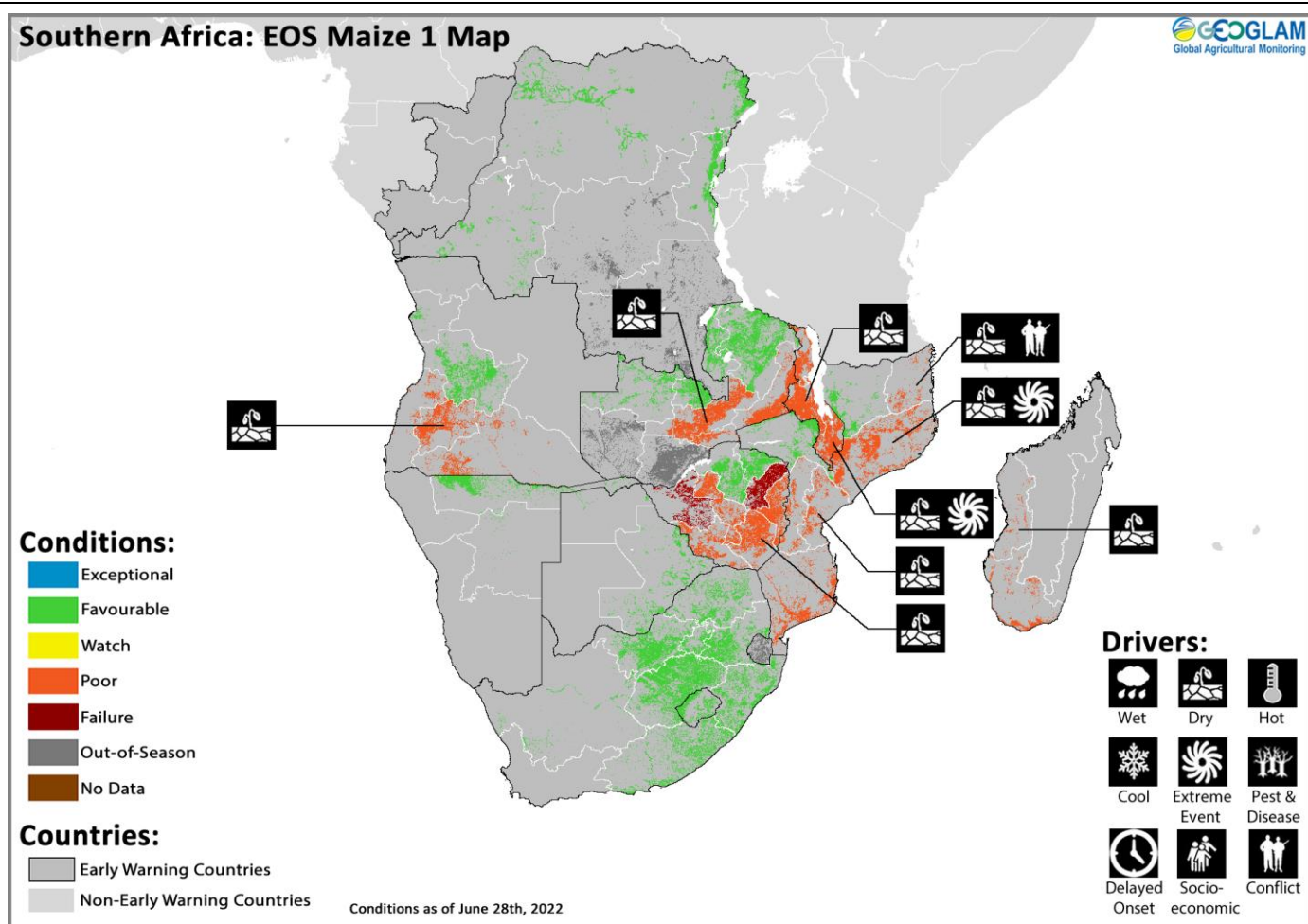


Crop condition map synthesizing wheat conditions as of June 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are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

In the Middle East and North Africa, harvesting of winter wheat is nearing completion and will finalize in July. Crop conditions remain mixed as persistent dryness throughout much of the season has resulted in crop failure with well below-average yields in **Morocco** and poor conditions with below-average yields in central and western **Algeria**, central **Tunisia**, northern **Syria**, and Ninewa governorate in northwestern **Iraq**. Conditions in southern parts of **Iraq** and northeastern **Iran** have also downgraded due to recent drier than average conditions. Furthermore, persisting conflict and socio-economic challenges continue to impact agricultural activities in **Libya** and **Syria**.

In **Morocco**, prolonged drought from December 2020 through February 2022 in combination with unusually high temperatures severely impacted crops through the onset of flowering, resulting in well below-average biomass in most agricultural areas and crop failure. While mid-February through early April rainfall was above-average, it was too late for significant crop recovery. Yields are projected to be less than 50 percent of average at the national level. In **Algeria**, drought from December 2021 through the end of February 2022 resulted in sowing delays and below-average biomass accumulation. Above-average rainfall from early March through mid-May resulted in significant crop recovery in the central and eastern regions. However, western regions had been more seriously impacted by the preceding drought, and rainfall arrived too late for crop recovery. In **Tunisia**, favourable temperatures and sufficient rainfall in the northwest resulted in above-average biomass accumulation. In the central-west, intense rainfall in mid-March resulted in crop recovery. However, conditions in the centre remain poor due to persistent dryness throughout much of the season. In **Libya**, above-average rainfall throughout the season and good temperatures have resulted in favourable growing conditions and above-average biomass accumulation in the northeast, while early-season drought in the northwest resulted in delayed but near-average biomass accumulation. In **Egypt**, conditions remain favourable for all crops. In **Syria**, a delayed start to the season and pockets of drought have resulted in below-average crop biomass in parts of the north, particularly in Aleppo, Hassakeh, and Raqqqa, while biomass in the south is near-average. However, conflict and socio-economic impacts continue to be the primary drivers impacting agriculture. In **Iraq**, concern remains throughout the country due to persistent dryness, and crops in the northwest are unlikely to recover. However, crops in the southeast, south, and central west depend on irrigation. While current irrigation water supply is sufficient, crop biomass is slightly below-average in these regions. The government's decision to half the planted area of irrigated crops in some regions may have reduced irrigated area. In **Iran**, below-average production is expected in Esfahan and Fars provinces as well as in Khorasan province due to recent drier than average conditions. Elsewhere, crop conditions are close to average.

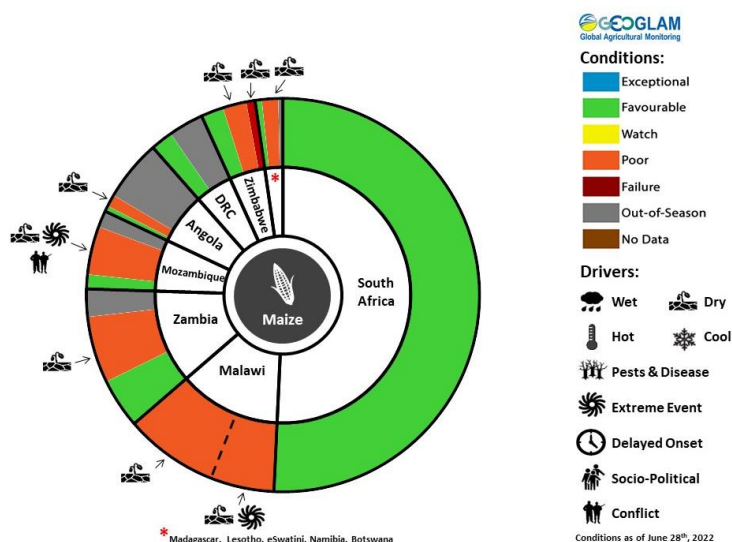
Southern Africa



Crop condition map synthesizing maize conditions as of June 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.**

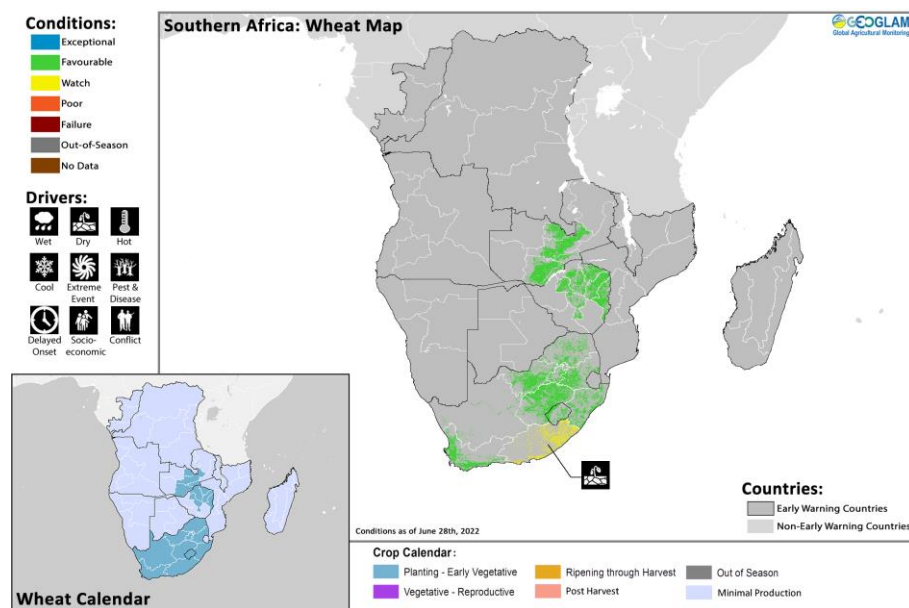
In Southern Africa, harvesting of main season cereals mostly finalized last month and has completed this month in **Angola, Namibia**, north and eastern **Botswana, Zimbabwe**, and central **Mozambique**. Failure conditions resulted in parts of **Zimbabwe**, and below-average yields resulted in southern **Angola**, Kunene region in northwestern **Namibia**, central and eastern **Zambia**, parts of **Zimbabwe, Malawi**, parts of **Mozambique**, and west and southern **Madagascar** due to persistent dryness throughout the season as well as damage from the passage of several tropical storms in central **Mozambique**, southern **Malawi**, and eastern **Madagascar**. Elsewhere, conditions are favourable, and final yields are expected to be near-average.

In **Angola**, while near-average cumulative rainfall resulted in favourable crop outcomes in the northern half of the country, below-average yields resulted in southern areas of Huila as well as in south and south-coastal provinces due to persistent dryness throughout the season. In southern provinces, delayed rainfall onset and above-average temperatures from December through February resulted in a poor start to the season, particularly over Cunene province. Despite some improvement in March, totals remained below-average and are likely to result in negative crop outcomes. In southern-coastal provinces, below-average cumulative rainfall is likely to lead to below-average crop outcomes in Namibe, whereas only slightly below-average cumulative rainfall in Benguela, which has larger cropping areas, is likely to lead to near-average crop outcomes. In **Botswana**, while final yields are likely to be near-average, erratic rainfall in the north and east impacted crop conditions during the season, and early national production estimates indicate a slight decrease compared



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

to average. In **Madagascar**, maize crop yields are below-average in the south and west, and concern remains for rice crops in the centre and east due to delayed rainfall onset and below-average seasonal totals, despite rainfall received from the passage of two tropical cyclones, as well as significant storm damage in the east that impacted rice crops at the transplanting stage. In **Namibia**, the first half of the rainfall season from October to December 2021 was characterized by a delayed onset and below-average precipitation, which delayed ploughing activities and affected crop germination in the major crop growing regions. Erratic rainfall and prolonged dry spells also impacted the country in December and January. Significant rainfall improvements were realized in the second half of the rainfall season, mainly from mid-January, across most of the country, resulting in substantial crop improvement. While some areas of the north still received below-average cumulative rainfall during early October through late March, including in parts of Omusati, Oshana, and Kunene regions, generally good rains received in the second half of the rainfall season resulted in good crop germinations with a positive impact on production prospects and water supply. National harvests are expected to be 25 percent higher than the previous season and 41 percent above the five-year average. In **Zimbabwe**, harvesting is expected to complete in early July, later than normal due to delayed rainfall onset. Despite above-average planted area for maize of 1.9 million hectares, national production is officially estimated at 1.6 million tonnes, slightly below the five-year average and 45 percent below the 2021 bumper harvest due to reduced planted area, unevenly distributed and below-average rainfall, and high temperatures. Crops in Mashonaland East and

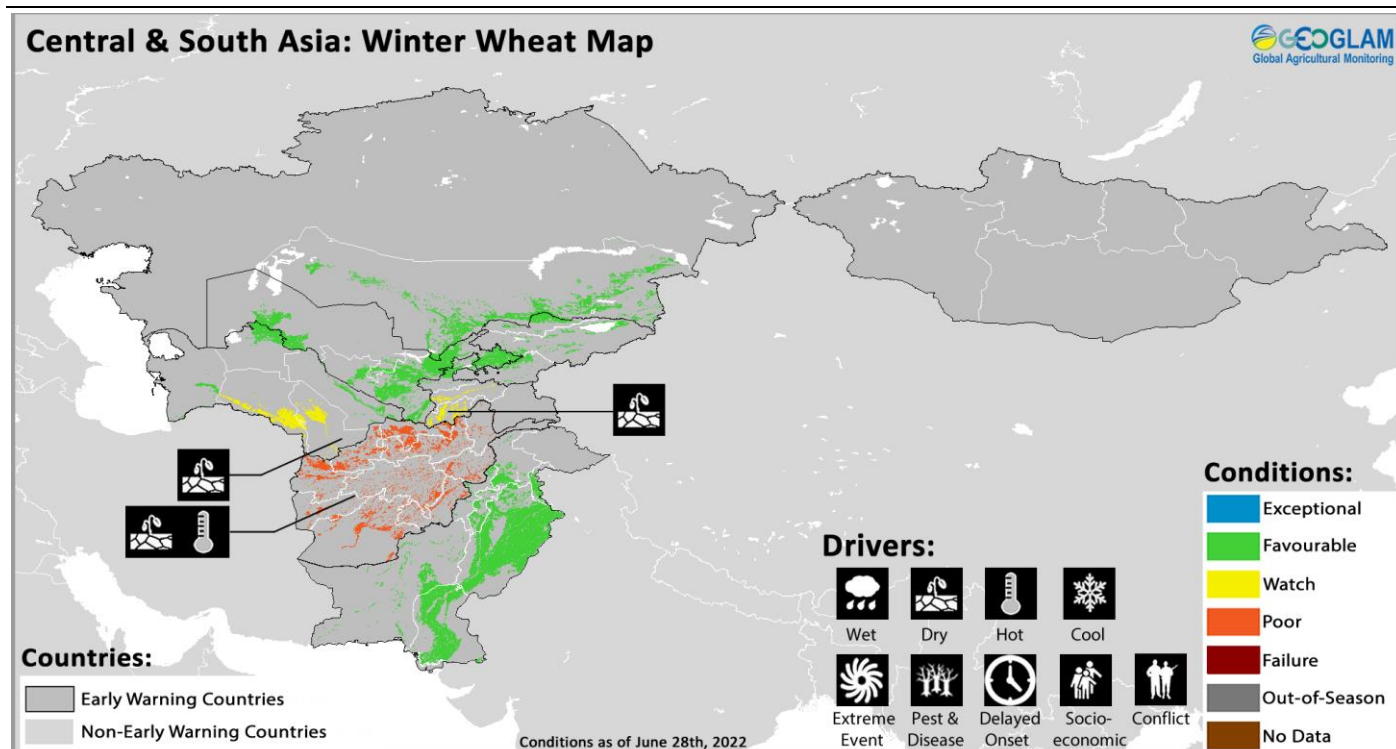


Crop condition map synthesizing wheat conditions as of June 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled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

Matabeleland North have failed. However, final yields are above-average in Mashonaland West, preventing a larger year on year decrease in production at the national level as it accounts for 40 percent of national output in 2022 compared to an average of 29 percent. In the **Democratic Republic of the Congo**, harvesting of main season sorghum crops finalized in the southeast while planting and development continues in the north and west, and harvesting of second season maize crops is now underway. Overall growing conditions are favourable throughout the country.

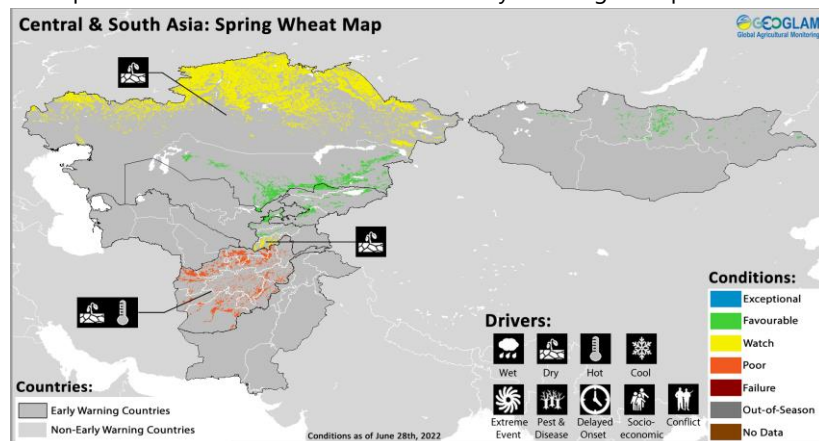
Planting of winter wheat continues in **Lesotho, South Africa, Zambia, and Zimbabwe** for harvest from September. Planting conditions remain favourable, and recent wet conditions over the winter rainfall region of **South Africa** have improved the outlook for wheat to favourable, except in the Eastern Cape where dry conditions are present.

Central & South Asia



Crop condition map synthesizing Winter Wheat conditions as of June 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, harvesting of winter wheat is underway in **Afghanistan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan** while crops continue to develop in southern **Kazakhstan** for harvest from July. Overall conditions are mixed as crops in **Afghanistan** are unlikely to recover, and crop stress remains in Khatlon and Tadjikistan territories in **Tajikistan** as well as Ahal and Mary provinces in **Turkmenistan** due to ongoing dry conditions. Conversely, crops in southeastern **Uzbekistan** have recovered from dry conditions last month. Elsewhere, agro-climatic conditions remain favourable. In **Afghanistan**, areas of the southwest, north, and central highlands as well as northeastern areas experienced below-average cumulative rainfall for the October 2021 through May 2022 wet season. Additionally, snow water volumes have been well below-average in the north, northeast, and eastern basins, and high temperatures resulted in rapid snowpack melt. Total wheat production has been projected at well below-average levels with losses of 30 percent or greater in the northern and north-central provinces of Badghis, Faryab, Jawzjan, Balkh, Kunduz, Samangan, Sari Pul, and Ghor, and the western province of Nimroz. A forecast third consecutive La Niña event and associated below-average precipitation in late 2022 and early 2023 is expected to have negative consequences for the upcoming 2022/23 agricultural season, which will begin in mid-October. Furthermore, on June 22nd, a 5.9 magnitude earthquake hit the southeast region of the country, with the epicenter in Paktika province. The most affected regions include Giyan and Barmal district in Paktika province and Spera district in Khost province, and continuous rainfall in late June in the affected provinces heightens the risk of landslides and flooding. The earthquake comes at a time when the country is facing multiple other crises, including persisting conflict, economic collapse and



Crop condition map synthesizing Spring Wheat conditions as of June 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.**

sanction-related impacts, and severe drought (See Regional Outlook Pg. 12). In **Tajikistan**, below-average rainfall amounts, particularly in February and April, impacted crops in parts of the main producing Khatlon province as well as in Tadjikistan Territories. While crop biomass is near-average in Khatlon province due to irrigation use, final yields are expected to be slightly below-average at the national level. Similarly, in Ahal and Mary provinces of **Turkmenistan**, concern remains due to low rainfall earlier in the season; however, crop biomass is close to average due to irrigation use. In southern **Kazakhstan**, adequate temperatures and sufficient rainfall sustained average crop growth. Yield is expected to increase 6 percent, and production is expected to increase 26 percent compared to the five-year average.

Spring wheat crops are in vegetative to reproductive stage in **Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, and Tajikistan**. Crops in **Afghanistan** are unlikely to recover from persistent hot and dry conditions, and there is concern in main producing areas of northern **Kazakhstan** and Khatlon province of **Tajikistan**. In **Afghanistan**, above-average precipitation in late June may help land preparation. However, a forecast return to dry weather in early July and above-average temperatures through the end of the season in combination with low water availability will limit production and yield outcomes (See Regional Outlook Pg. 12). In northern **Kazakhstan**, drier than normal conditions have prevailed since one month prior to planting, and additional rainfall is needed to sustain growth. In **Pakistan**, planting of *Kharif* (summer) season maize and rice crops is underway for harvest from September, and planting conditions remain favourable.

Regional Outlook: Second consecutive below-average rainfall season has resulted for many areas across the region, and a third consecutive below-average rainfall season is forecast for late 2022 and likely to worsen hydrological drought conditions in impacted areas

Extremely poor precipitation performance impacted Afghanistan, southeastern Uzbekistan, and central and eastern Tajikistan during the 2021-2022 winter and spring seasons. Many of these areas had [record-breaking](#) or close-to record low precipitation between late-March and late-June, based on a 42-year record (Figure 1 left). Spring season totals ranged from 45% of average to less-than 75% of average (Figure 1 middle-left), and October 2021 to May 2022 totals were also substantially below-average in these areas (Figure 1 middle-right). Drier-than-average conditions prevailed through most of the winter and spring, with the exception of above-average precipitation in early to mid-March and during a few storms in December and January.

Spring precipitation from April was below-average across most areas of the region (Figure 1 middle-left). In western Uzbekistan and western Turkmenistan, above-average precipitation during May improved seasonal precipitation totals, following a much drier-than-average April, a moderately below-average March, and below-average winter precipitation. Precipitation totals from April 1st are near-average in portions of southeastern Kazakhstan and Kyrgyzstan.

During late-May to late-June, southeastern and northern Kazakhstan, Kyrgyzstan, and portions of central and northern Tajikistan and eastern Afghanistan received moderate precipitation, between 25 and 50 mm, with higher amounts in some localized areas. More than a thousand people in southeastern Afghanistan were killed from a 5.9 magnitude earthquake on June 22nd, and flooding from heavy rains also impacted communities. Infrastructure, homes, and farmland were destroyed. According to the SubX forecast from July 1st, Kyrgyzstan and southeastern Kazakhstan crop growing areas are likely to be drier than normal in July (Figure 1-right). To the south, most areas are now in the dry season, and areas under hydrological drought will not improve until at least October 2022. Hotter-than-normal summer temperatures are expected throughout the region.

This is the second year in a row with below-average winter and spring precipitation in many areas across the region, associated with two back-to-back La Niña events. [Hydrological drought conditions](#) are dramatically worse in Afghanistan now than a year ago, based on extremely low snow water levels through the peak of the main snow season and [current record-low](#) amounts. Record-low snowpack and reservoir levels will limit water supply needed in coming months for second season crop cultivation. If La Niña conditions are present again, which is favoured for late 2022 (~ 59% chance), ongoing depletion of water supply and increased chances for a third below-average precipitation season will worsen an already highly concerning situation.

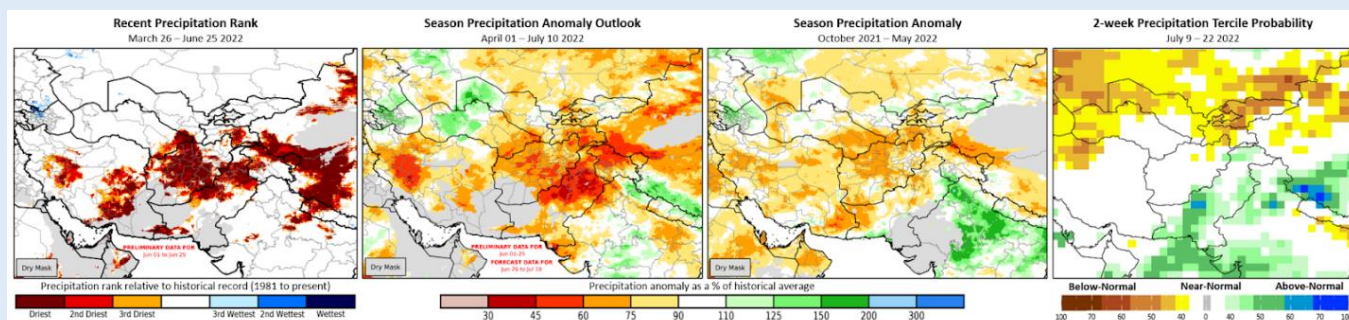
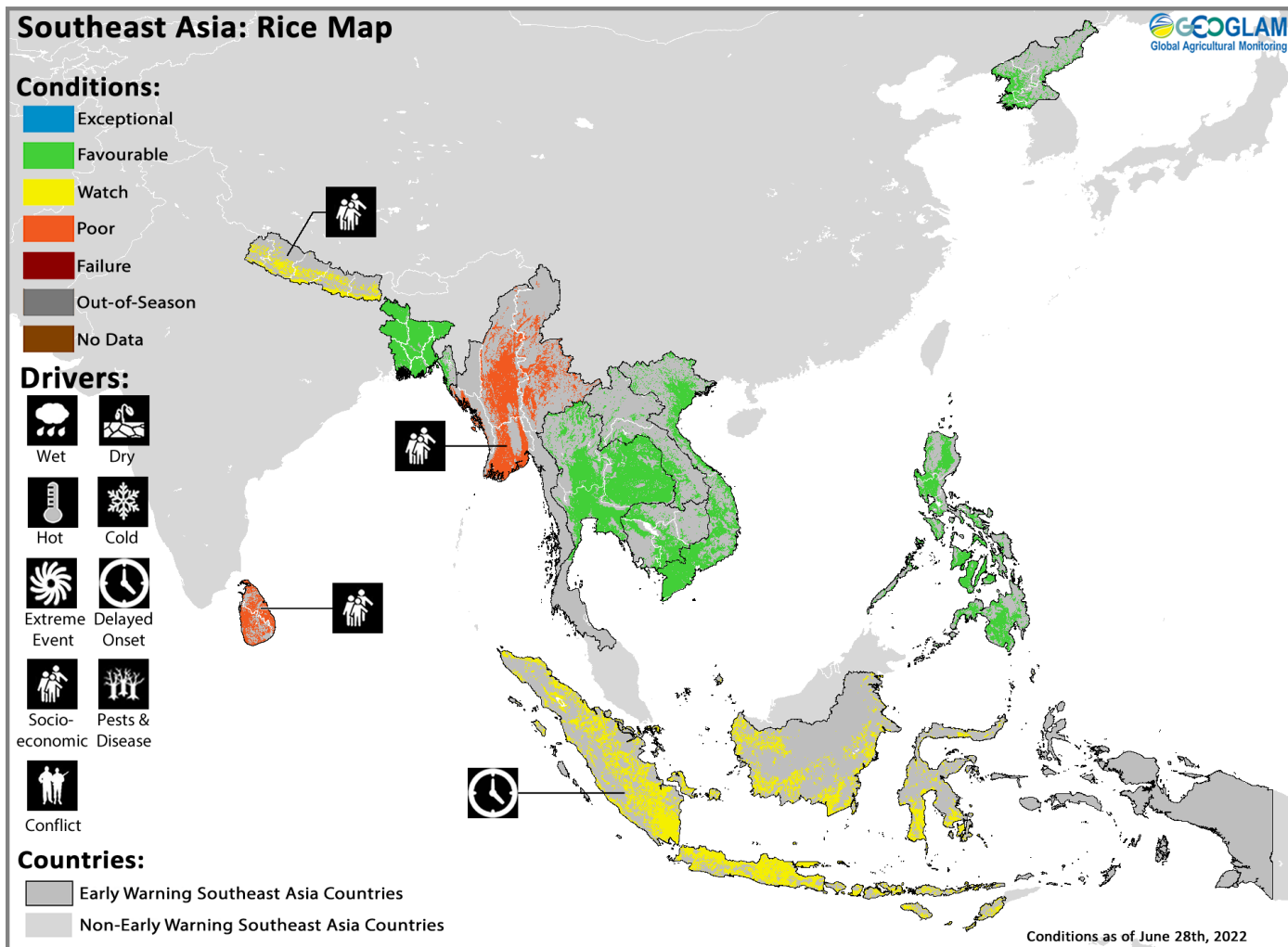


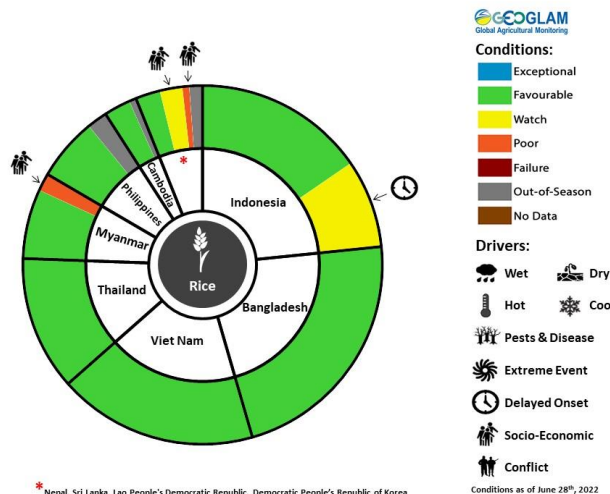
Figure 1. March 26th to June 25th precipitation rank, April 1st to July 10th, 2022 and October 2021 to May 31st 2022 precipitation anomalies, and a 2-week probability forecast for July 9th-22nd, 2022 precipitation. The left three panels are CHC Early Estimates, which compare recent precipitation to the historical CHIRPS record (1981-2021/22) for their respective accumulation periods. The left panel shows how March 26th to June 25th, 2022, precipitation totals rank amongst the historical record (1981-2020/21). Red hues indicate where the current year's totals are amongst the driest three years on record. The others show precipitation totals, as a percent of average, for April-to-July 10th 2022 (middle-left) and for October 2021 to May 2022 (middle-right). Totals for April to July include preliminary data for June 1st-25th and a two-week bias-corrected GEFS forecast for June 26th to July 10th. The right panel is an IRI SubX probabilistic precipitation tercile forecast for July 9th to 22nd, from July 1st. From the [IRI subseasonal forecast maproom](#). Source: Climate Hazards Center

Southeast Asia



Crop condition map synthesizing rice conditions as of June 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 northern Southeast Asia, harvesting of dry-season rice finalized under generally favourable conditions except in localized south and central regions of the **Philippines** where tropical storms and flooding during the growing season resulted in below-average yields and in **Myanmar** where harvested area is expected to decrease more than 10 percent compared to last year due to significant increases in the cost of labour, agricultural inputs, and machine utilization. Wet-season rice is in seeding to young panicle forming stage, and sowing conditions are generally favourable due to sufficient rainfall and despite flooding in some localized areas. Below-normal rainfall is forecast in many areas for the July to August period, with a possible transition to above-normal rainfall in September (See Regional Outlook Pg. 15). In **Indonesia**, harvesting of wet-season rice enters the fifth month with good yields and an increase in harvested area compared to last year due to sufficient water and sunlight during the growing period. Sowing of dry-season rice is beginning but is limited as farmers wait for ideal conditions. Above-average rainfall is forecast in southern areas through early July to November (See Regional Outlook Pg. 15). In the **Philippines**, dry-season rice harvesting is wrapping up under mixed conditions due to damaging rains in localized areas Visayas and pest infestations in Mindanao. Sowing of wet-season rice is beginning under favourable conditions. In **Thailand**, dry-season rice harvesting is wrapping up with an increase in yields and total sown area compared to last year. Sowing of wet-season rice is beginning under favourable conditions. However, some fields in the Northeastern region cannot yet be sown due to recent flooding. Overall planted area is forecast to increase slightly due to



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

sufficient irrigation water supply and good paddy prices, and farmers expect the government to continue the income insurance scheme, though some farmers may switch to crops such as cassava and sugarcane to earn a higher income. Yield is also expected to increase compared to the previous year, but the rising price of fertilizer, pesticides, and fuel may contain the increased productivity. In **Viet Nam**, winter-spring rice (dry-season) is continuing to develop in the north with an estimated yield of 6.26 tons per hectare, 0.3 percent lower than the previous year due to low temperatures at the early growing stage. Harvesting of winter-spring rice (dry-season) is underway in the south, and growing conditions are normal. Sowing of summer-autumn rice (wet-season) in the Mekong River Delta is ongoing under favourable conditions. In lowland areas of **Laos**, wet-season rice is in land preparation and seeding stage with favourable weather conditions and sufficient irrigation water supply for crops in the early growing stage. The planting plan for lowland areas is approximately 721 thousand hectares, slightly lower than the previous year, and production is expected around 3 million tons. In upland areas, the planting plan is approximately 86 thousand hectares with an expected yield of 2 tons per hectare. In **Myanmar**, harvesting of dry-season rice is nearing completion and has reached 85 percent of the total planted area of 0.98 million hectares. The current yield of 4.85 tons per hectare is slightly higher than the previous year, though harvested area is expected to decrease more than 10 percent compared to last year due to significant increases in the cost of labour, agricultural inputs, and machine utilization. Planting of wet-season rice began in June with a national planting plan of 6.07 million hectares, and planting progress is almost double compared to the previous year due to early monsoon rains. In **Cambodia**, planted area of wet-season rice reached 41 percent of the national plan of 261,000 hectares. Crops are in early tillering to young panicle forming stage under generally favourable conditions except in fields around Lake Tonle Sap that cannot be planted due to flooding, which is estimated to be about 1.3 percent of the total planting plan. In **Sri Lanka**, *Yala* season maize and rice crops are in vegetative to reproductive stage for harvest from August, and production is expected to decrease sharply as a result of severe shortages of fertilizer, fuel, and pesticides. The country is currently facing its worst economic crisis since independence in 1948, resulting in an 80 percent currency depreciation since March, unavailability of production inputs, and estimated inflation as high as 132 percent as of March 2022. The crisis has particularly affected the agricultural sector, livelihoods, and food security as reduced availability and high prices of fuel, fertilizer, seeds, and credit resulted in a 40 to 50 percent reduction in food production during the most recent *Maha* season. In the wake of the onset of the COVID-19 pandemic in 2020, the Government of Sri Lanka limited the import of essential items to protect its foreign currency reserves. From April to November 2021, the import of synthetic fertilizers was limited only to farmers with adequate preparation and training, increasing agricultural product inflation to 24.7 percent in February 2022 and contributing to the reduction of the *Maha* season harvest. A June 9th OCHA report estimated that only 24 percent of agricultural land had been cultivated for the current *Yala* season due to the high costs of production, particularly for paddy crops. A second state of emergency was declared on May 6th due to the crisis and related food, fuel, and medicine shortages. In **Nepal**, harvesting of the mostly irrigated wheat crop finalized this month, and production is forecast to decrease due to shortages of agricultural inputs. Planting and development of main season maize and rice crops is underway, and planting activities and production are likely to be impacted by the high price of fuel and fertilizer. In **Bangladesh**, harvesting of *Boro* season rice crops finalized this month with near-average yields. Planting of main season maize crops continues under favourable conditions, and land preparation and early planting of *Aman* season rice crops is underway. However, from early June, torrential monsoon rains inundated large parts of Sylhet, Sunamganj, and Netrakona districts in the northeast, resulting in flash floods that inundated farmlands. The rains came at a time when the region was already recovering from recent flash floods in late May (See Regional Outlook Pg. 15). In the **Democratic People's Republic of Korea**, planting and development of main season maize and rice crops is underway for harvest from August, and conditions have improved due to recent rainfall improvements in June, following a drier than average April through May period, with a 50 to 70 percent rainfall deficit in the western half of the country. Crop biomass is near or above-average in most areas.

Regional Outlook: Below-average July-to-August rainfall in mainland areas likely to be followed by a transition to above-normal rainfall from September

In recent weeks, rainfall was average to below-average in most northern areas of the region (Figure 1 left), following significantly wetter-than-average conditions and incidents of high-impact flooding during April and May. However, continued heavy rain in northern Bangladesh in June led to repeated flooding, further impacting millions of people. Average to above-average April 1st to July 10th rainfall totals are estimated in most northern and southern areas, reflecting the mixed conditions during these months and a two-week forecast (Figure 1 middle-left). Below-average rainfall is forecast through early July in Bangladesh and western Myanmar, and above-average rainfall is forecast in northeastern areas due in part to Typhoon Chaba that reached mainland China on July 2nd. Above-average rainfall is also forecast in southern Indonesia during that time.

Above-normal rainfall is anticipated from July to November in southern areas of the region, including Indonesia and east Malaysia. Models from several international forecasting centers, such as the WMO forecast from June (Figure 1 middle-right and right), indicate this with high confidence. Wetter-than-normal conditions are typical of negative Indian Ocean Dipole and La Niña conditions. Models are forecasting sea surface temperatures that are coincident with these climate modes, including much warmer than normal conditions in the Indo-Pacific Ocean region. In northern areas of the region, there are elevated chances for below-normal July-to-August rainfall in southern Myanmar, southern Thailand, southern Vietnam, Cambodia, southern Laos, and in the northern Philippines (Figure 1 middle-right). From September to November, models indicate a transition to above-normal rainfall in some of those areas (Figure 1 right).

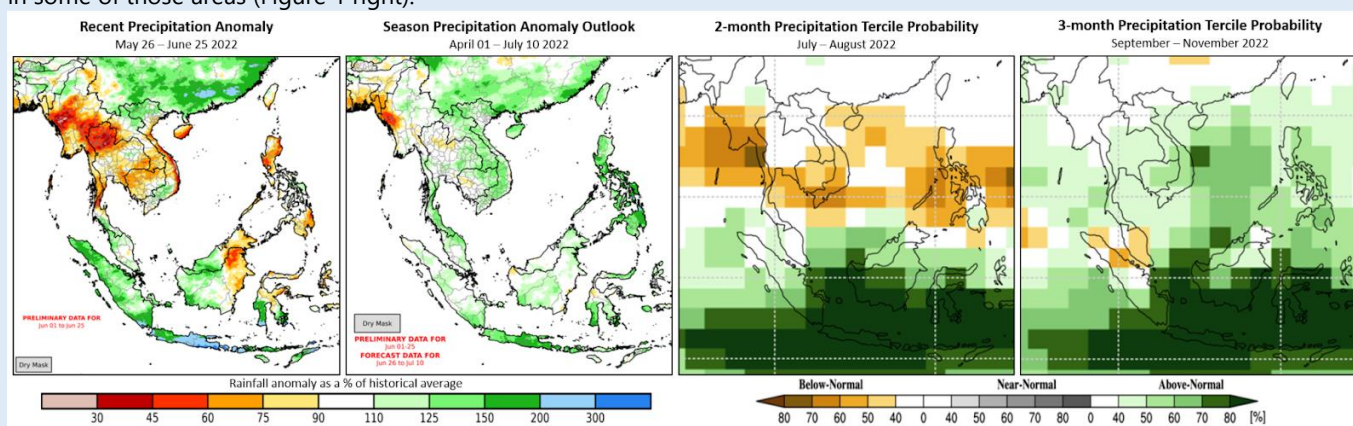
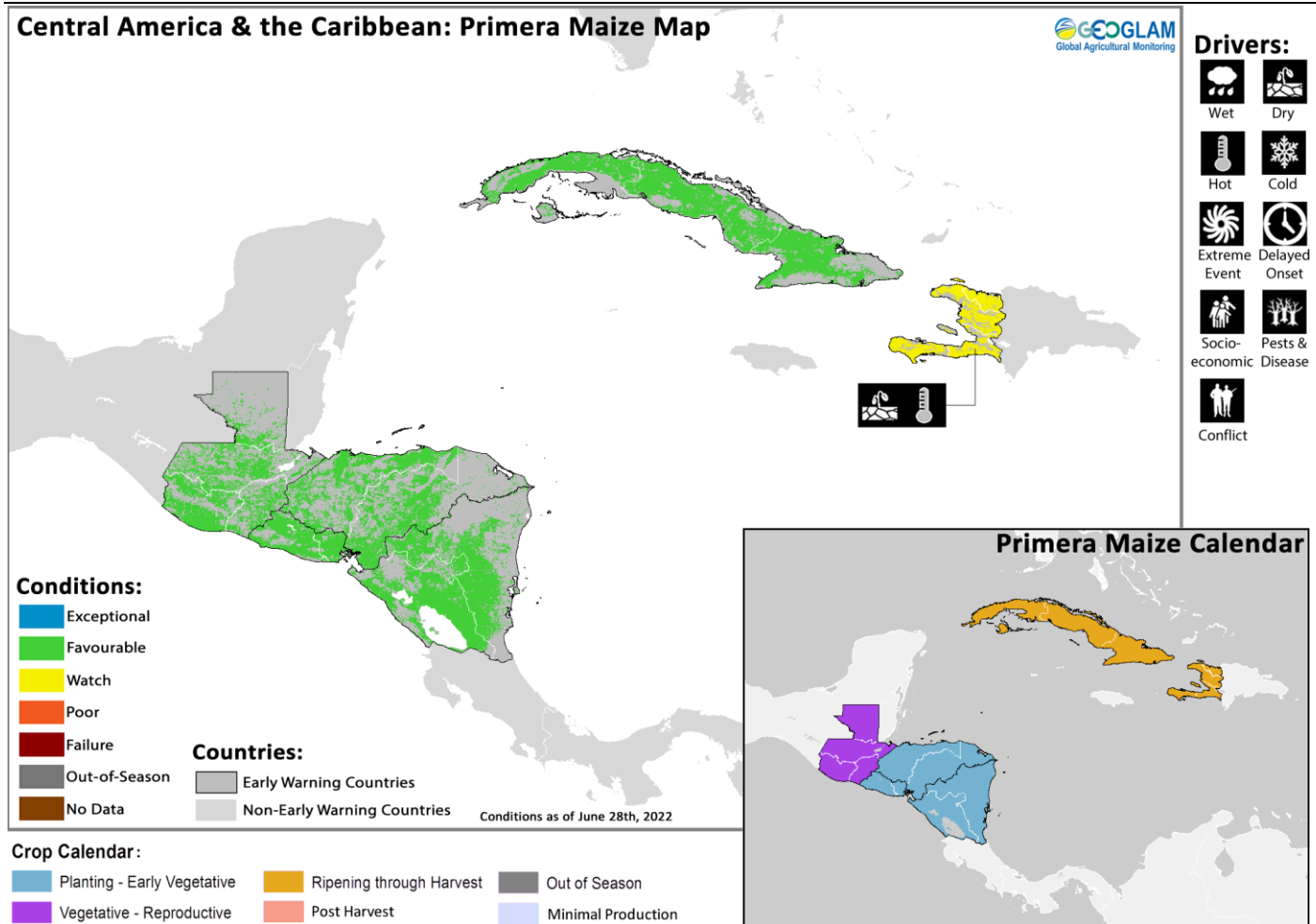


Figure 1. May 26th to June 25th and April 1st to July 10th, 2022 precipitation anomalies, and probability forecasts for July-to-August and September-to-November 2022 precipitation. The left two panels are CHC Early Estimates, which compare current precipitation totals to the 1981-2021 CHIRPS average for their respective accumulation periods. These use a combination of final and preliminary data, and for middle-left, also a two-week bias-corrected GEFS forecast. Left: Percent of average for May 26th to June 25th, 2022. Middle-left: Percent of average for April 1st to July 10th. Preliminary data for June 1st - 25th; forecast data for June 26th to July 10th. The right two panels show WMO probabilistic forecasts for July-to-August (middle-right) and September-to-November (right) 2022 precipitation, based on models initialized in June. From the WMO Lead Centre Long-Range Forecast Multi-Model Ensemble. Source: UCSB Climate Hazards Center

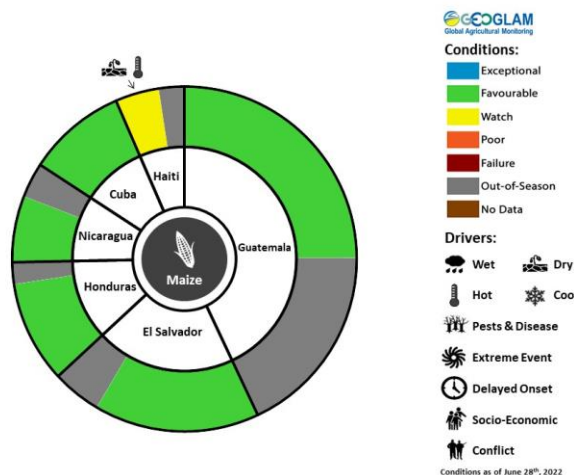
Central America & Caribbean



Crop condition map synthesizing *Primera* season maize conditions as of June 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, planting and development of *Primera* season cereals is underway across **Guatemala, Honduras, El Salvador, and Nicaragua** for harvest from July, and conditions are generally favourable except in northern **Honduras** where above-average precipitation may lead to excessive moisture at maturation stage for rice crops. Additionally, in **Guatemala** and parts of **Honduras**, excessive moisture has resulted in crop plagues and diseases, road damage due to landslides and flooding, and localized crop loss in subsistence areas. On July 1st, Tropical Storm Bonnie made landfall in southeastern **Nicaragua** and crossed to the Pacific Coast the next day. The storm brought heavy rain to **Nicaragua, El Salvador, and eastern Honduras**, and led to flooding and several fatalities, before strengthening into a hurricane in the eastern Pacific (See Regional Outlook Pg. 17).

In **Guatemala**, above-average precipitation between the third dekad of May and second dekad of June as well as favourable soil moisture conditions are benefitting planting activities and crop germination, though some replanting occurred along the southern coast and northeast due to damage from flooding and landslides. Torrential rains also affected housing and infrastructure, and subsurface soil moisture was more than 75 percent of average in Alta Verapaz, Chiquimula, El Progreso, Huehuetenango, Izabal, Jalapa, Jutiapa, Petén, Quiché, and Zacapa as of June 27th. Additionally, high prices of agricultural inputs and fuel are likely to limit planted area. Between December 2021 and March 2022, fertilizer imports declined by 30 percent compared to the previous three-year average due to export limitations from China and the Russian Federation. The government plans to distribute fertilizer to 180,000 smallholder farmers to improve access. In northern **Honduras**, recent above-average rainfall in combination with high precipitation amounts forecast during the June to September period may result in



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

torrential rains during the crop maturity and harvesting stage, particularly for rice crops (See Regional Outlook Pg. 17). Additionally, in late May, the government distributed improved seeds and fertilizers to smallholder farmers with less than 0.7 hectares of land in response to concerns about high production costs. Overall imports of fertilizer declined by 20 percent in the first quarter of 2022 due to export quotas introduced by the Russian Federation. In **Haiti**, harvesting of main season cereals is now underway. Following generally favourable weather conditions from January and a good start to the season, crop conditions deteriorated moderately in May due to erratic and below-average precipitation. The irregular rainfall distribution and above-average temperatures affected the normal development of crops, particularly in the minor producing areas of the north and south. While forecast heavy rainfall in the first week of July may provide some relief, conditions are likely to worsen with an expected return to drier conditions for the remainder of July, and the extent of crop recovery is uncertain (See Regional Outlook Pg. 17). Prevailing dry conditions in June are expected to affect rice yields in particular. In **Cuba**, harvesting of first season rice crops finalized in June under favourable conditions. Harvesting of first season maize crops is just beginning, and conditions of the planted crops are favourable due to good rains. In the west, torrential rains in the first week of June triggered localized flash flooding but also replenished soil moisture deficits present between March and May. However, there has been a declining trend of planted area as a result of economic hardship and limited availability and access to agricultural inputs. As such, production of first season cereals is expected at a below-average level for a third year in a row. In 2021, domestic fertilizer production was 80 percent below-average, and imports were also low. Planting of second season rice crops is underway for harvest from September. While planted area is expected to remain below-average, forecast above-average rainfall amounts in early July and in central and eastern areas from August are expected to benefit crop development (See Regional Outlook Pg. 17).

Regional Outlook: Elevated chances of above-normal rainfall across Central America from August, and a forecast very active 2022 Atlantic hurricane season

During late-May to late-June, rainfall totals were average or above-average across much of Central America, while drier-than-average conditions continued in Haiti, the Dominican Republic, and in portions of El Salvador. Many areas received heavy and consistent rainfall, while eastern Guatemala, western Nicaragua, and northeastern Honduras were much wetter than average. Season-to-date totals, from April 1st to June 25th (Figure 1 left) generally reflect these conditions.

In Haiti, rainfall from April to June was irregular and below-average, and many areas received less than 75% of average rainfall between late-April and late-June, when peak seasonal rains typically occur. Northeastern areas received less than 60% of average rainfall during that period. Forecast heavy rainfall during the first week of July (Figure 1 middle) could increase seasonal totals. However, these rains may be too late to provide substantial relief to some crops. Drier conditions are anticipated through the rest of July, based on typical seasonal patterns and a SubX forecast from July 1st, which shows elevated chances of below-normal rainfall during mid-to-late July.

On July 1st, Tropical Storm Bonnie made landfall in southeastern Nicaragua and crossed to the Pacific Coast the next day. It brought [heavy rain](#) to Nicaragua, El Salvador, Costa Rica, and eastern Honduras, and led to flooding and several fatalities, before strengthening into a hurricane in the eastern Pacific. The precipitation forecast for July 1st to 7th (Figure 1 middle) shows the main areas in Central America impacted by the storm as it crossed, and El Salvador and southern Guatemala were additionally impacted as the storm then traveled northwest. During August-to-November, there are elevated chances of above-normal rainfall across Central America. This is indicated by models from several international forecasting centers, such as the NMME ensemble forecast from June (Figure 1-right). These indicate higher confidence (> 50% chances) in southern areas of the region. Due to the anticipated very active 2022 Atlantic hurricane season, there are also increased risks of flash floods, landslides, and other storm hazards.

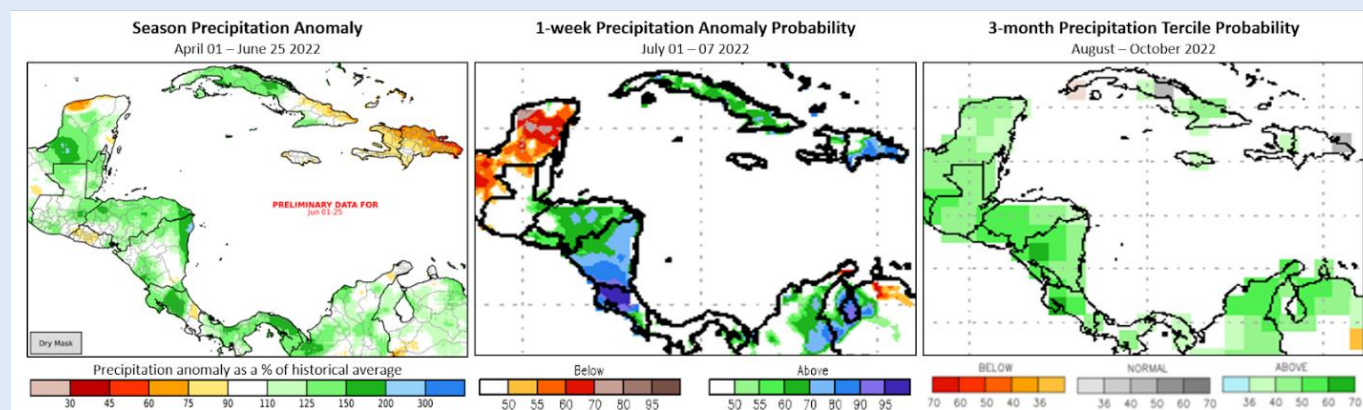


Figure 1. Season precipitation anomaly and 1-week and 3-month precipitation anomaly probability forecasts. The left panel shows the April-to-June 25th 2022 season precipitation performance, represented as a percent of the 1981-2021 CHIRPS historical average based on final CHIRPS data for April and May, and preliminary CHIRPS data for June 1st-25th. The middle panel is the [NOAA CPC GEFS](#) week 1 forecast for July 1st to 7th, 2022 from June 30th, which shows the chances for above-average (> 120% of average) and below-average (< 80% of average) precipitation. The right panel is a 3-month NMME probabilistic precipitation forecast for August to October, 2022, based on June 2022 initial conditions. The forecast probability is calculated as the percentage of all 79 NMME ensemble members that fall in a given tercile (above/below/near-normal). White color indicates there is no dominant category across the model forecasts. NMME image from the [NOAA CPC Climate Forecasts](#). Source: UCSB Climate Hazards Center

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 slice 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 July 7th, 2022.

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.



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.

MENA				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Egypt	Rice	Summer-planted	Nili season (Nile Flood)	

East Africa				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Burundi	Maize	Season B	Season A	
Ethiopia	Maize	Meher Season (long rains)	Belg Season (short rains)	
Kenya	Maize	Long Rains	Short Rains	
Somalia	Maize	Gu Season	Deyr Season	
Somalia	Sorghum	Gu Season	Deyr Season	
Uganda	Maize	First Season	Second Season	
United Republic of Tanzania	Maize	Long Rains	Short Rains	
United Republic of Tanzania	Sorghum	Long Rains	Short Rains	

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	

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	

Southeast Asia				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Bangladesh	Rice	Boro	Aman	
Cambodia	Rice	Wet season	Dry season	
Indonesia	Rice	Main season	Second 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	Rice	Maha	Yala	
Thailand	Rice	Wet season	Dry season	
Viet Nam	Rice	Wet season (Autumn)	Dry season (Winter/Spring)	

Central & 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	
Tajikistan	Wheat	Winter-planted	Spring-planted	

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.

Central America & Caribbean				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Cuba	Rice	Main season	Second season	
El Salvador	Beans	Primera	Postrera	
El Salvador	Maize	Primera	Segunda	
Guatemala	Beans	Primera	Postrera	Apante
Guatemala	Maize	Primera	Segunda	
Haiti	Maize	Main season	Second season	
Honduras	Beans	Primera	Postrera	
Honduras	Maize	Primera	Segunda	
Nicaragua	Beans	Primera	Postrera	Apante



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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.

Contributing partners



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