

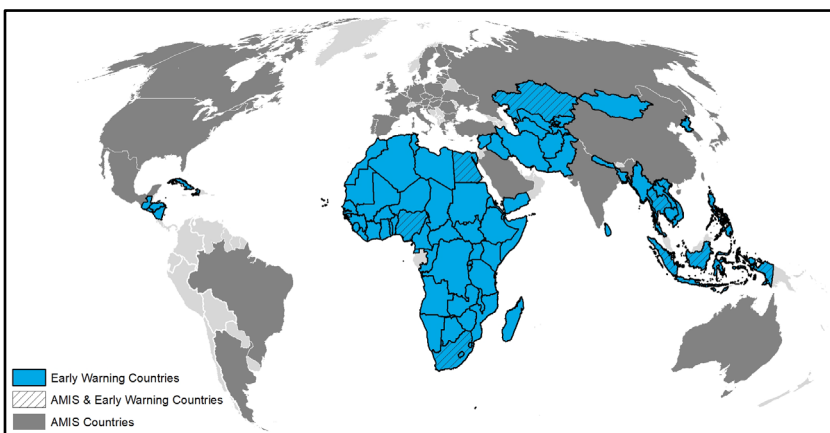


Crop Monitor

EARLY WARNING

Overview:

In **East Africa**, harvesting of main season cereals finalized in the north under mixed conditions due to ongoing conflict in South Sudan and northern Ethiopia, flooding in South Sudan, and dry conditions in southwestern Ethiopia. In the south, three consecutive seasons of poor rainfall have impacted OND crop performance in affected regions, and poor crop conditions resulted across many areas. In **West Africa**, harvesting of main season cereals finalized under generally favourable conditions except in areas of Burkina Faso, Mali, and Mauritania impacted by previous dryness and in conflict-affected regions. In the **Middle East and North Africa**, pockets of dry conditions in December were relieved by rainfall improvements in January, except in Morocco and Algeria where dry conditions remain a concern. In **Southern Africa**, main season cereal crops are developing under mixed conditions as below-average rainfall and hot temperatures as well as flooding from Tropical Storm Ana are impacting crops in parts of the subregion (See Tropical Cyclone Alert Pg. 12 and Regional Outlook Pg. 13). In **Central and South Asia**, dry conditions continue to impact winter wheat development in parts of Afghanistan, Turkmenistan, Uzbekistan, and Kazakhstan. In **Southeast Asia**, harvesting of wet-season rice finalized in the north under favourable conditions despite localized flood damage prior to harvest, and planted area of dry-season rice is expected to increase. In **Central America and the Caribbean**, harvesting of *Segunda/Postrema* season cereals finalized under mixed conditions as erratic and below-average rains resulted in below-average yields in south and central Guatemala and southern Honduras.



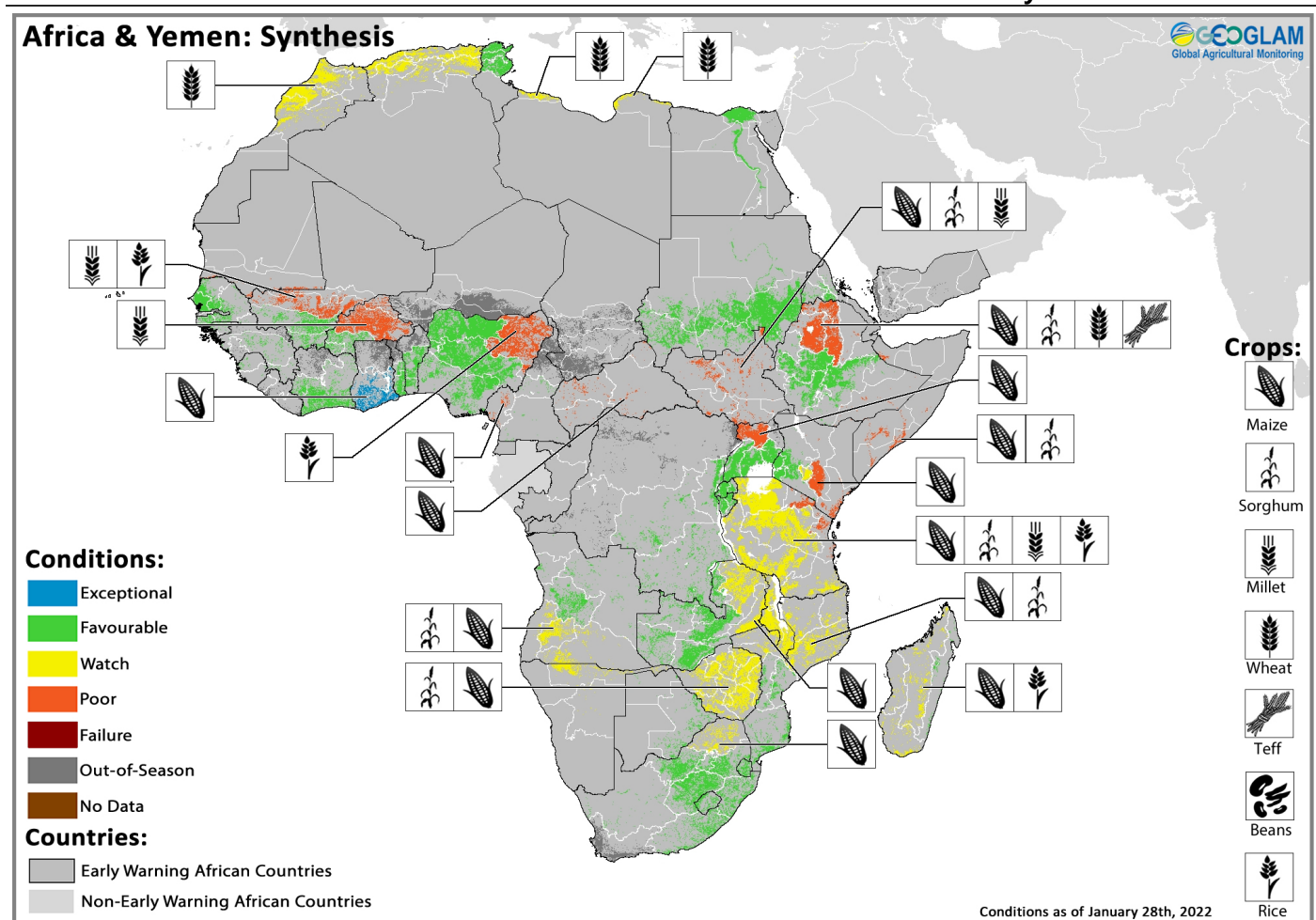
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GEOGLAM Crop Monitor for Early Warning

Crop Conditions at a Glance

based on best available information as of January 28th



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of January 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 the north, harvesting of main season cereals finalized under mixed conditions due to ongoing conflict and widespread flooding in South Sudan. In Ethiopia, final conditions are mixed for *Meher* season (Long Rains) cereals due to ongoing conflict in the north and prevailing dryness in southern Somali region. In the south, harvesting of second season cereals is complete or nearing completion under mostly poor conditions due to dry conditions during the OND rainfall season and the effects of three consecutive poor rainfall seasons.

WEST AFRICA: Harvesting of main season cereals finalized across the subregion under generally favourable conditions except in parts of Burkina Faso, Mali, and Mauritania impacted by rainfall deficits as well as in regions impacted by ongoing conflict.

MIDDLE EAST & NORTH AFRICA: Winter wheat crops are developing under mixed conditions with concern in parts of Morocco and Algeria due to prevailing dryness, and conflict and socio-economic challenges remain throughout Libya and Syria.

SOUTHERN AFRICA: Main season cereals are developing under mixed conditions as parts of Angola, Madagascar, Malawi, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe are being impacted by erratic and below-average rainfall and hot

temperatures. Additionally, there is concern for areas impacted by Tropical Storm Ana in late January, including parts of Madagascar, Mozambique, and Malawi (See Tropical Cyclone Alert Pg. 12 and Regional Outlook Pg. 13).

CENTRAL & SOUTH ASIA: Planting and development of winter wheat is underway under mixed conditions as dryness continues to impact crops in parts of Afghanistan, Turkmenistan, Uzbekistan, and Kazakhstan. However, rainfall in January helped to develop sufficient snowpack accumulation for irrigated crops in Afghanistan.

SOUTHEAST ASIA: In the north, harvesting of wet-season rice finalized in December under favourable conditions despite localized flood damage, and planted area of dry-season rice is expected to increase. In Indonesia, overall conditions are favourable.

CENTRAL AMERICA & CARIBBEAN: Harvesting of *Segunda/Postera* season cereals finalized under mixed conditions as erratic and below-average rains resulted in below-average yields in south and central Guatemala and southern Honduras. In Haiti, second season crop yields remain below-average due to prolonged dry conditions and impacts from the August disasters.

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 the western prairies of Canada, southeast US, eastern Venezuela, Guyana, Suriname, French Guiana, southeast Brazil, southern Argentina, Ireland, Scotland, Norway, Finland, Estonia, Latvia, Lithuania, northwestern and Ural districts of the Russian Federation, northern Kazakhstan, Tanzania, southwestern Angola, southern China, Laos, Viet Nam, Cambodia, Thailand, North Sulawesi Indonesia, and eastern Australia. There is also a likelihood of below-average rainfall in the northwest and central plains of the US, northern Mexico, northern Chile, southern Brazil, Uruguay, central Argentina, central and southern countries of the EU, central Ukraine, western Turkey, Morocco, northern Algeria, eastern Liberia, Côte d'Ivoire, Ghana, Togo, Benin, southern Nigeria, southern Cameroon, the Central African Republic, Equatorial Guinea, Gabon, Republic of the Congo, northern Democratic Republic of Congo, northern Angola, South Sudan, western Ethiopia, Uganda, eastern Kenya, southern Somalia, eastern Namibia, Botswana, Zimbabwe, northern South Africa, southern and western Mozambique, southern Iraq, southern Islamic Republic of Iran, western Afghanistan, western Pakistan, northern India, western and northeast China, northern Mongolia, southeastern Russian Federation, Democratic People's Republic of Korea, Republic of Korea, and Sumatra Indonesia.

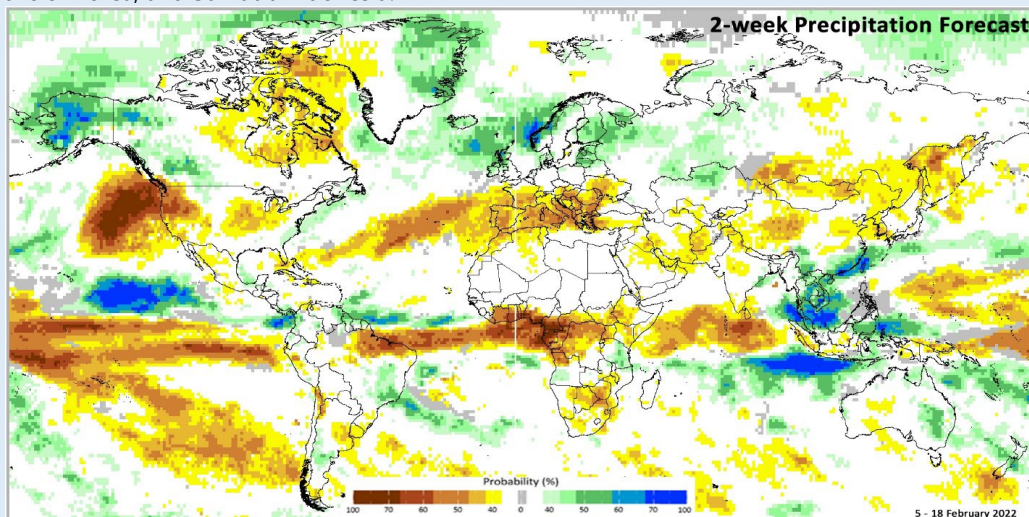


Figure 1: IRI SubX Precipitation Biweekly Probability Forecast for 5-18 February 2022, issued on January 28th, 2022. The forecast is based on statistically calibrated tercile category forecasts from three SubX models. Source: [IRI Subseasonal Forecasts Maproom](https://www.iri.columbia.edu/our-work-and-services/forecasts/subseasonal-forecasts-maproom/)

Climate Influences: La Niña event present and expected to continue through April

The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase and is expected to remain as La Niña for several more months. Forecast chances of La Niña conditions continuing are high through April and are elevated through May, according to IRI/CPC (83% chance for February-March-April; 67% chance for March-April-May). Long-range forecasts currently indicate ENSO-neutral conditions are most likely during June-July-August.

La Niña conditions typically increase the chances of below-average precipitation in East Africa, Central and South Asia, southern South America, the southern United States, northern Mexico, and eastern East Asia. There are elevated risks of a two-year sequence of dry conditions in these regions, associated with La Niña conditions last year and this year. La Niña conditions typically increase the chances of above-average precipitation in parts of Southeast Asia, Australia, Southern Africa, and northern South America. Source: [Climate Hazards Center](https://www.climate.gov/news-features/understanding/la-nina)

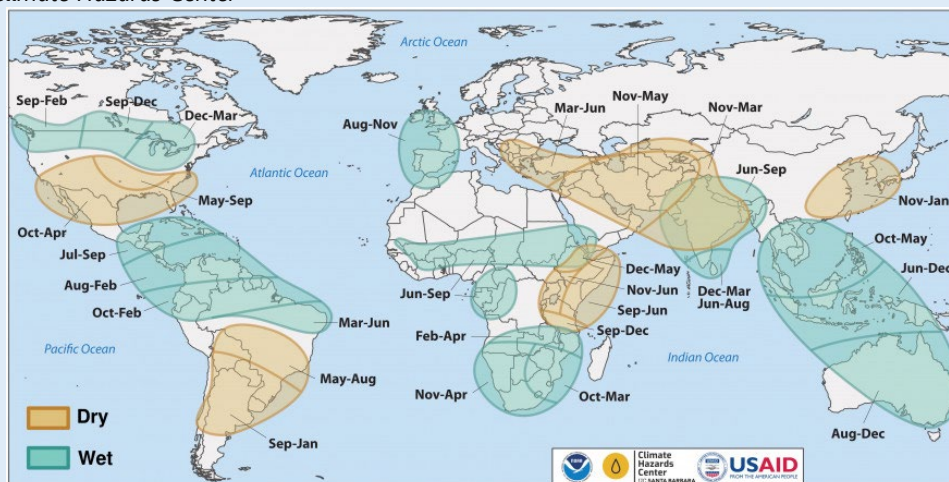


Figure 1. Timing of wet and dry conditions related to La Niña <https://fews.net/la-ni%C3%B1a-and-precipitation>. Source: NOAA & CHC & FEWS NET

East Africa Seasonal Forecast Alert: Increased chances for a fourth consecutive poor rainfall season during MAM 2022

As described in a recent multi-agency [alert](#), due to three consecutive below-average rainfall and agricultural production seasons across the eastern Horn of Africa, East Africa faces a widespread food security [crisis](#). Over 20 million people are in need of urgent food aid amid severe drought, conflict, and economic challenges. As the dry season commences, above-average land surface temperatures in the eastern Horn and the northern sector are forecast until the start of the next rainy season. This will likely drive a quicker-than-usual deterioration in rangeland resources (pasture and surface) conditions and continued poor livestock health and productivity through at least March 2022. The March-April-May (MAM) rainy season is notoriously difficult to forecast, with current global models showing mixed signals and high levels of uncertainty. However, some recent forecasts suggest the possibility of another below-average season in 2022, based on analyses that show a very high probability that Pacific Ocean sea surface temperatures (SST) during the MAM season will largely resemble past droughts, and based on analyses of historical analog La Niña years. If this were to occur, it could result in an unprecedented (in the last 40 years) sequence of four below-normal rainfall seasons, and major increases in food insecurity and malnutrition across most parts of the eastern Horn of Africa.

Similar to the last three poor-performance rainfall seasons in the eastern Horn of Africa, large-scale climate conditions that often suppress rainfall are anticipated during the MAM 2022 season. La Niña or a La Niña-like Pacific Ocean sea surface temperature (SST) gradient (Figure 1) will likely be present. Back-to-back October–November–December (OND) and MAM droughts have occurred during similar oceanic conditions, including in OND 2020/MAM 2021. This has generated concern about a possible four-season drought sequence in this region since August ([CHC blog](#) and CM4EW August 2021). Elevated chances for another dry season in this region are founded upon the increased frequency of dry MAM seasons during recent La Niña years (since 1999, ~80% of MAM seasons following these events were drier-than-normal) and consideration that a La Niña-like Pacific SST gradient can still suppress rainfall, even if eastern Pacific SST are not cool enough to meet La Niña criteria in MAM. IRI/CPC predicts that La Niña will likely remain active into MAM (67% chance). There is a very high probability the “Western V” tropical-extratropical SST gradient will be strong (WVG < -0.8Z) and similar in strength to 2021 (90% chance, based on 3 NMME models from January). The WVG forecast incorporates the influence of Western Pacific warming trends, the Nino3.4 region SST (an ENSO strength indicator), and good model skill in forecasting both of these in January. Using recent historical analogs as a guide, based on similar La Niña and WVG climate conditions, the chance for below-normal rainfall in MAM 2022 is [higher than 50%](#) in [many areas](#) of the eastern Horn.

Though some global and regional models suggest increased chances of average to above-average rains, models have low skill at predicting MAM rainfall at this lead. Weather forecasts close-to and during the season should be closely monitored. While forecast large-scale drivers indicate elevated odds for below-normal MAM rainfall, some wet seasons and high rain events have occurred during similar years (i.e., 2018). During OND 2021, some areas experienced historically dry conditions through much of the season. Following poorly distributed and late rains, parts of central and eastern Kenya and far southwestern Somalia had abnormally heavy December rain events. Outside this region—in the rest of Somalia and eastern Ethiopia—vegetation conditions are mostly drier-than-normal, and land surface temperatures are hotter-than-normal. Until March-to-May rains become established, hotter-than-normal conditions could dry soils and vegetation more quickly than usual.

Overall, a fourth season in a row with sub-par rainfall performance, and the possibility of moderate to extreme drought during that season, is a highly concerning scenario. Consecutive poor rainfall seasons have already greatly eroded the coping capacity of many marginal area farmers and pastoralists, and should another poor season materialize, this would likely drive major increases in food insecurity and malnutrition. While it is certainly possible that strong WVG/La Niña-like conditions will fade by mid-MAM, or that a wet season (like 2018) could occur in the midst of such conditions, WVG and La Niña-based analogs support elevated levels of concern.

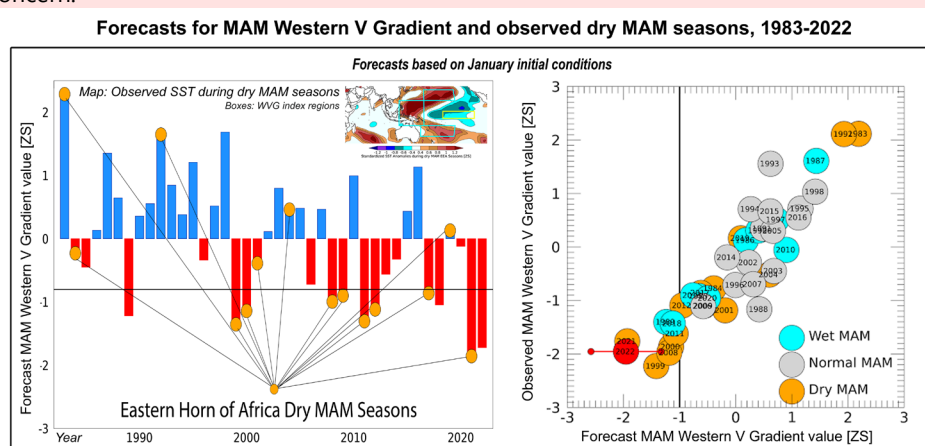
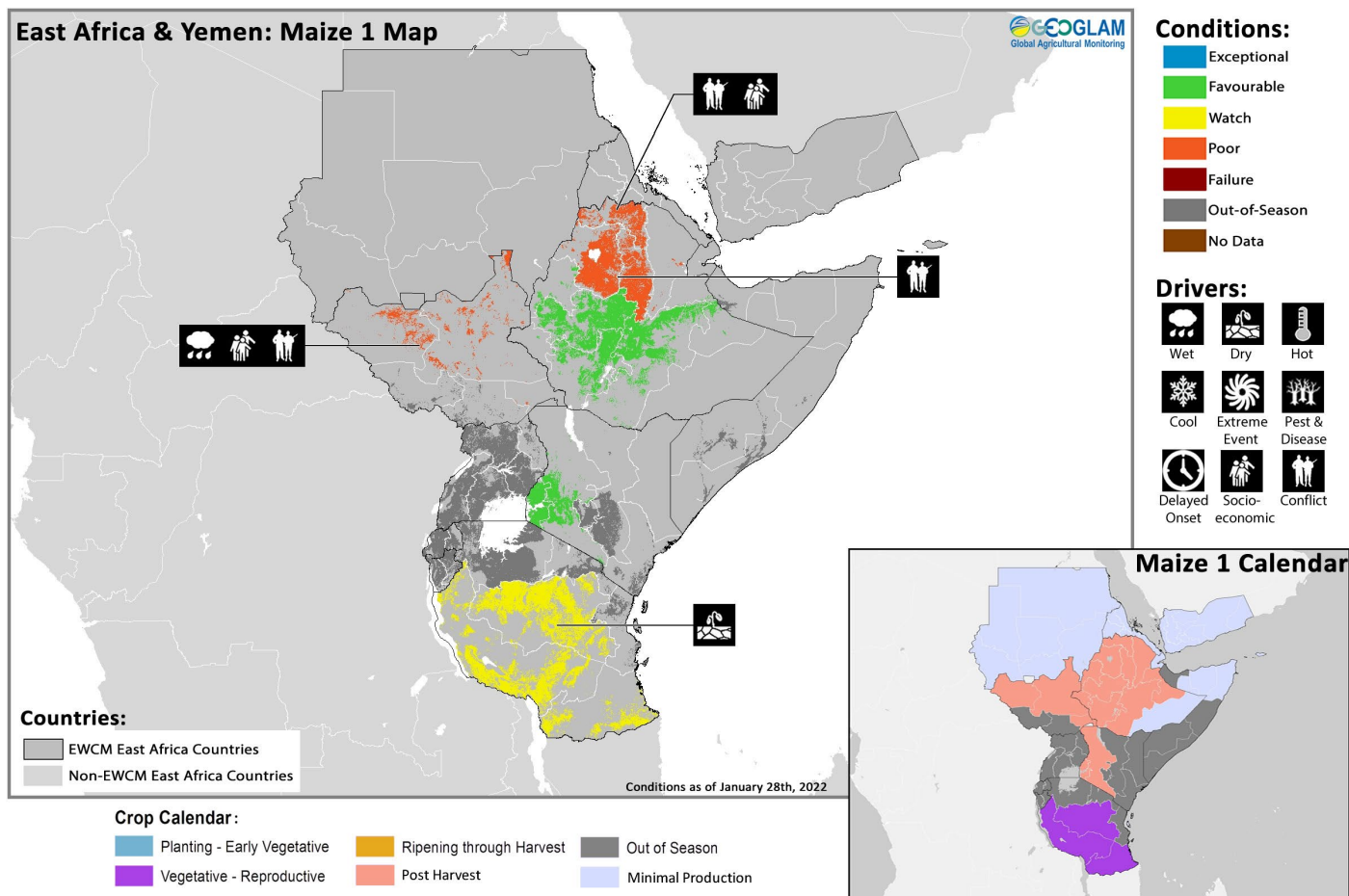


Figure 1. Left - Time-series of 1983 to 2022 Western V Gradient index forecasts (bars), based on NMME January forecasts for March-April-May (MAM) Pacific Ocean sea surface temperatures. Orange circles: Observed below-normal MAM rainfall seasons for the eastern Horn of Africa. The “Western V Gradient” (WVG) is the difference between standardized NINO3.4 and Western V region time-series. Inset map: These locations (boxes) and observed SST for dry MAM seasons. Right - Scatterplot of forecast and observed MAM WVG values. Red circle and line: 2022 WVG forecast with 80% confidence interval. Other colors: Observed MAM rainfall tercile. Forecasts are based on COLA-RSMAS-CCSM4, NASA-GEOSS2S, and NCEP-CFSv2 NMME models (January initial conditions). These indicate a strong WVG into MAM 2022. -normal MAM rains have frequently occurred during forecast and observed strong negative WVG conditions. For more details see the CHC Blog (<https://blog.chc.ucsb.edu/?p=1030>). Source: Climate Hazards Center

Desert Locust Update: Further decline in the desert locust upsurge, and no significant developments are likely

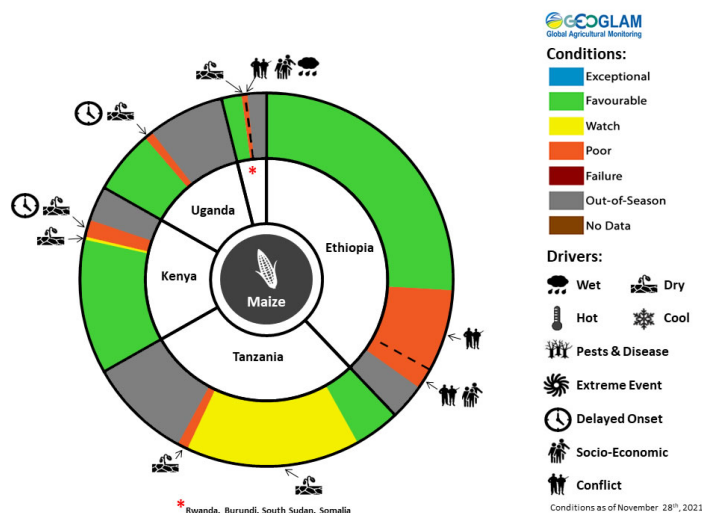
In late December 2021, a few swarms likely migrated towards southwestern **Somalia** and southern **Ethiopia**. As of early January 2022, control operations significantly reduced the number of swarms that formed in northeastern **Somalia**, though a few small immature swarms were present as local winds delayed their anticipated migration across eastern **Ethiopia** toward the **Kenyan** border. Additionally, a few solitarious adults were present along the Red Sea in **Yemen** and southeastern **Egypt**, though no significant developments are expected. As of late January, the desert locust upsurge has largely declined. No locusts were seen in **Ethiopia** and **Kenya**, and the likelihood of further developments in the Horn of Africa is low.

East Africa & Yemen



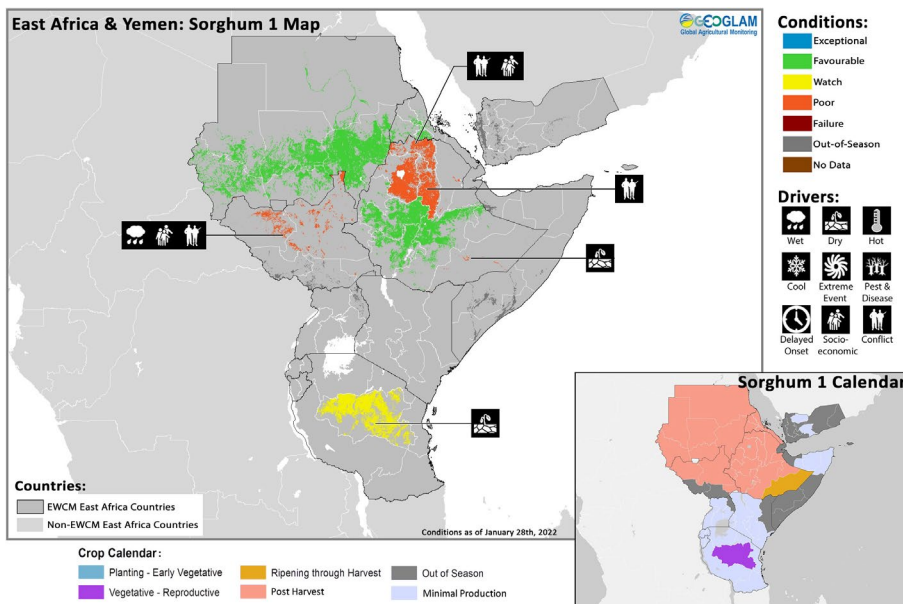
Crop condition map synthesizing Maize 1 crop conditions as of January 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable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

In the north of the subregion, harvesting of main season cereals finalized in **Eritrea, South Sudan, and Sudan**. While near-average yields resulted in **Eritrea** and **Sudan**, ongoing conflict and a third consecutive year of flooding in **South Sudan** has resulted in poor end of season conditions. In **Ethiopia**, harvesting of *Meher* season (Long Rains) cereals finalized in January under mixed conditions due to ongoing conflict in Tigray, Afar, and Amhara as well as prevailing dryness in southern Somali region. In the south of the subregion, harvesting of second season cereals finalized in **Somalia, Uganda, and the United Republic of Tanzania** while crop development and harvesting continues in **Burundi, Rwanda, and Kenya**. Conditions are generally poor as three consecutive poor rainfall seasons have deteriorated vegetation conditions and water levels in affected regions. As of early December 2021, **Kenya** and **Somalia** have declared drought



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

emergencies, and the possibility of a fourth consecutive below-average March to May 2022 rainfall season is likely to exacerbate conditions (See Seasonal Forecast Alert Pg. 4). As of January 2022, the areas worst affected by drought include southern **Ethiopia**, northwestern **Kenya**, and south-central **Somalia**. As a result, final yields are below-average in most areas with the exception of central and western **Uganda**, northern parts of the **United Republic of Tanzania**, **Burundi**, and **Rwanda**.



*Crop condition map synthesizing Sorghum 1 conditions as of January 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.***

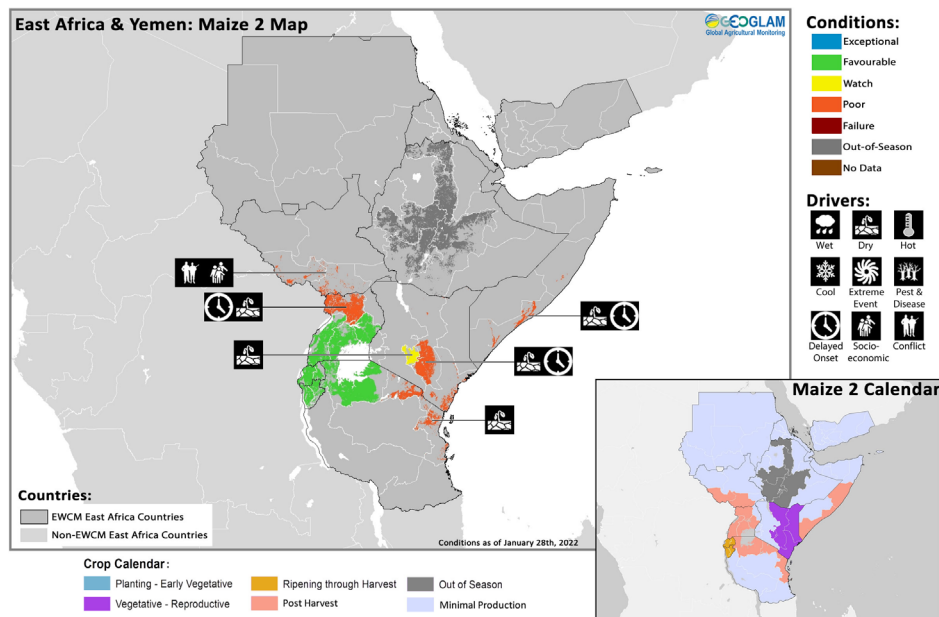
percent reduction in harvest is expected next season in conflict-affected regions due to lack of fertilizers that are usually delivered this year. In south and eastern regions of the country, including parts of Somali and Oromia regions, the already severe impact of continued drought may worsen in the beginning of 2022 with the potential for a below-average March to May rainfall season (See Seasonal Forecast Alert Pg. 4). According to UN OCHA, significant harvest loss has been reported in Fafan and Sitti zones of Somali region with up to a 70 percent loss expected for sorghum and maize and 30 percent loss expected for wheat. In southern Oromia, an average of 70 percent harvest loss has been reported, though yields for the region remain near-average. In **Sudan**, harvesting of main season millet and sorghum crops finalized in January while winter wheat continues to develop in the north and east, and overall agro-climatic conditions remain favourable. However, the country is contending with complicated political and humanitarian situations, including flood related trade disruptions from late July 2021, economic crisis, refugee arrivals from northern Ethiopia, and an upsurge in political instability from late October 2021. The economic crisis has resulted in spiralling inflation rates, and the cost of basic items have increased 200 percent as of late 2021, in turn increasing the prices of agricultural inputs and production costs. In **South Sudan**, harvesting of first season cereals finalized in January under poor conditions due to the combined impacts of conflict, socio-economic challenges, widespread flooding, and delayed rainfall onset in Western Equatoria and Central Equatoria in the beginning of the season. Between June and October 2021, fighting between armed groups in Western Equatoria state displaced more than 80,000 people. Additionally, a third consecutive year of severe flooding throughout the country in 2021 has resulted in widespread displacement, livelihood loss, and disruptions to agricultural activities. An estimated 835,000 people have been affected, and initial studies from the FAO indicate approximately 65,000 hectares of cultivated land have been damaged due to the floods. The Bahr el Ghazal and Nile Sobat regions were particularly affected by the wet conditions and flooding, leading to disrupted agricultural activities and damage to planted crops. In **Eritrea**, harvesting of main season sorghum and winter wheat crops finalized in January under favourable conditions.

Southern East Africa

In **Uganda**, harvesting of second season maize crops finalized under mixed conditions as delayed rainfall onset and dry conditions resulted in below-average yields in the north. Elsewhere, final yields are near-average, though below-average rainfall performance in some localized eastern areas may lead to poor production in affected areas. Land preparation for first season maize crops is underway, and planting will begin in February. In **Kenya**, harvesting of Long Rains crops finalized in the major producing Rift Valley, West, and Centre in January with favourable yields despite some localized impacts to rice crops in the Centre due to persistent dryness. Short Rains maize crops are in vegetative to reproductive stage for harvest from February, and crops in the east, northeast, and coastal areas are unlikely to recover from significant rainfall delays that led to late and reduced plantings as well as below-average precipitation that resulted in crop wilting due to moisture stress. In marginal agricultural producing areas of the east and north, the largely failed October to December 2021 Short Rains marked a third consecutive below-average season as rainfall totals were inadequate for crop development. In October and November, rainfall was less than 60 percent of the 40-year average, with some areas experiencing significantly delayed or no rainfall onset. Despite improved rainfall in December in central-eastern areas, rains were insufficient to improve crop production. In addition, forecasts indicate the potential for a fourth consecutive poor performance

Northern East Africa & Yemen

In **Ethiopia**, harvesting of *Meher* season (Long Rains) cereals finalized under mixed conditions due to ongoing conflict, socio-economic challenges, and localized flooding in the northern regions of Tigray, Afar, and Amhara as well as sustained dry conditions in southern Somali region. Continued fighting in and around Tigray region since November 2020 has resulted in widespread displacement, destruction of infrastructure, and loss of livelihood. Fighting persisted despite a ceasefire in Tigray region in June 2021, and violence has spread into adjacent areas of Afar and Amhara regions. This has resulted in new displacements, with many people having been displaced for a second or third time, and in November 2021, a state of emergency was declared. This season, the effect of conflict and insecurity on agriculture and access to inputs resulted in below-average yields despite favourable climate conditions. Additionally, up to 50

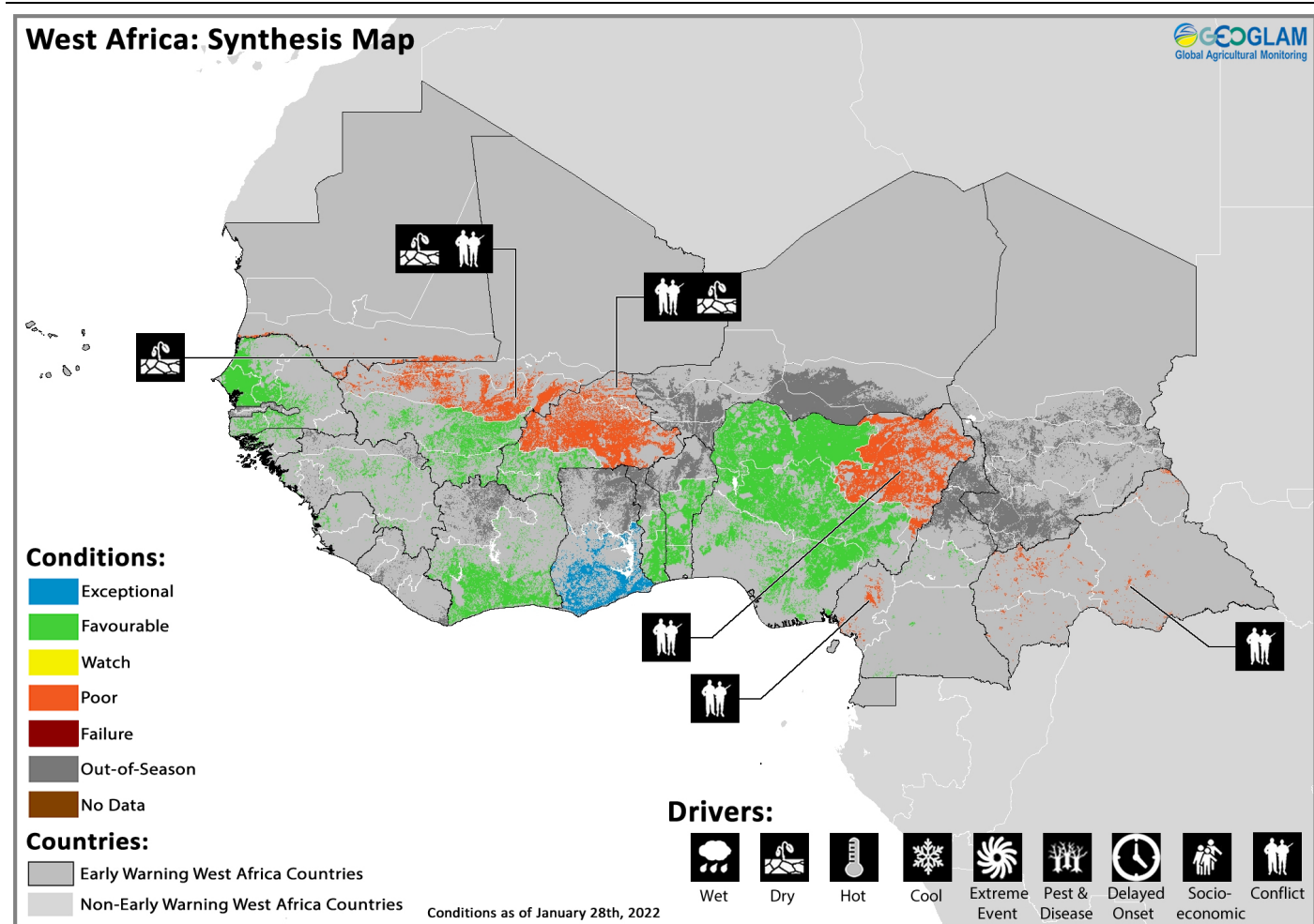


Crop condition map synthesizing Maize 2 conditions as of January 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled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

the south and central areas most affected. Additionally, the below-average *Deyr* rains have lowered water levels along the Juba and Shabelle rivers and reduced water availability. As a result, farmers in major producing southern and central areas experienced a third consecutive poor production season due to severe drought in combination with residual impacts from 2020 flooding, and the January cereal harvest is projected to be historically low at only 30 to 40 percent of the long-term average. Overall, 3.2 million people have been affected by worsening drought conditions in most districts, and 245,000 have been displaced. Furthermore, the drought is projected to intensify with the possibility of a fourth consecutive failed rainy season for the 2022 April to June *Gu* rains (See Seasonal Forecast Alert Pg. 4). In **Burundi** and **Rwanda**, harvesting of second Season A maize crops finalized in January under favourable conditions despite dry spells in localized areas of eastern Rwanda. Land preparation for main season B crops is underway, and planting will begin in Rwanda in February. In northern bimodal areas of the **United Republic of Tanzania**, harvesting of *Vuli* season maize crops finalized under mixed conditions as persistent dryness impacted yields in the northeast and northern coast. Planting and development of *Masika* season rice and winter wheat is underway in northern bimodal areas while planting and development of *Msimu* season cereals is underway in unimodal areas, and there is concern due to continued dry conditions.

rainfall season during the March to May 2022 Long Rains which, if materializes, is likely to worsen the situation (See Seasonal Forecast Alert Pg. 4). In **Somalia**, harvesting of *Deyr* season maize and sorghum crops finalized under poor conditions in January. Due to the extensive delay to the start of the rainfall season in addition to inadequate rainfall amounts, the *Deyr* cropping season resulted in low planted area, limited germination, and moisture stress. The 2021 October to December *Deyr* rains largely failed across most parts of the country, with rainfall totals ranging from less than 30 to 60 percent of average. The country declared a state of humanitarian emergency on November 23rd, and while some late season rainfall alleviated some moisture stress, rains were not sufficient to improve crop prospects. As of mid-January, more than 90 percent of the country was experiencing drought with

West Africa

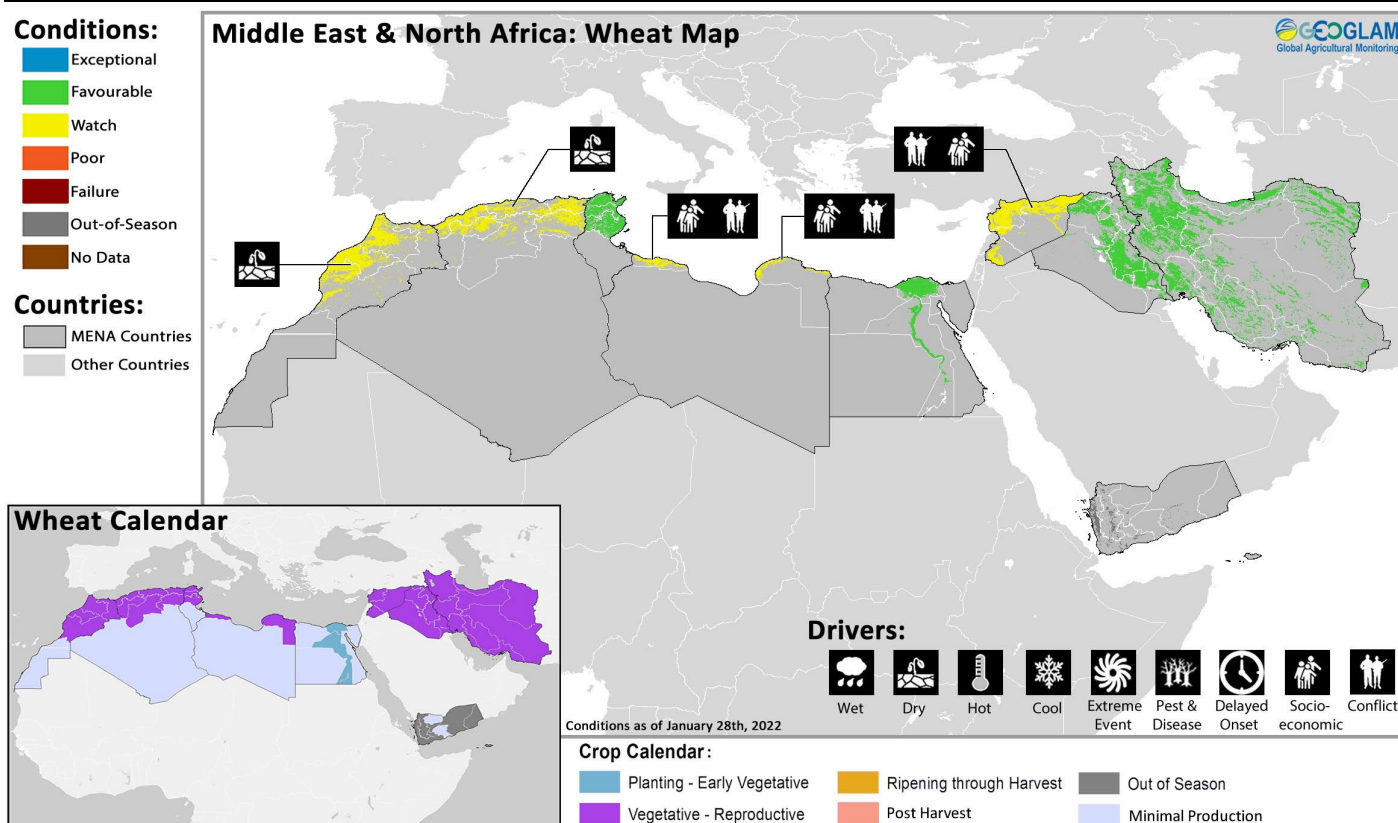


Crop condition map synthesizing information as of January 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are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

Across the south of the subregion, harvesting of main season maize crops finalized in **Cape Verde, Guinea, Chad, the Central African Republic**, and southern **Cameroon**, and harvesting of main season rice crops finalized in **Guinea-Bissau, Guinea, and Sierra Leone**. Additionally, harvesting of second season maize crops finalized in **Cote d'Ivoire, Ghana, Togo, and Benin**, and harvesting of second season rice crops finalized in the northern half of **Nigeria**. In the north of the subregion, harvesting of main season cereals finalized in **Mauritania, Senegal, Mali, and Burkina Faso**, and second season rice crops are in vegetative to reproductive stage in **Mauritania and Mali**. Throughout the subregion, end of season harvests finalized under generally favourable conditions except in parts of north and central **Burkina Faso**, central **Mali**, and **Mauritania** where dry conditions contributed to poor harvests as well as in conflict-affected regions of northern **Burkina Faso**, southwestern **Cameroon**, the **Central African Republic**, Lac region in **Chad**, central **Mali**, southwest and western **Niger**, and northeastern **Nigeria** where final yields are below-average. Conversely, above-average yields resulted for southern **Ghana** due to favourable weather conditions throughout the season.

In central **Mali** and parts of **Mauritania**, a severe rainfall deficit combined with a long dry spell during the flowering to maturation stage significantly affected crop outcomes. In **Mali**, national millet production is estimated at 18 percent lower than the previous year and 12 percent below-average due to a deterioration of security conditions and a short period of drought in July 2021 that was followed by a severe rainfall deficit and dry spells ranging from 15 to 25 days in September that significantly impacted crop performance. In **Mauritania**, national millet production is estimated at 25 percent below the previous year and below the five-year average. In northern **Burkina Faso**, a deterioration of the security situation in combination with an early cessation of the rainy season in September impacted cereal production and livelihoods in 2021. Specifically, a moderate to severe rainfall deficit in September 2021 resulted in dry spells in most areas when crops were in flowering and maturation stage, a period when they are most sensitive to water stress. Rainfall amounts further deteriorated in October, resulting in a very severe rainfall deficit. In **Nigeria**, attacks by non-State Armed Groups in the northeast in combination with intercommunal violence in the northcentre and northwest continue to impact agricultural and marketing activities. In the **Central African Republic**, conflict has resulted in reduced field access, market disruptions, and a decline in agricultural production, which is the main livelihood source for the country. In southern **Ghana**, favourable weather conditions throughout the second planting season allowed farmers to put more areas under cultivation. As a result, maize production is estimated at 18 percent above the previous year and 50 percent above-average due to an increase in planted area, and yields are 15 percent higher than the previous year and 45 percent above-average.

Middle East & North Africa



Crop condition map synthesizing wheat conditions as of January 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, winter wheat crops are developing under mixed conditions. Despite pockets of dry conditions in parts of central and southern **Tunisia, Syria, Iraq, and Iran** in December, growing conditions in these areas are favourable following improved precipitation in January (See Regional Outlook Pg. 10). Conversely, dry conditions are impacting crops in **Morocco** and parts of **Algeria**, particularly in the western producing regions. Furthermore, conflict and socio-economic challenges continue to impact agricultural activities throughout **Libya and Syria**.

In **Libya**, agro-climatic conditions are favourable as above-average rainfall amounts from the start of the season in main producing areas along the coast benefitted planting activities. However, despite improved field access following a ceasefire agreement in October 2020, high prices of agricultural inputs as well as limited power availability continue to constrain agricultural production. In **Syria**, some rainfall deficits were observed earlier in the season, particularly in Aleppo which received between 60 to 70 percent of average rainfall in the last three months, leading to below-average biomass and delayed crop growth in Aleppo, Idlib, and Hama. However, current agro-climatic conditions are favourable following improved precipitation amounts in some areas in January, though conflict continues to impact agricultural activities throughout the country. In **Iraq**, heavy rains impacted the country's northern Kurdish region on December 17th, resulting in flash flooding in the region's capital of Erbil as well as in Kirkuk Governorate. The heavy rains and flooding came after record-low rainfall in 2021 that resulted in severe droughts and dry spells over agricultural areas. Elsewhere in the country, conditions remained dry in December but benefitted from precipitation improvements in January. Only small deficits remain with parts of Sulaymaniyah showing delayed crop growth. In **Iran**, pockets of dry conditions in December were followed by heavy rainfall and thunderstorms in early January that affected over 80,000 people in 20 provinces, particularly in Sistan Baluchestan, Hormozgan, Kerman, Fars, Bushehr, and Khuzestan, and resulted in flooding and damage to agricultural lands and infrastructure. In **Egypt**, harvesting of *Nili* season (Nile Flood) rice crops finalized in January with near-average yields following favourable conditions throughout the season.

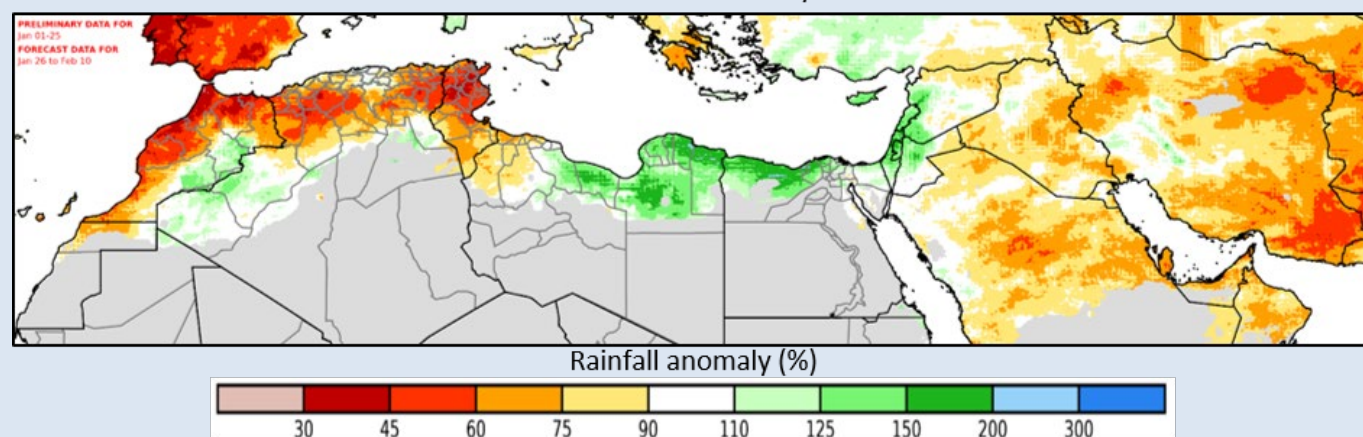
Regional Outlook: Drier than average conditions likely to persist across western coastal North Africa and some areas of the Middle East in the coming months

Morocco has had a substantially drier-than-average season thus far, with November 1st to January 20th precipitation totals lower than 60% of average in coastal areas. Western and eastern Algeria, Tunisia, and western Libya have also been drier than average. In eastern Mediterranean coastal areas, a wet December resulted in currently average to above-average season-totals. Mixed conditions occurred farther east, with below-average precipitation in southeastern Turkey and northern Iran.

Drier-than-average conditions will likely persist in coastal western North Africa and in some Middle Eastern areas, based on short-range and long-range forecasts. Figure 1 shows a November-to-early February precipitation outlook that includes a two-week forecast from January 26th (top), and the WMO's probabilistic forecast for February-March-April precipitation (bottom). During the next two weeks, seasonal precipitation deficits are forecast to intensify in coastal Morocco, Algeria, Tunisia, and western Libya, and to become more widespread in Saudi Arabia, Iraq, and Iran. According to WMO, NMME, and C3S ensemble forecasts, there are also elevated chances for below-normal February-to-April precipitation. Above-average precipitation is forecast in the eastern Mediterranean, and in central-eastern Morocco between late January and early February.

November to February Rainfall Outlook

October 01 2021 – February 10 2022



3-month Rainfall Tercile Probability

February – April 2022

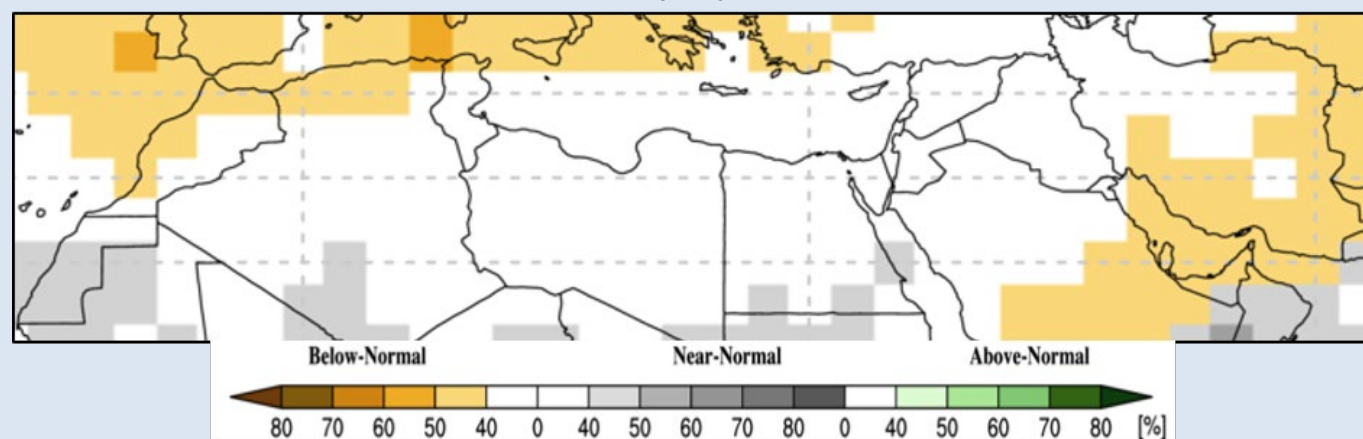
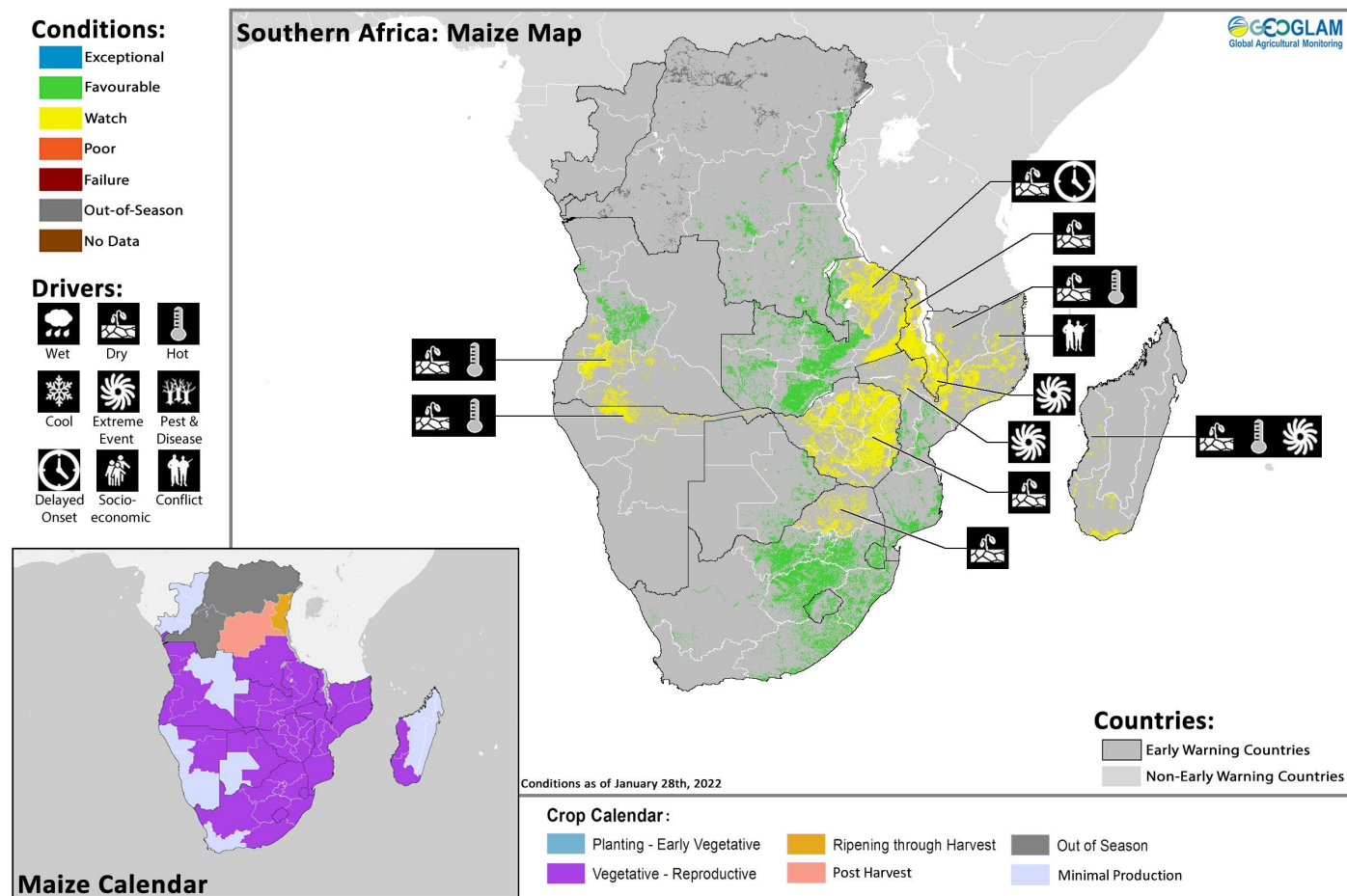


Figure 1. October-to-February 10th rainfall anomaly outlook and a 3-month rainfall probability forecast for February-March-April 2022. The top panel is a CHC Early Estimate, which compares the outlook for October 1st, 2021 - February 10th, 2022 rainfall amounts to the 1981-2021 CHIRPS average. This outlook uses CHIRPS final data through December, preliminary data for January 1st-25th, and a forecast for January 26th-February 10th. The bottom panel is the WMO probabilistic forecast for February-to-April 2022 precipitation, based on models initialized in January. From [WMO Lead Centre Long-Range Forecast Multi-Model Ensemble](#).

Source: Climate Hazards Center

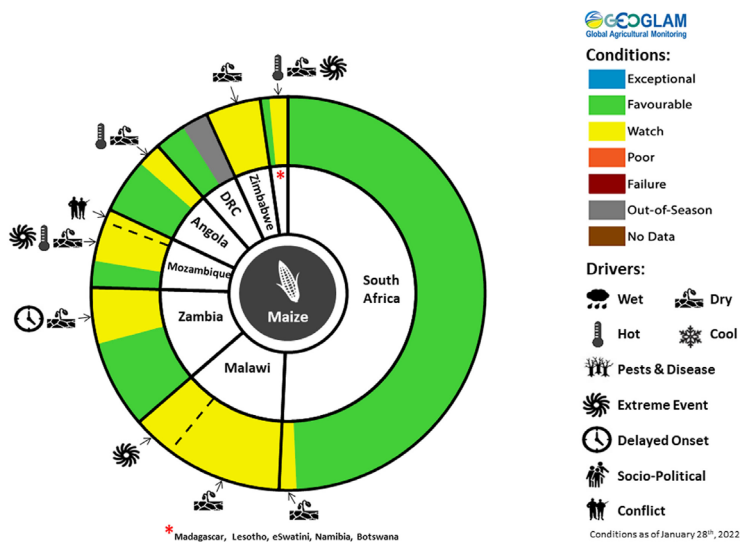
Southern Africa



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

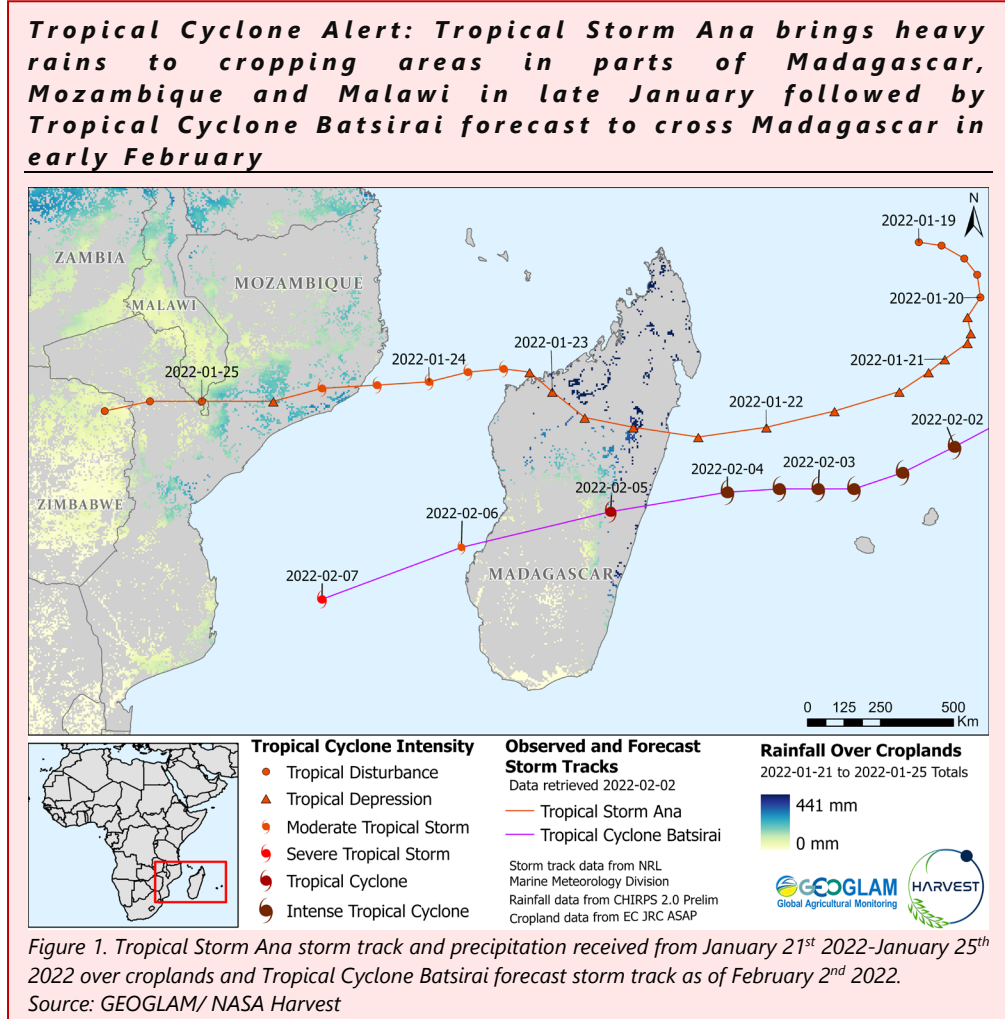
In Southern Africa, main season cereals are in vegetative to reproductive stage across **Angola, Botswana, eSwatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe**. Crops are developing under mixed conditions as dry conditions and hot temperatures are causing concern in southwestern **Angola, Madagascar, Malawi**, northern **Mozambique, Namibia**, northeastern **South Africa**, east and northern **Zambia**, and **Zimbabwe**. Additionally, on January 22nd, Tropical Storm Ana formed over the Indian Ocean and passed over northern areas of **Madagascar**. Heavy rainfall and strong winds impacted central-northern and coastal provinces. The storm then passed over Angoche district in Nampula province of **Mozambique** on January 24th, bringing heavy rains and strong winds to north and central provinces, particularly in Zambezia, Nampula, and Tete, and to a lesser extent to Sofala, Niassa, and Cabo Delgado. Heavy rains and strong winds resulted in displacement, widespread flooding, and infrastructure damage in affected regions. As a result, there is concern for crops in parts of **Madagascar, Mozambique** and southern **Malawi** impacted by the storm. Furthermore, Tropical Cyclone Batsirai is currently evolving over the southwestern Indian Ocean and may affect parts of **Madagascar** as well as southern **Malawi**, central **Mozambique**, and eastern **Zimbabwe** if it resurfaces in the Mozambique Channel in the coming days (See Tropical Cyclone Alert Pg. 12 and Regional Outlook Pg. 13).

In **Angola**, the worst recorded drought in 40 years is impacting southwestern parts of the country. While conditions in northern areas are favourable with good rains received in November 2021 through early January 2022, below-average rainfall and high temperatures have resulted in delayed plantings and significant moisture deficits in southern areas, particularly in the southwest where cumulative rainfall is well below-average. Specifically, below-average and erratic rainfall since the start of the season in October has resulted in below-average biomass in southwestern Cunene, Huila, and Namibe provinces. Conversely, biomass is close to average in the southeastern Cuando Cubango province, and conditions in the central-eastern Huambo, Benguela, Bie, and Cuanza Sul provinces are also close to average despite delayed and slightly below-average rainfall. In **Botswana**, cumulative rainfall amounts are near-average despite erratic rainfall over the past two months, and crops are developing under favourable conditions. In **Madagascar**, delayed rainfall onset in the beginning of the season was followed by uneven rainfall distribution and high temperatures. Moderate to severe moisture deficits have been recorded, particularly in the south where drought conditions and above-average temperatures continue to result in poor vegetation conditions. While conditions in the central and northern areas have somewhat improved following recent rainfall, the benefits were likely minimal in the south. However, heavy rainfall by two different tropical weather systems has also resulted in flooding, landslides, and infrastructure damage in late January across central-western and northern areas. Heavy rainfall is



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

allowed farmers to plant, forecasts of continued below-average rainfall are likely to further exacerbate dry conditions. Additionally, there is concern in areas impacted by the passage of Tropical Storm Ana in late January, particularly in Zambezia, Nampula, and Tete provinces (See Tropical Cyclone Alert Pg. 12 and Regional Outlook Pg. 13). A recent report from UNOCHA estimated that a total of 37,930 hectares of crops have been flooded. Conversely, conditions remain favourable in the south as improved rainfall in December and January benefitted vegetation conditions and allowed for replanting of early planted crops that were affected by moisture stress. While cumulative rainfall remains below-average in some areas, forecasts of improved rainfall are likely to further benefit crops (See Regional Outlook Pg. 13). In **Namibia**, erratic rainfall from the start of the season combined with above-average temperatures from late November have resulted in below-average soil moisture and poor vegetation conditions. However, recent rainfall may have



expected to persist in the coming days, and another tropical weather system in the southwest Indian Ocean could result in tropical storm or cyclone formation (See Tropical Cyclone Alert Pg. 12 and Regional Outlook Pg. 13). In **Malawi**, vegetation conditions are below-average as much of the region is experiencing the driest season in 40 years. Poor rainfall from the start of the season and above-average temperatures in December were followed by good rains in January that likely helped to alleviate moisture deficits, and above-average rainfall is forecast through early February (See Regional Outlook Pg. 13). However, heavy rains in January from Tropical Storm Ana also caused widespread flooding in the south, and according to preliminary estimates from the Ministry, the storm is estimated to have impacted 91,742 hectares of land (See Tropical Cyclone Alert Pg. 12). In **Mozambique**, there is concern for crop development in the north due to poor rainfall performance since the start of the season as well as above-average temperatures and ongoing conflict in Cabo Delgado region. While recent rainfall helped alleviate moisture deficits and

helped to alleviate moisture stress, and above-average rains are forecast in eastern Namibia through early February (See Regional Outlook Pg. 13). In **South Africa**, conditions are favourable over most areas due to above-normal rainfall through mid-January and despite some water damage over the western production regions throughout Free State and North West that resulted in lower planted area estimates. Conversely, there is concern in the northeast as current dry conditions may negatively impact crop development. In **Zambia**, delayed and erratic rainfall from the start of the season in east and northern areas resulted in some dryness. While rainfall from early January helped to alleviate moisture deficits, concern remains in the east and north due to slightly below-average cumulative rainfall amounts. Conversely, heavy rainfall in January resulted in flooding in wide areas of Namwala and Choma Districts in the Southern Province, and above-average rainfall is forecast through early February (See Regional Outlook Pg. 13). The

floods have inundated land and homes, and a report issued by the Zambian government indicated that 8,000 hectares of crops have been submerged by water. In **Zimbabwe**, dry conditions resulted in moderate to severe moisture stress where early planting had already occurred in November, particularly in northern areas. For crops planted later in December, growing conditions are favourable due to improved rainfall from mid-December. However, crops planted in sandy soils were negatively affected by heavy rains from Tropical Storm Ana that resulted in leaching (See Regional Outlook Pg. 13). Overall, concern remains due to previous dry conditions, and planted area remains below-average. In the **Democratic Republic of the Congo**, main season cereals continue to develop under favourable conditions. Despite poor rainfall distribution from the start of the season and high temperatures in Katanga region, rainfall received in January may have improved conditions. Additionally, harvesting activities are underway in the centre and east where near-average production is expected despite uneven rainfall distribution and except in areas impacted by conflict. Planting of second season maize crops has commenced under favourable conditions.

Regional Outlook: Drier than average conditions forecast for the coming weeks to months in some prevailing rainfall deficit areas

Substantially drier-than-average conditions prevailed from October through early January 2022 in northeastern and western areas, and in southern Madagascar (Figure 1-left). In southern Angola, northern Namibia, southern Mozambique, and southern Madagascar, many areas were impacted by inconsistent rainfall and received around half and up to only 75% of typical amounts. The season began much wetter than average in southern and central South Africa, and in portions of southern Botswana and Zimbabwe.

In recent weeks—in Zambia, Malawi, and northern Mozambique—wetter conditions, including a tropical storm in late January, brought seasonal rainfall totals closer to average. Tropical Storm Ana made landfall in Nampula province in Mozambique on January 24th. Heavy rains and strong winds produced widespread flooding, damages to critical public infrastructure and basic services, displacement, and numerous fatalities in central and northern areas of [Madagascar](#), [Mozambique](#), and in southern [Malawi](#). CHIRPS preliminary and IMERG data also show high rainfall amounts in northern and eastern Zimbabwe.

Short- and long-range forecasts indicate drier-than-average conditions in coming weeks to months in some of the prevailing deficit areas. Figure 1 shows an October-to-early February precipitation outlook that includes a two-week forecast from January 26th (middle), and the WMO’s probabilistic forecast for February-March-April precipitation (right). During the next two weeks, substantial seasonal precipitation deficits are forecast to either worsen or see little improvement in southwestern Angola, northwestern Namibia, central and southern Mozambique, and southern Madagascar. According to WMO, NMME, and C3S ensemble forecasts for February-March-April (FMA), there are increased chances for below-normal precipitation in many of the same areas. Drier-than-usual FMA conditions are likely in western equatorial and western central areas, from Gabon to northwestern Namibia (higher than 50% chance), as well as in central and southeastern areas (higher than 40% chance). These outlooks highlight a continued concern for poor growing-season precipitation conditions in some of these already-affected areas. Poor rainfall distribution, dry spells in December, and adverse impacts from storms are concerns for northeastern areas.

Above-average precipitation is forecast in northern Mozambique, Malawi, Zambia, and portions of Botswana, eastern Namibia, and western and southern South Africa during late January to early February. As of January 27th, Tropical Cyclone “Batsirai” is forecast to reach near La Réunion Island in the next 5 days. There is potential for Madagascar to receive heavy rains and wind gusts related to this storm (See Tropical Cyclone Alert Pg. 12).

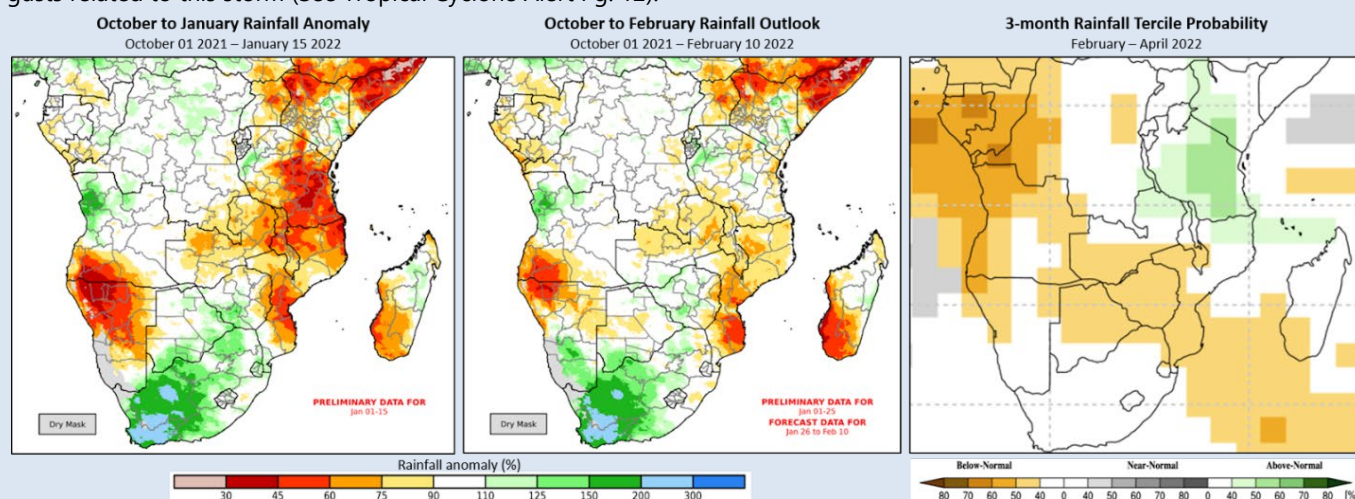
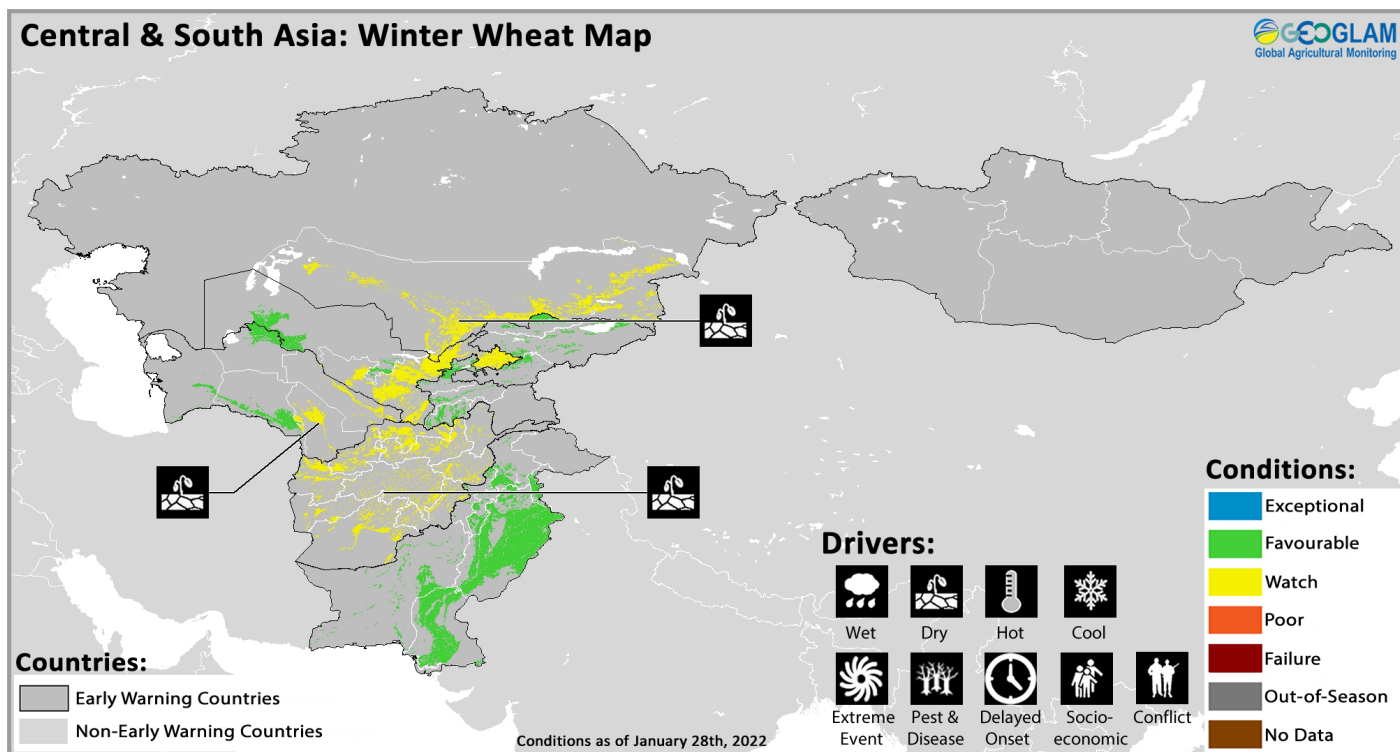


Figure 1. A recent rainfall anomaly, a rainfall anomaly outlook, and a 3-month rainfall probability forecast. The left and middle panels are CHC Early Estimates, which compare recent and forecast data to the 1981-2020 CHIRPS average. The left panel shows the seasonal rainfall performance, represented as a percent of the historical average, for October 01, 2021 to January 15, 2022. The middle panel shows what the October 1st to February 10th rainfall anomaly would look like if the 16-day GEFS forecast from January 26 comes to fruition. The right panel is a WMO probabilistic forecast for February-to-April 2022 precipitation, based on models initialized in January. From [WMO Lead Centre Long-Range Forecast Multi-Model Ensemble](#). Source: UCSB Climate Hazards Center

Central & South Asia



Crop condition map synthesizing Winter Wheat conditions as of January 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, planting and development of winter wheat continued in January under mixed conditions as dry conditions continue to impact crops in **Afghanistan**, Mary and Chardzhou provinces in **Turkmenistan**, highlands and plains in **Uzbekistan**, and southern **Kazakhstan**. Elsewhere, conditions are favourable; however, forecasts of below-average rainfall during the next several months in large parts of the subregion may impact crop performance (See Regional Outlook Pg. 15). In Mary and Chardzhou provinces of **Turkmenistan**, abundant precipitation in early November and from late December helped improve soil moisture levels; however, vegetation conditions remain below-average in the southeast of both regions. In **Uzbekistan**, increased precipitation from mid-December helped to improve conditions in central areas. However, vegetation conditions remain below-average in some areas due to earlier dryness. In **Kazakhstan**, low precipitation levels since rainfall onset in October have resulted in below-average vegetation conditions in parts of South and Zhambyl regions. In **Afghanistan**, crops are now in dormancy, and concern remains as drought conditions continued in December, resulting in drier than average soil moisture conditions, historically low water reservoir levels, and delayed snowpack accumulation. Improved precipitation in January led to sufficient snowpack accumulation in medium to low elevations in the southwest and southern basins, though snowpack remains deficient in higher elevations in the northeast and central highlands. The current snowpack amount will likely be sufficient to provide irrigation water supply for irrigated wheat from March to April; however, higher than normal temperatures may lead to flash floods and landslides that could result in crop damage (See Regional Outlook Pg. 15). While planted area for irrigated winter wheat is likely to be below-average due to earlier dryness, farmers may increase the planted area of spring wheat to compensate for losses if February to April rainfall is sufficient and inputs are available. In **Kyrgyzstan**, conditions are favourable as sufficient snow cover in mountainous areas from November helped to improve soil moisture and vegetation conditions. In **Tajikistan**, conditions are favourable as below-average rainfall since seasonal onset in October was followed by abundant precipitation in early November and from late December. Improved rainfall amounts have been sufficient to improve soil moisture and vegetation conditions, though crop conditions remain below-average in localized areas of the northwest. In **Pakistan**, harvesting of *Kharif* (summer) planted rice crops finalized in January under favourable conditions.

Regional Outlook: Below-average precipitation is forecast for the coming months based on the forecast persistence of La Niña.

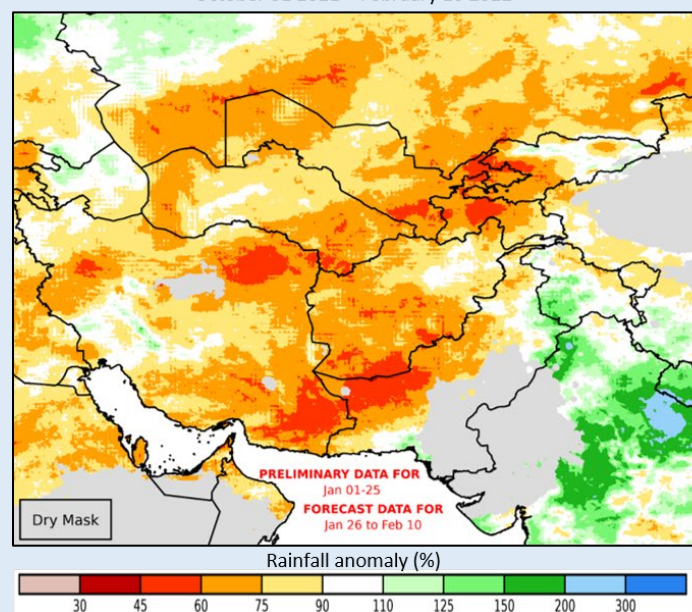
After a drier-than-usual beginning to the winter wheat season for most areas, mixed precipitation conditions occurred in recent weeks. Late-December to late-January precipitation improved seasonal totals in some central areas and in portions of Afghanistan. In Tajikistan, Kyrgyzstan, and eastern Kazakhstan, precipitation was mainly below-average. Several storms in Afghanistan appear to have built up snowpack in several northwestern, western, and southern basins, bringing some of these to average or above-average levels as of late January. However, snowpack was still substantially below-average in northern Khulm, Kunduz, Khanabad, Kokcha_Ab-I-Rustaq, and Panj basins (see the [USGS Afghanistan Seasonal Monitor](#)).

Despite recent improvements in some areas, cumulative precipitation for October to early February will likely be mainly below-average. Based on amounts received by late January, and forecast for the next two weeks, seasonal totals may range from 60-90% of average (Figure 1-left). Substantial deficit areas may include central, southern, and northern Afghanistan, western and eastern Turkmenistan, eastern Uzbekistan, western Tajikistan, western Kyrgyzstan, and portions of southern Kazakhstan and northern Pakistan. Totals may be 50 to over 100 mm below-average (< 60% to 75% of average) in these areas.

Below-average precipitation is expected during the next several months, based on the forecast persistence of La Niña. Several international forecasting centers generally support that outlook, and predict elevated chances for a drier-than-normal February-to-April period in various areas across the region. The WMO forecast indicates around 40% chances for below-normal precipitation in large areas of Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan, and in portions of Kazakhstan and Pakistan. There are increased chances for above-normal temperatures for the remainder of the winter season in Central Asia, and for above-normal spring and summer temperatures across the region. Snowpack is expected to increase during the next several months, but may be below-average for the 2021/2022 season in many areas, based on observations and the indications for drier and warmer-than-normal conditions going forward.

October to February Rainfall Outlook

October 01 2021 – February 10 2022



3-month Rainfall Tercile Probability

February – April 2022

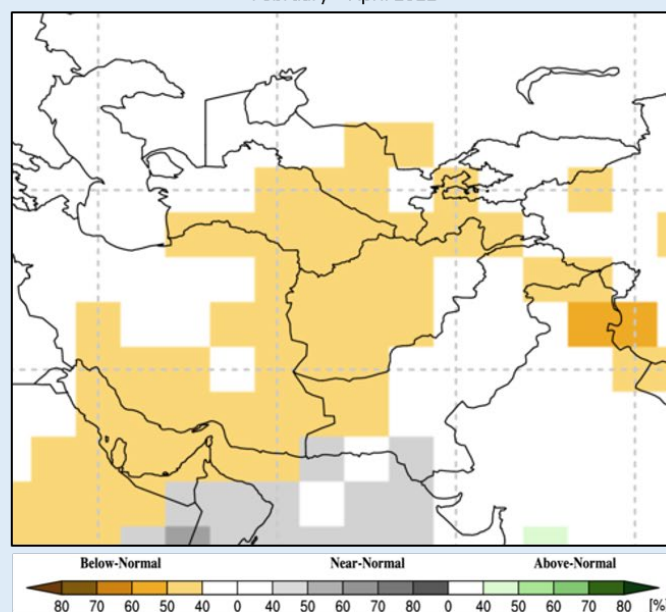
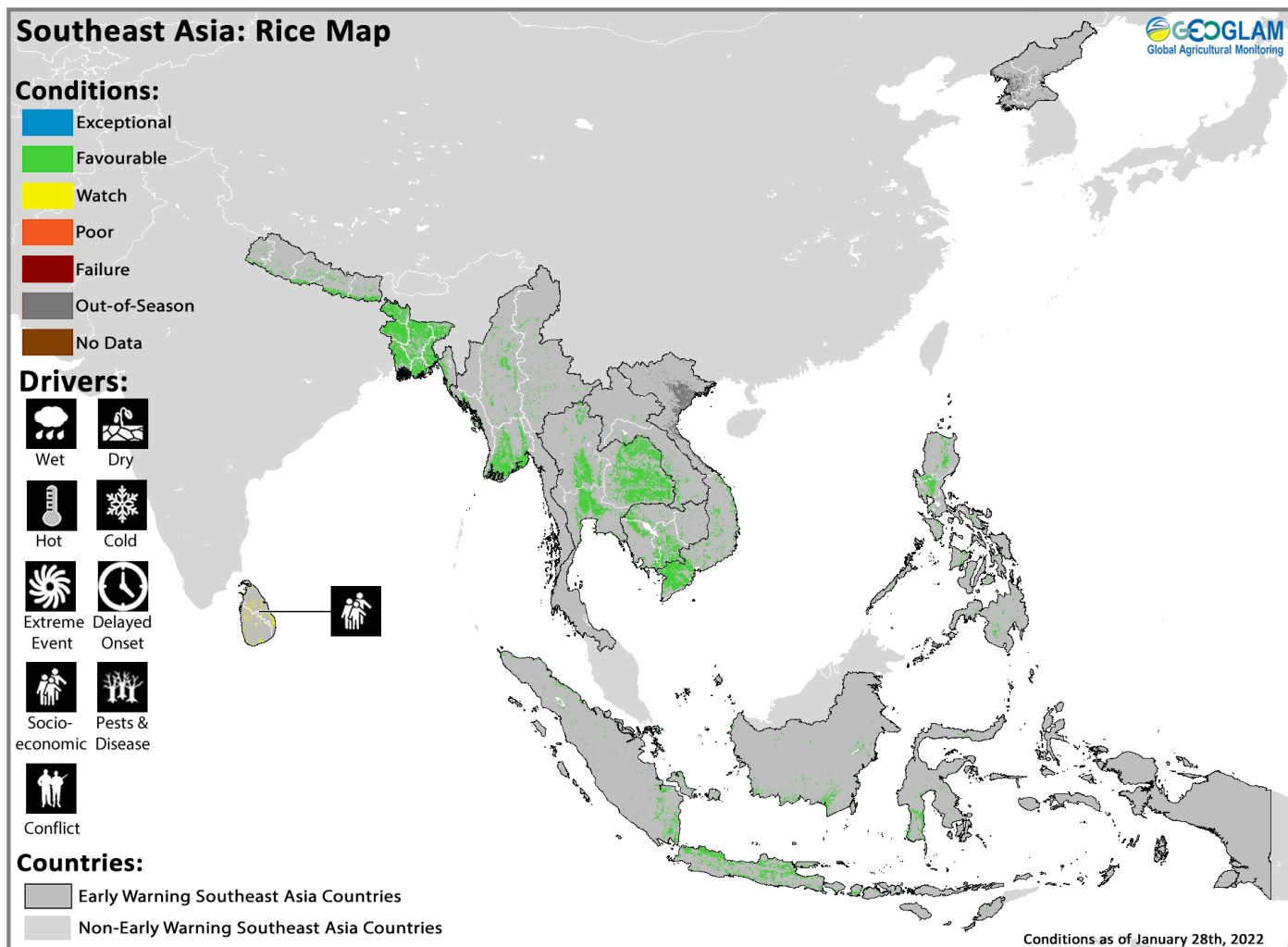


Figure 1. October-to-February 10th rainfall anomaly outlook and a 3-month rainfall probability forecast for February-March-April 2022. The left panel is a CHC Early Estimate, which compares the outlook for October 1st, 2021 - February 10th, 2022 rainfall amounts to the 1981-2021 CHIRPS average. This outlook uses CHIRPS final data through December, preliminary data for January 1st-25th, and a forecast for January 26th-February 10th. The right panel is the WMO probabilistic forecast for February-to-April 2022 precipitation, based on models initialized in January. From [WMO Lead Centre Long-Range Forecast Multi-Model Ensemble](#).

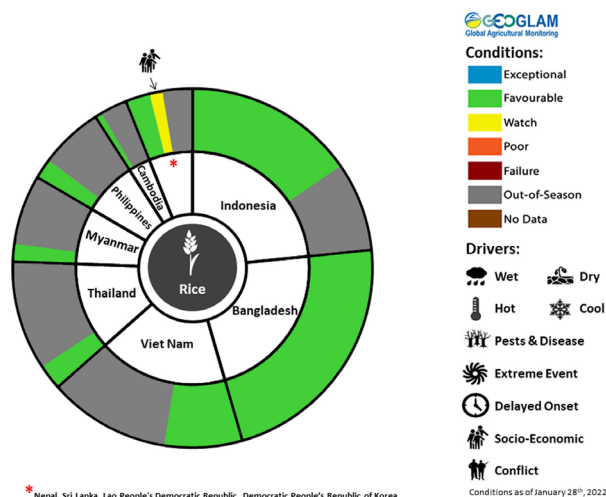
Source: Climate Hazards Center

Southeast Asia



Crop condition map synthesizing rice conditions as of January 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.**

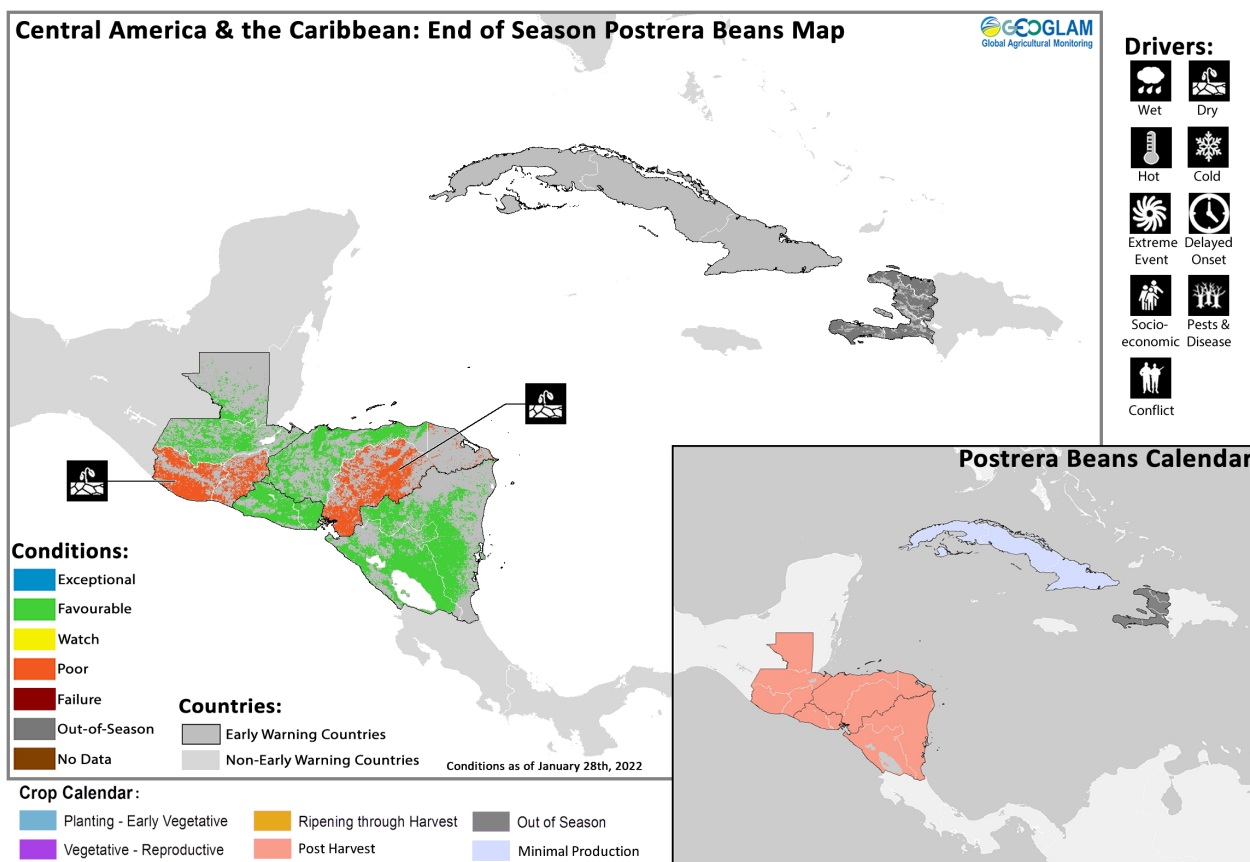
In northern Southeast Asia, harvesting of wet-season rice completed in December under generally favourable conditions despite flood damage in some localized areas prior to harvest. Planting of dry-season rice is underway in most regions, and planted area is expected to increase due to sufficient irrigation water supply and favourable weather conditions. In **Indonesia**, harvesting of dry-season rice mostly completed in December with favourable yields due to sufficient precipitation during the growing season. Wet-season rice sowing continues into the fourth month under favourable conditions due to sufficient irrigation water supply. Plentiful rainfall in December and January has supported an increase in total sown area to 4.9 million hectares, 6.9 percent above that of last year’s level. Early harvesting activities are now underway, and yield is expected to be favourable. In the **Philippines**, harvesting of wet-season rice finalized in December with near-average yield of 4.07 metric tons; however, yield was slightly below-average in some provinces due to strong winds and flooding as well as a pest infestation during the reproductive stage. Dry-season rice is under generally favourable conditions with some areas of damage from typhoon Odette, particularly in Southern Luzon, Visayas, and Mindanao. On December 16th, Super Typhoon Rai (locally named Odette) made landfall, bringing destructive winds, torrential rains, and severe flooding to southern and central areas. The storm exited the region on December 18th after having made landfall in several areas, affecting more than 4.6 million people across 10 regions and displacing 571,000 as of December 27th. In **Thailand**, harvesting of wet-season rice finalized in December under generally favourable conditions except in localized areas of the



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

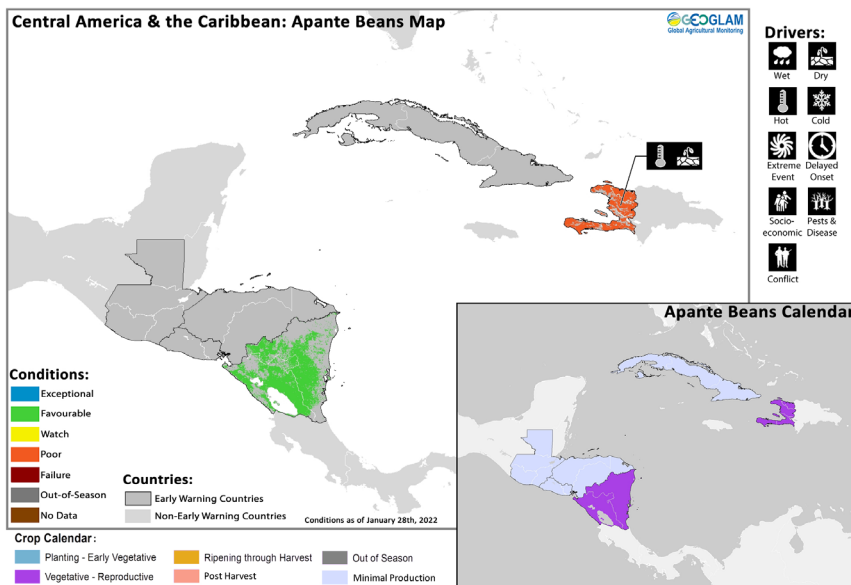
north and northeast where production was impacted by flood damage. Conversely, farmers in the central region were able to harvest before the flooding, and non-affected areas generally benefitted from increased rainfall. Overall, production reduced 1.5 percent from the previous year, and yield is near-average. Dry-season rice is in tillering stage under favourable conditions, and the total sown area is above-average to make up for flooding losses during the wet-season crop. In **Viet Nam**, harvesting of wet-season rice finalized in December under favourable conditions with yield estimated at 5.26 tons per hectare, 0.8 percent higher than the previous year due to favourable weather conditions. In the South, harvesting of wet-season rice finalized in January with average yield estimated at 5.6 tons per hectare, 2.4 percent higher than the previous year due to favourable weather conditions during the growing season. Winter-spring rice (dry-season) is sowing in the south under favourable conditions. Current sown area is 1.17 million hectares with 1.06 million hectares located in the Mekong River Delta. In **Laos**, harvesting of wet-season rice finalized in December under favourable conditions. Final harvested area was 780,000 hectares, and production increased slightly compared to the previous year due to an increase of planted area. Dry-season rice crops are in seeding stage under favourable conditions. Planted area has reached 57,000 hectares and 61 percent of the national plan, slower than the previous year due to limited rainfall and a shortage of irrigation water supply, and planted area is expected to decrease slightly. In **Myanmar**, harvesting of wet-season rice mostly completed in December under generally favourable conditions except in central areas where low rainfall and irrigation water supply during the reproductive stage impacted yields. Dry-season rice is mostly at early vegetative growth stage, and growing conditions are favourable. Planted area has reached 427,000 hectares and 44 percent of the national plan, slightly slower than the previous year. Additionally, fighting in Kayah and Kayin states has intensified since December 2021, and 162,000 people remain displaced since May 2021. In **Cambodia**, dry-season rice is in tillering to maturity stage under favourable conditions due to sufficient irrigation water supply and sunlight; however, fields farther from irrigation systems may face water shortages. Planted area has reached 534,000 hectares and 115 percent of the national planting plan. In **Sri Lanka**, *Maha* season maize and rice crops are in vegetative to reproductive stage for harvest from February. Despite favourable agro-climatic conditions, there is concern as crops may be affected by fuel and fertilizer shortages. In **Bangladesh**, harvesting of *Aman* season rice crops finalized under favourable conditions, and planting of *Boro* season rice crops continued in January for harvest from mid-April. In **Nepal**, harvesting of main season rice crops finalized under favourable conditions while winter wheat continues to develop for harvest from mid-March. Land preparation for main season maize crops is underway, and planting will begin in February.

Central America & Caribbean



Crop condition map synthesizing Postrera season conditions as of January 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.**

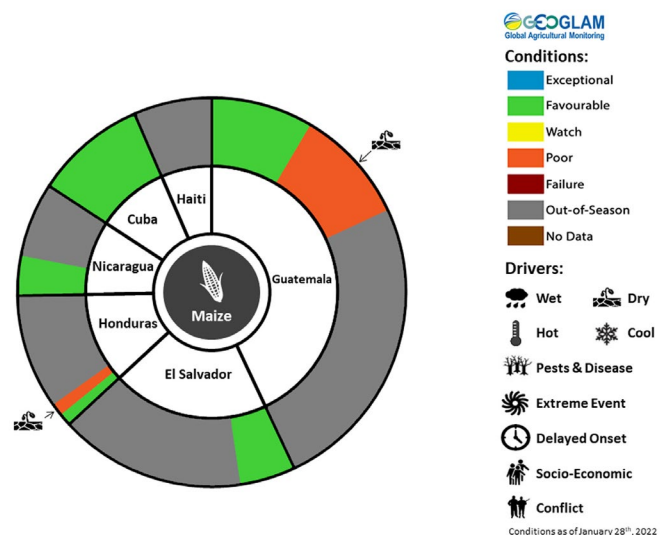
In Central America, harvesting of *Segunda/Postrera* season maize and bean crops finalized under mixed conditions as below-average yields resulted in central and southern **Guatemala** and southern **Honduras** due to significant rainfall deficits earlier in the season. Elsewhere, final yields were near-average. After limited precipitation in November which slightly delayed planting operations,



Crop condition map synthesizing Apante Beans conditions as of January 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.**

production and yields are expected as slightly below-average rains in September and November in the north were followed by rainfall improvements from December. The abundant rains resulted in average to above-average soil moisture levels, providing conducive conditions for crop development. The *Apante* season crops, to be harvested in March, are at vegetative stage and generally in favourable conditions. In **El Salvador**, crops were generally not affected by slightly below-average rains due to the use of irrigation water to compensate, and near-average production and yields are expected.

In **Haiti**, second season rice and third season beans are in vegetative to reproductive stage for harvest from February, and crops are unlikely to recover from rainfall deficits and high temperatures. Below-average precipitation from September has had a negative impact on crop development and yield, and only localized areas have reported normal crop development. Additionally, on January 24th, two 5.4 and 5.6 magnitude aftershocks hit Nippes department five months after the 7.2 magnitude earthquake hit the country in August 2021, resulting in further infrastructure damage. In **Cuba**, planting of main season maize and rice crops is underway for harvest from April, and overall conditions are favourable.



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

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 February 3rd, 2021.

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.

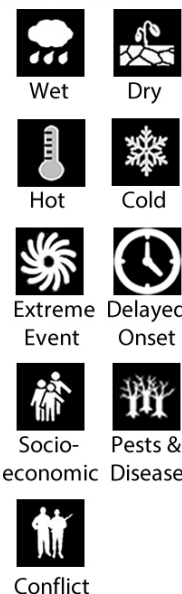
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)

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