

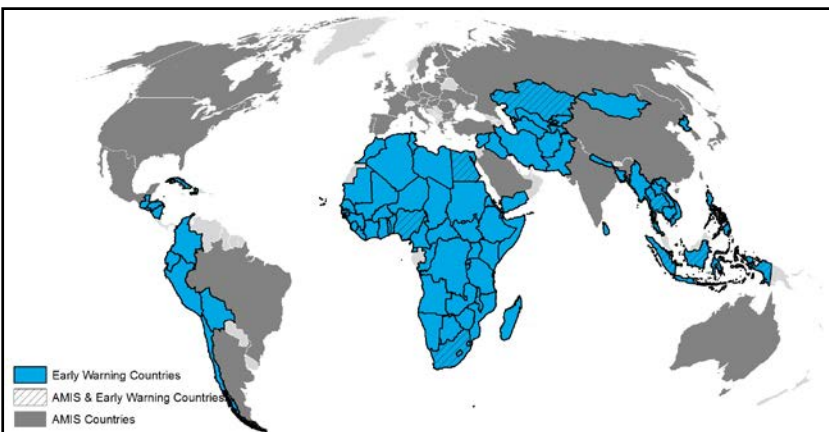


Crop Monitor

EARLY WARNING

Overview:

In **East Africa**, conditions have improved with average to above average August/ September rainfall over main season crops in the north while poor rainfall has been received over secondary crops in the south now under planting. In **West Africa**, conditions are worsening due to below average rainfall and dry spells in September across the Sahelian zone. Harvest is ongoing for winter wheat in **Southern Africa** and conditions have improved with average yields expected. Conditions are favourable for planting of wheat currently underway across the **Middle East & North Africa** and **Central & South Asia**. In **Southeast Asia**, wet season rice harvest is ongoing and despite concerns early in the season, production prospects are favourable. In **Central America** and the **Caribbean**, the segunda season is starting and conditions are favourable with good rainfall received.



Contents:

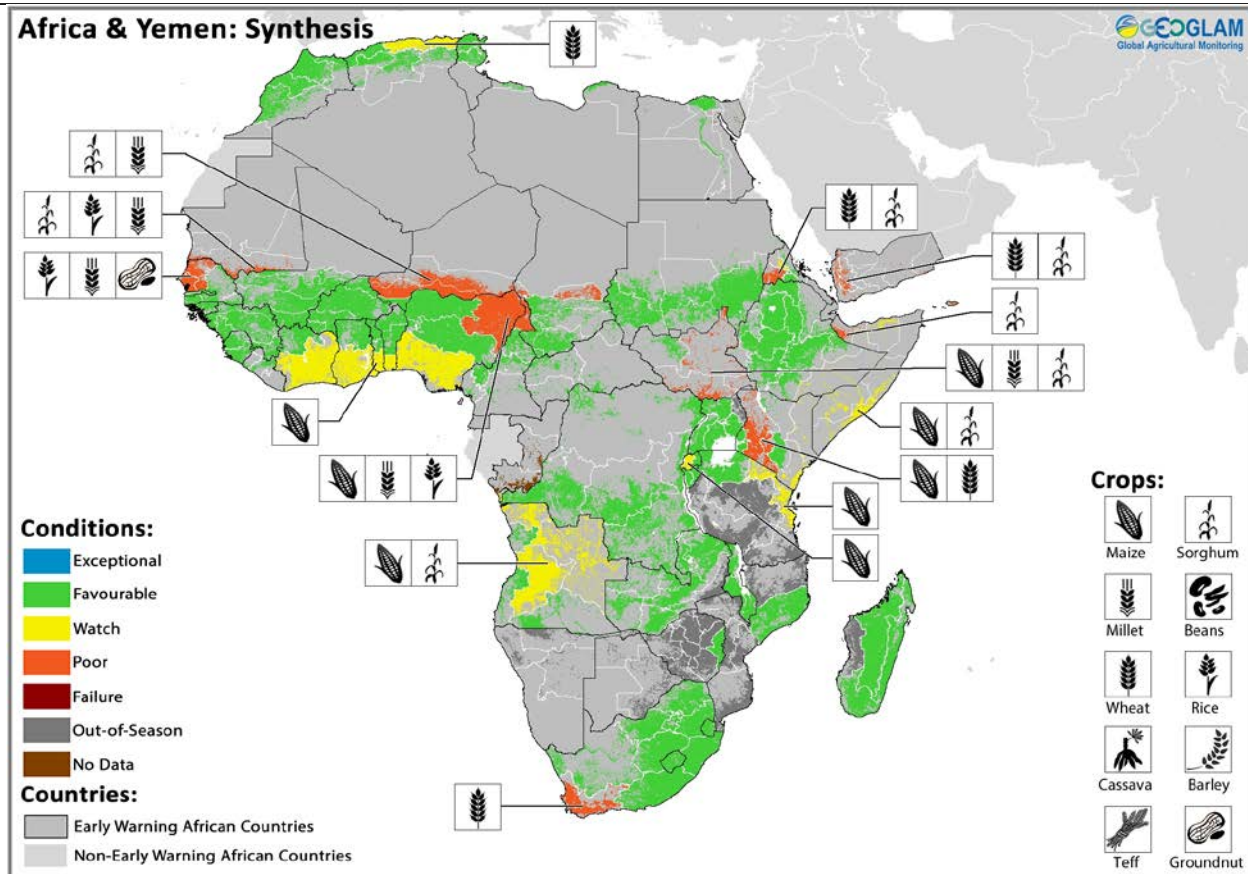
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Assessment based on information as of October 28th

GEOGLAM Crop Monitor for Early Warning

Crop Conditions at a glance

based on best available information as of October 28th



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of October 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 of the subregion over Sudan, Ethiopia and South Sudan conditions have improved with above average rainfall August–September. Harvest is complete in northern South Sudan and despite favourable weather conditions, crop prospects are generally poor due to widespread insecurity. Across the south of the subregion planting of second season crops began in October across parts of Somalia, Uganda, Rwanda, Burundi and Tanzania and there is concern due to delayed onset of the rains affecting the western regions.

WEST AFRICA: In September, parts of the Sahelian zone (Mauritania, Senegal, Niger and Chad) experienced a combination of below average rainfall and dry spells affecting rain-fed crops, a poor outcome is expected. Planting of second season maize is ongoing across the southern bimodal zone and there is concern due to delay onset of rains and dry conditions at the start of the season.

CENTRAL AND SOUTH ASIA: Across Central and South Asia, spring wheat harvest is complete and winter wheat planting is now ongoing and under favourable conditions with good rains at the start of the season.

MIDDLE EAST AND NORTH AFRICA: Winter wheat planting started in October across the Middle East and conditions are favourable. In North Africa, the main wheat season is starting and rainfall deficits in Algeria have delayed planting activities.

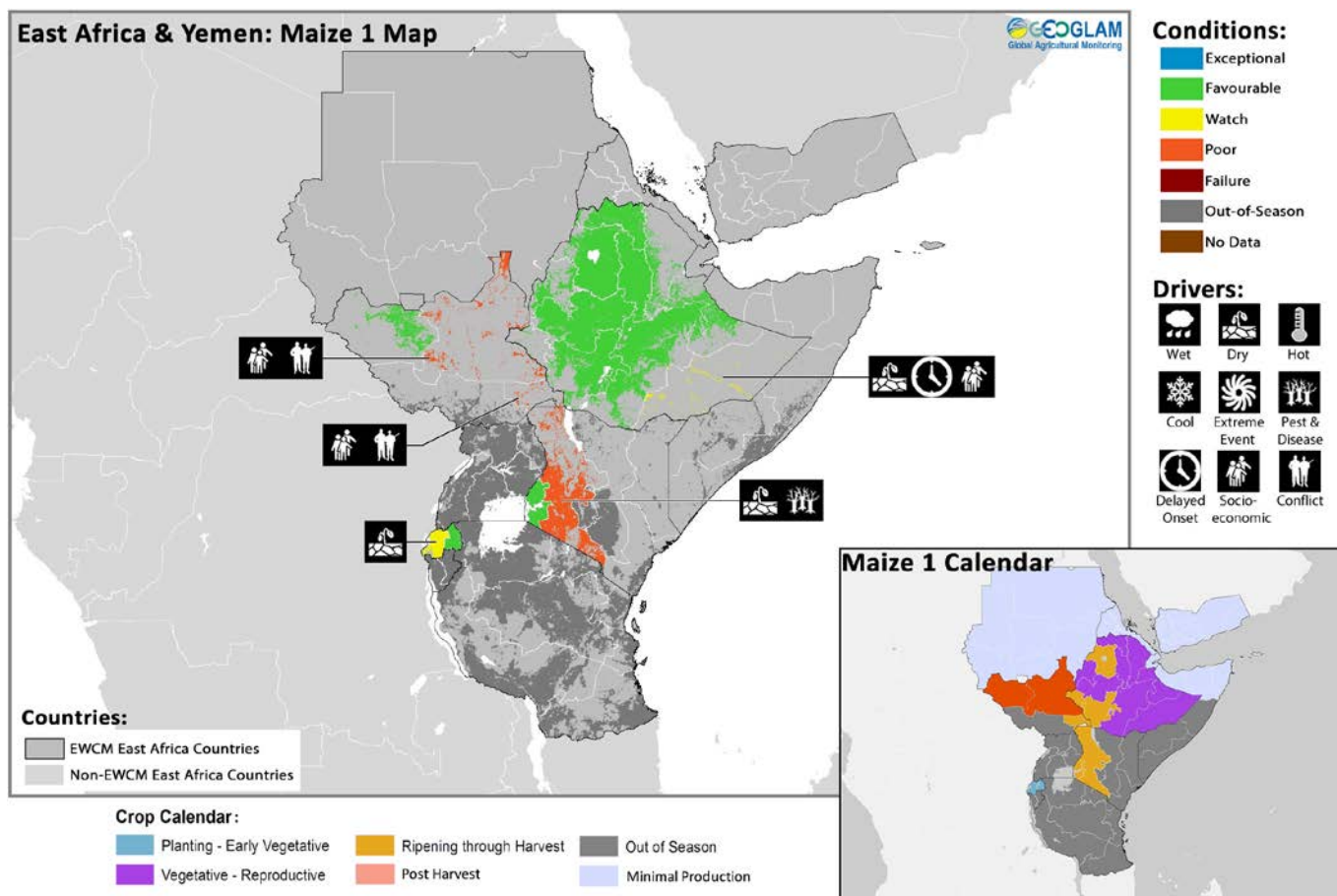
SOUTHERN AFRICA: Winter wheat harvest commenced in October and conditions are favourable. However, production prospects for the main producing western cape region of South Africa remain poor due to dry conditions at the start of the season.

SOUTHEAST ASIA: In northern SE Asia, harvesting of wet season rice is underway across Cambodia, Philippines, and southern Vietnam. However, in mid-October, severe heavy rain due to tropical cyclones was recorded in Vietnam and damage assessments are now underway. In Indonesia, the planting of dry season rice is nearing completion and yield prospects are above average.

CENTRAL AMERICA & CARIBBEAN: Across Central America *segunda* crops are underway and conditions are generally favourable with good rains received at the start of the season.

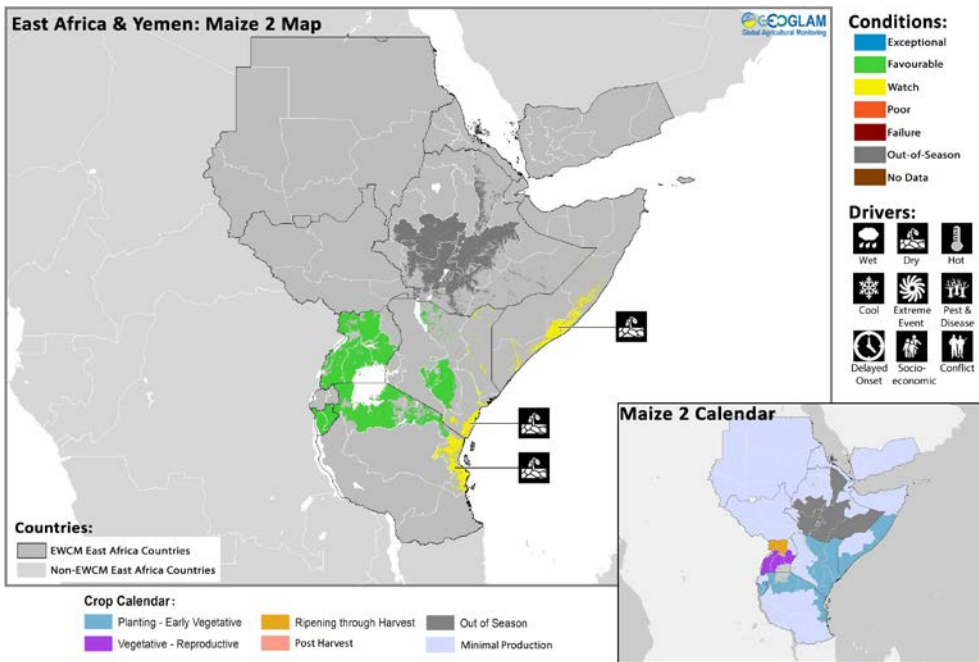
La Nina watch conditions declared:

Conditions in the equatorial Pacific Ocean are currently neutral but a La Nina watch has been declared, with the probability of La Nina conditions in the November – February time frame being on the order of 60-65%. By comparison, the typical probability during these months is 35%. Should La Nina materialize, above normal rains would be favored for Central America, the Caribbean, northern South America, Southern Africa, and Southeast Asia. Drier than normal conditions would be favored for southwest Asia, the Horn of Africa, southeastern South America and the southern United States.

East Africa & Yemen

Crop condition map synthesizing primary maize conditions as of October 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.**

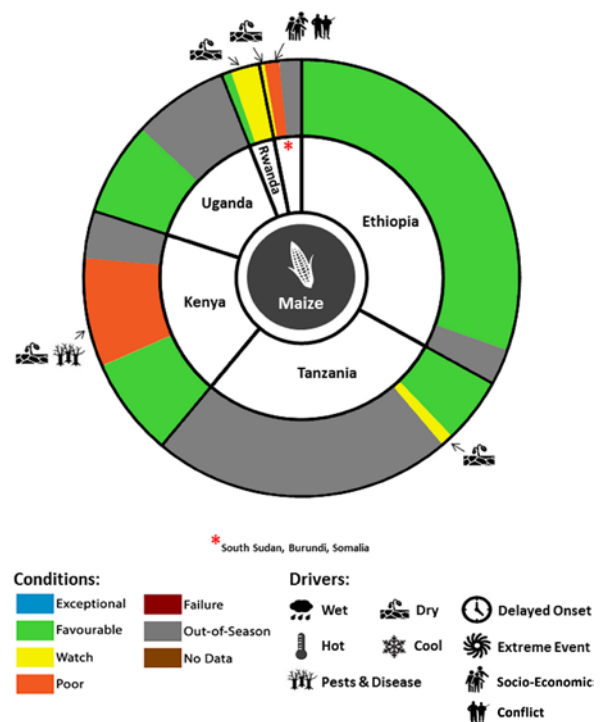
In the north of the subregion over Sudan, Ethiopia and South Sudan August/September rainfall was characterized by above to above-average amounts. Fall armyworm incidences increased in September across Ethiopia and there is some concern for main season production prospects, however the full impact on crop production is still unknown. In South Sudan's northern regions harvest is complete, but harvests of the second cycle of maize and sorghum in the Equatorias and long cycle maize in Lakes and West Bahr-el-Ghazal will take place from December. Despite overall favourable weather conditions, crop prospects are generally poor due to widespread insecurity disrupting agricultural activities. However, in North Bahr-el-Ghazal and Warrap, where conflict has had a reduced impact, production prospects are favourable. Across the south of the subregion planting of second season crops began in October across parts of Somalia, Uganda, Rwanda, Burundi and Tanzania and there is concern due to delayed onset of the rains affecting the western regions. In addition, carryover effects of the poor main season production have continued to cause increasing food prices, depleted household stocks and left several areas in need of humanitarian assistance. In **Ethiopia**, despite a timely onset of rains, there is ongoing concern over South Somali due to dry conditions and carryover effects of consecutive failed seasons. In **Eritrea**, there is continued concern for main season crops over Anseba and most notably Gash Barka due to delayed onset of the season and ongoing dry conditions. In **Djibouti**, conditions are favourable over sorghum and millet crops with good distribution and amounts of the *karan* (*karma*) rains. In **Sudan**, sorghum and millet crops, planted in June-July, will be harvested from November. Conditions have improved and are favourable with good rains since August lifting crop prospects in the areas affected by early-season dryness.



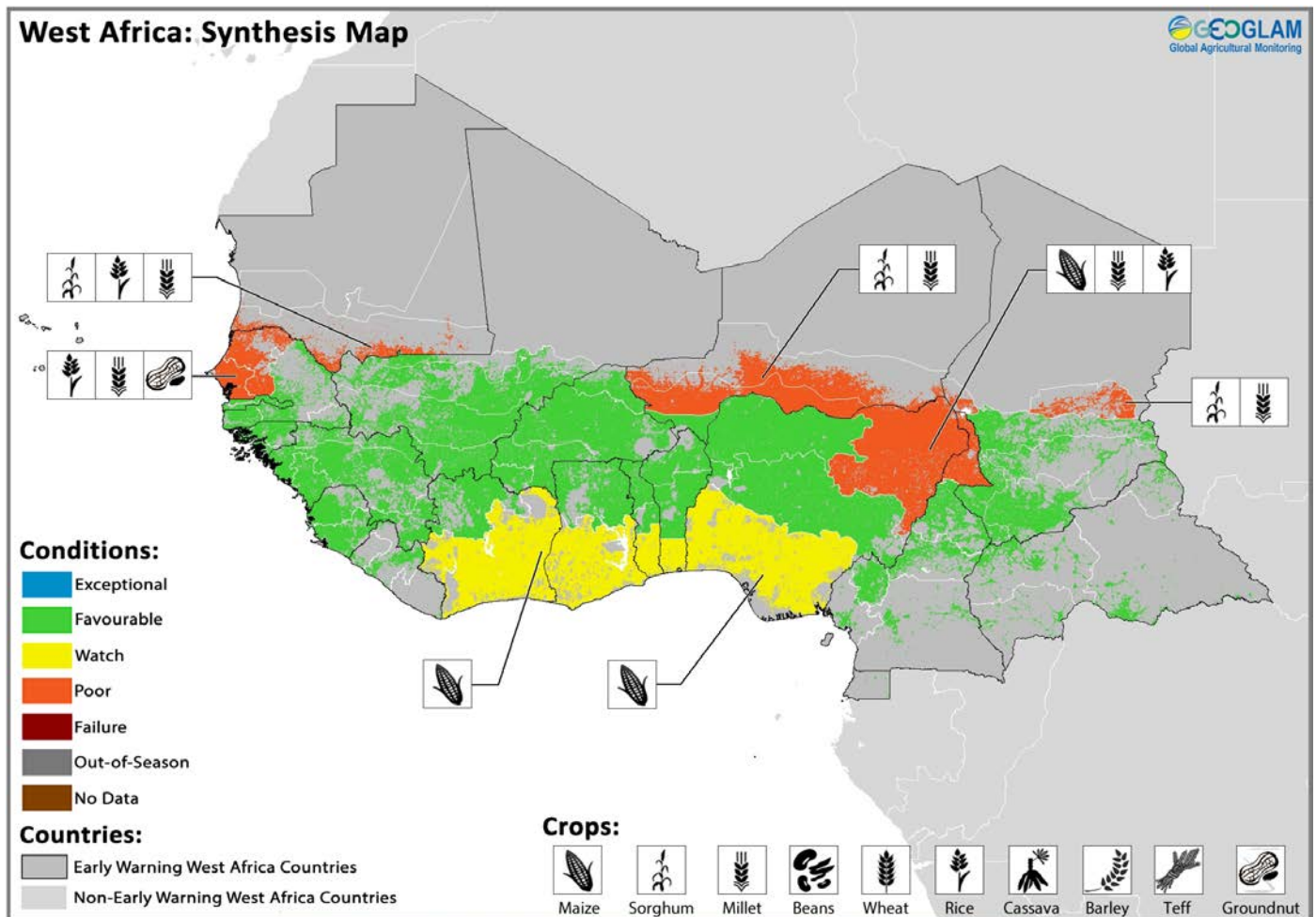
In **Kenya**, planting of short rain crops started in October and there is concern due to a delayed start of the season across the coast and northeast. Winter wheat harvest started in October and production prospects are poor over the central and rift valley due to dry conditions and pest outbreaks. In **Uganda**, conditions have improved and are favourable across all areas for second season crops planted at the start of September. In **Rwanda**, and Burundi, A season crops were planted in September. So far, cumulative rainfall has been well below-average over several central and western cropping areas in Rwanda, with a negative impact on crop establishment and development, while in Burundi vegetation conditions are good following average to above-average seasonal rains.

Crop condition map synthesizing second season maize conditions as of October 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 **United Republic of Tanzania**, planting of the *vuli* crop in the bimodal north is underway in most areas where rains have been received. There is concern due to a delayed start of the rains and dry conditions over the coastal areas. In **Somalia**, the *deyr* crop planted at the start of October is underway. The carryover effects of the failure of the previous *deyr* and low output of the 2017 *gu* season have led to large scale and ongoing displacement and crisis conditions that continue to worsen as household food stocks deplete. Against this scenario, drier than average conditions during October raise the prospect of yet another poor cropping season further worsening the already concerning humanitarian situation.



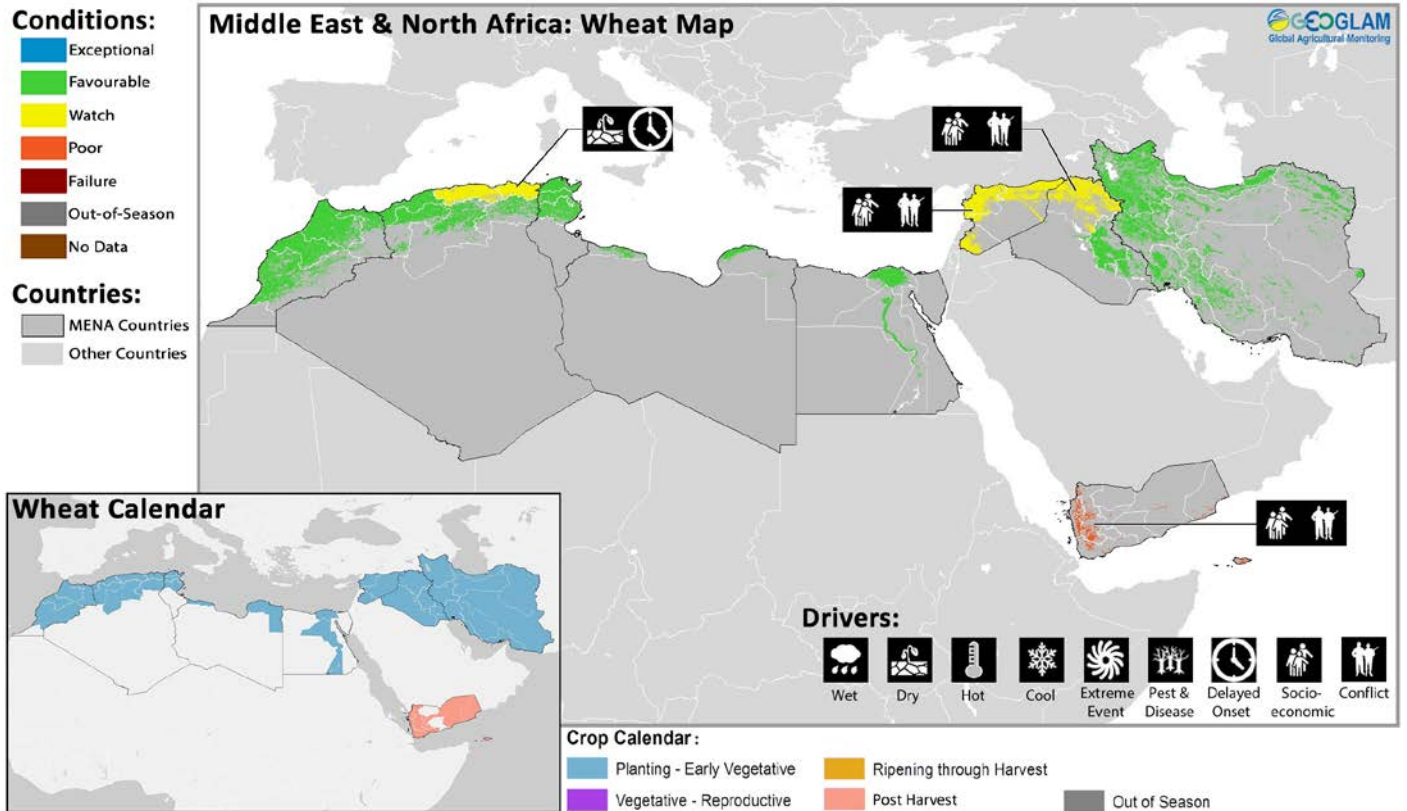
West Africa



Crop condition map synthesizing all cropping information as of October 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.**

Across West Africa the main season had been favourable up to the end of August with exception of the Western part of the Sahel. However, in September parts of some countries of the Sahelian zone (Mauritania, Senegal, Niger and Chad) experienced a combination of below average rainfall and dry spells affecting all crops and most notably rain-fed where a poor outcome is expected. Planting of second season maize is ongoing across the southern bimodal zone extending from Liberia to Cameroon and there is concern due to delay onset of rains and dryness at the start of the season over parts of Togo, Benin, Nigeria, and southern Cameroon. In **Mauritania**, there is worsening concern across all areas and most notably in the South with a delayed start to the season due to declining rainfall amounts from mid-July onwards impacting all crops. In **Niger**, conditions have worsened in the south with August until October rainfall amounts 50% and 40% below the average respectively. This is the third consecutive year with below average rainfall over the region, impacting production. In addition, ongoing conflict in the extreme southwest of the country is impacting agricultural activities and compounding concern for the 2017 main season production. In **Chad**, main season conditions are favourable excepting the region of Lac and portions of Bahr el Ghazel, Batha Est and Wadi Firra where there is concern due to dry conditions. In **Senegal**, main season harvests are underway and there is serious concern for all main season crops due dry conditions in July and September with rainfall amounts in September recorded at 50% below the average. Rain-fed crops of millet, rice and groundnut will be most affected. In **Cameroon**, conditions are favourable for main season crops excepting Extreme Nord where there is concern over conflict impacting agricultural activities. In **Nigeria**, overall conditions are favourable for main season crops however, concern remains in the northeast Borno state from ongoing conflict impacting agricultural practices. There is concern in the South with delayed start of the season due to dry conditions.

Middle East and North Africa

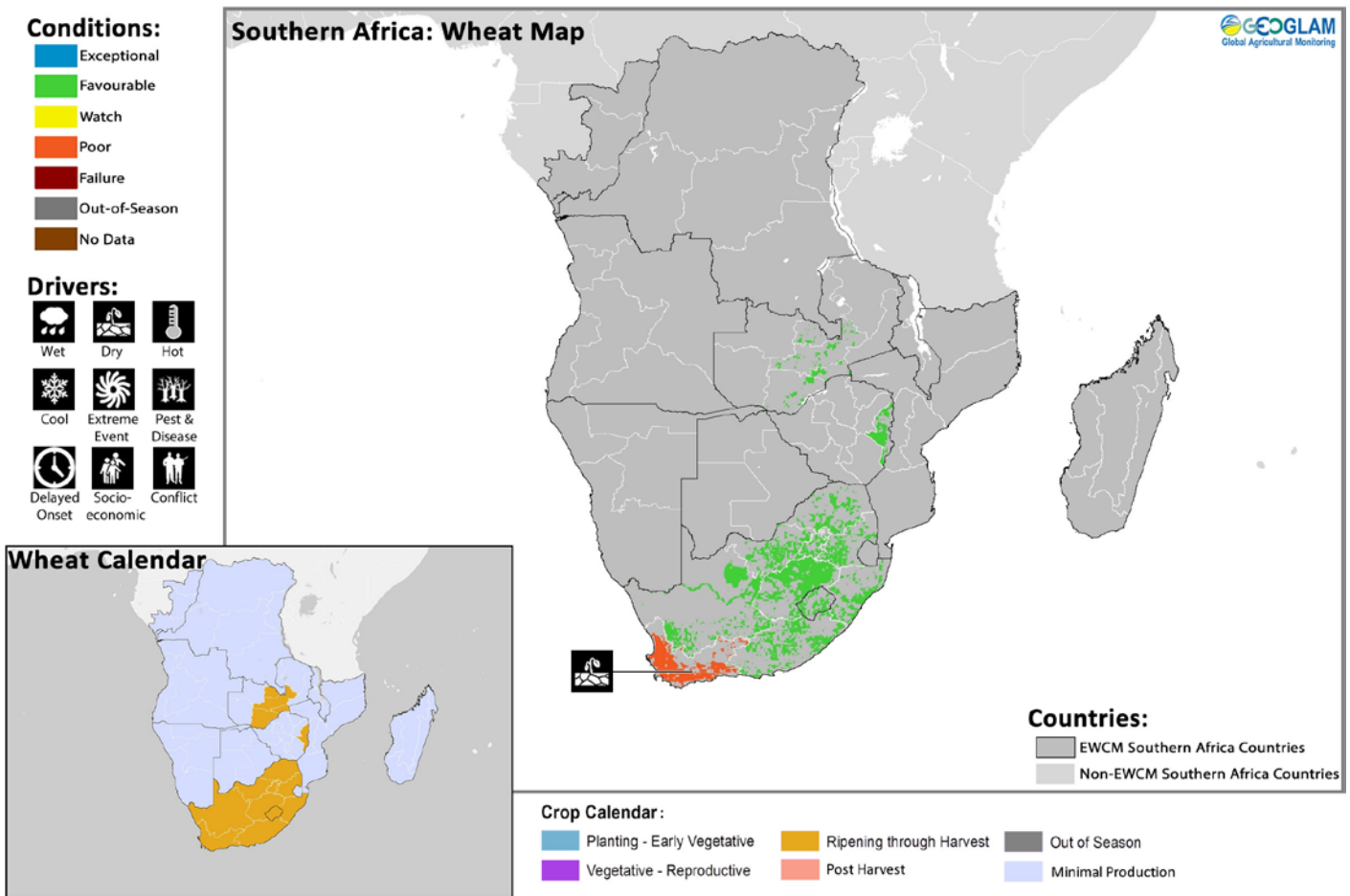


Crop condition map synthesizing information for winter wheat as of October 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable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

Across the Middle East, winter wheat planting started in October and conditions are favourable at the start of the season however, concern remains in Syria and northwest Iraq due to conflict over the region. In **Iran**, winter wheat planting is ongoing and conditions are favourable with only localized dry conditions in parts of Khuzestan. In **Iraq**, conditions indicate a favourable start of the season, expect in the northwest where conflict aftermath is likely to affect agricultural activities. In **Syria**, winter wheat planting started mid-October and there is concern due to ongoing conflict impacting agricultural practices and on rural infrastructure including irrigation equipment. In **Yemen**, wheat harvests finished in October and end of season conditions are poor due to ongoing conflict impacting agricultural practices.

In North Africa, rainfall deficits affect the eastern part of the Maghreb in Morocco and Algeria leading to delays in the planting of main season wheat. The water deficit is most evident in Eastern **Algeria**, where planting has not taken place yet. The optimal planting window in this region is relatively large, but rainfall needs to improve in November/early December to allow for a normal crop season. In **Tunisia** and **Libya** wheat crops are underway and conditions are favourable at the start of the season due to abundant rainfall in October. In **Egypt**, maize and rice harvests are complete and production is favourable. Planting of the winter wheat crop is underway and conditions are favourable.

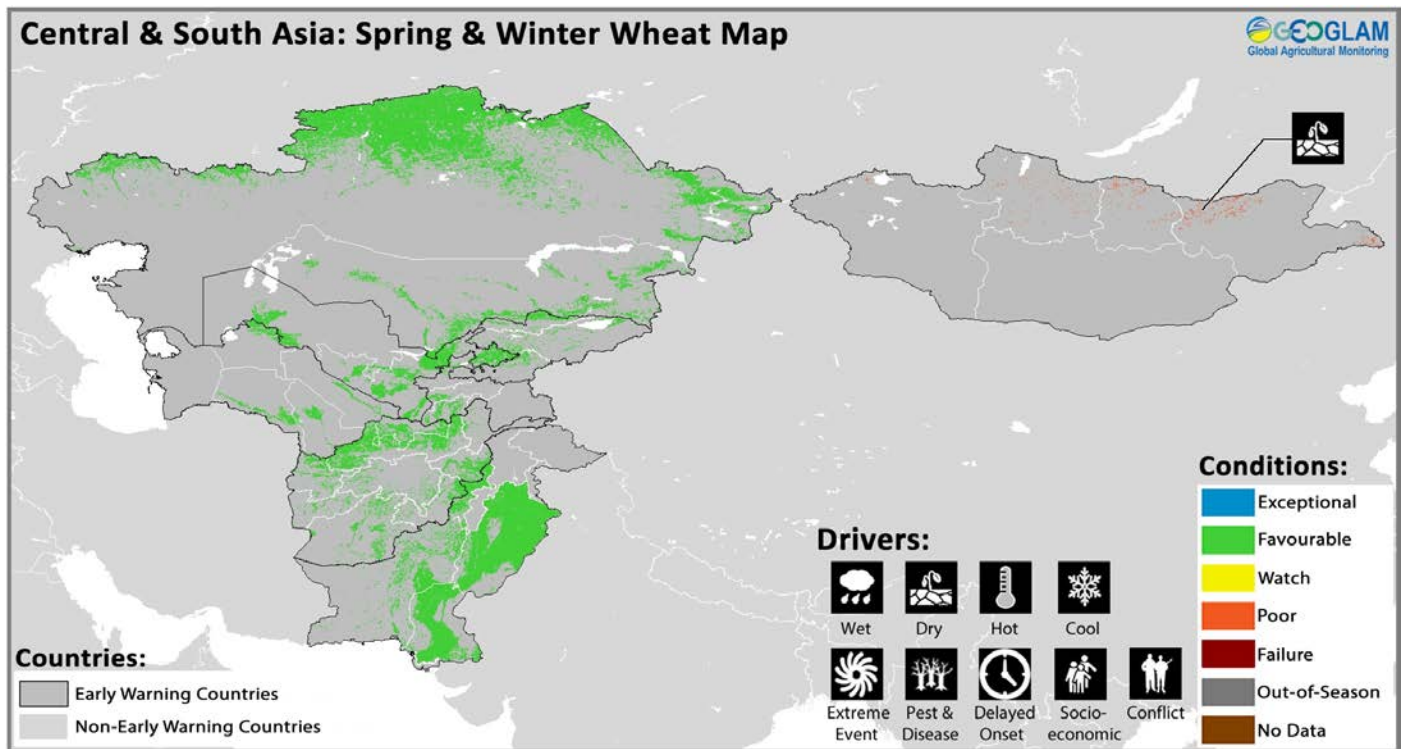
Southern Africa



Crop condition map synthesizing information for winter wheat as of October 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 winter wheat harvest is underway and conditions are generally favourable. In **Zambia** and **Zimbabwe**, winter wheat harvest began in October and conditions are favourable with good rainfall in September supporting crop development. In **South Africa**, conditions have improved and production prospects point to a near-average output due to a recent increase in the estimated area planted. However, continuing dry weather following a delayed start of the season over the main producing Western Cape have decreased yield prospects, curbing overall production expectations. In Free State, production prospects are favourable due to a twofold increase in irrigated crop area from the previous year, which accounts for majority of production for the region. However, conditions over rain-fed areas remains poor due to poor rainfall during the season. Planting of main season maize is underway and conditions are favourable at the start of the season. In **Swaziland** and **Democratic Republic of Congo**, planting of main season maize is underway and conditions are favourable with good rains received. In **Angola**, main season maize and sorghum planting is underway and there is some concern in the north, east and highlands due to poor rainfall in September causing a delay in the start of the season. Main season rains have started and conditions are favourable with good rains received at the start of the season.

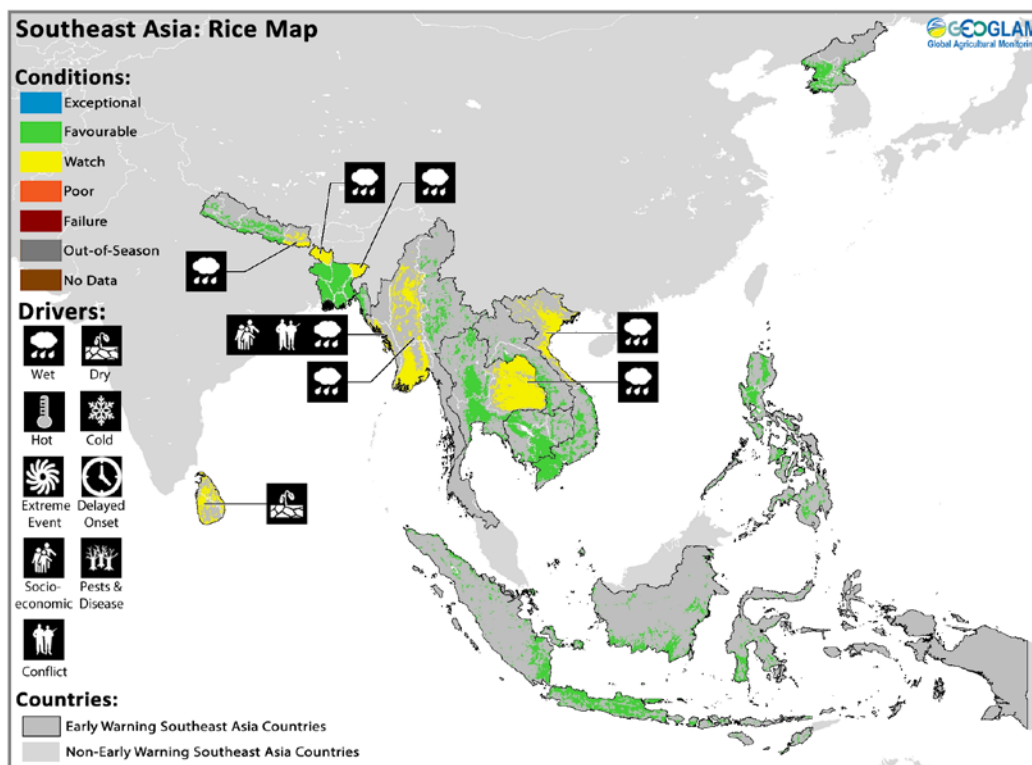
Central and South Asia



Crop condition map synthesizing information for spring and winter wheat as of October 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.**

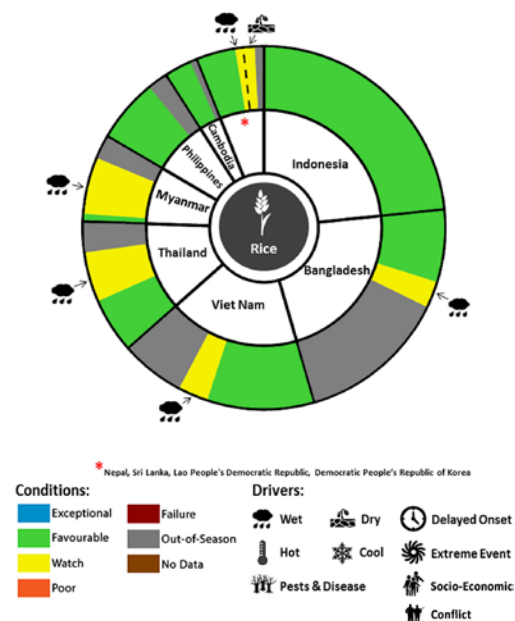
Across Central and South Asia, spring wheat harvest is complete and winter wheat planting is now ongoing and under favourable conditions with good rains at the start of the season. In **Kazakhstan**, harvesting of spring wheat finished mid-October and total wheat output decreased from the previous year due to reduced planting area. In **Tajikistan**, spring wheat harvest finished at the end of October and production was favourable. In **Kyrgyzstan, Uzbekistan, and Turkmenistan**, planting of the 2017-18 winter wheat started at the end of October and will continue through mid-November. Conditions are favourable with good rains and temperatures received. In **Afghanistan**, planting of winter wheat and barley is underway and conditions are favourable. In **Pakistan**, harvest of the *kharif* rice crop is ongoing and will finish at the beginning of December and conditions are favourable. Rabi (winter wheat) planting is underway under generally favourable weather conditions. In **Mongolia**, harvest completed last month and poor end of season conditions resulted for the 2017 spring wheat crop due to dry weather and above average temperatures throughout the summer months of June and July.

Southeast Asia



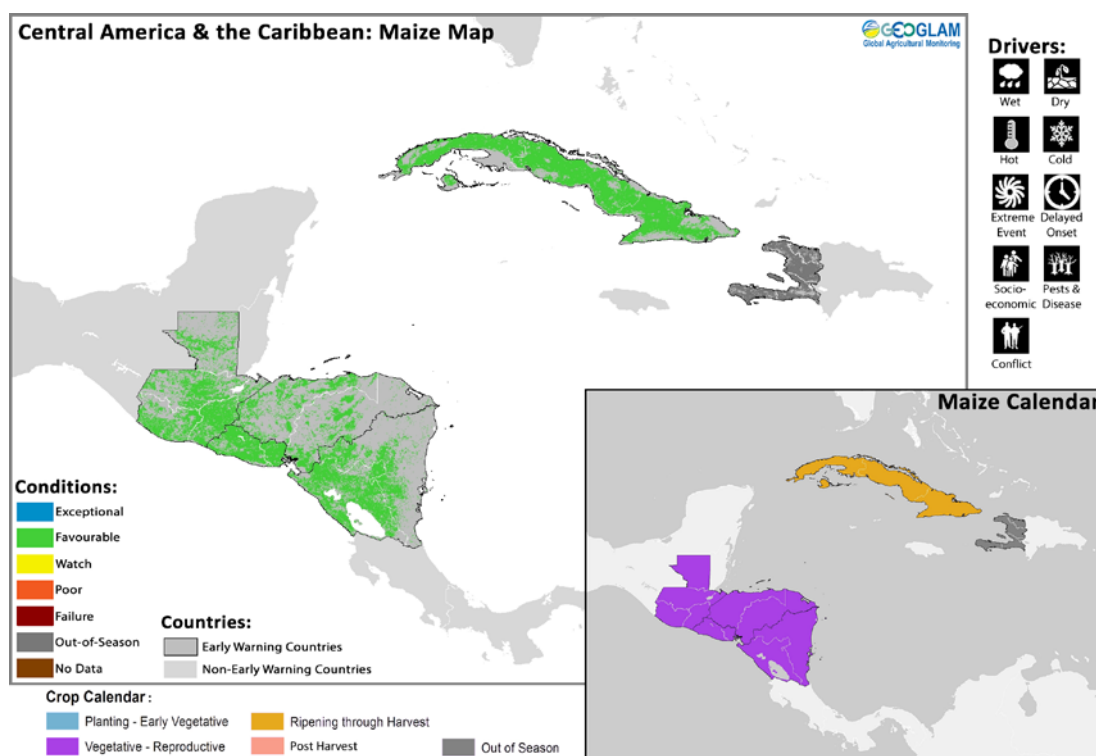
Crop condition map synthesizing information for rice as of October 28th. Crop conditions over the main growing areas are based on a combination of inputs, including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are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

In the northern side of SE Asia, the harvesting of wet season rice has started in all countries. Despite concerns early in the season due to flooding over parts of Myanmar and Thailand and drought in eastern Cambodia, production prospects are favourable. However, in mid-October, severe heavy rain due to tropical cyclones was recorded in northern and central area of Vietnam and damage assessments are now underway by the government. In **Indonesia**, the harvest of dry season rice is nearing completion and yield is expected to increase from last year due to enough irrigation water and sunlight. In **Viet Nam**, conditions are mixed in the north due to heavy rainfall from October tropical cyclones. Harvest of wet-season rice began with initial yields slightly higher than last year. In the south, wet-season rice harvest continues under favourable conditions with yields expected to be slightly below last year's and sowing of the dry-season crop has begun. In **Laos**, harvest is underway for wet season rice and conditions are favourable. In **Thailand**, conditions are generally favourable for wet-season rice except in the northeast due to flood damage and disease outbreaks. In **Cambodia**, harvests are underway and production prospects are favourable. Conditions have improved in the East due to increased precipitation received in September and October. In **Myanmar**, wet season rice planting is complete and there is concern due to flooding across the delta, dry land and Rakhine province. Food security concerns have worsened in Rakhine with ongoing conflict* in the region impacting agriculture practices. In the **Philippines**, conditions are favourable for the wet-season rice planted July-August, which is currently in vegetative to reproductive stage. Heavy rainfall from recent tropical cyclones resulted in no significant damage. In **Indonesia**, conditions are favourable as harvest of the dry-season rice continues with higher yields than last year expected. Sowing of wet-season rice has begun. In the **Democratic People's Republic of Korea**, despite delay start of the rains and dry weather early in the season, crop conditions have improved considerably. In **Bangladesh**, aman rice crop is ongoing and under favourable conditions excepting Sylhet and Rangpur where crops are still recovering from ongoing above average rainfall in September and flood damage. In **Nepal**, conditions are generally favourable for main season rice however there is ongoing concern over the east due to heavy rainfall in September damaging rice crops. In **Sri Lanka**, planting of the 2018 main maha season just started and there is concern due to low levels of water in the major reservoirs.



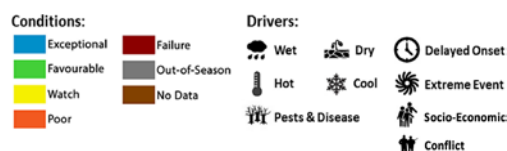
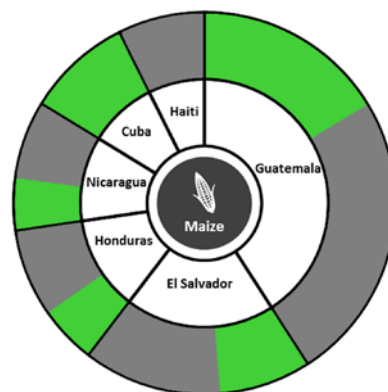
* Disclaimer: The findings and conclusions in this joint multi-agency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts. Conflict driver is sourced from international organizations and do not represent national inputs. More detailed information on the GEOGLAM crop assessments is available at www.cropmonitor.org

Central America & Caribbean



Crop condition map synthesizing information for primera season maize as of October 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 Central America segunda crops are underway and conditions are generally favourable with good rains received at the start of the season. In **Honduras, Nicaragua, and El Salvador** conditions are favourable with good rains received at the start of the season supporting crop development. In **Guatemala**, conditions are generally favourable with good rainfall distribution at the start of the season however, some floods have been reported affecting early planted segunda maize crops in Sayaxché, Cobán, Chisec and Ixcán. In **Haiti**, there is concern due to dry conditions impacting second season rice crops. In **Cuba**, conditions are generally favourable with some areas of limited dryness in the west.



Information on crop conditions in the main production and export countries can be found in the [AMIS Market Monitor](#), published November 2nd 2017.

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). When conditions are other than favourable icons are added that provide information on the key climatic drivers affecting conditions.

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.

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.

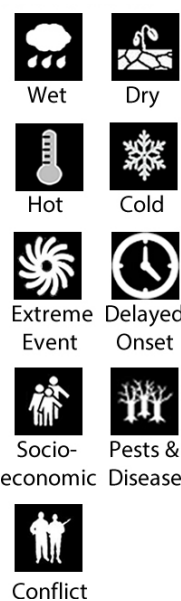
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)

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.



Sources and Disclaimers:

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

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

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 (Winter/Spring)	Dry season (Autumn)	

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	

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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



The Crop Monitor is a part of
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Early Warning partners



ICPAC
IGAD Climate Prediction
& Applications Centre



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