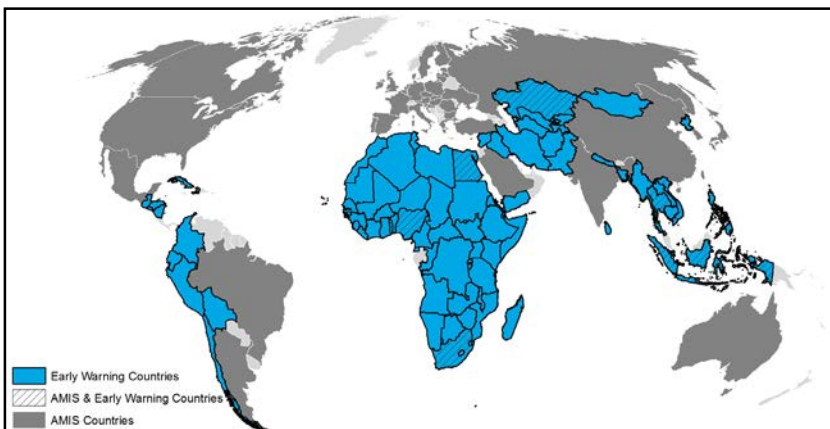


# Crop Monitor

## EARLY WARNING

### Overview:

In **East Africa**, main season cereals are in maturing to harvest stages across the north of the region and conditions are generally favourable. In **West Africa**, harvest of main season cereals is underway across the Sahel and conditions are favourable except in parts of Gambia, Mauritania and Senegal. In the **Middle East** and **North Africa**, early planting of winter wheat crops has started in Iran and conditions are favourable. In **Southern Africa**, harvest will start in October for winter wheat crops and concern remains in Zimbabwe and parts of Zambia and South Africa due to dry conditions. In **Central** and **South Asia**, harvest will finish in October for spring-planted cereal crops, which account for the majority of regional cereal production, and production prospects are favourable except for Kazakhstan. In **Southeast Asia**, wet-season rice is in final growing stages and there is concern across much of the region due to impacts from early season drought, followed by heavy rains and flooding in August from tropical cyclones. In **Central America** and the **Caribbean**, the *Primera* season harvest is complete and final yields were severely reduced along much of Central America's dry corridor, especially among subsistence farmers. Sowing of secondary season crops has been delayed due to expected rain deficits.



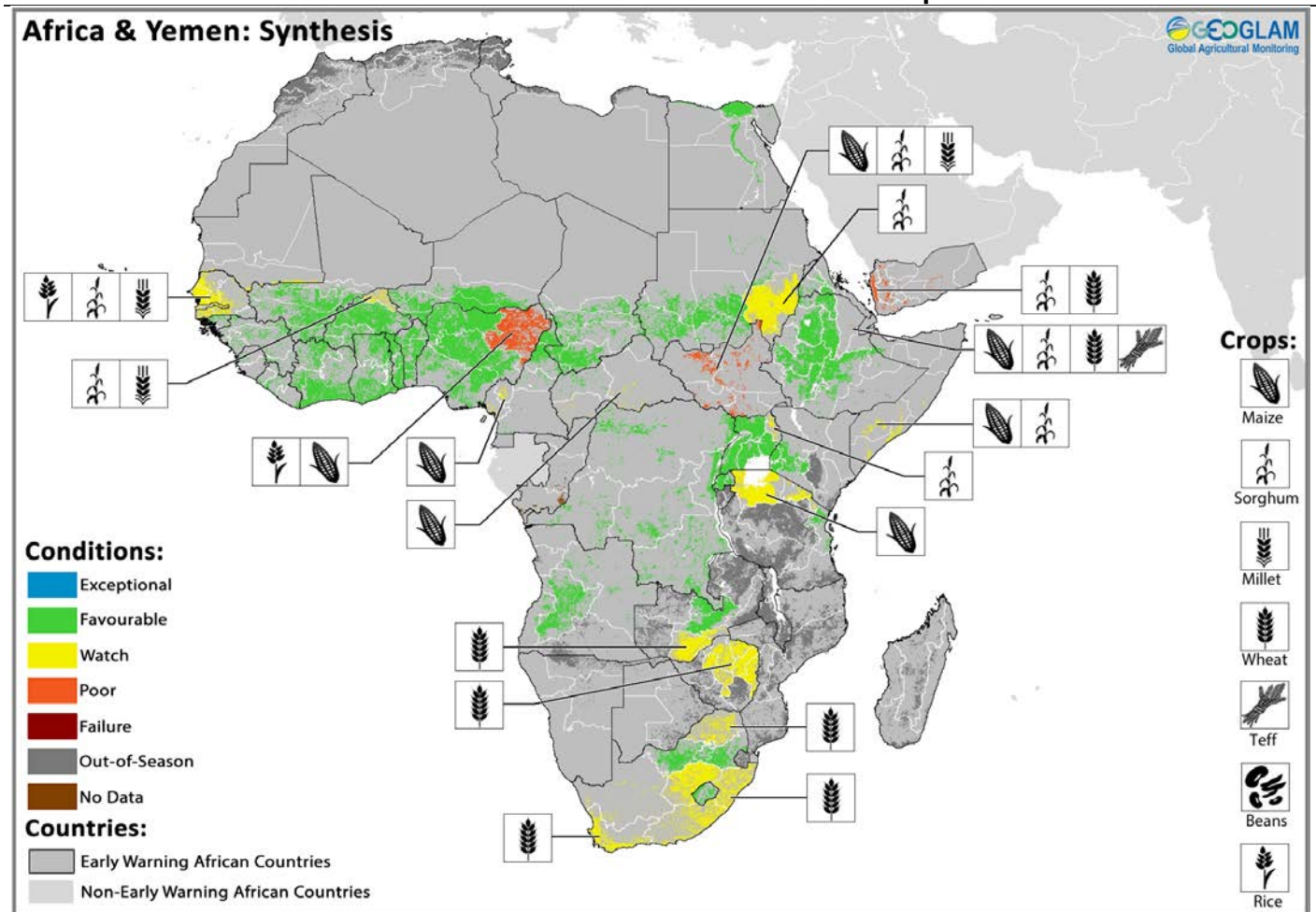
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# GEOGLAM Crop Monitor for Early Warning

## Crop Conditions at a Glance

based on best available information as of September 28<sup>th</sup>



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of September 28<sup>th</sup>. 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:** Main season cereals are in maturing to harvest stages across the north of the region and conditions are generally favourable. Planting of second season crops has started across parts of the south of the region and conditions are generally favourable at the start of the season with good rains expected (See Regional Outlook pg 5).

**WEST AFRICA:** Sowing of second season cereals has started across the south of the region under favourable conditions. Across the Sahel region, harvesting of main season sorghum and millet crops has started and there is increasing concern in Gambia, Senegal and Mauritania where dry conditions have affected crops.

**MIDDLE EAST & NORTH AFRICA:** In the Middle East, crops are mainly out of season except in Iran where planting has begun for the 2020 winter wheat season under favourable conditions.

**SOUTHERN AFRICA:** Harvest will start in October for winter wheat crops and there is concern in Zimbabwe and parts of Zambia due to power cuts affecting irrigation activities and South Africa due to dry conditions.

**CENTRAL & SOUTH ASIA:** Harvest will finish in October for spring-planted cereal crops, which account for the majority of regional cereal production, and production prospects are favourable except in northern Kazakhstan due to reduced plantings and dry conditions. Planting has begun for 2019-2020 winter-planted wheat.

**SOUTHEAST ASIA:** There is concern for wet-season rice crops, which will likely be affected by extended periods of drought across parts of Laos, Viet Nam, northern Thailand and Cambodia, followed by heavy rains in August from tropical cyclones which caused widespread flooding. In Indonesia, planting of dry-season rice has ended and conditions are favourable.

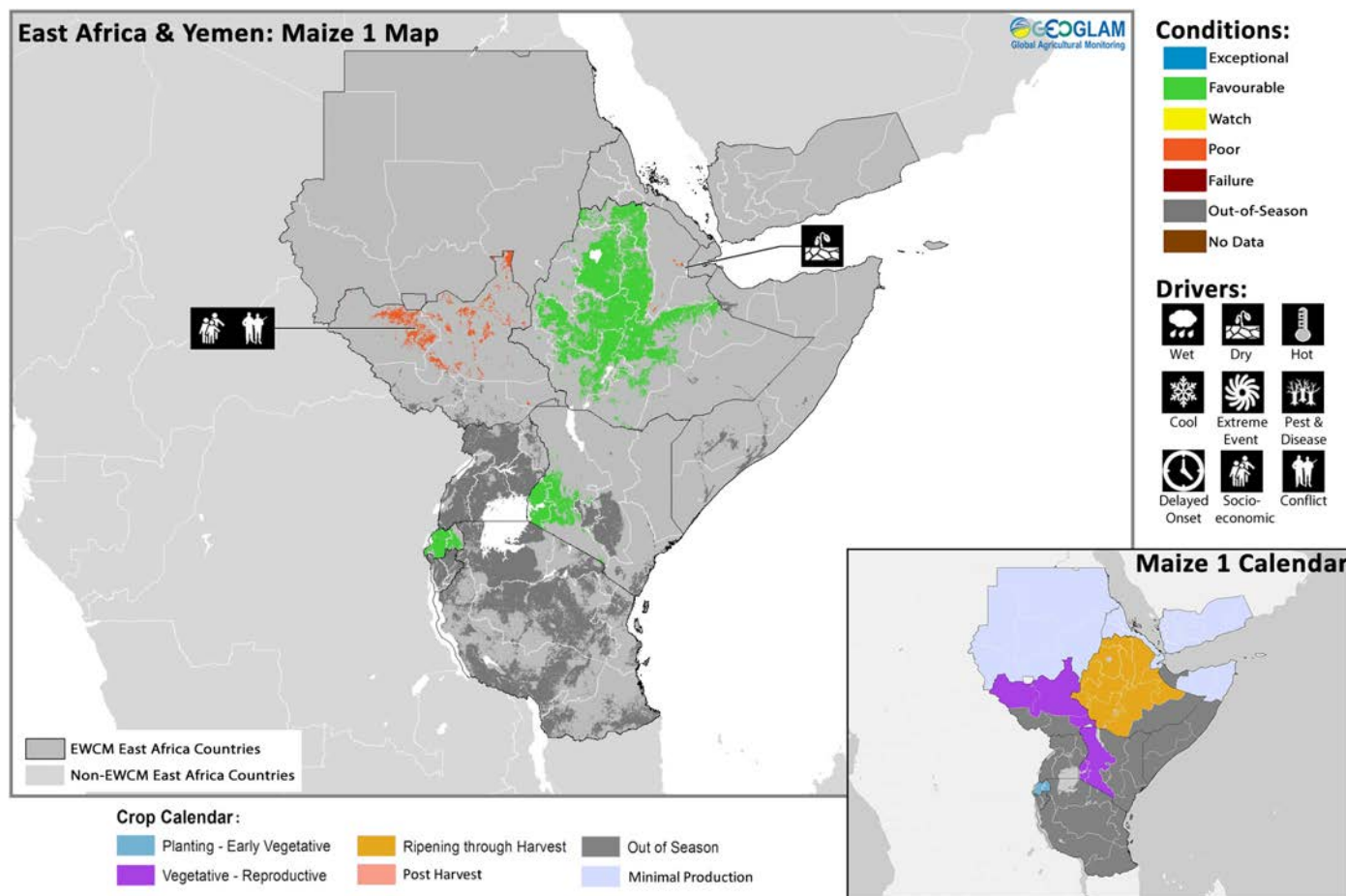
**CENTRAL AMERICA & CARIBBEAN:** Primera season harvest is complete and while production was generally average due to an increase in planted area, significant yield reductions resulted across central and east Guatemala, south Honduras, east El Salvador and south Nicaragua with many areas incurring losses of up to 50 to 75 percent with the worst losses experienced by subsistence farmers. Dry conditions have delayed secondary season sowing by two to three weeks.

### Global Climate Outlook: ENSO neutral conditions likely to continue through Spring 2020

El Niño-Southern Oscillation (ENSO) conditions are neutral and are most likely to remain neutral through May 2020. The Indian Ocean Dipole is in a positive state and is forecast to remain so through the rest of 2019. A positive IOD tends to enhance rainfall in parts of East Africa and suppress rainfall in southern and central Australia.

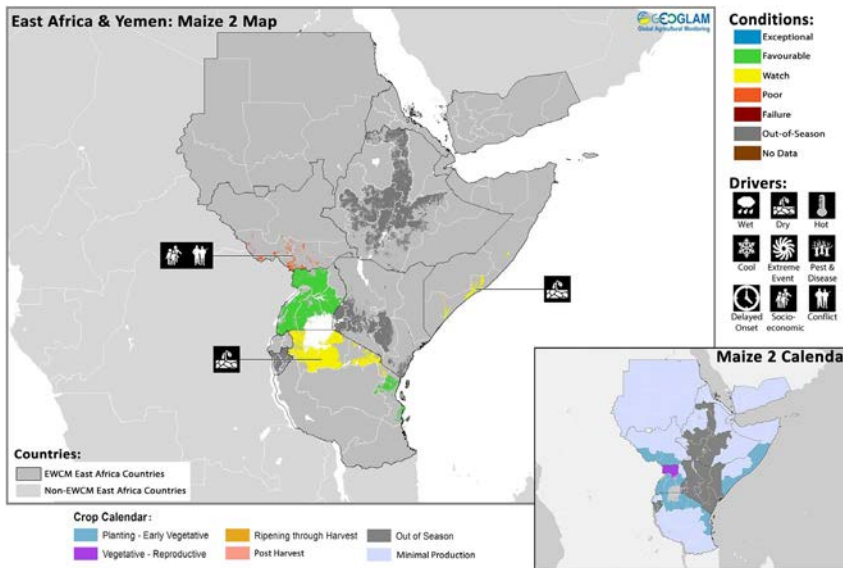
Source: UCSB Climate Hazards Center

## East Africa & Yemen



Crop condition map synthesizing conditions as of September 28<sup>th</sup>. 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.**

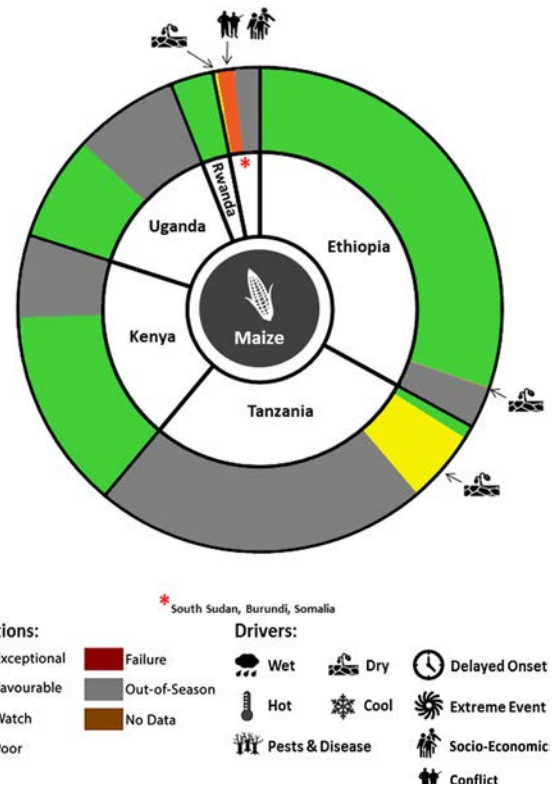
In East Africa, the main season harvest finished last month across central and southern parts of the region where severe early-season dryness resulted in poor harvests and, in some cases, crop failure. Planting of second season crops is now underway in Somalia and northern Tanzania and while dry conditions still remain from the previous season, in some areas, forecasts point to average seasonal rains through October (See Regional Outlook pg. 5). Across the north of the region, main season cereals are in maturing to harvest stages and conditions are generally favourable, except in northeast **Ethiopia** and **South Sudan**. In **Ethiopia**, *Meher* crops, planted in June and July, are favourable following timely and adequate moisture from Kiremt seasonal rains except in some parts of northern Afar. In the central and northern unimodal areas of **South Sudan**, main season cereals are in vegetative stages and in the bimodal south planting of second season crops started in August. While crop growing conditions are generally favourable due to average to above-average rainfall throughout much of the growing season, agricultural operations continue to be affected by the impact of the prolonged conflict. Crop yields show improvement from last year, but remain below the five-year average. Prior to the current conflict conditions, cultivated area was less than 10 percent nationally and has decreased by more than half since the start of the conflict. The South Sudan government is expected to sign a peace agreement in November, which may improve the situation. In the **Sudan**, conditions are generally favourable with high yields expected in rainfed areas due to abundant rainfall throughout the season. However, in eastern Sudan and parts of Darfur, recent flooding has affected main season cereals, particularly in White Nile and Khartoum, due to above-average rainfall and heavy rains in August through September.



Crop condition map synthesizing conditions as of September 28<sup>th</sup>. 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 **Somalia**, planting of second season crops started at the end of September and there is concern due to carryover dry condition from the previous season. In key growing areas of **Kenya's** Rift Valley and Western provinces, where the "long rains" season normally extends from March to August, improved rains from May onwards mostly offset rainfall deficits and resulted in a partial recovery of water stressed and late-planted crops. As a result, the maize harvest over the West and Rift Valley will begin in late October to November and while yields are expected to be average due to improved rains from mid-May onwards production prospects are below-average due to a delay in onset of the long rains and erratic rainfall, which caused an estimated 25 percent decrease in planted area. In agropastoral and marginal agricultural areas of central, southeastern and coastal Kenya, long rains maize harvest finished in August and production was estimated at about 50 to 60 percent below-average, with a near failure of the harvest reported in

southeastern areas. The overall long rains maize production outlook is estimated at 20 percent below the 2018 bumper harvest and 10 percent below the average 2016 harvest. In **Uganda**, harvest of first season crops finished in August and while planting was delayed by more than a month due to severe early season dryness, abundant mid- and late-season rains allowed a partial crop recovery, however, production is estimated at about 30 percent below-average. In the unimodal rainfall Karamoja region, the cereal harvest is currently underway. Following a delayed start to the season adequate rains during much of the cropping season led to generally improved yields. However, sorghum production, the main cereal grown in the area, is estimated to be about 20 to 40 percent below-average on the district level due to a poor start to the season and reduced planted area due to seed shortages. Land preparation and planting of second season crops is underway and the onset of seasonal rains are expected in October (See Regional Outlook pg. 5). In **Rwanda**, planting is underway for "A season" crops and conditions are favourable. In **Yemen**, main season wheat and sorghum crops are ripening through harvest and conditions are poor due to ongoing conflict and socio-economic concerns, as well as outbreaks of Fall Armyworm (FAW). Due to conflict-related constraints as well as pest outbreaks, total cereal production in 2019 is forecast at 12 percent below the previous year's harvest and more than 30 percent below the five-year average.



For detailed description of the pie chart please see description box on pg. 11.

### **Regional Outlook: Average to above average OND rainfall is forecast**

The outlook for October to December 2019 rainfall is favorable for most in-season areas of East Africa. Seasonal rainfall totals will most likely be above average across the equatorial region from South Sudan and southern Ethiopia to southern Tanzania, according to several forecast systems. The GHACOF53 October to December outlook (Figure 1-left) shows a greater than 50 percent chance that seasonal totals will rank in the upper third of historical rainfall in southern Somalia, western Kenya, southeastern South Sudan, much of Uganda, Rwanda, Burundi, and most of Tanzania. The forecast favorable rainfall conditions are associated with the positive Indian Ocean Dipole mode that is expected to last through December 2019.

The forecast for September 26<sup>th</sup> to October 3<sup>rd</sup> shows an atypically wet week in parts of central-western Ethiopia and Sudan, similar to what has occurred in recent weeks. Enhanced rains are also forecast for western equatorial areas including South Sudan and the Lake Victoria region (Figure 1-top right).

The 30-day outlook (Figure 1-bottom right) shows above average late September and October rainfall totals across much of East Africa, and some confidence is afforded by agreement across models. Models tend to show markedly enhanced rainfall, amounts more than 50 mm from average, in central and western Ethiopia, South Sudan, Uganda, eastern DRC, the Mandera triangle region, and coastal Kenya and Tanzania. Eastern equatorial areas may see a timely onset of consistent rains around the second week of October, but this may not be the case for all areas, especially if the Inter Tropical Convergence Zone is delayed in the north.

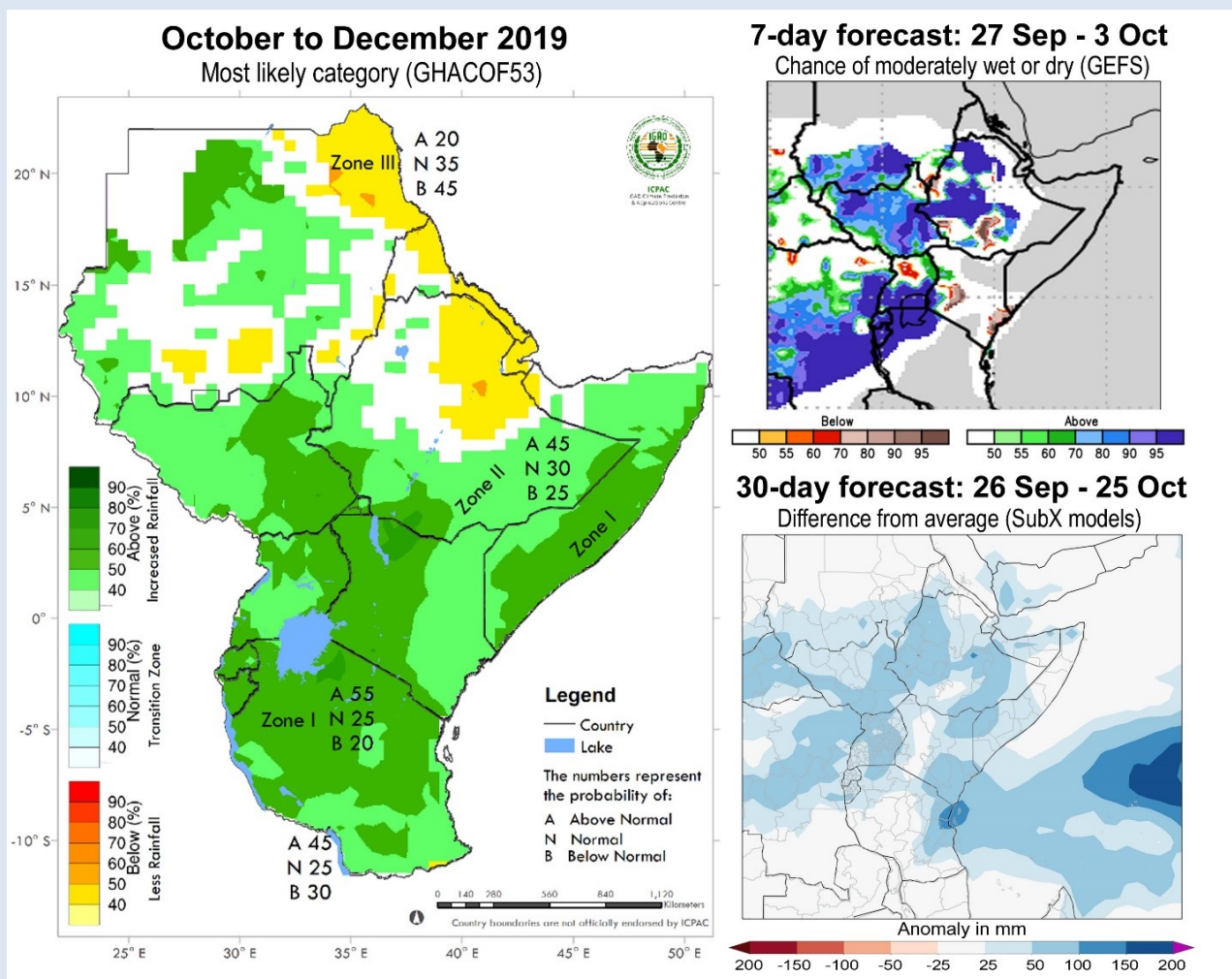
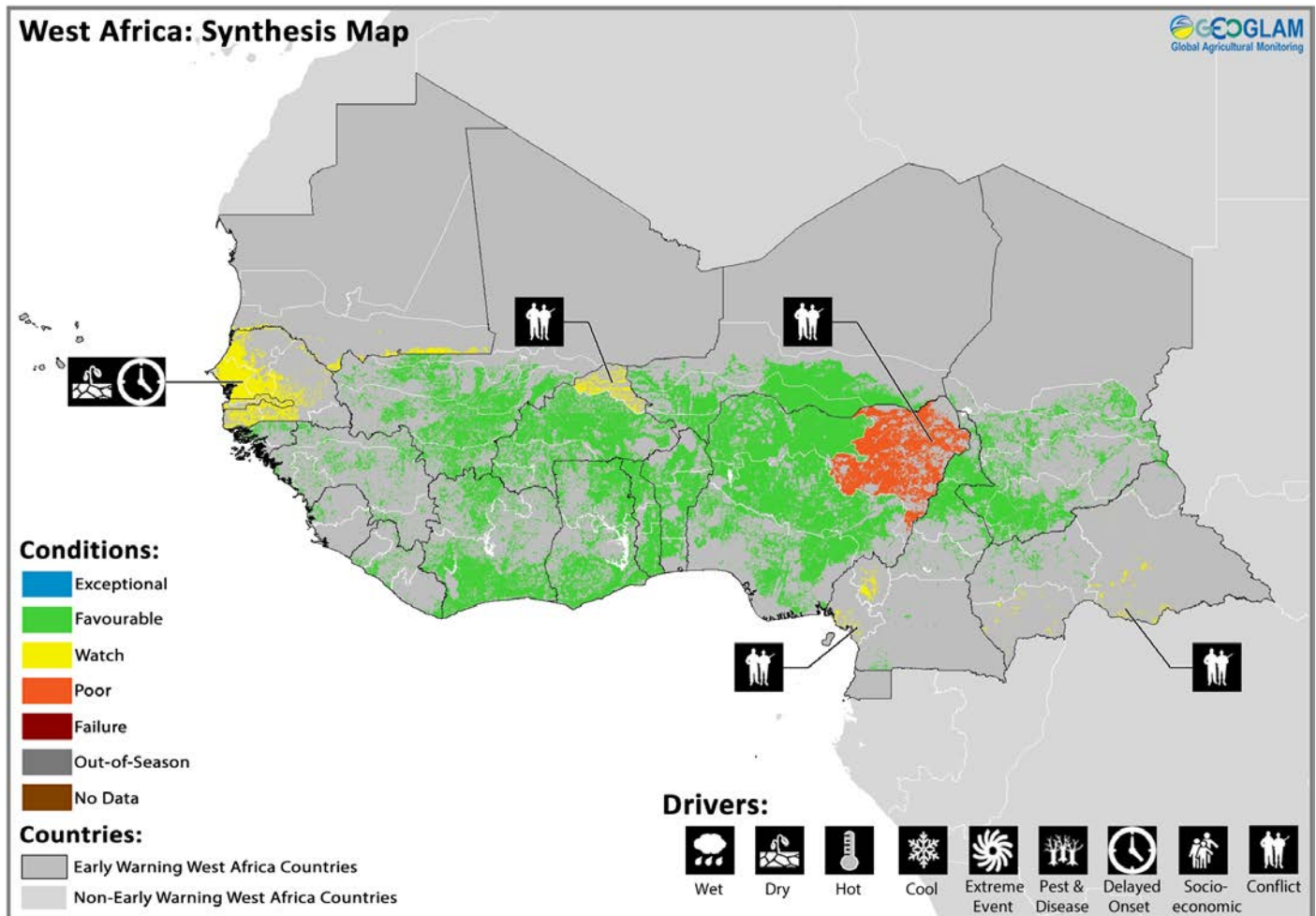


Figure 1. Seasonal, and near to medium term rainfall forecasts. Left- The most likely outcome for October to December 2019 rainfall (above normal, normal, below normal) and corresponding probabilities, according to the Fifty Third Greater Horn of Africa Climate Outlook Forum (GHACOF53). Top right- Chance of moderately dry (< 80% average) or wet (> 120% average) conditions during the week of September 27<sup>th</sup> to October 3<sup>rd</sup>. From the NOAA/NCEP/CPC Global Ensemble Forecast System (GEFS) on 9/26. Bottom right- Forecast rainfall for the 30-day period ending October 25<sup>th</sup>, shown as the difference from the 1999 to 2016 average. Image shows the average across five Subseasonal Experiment (SubX) model forecasts on 9/26.

Source: UCSB Climate Hazards Center

## West Africa



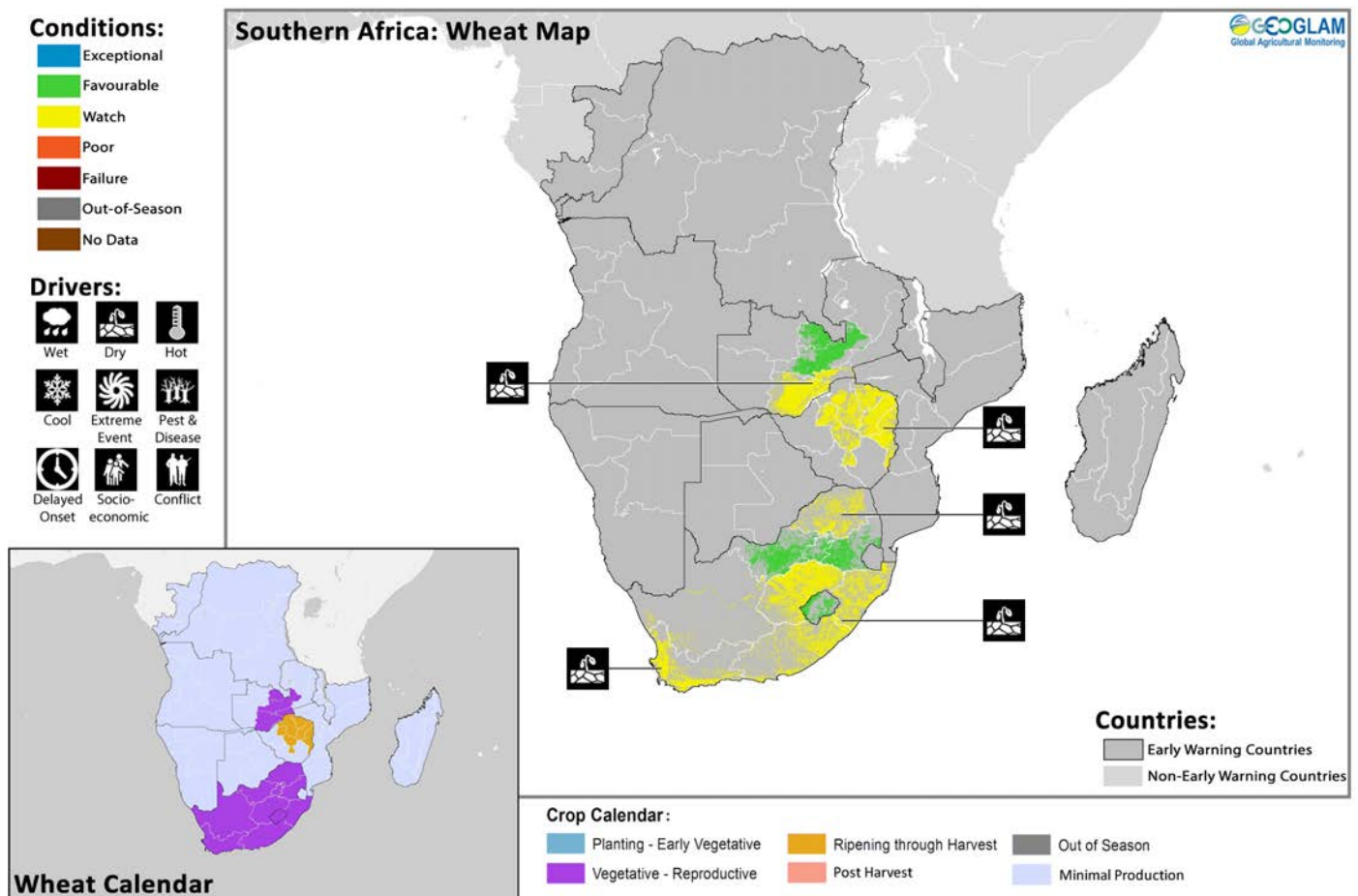
Crop condition map synthesizing information as of September 28<sup>th</sup>. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions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

In West Africa, the main season maize harvest finished in September and final yields were favourable, except in conflict-affected areas of **Cameroon** and **Central African Republic**. Second season maize is in planting to early vegetative stages across the south of the region and conditions are favourable. In **Central African Republic**, harvesting of maize was completed by the end of September and the 2019 cereal production is expected to increase relative to the previous year's level, but still remain well below the pre-crisis average. Rains between June and early-September have been generally erratic in most cropped areas, but seasonal rainfall distribution in 2019 has been more conducive for crop growth compared to the previous year. In addition, access to agricultural inputs and humanitarian assistance is reported to be better than in 2018. In **Cameroon**, harvesting of main season maize is expected to finalize by the end of October, while harvesting of millet and sorghum recently started. Conditions have been generally favourable in most central and southern cropping areas following adequate precipitation since the onset of the cropping season in March. In the Far North Region, however, civil unrest continues to affect agricultural livelihoods, especially in the departments of Logone-et-Chari, Mayo-Sava and Mayo-Tsanaga. Precipitation in the region was well-distributed throughout the season and cumulative rainfall amounts are slightly above-average. As a result, and in spite of the impact of the conflict, cereal production is expected to be close to the average at the regional level, although poor harvests are foreseen in the crisis-affected areas. Similarly, in the Northwest and Southwest Anglophone regions, insecurity continues to limit households' access to agricultural land and inputs and below-average cereal harvest is expected. Across the Sahel region, harvesting of main season sorghum and millet crops has started and there is increasing concern in **Gambia**, **Senegal** and **Mauritania** where delayed rains and dry conditions continue to affect crops and in north **Burkina Faso** where increasing flows of internally displaced persons and limited population movements are negatively affecting agricultural activities. Main and second season rice is in vegetative to reproductive stages across most of the region and conditions are favourable, except in **Mauritania** and the West and North Central regions of **Senegal** due to dry conditions. In northeast **Nigeria**, there is concern for main season crops due to ongoing conflict, which has limited access to farmland and inputs.

## Middle East & North Africa

In the Middle East and North Africa, the 2018-2019 winter wheat season completed in August and crops are now mainly out of season. In **Iran**, early planting of wheat crops for the upcoming 2019-2020 winter season has started and conditions are favourable. In **Egypt**, main season maize and Nili season (Nile flood) rice crops are in vegetative to reproductive stages and harvest of main summer-planted rice has begun. Despite an exceptional heatwave during much of the growing season, crops have not shown any visible negative effects and conditions remain favourable, though localized outbreaks of Fall Armyworm (FAW) may impact final maize yields in southern Egypt.

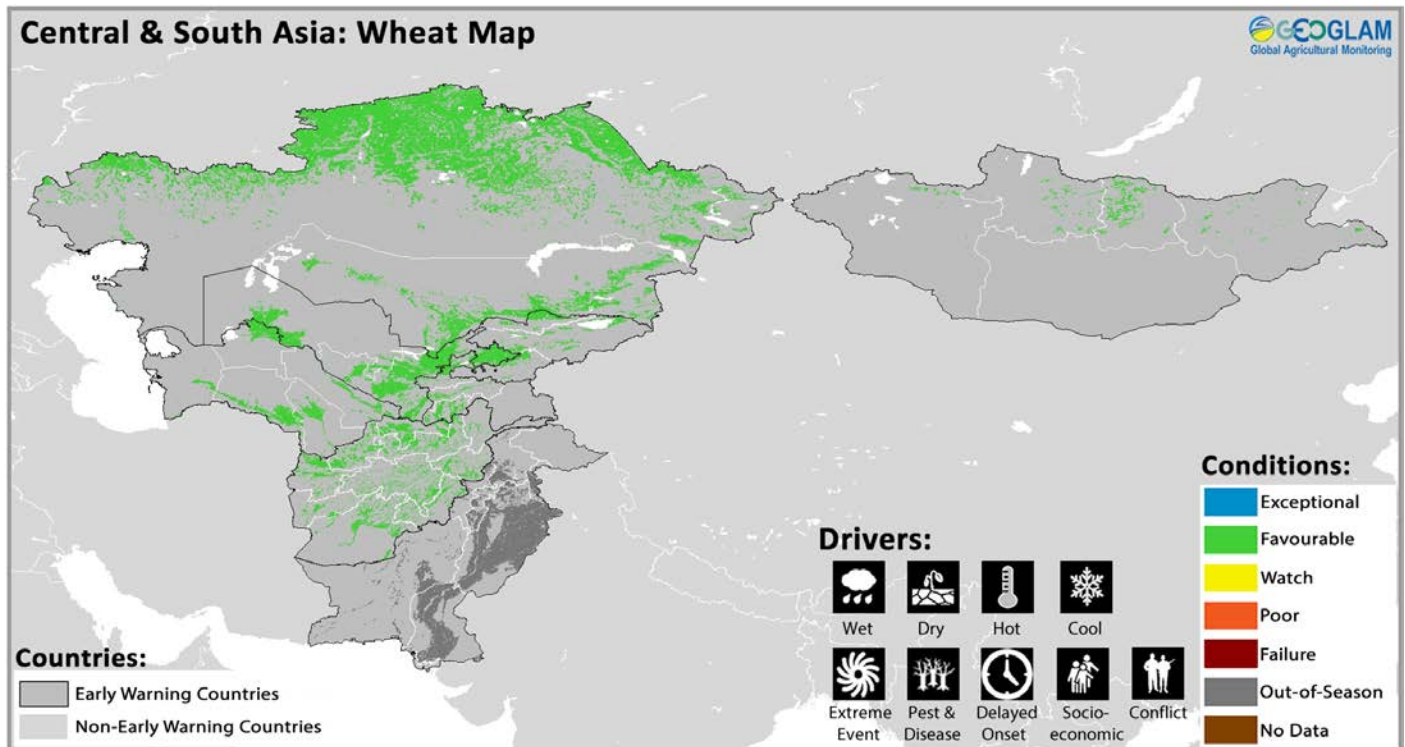
## Southern Africa



Crop condition map synthesizing information as of September 28<sup>th</sup>. 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, harvest will start in October for winter wheat crops across South Africa, Zambia and Zimbabwe and concern remains in Zimbabwe and parts of Zambia where rolling power cuts continue to negatively affect irrigation activities and along the southern coast of South Africa where crop stress is present due to below average rainfall. In **Zimbabwe**, early-planted crops are at maturing stages while late-planted crops are at vegetative stage. Extended power cuts remain a problem for wheat irrigation and ground information suggests that crop conditions across growing areas vary from poor to fair. Water stress is evident in many fields and some fields have been written off as crop failures due to poor water supply. Area planted is lower than the previous year, which will further reduce production prospects. In **Zambia**, conditions remain on watch in Lusaka and Southern provinces due to continuing electricity disruptions in some parts which have been affecting irrigation activities and below-average reservoir levels remain a concern. In **South Africa**, widespread rain over the central parts of the country in April resulted in favorable conditions for wheat cultivation over the summer rainfall region (+/- 30 percent of production). However, over the winter rainfall region, where about 70 percent of production occurs, above-normal rainfall in July was followed by dry conditions in both August and September, resulting in a downward adjustment of production expectations. Wheat production is expected at three percent below the previous year's average, largely due to an estimated 12 percent decrease in production in the Western Cape, which produces the majority of the wheat for the country. In the **Democratic Republic of the Congo**, conditions remain favourable with fair to good rains received across the region in the past dekad.

## Central &amp; South Asia

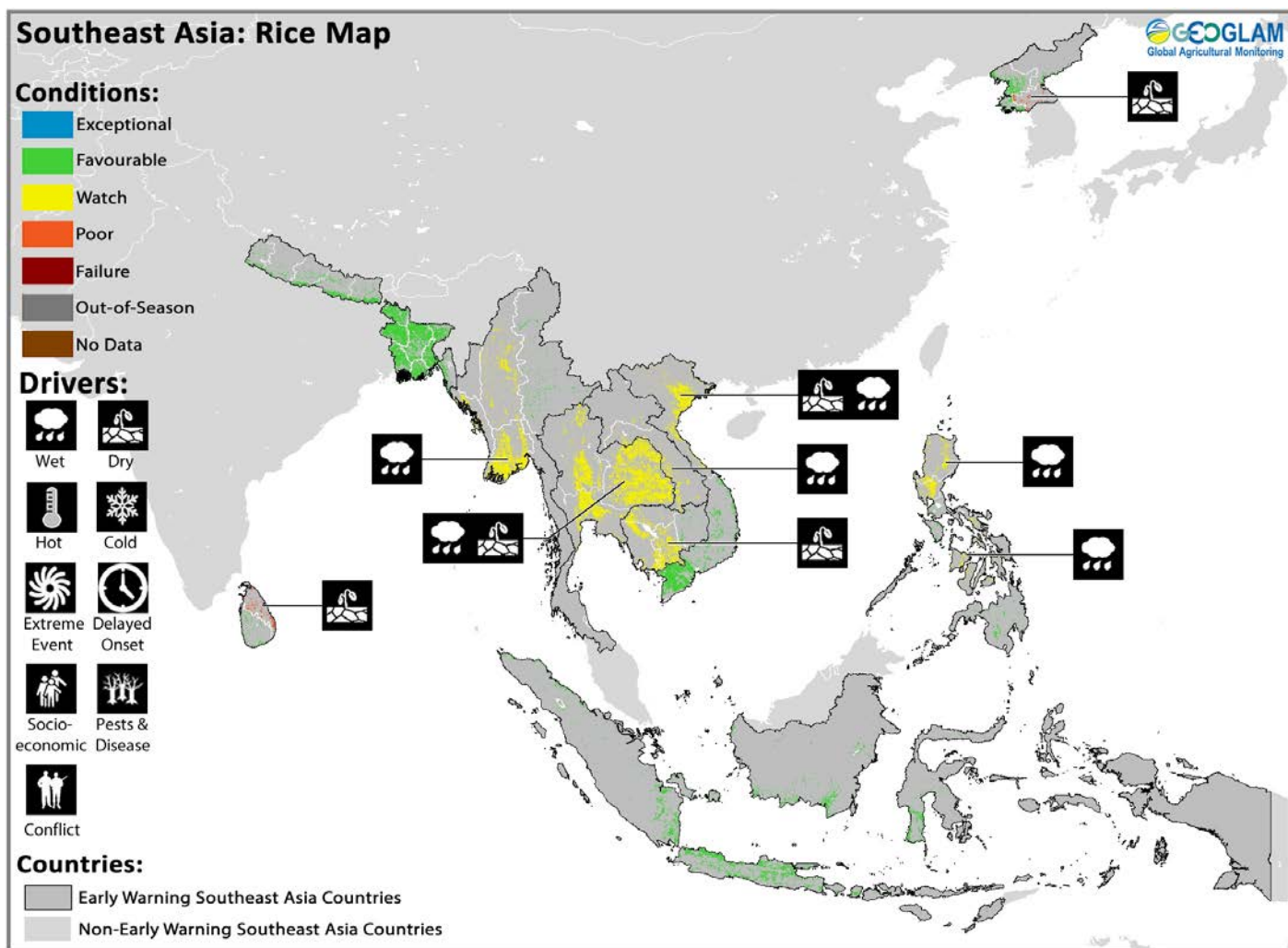


Crop condition map synthesizing information as of September 28<sup>th</sup>. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions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

In Central Asia, harvest will finish in October for spring-planted cereal crops, which account for the majority of regional cereal production, and production prospects are favourable. However, abundant rains during the peak harvest months of late August to early September may have negatively affected the quality of the grain in the northern provinces of Kazakhstan. The aggregate (winter- and spring-planted) wheat output, accounting for about 70 percent of subregional cereal production, is forecast at a near-average level of 25 million tonnes. In **Kazakhstan**, the 2019 aggregate wheat output is estimated to be about eight percent below-average at 13 million tonnes, due to reduced plantings and dryness between June and mid-August in parts of the key producing Kostanay Province. In **Turkmenistan**, the 2019 wheat production is set well above-average at 1.6 million tonnes, while in **Kyrgyzstan**, wheat production is estimated at 590,000 tonnes or about five percent below the five-year average on account of a reduction in area planted. In **Uzbekistan** and **Tajikistan**, wheat outputs are set at a near-average 6.8 million tonnes and 830,000 tonnes, respectively. Across the region, sowing of the 2019-2020 winter-planted cereal crops started at the end of August under generally favourable conditions. In **Afghanistan**, harvest of spring-planted wheat completed last month and crops are now out of season. Sowing of winter-planted wheat in Afghanistan is expected to begin in mid-October. In **Pakistan**, harvest started at the end of September for main season rice and conditions are favourable. In **Mongolia**, wheat harvest will finish in October and above average output is expected due to favourable conditions throughout the season.

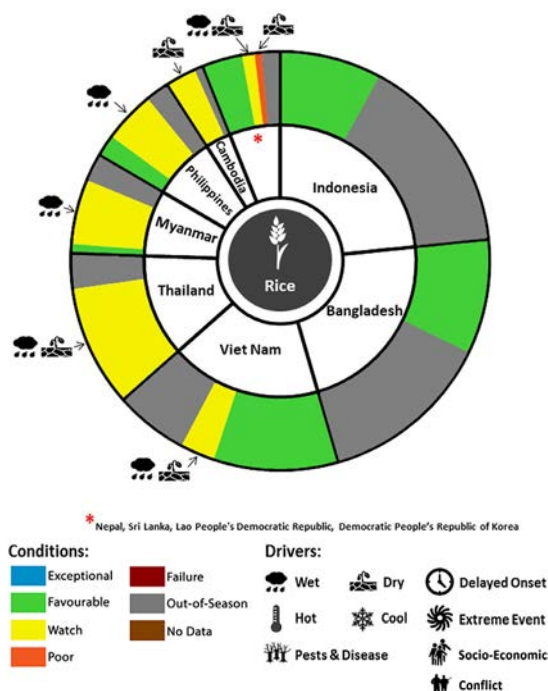


Southeast Asia



Crop condition map synthesizing rice conditions as of September 28<sup>th</sup>. All dry season rice crops are complete except in Indonesia where dry season rice sowing is underway. 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**

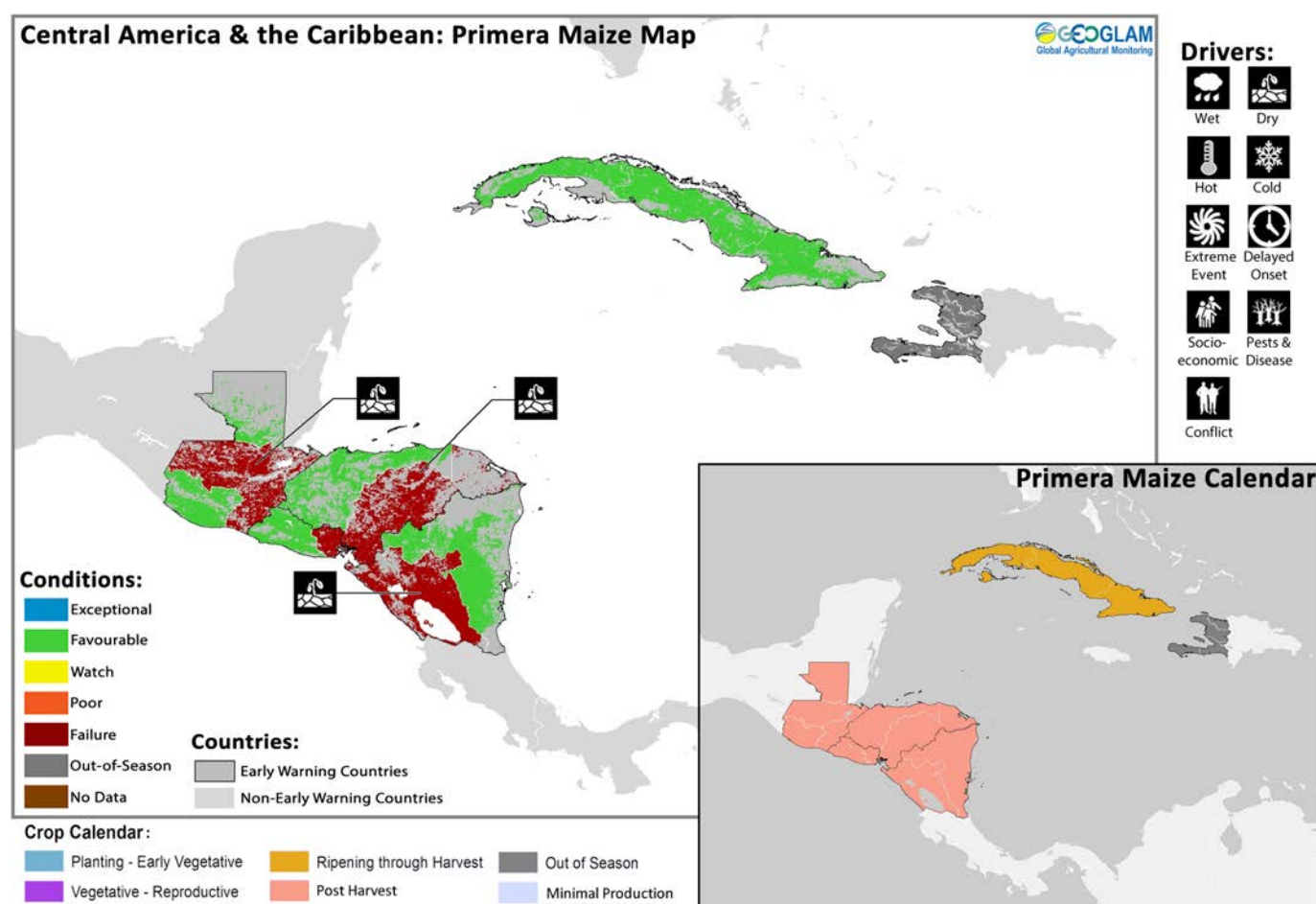
In northern Southeast Asia, the drought conditions that caused damage to wet-season rice in **Cambodia**, northeastern **Thailand**, northern **Laos**, and northern **Viet Nam** from the start of the season were followed by heavy rains in August from tropical cyclone Podul and tropical depression Kajiki. In parts of the Philippines, Cambodia, Vietnam, Laos, Thailand, and Myanmar, heavy rains triggered flooding, causing damage to infrastructure and some cropping areas. Crop growth and final yield will likely be affected both by drought and recent flood damage. In **Indonesia**, total planted area of dry-season rice remains low due to below-average rainfall through the start of the season. However, the growing conditions of early generative dry-season rice is generally good and there is no significant damage. In the **Philippines**, conditions are mixed due to heavy rains from several tropical cyclones as the harvest begins for wet-season rice. In **Thailand**, wet-season rice conditions are mixed due to a dry start of the season followed by recent heavy rainfall and flooding of fields in early September. In **Viet Nam**, conditions are mixed for summer-autumn rice (wet-season rice) due to dry conditions in the north. In **Laos**, the lowland wet season rice is in young panicle forming stages. Heavy rains in late August from tropical cyclone Podul resolved drought concerns, however, crops in the southern region were affected by flooding. In the northern region, upland rice is also in young panicle forming stages, however, the growing condition is slightly poor due to



For detailed description of the pie chart please see description box on pg. 11.

early-season drought. In **Myanmar**, wet season rice planting has progressed slower than in previous years; planting operations are expected to finish next month. At the end of August, heavy rains caused landslides and flooding of the delta and river basin areas throughout the country, except in Chin state. Over 92 thousand hectares of rice were damaged by flooding and over 10 thousand hectares have been replanted. In **Cambodia**, while drought conditions have improved due to above average rain in August, an estimated 13 percent of cultivated area in Northwestern and Mekong Lowlands regions have been affected by early-season drought and recent flooding from tropical cyclone Podul. The early planted wet season rice is nearing maturation and yields are expected to be near average. In **Democratic People's Republic of Korea**, the harvest of the 2019 main season crop is ongoing and is expected to finalize at the end of October. A below-average output is forecast for these crops, mostly as a result of unfavourable meteorological conditions. Below-average rains from April to June affected planting operations and early crop development. Heavy rains in August and early September, coupled with the passage of typhoon Libling on the 7<sup>th</sup> September, caused severe localized flooding and damage to maturing standing crops. In **Sri Lanka** the harvest of the 2019 secondary season crops, is nearing completion. Below-average rains during the cropping season affected crops in Uva, Northern, North Central and Eastern provinces. In **Nepal** main season crops are in late stages of development and conditions are generally good. In **Bangladesh**, growing conditions of the 2019 *Aman* crop, which accounts for 35 percent of the annual output, is good reflecting generally favourable meteorological conditions since the start of the season.

## Central America & Caribbean



Crop condition map synthesizing information as of September 28<sup>th</sup>. 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.**

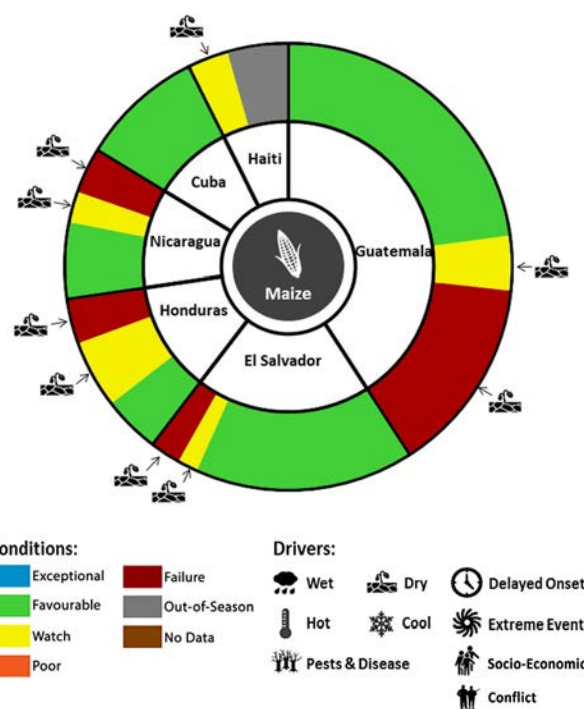
Harvesting of *Primera* season maize and bean crops is complete across **El Salvador, Guatemala, Honduras** and **Nicaragua** and while national production was generally average across many countries due to an increase in area planted, final yields were significantly reduced due to irregular weather conditions during the start of the season including high temperatures, below-average and irregular rainfall and extended dry spells. In particular, subsistence and large farmers without access to irrigation systems or riverine areas experienced significant crop losses of 50 to 75 percent and food security is of increasing concern. In **El Salvador**, despite significant crop losses among subsistence and medium farmers, the national *Primera* season output was average. In east El Salvador, crop losses among subsistence farmers exceeded 50 percent of crops, though these farmers account for only a small proportion of the country's

### **i** 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](http://www.cropmonitor.org)

national production. By contrast, the timely distribution of rainfall in west El Salvador provided enough moisture for crops and yields were favourable despite the rainfall deficit. In **Guatemala**, despite below-average and erratic rains throughout the season, overall national production was near-average. In central and eastern Guatemala, final *Primera* season yields among subsistence farmers were more than 75 percent below-average, while some main farmers in Quiche and Retalhuleu departments reported a nearly 40 percent reduction in yields. However, due to the increase in sowed area, these crop losses do not represent problems to the national production. In the North and South regions, timely rainfall at the end of the *Primera* season resulted in favourable crop yields, with some localized losses in dry areas of southern departments Escuintla, Retalhuleu and Suchitepequez. In southern **Honduras**, irregular and insufficient rainfall reduced *Primera* season yields by an estimated 50 percent due to crop losses in subsistence and main production areas, including in main producing El Paraiso and Olancho departments. In southern **Nicaragua**, reports indicate losses of more than 50 percent in the departments of Madriz, Chinandega, Estelí, Matagalpa, Boaco, Nueva Segovia and Leín. However, a favourable yield was produced in northern Nicaragua. In **Haiti**, harvesting of main season rice is underway and there is concern due to dry conditions in the Nord and Sud regions, which could affect rice yields. However, about 80 percent of national rice production is obtained in Artibonite department where crop conditions are generally favourable so the overall effect on national yield is expected to be minimal. Second season maize and beans are in vegetative to reproductive stages under favourable conditions.

In much of **El Salvador**, **Guatemala**, **Honduras** and **Nicaragua**, rainfall deficits since late August have delayed the start of the secondary *Segunda* (*Postrema*) cropping season. While some farmers sowed crops on time, many are waiting for regular rainfall to start sowing activities. In general, a delay of two to three weeks has been observed. In southern **Honduras**, the government has called on farmers to cancel *Postrema* maize sowing due to local forecasts of rainfall deficits. While some large farmers will follow the government's recommendation, subsistence farmers will sow as planned to make up for *Primera* season losses. In **Cuba**, main season rice is in vegetative to reproductive stages and the harvesting of main season maize has started under favourable conditions.



For detailed description of the pie chart please see description box on pg. 11.

**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 October 3<sup>rd</sup> 2019.**

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# 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.



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**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	

**i 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](http://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.*

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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# GEOGLAM

## Global Agricultural Monitoring

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### Early Warning partners



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