



Overview:

In West Africa, main season cereals are in vegetative stage and conditions are favourable due to good rains at the start of the season. In **East Africa**, harvest is underway for main season cereals in the south and production prospects are favourable despite losses from widespread flooding. In the Middle East, winter cereal harvest is complete and production was below average in Syria and Iraq due to due ongoing conflict. In North Africa, winter wheat harvest is complete and production was average to above average due to good rains throughout the season. In Southern Africa, winter wheat planting is complete and conditions are favourable due to sufficient rainfall. In Central and South Asia, winter cereal harvest will finish at the end of August and production prospects are below average due to dry conditions during the winter and spring period. In northern Southeast Asia, wet season rice planting is complete and conditions are favourable except in Myanmar and Philippines due to typhoon and monsoon impacts. In Central America and the Caribbean, the primera season harvest is just starting across early season planted areas and there is concern in parts of Guatemala, El Salvador, Haiti, and Cuba due to dry conditions.







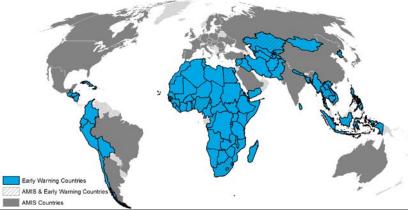












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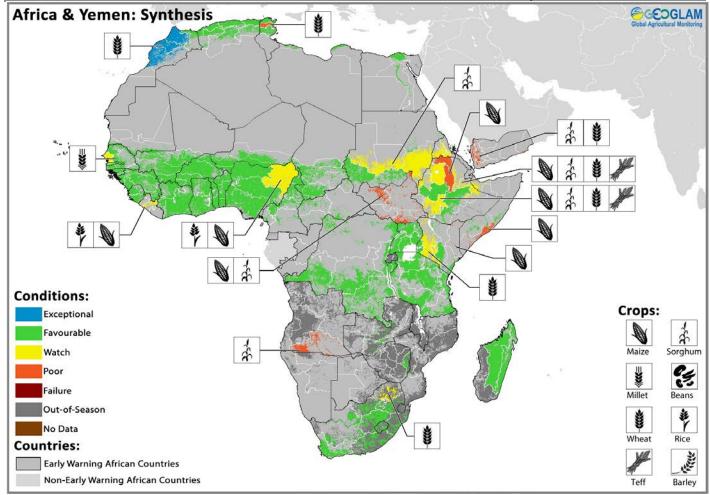
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GEOGLAM Crop Monitor for Early Warning

Crop Conditions at a glance based on best available information as of July 28th



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of July 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 sub region, crops are at varying stages of development while in the central and south, harvest of the 2018 main season cereal crops is underway and will finish in August. Abundant late spring rainfall notably over southern Somalia, and northeastern Kenya triggered severe riverine flooding in May and production over affected areas is expected to be below average.

WEST AFRICA: In West Africa, main season cereals are underway and conditions are favourable with improved rainfall in July.

MIDDLE EAST & NORTH AFRICA: In the Middle East, the 2017-18 winter wheat season is complete and production was below average in Syria and Iraq due to due ongoing conflict. Across North Africa, the 2018 winter wheat harvest is complete and production is average to above average due to good spring rainfall in most parts. However, concern remains in central Tunisia where carryover effects from early season dryness are expected to affect overall production.

SOUTHERN AFRICA: Planting of the 2018 winter wheat crop is complete across Southern Africa and conditions are favourable due to good rains at the start of the season.

CENTRAL & SOUTH ASIA: Harvesting of winter cereals will complete in August and there is concern over Uzbekistan, Tajikistan, Turkmenistan and Afghanistan due to lack of precipitations during winter and spring period.

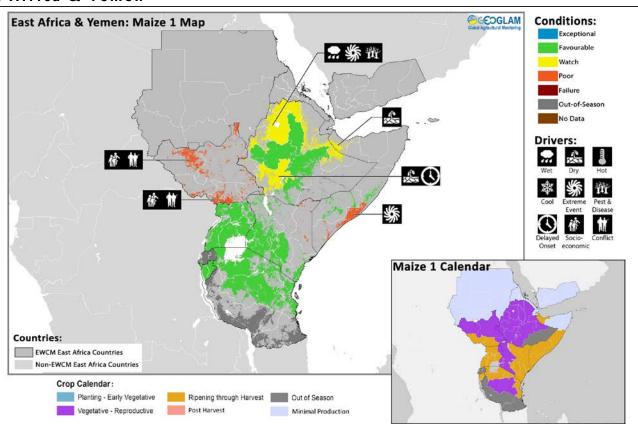
SOUTHEAST ASIA: In the northern side of Southeast Asia, sowing of wet season rice has started in all countries and growing condition is good due to enough precipitation. Some damage incurred over western Myanmar and Philippines due to monsoon and typhoon impacts causing heavy rainfall.

CENTRAL AMERICA & CARIBBEAN: Primera season harvest is just starting across early season planted areas and there is concern in parts of Guatemala, El Salvador, Haiti, and Cuba due to dry conditions.





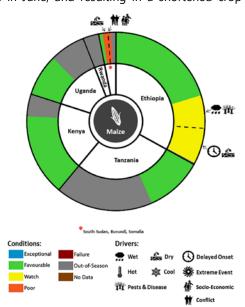
East Africa & Yemen



Crop condition map synthesizing conditions as of July 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.**

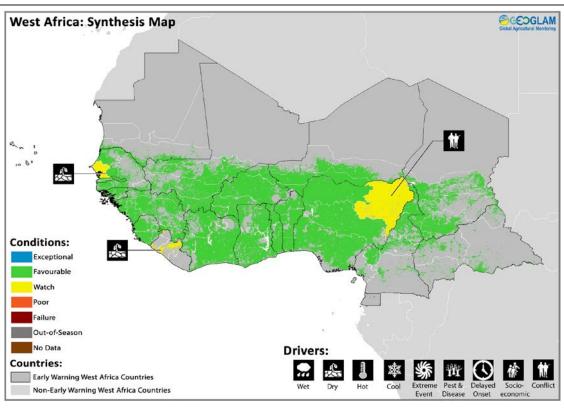
The June – September season started well in most parts of the region. Above average rainfall has been received across the north of the sub region over parts of Sudan, Ethiopia and South Sudan and crops are at various stages of development. The main cropping season in Kenya, Uganda and Tanzania has been favourable and harvest is underway. Flooding that occurred in May had impacts for the riverine regions in Somalia, and north eastern Kenya. In **Ethiopia**, the *meher* season, which is regarded as the major cropping season, began in June with most areas benefiting from the above average *kiremt* rainfall however, there is some concern due to damage sustained from heavy rainfall. In contrast, since July, precipitation has been below average across Afar, North Somali, and West Amhara which may impact crops at early development stages. Harvesting of secondary season *belg* crops is complete. In southern Tigray and eastern Amhara, dry conditions in March forced farmers to re-plant. In these areas the *belg* harvest was delayed, with negative effects on planting of major *meher* crops, which normally commence in June, and resulting in a shortened crop

development period. By contrast, in West Oromia, SNNPR, and East Oromia, final production was favourable due to good rainfall amounts received. In Eritrea, the 2018 kiremti season, which is the major cropping season of the country, is slightly delayed and rainfall in mid-July is below average in Gash Barka zoba. At this early stage, there is still room for improvement, so continued monitoring in the coming weeks will be relevant. In southern bi-modal rainfall areas of South Sudan, harvest is underway for first season crops and conditions are poor due to ongoing conflict. In central and northern unimodal rainfall areas, plantings operations started in mid-May, about two weeks later than normal, due to a delayed onset of seasonal rains and harvest is expected to begin in August. Across the country, agricultural activities continue to be affected by the protracted and widespread insecurity, which is constraining access to fields and continues to cause large-scale displacement of people and damage to households' productive assets. In addition, fall armyworm outbreaks are likely to further constrain yields. In Sudan, planting of 2018 main season crops, for harvest from October, is complete and conditions are favourable except in central areas of Kassala and Gederef where heavy rainfall in July caused flooding. Planted area and yields are likely to be affected by severe fuel shortages and by low availability and very high prices of agricultural inputs. In most pastoral and agro-pastoral areas, where drought conditions prevailed between mid-2016 and November 2017, abundant rains in March



- May offset accumulated moisture deficits benefited crops and prompted a substantial regeneration of rangeland resources. In northern and eastern Kenya, southeastern Ethiopia, central and northern Somalia, which experienced the most severe rainfall deficits during the past three subsequent rainy seasons, heavy rains within the March - May season resulted in marked improvements of vegetation conditions, which are currently above-average in most areas. By contrast, in northern pastoral areas of Ethiopia (Afar and Northern Somali region) sugum/belg rains started in April, with about a one month delay, and there is concern due to a prolonged dry spell and below average rainfall across the regions. In Yemen, conditions are poor for main season crops due to ongoing and worsening conflict impacting agricultural practices and market access which might hinder access to farm inputs and labour. In central and southern parts of the region including Burundi, Rwanda, eastern Kenya, southern Somalia, the United Republic of Tanzania and Uganda, harvesting of the 2018 main season cereal crops is underway and will complete at the end of August. The rainy season has been characterized by exceptionally high precipitation amounts across the sub region, with cumulative rainfall estimated at up to twice the long-term average. Abundant rains had a positive impact on crop establishment/development and vegetation conditions are currently good across most cropping areas. Flooding within the March to May was evident to negatively impact the crop conditions in most parts of eastern Kenya and riverine vegetation in Somalia's Juba and Shabelle zones. In the most affected marginal irrigated cropping zone in the northeast of Kenya, below average production is expected due to large areas of farmland submerged during harvesting stage and increased incidents of fall armyworm. However, across the main producing centre and rift valley, conditions are favourable with above average rainfall received. In Somalia, conditions have improved dramatically and although riverine production in July will be well below average, rain fed production combined with an above-average riverine offseason harvest in September is expected to lead to overall above-average gu production, much higher than initially expected. In Burundi and Rwanda, excessive moisture and flood damage is expected to result in a below-average pulse and rice output. However, this decline is likely to be offset by an increased production of more moisture tolerant crops including cereals, sweet potatoes, bananas and cassava, and the aggregate crop production is expected at average levels.

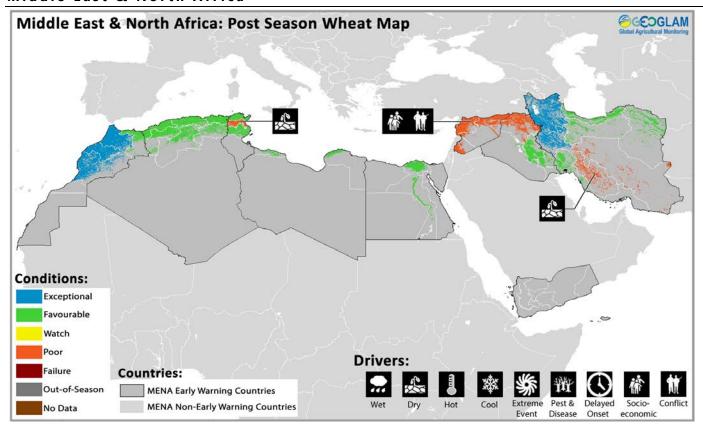
West Africa



Crop condition map synthesizing information as of July 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.**

The 2018-2019 agro pastoral cropping season is now underway in the extreme western part of the region and has been completely established over all the Sahelian zone. Across the central Sahel, main season cereals are in vegetative stage and conditions have improved from early season dryness with good rains in July. Although the rainfall situation has improved, for example, over Guinea and south West of Mali and parts of Senegal, vegetation conditions are still low and it is uncertain whether late rains will be able to compensate for the initial delay. In southern West Africa, main season cereals are in vegetative stage across Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon and the Central African Republic and conditions are generally favourable with good rains received leading up to the start of harvest in August. However, in **Sierra Leone** and central and west **Liberia**, there are some concerns due to persisting dry conditions in July that may impact final production. In **Nigeria**, while conditions are improving, concern remains in the northeast due to ongoing conflict affecting agricultural activities.

Middle East & North Africa

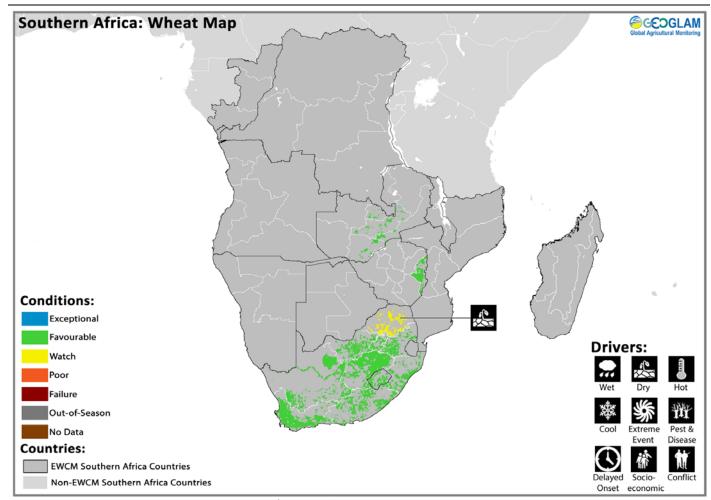


Crop condition map synthesizing information as of July 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Conditions that are other than favourable are labeled on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

In the Middle East, the 2017-18 winter wheat season is complete and production was below average due to due ongoing conflict in Iraq and Syria and dry conditions with above average temperatures in parts of Iran. In **Syria**, winter wheat production was below average due to poor rainfall distribution throughout the season and ongoing conflict impacting agricultural practices. In **Iraq**, winter harvest is complete and production is poor in the north due to poor unfavourable rainfall distribution throughout the season and impact of continuing conflict on agricultural practices. In **Iran**, despite lowered production in the south due to dry conditions impacting final harvest, national winter wheat production remains above average and in line with 2017's high production levels due to increased yields across the rest of the country and sufficient March-May rainfall which improved soil moisture levels.

Across North Africa, the 2018 winter wheat harvest is complete and production was above average due to good spring rainfall and temperatures. However, slightly below average production resulted in Tunisia due to prolonged dryness in central Tunisia affecting total production. In **Morocco**, production was above average due to good spring rainfall. National wheat yield forecast is 15% above the 5 year average and the barley forecast is 34% above 5 year average. In **Algeria**, yields are above average across the country due to positive rainfall and temperature conditions in spring. In **Tunisia**, the national yield forecast is slightly below the 5 year average due to drought conditions that have affected the central areas of the country for several months. However, the main cereal producing areas in the North have generally performed well. In **Libya**, production was favourable with adequate rains received. In **Egypt**, winter wheat harvest, grown primarily under irrigation, finished in June and production was favourable. Main season maize and rice is now in vegetative stage and conditions are favourable.

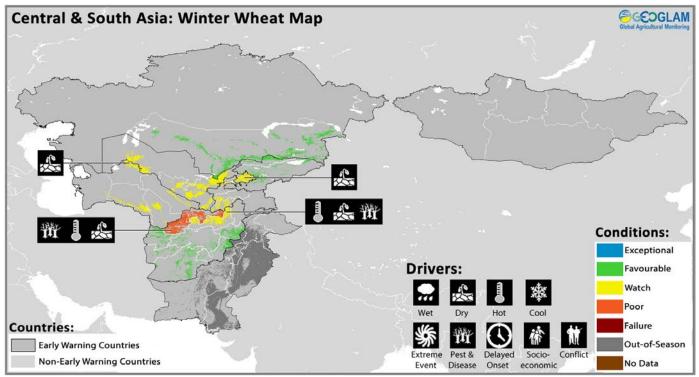
Southern Africa



Crop condition map synthesizing information as of July 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.**

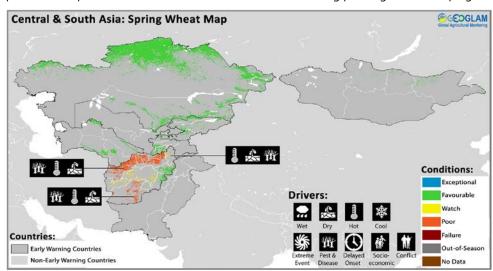
Planting of the 2018 winter wheat crop is complete across Southern Africa and conditions are favourable due to good rains at the start of the season. In **Zambia** and **Zimbabwe**, winter wheat is in vegetative stage and conditions are favourable. In **South Africa**, the crop outlook for winter wheat remains positive despite some concern over irrigated crops in Limpopo where dam levels are still recovering from dryness earlier in the year. Following widespread rain since the start of the season over especially the western parts of the Western Cape, the medium-term rainfall outlook remains good. In the **Democratic Republic of Congo**, planting of main season maize is underway and conditions are generally favourable at the start of the season despite patches of below average rainfall. In **Madagascar**, main season rice harvest is complete and production was favourable due to good rainfall received throughout much of the season.

Central & South Asia



Crop condition map synthesizing information as of July 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 Asia, harvesting of winter cereals is ongoing and is expected to finish by the end of August. In **Tajikistan**, **Turkmenistan** and **Uzbekistan** lack of precipitations during winter and spring periods has negatively affected yields of winter crops. As a result, total harvests are forecast at below the five-year average levels. In **Kyrgyzstan**, excessive precipitations just before the start of the harvest (at the end of May) had negative impact on winter cereals and total cereal output is officially forecast below last year's high level, but still above the five-year average. In **Kazakhstan**, harvesting of winter wheat is ongoing under favourable weather conditions, however the forecast for aggregate wheat production is set below the last year due to decline in area planted as farmers switch to more profitable crops. Across Central Asia, weather conditions during planting and developing of spring cereals were generally favourable.

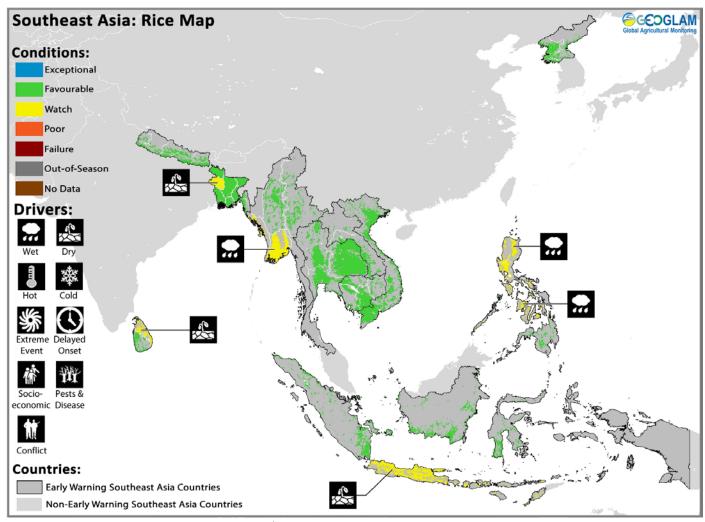


Crop condition map synthesizing information as of June 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are labeled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

Timely rains at the end of May increased below-average soil moisture and benefited crops. Harvest of spring cereals has started in beginning of August. In Afghanistan, the Turkistan Plains and Badghis/Faryab areas continue to show poor conditions for winter wheat based on remote sensing and field reports. Irrigated winter wheat in the south has done fairly well in comparison to other areas of the country that experienced first season irrigation water deficits. Rain fed spring wheat has fared much worse with widespread below average conditions due to lack of spring rains and production is expected to be seriously impacted due to both poor rainfall and reductions in planted area. The only areas in exception from this are the southern and eastern portions

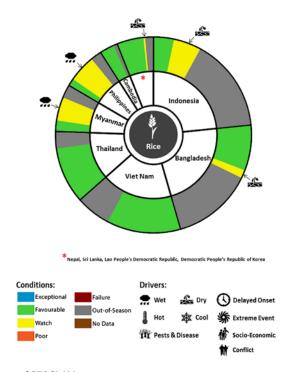
where above average rains were received. In **Pakistan**, sowing of main season rice crops which started in June is now complete and there is concern across all areas due to below average precipitation at the start of the season except over Punjab and Khyber Pakhtunkhwa where rainfall has been timely. In **Mongolia**, spring wheat planted in April is favourable with good rains throughout the season and harvest will commence at the start of September.

Southeast Asia



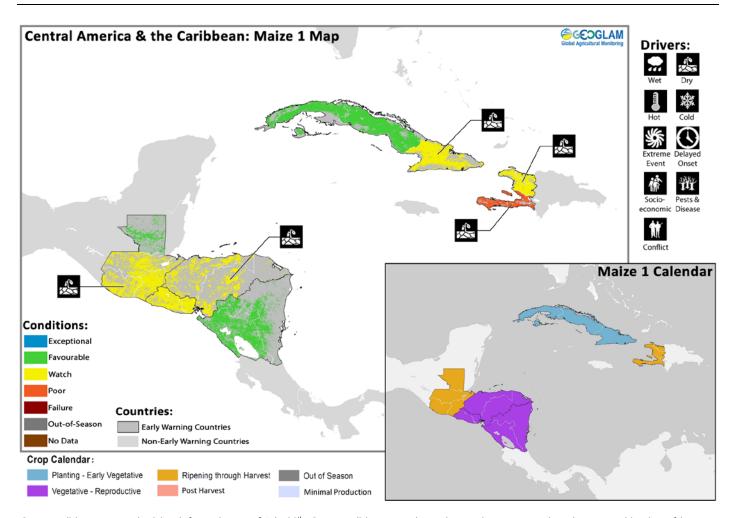
Crop condition map synthesizing information as of July 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts. **Crops that are in other than favourable conditions are labeled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

In the northern side of Southeast Asia, wet season rice planting is complete and growing condition is generally favourable due to sufficient precipitation. Some damage incurred over Myanmar and Philippines due to monsoon and typhoon impacts in June and July causing heavy rainfall. In Indonesia, planting of dry season rice has started in irrigated areas and lack of irrigation water remains a concern. In Viet Nam, winter spring rice (dry-season rice) harvest has completed in the north under favourable conditions. Sowing of summer-autumn rice (wet-season rice) is almost complete in the south and underway in the north. In the south, current sown area is reduced compared to last year due to the late harvest of dry-season rice. In Thailand, wetseason rice is in the tillering stage under favourable conditions thanks to ample rainfall. An increase in total sown area is expected. In **Laos**, wet season rice in lowland areas is in transplanting stage while upland rice is in tillering stage and conditions are favourable across the country due to sufficient rainfall amounts received. In Cambodia, early wet season rice is in grain filling stage and conditions are favourable due to sufficient rainfall at the start of the season across the country. Reports of minor drought in the northwest are now resolved due to good rainfall amounts in July. In Myanmar, dry season rice harvest is nearing completion and yields are slightly higher than the previous year despite a delay in harvest work. Wet season rice planting started in May and heavy rain and winds from monsoon impacted the delta and river basin area, flooding rice crops and causing areas to be replanted. In the **Philippines**, wet-season rice is under mixed



conditions as a result of damage concerns from consecutive typhoons hitting the country in the major producing regions. In **Indonesia**, sowing of dry-season rice has begun in irrigated areas. Overall sowing is behind last year's progress due to low levels of precipitation, however irrigation water levels in Java and Lesser Sunda Islands have recovered somewhat with recent rains. In the **Democratic People's Republic of Korea**, planting is complete for main season rice and conditions are favourable with good rainfall received. In **Bangladesh**, sowing of the *aman* rice crop started in June and conditions continue to be favourable with good precipitation amounts however, there is some concern in Rajshahi due to dry conditions. In **Nepal**, conditions are favourable for main season crops with good rains received throughout the season. In **Sri Lanka**, *yala* rice crop, making up 35% of national production, is in vegetative stage and conditions are favourable in the south with some concern over dry conditions in the northeast.

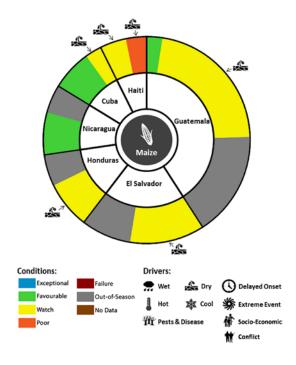
Central America & Caribbean



Crop condition map synthesizing information as of July 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, the *primera* season continues with some concern due to dry conditions in July that impacted crops at key stages of development. In **Guatemala**, despite good rainfall at the beginning of the season, high temperatures rainfall deficits have been in effect since the end of June over many areas in the south with different intensity and notably the departments of Escuintla, Retalhuleu, Santa Rosa and Jutiapa where yield reductions have been reported. While some precipitation was received in July, rainfall only reached 40% of the average. While total production may not be impacted, this causes concern for the most affected subsistence farmers in these departments that depend on rain fed agriculture for livelihood. In **El Salvador**, there is concern due to dry conditions in July impacting crops at key stages of development. Losses have already been reported by the government for subsistence farmers in the most affected eastern region, with precipitation deficits also reported in west that are expected to reduce yields. In **Nicaragua**, despite slight precipitation deficits throughout the season, conditions are favourable due to timely rainfall and in adequate quantities, field information indicates some losses in very localized areas. In **Honduras**, there is concern due to rainfall deficits and crop stress in July, notably in southern departments of Choluteca, El Valle and El Paraiso and northern departments of La Paz, Comayagua, Intibucai where subsistence farmers have reported losses and the area affected is expected to increase in the coming month. In the Caribbean, concern remains for main season crops over parts of Cuba and Haiti due to dry conditions. In **Cuba**, crop conditions have improved from last month's flooding from subtropical storm Alberto and conditions are favourable. Some concern remains in the east over Santiago de Cuba due to dry conditions and low rainfall accumulation throughout the season. In **Haiti**, poor conditions have resulted

due to irregular rainfall distribution and poor quantity, notably over the southern and eastern regions where permanent wilting has occurred and conditions will not improve and considerable losses have already incurred. Planting of second season crops is now being delayed due to continuing drought conditions. Farmers are waiting for soil moisture levels to improve and rains to come before they can start planting activities.



Information on crop conditions in the main production and export countries can be found in the <u>AMIS Market Monitor</u>, published August 2nd 2018.

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

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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Onset



Event



Socio- Pests & economic Disease



Crop Season Nomenclature:



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

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:



Sources and Disclaimers:

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 & Carribean					
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	





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



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

Cover Photo by: Christina Justice

Early Warning partners



























