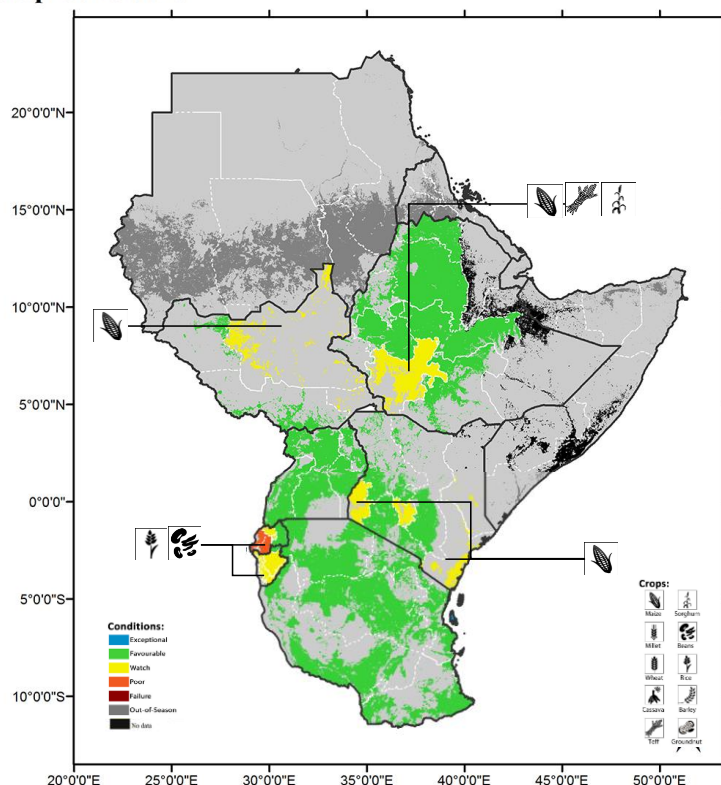


# EASTERN AFRICA CROP MONITOR BULLETIN

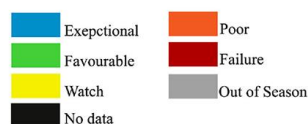
## Overview

- Eastern Africa has been experiencing average to above average rainfall resulting in overall favorable crop conditions.
- Watch conditions prevailed in Rwanda, Burundi for rice and beans and in Kenya for main season maize mostly due to water logging and flooding
- Poor conditions have been reported in Rwanda due to extensive damage to rice and beans.
- Prices of grain staples in the region were below the 5-year average for quarter-1 as a result of adequate stocks. With inbound stocks from Tanzania and Uganda regional prices are expected to decrease towards the end of quarter-2 of 2018.

## Crop Conditions



### Conditions



### Drivers:



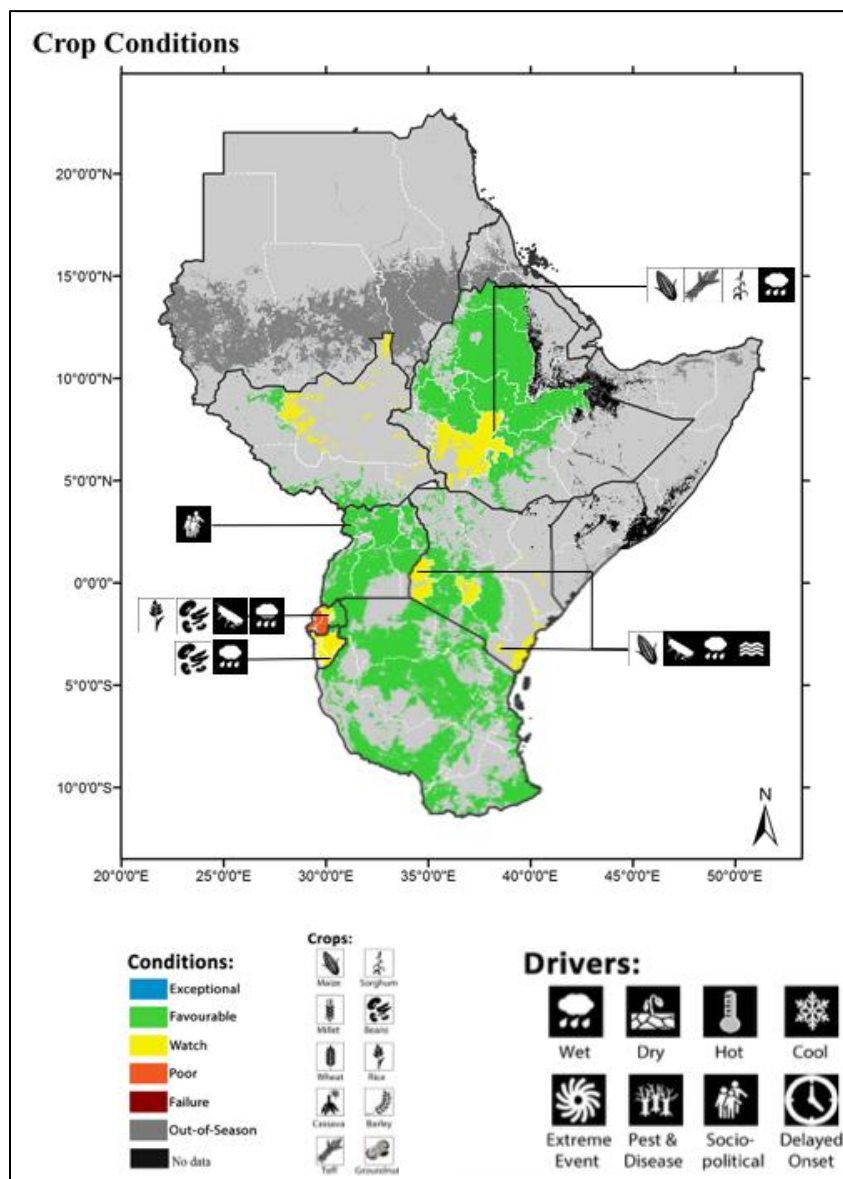
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## Market Information Grain Trade Q1

	Beans	Maize	Rice
Cross Border Trade	53,002 MT	190,181 MT	62,518 MT
Value of Trade	\$38 Mill.	\$34 Mill.	\$67 Mill.
Average Price in Q1 2018	\$403	\$262/MT	\$958/MT
Price change from Q1 2017	-37% ▼	-38% ▼	13% ▲

## Regional Crop Conditions



With most countries experiencing average to above average rainfall, overall favorable crop conditions have been reported. Some areas under watch due waterlogging, flooding and fall armyworm damage.

In **Burundi** rains were good, resulting in favorable crop conditions, including for banana and beans, which are the predominant crop in the current season. Limited areas experienced heavy rains at the early stage of planting, causing damage and slowed development.

Growing conditions in **Ethiopia** are favorable throughout the entire country except SNNPR region where crops have been affected by water logging and are under watch conditions.

**Kenya** received significantly above average rainfall causing waterlogging and flooding with negative impacts on crop conditions, aggravated by fall armyworm infestation. This is true for all regions except North Rift Region where conditions are generally favorable.

In **Rwanda** heavy rains caused poor conditions for rice due to waterlogging and flooding. In the eastern part conditions were favorable where rainfall supported good growing conditions for maize and beans.

Crops in most regions in **Tanzania** are in favorable conditions due to timely onset and good distribution of rainfall. Normal to above normal rainfall has been reported across the country.

In **Uganda** crop conditions are favorable across the country with both rainfall amounts and vegetation conditions above average. Incidences of flooding, waterlogging and mudslides in the country are isolated and have not had widespread negative impacts on crop growth.

## Regional Grain Markets and Trade Overview

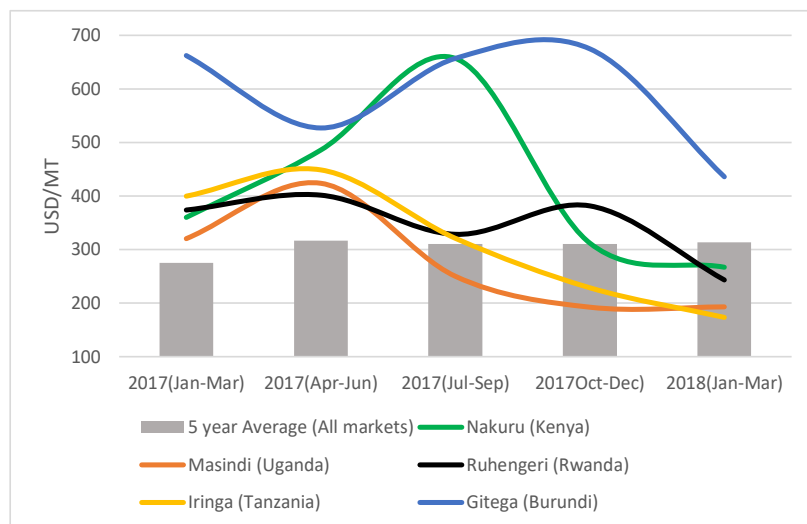


Figure 1: Wholesale quarterly average prices of maize in selected markets in production regions in East Africa

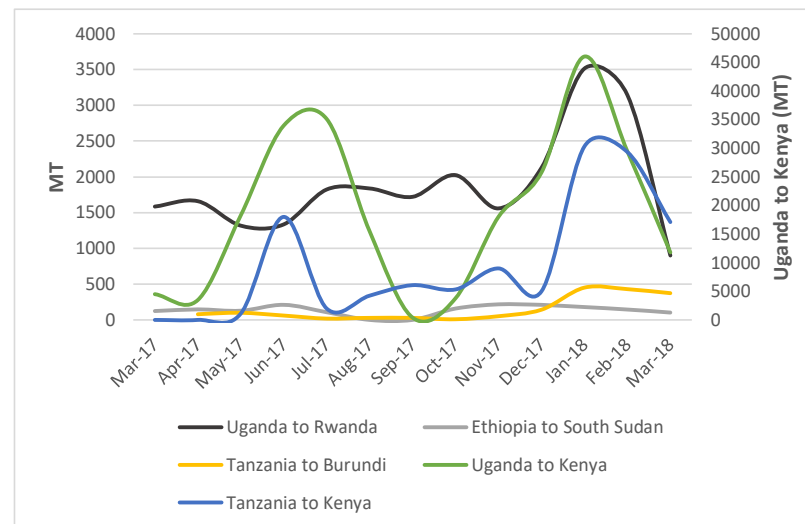


Figure 2: Informal and Formal Cross-border Trade of Maize. Source, EAGC RATIN, and FEWSNET

**Maize:** In the first quarter, a total of 190,181MT of maize was traded leading to an upward trend in intra-regional trade was observed in January and February following inbound harvest from Uganda, Rwanda, and Burundi. In the first quarter, Uganda exported 102,161.7 metric tonnes of maize as the country realized above average production with the Second season harvest ending in January. This was a 60 percent increase in trade compared to the fourth quarter of 2017. Kenya was the primary importer of Uganda maize accounting for 86 percent of the total trade. Demand for the commodity in Kenya remained high at the start of the year with cessation of the maize subsidy program late last year. With inbound stocks in Uganda, prices plunged to about USD 200/MT in the production regions and as a result, the low prices attracted Kenyan traders. In the first quarter of 2018, stocks in Tanzania remained atypically high due to export ban imposed on unprocessed maize that had been placed since July 2016. With the lifting of the ban late last year, there was increased activity in the southern trade corridors of Kenya as about 30,313 metric tonnes of maize was imported in January however, trade eased towards the end of the quarter. With improved seasonal performance, prices went down considerably in the first quarter (See fig 1.) as all markets prices were below the regional five-year average. In the second quarter, inbound stocks from the Msimu crop in Tanzania and the Main Season in Uganda will improve regional supply as field reports indicate good prospects of the crop.

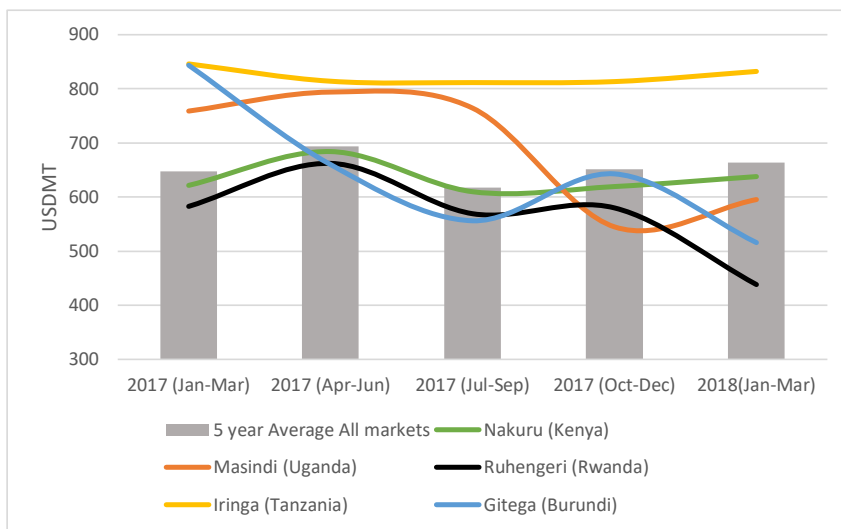
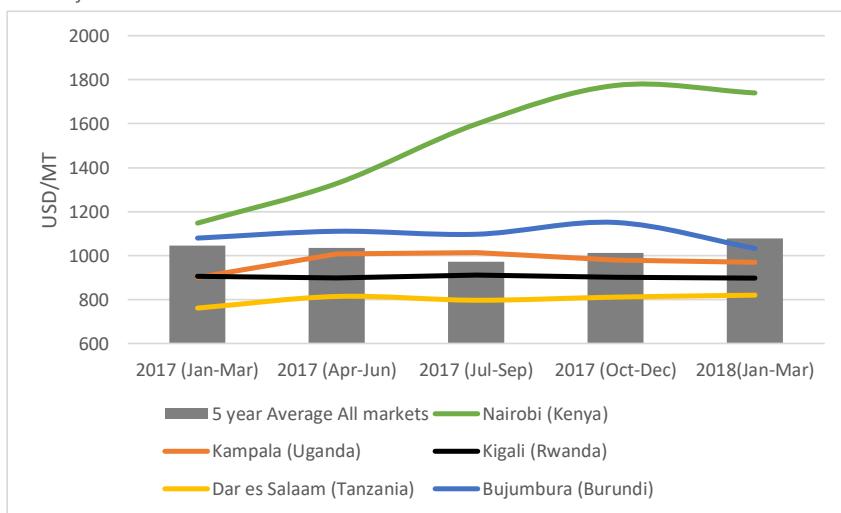


Figure 3: Wholesale Quarterly average prices of dry beans in selected markets in the production regions in East Africa. Source EAGC RATIN



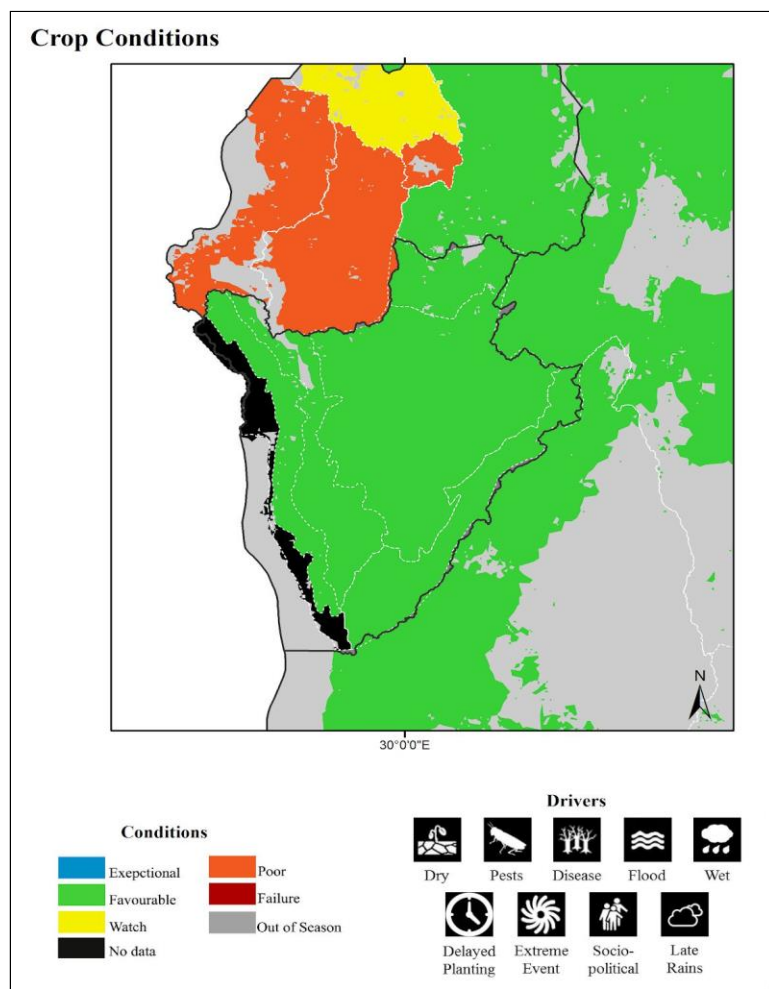
**Beans:** Trade declined seasonally as the harvest of the second season crop in Uganda, first season crop in Rwanda and Burundi ended in January 2018. From the monitored corridors, about 63,763 metric tonnes of beans was traded in the first quarter. Uganda accounted for 40 percent (25,591.49 MT) of total trade with exports to Kenya accounting for 80 percent of its trade in the quarter through the monitored borders. Kenya imported 20,459.18 metric tonnes of dry beans in the quarter from Uganda. This was a 47 percent decline from the five-year average and 39 percent increase from last year's levels. There was a decrease in volumes traded from Kenya from the last season due to low opening stocks in 2017 however, the imported stocks had a significant impact pushing prices down in the western markets. From Tanzania, a total of 2,152.23 metric tonnes was traded in the first quarter. There was a 98 percent increase in volumes traded compared to last year. The poor crop performance in 2016 led to lower carry-over stocks in 2017 and the sustained domestic demand led to lower opening stocks in 2018. In comparison with the five-year average, there was a 45 percent decrease in trade with Kenya as only 1,577.67 metric tonnes passed through the monitored borders. Trade between Rwanda and Uganda increased significantly

**Rice:** In the first quarter, 62,518 MT of rice was traded through the monitored borders with 39.24% of the total volume traded being formal. Tanzania remained the primary supplier for the region. In the first quarter, trade from Tanzania to Kenya increased by 25 percent with 22,792.025 metric tonnes being recorded. This was a 112 percent increase from the five-year average. Last year, the Mwea crop in Kenya performed poorly leading to shortfalls in domestic supply. Tightened supplies pushed prices to an all-time high of about USD 1800/MT in February. Trade between Rwanda and Tanzania increased towards the end of the quarter as domestic supply went down seasonally. In the first quarter, 5,636 metric tonnes was traded and this was a 23 percent increase from last year's levels. Trade is expected to peak in the second quarter of 2018 with inbound stocks from the Msimu season in May. Trade with Uganda decreased by 52 percent compared to last year. The export ban that was in place last year affected trade between the two countries; therefore, traders relied on the global markets following the shortfall in supply. In the second quarter, trade is expected to increase, as stocks in Tanzania will have shored up.

Figure 4: Wholesale Quarterly average prices of Rice in selected markets in the urban markets in East Africa. Source EAGC RATIN

## National Crop Conditions

### Burundi



### Beans : cropping season 2018/B



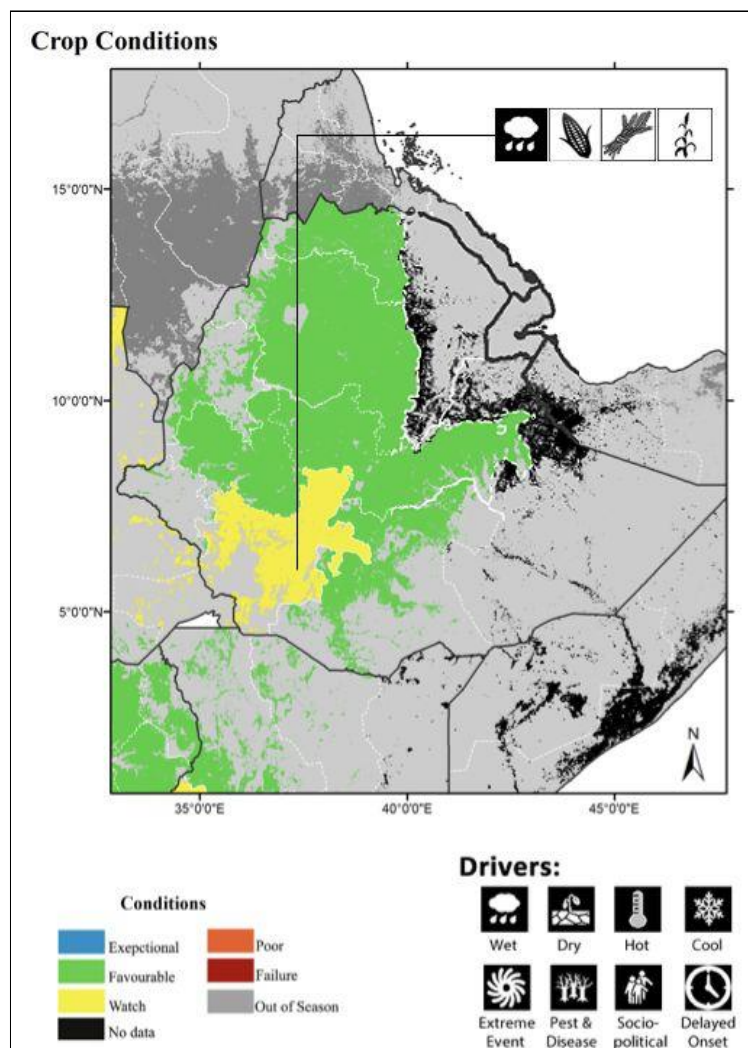
*Beans' field damaged by erosion in Muhanga Commune, Ngozi Province- April 2018*

In Burundi, beans is the predominant crop in the current 2018/B cropping season in almost all the agro-ecological zones. Some areas experienced heavy rains at the early stage of planting, causing damages or slowed development and the beans crops are still in the vegetative stage. In others areas, where soil erosion was not observed, beans crop is at the beginning of the reproductive stage and wet conditions will improve beans crops production.

**Banana crop: cropping season 2018/B:** Good rains were observed during the current MAM cropping season. This will improve banana crop production in the coming months.

**Maize crop: cropping season 2018/B:** Maize crop is nearly out of season in many parts of the country. However, in some few regions where maize crop has been cultivated and where soil erosion was not experienced, good rainy conditions will improve maize crop production.

## Ethiopia



The southern part of **Tigray** region received good rainfall according to field reports and maize conditions are favorable. NDVI indicates near normal conditions. Fall armyworm was observed at some locations but with insignificant effect. The weather forecast indicates that the region is likely to get good rainfall for the next half of the month.

In **Amhara**, based on information received from met stations, the region was getting good rainfall during the month of April and crops are in good growing condition. NDVI also shows near normal conditions. The weather forecast indicates that the region is likely to get ample amount of rainfall up to mid May.

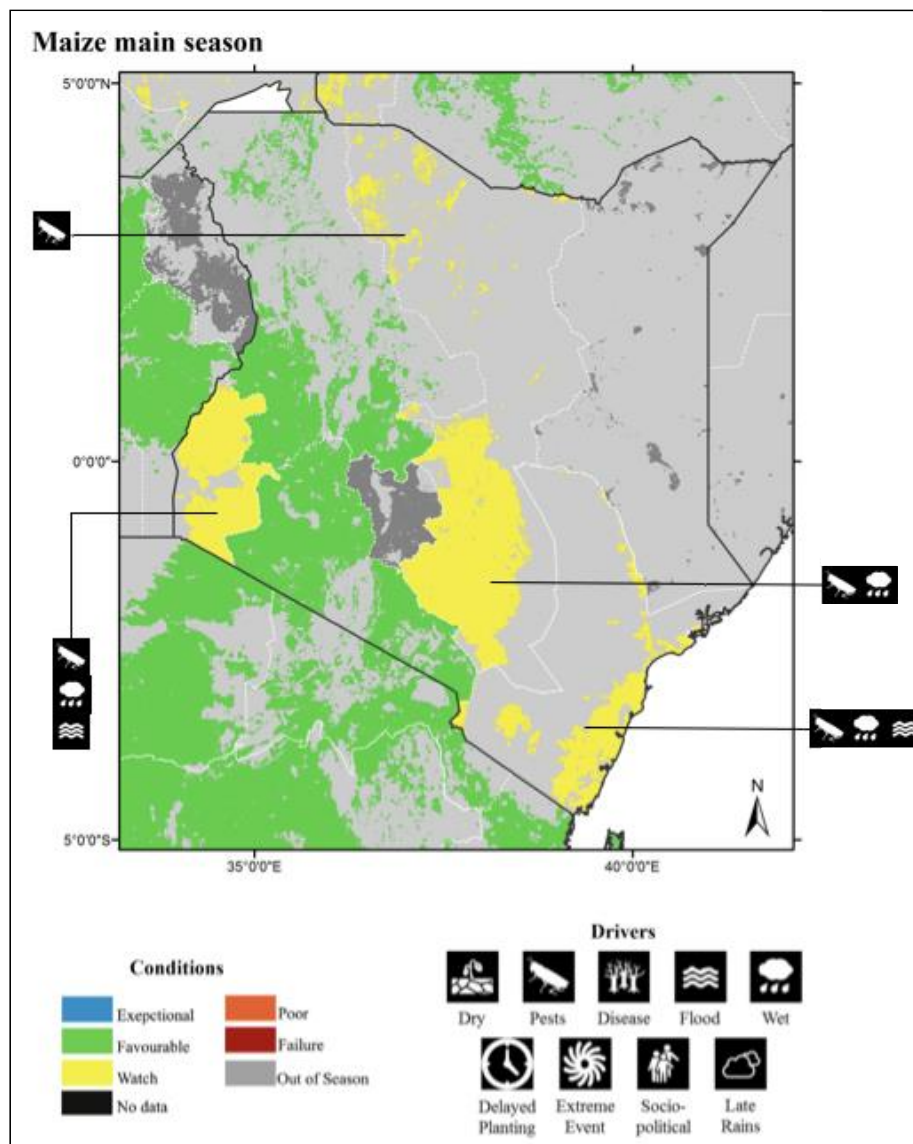
**Tigray** region is experiencing favorable growing conditions due to a good rainfall amount and distribution. The forecast indicates that most areas are likely to receive fair rainfall.

In **Oromia (West, Central and South Oromia)** crops are in good growing condition. The forecast indicates that most parts of the areas are likely to get normal to above normal rainfall for the next month.

**Beneshangul** - Remotely sensed vegetation condition and field reports indicate that the crop condition is found in good growing condition almost over the entire region with exception of the north-western part of the region. The forecast indicated that most parts of the areas are likely to get normal to above normal rainfall.

**SNNPR** - Based on field reports, the southern section of Ethiopia has been experiencing heavy and continued rainfall since the last dekad of March. Water logging could appear as a major problem for crops due to excess water on crop fields. The forecast indicates that the heavy rainfall conditions are likely to continue over most parts of the region particularly in the western part.

## Kenya



**Western Region** - The region is under watch because of too much rainfall and fall armyworm infestation. This is generally the case across all counties in the region. Parts of Busia and Kisumu counties are affected by flooding. Wet conditions are likely to slow crop vigor due to water logging and nutrient leaching which will ultimately lead to depressed yields.

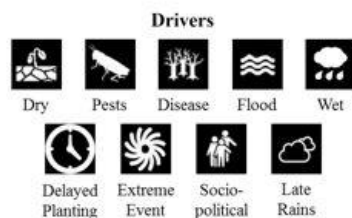
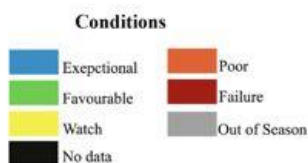
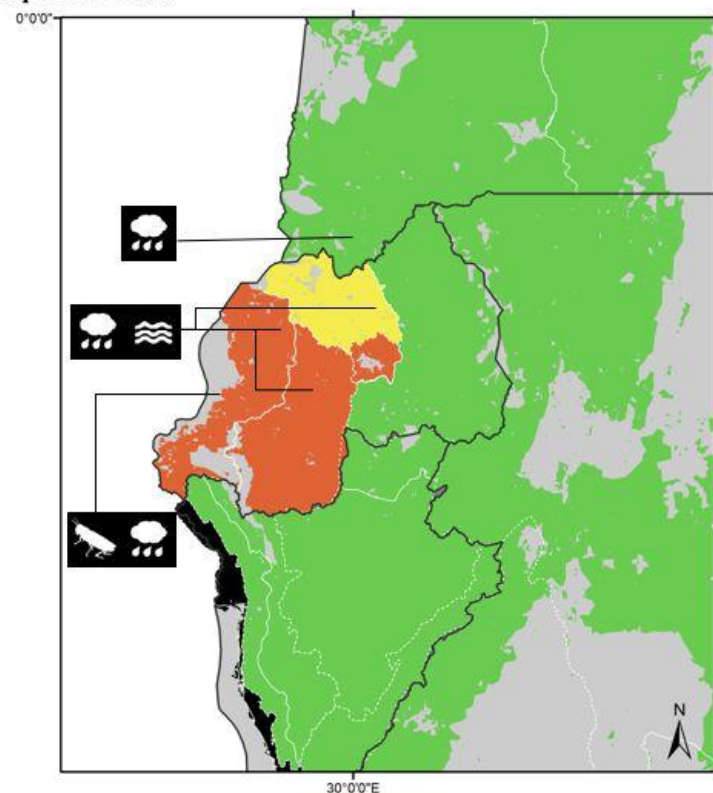
**North Rift Region** - The region is generally favorable; however isolated pockets have reported incidences of fall armyworm.

**Central Region** - The region is under watch because of too much rainfall and fall armyworm infestation. This is generally the case in the lower parts of the region bordering Eastern Region. The wet conditions are likely to decrease crop vigour due to water logging and nutrient leaching.

**Coastal Region** - It is under watch due to wet conditions, fall armyworm attack and flooding, particularly in Tana River and Kilifi Counties. These conditions are likely to lead to low yields.

## Rwanda

## Crop Conditions



The second season (season B) has been affected by heavy rain that caused some waterlogging and flooding in some parts of the country.

Maize and beans are favorable in East parts because of the maximum rainfall in this region usually used to be affected by drought. The conditions for maize & beans are poor in West and South provinces due to the heavy rain much affected these regions.



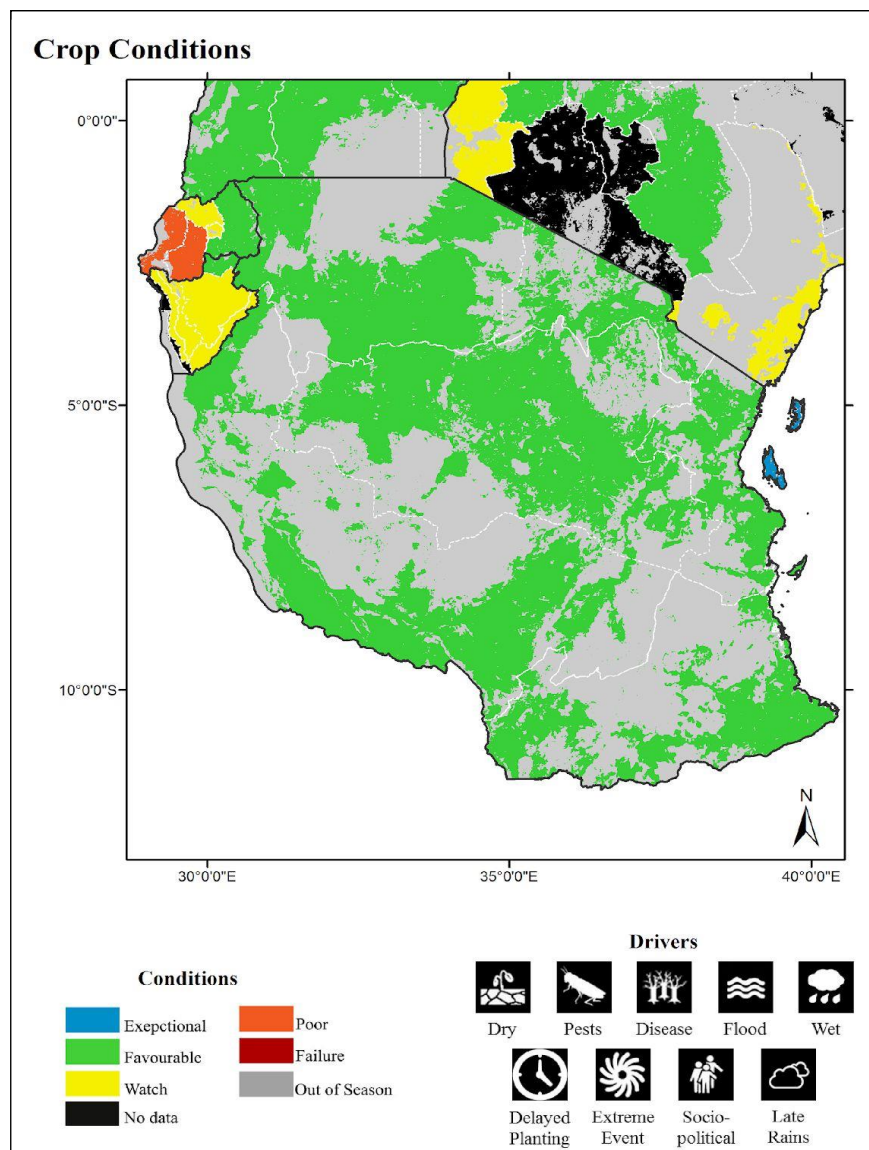
Beans fields damaged by landslides in Karongi district (7 may 2018).

North province seems to be watch because some of the parts have not totally affected by floods. There is an expectation of low rice production in all favorable regions, if the rain continues to be abundant throughout the season. Rice is usually grown in the marshland that are affected by waterlogging.



Maize Fields in NYAGATARE District, Eastern Province 27/04/2018

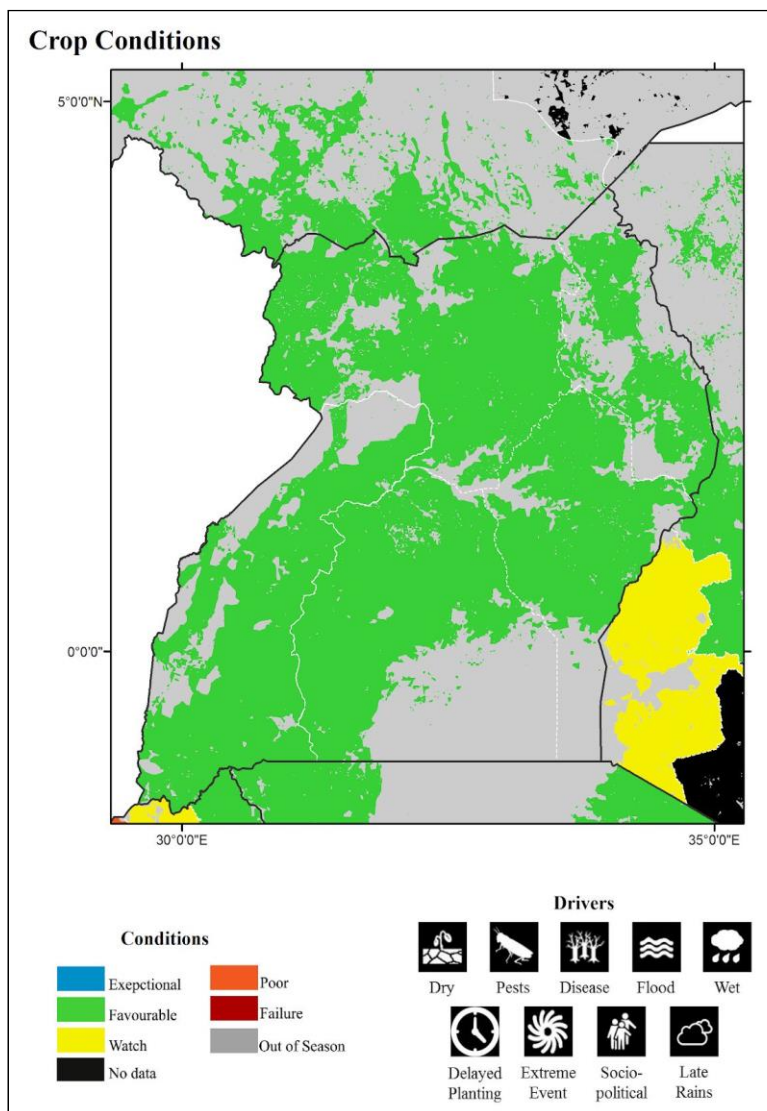
## Tanzania



Currently Crops are in favourable conditions in most of the regions, due to good rainfall across the country in terms of both the timing of the onset of the rainfalls and the spatial distribution. Crops in the majority of the regions, especially Maize, are in vegetative to ripening growth stages.

During the month of April, most of the areas in the country continued to receive adequate rains with normal to above normal rainfall amounts. The prevailing rainfall provided favourable conditions for crops and pasture. Under continuing good rainfall conditions the food crop harvest is expected to be good.

## Uganda



In **Uganda**, rainfall has been average to above average throughout most regions for the past month with NDVI above average which is “favourable” for annual crop growth in the fields and according to meteorology department, a good crop performance is expected to continue over all regions due to enhanced rains projected in May which will likely improve on the season harvests.

In northern parts of West Nile, Lango, Acholi and Karamoja, sorghum crops are reported to be “favourable” with consigned above average rainfall received in April. However, the **West Nile** region is home to close to a million people of concern (refugees), with this dramatic increase in population having implications on food security but minimal impacts on current crops in the field.

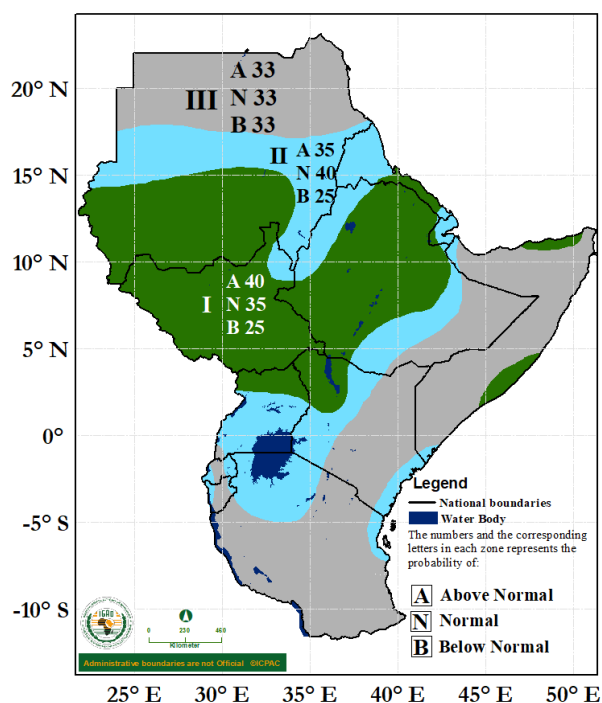
In **Western, Central** and **Eastern** regions, maize crop prospects are expected to be better compared to the **Northern** parts of the country. However, incidents of floods were reported in South Western districts of Kisoro, Kabale and floods in Kasese district in west.

Average maize crop prospects are expected in **Elgon** region eastern part of the country. The region received above average rainfall in the previous month with Bulambuli district recording the highest monthly rainfall of 371.0mm.

Although incidences of flooding, waterlogging and mudslides have been reported in the country, these events are isolated and have not had widespread negative impacts on the crop yield and overall average to above average yields are expected for all annual crops in the gardens.

## Climate Outlook and Impacts on Agriculture

### Consensus Rainfall Outlook for June to September 2018 season

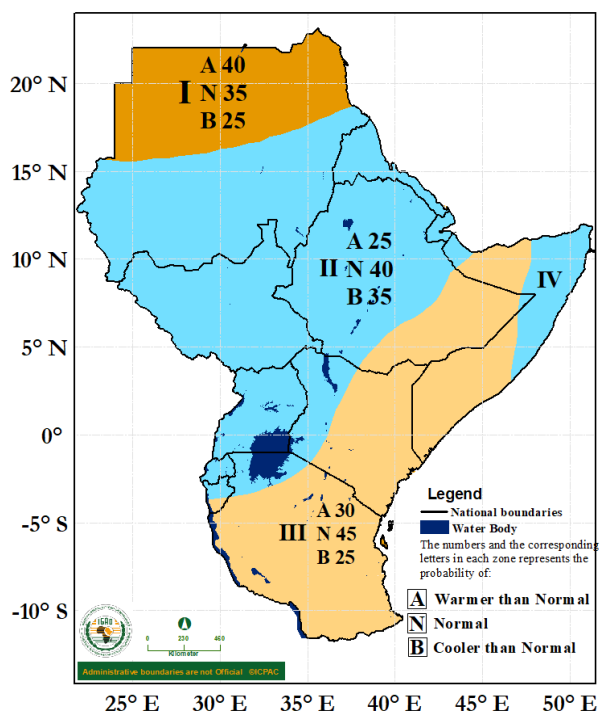


**Zone I:** Increased likelihood for above normal rainfall

**Zones II:** Increased likelihood of near normal to above normal rainfall

**Zones III:** Usually dry during June to September

### Consensus Temperature Outlook for June to September 2018 season



**Zone I:** Increased likelihood for above to near normal mean temperature

**Zones II & IV:** Increased likelihood of near normal to below normal mean temperature

**Zones III:** Increased likelihood for near normal mean temperature

COUNTRY	IMPACTS	MITIGATION MEASURES
<b>Burundi</b>	<ul style="list-style-type: none"> <li>MAM is termed as season</li> <li>Beans predominant crop during season B,</li> <li>Good rains conditions except in western part (Bubanza) and NE that experienced some flash flooding</li> <li>Banana-good prospects due to good rains</li> <li>Beans-flash floods in some areas at early stage due to heavy rain (Bubanza, cankuzo)</li> <li>Flash flooding in Imbo region affecting rice plantations</li> </ul>	<ul style="list-style-type: none"> <li>Soil erosion control structures established e.g. farm contour lines</li> <li>Watershed management activities-tree plantation on high lands</li> <li>River bank protection and rehabilitation-</li> <li>Pesticide application in areas affected</li> </ul>

	<ul style="list-style-type: none"> <li>Food security- good crop production prospects mostly banana, prices expected to go down for banana</li> <li>Generally good prospects</li> </ul>	<ul style="list-style-type: none"> <li>Seeds, fertilizer and pesticides- subsidized</li> </ul>
<b>Ethiopia</b>	<ul style="list-style-type: none"> <li>MAM is second and smallest season</li> <li>SE forecasted rainfall not achieved</li> <li>Onset is not as predicted -late onset observed</li> <li>March was very dry except in the southern part</li> <li>Serious water stress in some areas</li> <li>Southern Ethiopia-sufficient amount of rain in April and May. In areas that had excess water, there was instances of water logging</li> <li>Fall army worms in some parts-impact not very clear and in the state of watch</li> <li>Northern-Below Normal yield expected mostly due to dry spells</li> <li>Livestock- in SE areas, positive implication for pastures due to above normal rains</li> <li>Serious food insecurity cases likely in the north</li> <li>Belg season crops prospects are near normal</li> </ul>	<ul style="list-style-type: none"> <li>Update on seasonal climate was used</li> <li>Seed distributed for replanting-in areas that was swept by floods</li> <li>Fall army worm-in areas with less than 5 percent worm infestation (manual pick was recommended whereas areas with more than 5 %, pesticide control was recommended)</li> <li>Clearing of drainage system</li> </ul>
<b>Rwanda</b>	<ul style="list-style-type: none"> <li>S, W and some parts of the north was mainly affected negatively due to heavy rain which caused floods</li> <li>Forecasted rainfall not achieved in most areas</li> <li>Eastern, heavy rains affecting mainly rice specifically in the marsh lands Rice-low prospects</li> <li>About 4250-actres destroyed-in west and south province mountainous</li> <li>Good prospect for maize and beans in eastern part</li> </ul>	<ul style="list-style-type: none"> <li>Flood management</li> <li>National strategic reserves</li> <li>Prevention of fall army worms-applying pesticides-team including the ministry of defence and others (outreach program)</li> <li>Soil erosion control</li> </ul>
<b>South Sudan</b>	<ul style="list-style-type: none"> <li>Season started early</li> <li>Prolonged dry spell in mid-April</li> <li>Season Important for southern parts of SSD</li> <li>Flash floods in the lowlands-washed the first crop.</li> <li>Rains in march were intermittent</li> <li>Poor access to markets-most productive areas due to insecurity/conflict</li> <li>Conflict contributed mostly to food insecurity in</li> <li>High inflation of local currency-discouraging traders</li> </ul>	<ul style="list-style-type: none"> <li>Fall army worm-campaigns on training extension officers on how to reduce the impact,</li> <li>Signing of cessation of hostilities</li> <li>Early warning systems in each state</li> <li>Farmers had to replant</li> </ul>

<b>Somalia</b>	<ul style="list-style-type: none"> <li>• Post-harvest losses</li> <li>• Most of the spots are not agricultural zones</li> <li>• Re-planting in some areas mostly water melons and sesame to make use of the rains</li> </ul>	<ul style="list-style-type: none"> <li>• Post-harvest technologies</li> <li>• Rehabilitation of agricultural infrastructure destroyed by flooding</li> </ul>
<b>Sudan</b>	<ul style="list-style-type: none"> <li>• No rain- march and April was dry</li> <li>• Impacts noted on price increases</li> <li>• Season starts towards the end of May</li> <li>*Main season is JJA</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic reserves distributed e.g. sorghum to Kordofan state, plan to distribute sorghum to eastern parts</li> <li>• Early Warning information given to sectors</li> </ul>
<b>Tanzania</b>	<ul style="list-style-type: none"> <li>• Above normal areas-rice cultivated areas</li> <li>• Fall army worms in some areas</li> </ul>	<ul style="list-style-type: none"> <li>• Early warning information</li> <li>• Pesticide application</li> </ul>
<b>Uganda</b>	<ul style="list-style-type: none"> <li>• Early onset</li> <li>• Farmers didn't plant immediately</li> <li>• Cereals are doing well</li> <li>• Problem of fall army worm in some areas</li> <li>• Negative impact on Irish potatoes-bacterial infection-tubers are rotten</li> <li>• Beans-heavy rainfall-bean getting burnt</li> <li>• First planted beans are now ripening though performance isn't good</li> <li>• Negative impacts out-weigh positive</li> <li>• Cereal prospects are okay, beans not good</li> <li>• Food prices has remained stable</li> <li>• Access to market-some bridge was cut off</li> <li>• SW UGANDA-SEVERE Haile storms destroyed banana plantations</li> <li>• Tomato diseases</li> </ul>	<ul style="list-style-type: none"> <li>• Advisories prepared and disseminated to districts</li> <li>• Army worm: The government of Uganda established a task force to create awareness, manage, procured pesticide</li> <li>• Hail storms affected areas-food aid from OPM</li> </ul>

## Definitions

### 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.

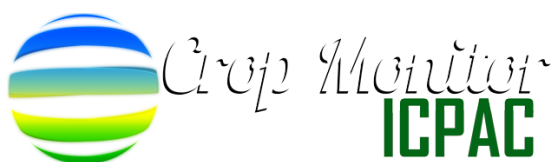
**Socio-economic:** Social or economic factors that impact crop conditions (i.e. policy changes, agricultural subsidies, government intervention, etc.)

**Conflict:** Armed conflict or civil unrest that is preventing the planting, working, or harvesting of the fields by the farmers.





**ICPAC**  
IGAD Climate Prediction  
& Applications Centre



**Prepared by members of the GEOGLAM Community of Practice, Coordinated by the IGAD Climate Prediction and Application Center**

## Partners



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



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