EASTERN AFRICA CROP MONITOR

BULLETIN NO. 6:
Season Update December 2019

ICPAC
IGAD Climate Prediction
& Applications Centre

OVERVIEW

Climate: Climatic season predictions forecasted early rains, higher rainfall and higher temperatures in the October-December season in most parts of the region (see OND predictions). The season has been characterized by the early rains and above normal rains. Notably, a tropical storm in the Horn of Africa region has cause rains and flooding in parts of Kenya, Ethiopia, Somalia and Djibouti. From the beginning of the season to end of November, most parts of the region have already recorded wetter than normal conditions.

Crops: The Eastern Africa region is currently under different crop stages; harvest in the northern sub-region and planting to vegetative stages in equatorial and southern regions. Most crop regions are under favourable conditions as per November 2019 assessments due to above average rains experienced in most parts of the region. Excessive rainfall due to tropical storm in the Horn of Africa has cause flooding and the impacts on crops will be established in December and January assessments.

Trade: Regional trade was key in improving supply of grains, specifically maize, beans and rice in the urban markets in Kenya as domestic stocks remained low in most of the production regions. Trade between Uganda and Rwanda was still hampered by the ongoing disputes between the two countries. October towards the end of the year, grain prices are relatively stable as compared to the previous month. In Kenya, maize prices are expected to go down due to the harvest season, which will see increased supply to markets. Maize prices in Tanzania still were firmly high, owed to domestic demand and increased regional demand from the South African countries.
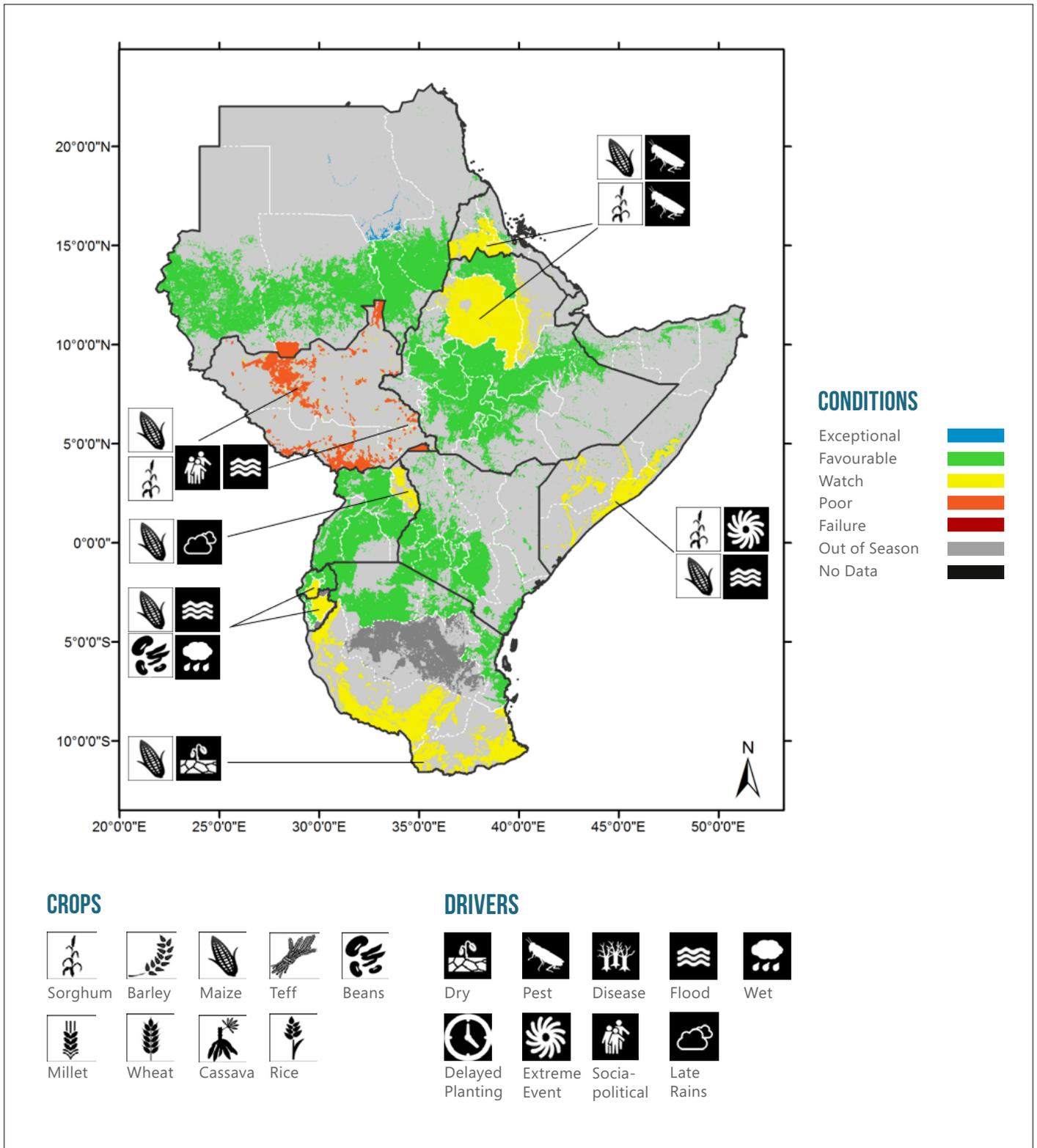
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CROP CONDITIONS

The crop season was characterized by an early start in western parts of the equatorial region and higher than normal rains in northern sub-regions of Eastern Africa. Harvest is underway for the main cereals in norther sub-regions, while equatorial sub-region crops are in vegetative stages and early planting in the southern sub-region. Crops are generally in favourable condition due to above average rainfall. In some of the crop lands, excessive rainfall led to flooding.

CONDITIONS

Exceptional
Favourable
Watch
Poor
Failure
Out of Season
No Data

CROPS

Sorghum Barley Maize Teff Beans

Millet Wheat Cassava Rice

DRIVERS

Dry Pest Disease Flood Wet

Delayed Planting Extreme Event Socia-political Late Rains

Floods in a maize field in Gisagara district, Southern Province Rwanda

Crops in **Burundi** season A have been favored by the early and above average rainfall in some regions while affected by floods and landslides in some. Maize and beans in *Bururi, Muramvya, Ngozi* and *Gitega* are in favourable condition. Landslides and floods are have occurred in some parts of the country like western parts of the country (landslides) and central (flooding) due to heavy rainfall received in November. Low maize crops production is forecasted in those regions due to flooding like *Kirimiro* region and due to landslides in western parts like *Imbo* and *Mirwa* regions.

In **Rwanda** rainfall has been above average across the country and forecast indicate the rainfall for the remainder of the season will be average. Average harvests are expected from December 2019 to February 2020. Despite the generally favorable production prospects, heavy rainfall has caused flooding in lowlands in some areas like Gisagara district in Southern Province.

In **Uganda** above-average rainfall since June prompted early planting for the second season. In *Karamoja,* harvest of cereals from the bimodal harvests was complete. In southern and central areas, the harvest is completed or ongoing. Recently planted crops are in favourable conditions due to the early rains in September and extended rains through December.

Kenya: Early rainfall onset and extended short rains season rainfall have led favourable wheat in growing areas of *Timau* and for maize and beans in *Central, Rift valley, Eastern* and *Coastal* regions. Above average rains have favored newly planted maize crop in many parts of the country and weeding activities currently being carried out. Heavy rainfall impacted maize crop in *Western Kenya, Uasin Gishu* and *Trans Nzoia* where the crop was at harvest stage and crop losses due to excess moisture on the grains is expected.

Tanzania *Vuli* rains have been heavy especially in the coastal regions of *Dar es Salaam, Tanga, Pwani, Unguja, Pemba* and *Morogoro.* Flooding was reported in some areas while planting started around the lake regions of *Mwanza, Shinyanga, Geita, Mara* and *Tabora.* Other regions which expected to start planting in November to early January had delayed rainfall and dry conditions which delayed planting activities.

Desert Locust in Afar Ethiopia in September 2019

Ethiopia is in the Belg season October-November is the harvest season for most crop regions planted in the Meher season June and July. The rains have been above average rainfall through most of the season in *Tigray* crop areas and in Somali region which resulted to favourable teff, wheat and maize conditions. There was however widespread desert locust attack on crops in the months of September and October led to some crop damage and loss in *Afar, Amhara, Eastern Oromia*, Somali and *Tigray* regions.
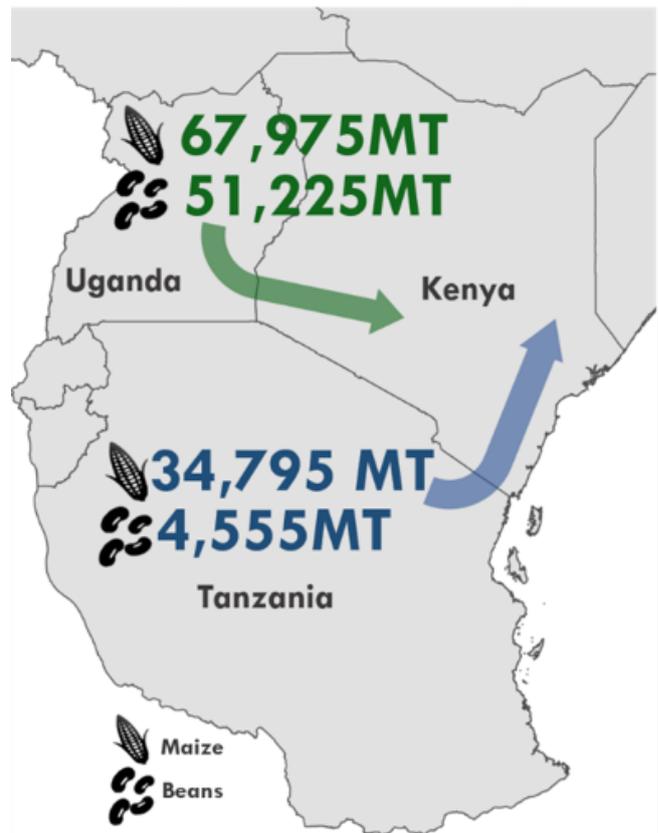
Eritrea's conditions are favourable for main season crops across key cropping areas of *Anseba, Debub, Maekel* and *Gash Barka* regions due to early-onset and sufficient Kiremti rains during most of the cropping period.

In **Somalia** planting of *Deyr* secondary season crops was recently completed. Heavy rains in October benefited crop establishment but resulted in severe flooding along the *Shabelle* and *Juba* rivers, damaging crops in *Bay* and *Bakool* regions and causing fatalities and displacement. Tropical storm *Kyarr* caused excessive rainfall in *Somaliland* and *Puntland.*

In the **Sudan,** harvest will started in November for main season cereals and conditions are generally favourable with high yields expected in rainfed areas due to abundant rainfall throughout the season.

In central and northern unimodal areas of **South Sudan**, harvest is underway for main season cereals and in the bimodal south, second season crops are in vegetative to reproductive stages. While crop growing conditions have been generally favourable due to average to above average rainfall throughout much of the growing season, agricultural operations continue to be affected by the lingering impact of the prolonged conflict, which resulted in asset depletion and damage to infrastructures. In addition, heavy late season rains in October led to widespread floods, especially in eastern areas of the Greater Upper Nile Region. A State of Emergency was declared on October 27 and according to the International Rescue Committee more than 600 000 people have been forced to leave their homes.

Major Trade in Q3 2019

67,975MT
51,225MT
Uganda → **Kenya**

34,795 MT
4,555MT
Tanzania

Maize
Beans

109%
Increase in beans export in Uganda to Kenya Q2 and Q3 2019
Source: EAGC RATIN

VEGETATION CONDITIONS

Progress of Vegetation Conditions in IGAD

Data Source: SPOT
VGT/PROBA V NDVI

September 11

October 11

November 11

NDVI VCI (%)

0   20   40   60   80   100

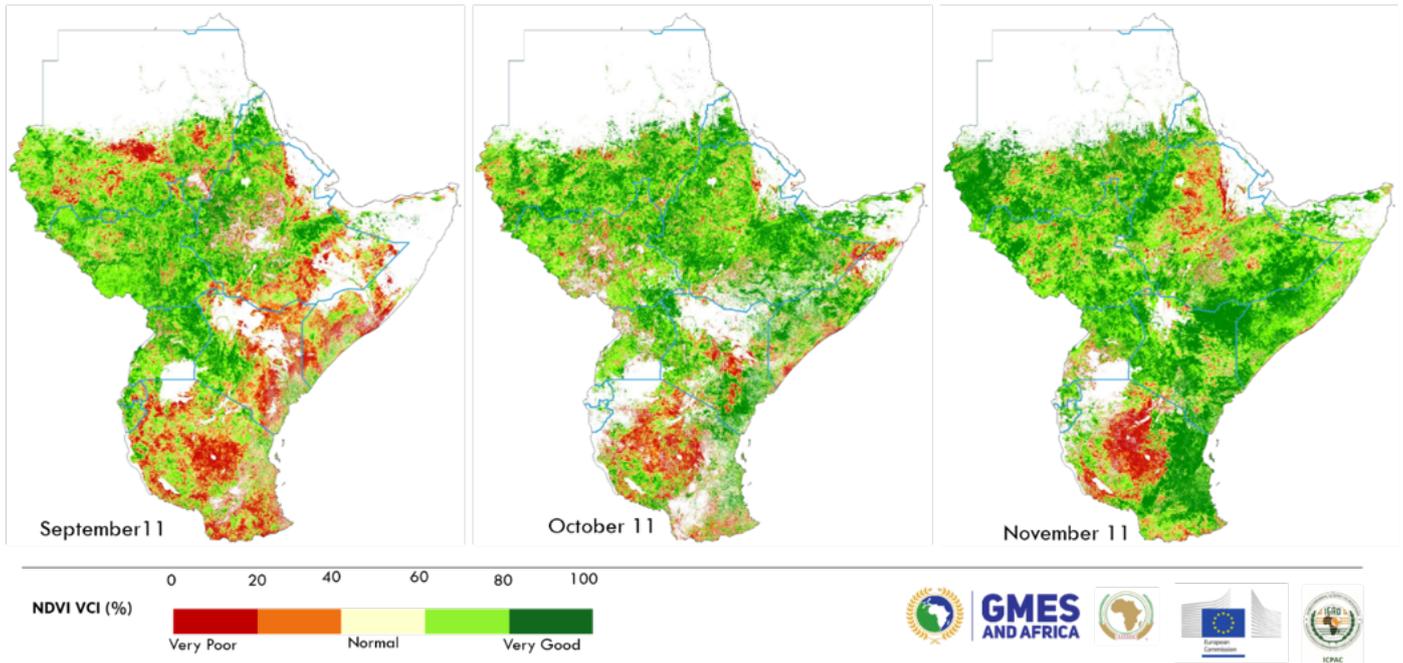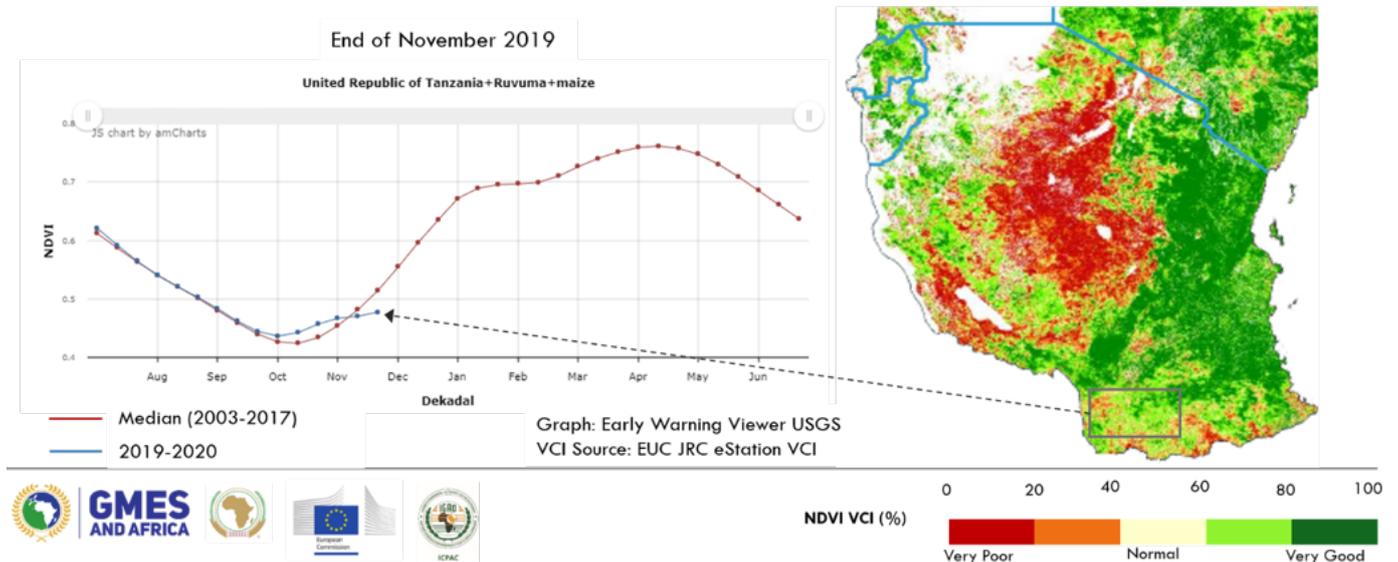Very Poor   Normal   Very Good

Figure 2: Vegetation conditions show recovery in October and November in most parts of Greater Horn of Africa

Monthly assessments of Vegetation Condition Index (VCI) show vegetation recovery due to above average rains in most parts of the region with most parts are in good to very good vegetation. Central and southern **Tanzania** *Singida* and *Ruvuma* are in a worse condition due to sustained dry period and a late *vuli* rainfall season start. *Amhara* and *Tigray* **Ethiopia** have parts with poor to very poor performance due to conditions poorer than long term or usual conditions. This has been caused by poor performance of rainfall and desert locust pests which attacked vegetation in the sub-regions.
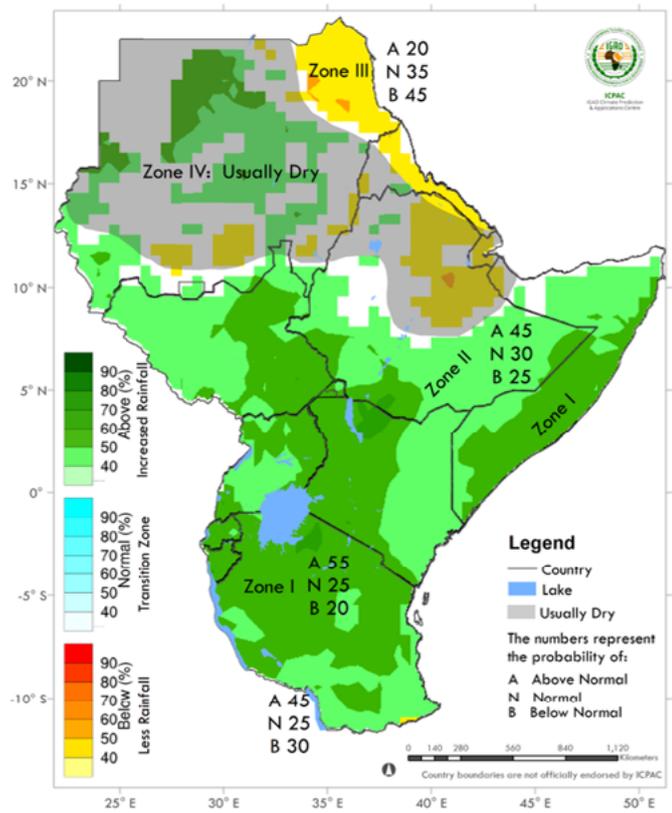
Current Vegetation Conditions in Ruvuma Tanzania

End of November 2019

United Republic of Tanzania+Ruvuma+maize

JS chart by amCharts

NDVI

0.8

0.7

0.6

0.5

0.4

Aug   Sep   Oct   Nov   Dec   Jan   Feb   Mar   Apr   May   Jun

Dekadal

— Median (2003-2017)
— 2019-2020

Graph: Early Warning Viewer USGS
VCI Source: EUC JRC eStation VCI

NDVI VCI (%)

0   20   40   60   80   100

Very Poor   Normal   Very Good

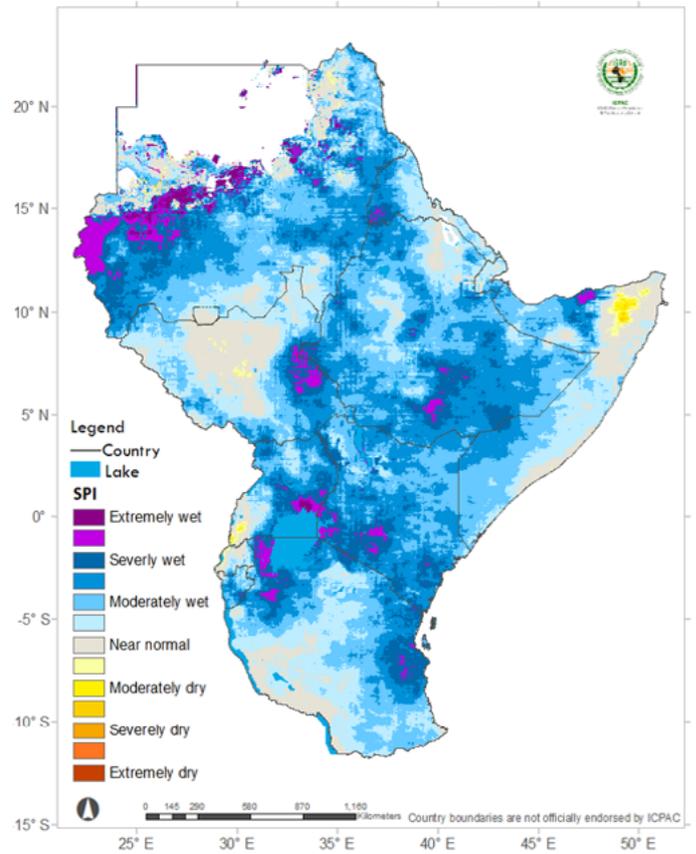# CLIMATE ANALYSIS FOR OCTOBER-DECEMBER SEASON

Rainfall Outlook
October-December Season 2019

Standardized Precipitation Index(SPI)
1 October to 30 November 2019

In December **Tanzania,** southwestern **Kenya,** south-eastern **Uganda, Burundi,** and **Rwanda** are expected to receive heavy rainfall. Some areas in **Kenya,** western **Sudan,** southern and central **Somalia, Djibouti,** southern **Ethiopia** and south eastern **Uganda** have reported flooding. The SPI map based on rainfall observations show instances of extreme and severely wet events in the region based on long term averages of rainfall. The risk of flooding continues to be high to the end of the season; preparedness and early action are highly advised to avoid crop loss. The surplus in rainfall is closely linked to ongoing positivity of the Indian Ocean Dipole (IOD). In cases where the Sea Surface Temperature (SST) in the western Indian Ocean is high, a positive IOD is recorded, resulting in massive low-pressure system accompanied by extreme wind and precipitation anomalies across large areas in the Eastern Africa.

80%
Areas of the region with Above Average October-December Rainfall in 2019
More Information & Climate Products: www.icpac.net

REGIONAL GRAIN MARKETS AND TRADE OVERVIEW

Overview

In the third quarter of the year, cereal crop output in **Kenya**, Northern **Tanzania** and **Uganda** from the first season was below average despite the season's improved rainfall. The late onset of rains affected the harvest raising the grain prices relatively higher than that of the same period last year. The harvest in **Uganda, Rwanda** and **Burundi** improved market supply which led to a decrease in prices in most of the observed markets. The June to August harvest season was completed in **Tanzania.** The grain prices in the third quarter maintained seasonal trends but higher than the similar quarter in the previous year, mainly due to tightened stocks caused by late onset of rainfall. The prices are expected to trend seasonally for **Kenya** and **Uganda** but above the last year's levels for maize and beans. In Tanzania and Burundi, prices of maize and beans are likely to trend below the five-year average due to ample stocks through the end of year 2019.

In the month of October towards the end of the year, grain prices are relatively stable as compared to the previous month. In **Kenya,** maize prices are expected to go down due to the harvest season, which will see increased supply to markets. Maize prices in **Tanzania** still were firmly high, owed to domestic demand and increased regional demand from the South African countries. Regional trade was key in improving supply of grains, specifically maize, beans and rice in the urban markets in **Kenya** as domestic stocks remained low in most of the production regions. Trade between **Uganda** and **Rwanda** was still hampered by the ongoing disputes and tensions between the two countries.
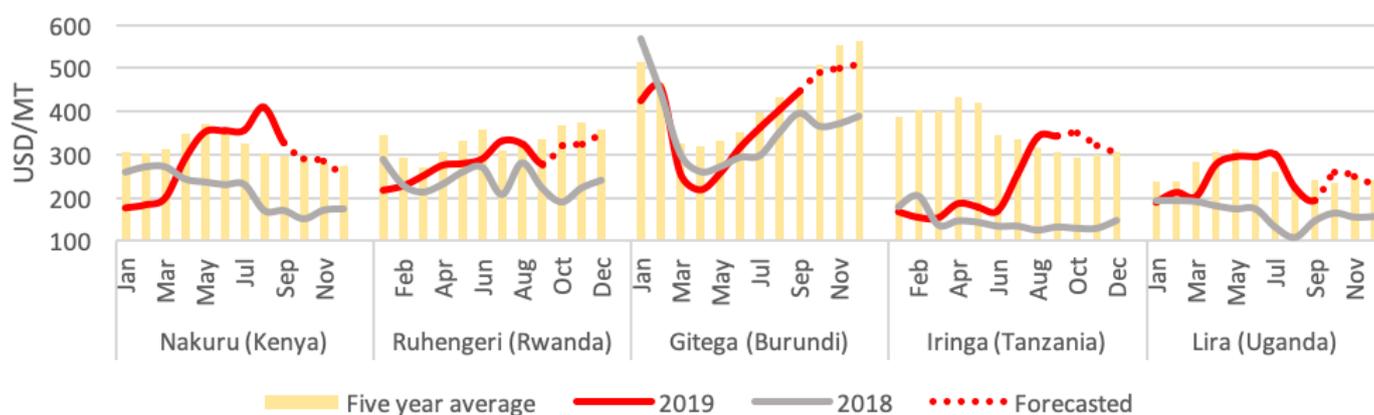

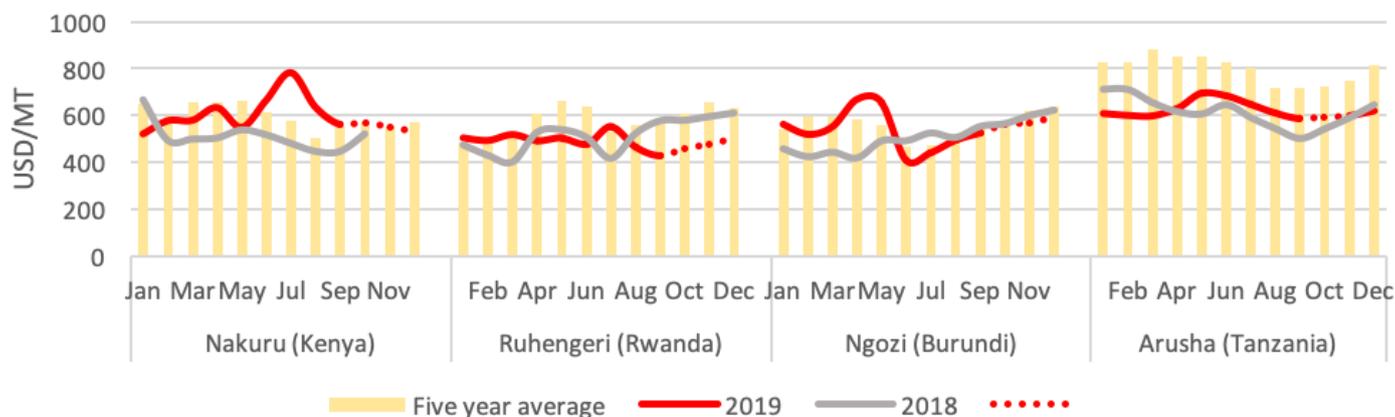**Figure: Maize Price Forecasts up to December 2019**

Figure: Projected Beans prices in selected production markets of East Africa. Source: EAGC RATIN

GRAIN TRADE NOTES

🌽 MAIZE

• Huge spike in trade in Q3, mostly due to import surge in **Kenya** as domestic stocks dwindled and poor harvests for Season B in **Rwanda** and **Burundi**

• **Uganda** has been biggest exporter of maize to East Africa, since Tanzania's surplus has been diverted to Southern Africa

• **Uganda** maize exports to **Kenya** was 67,975MT in Q3 and 34,795MT by **Tanzania**

• Minimal trade between **Uganda** and **Rwanda** due to ongoing trade disputes

🫘 BEANS

• The third quarter saw a slight increase in trade in the region.

• **Uganda** was the largest exporter of beans to Kenya, with quantities amounting to about 51,225MT. This was a significant increase of 109% from the previous quarter and this was attributable to tightened stocks as the growing season commences in **Kenya.**

• **Tanzania** exported 4,555MT of beans to **Kenya** while **Uganda** exported 8,394MT to **South Sudan** during the same period. Trade is expected to remain relatively high to meet demand given the below average performance of the past two seasons.
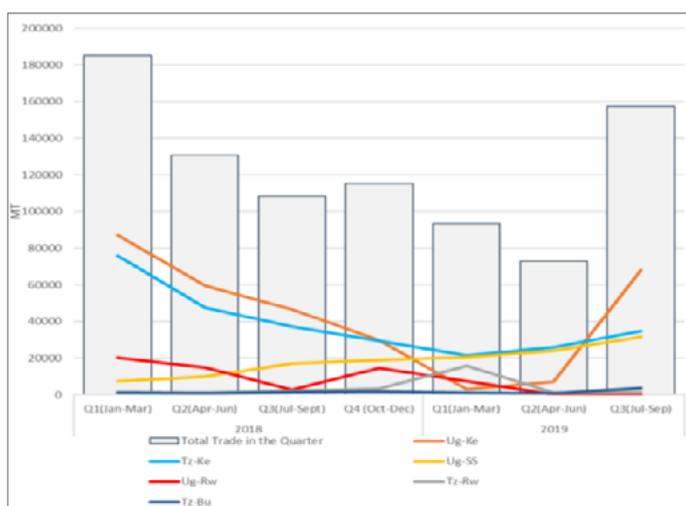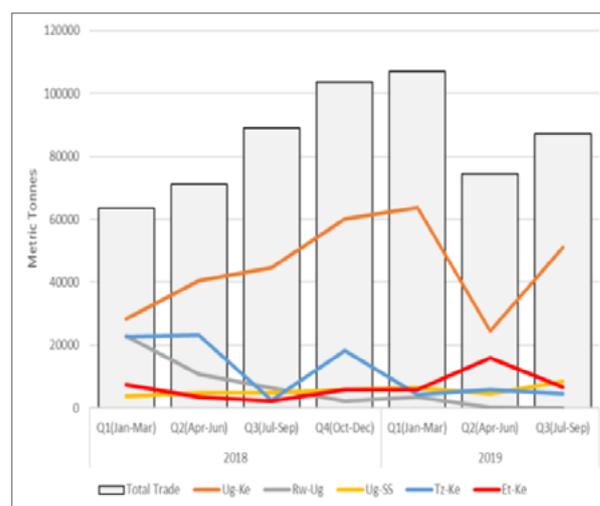

Figure 3:Quarterly Sum of Formal and Informal Cross border Trade of Maize Grain in Main Trade Corridors in Eastern Africa (2018 & 2019) Source: EAGC RATIN and FEWSNET

Figure 4:Quarterly Sum of Formal and Informal Cross border Trade of Beans in Main Trade Corridors in Eastern Africa (2018 & 2019) Source: EAGC RATIN and FEWSNET

PROJECTION ASSUMPTIONS FOR CEREAL PRICES IN EASTERN AFRICA UP TO DECEMBER 2019

• Maize and sorghum prices are expected to follow typical seasonal trends while remaining high through December, exceeding 2018 and the five-year average levels in most markets, as increased demand in structurally deficit **Kenya, South Sudan** and **Somalia** will likely exert additional pressure on cereal prices in **Uganda** and **Tanzania.**

• Maize trade is expected to slow down in Q4 as the main harvest comes into the market in **Kenya** and Uganda stocks are seasonably depleted

In Ethiopia, Burundi, Sudan and South Sudan, the 2019 harvests from October through December 2019 will temporarily stabilize cereal prices as households start accessing own foods. However, the underlying high inflation driven by macro-economic factors (currency depreciation, high fuel prices, high marketing cost etc.) are expected to further reinforce higher prices in these countries.

The maize harvests from long rains in Western and Rift Valley areas of Kenya from October through December will likely moderate maize prices domestically. At the same time, main harvests in unimodal areas of Uganda are expected to result in moderate prices of cereals in Karamoja.

In Rwanda, staple food prices are expected to increase seasonally until harvests are realized from December, aggravated by continued cross-border trade restrictions with Uganda which a major exporter of maize to Rwanda and the poor season B harvest. Field reports indicate that traders and processors are bringing in maize supplies from Tanzania but the prices are quite high considering that Tanzania has been exporting maize to Burundi, Zambia, DR Congo, Malawi and Kenya. Other trades have sought from the international market through duty waivers from the government.

Sustained export demand from the eastern and southern Africa countries is highly likely to extend pressure on cereal prices in Tanzania.

DEFINITIONS

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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