The Early Warning Crop Monitor brings together international, regional, and national organizations monitoring crop conditions within countries at risk of food insecurity. The focus is on developing timely consensus assessments of crop conditions, recognizing that reaching a consensus will help to strengthen confidence in decision making. The Early Warning Crop Monitor grew out of a successful collaborative relationship, the AMIS Crop Monitor (www.amis-outlook.org/), which monitors the main producing countries.
The Early Warning Crop Monitor is a part of GEOGLAM, a GEO global initiative. http://www.geoglam-crop-monitor.org/

**GEOGLAM Early Warning Crop Monitor**

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

**Africa & Yemen: Synthesis**

<table>
<thead>
<tr>
<th>Conditions:</th>
<th>Crop(s) Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional</td>
<td>Maize, Sorghum, Wheat</td>
</tr>
<tr>
<td>Favourable</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
<tr>
<td>Watch</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
<tr>
<td>Poor</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
<tr>
<td>Failure</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
<tr>
<td>Out-of-Season</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
<tr>
<td>No Data</td>
<td>Maize, Sorghum, Beans, Wheat, Rice, Canola, Barley</td>
</tr>
</tbody>
</table>

**Regions**

- **EarlyWarning African Countries**
- **Non-EarlyWarning African Countries**

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**EAST AFRICA:** Overall conditions for the ongoing main growing season in Ethiopia, Sudan, and South Sudan are mostly favourable. The secondary season is starting up in Tanzania and is underway in Kenya, Somalia and Uganda with concern across all countries and significant concern in Somalia and Coastal Kenya from poor conditions due to severe dry weather and delayed onset rains impacting crops.

**WEST AFRICA:** Overall conditions are favourable across the region and rainfed harvests are nearing completion across all areas. Exceptional prospects are expected in Senegal, Liberia and Ivory Coast owing primarily to increased cropped area.

**NORTHERN AFRICA:** Winter wheat planting is underway and sowing will continue through January. There is some concern over hot and dry conditions in October and early November causing delayed start of season, however rainfall increased in mid-November and continued monitoring is critical to evaluate if this trend will continue in the coming weeks.

**SOUTHERN AFRICA:** Planting is underway across the region with the onset of rains in November and conditions are mixed with delayed rains in the north over Zimbabwe and Zambia and some dry conditions in South Africa and Mozambique.

**SOUTHEAST ASIA:** Overall conditions are favourable with the exception of Vietnam where production is down for the wet season crop, and in northern Philippines where the crop was affected by the recent typhoon. In northern regions, wet season rice harvest is wrapping up and the dry season is beginning, whereas in southern areas dry rice harvest is complete and planting for wet rice is underway.

**CENTRAL AMERICA & CARIBBEAN:** The prostrera season harvests are underway across Central America and conditions are mostly favourable, with the exceptions of Nicaragua where damage from Hurricane Otto is still under assessment and Central Guatemala and El Salvador where there is concern over dry conditions.

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**La Niña conditions established**

La Niña conditions are established in the equatorial Pacific Ocean. They are anticipated to persist through January 2017, followed by transition to a neutral state. Consistent with this, broad areas of the Horn of Africa are experiencing a drier than normal October-December rainy season, with some areas characterized by drought with the worst vegetation conditions in fifteen years. Drier than normal conditions are expected in the next three months in southwest Asia, southeastern China, southeastern South America, and the southern United States. Above average rainfall is favoured for southern Africa, Southeast Asia, Australia, and northern South America.
East Africa and Yemen

In East Africa, conditions are mostly favourable for the ongoing season in the primary growing regions in Ethiopia, Sudan, and South Sudan as the season draws to a close, though some areas of concern still remain. The secondary season is starting up across Tanzania and underway in Kenya, Uganda, and Somalia with concern across all countries from dry conditions and delayed onset impacting crops. In Somalia and Coastal Kenya, conditions are poor and expected to deteriorate due to severe dry conditions.

Main Season:
In Ethiopia, the meher (primary season) conditions are mostly favourable and harvests are nearing completion, however concern remains for East Oromia, SNNPR, and Somali, where continued dry conditions due to below average kiremt rains, affected all crops. Therefore, harvests are expected to be below average in these regions. In Eritrea, conditions are favourable for main season sorghum across all regions. In Sudan, conditions are favourable and harvests are underway with average production expected. In South Sudan, harvesting is underway and production is likely to be below average excepting Nile Sobat where production is likely to be average. Areas bordering Juba (Southern Region) are still experiencing sporadic conflict incidences and this is likely to affect harvesting activity across the region. The reduced harvest, continued disruption of livelihoods activities, and persistent high staple food prices are driving many people to migrate to neighboring countries.

Secondary Season:
In Kenya, the growing season is underway in the southeast and there is concern across all regions due to delayed onset of the short rains in October and even more below average rainfall than previously anticipated despite some rainfall received in mid-November. As a result, poor crop conditions persist in the southeast and coastal marginal agricultural areas due to delayed onset rains and poor distribution. In Tanzania, the vuli season is underway in the bimodal regions and there is concern across most regions from continuing dry conditions and delayed onset across some regions. In Uganda, there is concern across all regions due to ongoing severe dry conditions impacting second season crops and production is expected to be below average, following the below average crop of the first season. In the West Nile region, there is concern due to dry conditions affecting maize and humanitarian concerns due to the large numbers of South Sudanese refugees migrating into the area that may impact food security for the region.

In Somalia, conditions continue to be poor and are expected to result in crop failure as the rainfall deficit continues to worsen with little to none of the expected deyr rainfall received during usual planting times in late October through early November. In Burundi, conditions are favourable for main season maize and have improved with November rains.

In Yemen, harvests are underway but concern remains due to ongoing conflict affecting production.

Crop condition map synthesizing information as of November 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.
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**West Africa:**

Crop condition map synthesizing information as of November 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.*

Overall conditions are favourable across much of West Africa and harvests of the rainfed crops are nearing completion across all areas. In **Ivory Coast, Liberia, and Senegal** conditions are overall exceptional owing to good rains throughout the growing season and a significant increase in planted area in these countries.

**Desert Locust Watch as of December 2nd**

Outbreaks have been reported in Mauritania, Sahara, Morocco, Algeria, Nigeria, Eritrea, Yemen and Sudan. Outbreaks continue in western **Mauritania** and ground control operation are underway. Locust breeding has extended into the southern portion of the Western **Sahara**, in the extreme south of **Morocco** where hatching has occurred and limited control operations are underway. Scattered adult locusts persist along the southern side of the Atlas Mountains in **Morocco** and in western **Algeria**. Small-scale breeding continues in the extreme south of **Algeria** near the border with Mali. In northern **Niger**, local breeding occurred in November and limited control operations were undertaken. Small localized outbreaks developed on the Red Sea coast in **Eritrea** and **Yemen** while outbreaks in **Sudan** have subsided. Ground control operations are underway in both countries but limited in Yemen due to insecurity. Small-scale breeding will cause locust numbers to increases along both sides of the Red Sea and Gulf of Aden during December.

*Source: FAO Desert Locust Watch*
Northern Africa:

Crop condition map synthesizing information as of November 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.

Across northern Africa winter wheat planting is underway and sowing will continue through January. There is some concern over hot and dry conditions in October and early November causing a delayed start of season, however rainfall increased in mid-November. Continued monitoring is critical to evaluate if this trend will continue in the next few weeks. In Algeria, winter wheat planting is underway and will continue through January. Overall conditions are favourable, however there is concern in the southwest and southeast due to dry conditions affecting wheat planting. In Tunisia, overall conditions for winter wheat are favourable despite a delay in onset rains in the north affecting planting. In Morocco, there is concern over delay of onset affecting winter wheat planting across the North, Central and Oriental regions however regions in the south have already received onset.
Southern Africa:  

Crop condition map synthesizing information as of November 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.

Across southern Africa, planting is underway with the onset of rains in November and conditions are mixed with minor delays of onset rains in the north over Zimbabwe and Zambia, and some dry conditions in parts of South Africa and Mozambique. In Angola, rains are just beginning and conditions are generally favourable for the main season maize and sorghum despite dry and hot conditions in the south affecting maize. In Namibia, overall conditions are favourable for the main season maize with the exception of northern areas close to the border with Angola where there is concern over dry conditions affecting maize. In Zimbabwe, conditions are mostly favourable, however there is some concern over early season conditions in Manicaland, Masvingo, and Matabeleland South due to dry conditions affecting maize. In Zambia, conditions are generally favourable at this early stage of the season, however there is some concern over dry conditions in the central areas of Manica, and Sofala affecting main season maize. In South Africa, planting is underway across most regions and overall conditions are favourable with above average early-season rainfall. There is minor concern over early season conditions in East and North Cape as well as the North West due to dry conditions affecting maize.
Southeast Asia:

Crop condition map synthesizing information for rice as of November 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 Southeast Asia, conditions are mostly favourable with the exception of Vietnam and northern Philippines. In the northern areas, wet season rice harvest is wrapping up and the dry season rice is just starting. In the southern areas, dry rice harvest is complete and planting of the wet season rice is underway. In Indonesia, wet season rice planting is ongoing and under favourable conditions owing to the early onset of the rainy season in September. In Vietnam, the harvest of the autumn-winter crop in the north is ongoing and yields are expected to be below average due to a mix of adverse weather conditions during the growing season. In the south, harvest of the summer-autumn crop is also ongoing, with below average yields expected. Land preparations are ongoing for dry season rice. In Thailand, the wet season crop is in the grain filling stage and growing conditions are favourable owing to good rainfall. Land preparations are ongoing for the dry season crop. In the Philippines, wet season rice, planted in July-August, is in maturing to harvesting stages under generally favourable conditions. Crop damage and flooding from Typhoon Haima (Lawin) resulted in poor conditions in the north. In Myanmar, wet season rice harvests will conclude at the end of the month and conditions are overall favourable. In Laos and Cambodia, conditions are favourable for main season rice and harvest is underway.

Central Asia:

Across Central Asia, the primary rain/snow season has been off to a slow start in the region with early season precipitation being slightly below normal. In Afghanistan, conditions worsened and there is concern across all regions due to delayed onset and dry conditions affecting winter wheat planting early in the growing season.
Central America & Caribbean:

Prostrera season harvests are underway across Central America and conditions are mostly favourable, with the exception of Nicaragua, Central Guatemala and El Salvador. In Guatemala, overall conditions are favourable owing to good rains with the exception of the Central region where there is continuing concern over dry conditions affecting maize and bean crops. In Honduras, conditions have improved across the country owing to regular rainfall pattern, which improved maize and bean crop conditions and harvests are underway. In Nicaragua, there is concern across all regions and most notably in the South, due to severe flooding and damage from Hurricane Otto affecting end of season conditions and resulting in severe farmer losses in preliminary analysis. In El Salvador, there is concern due to dry and hot conditions across the country affecting beans.

Crop condition map synthesizing information as of November 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.

Information on crop conditions in the main production and export countries can be found in the AMIS Market Monitor, published December 8th 2016.

Pie chart description

Each slice represents a country’s share of total average regional production, in the case of the regional charts, and total national production in the case of the national charts. Sections within each country are weighted by the average sub-national production statistics of the respective country.

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, 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.geoglam-crop-monitor.org.
Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland Center for Global Agricultural Research

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

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