The Group on Earth Observations’ Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objection is to provide AMIS with an international and transparent multi-source, consensus assessment of crop growing conditions, status, and agro-climatic conditions, likely to impact global production. This activity covers the four primary crop types (wheat, maize, rice, and soy) within the main agricultural producing regions of the AMIS countries (G20+7). The Crop Monitor reports provide cartographic and textual summaries of crop conditions as of the 28th of each month, according to crop type. There is another Crop Monitoring initiative called the Early Warning Crop Monitor (geoglaml-crop-monitor.org/), which has grown out of this initiative.
Conditions at a glance for AMIS countries (as of August 28th)

Crop condition map synthesizing information for all four AMIS crops as of August 28th. Crop conditions over the main growing areas for wheat, maize, rice, and soybean are based on a combination of national and regional crop analyst inputs along with earth observation data. Crops that are in other than favourable conditions are displayed on the map with their crop symbol.

Conditions at a glance

Wheat - In the northern hemisphere, conditions remain mixed as winter wheat harvest completes, and spring wheat harvest begins. The Russian Federation is experiencing exceptional conditions while in the northern plains of the US and southern prairies of Canada, dry weather persists for spring wheat. In the southern hemisphere, conditions remain mixed with adverse weather in Argentina and Australia.

Maize - In the southern hemisphere, conditions continue to be generally favourable as harvest wraps up in Argentina and Brazil. Conditions in the northern hemisphere are generally favourable, albeit with some areas of concern in the EU, China, and Ukraine due to dry weather.

Rice - In Asia, conditions are mixed as heavy rainfall affects areas in the north of Viet Nam, northern Thailand, and northeast China. Conditions remain favourable in India, Indonesia and the Philippines.

Soybeans - In the northern hemisphere, conditions are generally favourable with the exception of dry conditions in Ukraine. In the southern hemisphere, new-crop plantings are still to begin.

* Assessment based on information as of August 28th
Wheat Conditions for AMIS Countries

**Wheat:** In the EU, rains in western and northern Europe hampered harvesting and raised quality concerns, however overall yields are in line with the 5-year average as harvest is nearing completion. In the Russian Federation, conditions are exceptional for winter wheat as harvest is completing, while sowing for the next season has begun in some areas under favourable conditions. Spring wheat development continues under exceptional conditions with excellent yield prospects going into harvest. In Kazakhstan, conditions are generally favourable for spring wheat with the exception of dry conditions in Akmola, a main producing area. In China, spring wheat is under favourable conditions as harvest begins. In the US, harvest of spring wheat is wrapping up. Production in areas of the western Dakotas and Montana were significantly reduced due to drought. However, conditions in other parts of the spring wheat region were quite good. In Canada, conditions are mixed as dry conditions in the Southern Prairies are causing concern for spring wheat, while winter wheat yields in Ontario are average despite the cool wet season. In Australia, conditions have improved across southern production states with recent rainfall. However, dry conditions persist across northern areas in Western Australia, central and northern New South Wales and Queensland, where production is expected to be significantly affected in these areas. In Argentina, conditions are generally favourable as sowing is finishing, however new rains continue to delay final sowing in the southern areas.

* Assessment based on information as of August 28th
Maize Conditions for AMIS Countries

Maize: In Brazil, harvest of summer-planted maize is closing under favourable conditions. An increase in planted area and yields led to an increase in production compared to last year. In Argentina, conditions are generally favourable as harvest wraps up although high soils moisture and high grain moisture are delaying remaining areas. In the US, conditions are favourable with good yield prospects as conditions improved in the Dakotas and the eastern Midwest. In Canada, cool wet weather continues to slow crop development in the main producing province of Ontario. In Mexico, conditions are favourable for the start of the spring-summer crop as rains have begun across the country. In the EU, overall conditions are favourable as rains mitigated heat stress in eastern Europe, but southern Europe is still affected by a drought that potentially damaged yields. In Ukraine, conditions are less than favourable as a lack of rain and a rapid drying of the soil have affected crops in the southern, central, and eastern regions. In China, spring maize is in generally favourable condition with the exception of dry conditions in eastern Inner Mongolia. Conditions are favourable for summer planted maize in the flowering stage. In India, conditions are favourable for the Kharif crop as good soil moisture levels positively impact continued crop development.

* Assessment based on information as of August 28th
Rice Conditions for AMIS Countries

Rice: In China, single-season rice is under generally favourable conditions except in the northeast due to heavy rainfall and low solar radiation. Late rice is under favourable conditions. In India, conditions are favourable with good soil moisture levels across the country for the Kharif crop currently in the vegetative stage. In Indonesia, conditions continue to be favourable for dry-season rice owing to adequate irrigation water and sunlight. Planting continues as the harvest of earlier planted rice enters the second month, with higher yields than last dry-season expected. In Viet Nam, conditions in the north are mixed due to heavy rains and flooding as sowing of wet-season rice has completed with an increase in area compared to last year. While in the south, harvesting of wet-season rice continues under favourable conditions with yields similar to last year. In Thailand, conditions are mixed as two tropical storms impacted the northern part of the country, providing ample rainfall though also causing some flood damage. In the Philippines, wet-season rice harvest has begun under favourable conditions, despite heavy rainfall in Luzon and western areas from several tropical storms enhancing the southwest monsoon. In the US, rice conditions are favourable and unaffected by hurricane Harvey due to harvest being completed in those areas.

* Assessment based on information as of August 28th
Soybean Conditions for AMIS Countries

**Soybeans:** In the **US**, conditions are favourable with improvement in the Dakotas and in the Eastern Corn Belt. In **Canada**, conditions are mixed as cool wet weather continues to slow crop development in the main producing province of Ontario, while Manitoba is under favourable conditions. In **China**, conditions are favourable for the crop in the flowering stage. In **India**, conditions are generally favourable for the Kharif crop in the vegetative state. In **Ukraine**, conditions are less than favourable as a lack of rain and a rapid drying of the soil have affected crops in the southern, central and eastern regions.

*Assessment based on information as of August 28th*
Appendix 1: 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 more than 5% below average. This is only used when conditions are not likely to be able to recover, and impact on production is likely.

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

Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the first season.

<table>
<thead>
<tr>
<th>Country</th>
<th>Crop</th>
<th>Season 1 Name</th>
<th>Season 2 Name</th>
<th>Season 3 Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Soybean</td>
<td>Spring-planted</td>
<td>Summer-planted</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Maize</td>
<td>Summer-planted (larger producing season)</td>
<td>Spring-planted (smaller producing season)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Maize</td>
<td>Spring-planted</td>
<td>Summer-planted</td>
<td>Early Crop</td>
</tr>
<tr>
<td>China</td>
<td>Rice</td>
<td>Intermediate Crop</td>
<td></td>
<td>Late Crop</td>
</tr>
<tr>
<td>Egypt</td>
<td>Rice</td>
<td>Summer-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Maize</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Rice</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India*</td>
<td>Soybean</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Wheat</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Rice</td>
<td>Main-season</td>
<td>Second-season</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Maize</td>
<td>Spring-planted</td>
<td>Autumn-planted</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Maize</td>
<td>Main-season</td>
<td>Short-season</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Rice</td>
<td>Main-season</td>
<td>Off-season</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
</tr>
</tbody>
</table>

* Assessment based on information as of August 28th
Appendix 2: Crop Season Specific Maps & Pie Charts

Winter Planted Wheat Conditions for AMIS Countries

Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Spring Planted Wheat Conditions for AMIS Countries

Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

* Assessment based on information as of August 28th
Maize 1 Conditions for AMIS Countries

Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Maize 2 Conditions for AMIS Countries

Maize 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

* Assessment based on information as of August 28th
Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

* Assessment based on information as of August 28th
Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

* Assessment based on information as of August 28th
Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

* Assessment based on information as of August 28th
Wheat AMIS Comparisons

Share of total AMIS Production

Conditions:
- Exceptional
- Favourable
- Watch
- Poor
- Out-of-Season
- No Data

Drivers:
- Wet
- Dry
- Hot
- Cool
- Extreme Event
- Delayed-Onset

Wheat AMIS Comparisons

Share of total AMIS Exports

Conditions:
- Exceptional
- Favourable
- Watch
- Poor
- Out-of-Season
- No Data

Drivers:
- Wet
- Dry
- Hot
- Cool
- Extreme Event
- Delayed-Onset

Maize AMIS Comparisons

Share of total AMIS Production

Conditions:
- Exceptional
- Favourable
- Watch
- Poor
- Out-of-Season
- No Data

Drivers:
- Wet
- Dry
- Hot
- Cool
- Extreme Event
- Delayed-Onset

Maize AMIS Comparisons

Share of total AMIS Exports

Conditions:
- Exceptional
- Favourable
- Watch
- Poor
- Out-of-Season
- No Data

Drivers:
- Wet
- Dry
- Hot
- Cool
- Extreme Event
- Delayed-Onset

* Assessment based on information as of August 28th
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Rice AMIS Comparisons

Share of total AMIS Production

- Conditions:
  - Exceptional
  - Favourable
  - Watch
  - Poor
  - Out-of-Season
  - No Data

- Drivers:
  - Wet
  - Dry
  - Hot
  - Cool
  - Extreme Event
  - Delayed-Onset

Share of total AMIS Exports

- Conditions:
  - Exceptional
  - Favourable
  - Watch
  - Poor
  - Out-of-Season
  - No Data

- Drivers:
  - Wet
  - Dry
  - Hot
  - Cool
  - Extreme Event
  - Delayed-Onset

Rice AMIS Comparisons

Soybean AMIS Comparisons

Share of total AMIS Production

- Conditions:
  - Exceptional
  - Favourable
  - Watch
  - Poor
  - Out-of-Season
  - No Data

- Drivers:
  - Wet
  - Dry
  - Hot
  - Cool
  - Extreme Event
  - Delayed-Onset

Share of total AMIS Exports

- Conditions:
  - Exceptional
  - Favourable
  - Watch
  - Poor
  - Out-of-Season
  - No Data

- Drivers:
  - Wet
  - Dry
  - Hot
  - Cool
  - Extreme Event
  - Delayed-Onset

* Assessment based on information as of August 28th
Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland

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

Photo by: Conab

[www.geoglaml-crop-monitor.org](http://www.geoglaml-crop-monitor.org)

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**Sources & Disclaimer**

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