Overview:

Conditions for the four AMIS crops are mixed in the end of September. *Spring wheat* harvest in Canada continues under poor conditions, while *winter wheat* sowing in the northern hemisphere begins under mixed conditions. In the southern hemisphere conditions remain mixed due to adverse weather. For *maize*, conditions are generally favourable while heading into harvest in the northern hemisphere, and favourable for sowing in the southern hemisphere. For *rice*, conditions remain mixed in Southeast Asia due to heavy rains in Viet Nam, Thailand, and parts of China. *Soybean* prospects are good with an increase in expected production from the US and Canada.

Contents:

- Conditions at a Glance ................................................................. 2
- Wheat Conditions ........................................................................ 3
- Maize Conditions ........................................................................ 4
- Rice Conditions ........................................................................... 5
- Soybeans Conditions ................................................................. 6
- Appendix I – Terminology & Definitions .................................... 7
- Appendix II – Crop Season Specific Maps ............................... 8

Assessment based on information as of September 28th
Conditions at a glance for AMIS countries (as of September 28th)

Crop condition map synthesizing information for all four AMIS crops as of September 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 spring wheat harvest continues, and winter wheat sowing begins. For spring wheat, harvest in the Russian Federation is above average while in Canada the crop has been affected by dry weather. In the southern hemisphere, conditions remain mixed with adverse weather affecting all major producers.

**Maize** - In the northern hemisphere conditions remain generally favourable heading into harvest, albeit with some areas of concern in the EU and Ukraine due to dry weather. In the southern hemisphere, sowing of the new season began in Argentina and Brazil.

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

**Soybeans** - In the northern hemisphere, conditions are generally favourable with an increase in expected production this year for the US and Canada. In the southern hemisphere, Brazil sowing has begun.
**Wheat Conditions**

Wheat 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 September 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

**Wheat:** In the **Russian Federation**, spring wheat harvest is wrapping up under favourable conditions, albeit some delays due to a cooler season. Winter wheat sowing is ongoing under generally favourable conditions except in the south due to hot dry weather. In **Ukraine**, sowing of winter wheat has begun under mixed conditions due to the continued drought in the southern and eastern regions. In **Kazakhstan**, conditions are favourable for spring wheat with yields expected below last year’s level, however still above the 5-year average. In the **US**, sowing of winter wheat began under generally favourable conditions with some dryness persisting in the northern plains. In **Canada**, harvest of winter wheat completed under favourable conditions. Spring wheat harvest continues under poor conditions with yields expected to be well below average due to dry conditions throughout the season in the prairies. In **Australia**, conditions remain favourable across most southern states. Western Australia has seen some improvement with recent average to above average rainfall, however unseasonable hot dry conditions during September are likely to further reduce yield prospects in New South Wales and Queensland. In **Argentina**, sowing is complete and conditions are generally favourable. Continued rainfall and flooding in the south reduced planted area and will potentially impact crop development.

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

Maize: In the US, conditions are favourable as harvest begins in southern states. In Canada, conditions are favourable and production is expected to be slightly higher than last year due to an increase in area and favourable yields. In Mexico, sowing is completed under favourable conditions for the spring-planted crop. In the EU, conditions improved slightly on better prospects in France and Romania more than offsetting worsening drought conditions in southern Europe. In Ukraine, harvest begins as conditions continue to be less than favourable due to low soil moisture in the southern, central, and eastern regions. In China, spring and summer maize are both under favourable conditions with slightly above average conditions in the main producing regions. In India, harvest has begun for the Kharif crop under favourable conditions. In Brazil, summer planted maize harvest is complete with an increase in production resulting from higher planted area planted area and productivity gains. Sowing of spring-planted maize began in the southern region. Some crops are already at the stage of vegetative development. In Argentina, sowing began under favourable conditions in the center of the country with delays in the south due to flooding.

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

**Rice Conditions**

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

**Countries:**
- AMIS Countries
- Non-AMIS Countries

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

Rice 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 September 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

**Rice:** In China, conditions are favourable for single-season rice and semi-late rice currently in the ripening stage. Late-rice is under mixed conditions due to high rainfall and insufficient solar radiation required for development in the lower Yangtze region. In India, conditions are favourable for the Kharif crop as harvest begins in the north and central regions. In Indonesia, conditions continue to be favourable as harvest of dry-season rice is at its peak and planting is almost finished. Higher yields are expected due to favourable weather conditions over the last three months. In Viet Nam, conditions in the north are mixed with an increase in planted area compared to last year, with only minor losses from flooding earlier in the season. While in the south, harvest of wet-season rice continues under favourable conditions with yields slightly below last year. In Thailand, conditions are mixed due to two tropical storms earlier in the season that impacted the northern part of the country, resulting in flood damage and disease outbreaks. In the Philippines, conditions are favourable for wet-season rice planted July-August currently in tillering stage. Earlier planted wet-season rice completed harvesting under favourable conditions. In the US, harvest is well underway with a good crop expected.

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

**Soybeans:** In the **US**, conditions are favourable with a rise in expected production due to an increase in planted area and higher expected yields. In **Canada**, conditions are generally favourable as harvest begins. A record crop is expected, primarily due to a large increase in planted area. In **China**, conditions are favourable as the crop is in the ripening stage. In **India**, conditions are generally favourable for the Kharif crop heading into the harvest with the exception of Madhya Pradesh, where some late August dryness will potentially affect final yields. In **Ukraine**, harvest continues as conditions remain slightly below favourable due to low soil moisture in the southern, central, and eastern regions. In **Brazil**, sowing has begun under favourable conditions. However, improvements in soil moisture conditions are expected to intensify planting.

*Information on crop conditions in non-AMIS countries can be found in the GEOGLAM Early Warning Crop Monitor, published October 5th 2017*

**Pie chart description:** Each slice represents a country’s share of total AMIS production (5-year average). Main producing countries (representing 90 percent of production) are shown individually, with the remaining 10 percent grouped into the “Other AMIS Countries” category. The proportion within each national slice is coloured 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). When conditions are other than ‘favourable’, icons are added that provide information on the key climatic drivers affecting conditions.

* Assessment based on information as of September 28th
Appendix 1: Terminology & 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></td>
</tr>
<tr>
<td>China</td>
<td>Rice</td>
<td>Intermediate Crop</td>
<td>Early Crop</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>Rice</td>
<td>Summer-planted</td>
<td>Nili season (Nile Flood)</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 September 28th
Appendix 2: Crop Season Specific Maps

**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 September 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 September 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 September 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 September 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 September 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 September 28th
Rice 1 Conditions for AMIS Countries

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 September 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 Conditions for AMIS Countries

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 September 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 September 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 September 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 September 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 September 28th
Soybean 2 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 September 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.
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.geoglam-crop-monitor.org

@GEOCropMonitor

Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA, Agroindustry ministry), Asia Rice Countries (AFSIS, ASEAN+3 & Asia Rice), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerralmage & SANSA), Thailand (GISTDA & OAE), Ukraine (NASU-NSAU & UHMC), USA (NASA, UMD, USGS – FEWS NET, USDA (FAS, NASS)), Viet Nam (VAST & VIMHE-MARD). The findings and conclusions in this joint multiagency 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