



#### **Overview:**

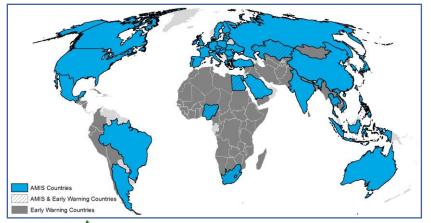
As of the end of June, conditions are mixed for maize and soybeans. Winter wheat in is under generally favourable conditions, albeit with some dry conditions in Australia and the Russian Federation. Spring wheat is favourable with the exception of dry conditions in Canada. Maize harvest is wrapping up in the Southern Hemisphere. In the Northern Hemisphere, the US is suffering from wet conditions and China is experiencing some dry conditions. Rice in Asia is under generally favourable conditions with small areas of dryness in Thailand and some wet conditions in southern China. Soybean conditions are mostly exceptional as harvest wraps up in Argentina. In the Northern Hemisphere, the US and Canada are suffering from wet conditions while northeast China is experiencing dry conditions.













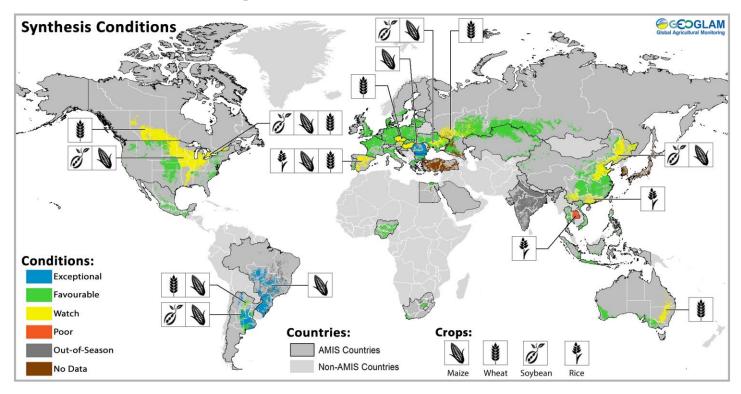
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# Conditions at a glance for AMIS countries (as of June 28th)



Crop condition map synthesizing information for all four AMIS crops as of June 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**

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**Wheat** - In the northern hemisphere, winter wheat is under generally favourable conditions with some dryness in southwest Europe and in part of the Russian Federation. Spring wheat is favourable in the Russian Federation while Canadian conditions remain dry. In the southern hemisphere, Australia is experiencing persistent dry conditions in the east.

**Maize -** In the southern hemisphere, harvest is continuing in Argentina and Brazil with a bumper production forecast. In the northern hemisphere, North America is suffering from cool-wet conditions delaying sowing and emergence, while conditions in Europe are mostly favourable.

**Rice** - In China, conditions are generally favourable for all three seasons. In southern Southeast Asia, sowing of wetseason rice has begun in the northern countries, while harvest of wet-season rice nears completion and sowing of dry-season rice begins in Indonesia.

**Soybeans** - In the southern hemisphere, an above-average harvest is near completion in Argentina. In the northern hemisphere, the US and Canada are suffering delays in sowing from a long-lasting wet spring, while Ukraine is experiencing some dryness.

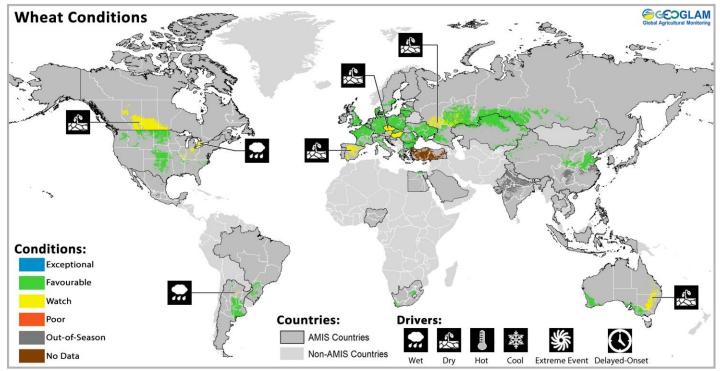
#### **El Niño Advisory**

Weak El Niño conditions are present and are forecast to continue through the Northern Hemisphere summer (58% chance for July to September) and with lower odds for fall and winter (51-55% chance). Associated with this event are increased chances of below normal July to September rainfall in the Maritime Continent, eastern Australia, Central America, the Caribbean, and northern South America.

The Indian Ocean Dipole is forecast to be positive during July to November. Such conditions tend to reduce the influence of El Niño on Indian summer monsoon rainfall, enhance rainfall in parts of East Africa, and suppress rainfall in southern and central Australia.

Source: UCSB Climate Hazards Center

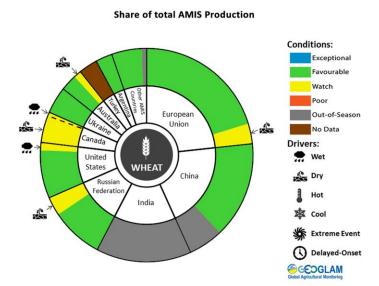
#### **Wheat Conditions for AMIS Countries**



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 June 28<sup>th</sup>. 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 **EU**, winter wheat conditions remain overall favourable. Recent rains were beneficial in western and northern Europe but came too late in parts of central Europe, while dry conditions persist in southwestern regions. In Ukraine, conditions remain favourable for winter wheat in the ripening stage. In the Russian Federation, winter wheat conditions are mixed due to dry conditions in the Central and Volga districts. Spring wheat sowing is wrapping up under generally favourable conditions. In Kazakhstan, sowing of spring wheat has finished under favourable conditions. In China, winter wheat harvest is wrapping up under generally favourable conditions and spring wheat is developing under favourable conditions. In the **US**, harvest is beginning for winter wheat under favourable conditions in the main producing areas,

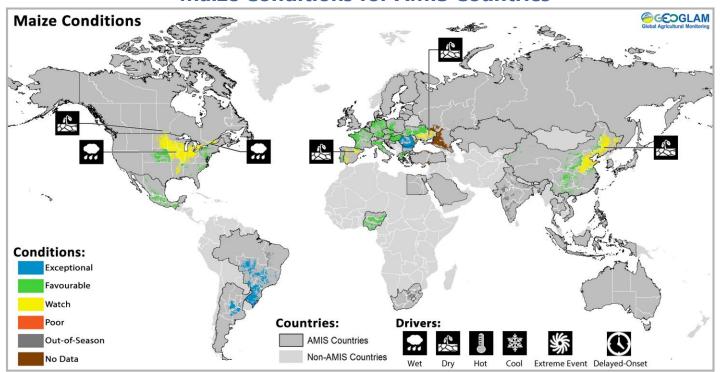
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For detailed description of the pie chart please see box below.

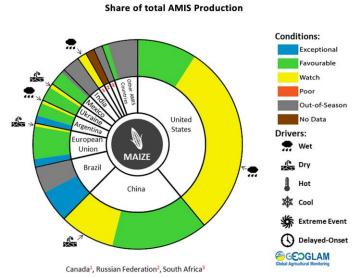
while spring wheat conditions are generally favourable. In **Canada**, dry and drought conditions in the prairies have resulted in very low soil moisture and delayed crop emergence, affecting both spring and winter wheat. In the east, winter wheat is suffering from excessive soil moisture. In **Australia**, conditions are mixed with generally favourable conditions in southern growing regions, but dry conditions persist across large areas of eastern Australia and parts of Western Australia. In **Argentina**, sowing of wheat continues under generally favourable conditions, albeit hampered in places by rainfall.

#### **Maize Conditions for AMIS Countries**



Maize 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 June 28<sup>th</sup>. 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.

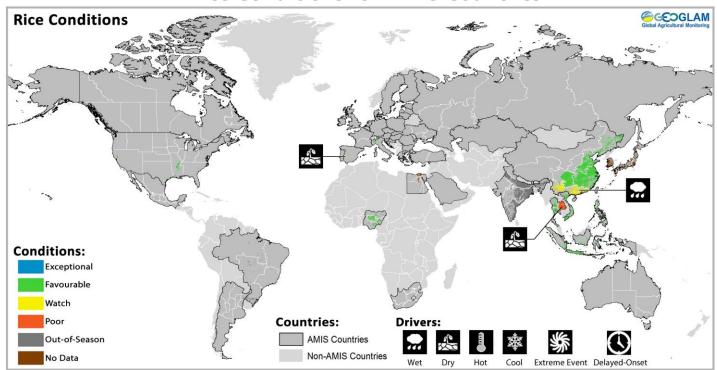
**Maize:** In **Brazil**, harvest is ongoing for the summerplanted crop (higher producing season) under exceptional conditions. A bumper crop is forecast due to an increase in total sown area and increased yields. In Argentina, harvest is continuing albeit with some slight delays due to heavy rainfall. Conditions are favourable to exceptional for both spring-planted and summer-planted crops with a record harvest forecast. In **Mexico**, harvest of the autumn-winter cycle crop is continuing under favourable conditions while sowing of the spring-summer crop is progressing under favourable conditions with a slight increase in total sown area. In China, conditions are mixed as the spring-planted crop in the northeast has experienced below average rainfall since sowing. In the US, much of the country remains under watch conditions due to the persistent wet spring, which significantly delayed



For detailed description of the pie chart please see box below.

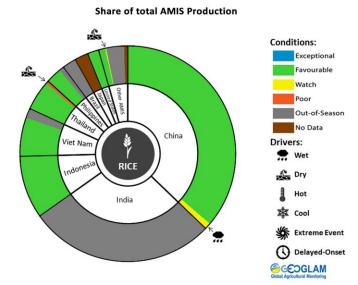
sowing. Additionally, the delay in sowing combined with the long-lasting spring provide risks to final yields. In **Canada**, conditions remain mixed due to dry conditions in Manitoba along with excessive moisture and delayed planting in the main producing eastern provinces. In the **EU**, conditions remain generally favourable with exceptional conditions in the southeast due to abundant rainfall. In **Ukraine**, conditions are favourable in the central and western regions, while the eastern and southern regions are experiencing dry to drought conditions.

#### **Rice Conditions for AMIS Countries**



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 June 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

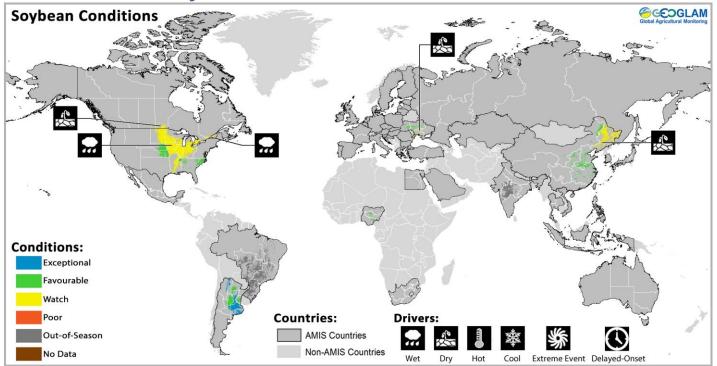
**Rice:** In **China**, conditions are generally favourable as harvest of early-rice and sowing of late-rice are ongoing. However, rainy and cloudy weather has hampered flowering and grain-filling for early-rice in the south. Single-season rice is under favourable conditions. In Indonesia, harvest of wet-season rice is almost complete with yields forecast to be close to average. Sowing of dry-season rice continues under favourable conditions with ample irrigation water. In **Viet Nam**, conditions are favourable as harvest for winter-spring rice (dry-season rice) has begun in the north and is wrapping up in the south. Sowing of summer-autumn rice (wet-season rice) has also begun in the south under favourable conditions. In **Thailand**, wet-season rice sowing is continuing under favourable conditions, with an expected increase in sown area compared to last year. Recent rainfall has improved



For detailed description of the pie chart please see box below.

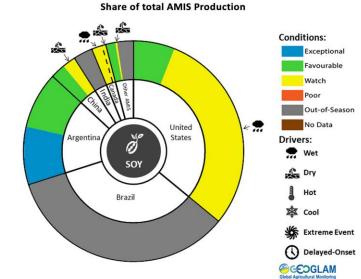
conditions in the northeast region. However, the rainfall was too late to help dry-season rice, which is wrapping up under poor conditions in the northeast. In the **Philippines**, wet-season rice is under favourable conditions in the early vegetative stage, with near normal rainfall easing previous dry conditions. In the **US**, conditions are favourable.

## **Soybean Conditions for AMIS Countries**



Soybean 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 June 28<sup>th</sup>. 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.

**Soybeans:** In **Argentina**, harvest of springplanted and summer-planted crops is almost complete with favourable to exceptional conditions in the main producing region. Heavy rainfall and flooding in the northern region has resulted in some reduction in harvestable area, however remaining crops are under favourable conditions. In **China**, dry conditions in the northeast persist since sowing. In the **US**, conditions remain primarily under watch due to the long-lasting wet spring. In Canada, conditions remain mixed across the country due to delayed sowing and reduced crop development. Significant areas remain unsown in the main producing province of Ontario because of the excess soil moisture while areas in Manitoba have delayed emergence due to dry conditions. In Ukraine, conditions are favourable in the western and central regions with adequate soil moisture, while dry to drought conditions are developing in the southern and eastern regions.



For detailed description of the pie chart please see box below.

Information on crop conditions in non-AMIS countries can be found in the <u>GEOGLAM Crop</u>
<u>Monitor for Early Warning</u>, published June 6<sup>th</sup>

**Pie chart description:** Each slice represents a country's share of total AMIS production (5-year average). Main producing countries (representing 95 percent of production) are shown individually, with the remaining 5 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.

# **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.

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

#### **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,

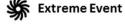
winterkill, wind damage, etc.)

**Delayed-Onset**: Late start of the season

# X Cool

Hot

Dry



# Delayed-Onset

#### **Crop Season Nomenclature:**

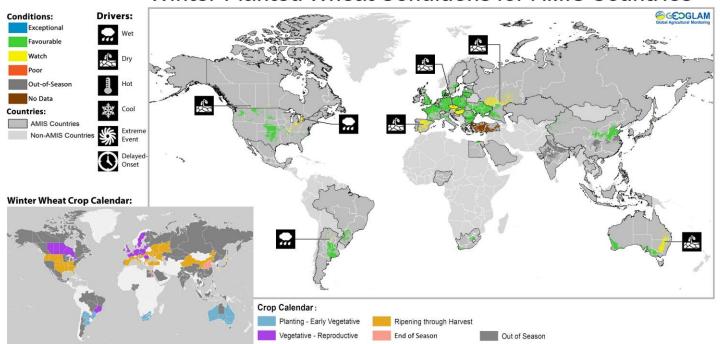
In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the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

Crop Season Nomenclature					
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name	
Argentina	Soybean	Spring-planted	Summer-planted		
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)		
Canada	Wheat	Winter-planted	Spring-planted		
China	Maize	Spring-planted	Summer-planted		
China	Rice	Intermediate Crop	Early Crop	Late Crop	
China	Wheat	Winter-planted	Spring-planted		
Egypt	Rice	Summer-planted	Nili season (Nile Flood)		
India	Maize	Kharif	Rabi		
India	Rice	Kharif	Rabi		
India	Soybean	Kharif	Rabi		
India	Wheat	Rabi	Kharif		
Indonesia	Rice	Main-season	Second-season		
Mexico	Maize	Spring-planted	Autumn-planted		
Nigeria	Maize	Main-season	Short-season		
Nigeria	Rice	Main-season	Off-season		
Philippines	Rice	Wet season	Dry season		
Russian Federation	Wheat	Winter-planted	Spring-planted		
Thailand	Rice	Wet season	Dry season		
United States	Wheat	Winter-planted	Spring-planted		
Viet Nam	Rice	Wet season	Dry season		

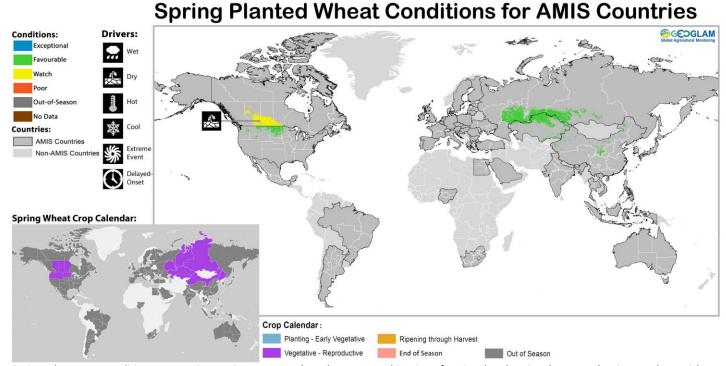
<sup>\*&</sup>quot;Average" refers to the average conditions over the past 5 years.

# **Appendix 2: Crop Season Specific Maps**

#### Winter Planted Wheat Conditions for AMIS Countries

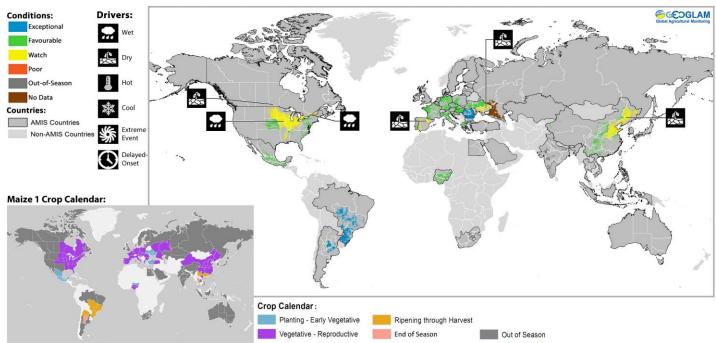


Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.



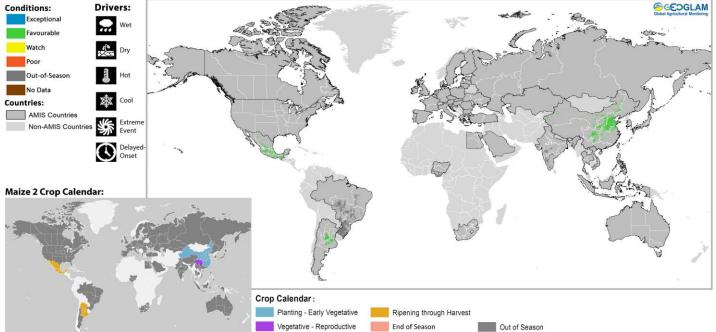
Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 1 Conditions for AMIS Countries**



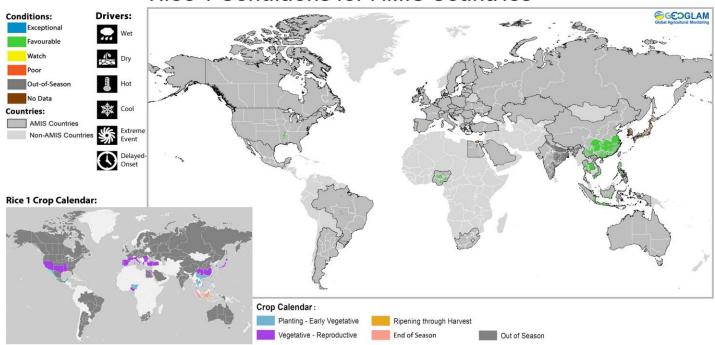
Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.



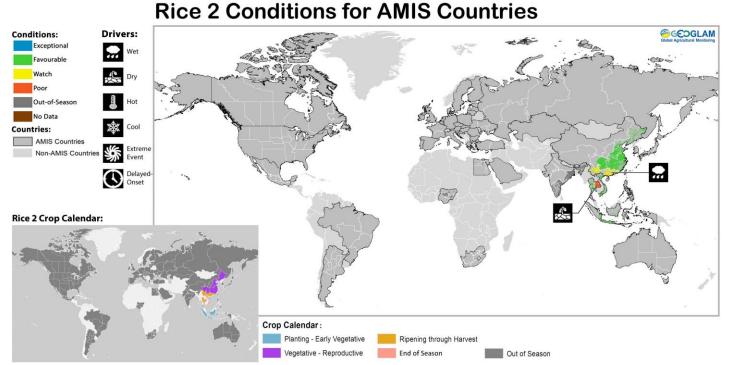


Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 1 Conditions for AMIS Countries**

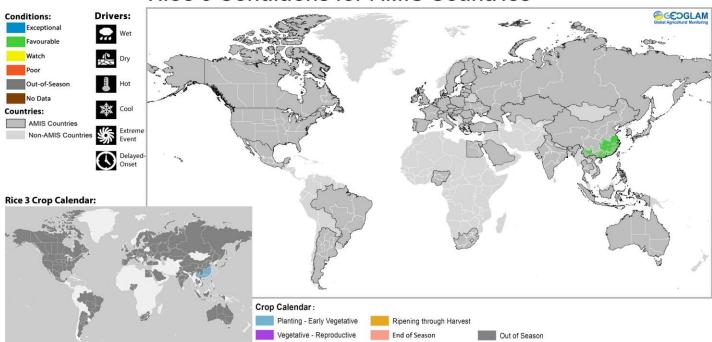


Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.

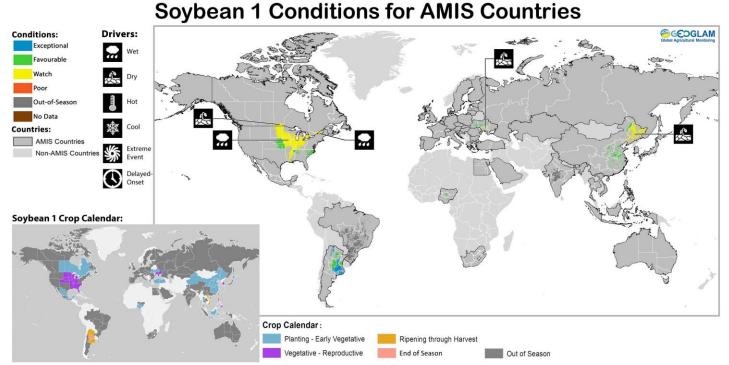


Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.

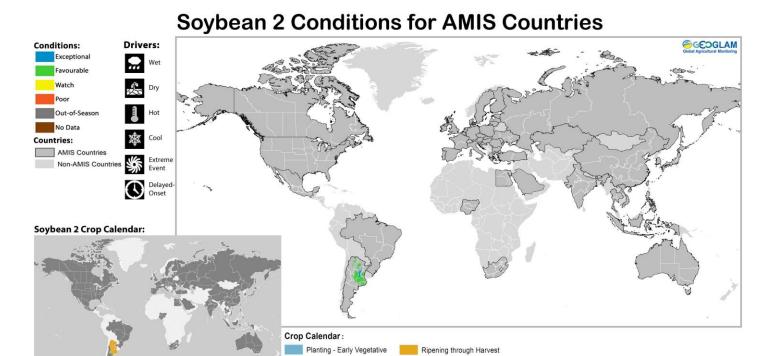
#### **Rice 3 Conditions for AMIS Countries**



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 June 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 June 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 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 June 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.

End of Season

Vegetative - Reproductive





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

Photo curtesy of: Brian Barker

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#### **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), India(NCFC), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & CSIR & 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.

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