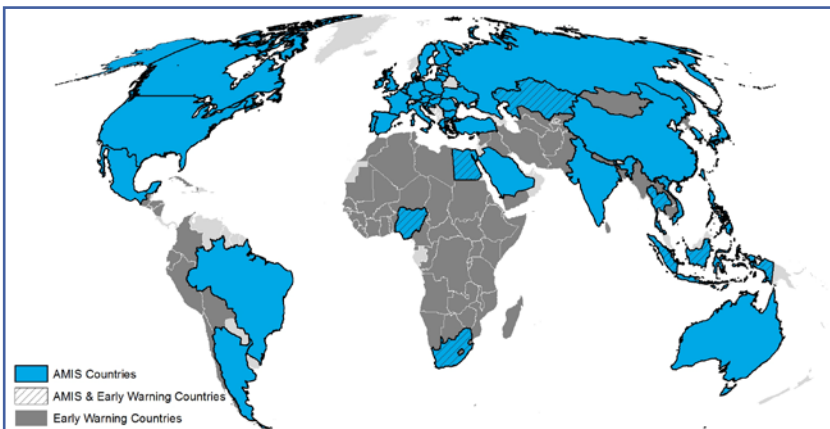


# Crop Monitor for AMIS

## Overview:

By the end of February, conditions for the four AMIS crops are generally favourable as the northern hemisphere begins to emerge from winter and the southern hemisphere moves through summer. **Winter wheat** in the northern hemisphere it is begins to emerge from dormancy with some areas to watch. For **maize** in the southern hemisphere, conditions are mixed due to dry conditions in Argentina, and South Africa. **Rice** conditions continue to be favourable in Asia. For **soybeans** in the southern hemisphere, conditions are mixed due to continued hot and dry conditions in Argentina.

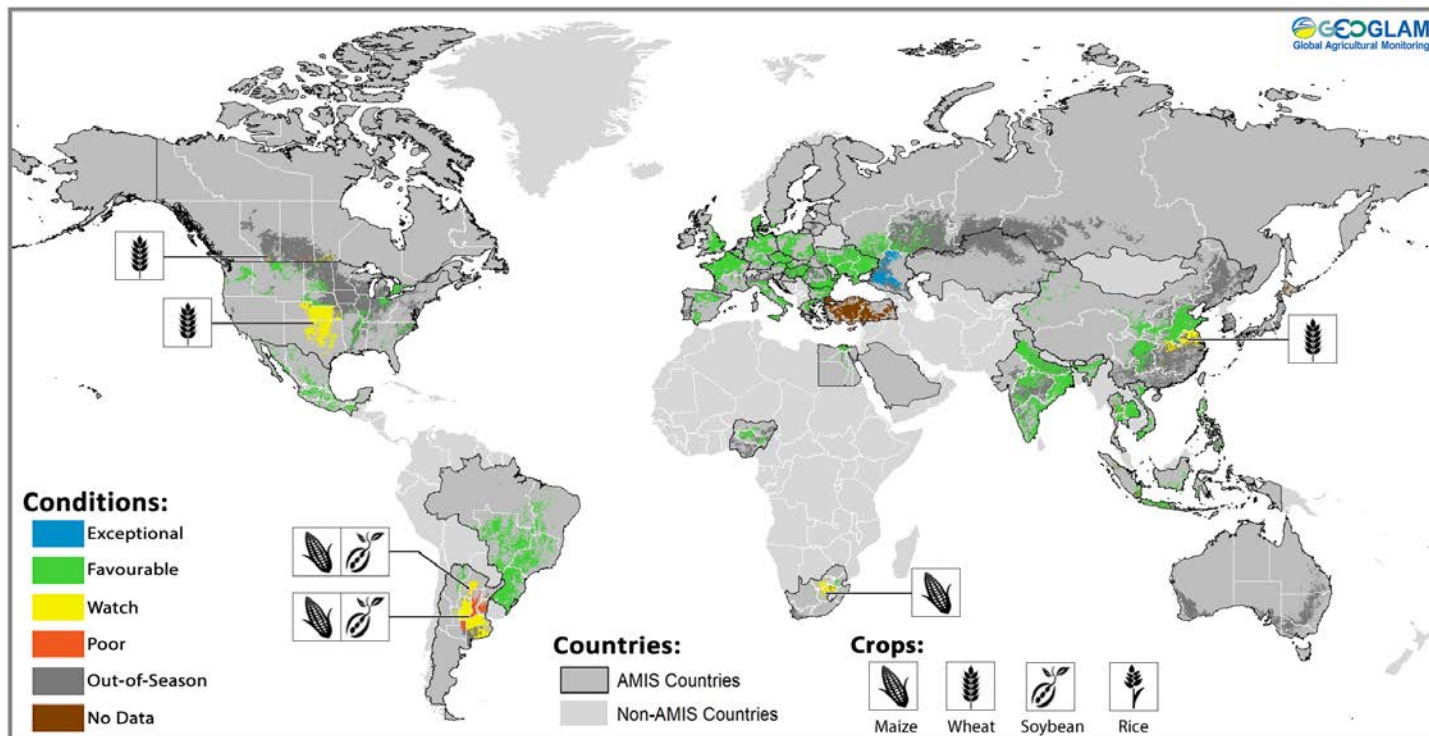


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*Assessment based on information as of February 28<sup>th</sup>*

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



Crop condition map synthesizing information for all four AMIS crops as of February 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 are generally favourable as winter wheat begins to emerge from dormancy in southern areas. Dry conditions exist in parts of the US and Canada, while low temperatures affect the resumption of growth in parts of China.

**Maize** - In the southern hemisphere, crop conditions are mixed due to increased dryness in Argentina, while there have been improvements in Brazil.

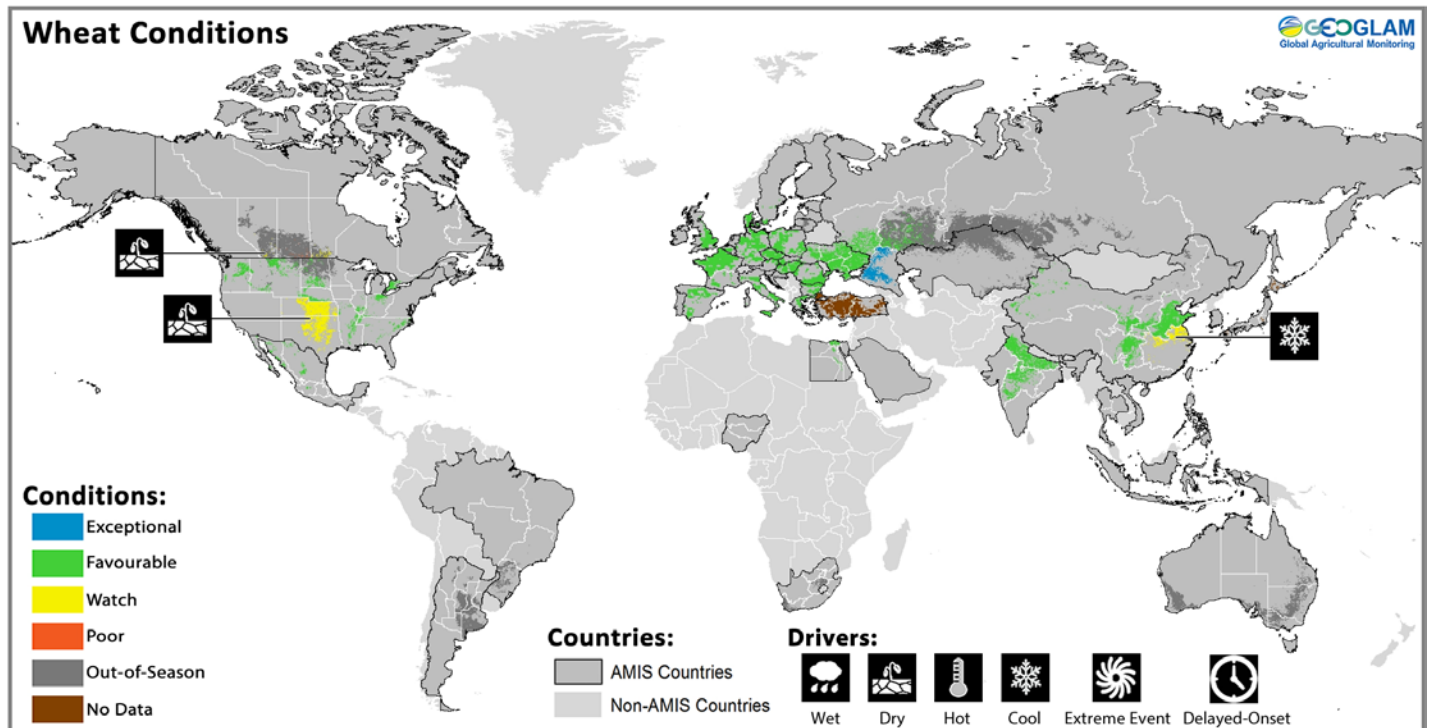
**Rice** - In India, the Rabi crop is favourable. In Southeast Asia, crop conditions remain favourable as dry-season rice advances in the northern countries while wet-season rice is well underway in Indonesia.

**Soybeans** - In the southern hemisphere, crop conditions have improved in Brazil while conditions have deteriorated in Argentina due to hot and dry weather.

### La Niña Update

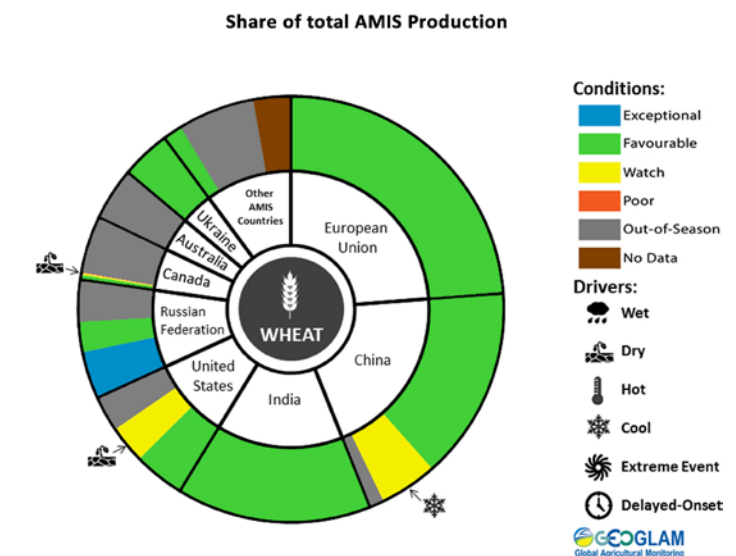
A La Niña Advisory has been in effect since November 2017, and the probability of persistence through March is about 60 percent, double the typical probability for that month of the year. Thereafter, La Niña conditions are expected to dissipate to a neutral state. Associated with the event, drier than normal conditions currently prevail in southwest Asia, southeastern South America, eastern China, and the southern US. Unusually for a La Niña event, areas of Southern Africa experienced an extended dry spell (late December until the beginning of February) in the heart of the season, though widespread abundant rain has come in recent weeks. Crops may not recover, however, and there are significant areas that did not receive the late rains. Though northern South America is frequently wetter than normal with La Niña, conditions in late 2017- early 2018 have been drier than average. As expected, wetter as normal conditions have been experienced in Central America and the Caribbean, and in Southeast Asia.

## Wheat Conditions for AMIS Countries



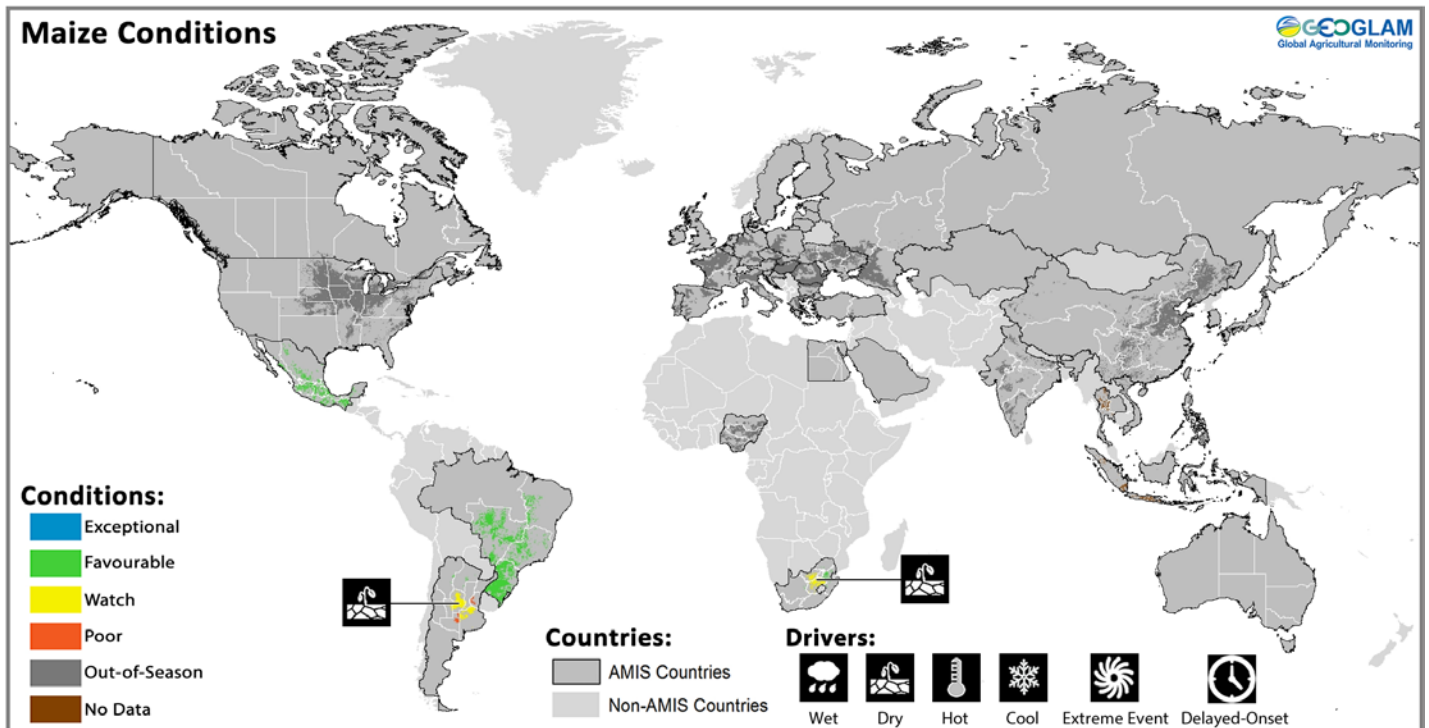
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

**Wheat:** In the **EU**, conditions are generally favourable for winter wheat. In **Ukraine**, winter wheat conditions are favourable with majority of crops still in dormancy with the exception of some areas in the south that are breaking dormancy early due to a recent run of above-average temperatures. In the **Russian Federation**, conditions are favourable for winter wheat with warmer than usual temperatures in the south facilitating the break of dormancy and resumption of vegetative growth. In **China**, winter wheat conditions are generally favourable as vegetative growth has resumed in the south with some below average conditions in the northern Lower Yangtze region due to low temperatures. In **India**, conditions are favourable for Rabi wheat with a minor reduction in sown area compared to average. In the **US**, drought in the Southern Plains has been persistent throughout the winter. As the crop emerges from dormancy, conditions are under watch. It is still too early in the season to assess whether current conditions will ultimately impact the crop production. Winter wheat sown area is expected to be about the same as last year. In **Canada**, conditions are mixed for winter wheat with low snow pack and below normal winter temperatures potentially impacting spring emergence and leading to some winter kill in the southern prairies.



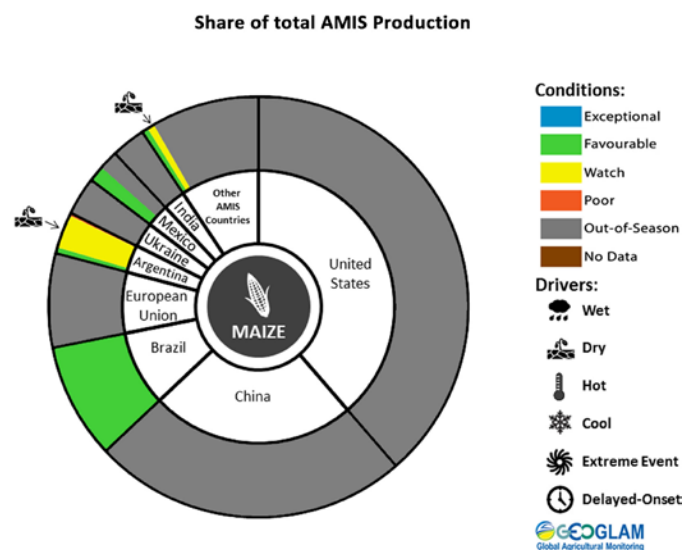
For detailed description of the pie chart please see box below.

## Maize Conditions for AMIS Countries



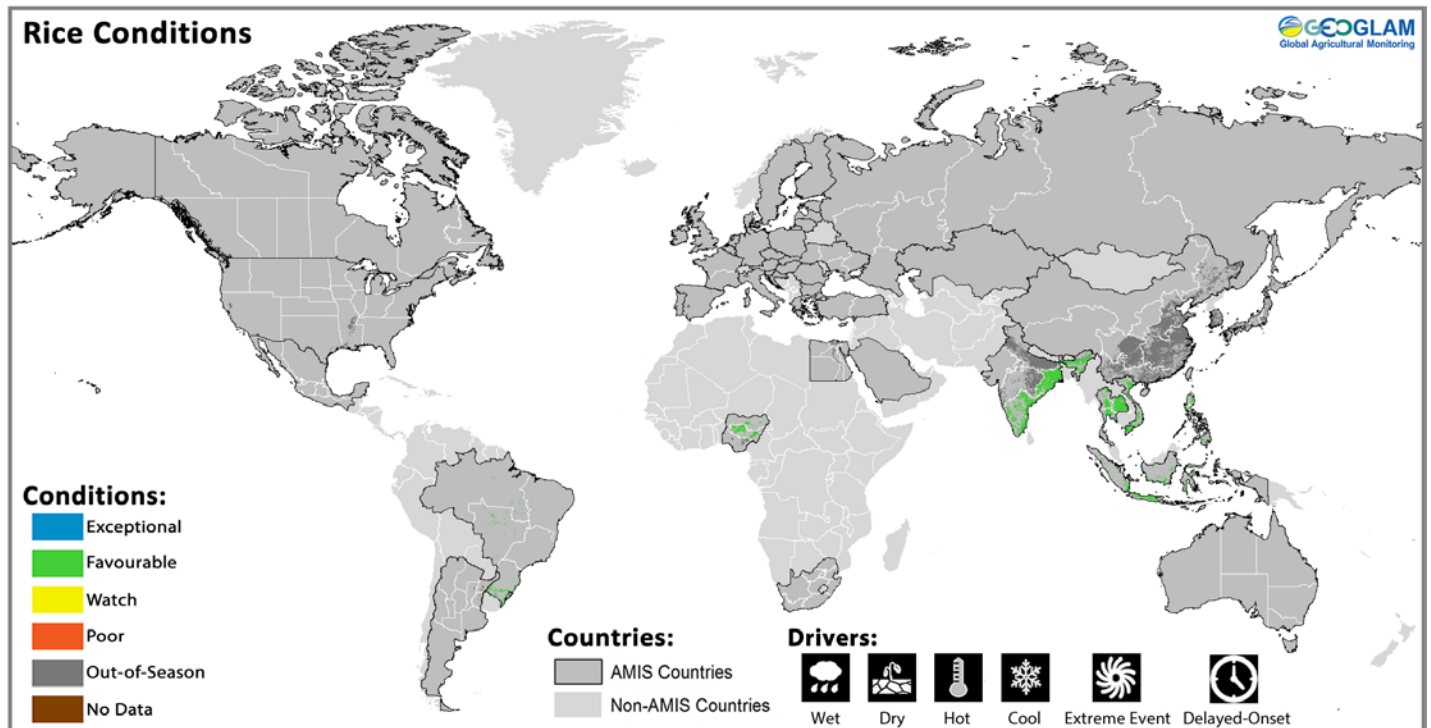
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

**Maize:** In **Brazil**, conditions for the spring-planted crop have recovered as recent rainfall in the south brought favourable conditions. Early harvest started with estimates in line with the five year average. Sowing of the summer-planted crop (larger) continues to advance in the main producing regions under favourable conditions. In **Argentina**, conditions deteriorated for both the early and late planted crops in the central and southern growing regions due to continued dryness. Sowing of the late crop in the north was delayed due to dryness and may impact final yields due to the shorter period between sowing and harvest. In **South Africa**, conditions are mixed as a result of hot and dry weather in the west at the start of the season, resulting in reduced sown area. Widespread rainfall has returned over the main cropping region, however concern still remains in the west. In **Mexico**, harvest of the spring-planted crop wraps up under favourable conditions with a higher production than last year. Sowing of the autumn-planted crop is progressing under favourable conditions.



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

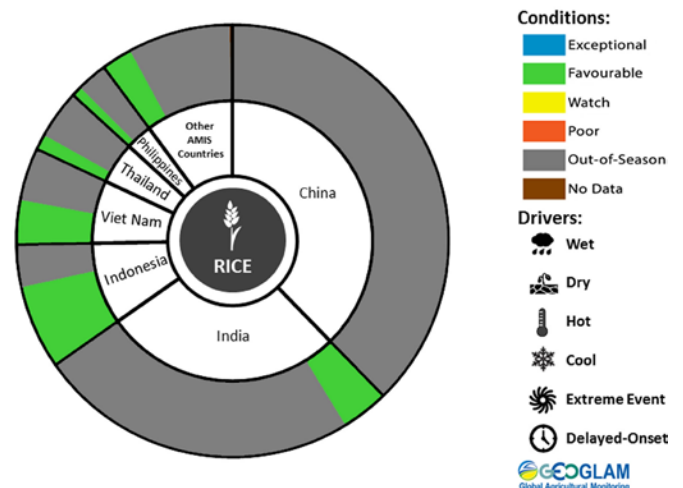
## Rice Conditions for AMIS Countries



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

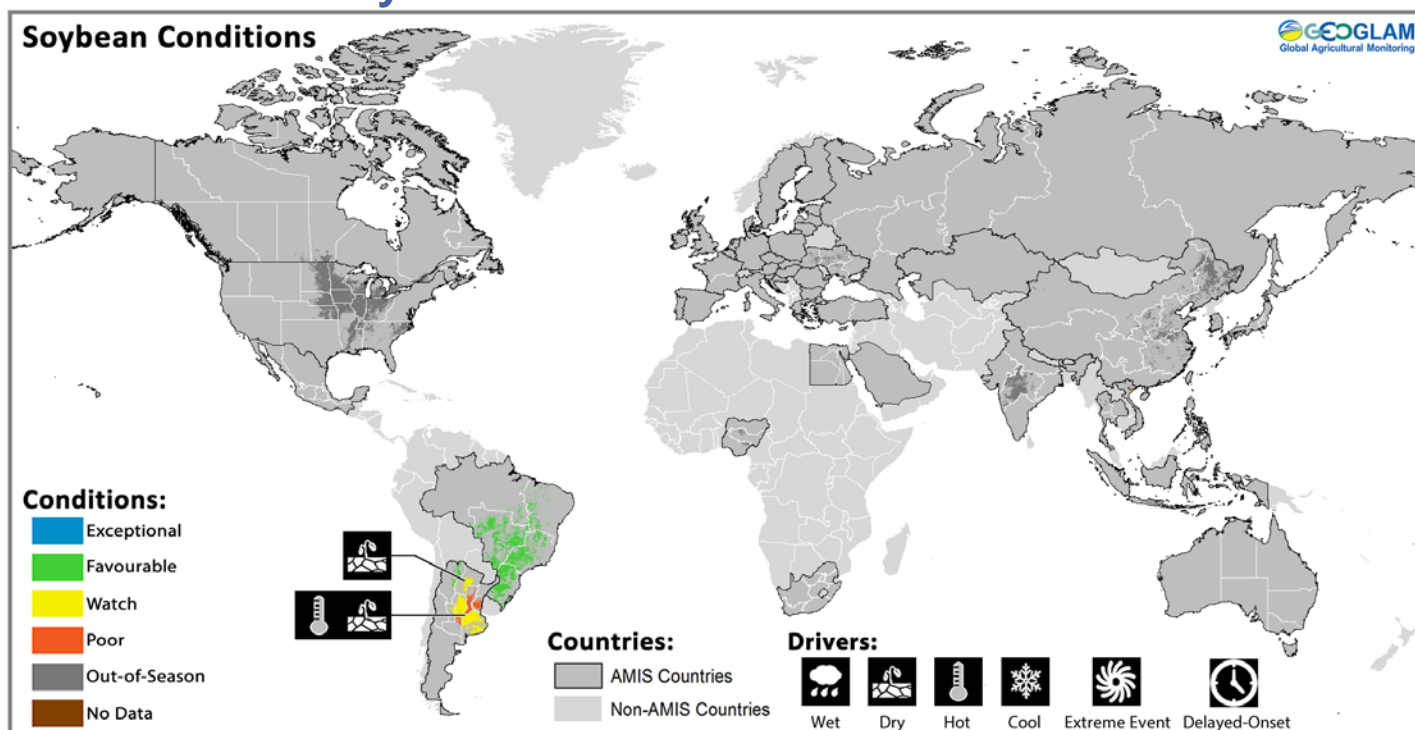
**Rice:** In **India**, conditions are favourable for the Rabi crop which is in the transplanting and tilling stages and there is an increase in sown area compared to average. In **Indonesia**, sowing of the wet-season rice continues under favourable conditions and total sown area remains lower than normal due to uneven rainfall. Harvest of earlier sown wet-season rice continues with expected yields higher than last season. In **Viet Nam**, sowing of the winter-spring rice (dry season rice) continues in the south under favourable conditions. Sowing has begun in the north after a delayed start due to cold weather. In **Thailand**, dry-season rice is in the vegetative stage under favourable conditions with no negative effects from earlier cold weather. In **the Philippines**, conditions are generally favourable for dry-season rice. Multiple weather systems affected the country over the past month, resulting in some minor crop damage in southern growing areas.

Share of total AMIS Production



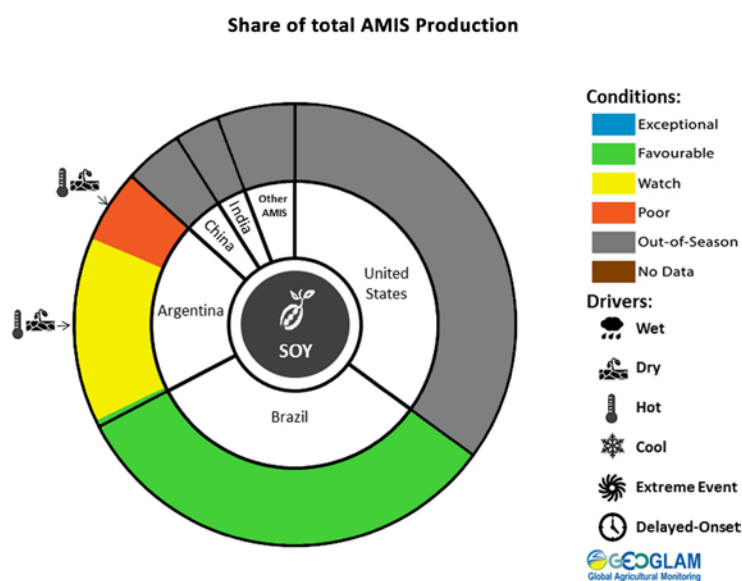
For detailed description of the pie chart please see box below.

## 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 February 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 **Brazil**, majority of the crop is in the vegetative to reproductive stage under favourable conditions with recent rainfall in the south improving conditions. Harvest begun with initial numbers confirming good production expectations. In **Argentina**, conditions continued to deteriorate due to poor soil moisture and high temperatures for both the spring-planted crop (larger) and the summer-planted crops. While conditions are extremely variable across the central and southern growing regions, possible recovery will depend on future weather conditions. Final sown area of the summer-planted crop was reduced due to lack of soil moisture in some growing 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 [GEOGLAM Crop Monitor for Early Warning](#), published March 5<sup>th</sup> 2018**

**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 slice 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.

\*"Average" refers to the average conditions over the past 5 years.

### 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

	Wet
	Dry
	Hot
	Cool
	Extreme Event
	Delayed-Onset

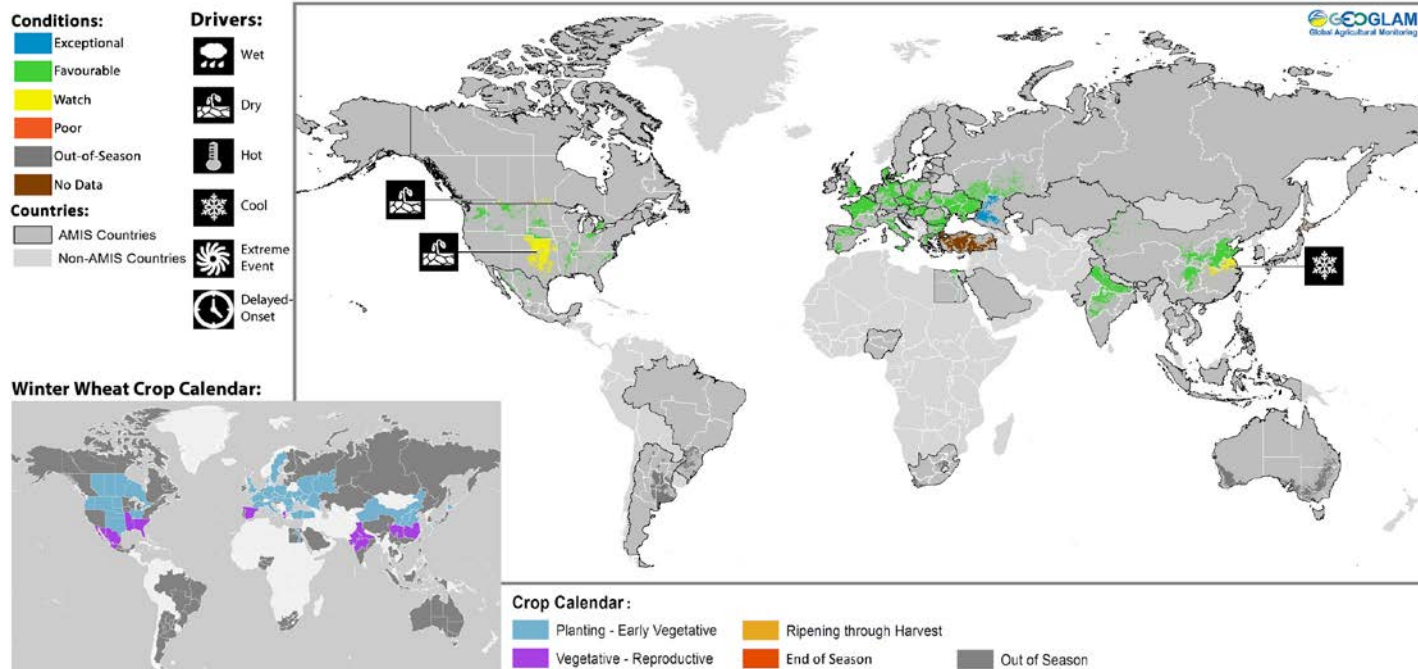
### Crop Season Nomenclature:

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	

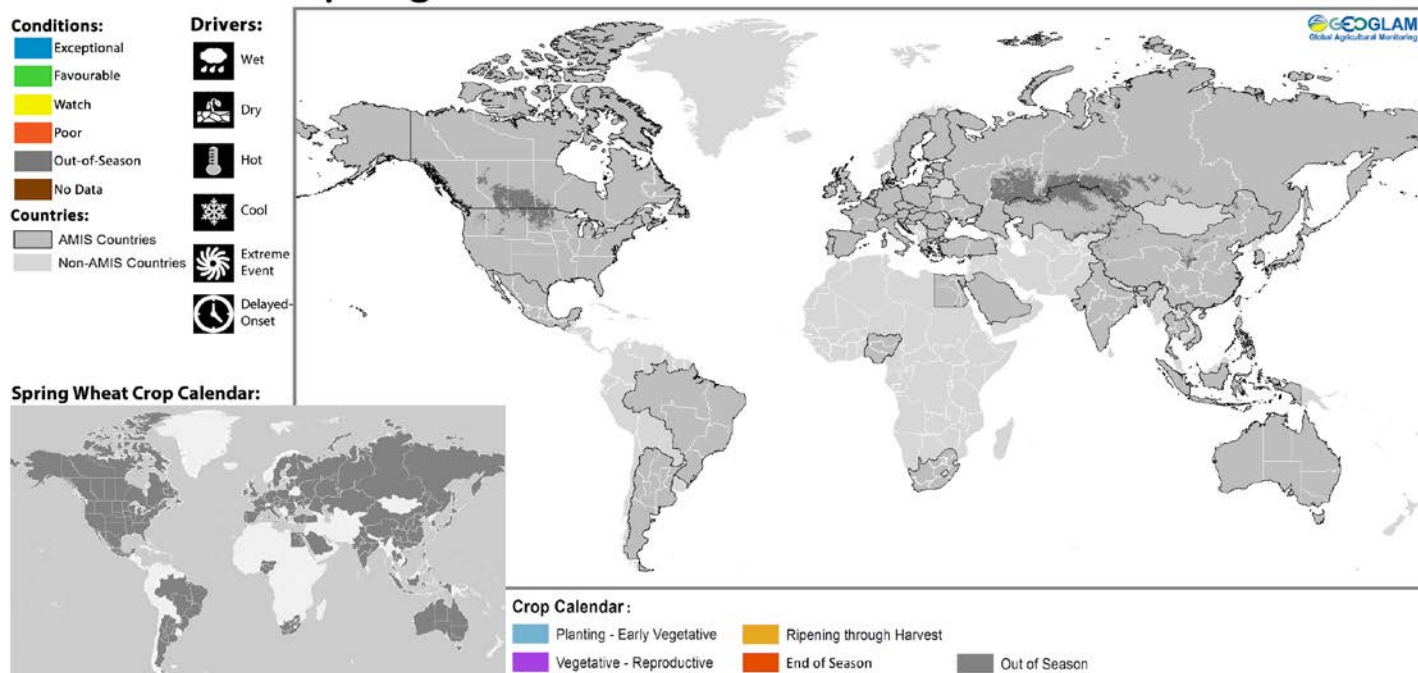
## Appendix 2: Crop Season Specific Maps

### 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 February 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.

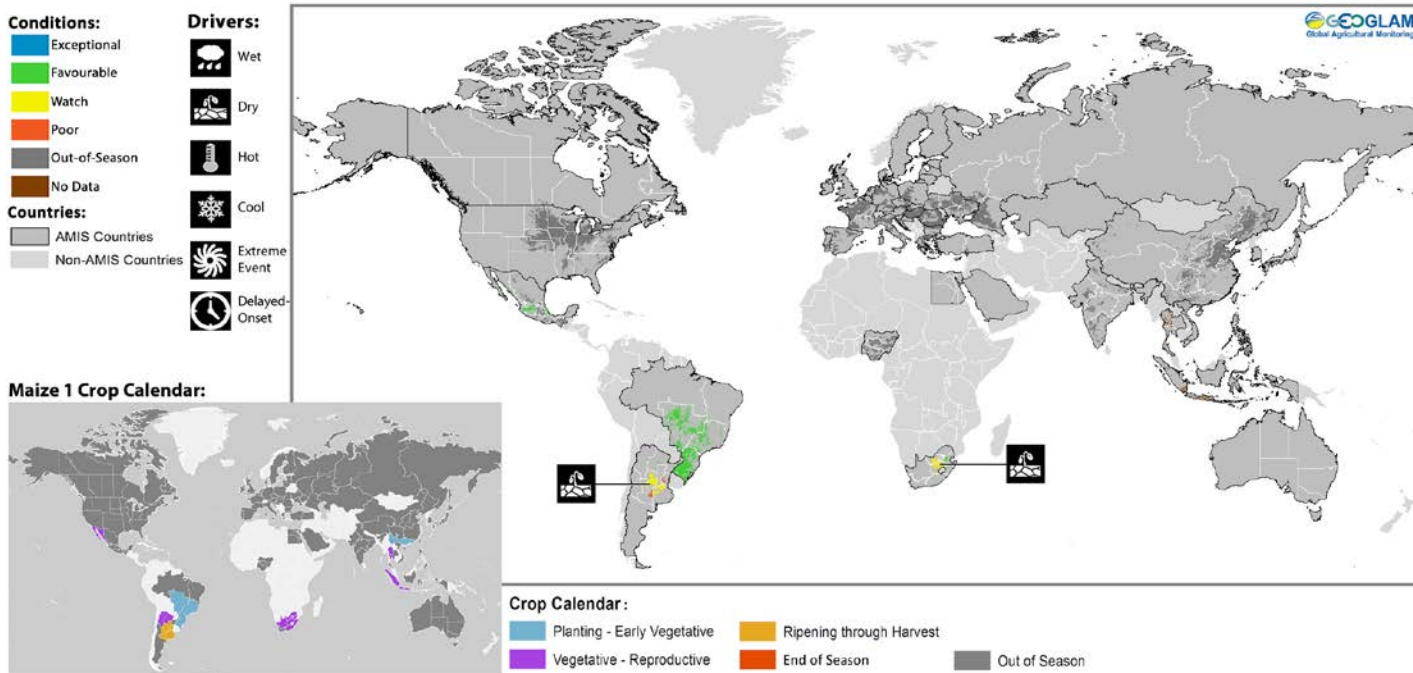
### Spring Planted Wheat Conditions for AMIS Countries



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 February 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.

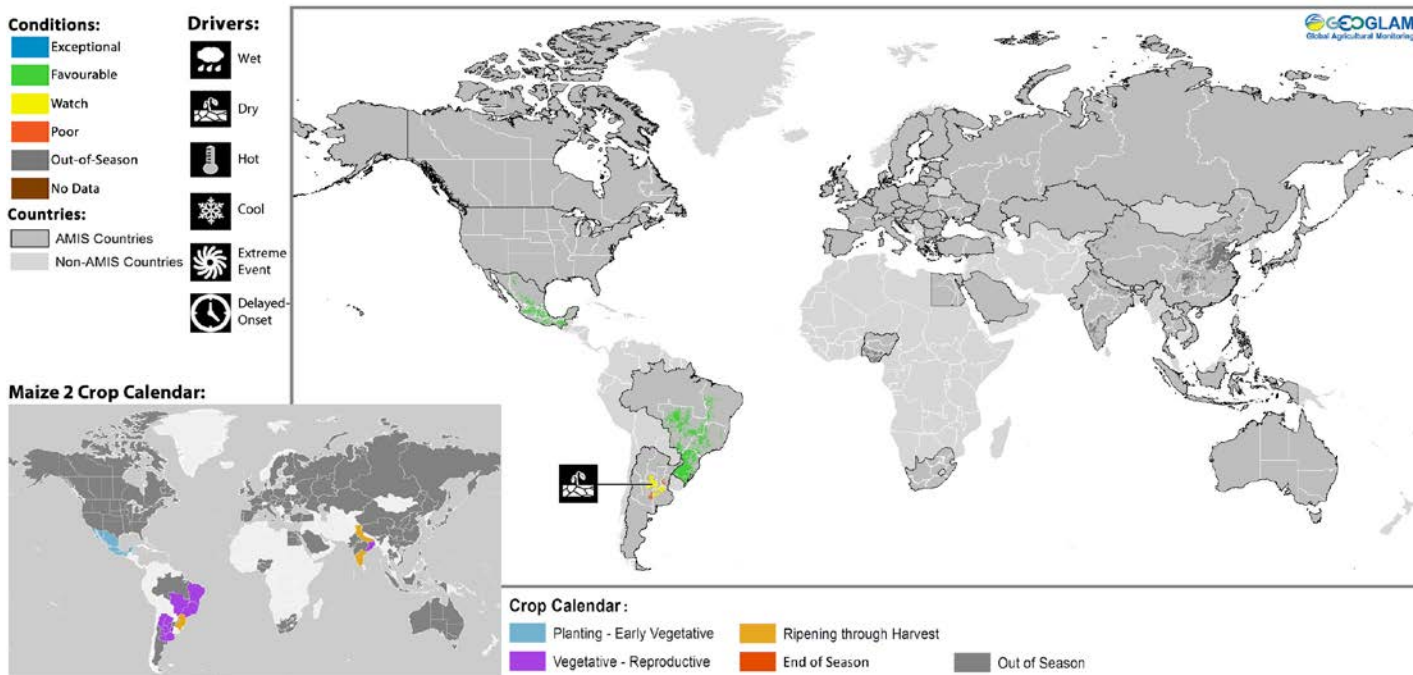


## Maize 1 Conditions for AMIS Countries



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 February 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.

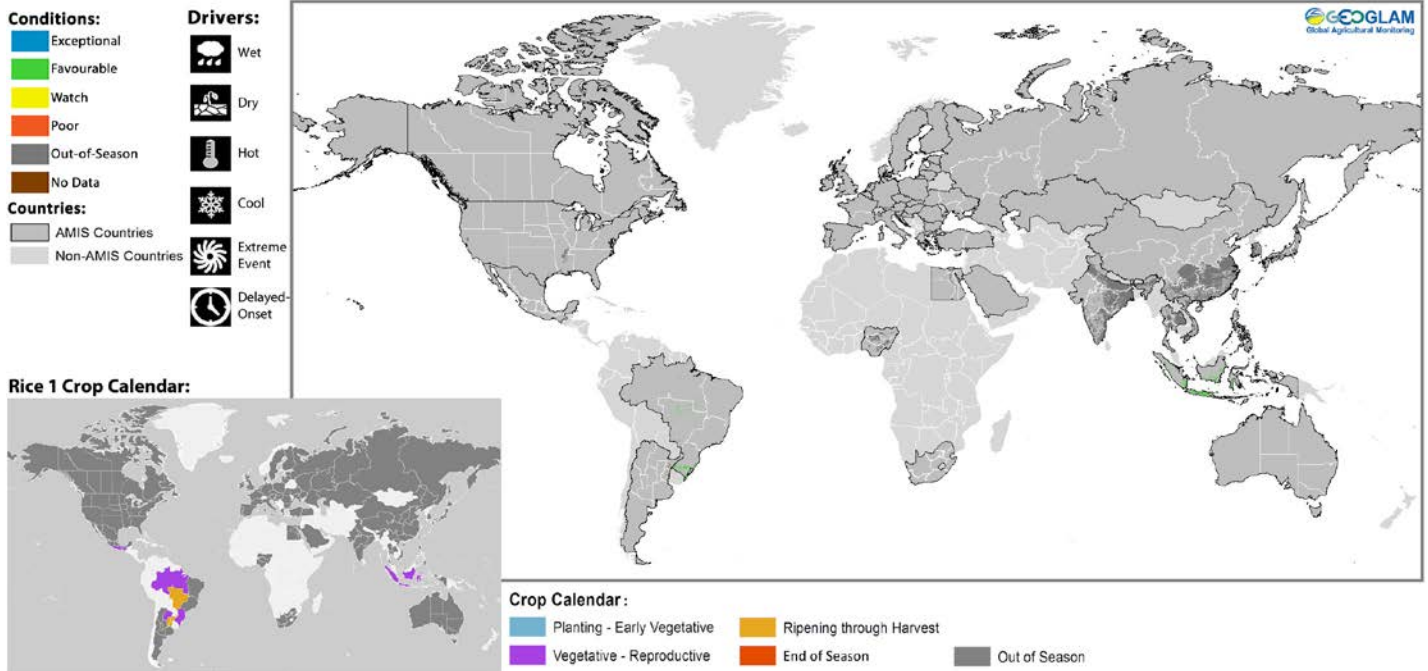
## Maize 2 Conditions for AMIS Countries



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 February 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.

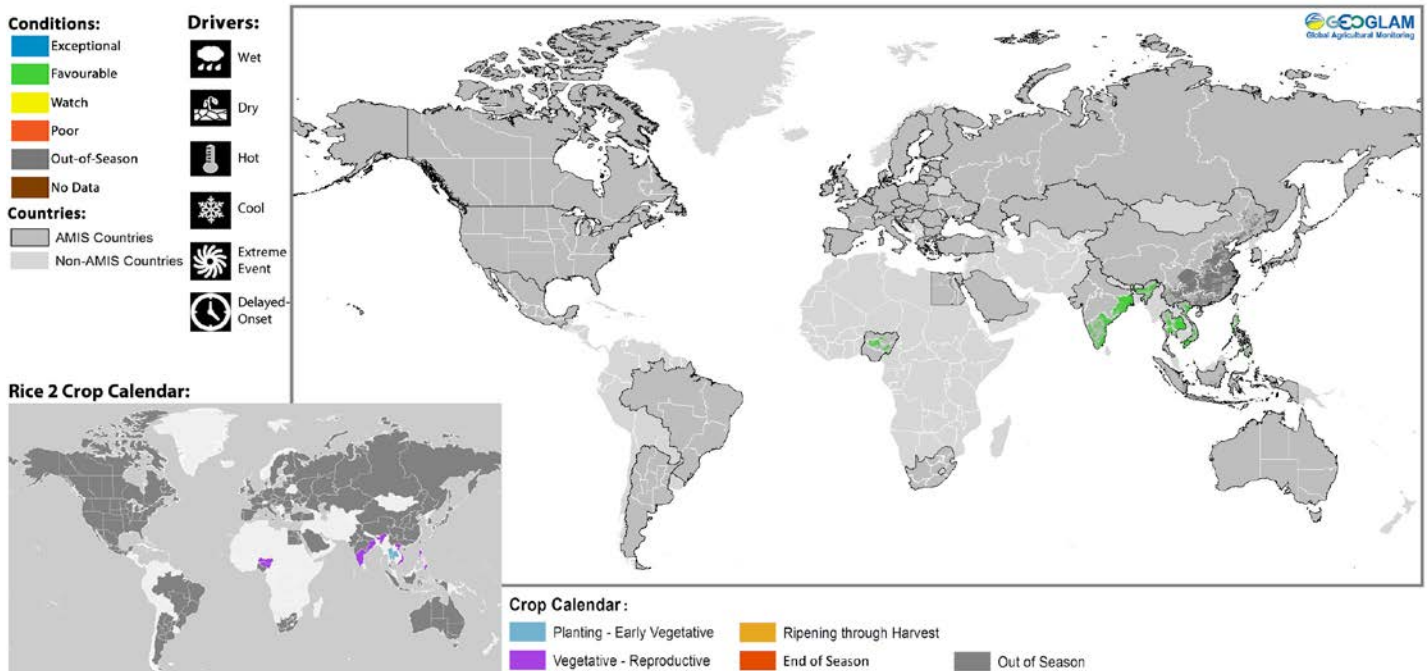
\* Assessment based on information as of February 28th

## 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 February 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.

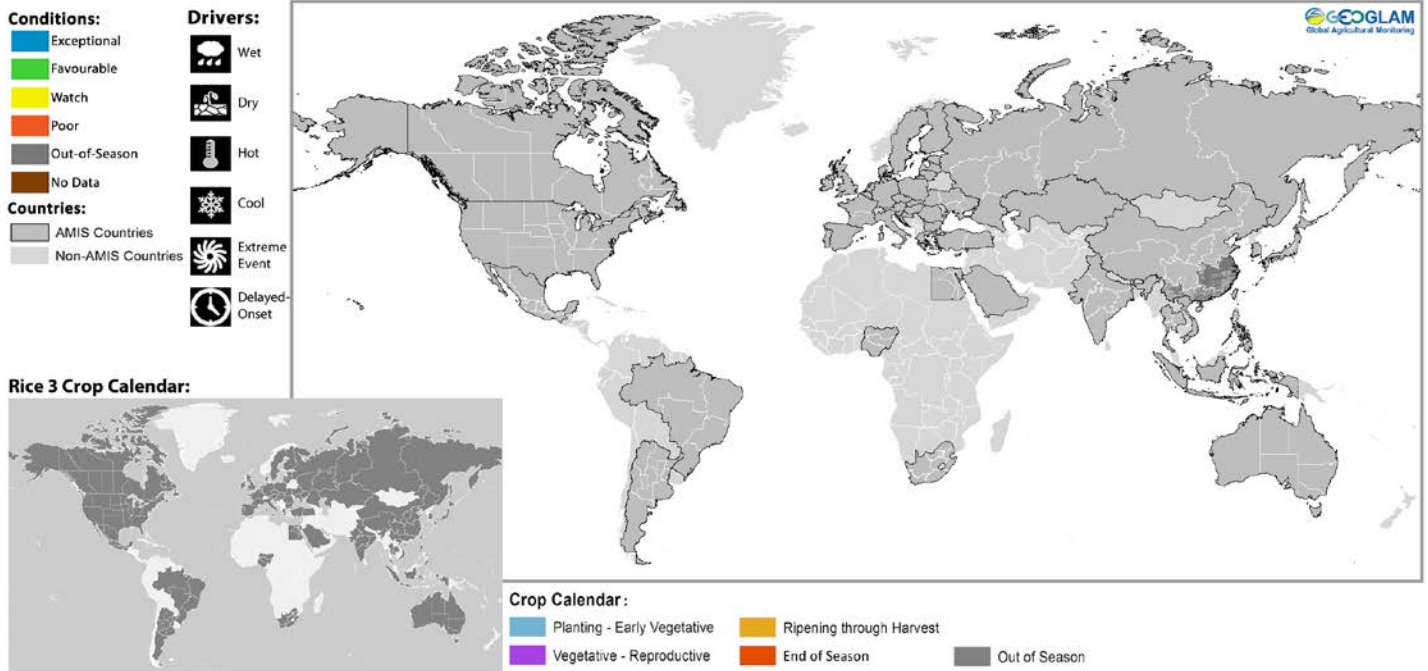
## Rice 2 Conditions for AMIS Countries



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 February 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.

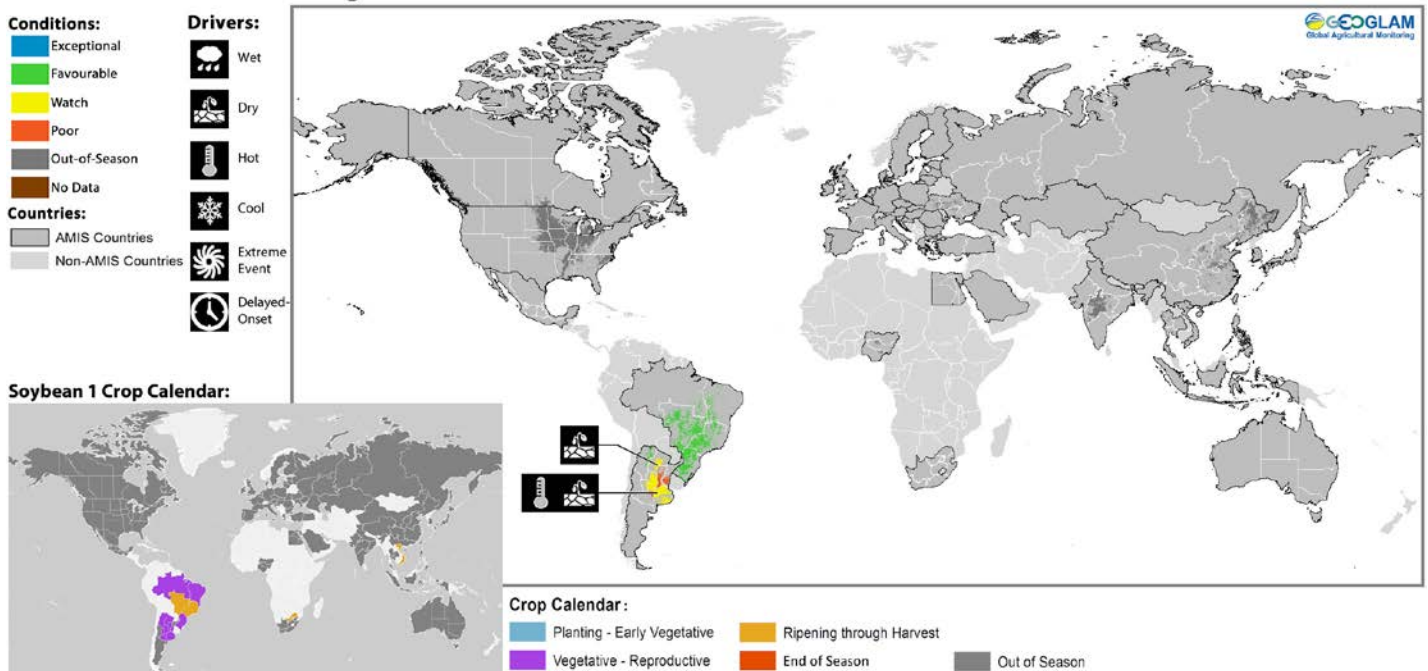
\* Assessment based on information as of February 28th

### 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 February 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.

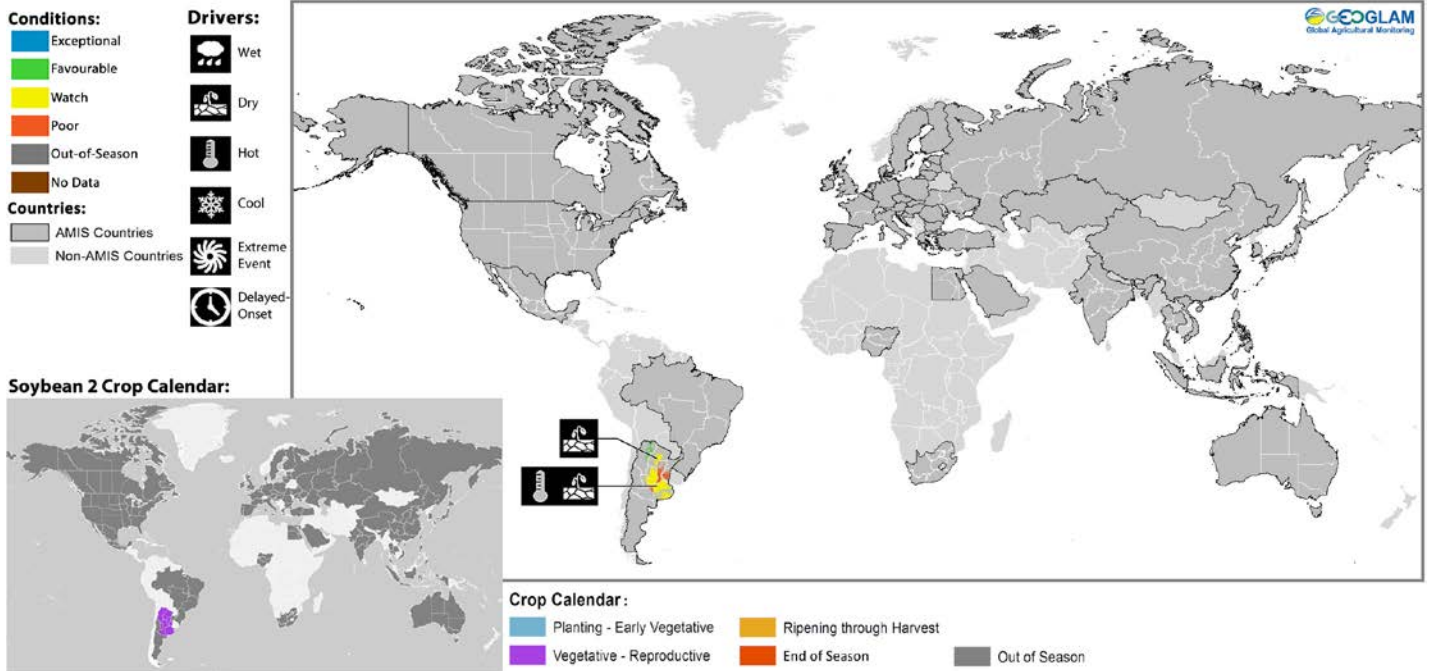
### Soybean 1 Conditions for AMIS Countries



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 February 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 February 28th

## Soybean 2 Conditions for AMIS Countries



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 February 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: The Buenos Aires Grain Exchange*

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

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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 & GeoTerraImage & 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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