

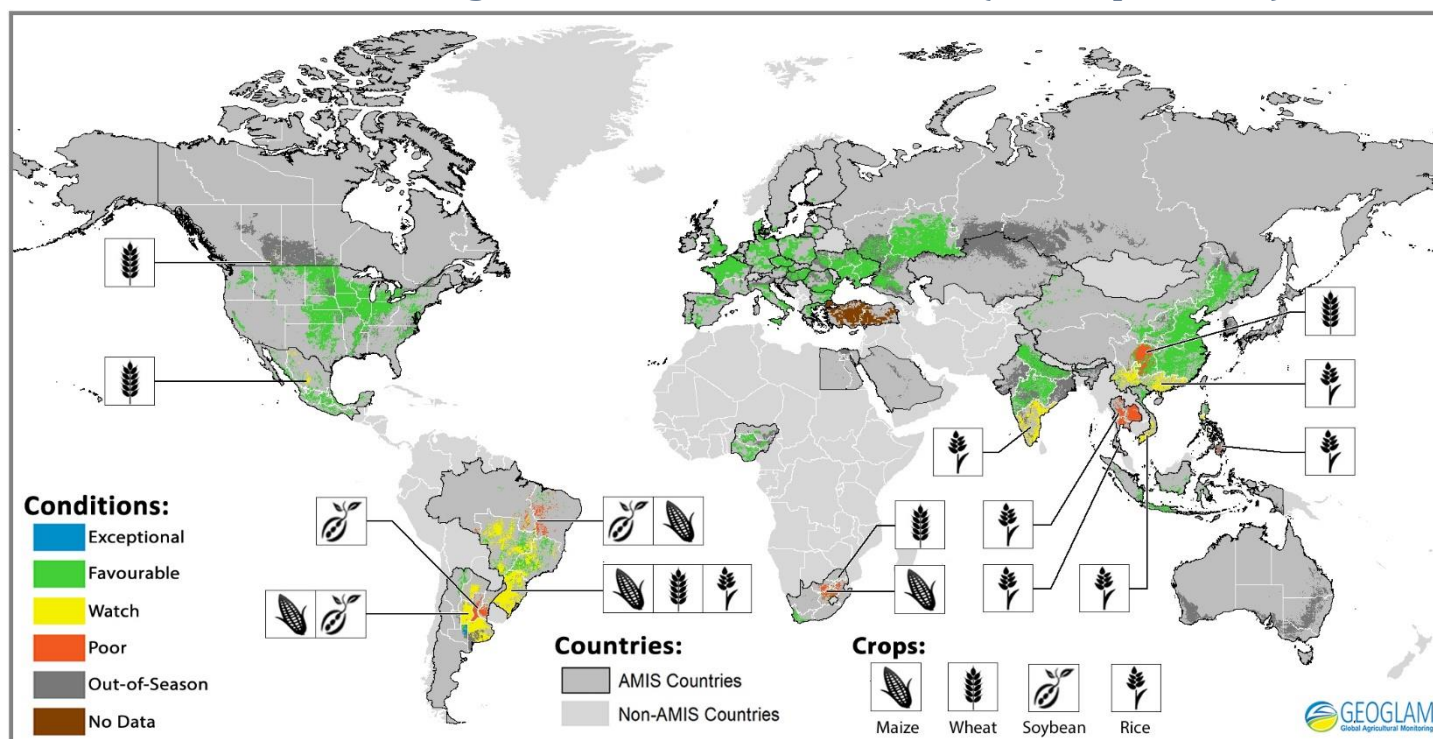
# GEOGLAM Crop Monitor

No. 28 – May 2016



Prepared by members of the GEOGLAM Community of Practice  
Coordinated by the University of Maryland

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



Crop condition map synthesizing information for all four AMIS crops as of April 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 for the winter wheat crop continue to be largely favourable with improved prospects in Russia and Ukraine. Spring wheat planting has begun in the Russian Federation. The southern hemisphere is currently out of season.

**Maize** - In the southern hemisphere, conditions deteriorated in Brazil due to dry conditions affecting the summer planted crop and conditions remain poor in South Africa. In the northern hemisphere planting has begun under generally favourable conditions.

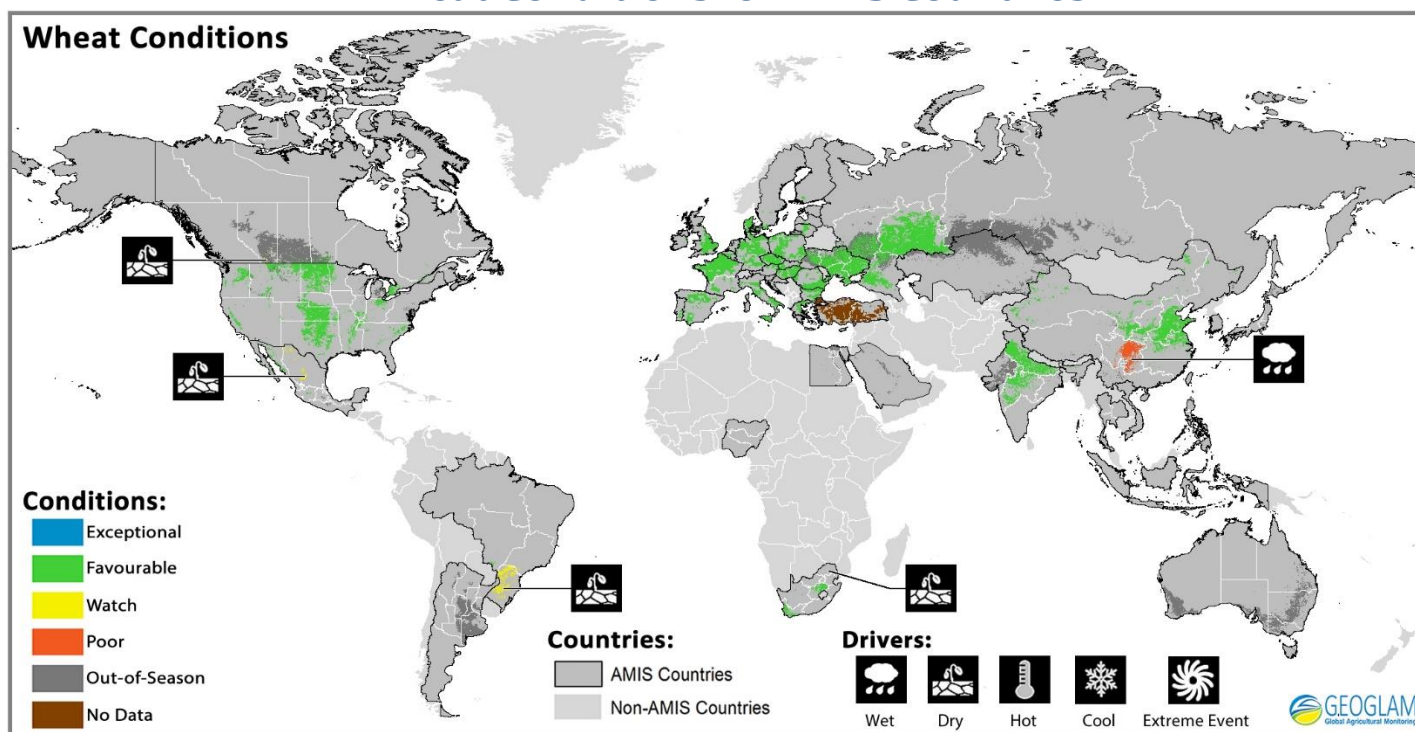
**Rice** - El Niño continues to impact conditions in parts of Southeast Asia, most notably in Thailand where harvest has begun and production is decreased, in southern Vietnam and Philippines. Conditions have improved in Indonesia.

**Soybeans** - In the southern hemisphere, conditions are mixed as harvest progresses. Conditions in Argentina deteriorated due to heavy rainfall, which caused lower yields, reduction in grain quality and area loss. Conditions in Brazil are favourable over the main producing regions but mixed in the northern areas due to drought. The northern hemisphere is currently out of season.

### El Niño declining

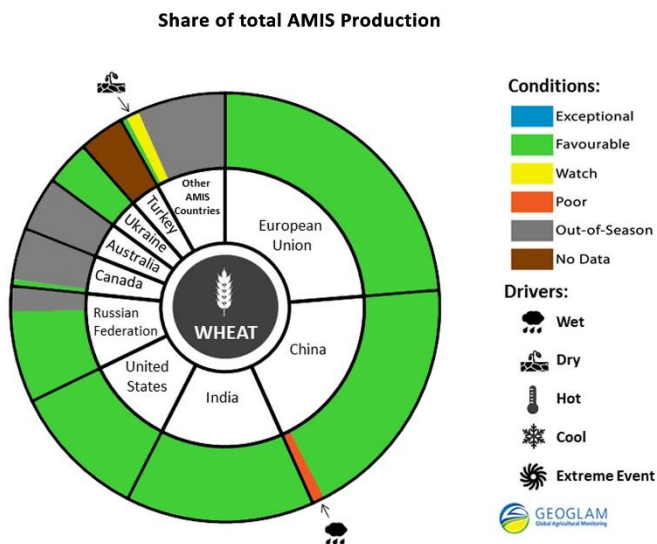
The El Niño of 2015-2016 is moderating in strength in April and should be replaced by neutral conditions in the coming months. Consistent with this trend in the Pacific, drought conditions should persist through May and June in Southeast Asia and northern South America, accompanied by above average temperatures that increase the impact of the dryness. In the same period, southeast Brazil and Uruguay should see continuation of above average rainfall. However, by July there should be no further effects of El Niño, and the event will have come to a close. Looking beyond the end of the northern hemisphere growing season, there are increasing odds of a transition to La Niña conditions by November. Model projections put the chance of that occurring at about 60 percent, which is double the long term average probability of La Niña in that month.

## 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 April 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 however, concerns remain over Poland where crops are poorly developed due to unfavourable winter conditions. In the **US**, winter wheat conditions are favourable throughout as the crop entered reproductive stages. In **China**, winter wheat conditions are generally favourable except in the Chongqing area where conditions are poor due to excess rainfall. Spring wheat planting has begun in the north. In the **Russian Federation**, conditions for winter wheat are favourable owing to good soil moisture from snow melt. Spring wheat planting has begun in the Volga region. In **Ukraine**, conditions are favourable owing to the beneficial rainfalls and favourable temperatures. Crop conditions have improved significantly, and there could be prospects for a good harvest. In **Canada**, winter wheat conditions are favourable in most eastern and central growing areas. In the western regions, warm temperatures have advanced cropping in British Columbia but the western prairies are very dry and the continuation of these conditions will likely result in a delay of early season field work and seeding of spring wheat. In **India**, harvest is almost complete for the winter-planted crop and conditions are favourable.

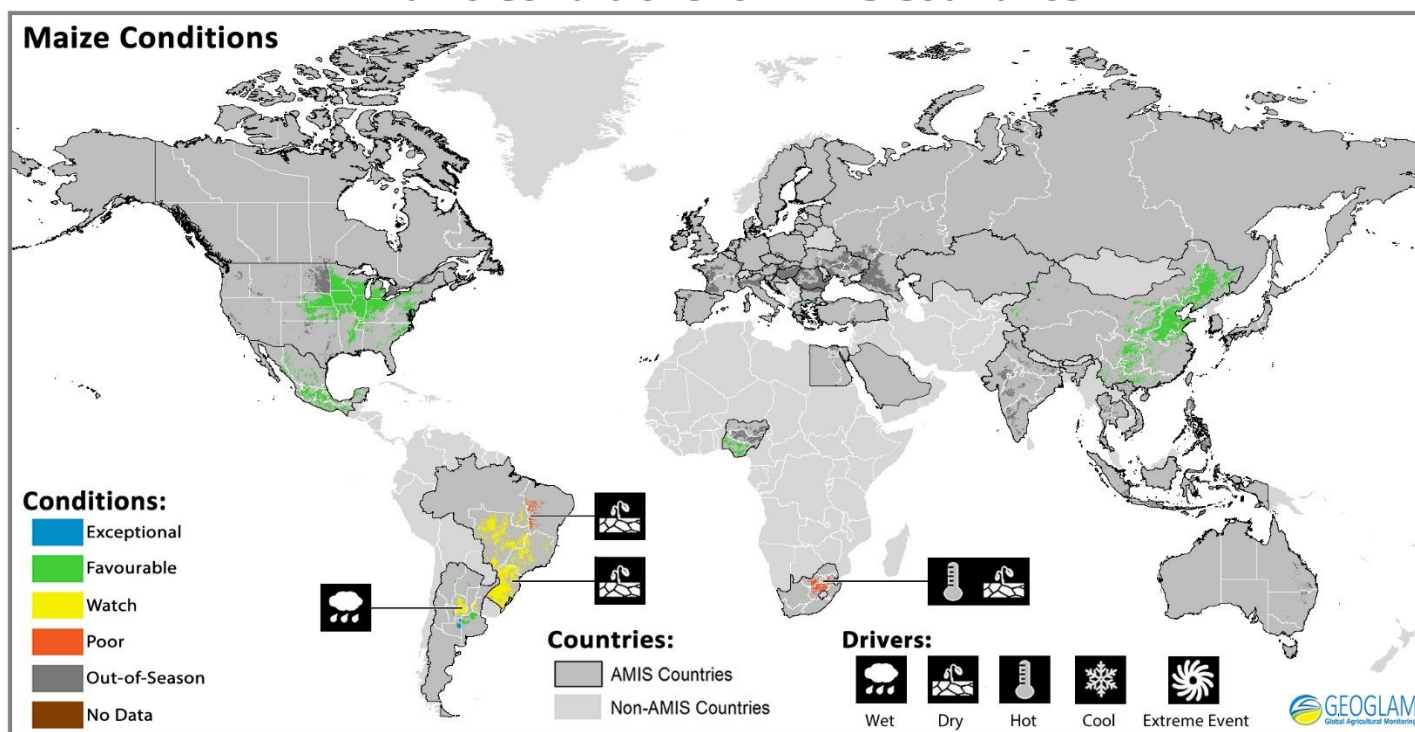


For detailed description of the pie chart please see box below.

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

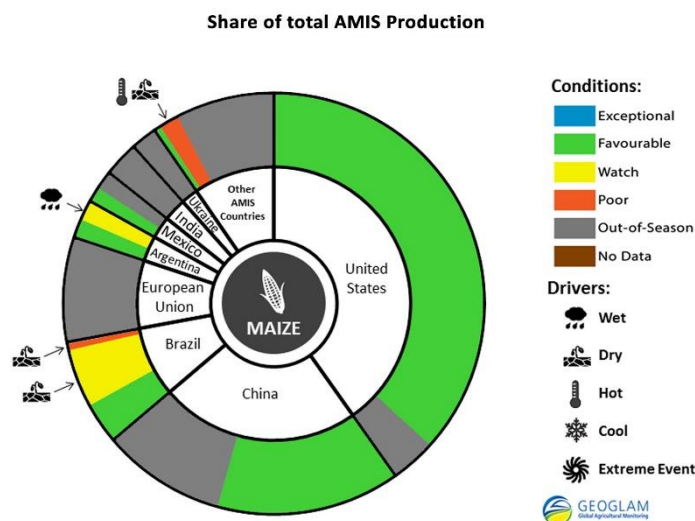


## Maize Conditions for AMIS Countries



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 April 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.

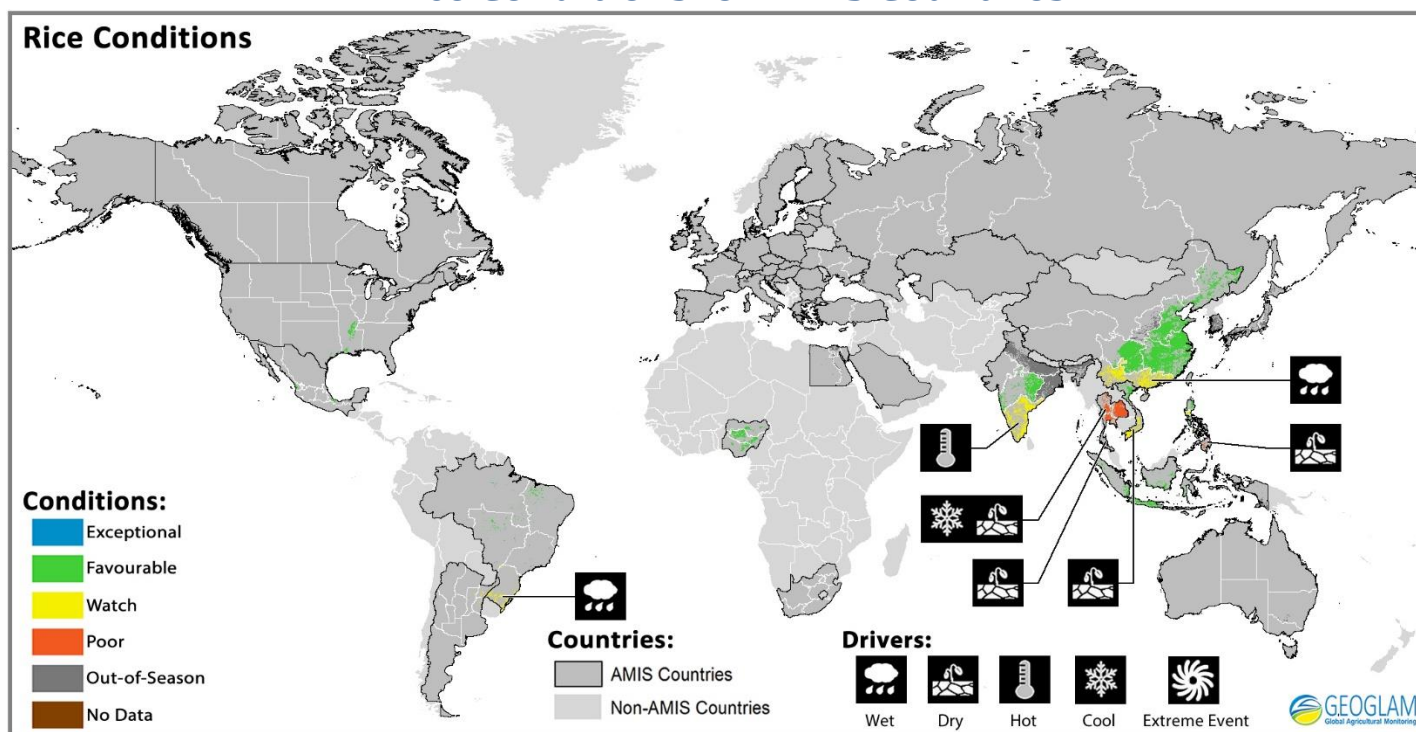
**Maize:** In **Brazil**, conditions for the summer-planted maize (the larger producing season) deteriorated from last month resulting in mixed conditions due to reduced rainfall. Harvest is advanced for the spring-planted crop and conditions in the main producing areas are favourable. In the northern and northeastern regions, conditions are mixed due to drought. In **Argentina**, the harvest is progressing very slowly owing to adverse weather conditions. The crop is generally in good condition, except in the Litoral region where excesses water is affecting yield and grain quality. In **South Africa**, conditions remain poor in the western and central producing regions due to persistently dry and hot conditions throughout the season resulting in decreased planted area and reduced yields. In the **US**, planting has begun and conditions are good throughout. In **China**, conditions are favourable for the spring-planted crop. In **Ukraine**, planting has begun under favourable conditions. In **Mexico**, planting is almost complete for the autumn-winter planted crop and conditions are favourable. The spring-planted crop is emerging under favourable conditions. In **Nigeria**, conditions are favourable and the crop is in planting to early vegetative stages.



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

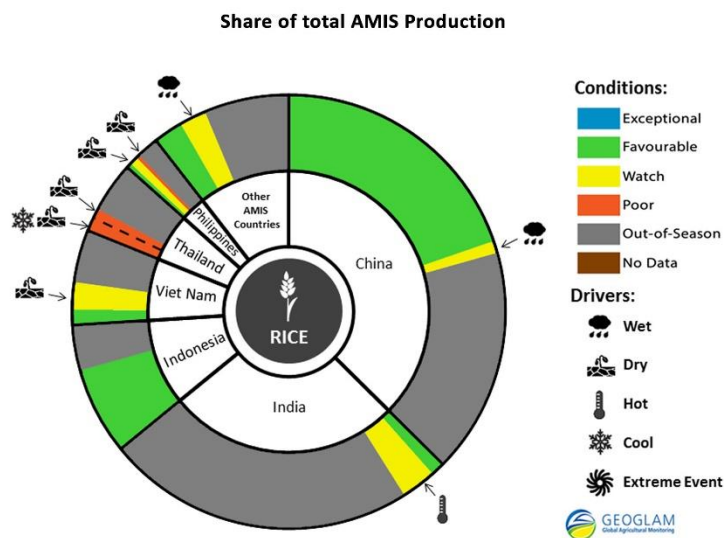
\* Assessment based on information as of April 28<sup>th</sup>

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

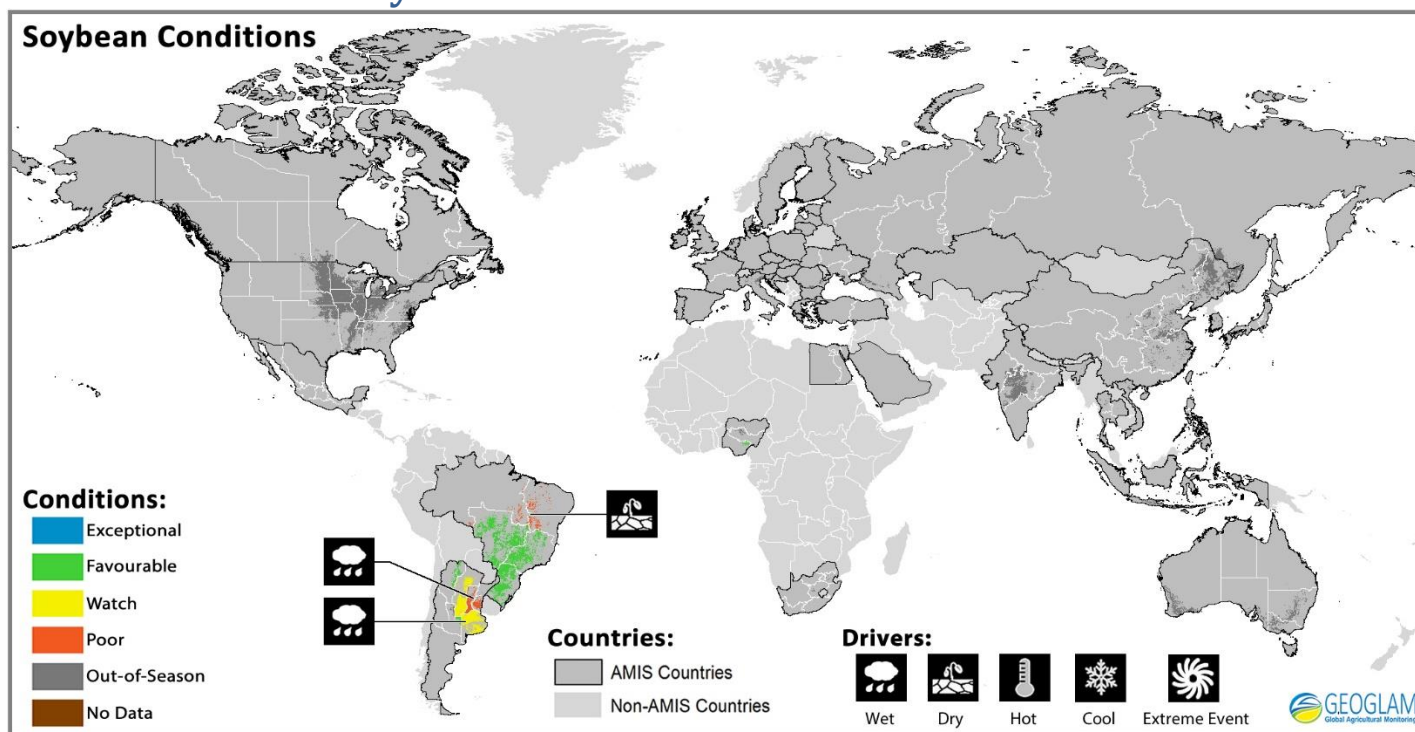
**Rice:** In **India**, conditions remain mixed for the rabi crop due to a lack of rainfall and high temperatures. In **China**, conditions are generally favourable except for in a small producing area in the southern region. In **Thailand**, harvest has begun and conditions continue to be poor. Yield is forecast to decrease due to insufficient water for cultivation attributed to El Niño and pest outbreaks throughout the season. In **Viet Nam**, harvest continues for the winter-spring dry season crop and conditions are favourable in the northern areas. However, there is concern in the southern region due to low levels of the Mekong River and saltwater intrusion. In **Indonesia**, conditions for the wet season crop improved from last month owing to a combination of sufficient irrigation and sunlight. In the **Philippines**, the dry season crop is favourable in the north and in mixed conditions in the south due to insufficient water, intense heat and pest outbreaks. In the **US**, planting has begun and conditions are favourable. In **Brazil**, excessive rainfall has delayed harvest, decreased the quality of the crop and reduced yields in the southern region, which is the main producing region. The crop is in favourable conditions in the rest of the country. In **Argentina**, harvest is progressing slowly due to unfavourable weather conditions and the crop was negatively affected in some areas by the excess of rainfall.



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

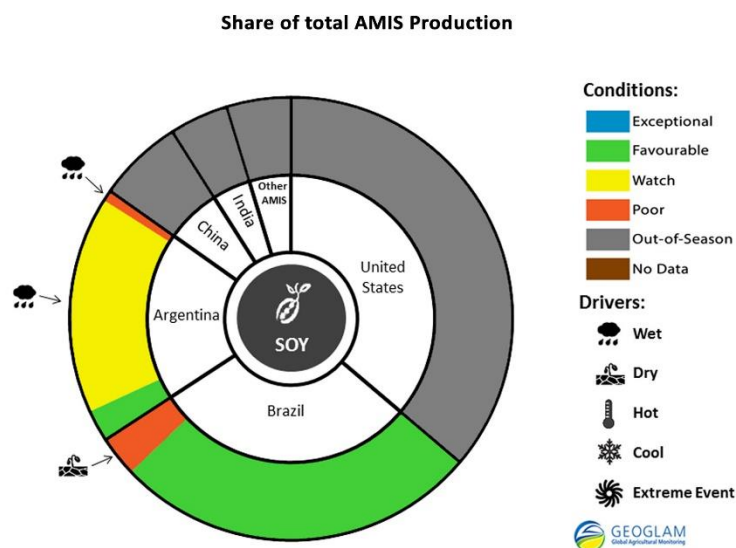
\* Assessment based on information as of April 28<sup>th</sup>

## 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 April 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**, harvest is progressing and conditions are favourable in the main producing center-west and southern regions. However, conditions in the north and northeastern regions continue to be mixed due to drought. Yields in these regions are expected decline relative to last year. In **Argentina**, conditions deteriorated and are unfavourable due to excess rainfall. The first crop is negatively impacted by the excess precipitation, in particular in the Litoral regions where there was loss of area, yield and grain quality.



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

**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 April 28<sup>th</sup>



## 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 production.

**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

\*"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 may result in production impacts and they 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.)

### Drivers:

	Wet
	Dry
	Hot
	Cool
	Extreme Event

### 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), 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, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & 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.

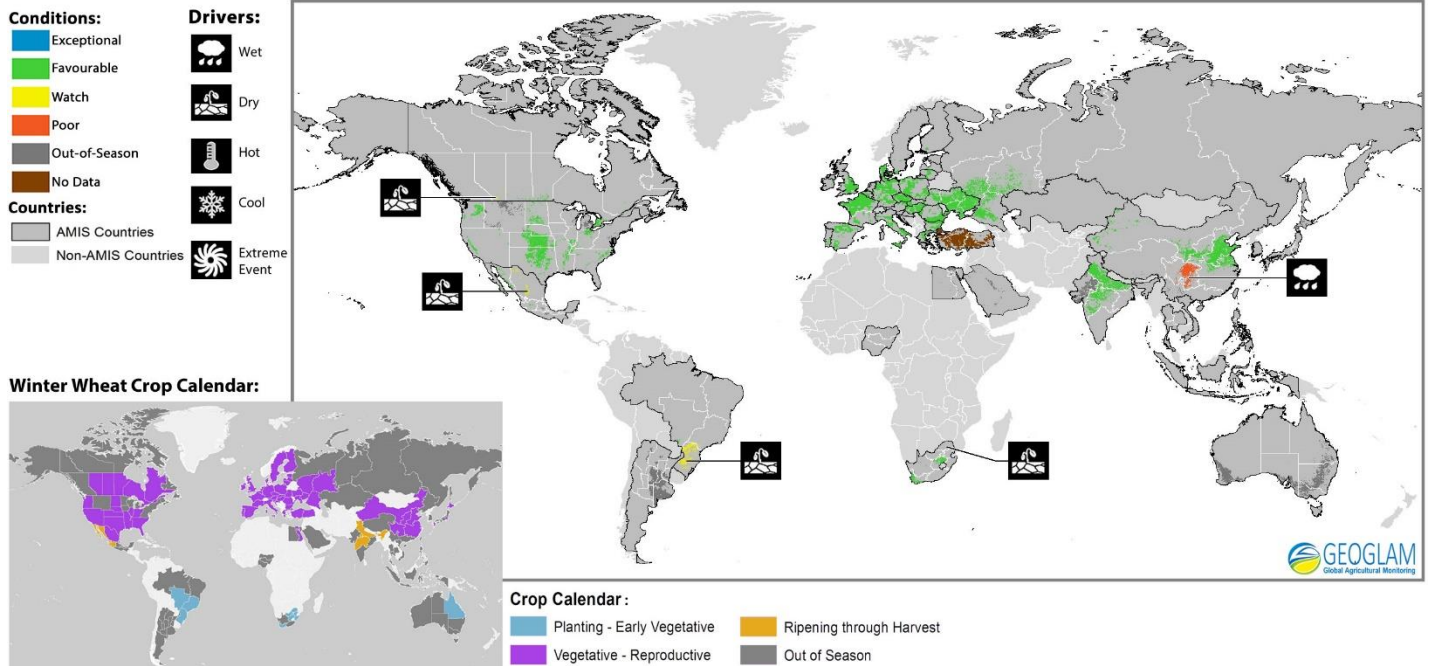
More detailed information on the GEOGLAM crop assessments is available at [www.geoglam-crop-monitor.org](http://www.geoglam-crop-monitor.org)

For information on country coverage and criteria:

<http://geoglam-crop-monitor.org/pages/about.php?target=approach>

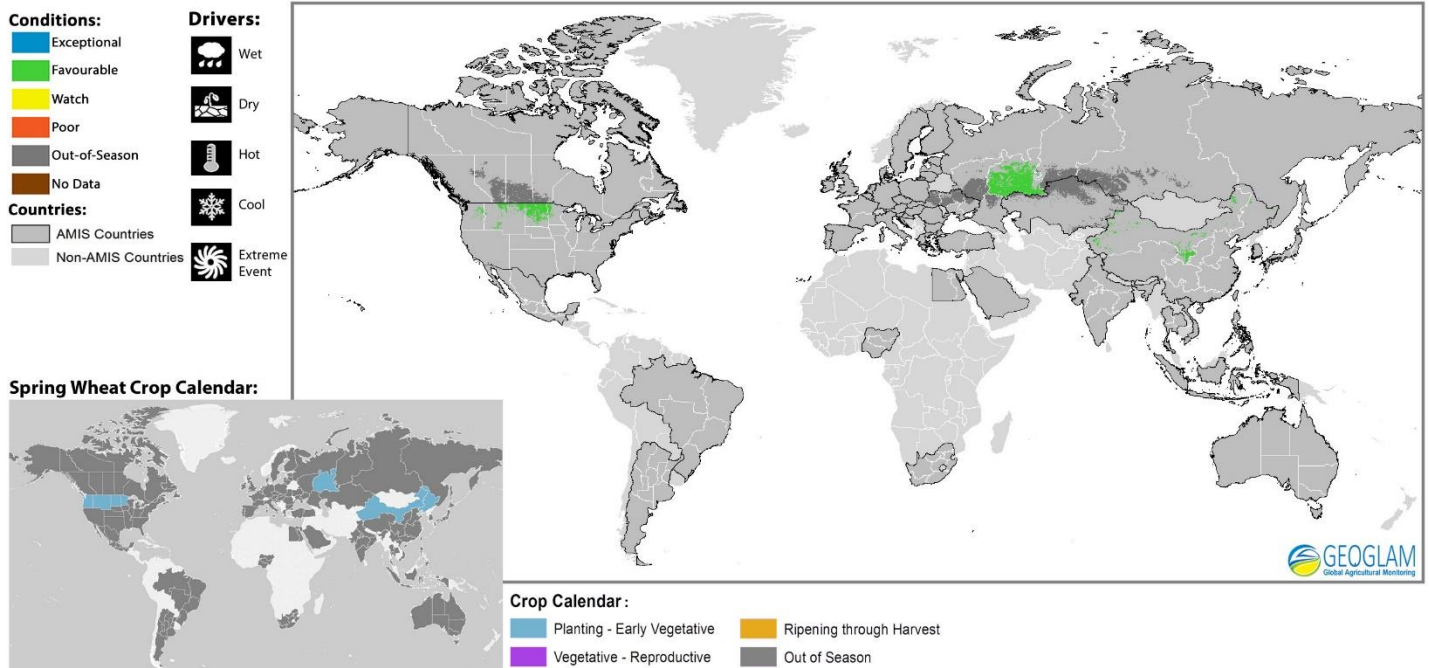
## Appendix 2: Crop Season Specific Maps & Pie Charts

### 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 April 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

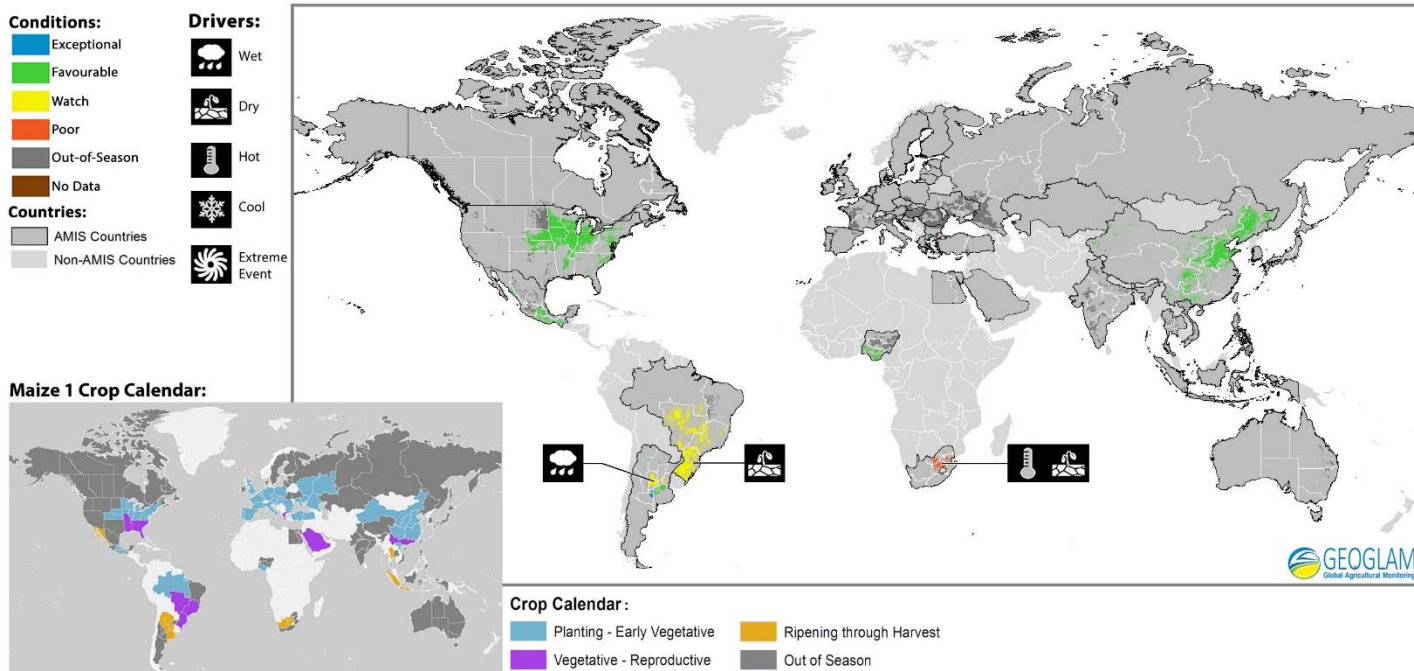


Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

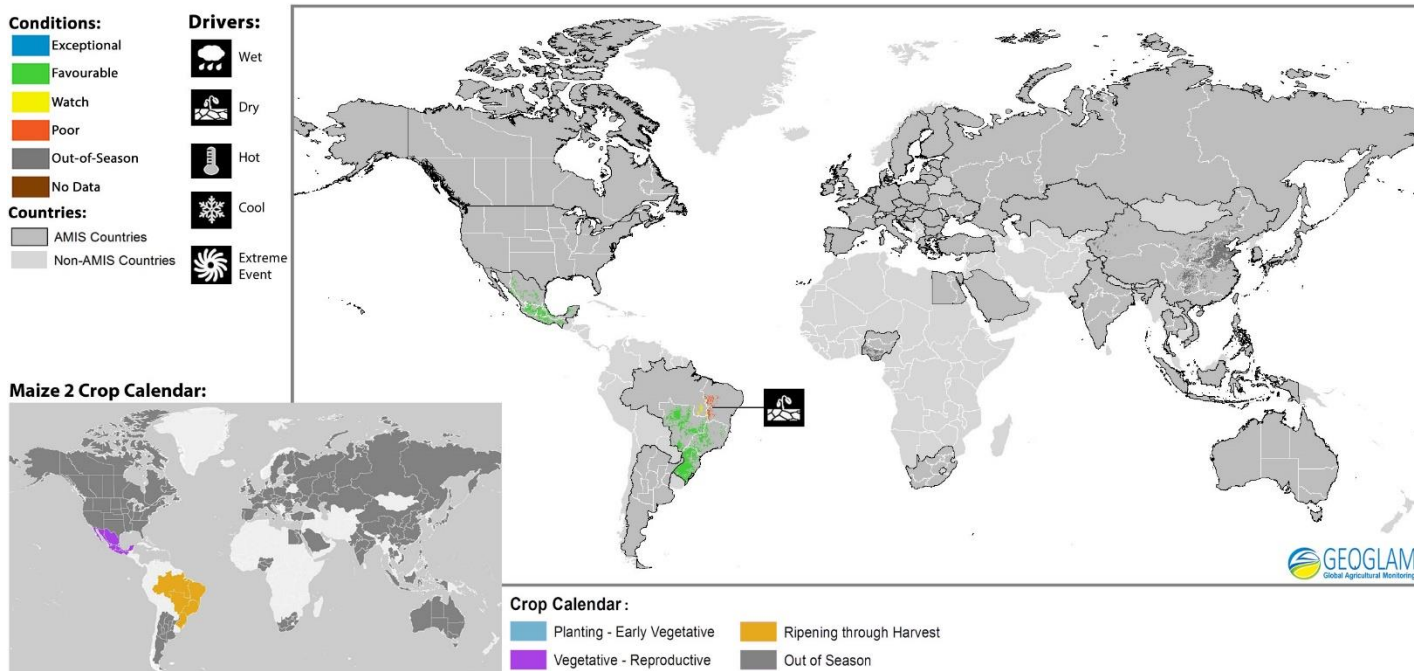


## Maize 1 Conditions for AMIS Countries



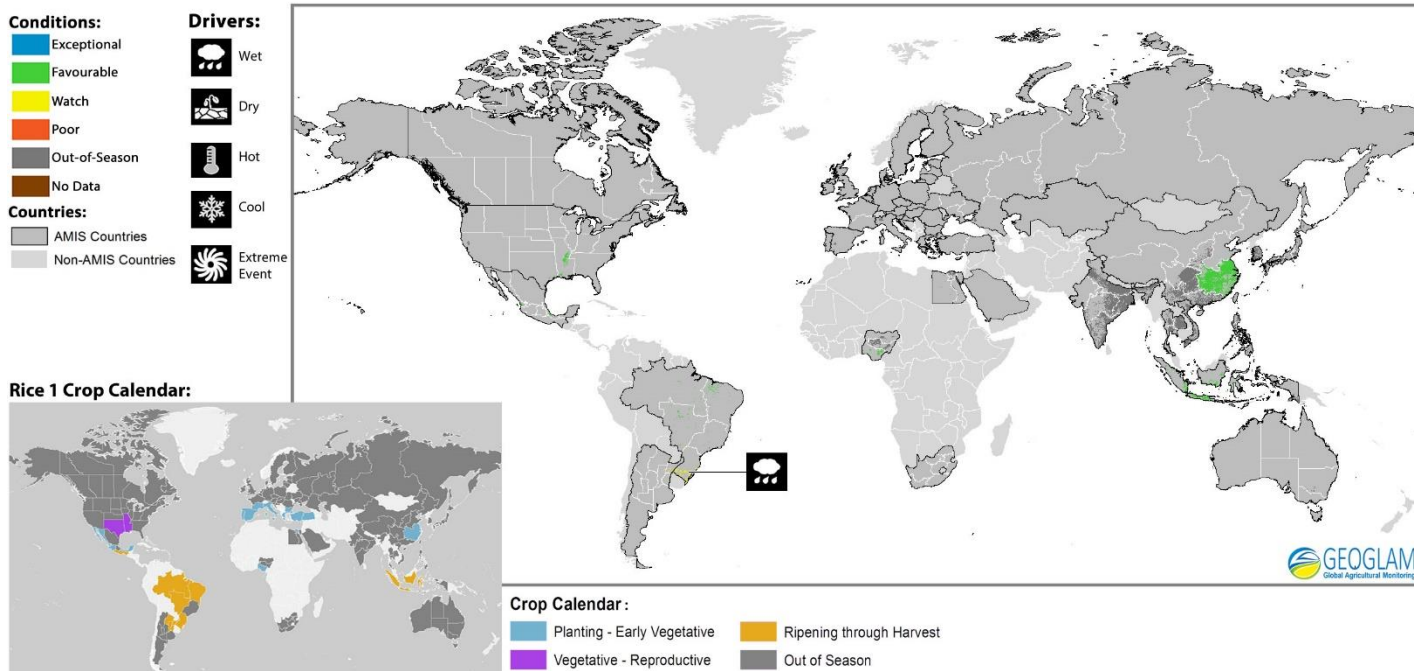
Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



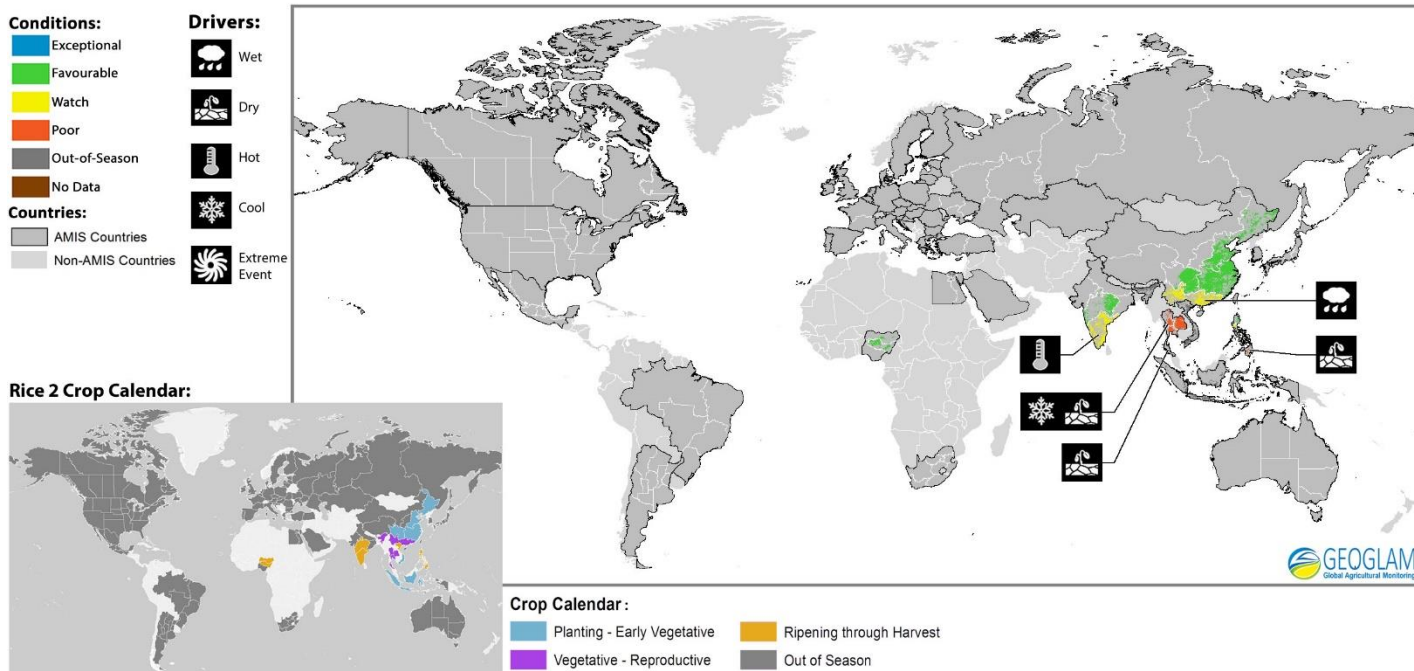
Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

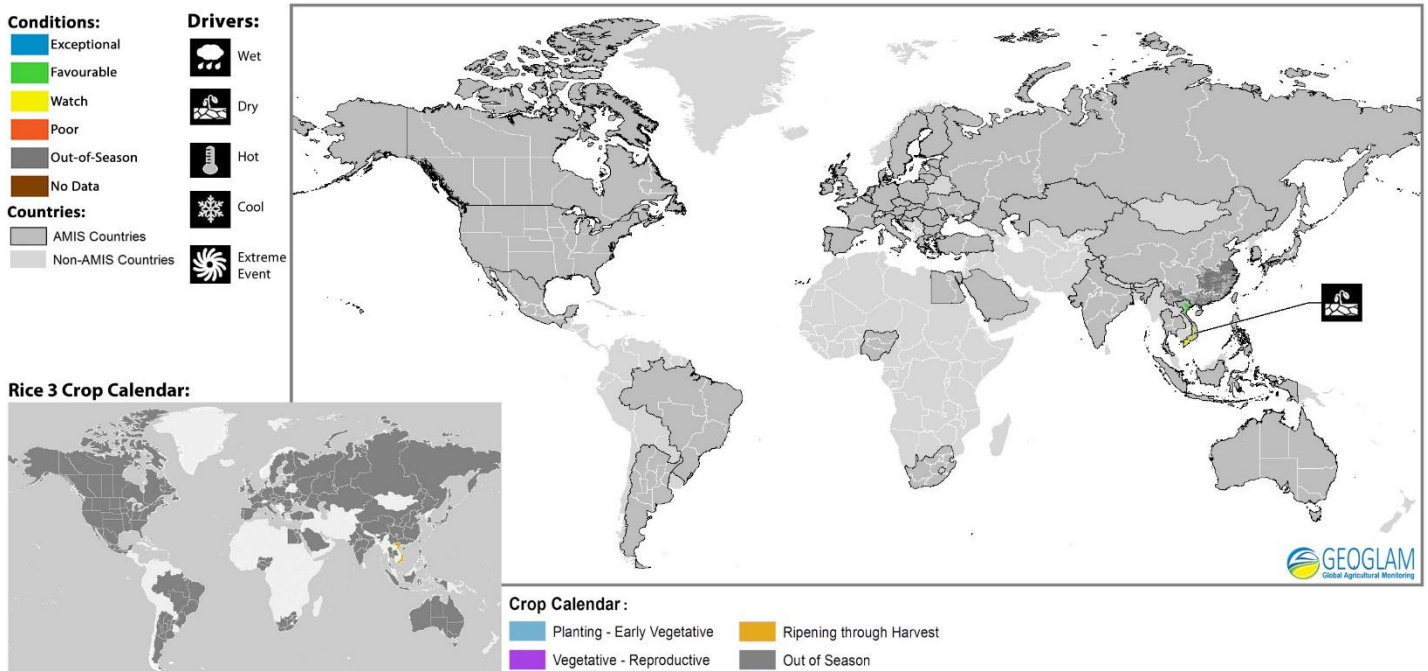


Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

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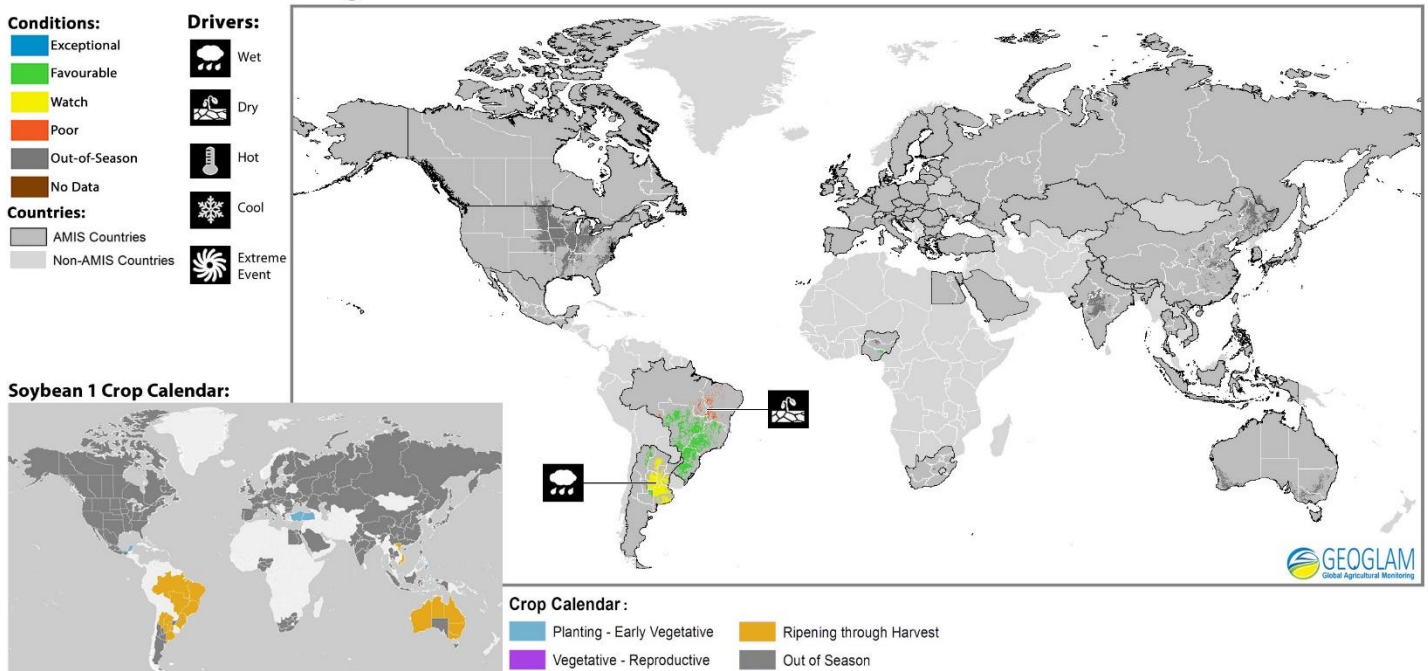


## Rice 3 Conditions for AMIS Countries



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 April 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

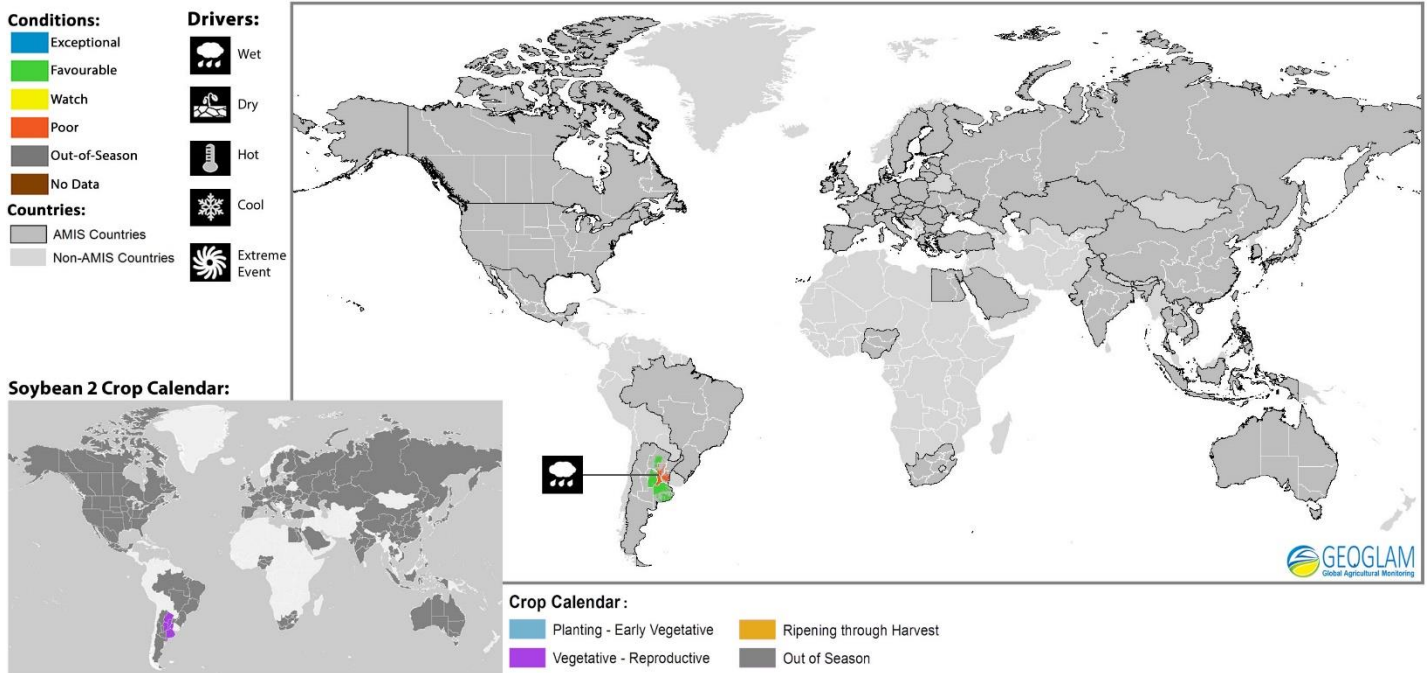


Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



## Soybean 2 Conditions for AMIS Countries

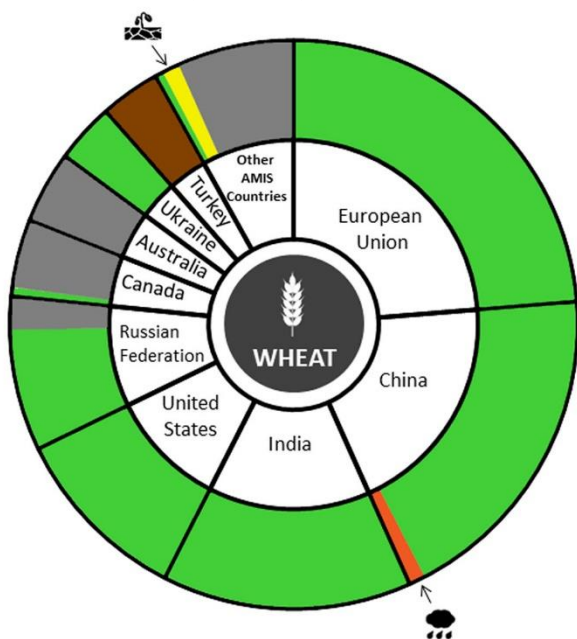


Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

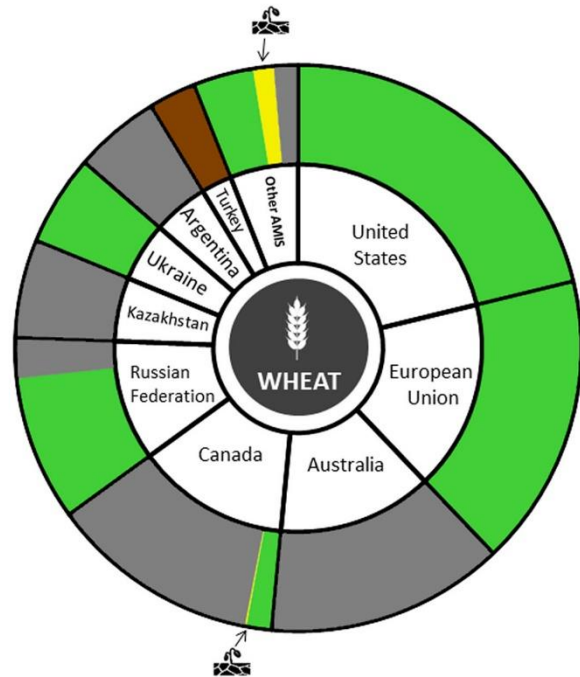
## Wheat AMIS Comparisons



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



Share of total AMIS Production



Share of total AMIS Exports

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

### Maize AMIS Comparisons

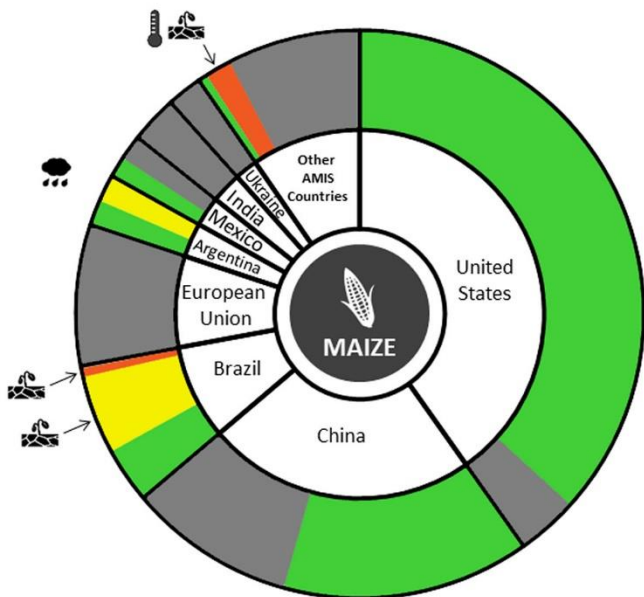
**Conditions:**

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

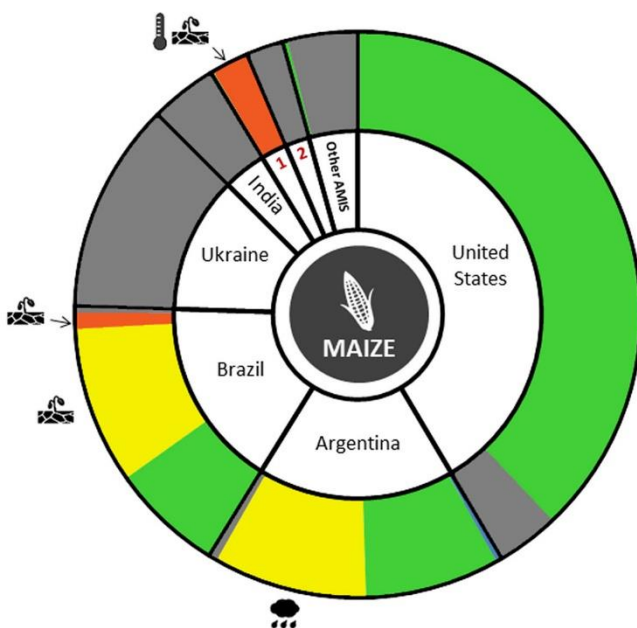
**Drivers:**

- Wet
- Dry
- Extreme Event
- Hot
- Cool

*For detailed description of the pie chart please see box above.*



Share of total AMIS Production



Share of total AMIS Exports

### Rice AMIS Comparisons

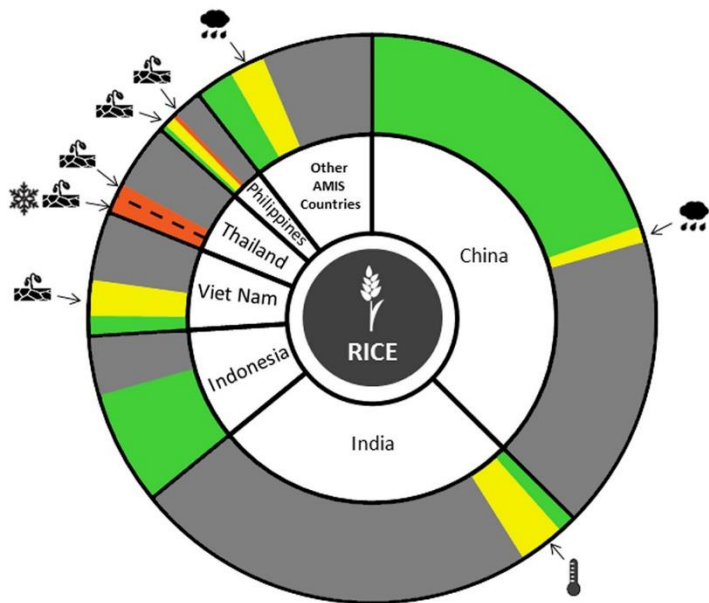
**Conditions:**

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

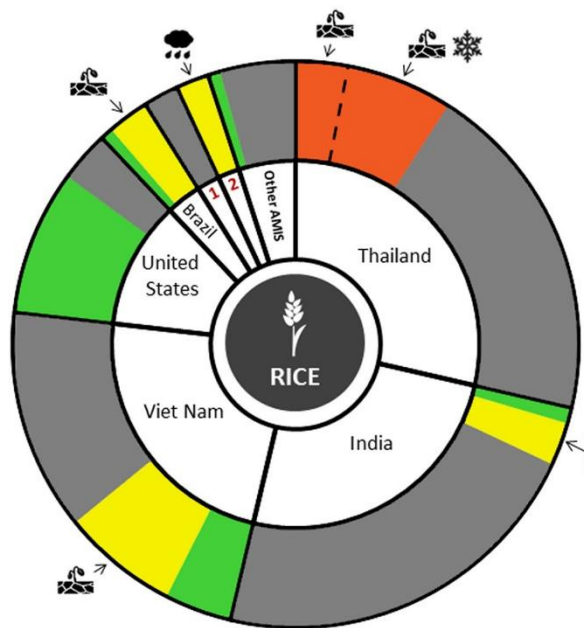
**Drivers:**

- Wet
- Dry
- Extreme Event
- Hot
- Cool

*For detailed description of the pie chart please see box above.*



Share of total AMIS Production



Share of total AMIS Exports

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

### Soybean AMIS Comparisons

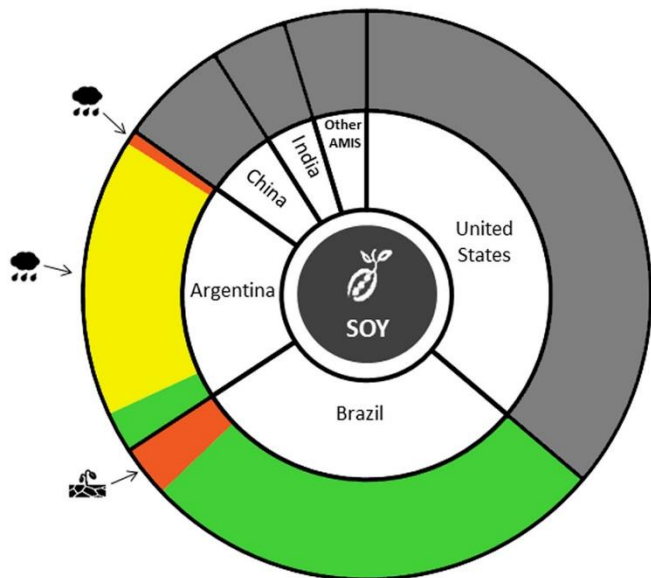
**Conditions:**

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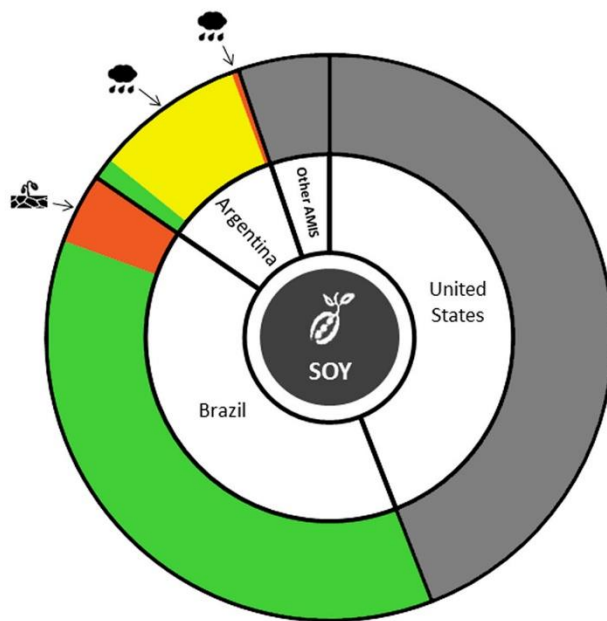
**Drivers:**

- Wet
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Share of total AMIS Production



Share of total AMIS Exports

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