No. 61 – May 2019

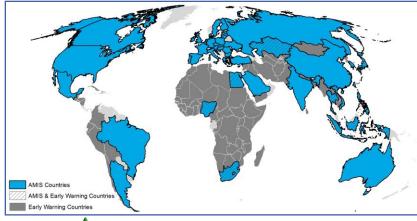




Overview:

As of the end of April, conditions are generally favourable for all four crops. **Winter wheat** in the northern hemisphere is developing under generally favourable conditions, albeit with some dry conditions in Europe and the Russian Federation. **Spring wheat** has begun sowing in the US and China. **Maize** conditions in the southern hemisphere are generally favourable with exceptional conditions in Argentina. **Rice** in Asia is under favourable conditions for dry-season rice in the north and wet-season rice in the south. **Soybean** conditions are favourable to exceptional as harvest progresses in South America.







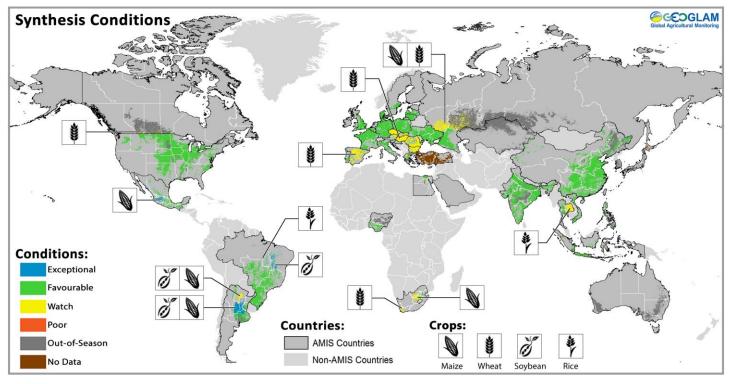
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Assessment based on information as of April 28 th	



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





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, winter wheat is under generally favourable conditions with some areas of dryness in Europe and the Russian Federation. Spring wheat is in early stages of sowing under favourable conditions.

Maize - In the southern hemisphere, harvest is ongoing in Argentina, Brazil, and South Africa. In the northern hemisphere, sowing has begun in most regions under favourable conditions. Mexico is harvesting the Autumn-Winter crop with very good yields expected. **Rice** - In China and India, conditions are favourable. In Southeast Asia, conditions are generally favourable for dry-season rice across the region and the harvesting of wet-season rice in Indonesia.

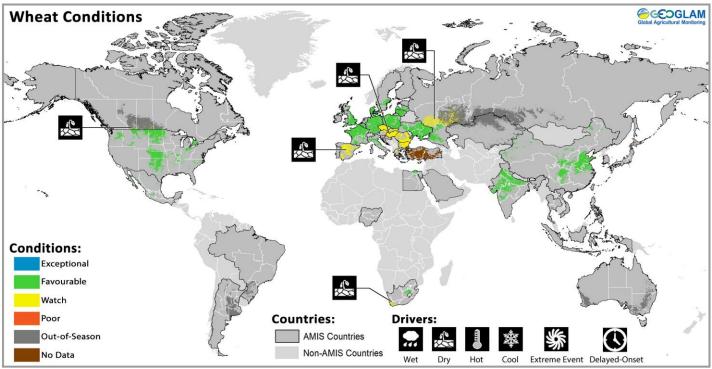
Soybeans - In the southern hemisphere, harvest is ongoing in Brazil and Argentina under favourable to exceptional conditions with above-average yields expected in many areas. In the northern hemisphere, sowing has just begun.

El Niño Advisory

Weak-to-moderate El Niño conditions are present and are forecast to continue through the Northern Hemisphere spring and late summer (74% chance for May to July and 60% chance for July to September).

Associated with this event are increased chances of above normal May to July rainfall in parts of the southern United States, Central Asia, and southeastern South America, and increased chances of below normal rainfall in parts of Southeast Asia including the maritime region, Central America, the Caribbean, and northern South America.

For July to September, this event increases chances of below normal rainfall in parts of Indonesia, eastern Australia, Central America, the Caribbean, and northern South America. Forecasts are tending towards a positive Indian Ocean Dipole mode after July. Such conditions tend to increase (suppress) rainfall in parts of East Africa (Australia).

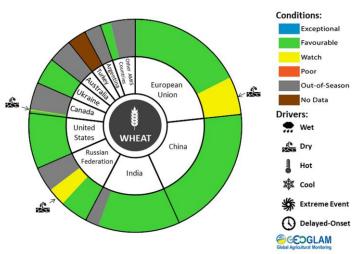


Wheat Conditions for AMIS Countries

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 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.

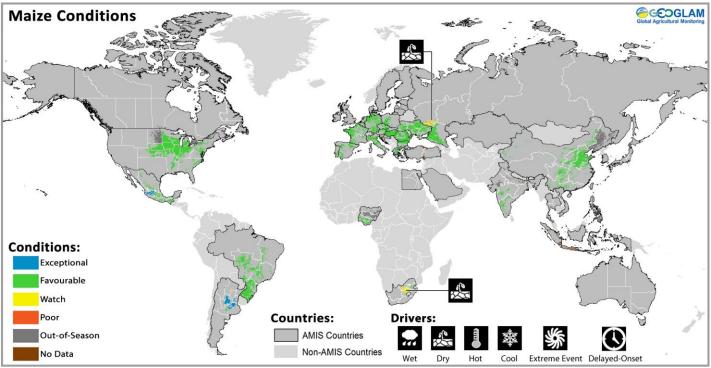
Wheat: In the EU, winter wheat conditions are mixed as dry soils in southwestern and southeastern Europe impact crops. In Ukraine, conditions are favourable with ample rainfall and warm temperatures supporting crop development. In the Russian Federation, winter wheat conditions are favourable in the main producing areas of the south, while conditions are somewhat mixed in the Central and Volga districts due to dry conditions. In China, winter wheat conditions are generally favourable with most areas having received sufficient snowfall during the winter and experiencing warm spring temperatures. Spring wheat sowing is beginning under favourable conditions. In India, conditions are favourable and a good production year is expected owing to lower than average temperatures during the critical development period. In the US,

Share of total AMIS Production



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

winter wheat conditions are mostly favourable with some mild areas of concern in the north and east due to wetter than normal conditions. Spring wheat sowing is beginning under favourable conditions albeit some delays due to excess moisture remaining from heavy snowfall over the winter. In **Canada**, winter wheat conditions are favourable in the main producing eastern provinces, while dry conditions in the central prairies remains a concern.

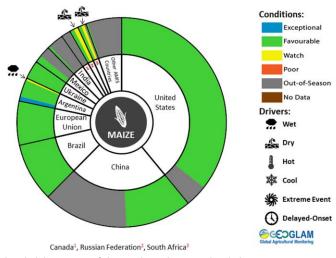


Maize Conditions for AMIS Countries

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 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.

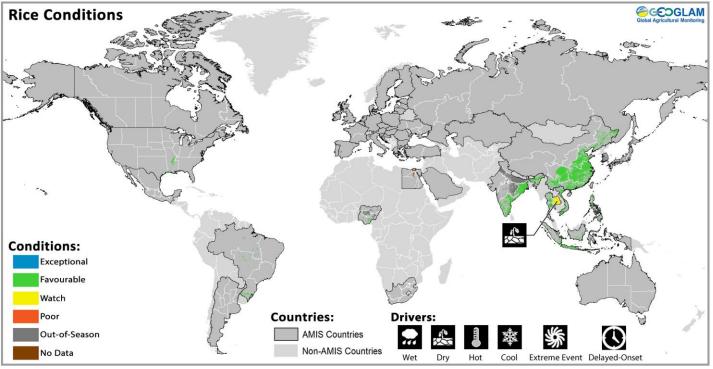
Maize: In Brazil, harvest is wrapping up for the spring-planted crop with average yields and a slight reduction in production expected compared to last year. Conditions are favourable for the summerplanted crop (higher producing season) in the reproductive stage with an increase in total sown area estimated. In Argentina, harvest of the spring-planted crop is continuing under exceptional conditions in the main producing areas and a historic production year is expected. Conditions are mostly favourable for the summer-planted crops. In Mexico, harvest of the autumn-winter cycle crop is beginning under favourable to exceptional conditions while sowing of the spring-summer crop is continuing under favourable conditions. In South Africa, conditions are mixed with a reduction in expected production, owing to a decrease in total sown area as a result of the

Share of total AMIS Production



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

delayed start of the rainy season in western areas. In **India**, conditions are favourable as the harvesting of the Rabi crop is wrapping up. In **China**, sowing of spring-planted maize is ongoing under favourable conditions with only spot areas of dryness. In the **US**, sowing is beginning across the country under favourable conditions with some delays expected due to excessive winter moisture. In the **EU**, conditions are generally favourable, however dry conditions in the southwest and southeast are affecting sowing and germination. In the **Russian Federation**, sowing is progressing under generally favourable conditions, albeit with some concerns in the northern areas due to dry conditions.

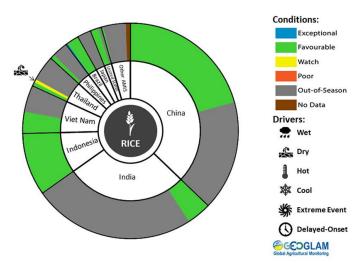


Rice Conditions for AMIS Countries

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

Rice: In **China**, early-crop rice conditions are favourable with plentiful rainfall for irrigation in the south. In India, Rabi rice has progressed well throughout the season and is now being harvested under favourable conditions. In Indonesia, harvest of wet-season rice continues with yields expected to be close to average. Sowing of dry-season rice is continuing under favourable conditions. In Viet Nam, conditions are generally favourable for winter-spring rice (dry-season rice) as sowing wraps up in the north and harvest progresses in the south. Yields are slightly below average due to lack of rainfall during the flowering stage. In **Thailand**, dry-season rice is being harvested under generally favourable conditions with an increase in production expected. Dry conditions remain in the northeastern region. In the Philippines, harvest of dry-season rice is ongoing under favourable

Share of total AMIS Production



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

conditions with a slight reduction in yields expected due to dry conditions during the season, especially in northern and southern Luzon. In **Brazil**, harvest is wrapping up under favourable conditions with exceptional conditions in the North region. A noticeable decrease in production compared to last year is expected due to a reduction in sown area. In the **US**, conditions are favourable along the Mississippi delta region.

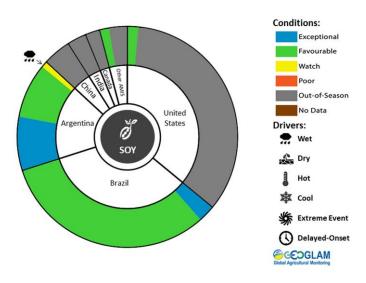
GEOGLAM Soybean Conditions Conditions: Exceptional Favourable Watch Poor **Countries: Drivers: AMIS Countries** Out-of-Season (\mathbf{J}) Non-AMIS Countries No Data Hot Cool Extreme Event Delayed-Onset Wet Drv

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 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.

Soybeans: In **Brazil**, conditions are favourable to exceptional as the harvest nears completion with overall yields near average and above average yields in the northeast region. A small year over year contraction in final production is expected due to dry conditions earlier in the season. In **Argentina**, harvest of spring-planted and summer-planted crops is continuing at a good pace with above average yields in most regions. Some concerns in the northeast remain due to heavy rainfall and floods. In the **US**, sowing is just beginning in the south under favourable conditions. In **Ukraine**, sowing has begun earlier than normal due to warm weather and favourable conditions.

Share of total AMIS Production



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 May 9th

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.

Exceptional

Favourable

Out-of-Season

Watch

Poor

No Data

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:

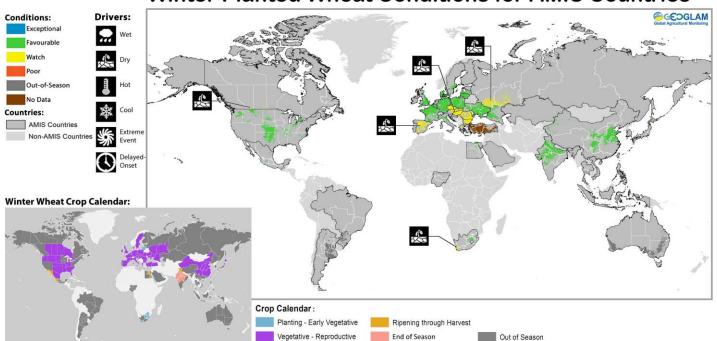
These represent the key climatic drivers that are having an impact on crop condition status. They result in production impacts and can act as either positive or negative drivers of crop conditions.	👷 Wet
	Dry
Wet: Higher than average wetness.	A
Dry: Drier than average.	Hot
Hot: Hotter than average.	WAR - I
Cool : Cooler than average or risk of frost damage.	🗱 Cool
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail,	🌋 Extreme Event
winterkill, wind damage, etc.)	
Delayed-Onset: Late start of the season	Delayed-Onset

Crop Season Nomenclature:

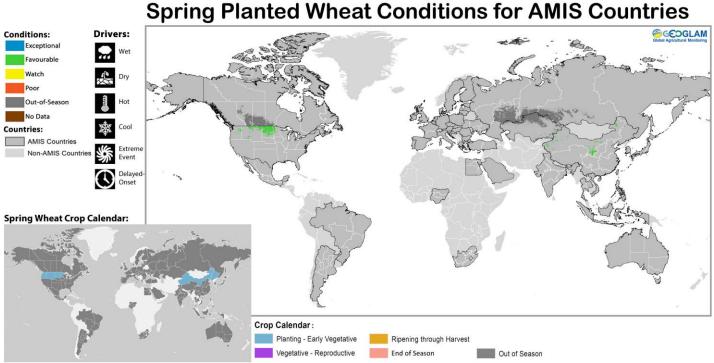
In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the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

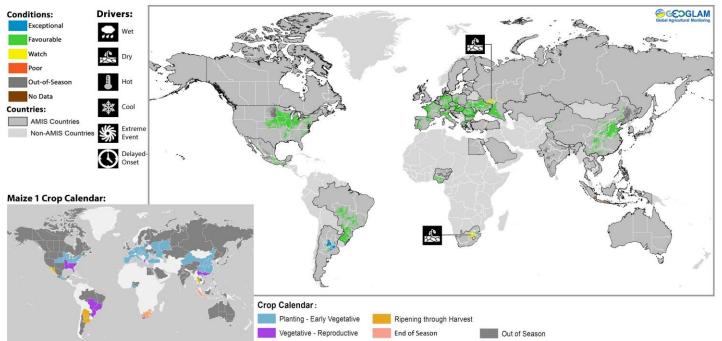


Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



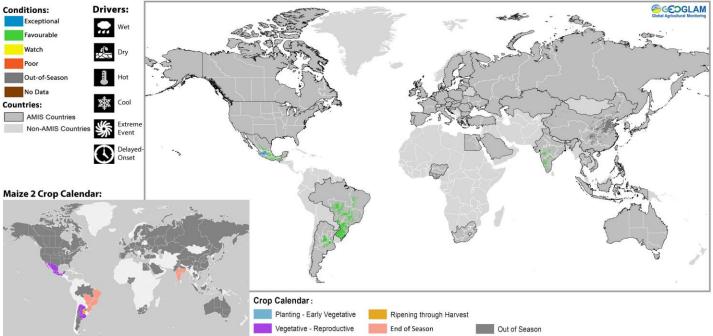
Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

Winter Planted Wheat Conditions for AMIS Countries



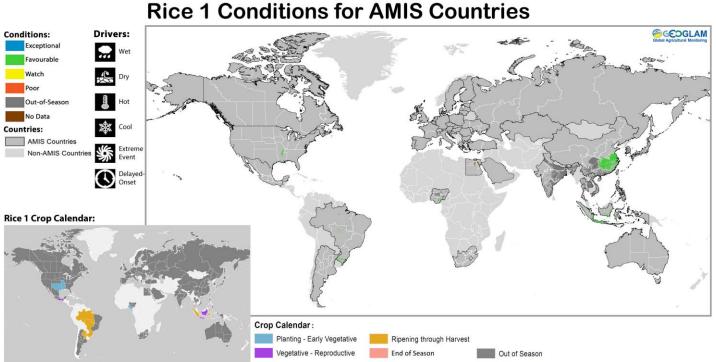
Maize 1 Conditions for AMIS Countries

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.

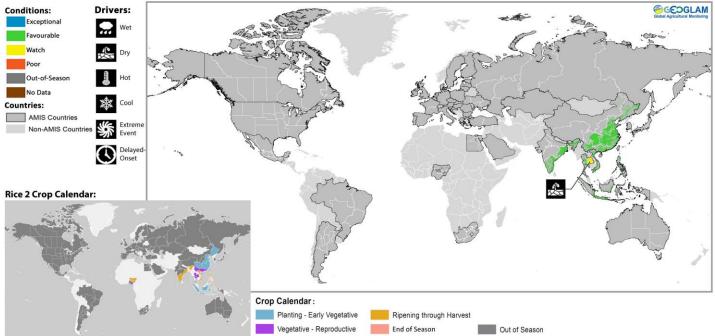


Maize 2 Conditions for AMIS Countries

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.

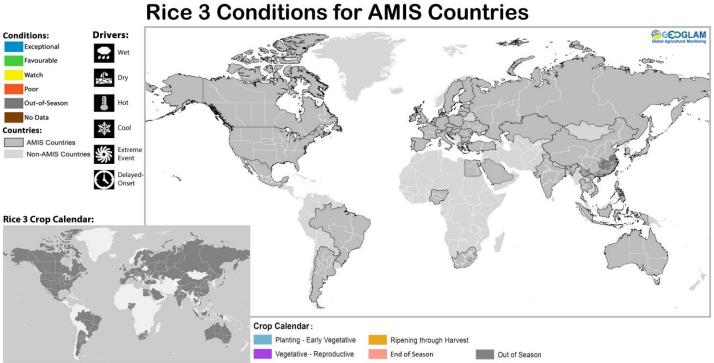


Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

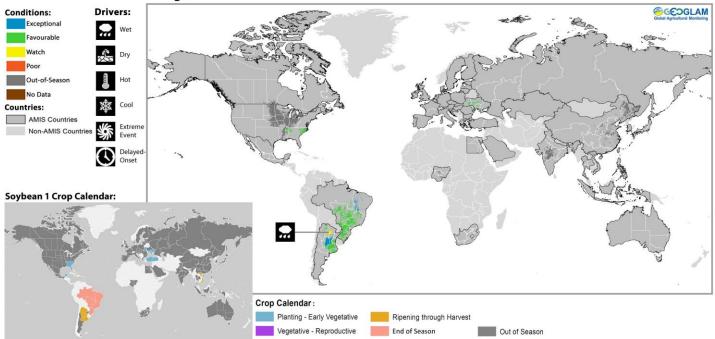


Rice 2 Conditions for AMIS Countries

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.

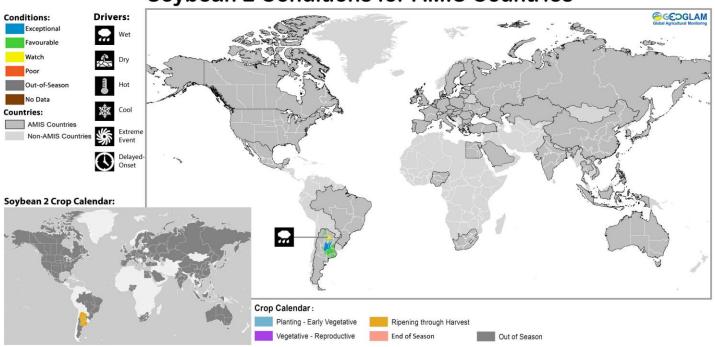


Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.



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.

Soybean 2 Conditions for AMIS Countries



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

Photo curtesy of: Asia RiCE

https://cropmonitor.org/

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Sources & Disclaimer

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