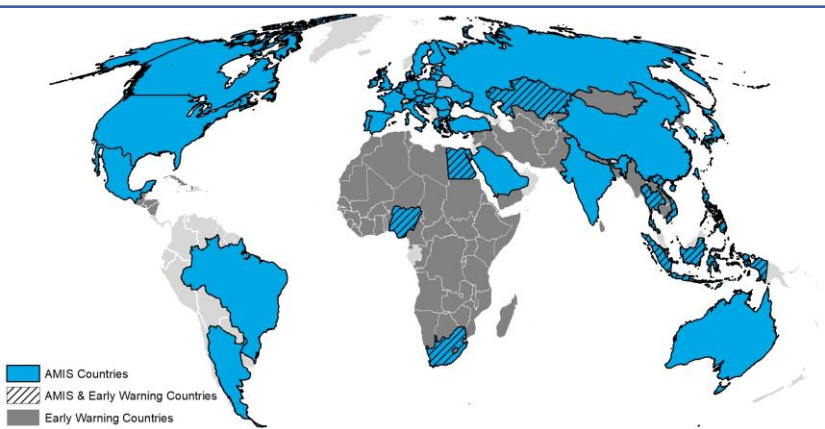


Overview:

At the end of January, conditions are favourable for wheat, maize, and rice, while mixed for soybeans. Winter wheat is mostly dormant in the northern hemisphere with only some areas in the US of concern. In the southern hemisphere, maize is under mixed conditions in Argentina and southern Brazil. Rice conditions are favourable across all major growing areas except for southern Brazil. Soybeans are under mixed conditions in Argentina and southern Brazil.

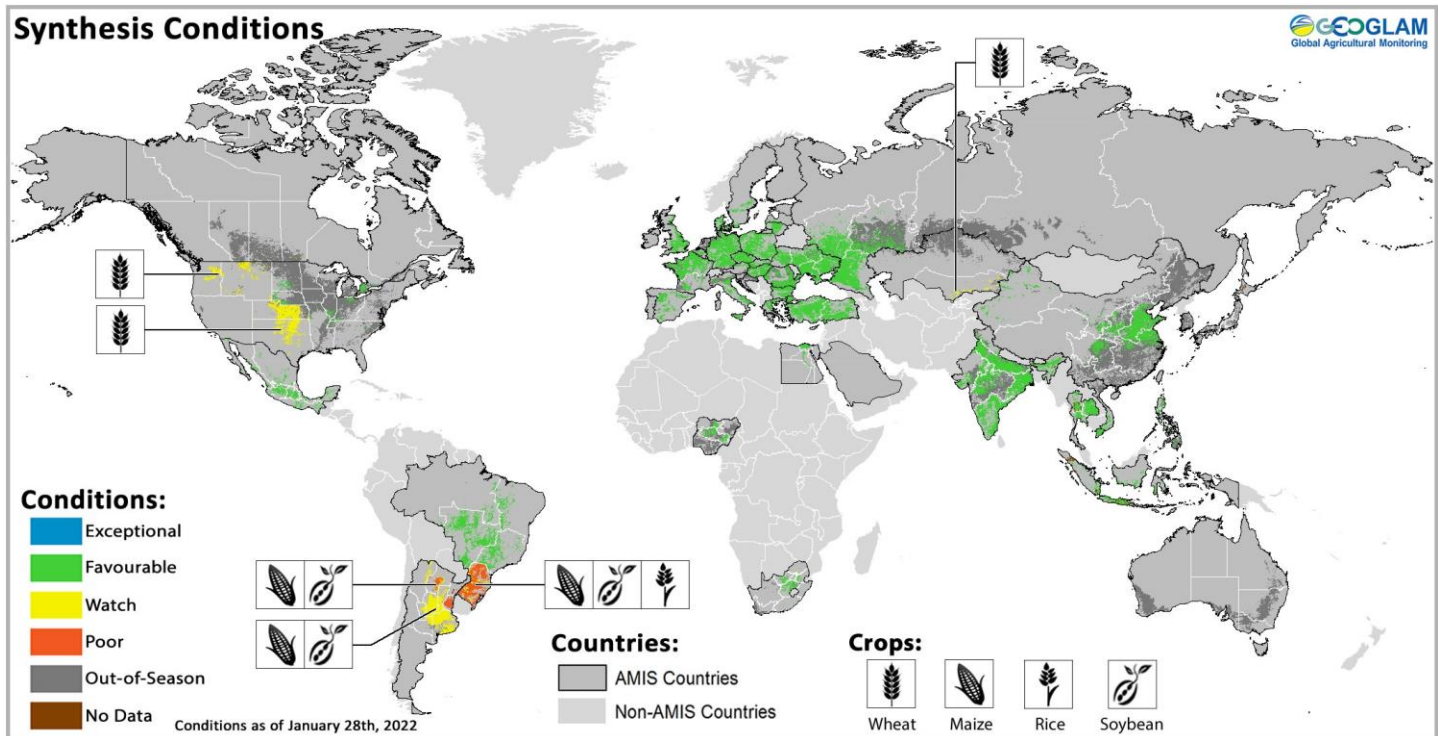


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Assessment based on information as of January 28th

At a glance for AMIS countries (as of January 28th)



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

Crop Conditions at a Glance

Wheat - In the northern hemisphere, winter wheat conditions have improved in the EU, Ukraine, Russian Federation, and Turkey. However, dry conditions remain an issue in the US.

Maize - In the northern hemisphere conditions are favourable in India and Mexico. In the southern hemisphere, prolonged drought has reduced yield expectations for the spring-planted and early-planted crops in Brazil and Argentina respectively.

Forecasts at a Glance

Climate Influences - The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase and is expected to remain as La Niña for several more months. Forecast chances of La Niña conditions continuing are high through April (83% chance) and are elevated through May (67% chance).

Argentina – In the short-term (2-week), rainfall is expected to be below-average across most growing areas with slight improvement during the second week. In the extended outlook, below-average rainfall is likely to continue.

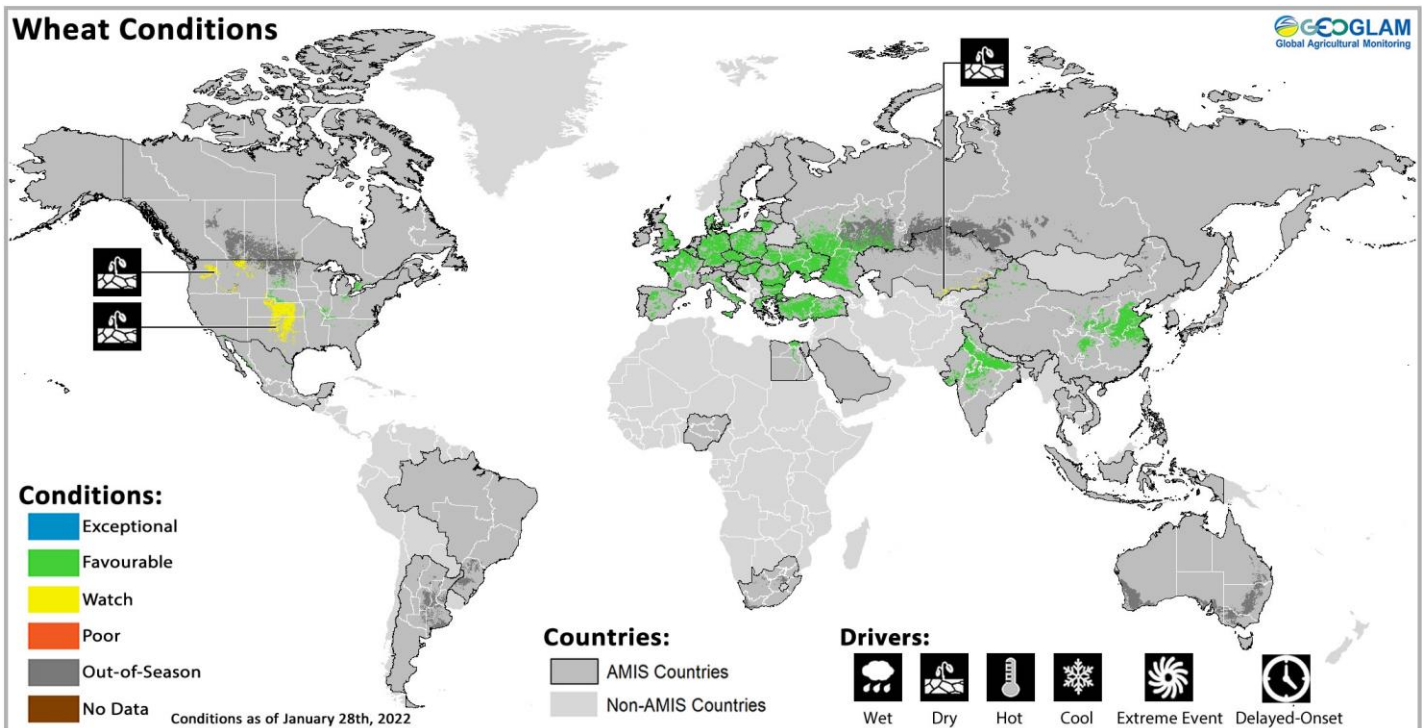
Rice - Transplanting of Rabi rice continues in India. Conditions are favourable in Southeast Asia for dry-season rice in the northern countries and wet-season rice in Indonesia. Dry conditions in Brazil.

Soybeans - In the southern hemisphere, a prolonged drought has reduced yields in Argentina and southern Brazil.

Brazil – The short-term (2-week), rainfall is likely to be below-average in the north and above-average in the southeast. In the extended outlook, rainfall is likely below-average in the south and above-average in the north.

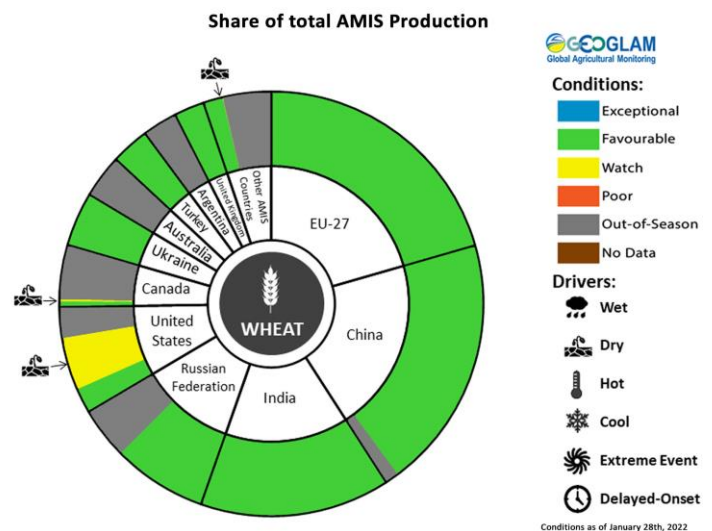
South Africa – The short-term (2-week) and the extended forecasts show likely below-average rainfall in Limpopo and eastern Mpumalanga.

Wheat Conditions for AMIS Countries



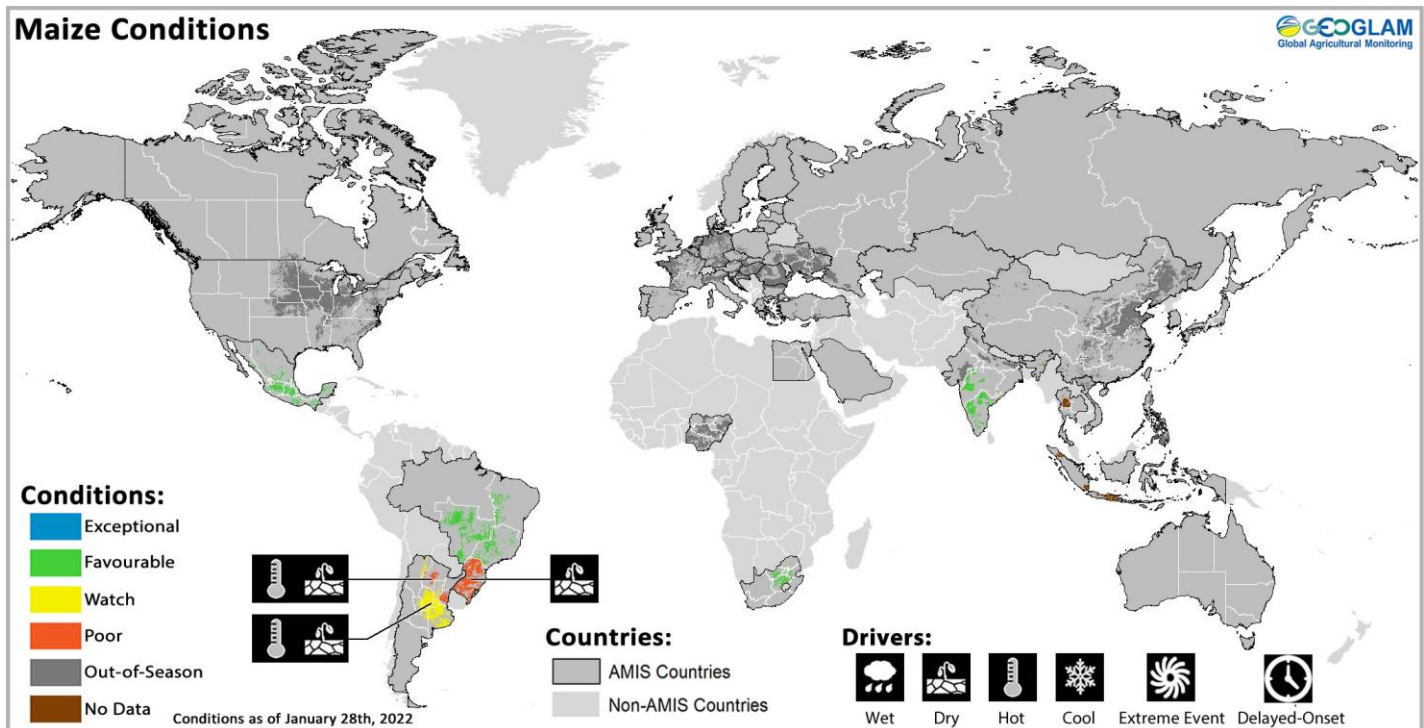
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Wheat: In the **EU**, the relatively mild winter weather in most parts of Europe is favourable for winter wheat, and no significant frost damage is expected to have occurred. In the **United Kingdom**, conditions are favourable. In **Ukraine**, conditions have improved across the country due to ample rainfall and snow in December. In the **Russian Federation**, wetter than average conditions during December and January have improved winter wheat conditions. In **Turkey**, winter wheat conditions have improved owing to plentiful rainfall in December. In **China**, conditions remain favourable for winter wheat. In **India**, sowing is wrapping under favourable conditions with an increase in total sown area compared to the 5-year average. In the **US**, conditions are mixed as long-term dryness continues in the northwest and the southern plains. In **Canada**, winter wheat remains under favourable conditions in the main producing province of Ontario and mixed in the Prairies.



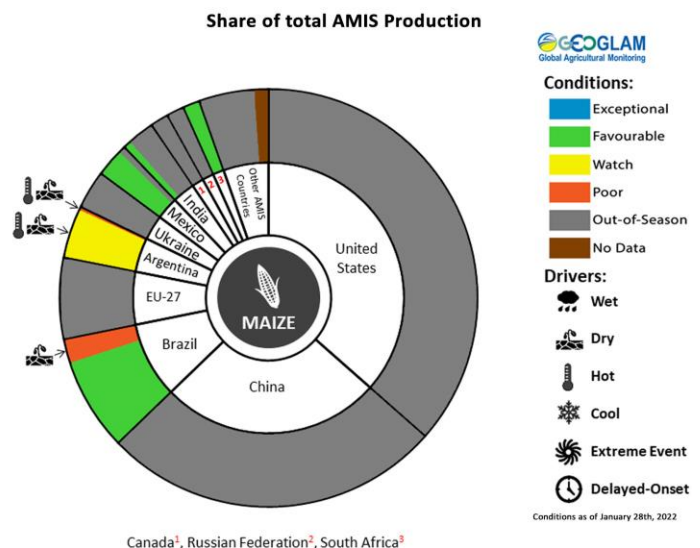
For detailed description of the pie chart please see box on page 6.

Maize Conditions for AMIS Countries



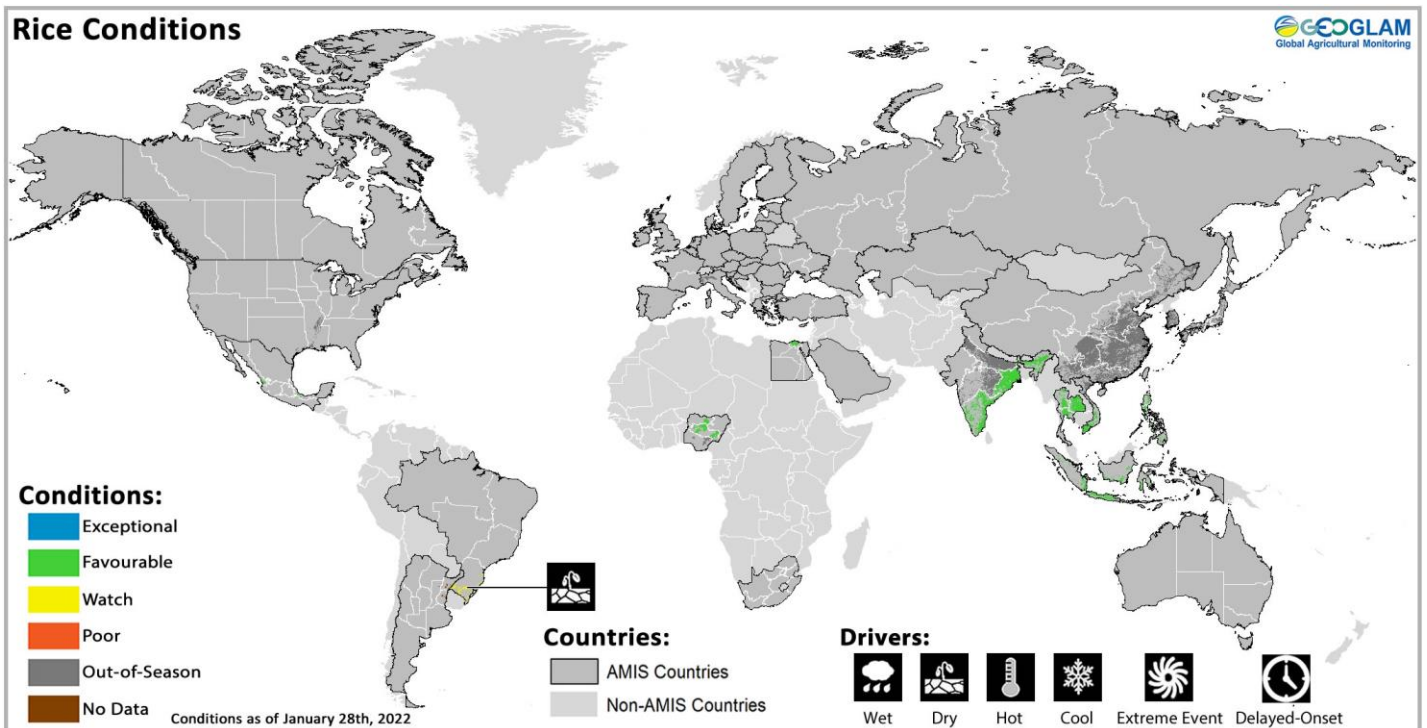
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: In **India**, sowing of the Rabi season crop is nearly complete with the total sown area in line with the 5-year average. In **Mexico**, conditions are favourable as harvesting of the spring-summer crop (larger season) continues while the sowing of the autumn-winter crop (smaller season) wraps up. In **Brazil**, conditions are mixed for the spring-planted crop (smaller season) due to drought in the southern region, whereas good rainfall has been contributing to crop development in Central-West, Northeast, and Southeast regions. Sowing of the summer-planted crop (larger season) has begun under favourable conditions in Mato Grosso and São Paulo. In **Argentina**, a prolonged period of drought and high temperatures has reduced yield expectations for the early-planted crop (larger season), which was in the reproductive stages at the time. The late-planted crop (smaller crop) is also under mixed conditions but will likely improve from recent rains. In **South Africa**, above-average rainfall in December and the first half of January has been mostly favourable for crops, but in western areas, it has led to a reduction in sown area.



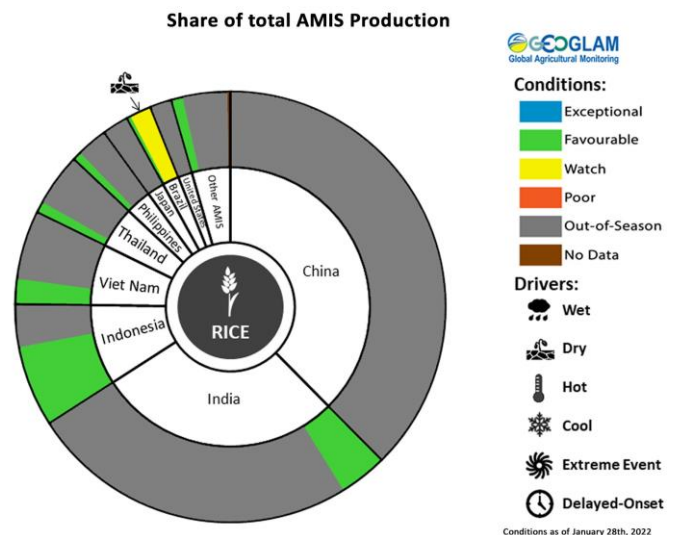
For detailed description of the pie chart please see box on page 6.

Rice Conditions for AMIS Countries



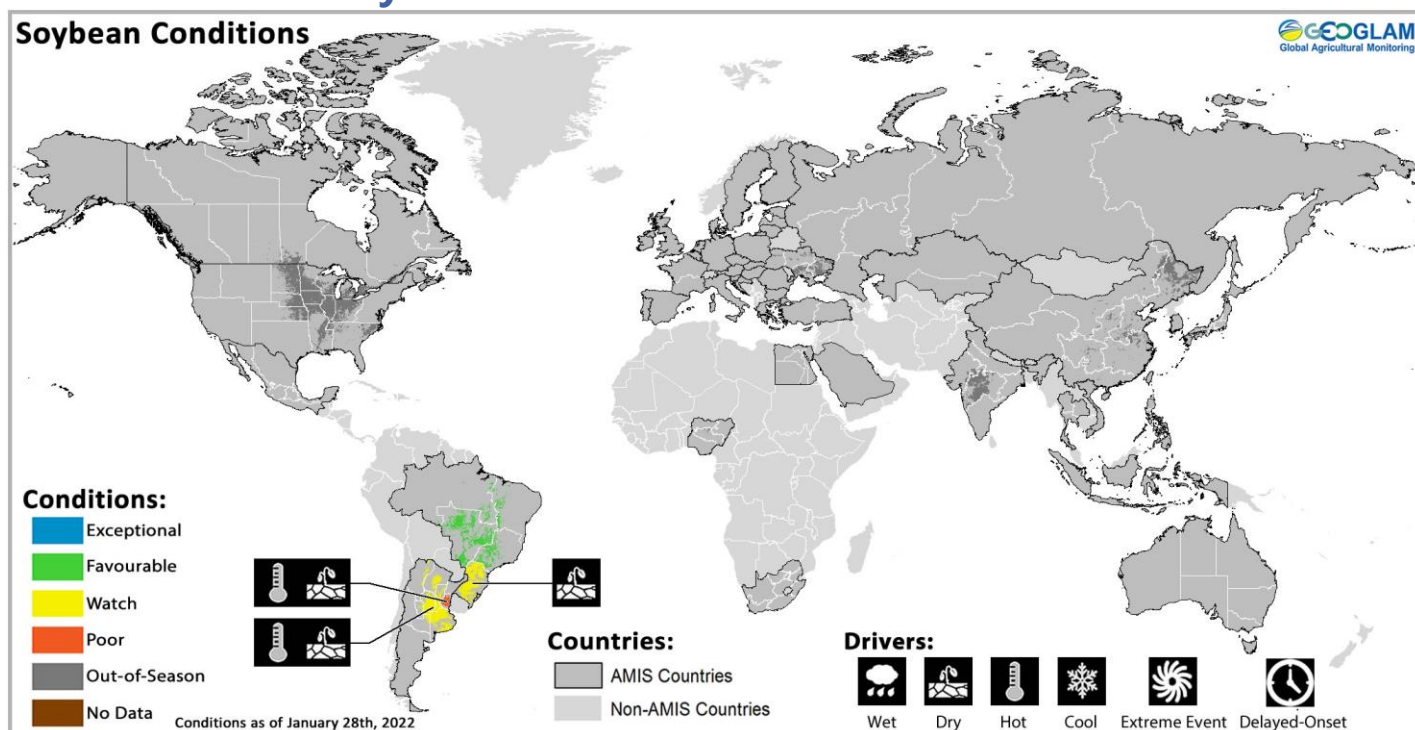
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Rice: In **India**, transplanting of the Rabi crop is still in progress in the eastern parts of the country while it wraps up in the south. The total sown area is expected to be in line with the 5-year average. In **Indonesia**, wet-season rice sowing continues into the fourth month under favourable conditions. Plentiful rainfall in December and January has supported an increase in total sown area to above that of last year's level. In **Viet Nam**, winter-spring rice (dry-season) is sowing in the south under favourable conditions. In **Thailand**, dry-season rice is under favourable conditions with the total sown area above-average to make up for flooding losses during the wet-season crop. In the **Philippines**, dry-season rice is under generally favourable conditions with some areas of damage from typhoon Odette, particularly in Southern Luzon, Visayas, and Mindanao. In **Brazil**, conditions are under watch due to a lack of water availability for irrigation.



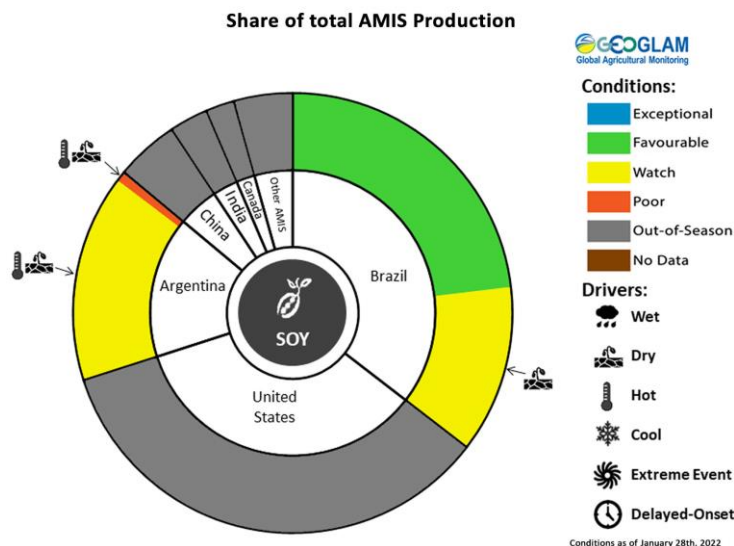
For detailed description of the pie chart please see box on page 6.

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 January 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**, most crops are in the reproductive stages, with harvest just beginning in some places. In the Central-West, North, Northeast, and Southeast regions, crops are under favourable conditions. However, in the southern region and parts of Mato Grosso do Sul and São Paulo reduced yields are expected due to dryness. In **Argentina**, the early-planted crop (larger season) is under mixed to poor conditions as a result of a prolonged drought and high temperatures during the reproductive stages. Sowing of the late-planted crop (smaller season) is wrapping up under slightly better conditions as the drought occurred during the early vegetative stages and recent rainfall has been beneficial.



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 February 3rd

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 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.

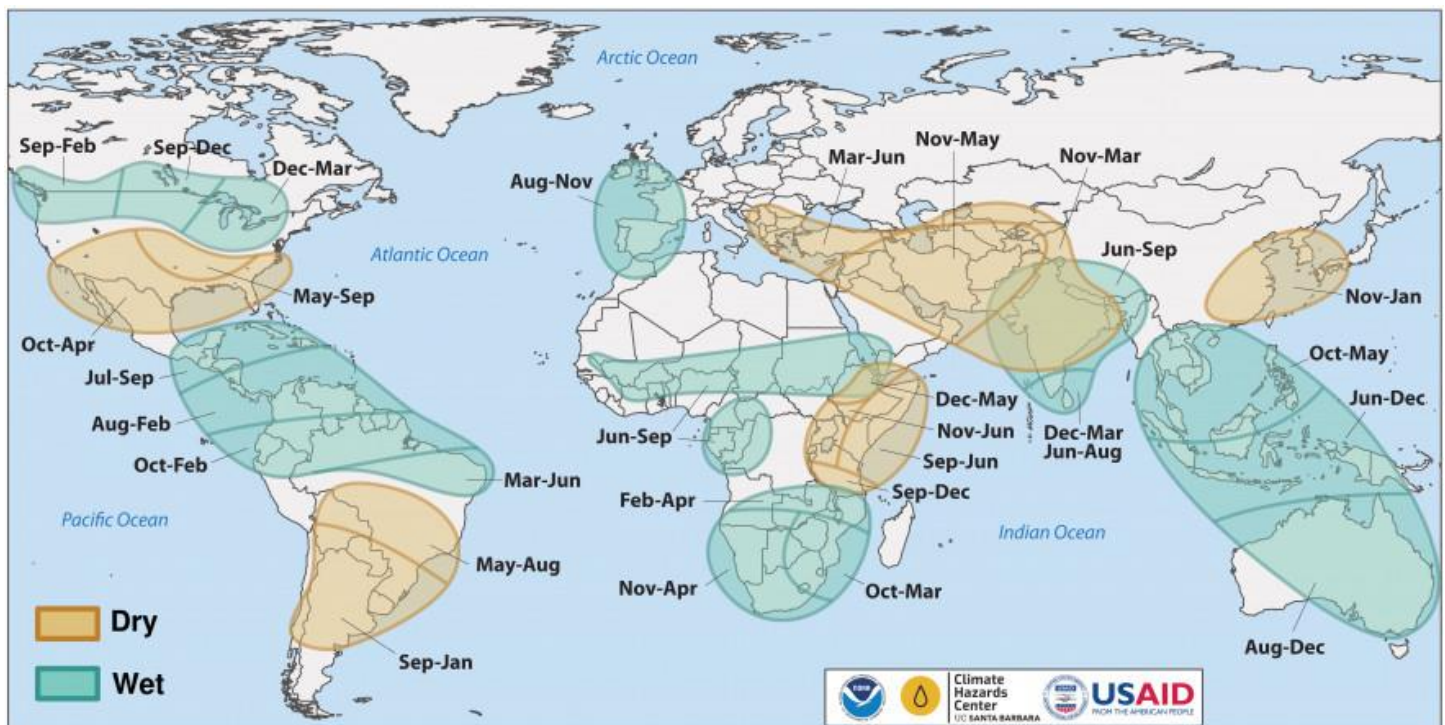
Climate Forecasts

Climate Influences: La Niña Advisory

The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase and is expected to remain as La Niña for several more months. Forecast chances of La Niña conditions continuing are high through April and are elevated through May, according to IRI/CPC (83% chance for February-March-April; 67% chance for March-April-May). Long-range forecasts currently indicate ENSO-neutral conditions are most likely during June-July-August.

La Niña conditions typically increase the chances of below-average precipitation in East Africa, Central and South Asia, southern South America, the southern United States, northern Mexico, and eastern East Asia. There are elevated risks of a two-year sequence of dry conditions in these regions, associated with La Niña conditions last year and this year. La Niña conditions typically increase the chances of above-average precipitation in parts of Southeast Asia, Australia, Southern Africa, and northern South America.

Source: UCSB Climate Hazards Center

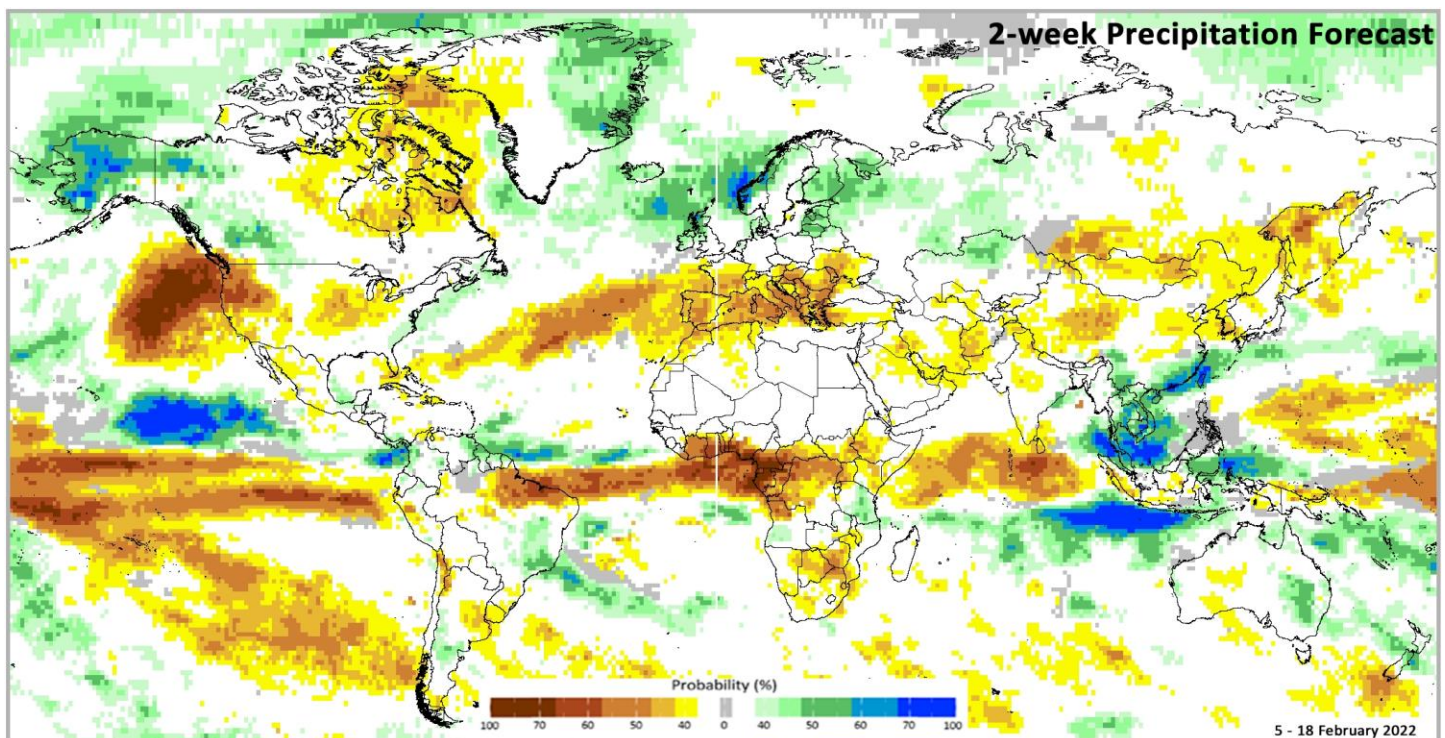


Location and timing of likely above- and below-average precipitation related to La Niña events. Based upon observed precipitation during 21 La Niña events since 1950, wet and dry correspond to a statistically significant increase in the frequency of precipitation in the upper and lower thirds of historical values, respectively. Statistical significance at the 95% level is based on the resampling of precipitation during neutral El Niño-Southern Oscillation conditions. Source: FEWS NET & NOAA & CHC <https://fewsn.net/la-ni%C3%B1a-and-precipitation>

Global Two-week Forecast of Areas with Above or Below-Average Precipitation

The two-week forecast (Figure 1) indicates a likelihood of above-average rainfall over the western prairies of Canada, southeast US, eastern Venezuela, Guyana, Suriname, French Guiana, southeast Brazil, southern Argentina, Ireland, Scotland, Norway, Finland, Estonia, Latvia, Lithuania, northwestern and Ural districts of the Russian Federation, northern Kazakhstan, Tanzania, southwestern Angola, southern China, Laos, Viet Nam, Cambodia, Thailand, North Sulawesi Indonesia, and eastern Australia.

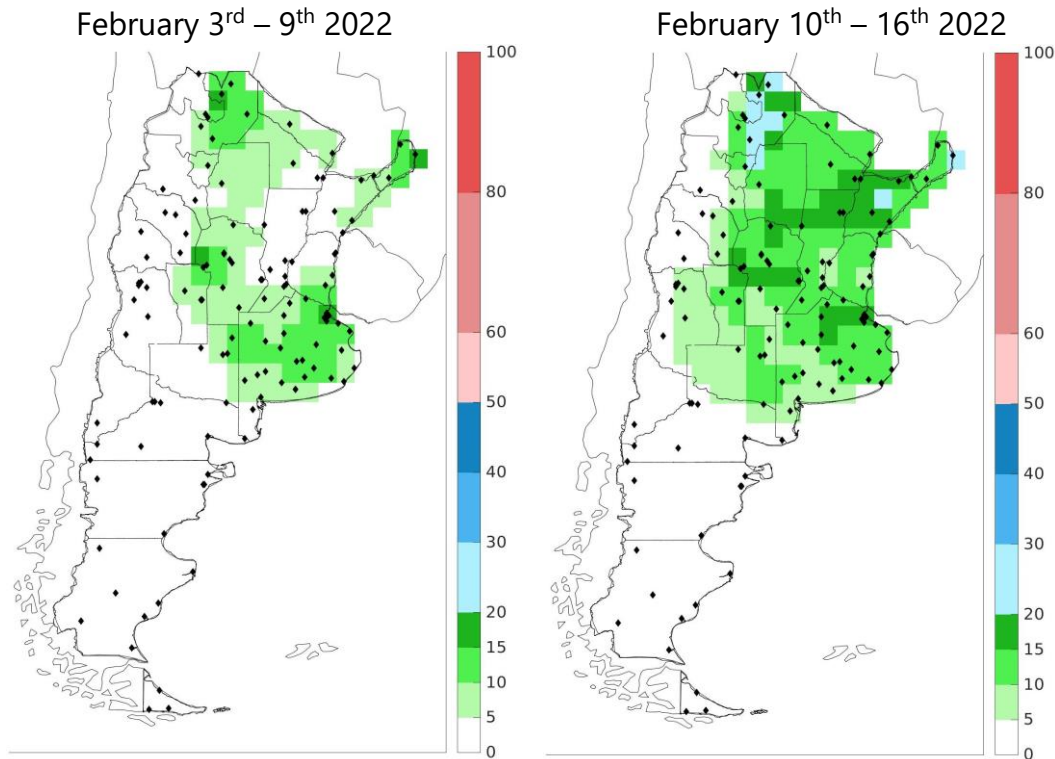
There is also a likelihood of below-average rainfall in the northwest and central plains of the US, northern Mexico, northern Chile, southern Brazil, Uruguay, central Argentina, central and southern countries of the EU, central Ukraine, western Turkey, Morocco, northern Algeria, eastern Liberia, Côte d'Ivoire, Ghana, Togo, Benin, southern Nigeria, southern Cameroon, the Central African Republic, Equatorial Guinea, Gabon, Republic of the Congo, northern Democratic Republic of Congo, northern Angola, South Sudan, western Ethiopia, Uganda, eastern Kenya, southern Somalia, eastern Namibia, Botswana, Zimbabwe, northern South Africa, southern and western Mozambique, southern Iraq, southern Islamic Republic of Iran, western Afghanistan, western Pakistan, northern India, western and northeast China, northern Mongolia, southeastern Russian Federation, Democratic People's Republic of Korea, Republic of Korea, and Sumatra Indonesia.



IRI SubX Precipitation Biweekly Probability Forecast for 5-18 February 2022, issued on January 28th, 2022. The forecast is based on statistically calibrated tercile category forecasts from three SubX models. Source: [IRI Subseasonal Forecasts Maproom](#)

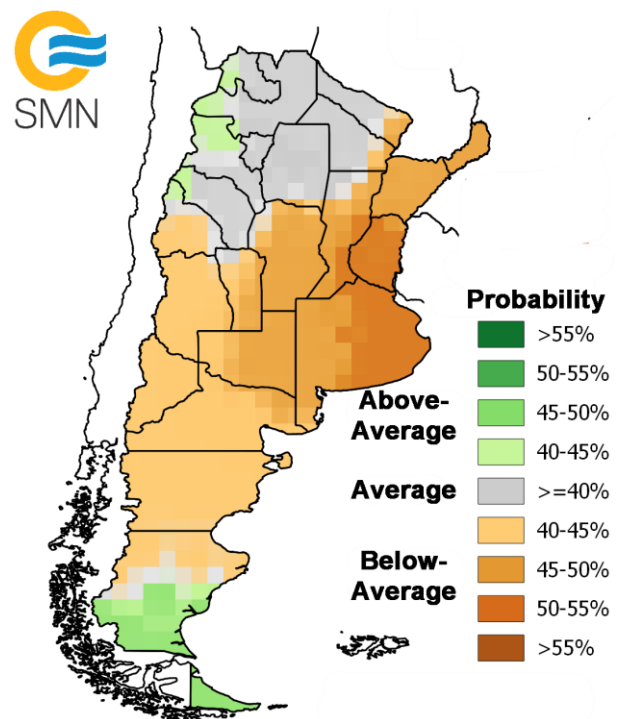
Argentina Outlook

For the week of February 3rd – 9th, rainfall is forecasted to be concentrated in Buenos Aires, Cordoba, Santiago del Estero, Chaco, Salta, and Misiones. Values range between 20 mm and 5 mm. Compared to average, rainfall will be below-average across most provinces with the most extreme deficits in Entre Rios, Santa Fe, and northern Cordoba. For the week of February 10th – 16th, rainfall is forecasted to be more distributed across the main maize and soybean growing provinces. Compared to average, rainfall will be below average primarily in the northern provinces and Entre Rios.



Weekly Forecasts from the SERVICIO METEOROLÓGICO NACIONAL
<https://www.smn.gov.ar/clima/perspectiva>

Over the extended forecast (February-March-April 2022), rainfall is likely to remain below-average across most growing regions. This is particularly the case for Entre-Rios, Santa Fe, and eastern Buenos Aires. Temperatures are also likely to be above-average during the extended forecast period particularly in Cordoba, Santa Fe, Entre Rios, Buenos Aires, San Luis, and La Pampa.



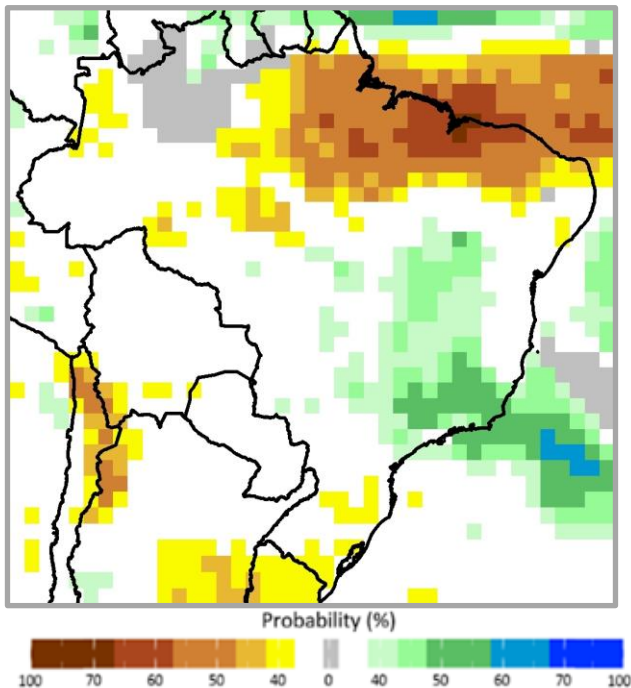
Extended forecast from SERVICIO METEOROLÓGICO NACIONAL
<https://www.smn.gov.ar/pronostico-trimestral>

Brazil Outlook

Over the next two weeks (February 5th – 18th), above-average rainfall is likely in Brazil over the southeast region and eastern parts of the central-west region. However, below-average rainfall is very likely in the north and northeast regions, while slightly likely in the south region. Over the extended forecast (February-March-April 2022), above-average precipitation is likely in the north region, with below-average precipitation likely in the south region.

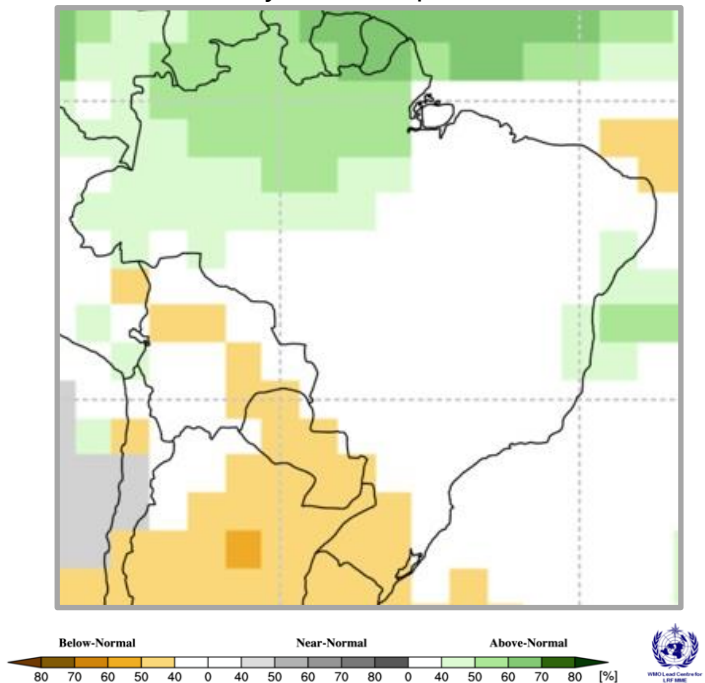
2-Week Rainfall Probability

February 5th – 18th 2022



3-Month Rainfall Anomaly Probability

February-March-April 2022



Left: IRI SubX Precipitation Biweekly Probability Forecast for 5-18 February 2022, issued on January 28th, 2022. The forecast is based on statistically-calibrated tercile category forecasts from three SubX models. Image from the [IRI Subseasonal Forecasts Maproom](#).

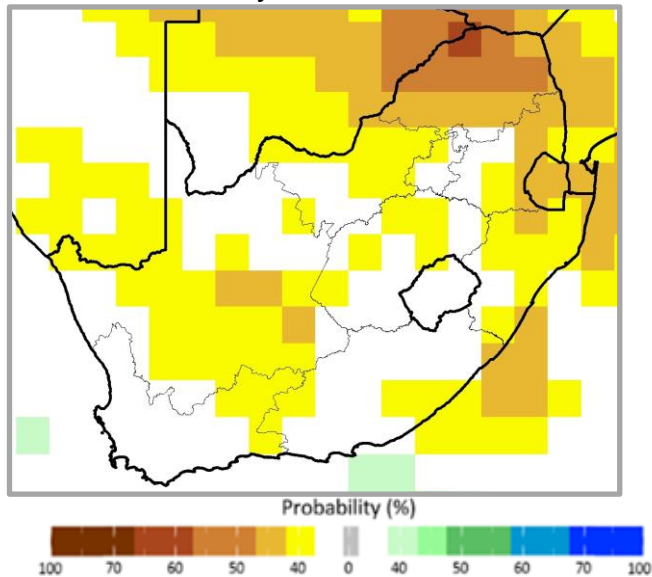
Right: Multi-model ensemble probabilistic forecast for February-March-April (FMA) 2022 precipitation from the WMO Lead Centre for Long-Range Forecast Milt-Model Ensemble at https://www.wmolc.org/seasonPmmeUI/plot_PMME.

South Africa Outlook

Over the next two weeks (February 5th – 18th), below-average rainfall is likely over Limpopo, eastern Mpumalanga, eastern KwaZulu-Natal, and central Northern Cape. The remaining provinces are likely to receive average rainfall or only slightly likely to receive below-average rainfall. Over the extended forecast (February-March-April 2022), there is a continued probability of below-average rainfall in Limpopo and eastern Mpumalanga while the rest of the provinces are likely to receive average rainfall.

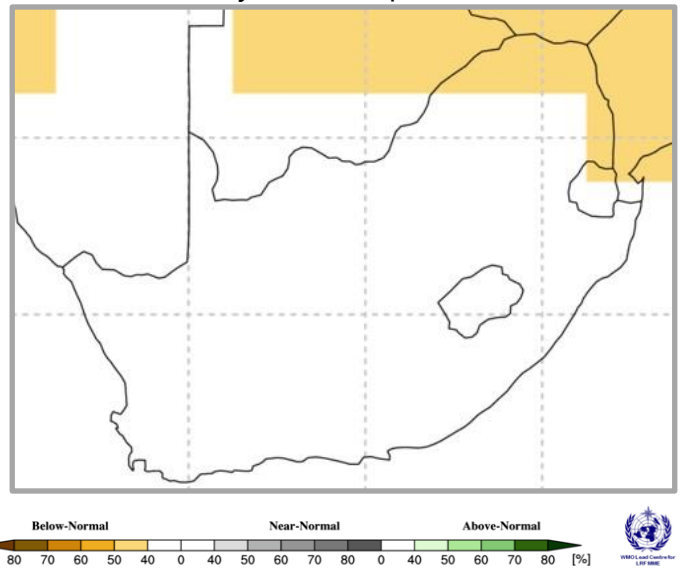
2-Week Rainfall Probability

February 5th – 18th 2022



3-Month Rainfall Anomaly Probability

February-March-April 2022



Left: IRI SubX Precipitation Biweekly Probability Forecast for 5-18 February 2022, issued on January 28th, 2022. The forecast is based on statistically-calibrated tercile category forecasts from three SubX models. Image from the [IRI Subseasonal Forecasts Maproom](#).

Right: Multi-model ensemble probabilistic forecast for February-March-April (FMA) 2022 precipitation from the WMO Lead Centre for Long-Range Forecast Milt-Model Ensemble at https://www.wmolc.org/seasonPmmeUI/plot_PMME.

Appendix 1: Terminology & Definitions

Crop Conditions:

Exceptional: Conditions are much better than average* at the 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: Wetter than average (includes water logging and floods).

Dry: Drier than average.

Hot: Hotter than average.

Cool: Cooler than average or risk of frost damage.

Extreme Events: Catch-all for all other climate risks (i.e., hurricane, typhoon, frost, hail, winter kill, wind damage, etc.). When this category is used the analyst will also specify the type of extreme event in the text.

Delayed-Onset: Late start of the season

	Wet
	Dry
	Hot
	Cool
	Extreme Event
	Delayed-Onset

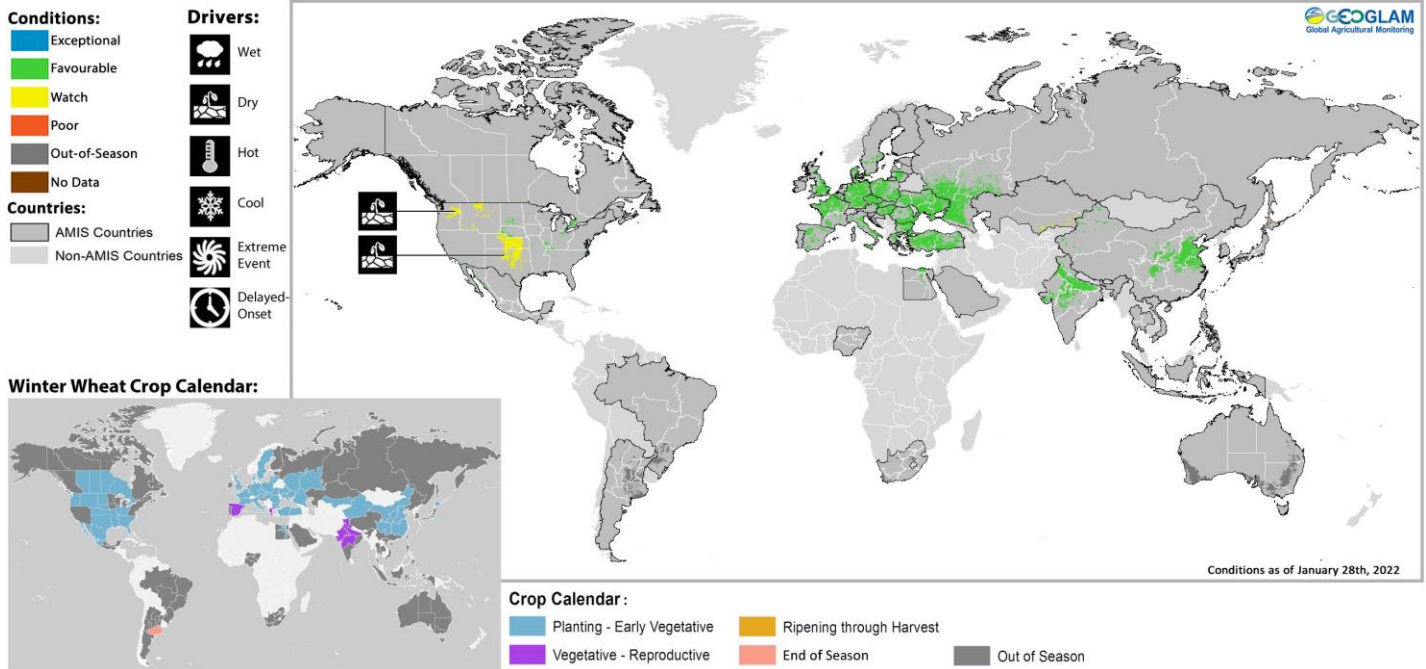
Crop Season Nomenclature:

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	Single-season	Late-season	Early-season
China	Wheat	Winter-planted	Spring-planted	
Egypt	Rice	Summer-planted	Nili season (Nile Flood)	
India	Maize	Kharif	Rabi	
India	Rice	Kharif	Rabi	
Indonesia	Rice	Wet-season	Dry-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	

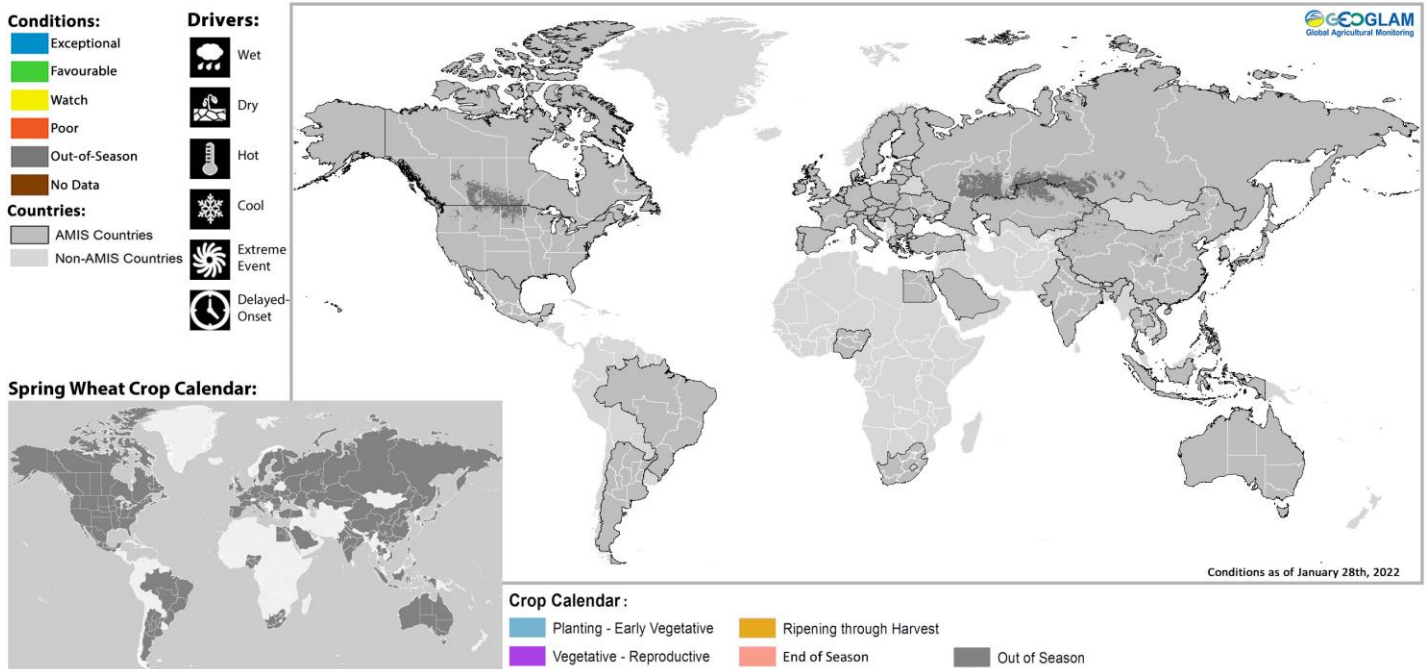
Appendix 2: Crop Season Specific Maps

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 January 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.

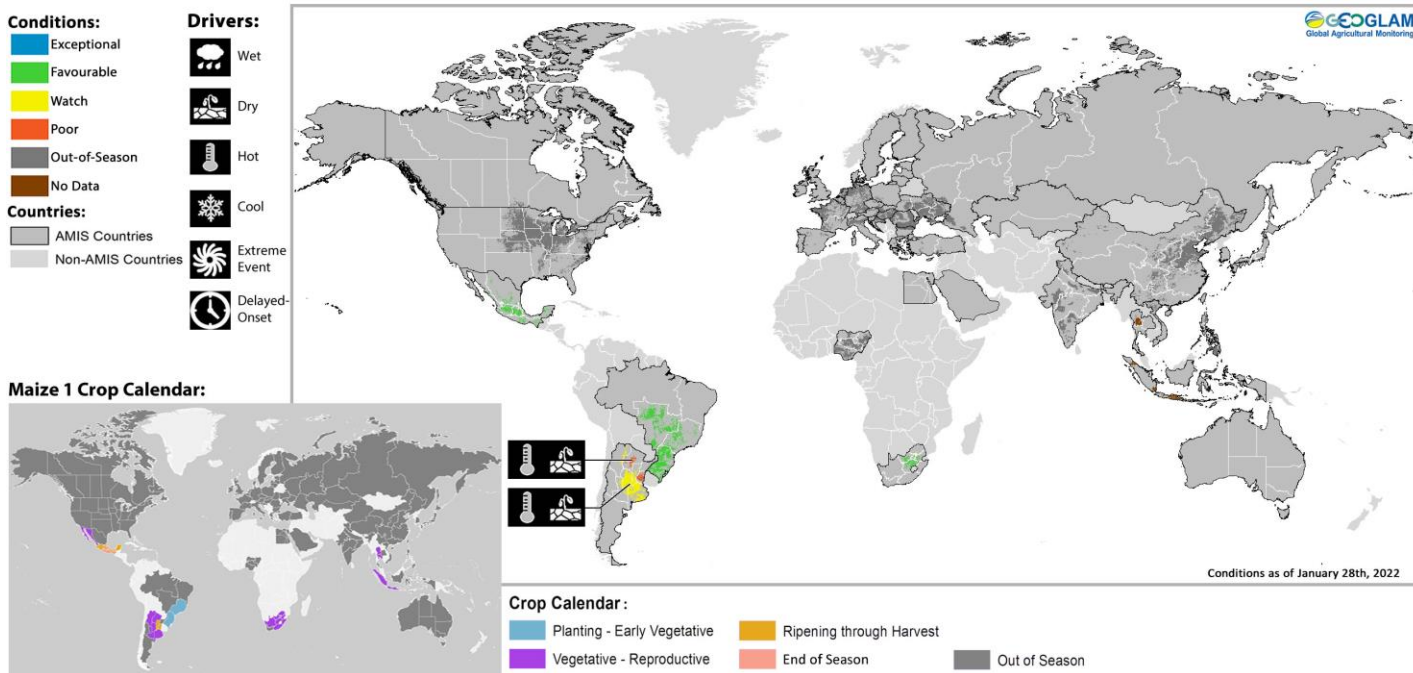
Spring Planted Wheat Conditions for AMIS Countries



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 January 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.

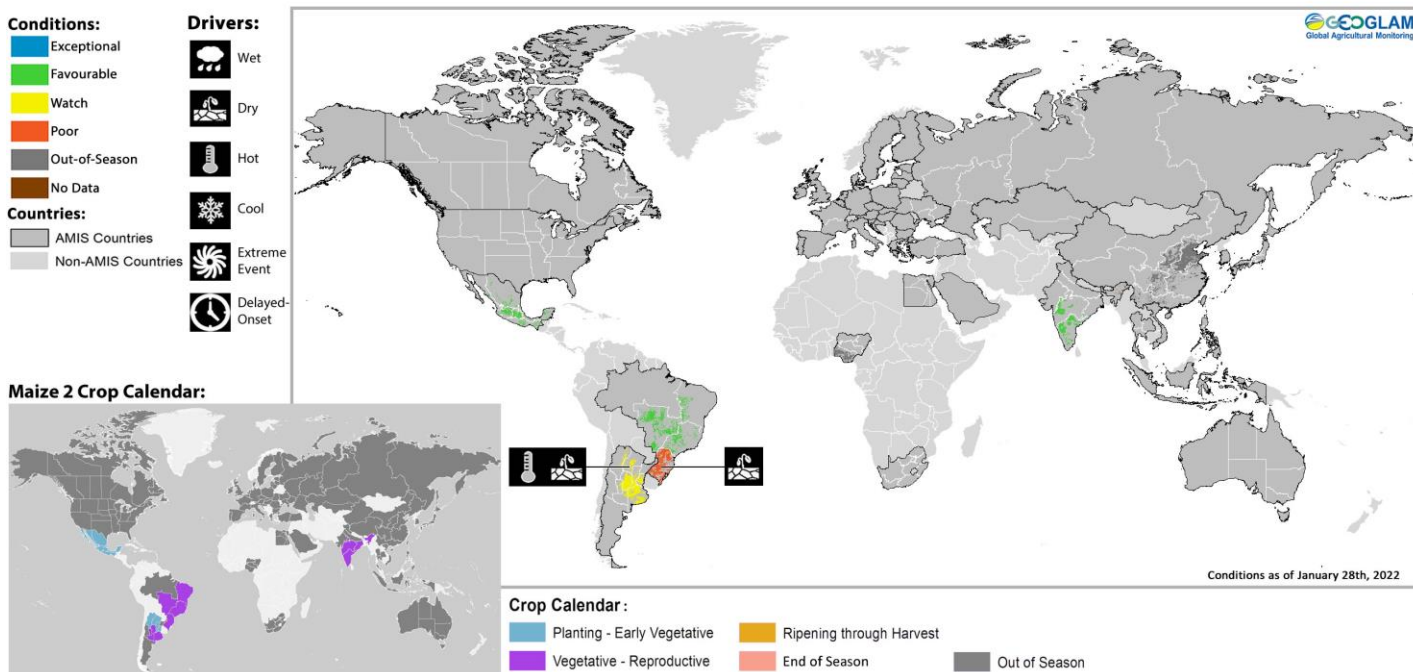
* Assessment based on information as of January 28th

Maize 1 Conditions for AMIS Countries



Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

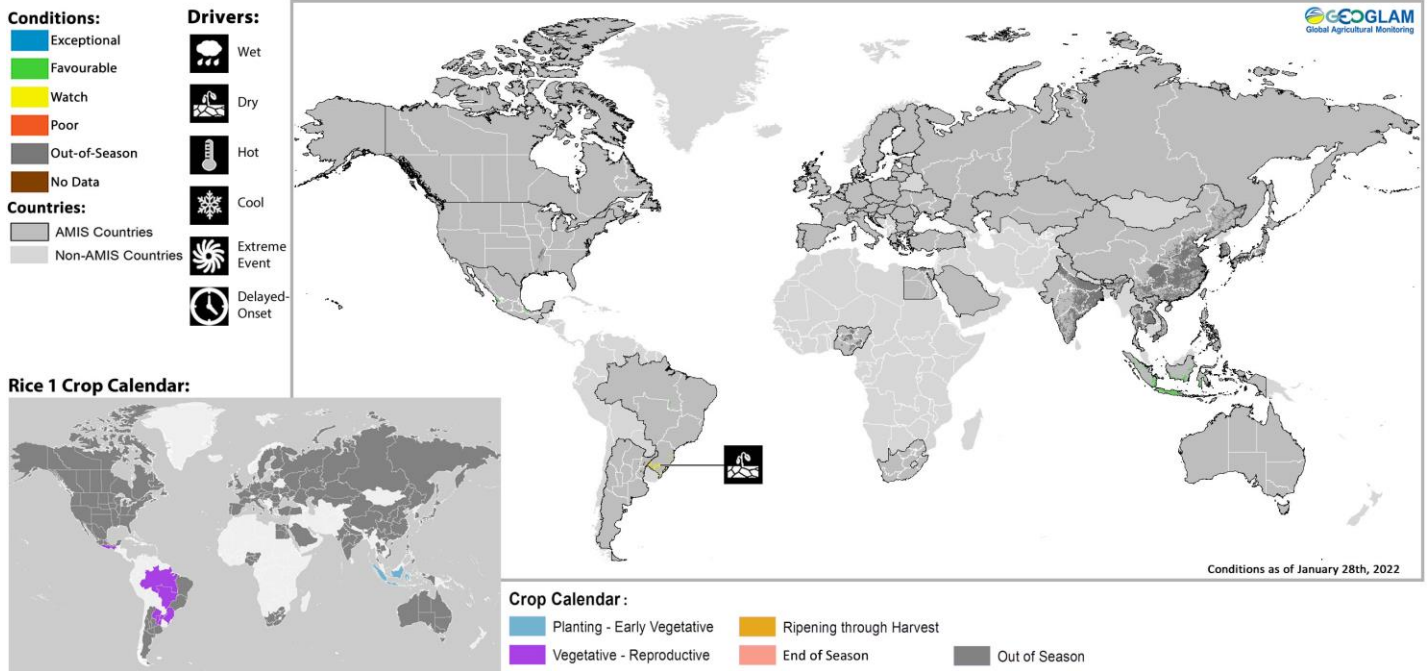
Maize 2 Conditions for AMIS Countries



Maize 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 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.

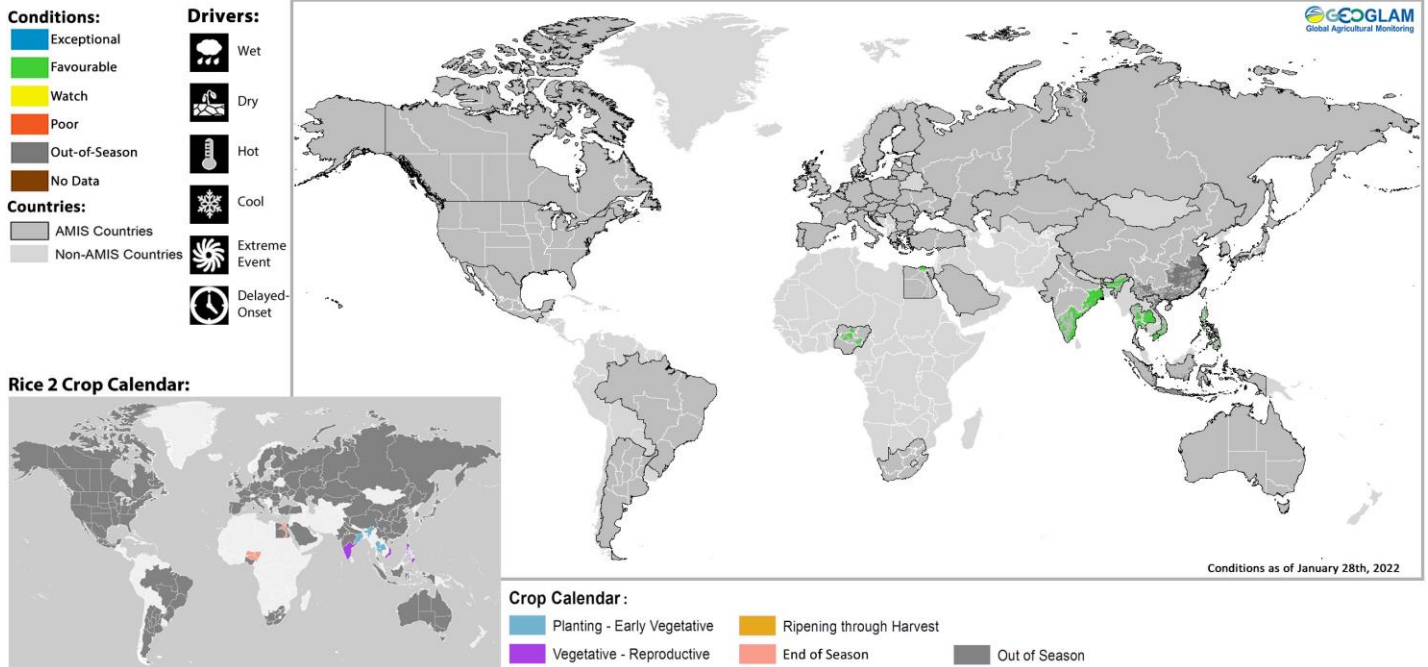
* Assessment based on information as of January 28th

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 January 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.

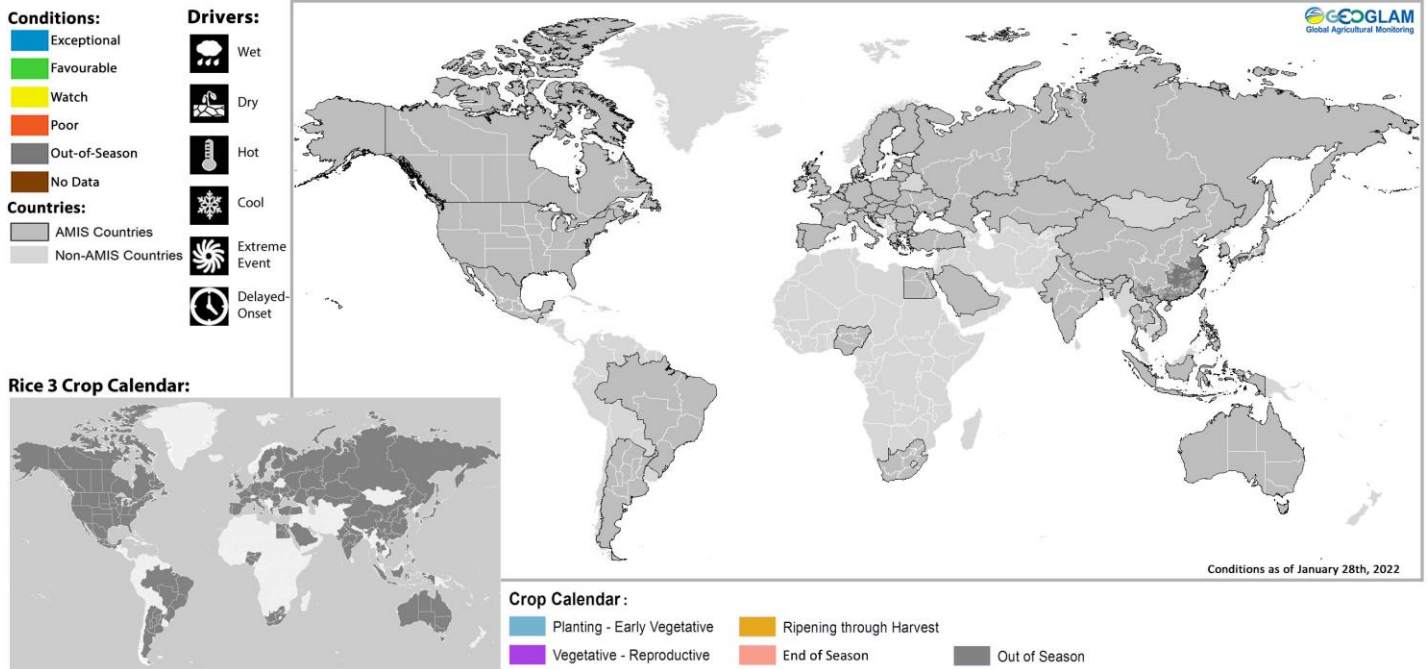
Rice 2 Conditions for AMIS Countries



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 January 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.

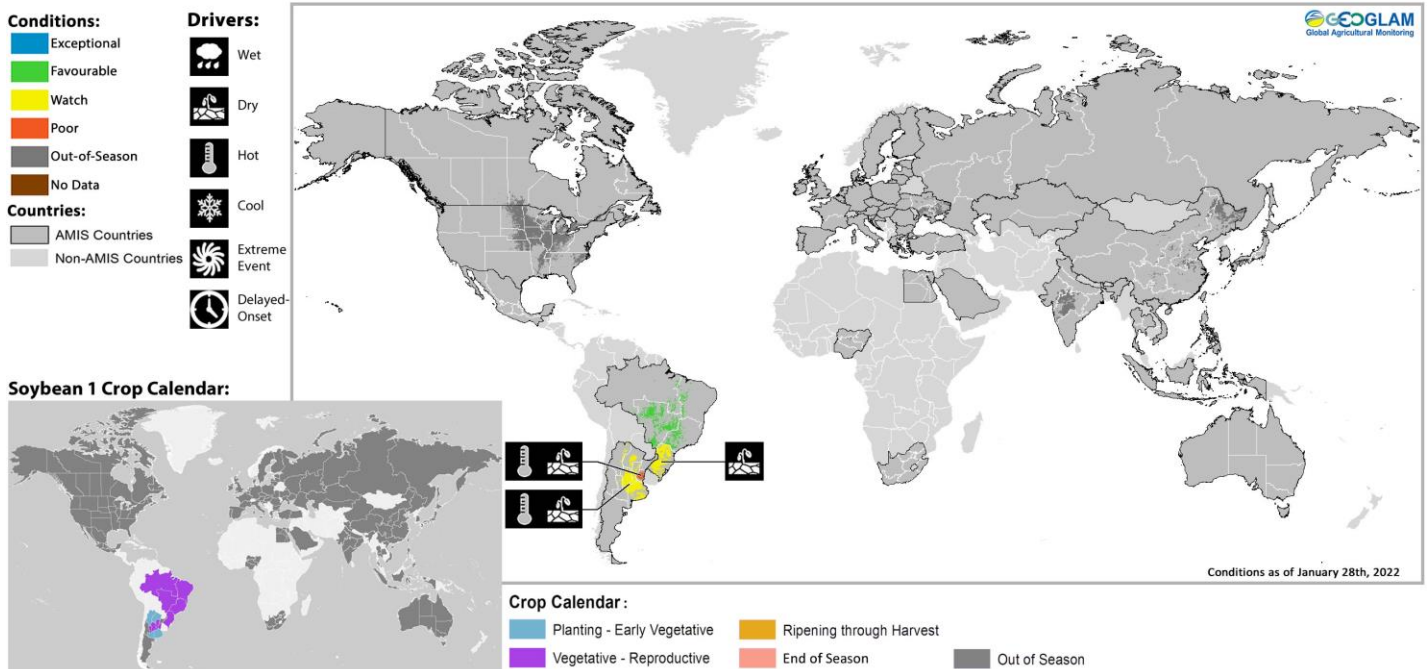
* Assessment based on information as of January 28th

Rice 3 Conditions for AMIS Countries



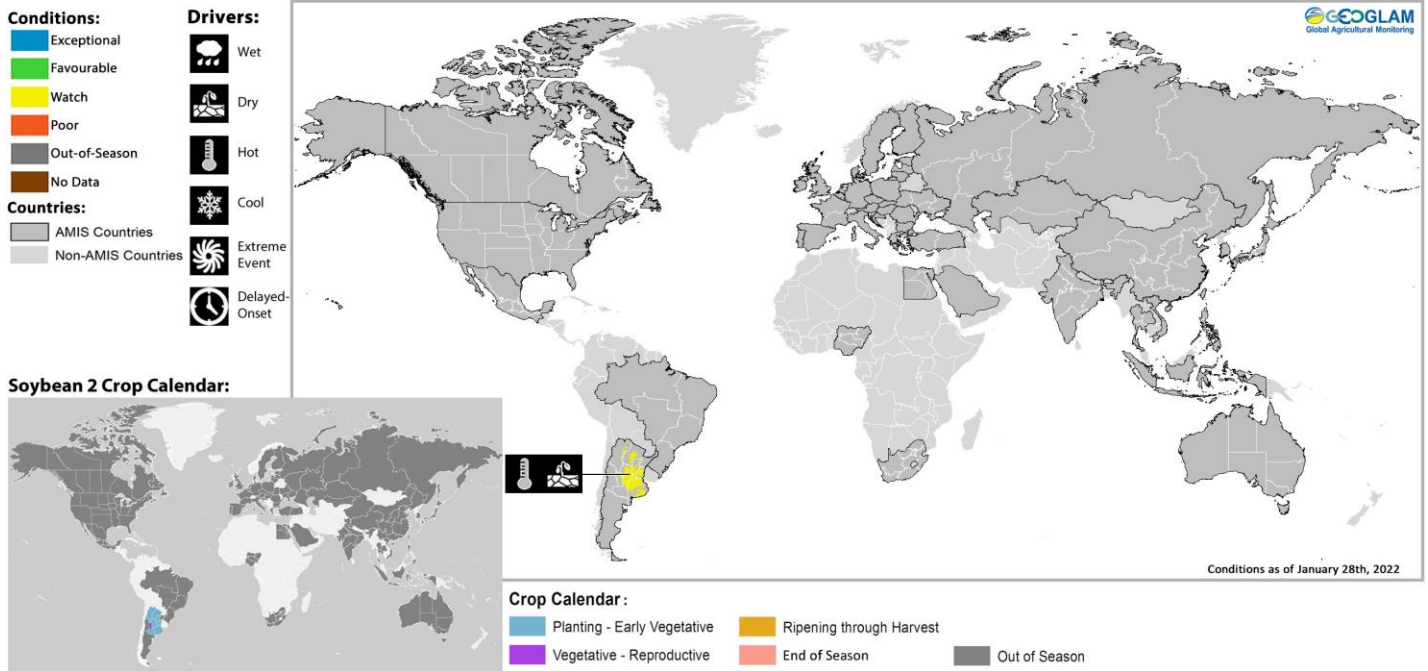
Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



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 January 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 January 28th



Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland with funding from NASA Harvest
Climatic Influences by Climate Hazards Center of UC Santa Barbara

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

Photo courtesy of Brian Barker

<https://cropmonitor.org/>

[@GEOCropMonitor](#)

Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, MAGyP), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Gro Intelligence, India (NCFC), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA, MAFF), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & CSIR & GeoTerralimage & 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 <https://cropmonitor.org>