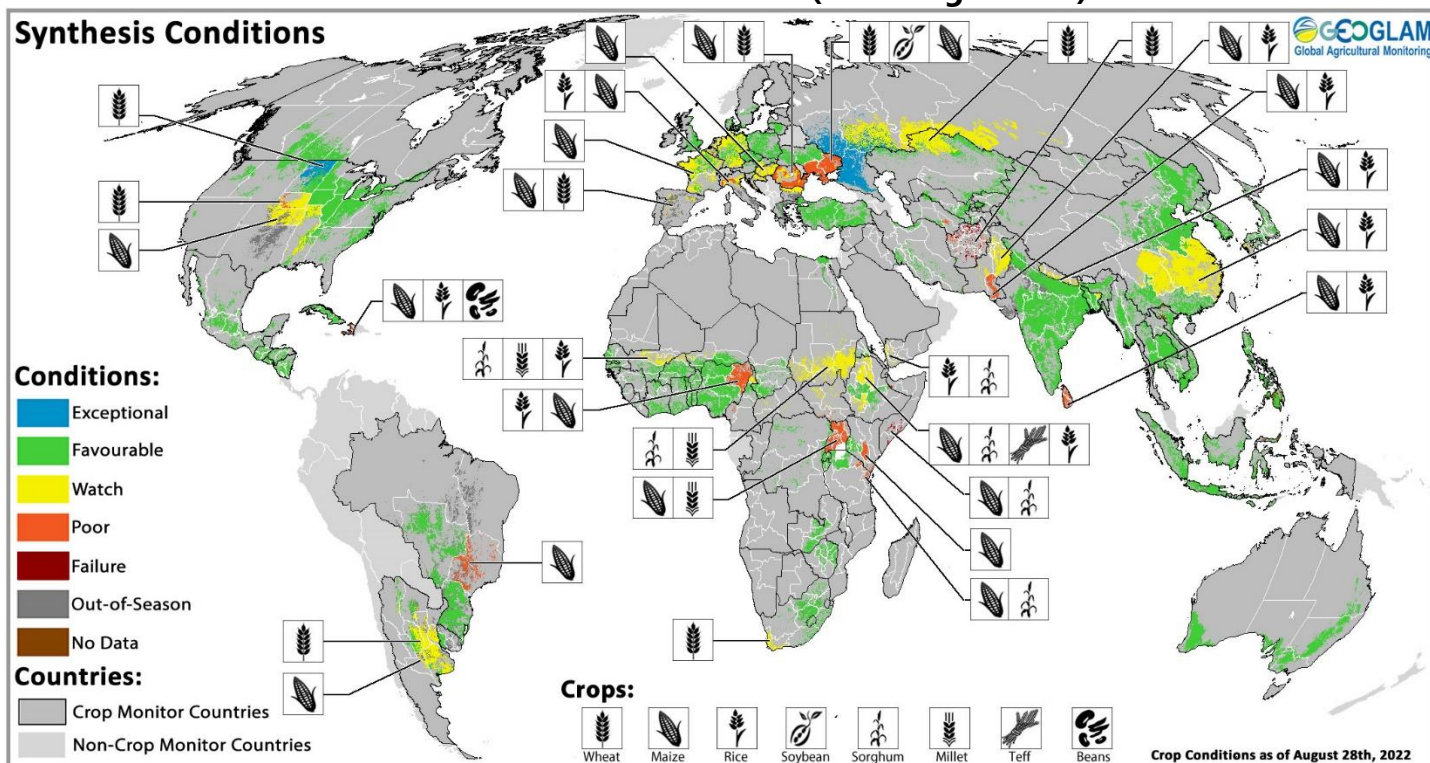


# GEOGLAM Global Crop Monitor

Global Conditions at a Glance (as of August 28<sup>th</sup>)



Crop condition map synthesizing information for all Crop Monitor crops as of August 28<sup>th</sup>. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, and national and regional experts. **Regions that are in other than favourable conditions are labeled on the map with a symbol representing the crop(s) affected.**

## Global Crop Overview

Global crop conditions at the end of August are overall positive for wheat and soybeans while mixed for rice and maize. For **wheat**, areas of concern remain in North America, South America, Europe, MENA, and Central Asia. For **maize**, hot and dry conditions have led to concerns in North America, Europe, and East Africa and Asia. For **rice**, conditions remain generally favourable except for in southern China and some minor areas in Southeast Asia. For **soybeans**, conditions are generally favourable. The remaining crops are covered in the [CM4EW](#) publication.

## Global Climate Influences

ENSO is currently in the La Niña phase and will likely continue into early 2023 (80% chance for September to November and 60% chance for December to February). Negative Indian Ocean Dipole (IOD) conditions are present and will likely continue into December.

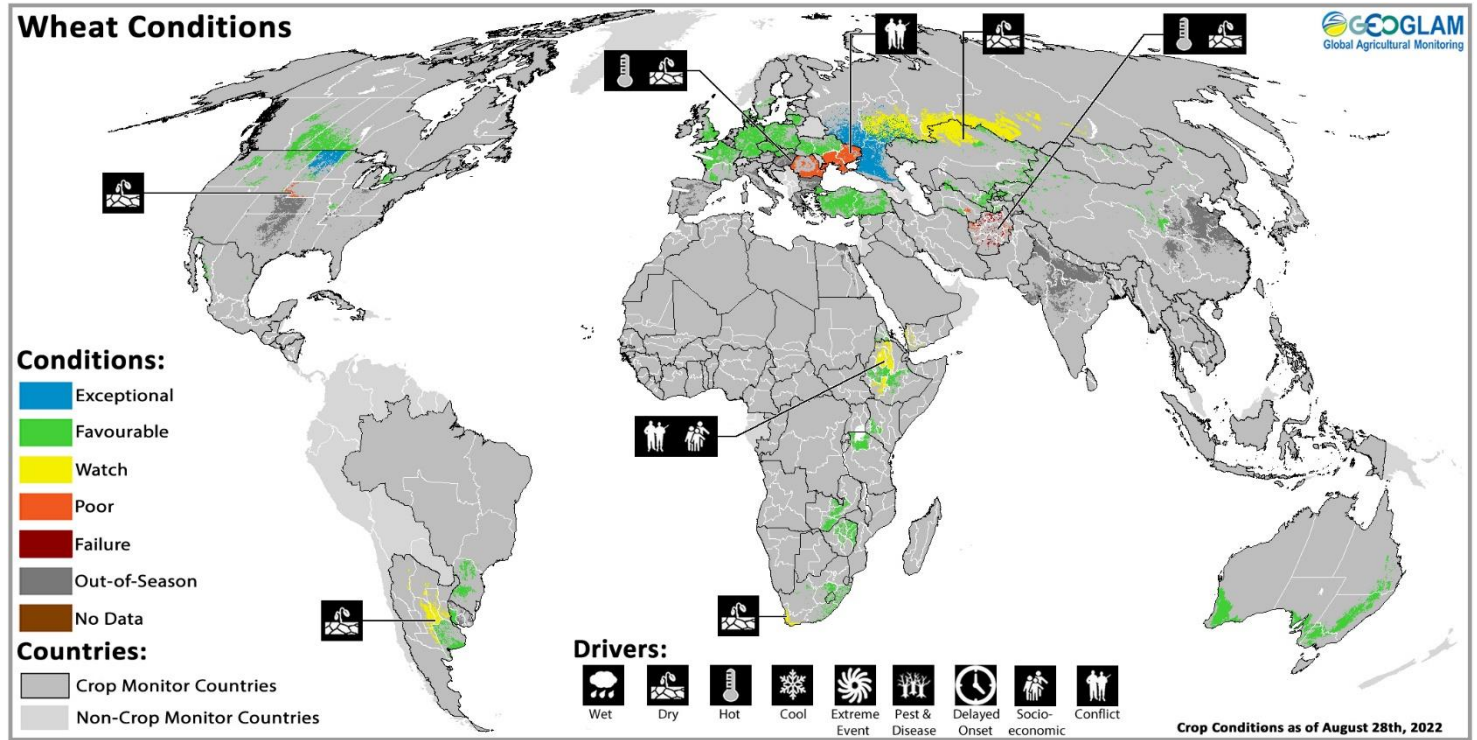
For further details see page 6.

Source: UCSB Climate Hazards Center

	Wheat	Maize	Rice	Soybean	
<b>Current Conditions</b>					<b>Legend:</b>
<b>Compared to last month</b>	↑	-	↑	-	Positive
<b>Compared to last year</b>	-	↑	↓	-	Mixed
					Negative
					Better
					Similar
					Worse

See Appendix I for detailed methodology description

# WHEAT

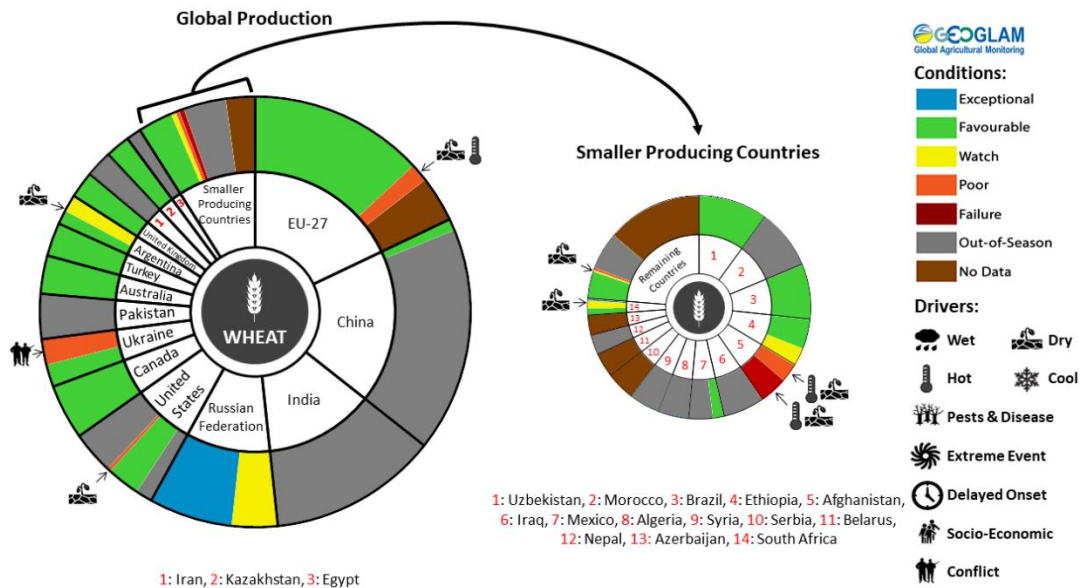


Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Conditions are based upon information as of August 28<sup>th</sup>.

In **North America**, harvesting of winter wheat is wrapping up in the US, while spring wheat harvest continues under favorable conditions. Harvesting is wrapping up in Mexico. In **South America**, sowing is wrapping up as ongoing dry conditions continue to be of concern. Conditions are favourable in Brazil and Uruguay. In **Europe**, hot and dry conditions benefited final harvesting across northern Europe. Harvesting is also wrapping up in the United Kingdom. Harvesting is wrapping up in Ukraine, harvesting is wrapping up with generally good yields away from the conflict zone and reduced yields near the war zone. In the **Russian Federation**, harvesting of winter wheat is completing with exceptional yields. However, dry conditions have developed over spring wheat areas throughout August. In Turkey, harvesting is wrapping up under favourable conditions. In **Central and South Asia**, harvesting of winter wheat has finalized with failure end of season conditions in parts of Afghanistan and poor conditions in Turkmenistan due to persistent dry and hot conditions. Harvesting of spring wheat is nearing completion under mixed conditions. **East Asia**, spring wheat is being harvested under favourable for spring wheat in China and Mongolia. In **Oceania**, conditions are favourable across all states of Australia; however, ongoing wet conditions in parts of southern Queensland and northern and central New South Wales may reduce the intended sown area in those regions. In the **Middle East and North Africa**, harvesting of wheat finalized last month under mixed conditions due to persistent dryness throughout the season.

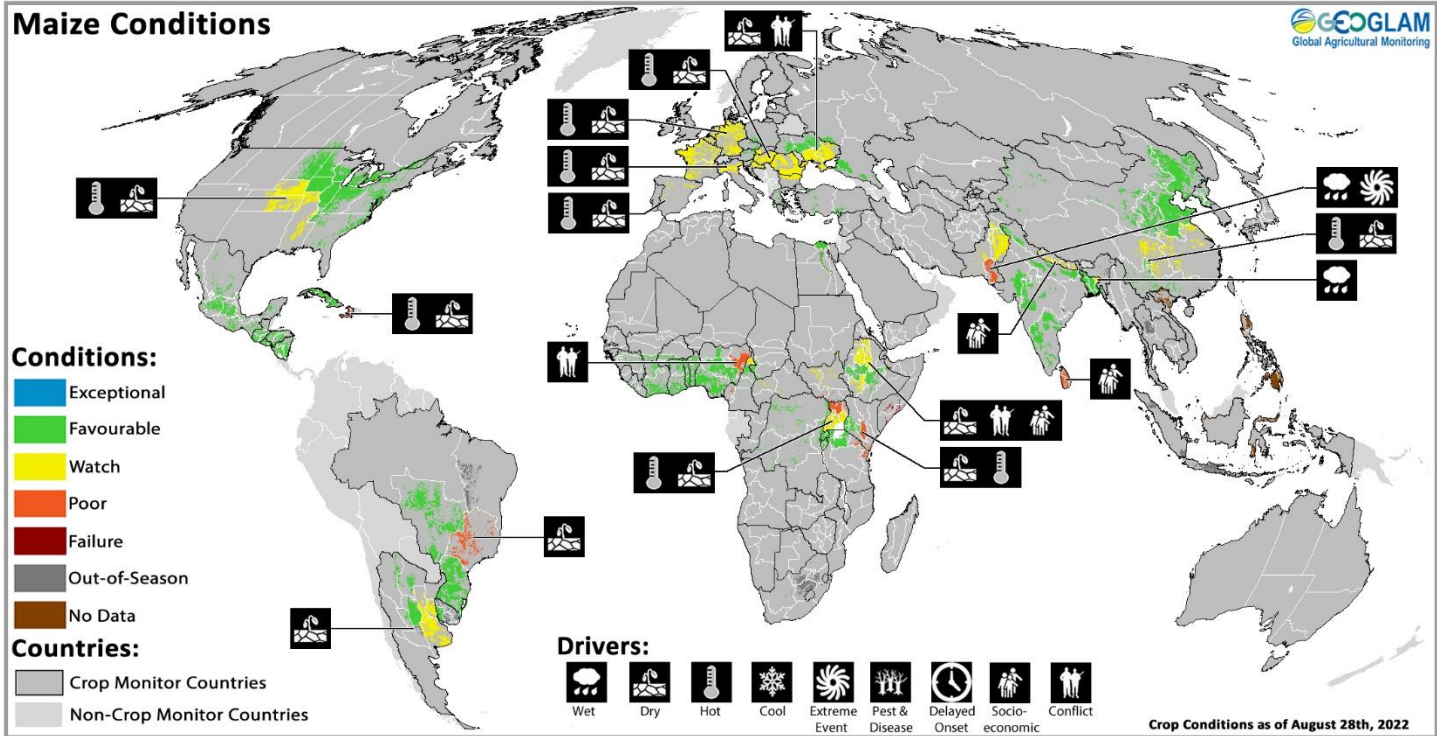
Planting and development of maize and rice crops are underway in Egypt while harvesting of rice crops is underway in Iran, and overall conditions are favourable. In **Southern Africa**, wheat crops continue to develop under generally favourable conditions except in the main producing Western Cape of South Africa due to ongoing dry conditions

## MAIZE



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

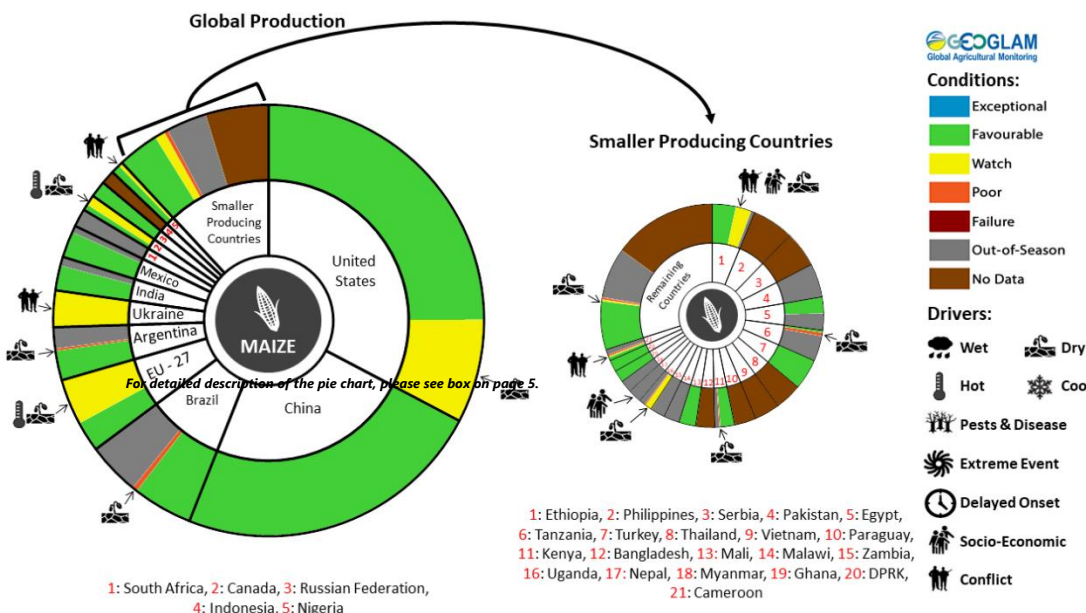




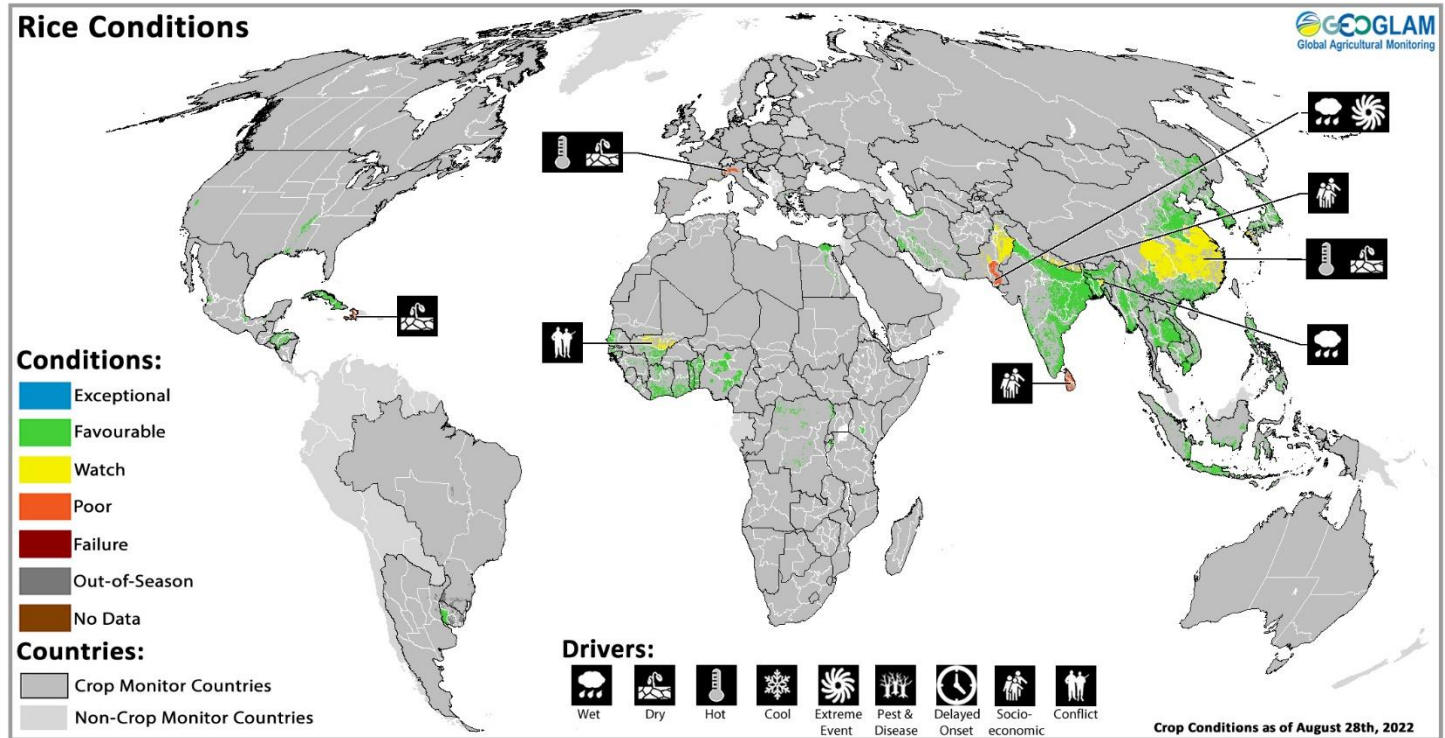
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Conditions are based upon information as of August 28<sup>th</sup>.

In **South America**, harvesting of the late-planted crop (smaller season) is wrapping up in Argentina under generally favourable conditions, but with heterogeneous yields. Sowing of the early-planted crop (larger season) has begun under dry conditions. In Brazil, harvesting of the summer-planted crop (larger season) is wrapping up under favourable conditions in the Central-West and South regions, while poor in the Southeast region. In **Central America & the Caribbean**, harvesting of *Primera* season cereals is nearing completion in **Guatemala, El Salvador, Honduras, and Nicaragua**, and overall conditions remain favourable. Land preparation is underway for *Segunda* season maize and bean crops, and planting will begin in September. In **Haiti**, harvesting of main season cereals is nearing completion, and crops are unlikely to recover from rainfall deficits and temperature increases during the *Printemps* season. The poorly-distributed first rainfall season has led to droughts, which have degraded crops over northwest, central, and southern areas of the country. In **North America**, conditions are mixed as earlier hot and dry weather, particularly along the western and southern Corn Belt of the US, continues to be of concern. In Canada, conditions have improved in Ontario despite recent excess heat. In Mexico, conditions are favourable as sowing continues for the spring-summer season (larger season). In **Europe**, exceptionally hot and/or dry weather conditions in large parts of Europe continue to substantially reduce yield outlooks. In **South Asia**, sowing of Kharif crops in India is complete with a total sown area similar to last year. In **East Asia**,

conditions are generally favourable except for in the Yangtze River basin in China where drought has impacted crops. There is a slight reduction in the total sown area compared to last year. In **West Africa**, harvesting of main season maize crops finalized in Nigeria and is nearing completion in Liberia, Cote d'Ivoire, southern Burkina Faso, Ghana, Togo, and central and southern Benin while crops continue to develop in Guinea, northern Benin, northern Cameroon, and the Central African Republic. In **East Africa**, The Horn of Africa continues to be affected by four consecutive below-average rainfall seasons since late 2020.

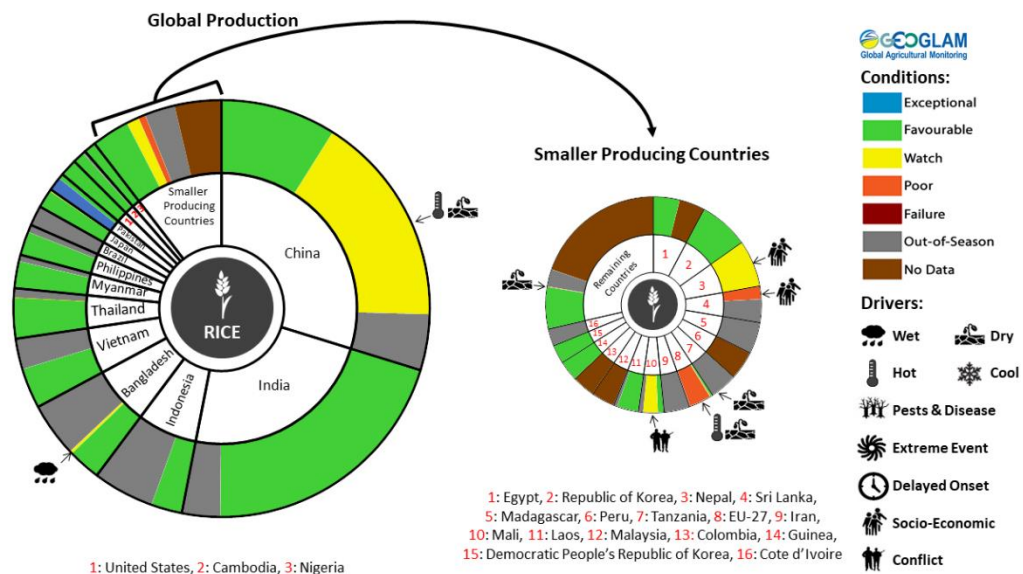


# RICE



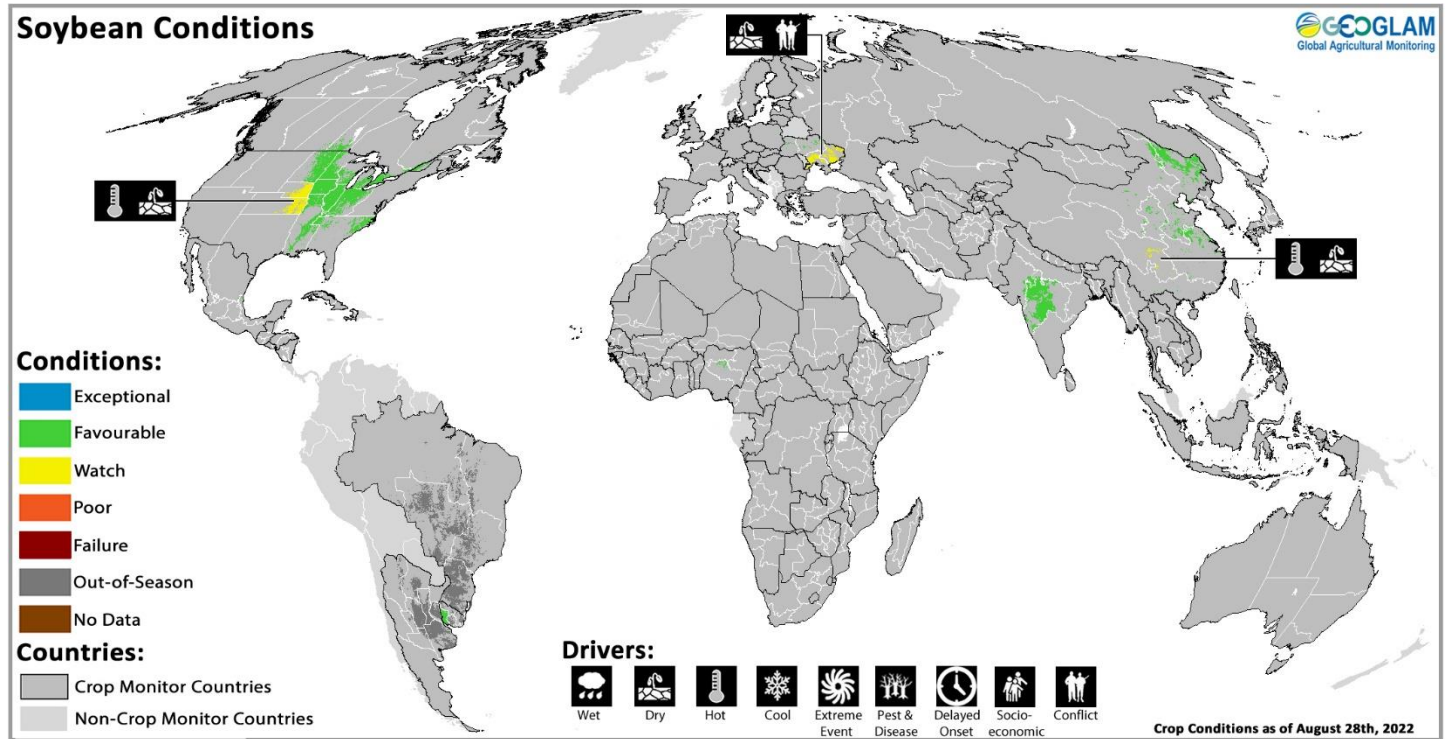
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Conditions are based upon information as of August 28<sup>th</sup>.

In **East Asia**, persistent extreme heat along with dry conditions within the Yangtze River basin in China has forced the early ripening of single-season rice and also affected late-season rice, reducing yields. Elsewhere conditions are favourable. In **Southeast Asia**, wet-season rice is in the growing to harvesting stage under favourable conditions with above-average seasonal rains received in most areas. Heavy rains have impacted some countries with flooding, and Tropical Storms Mulan and Ma-On brought heavy rains and flooding to parts of Viet Nam, northern Thailand and bordering areas of Myanmar, northern Laos, and the Philippines. No significant damage has been reported, and yields are expected to be near-normal. In Indonesia, conditions are favourable for dry-season rice with sufficient sunlight and water received during the growing period as sowing continues. In the Philippines, wet-season rice planted from April to May is in the maturing to harvesting stage under favourable conditions with earlier sown crops beginning to harvest. In Thailand, wet-season rice is in the tillering stage under favourable conditions with an increase in sown area in the Northern and Central regions due to abundant rainfall and good paddy prices. In northern Viet Nam, summer-autumn rice (wet-season) is in the young panicle forming stage under favourable conditions. Harvesting activities for summer-autumn (wet-season) rice are ongoing in the south, and harvested area has reached 0.44 million hectares out of 1.74 million hectares planted. The yield is forecast to be slightly higher than last year due to warm weather and better irrigation preparation. Autumn-winter rice (wet-season) sowing is continuing in the south. In the **Americas**, harvesting is ongoing in Louisiana and Texas in the US under favourable conditions. In **MENA**, harvesting of rice crops is underway in Iran, and overall conditions are favourable.



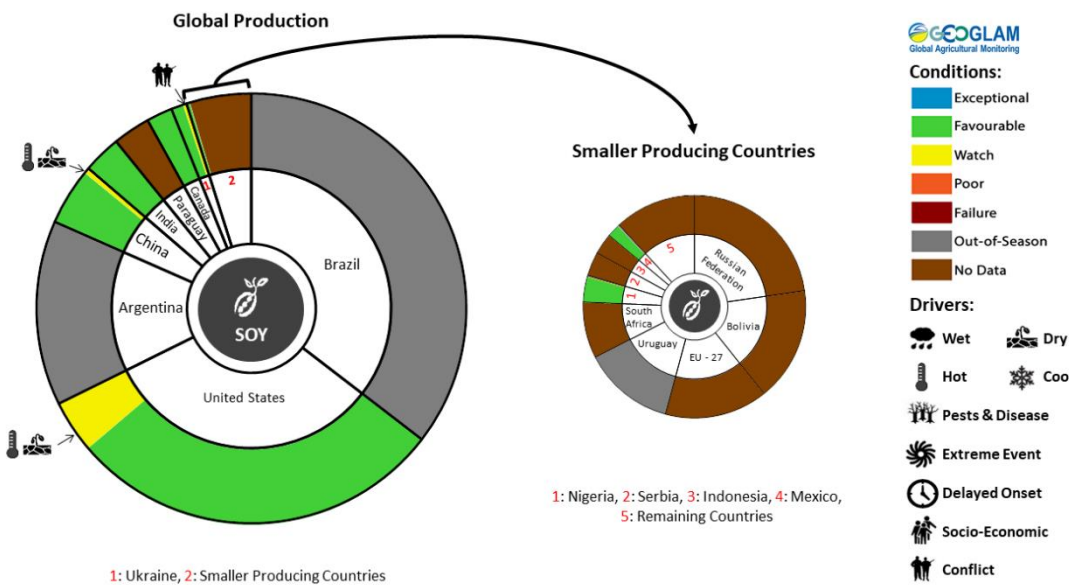


# SOYBEAN



Soybean crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Conditions are based upon information as of August 28<sup>th</sup>.

In **North America**, conditions remain generally favourable in the US, however, hot and dry conditions are beginning to impact crops on the western edge of the main growing states. There is an increase in total sown area compared to last year. In **Canada**, conditions have improved across the country. In **Asia**, conditions are favourable in China during the vegetative to reproductive stages. There is a large increase in the total sown area as compared to last year. In India, conditions are favourable with the majority of the sowing completed. The total sown area is in line with last year. In **Europe**, hot and dry conditions have reduced potential yields in the EU, most notably in Italy, Hungary, and Romania. In Ukraine, climatic conditions remain supportive while the war continues to bring uncertainties.



**Pie Chart Description:** Each slice represents a country's share of total Global production (5-year average). Main producing countries (representing 90-95 percent of production) are shown individually, with the remaining 5-10 percent grouped into the "Smaller Producing 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 (e.g., spring and winter wheat). When conditions are other than 'favourable', icons are added that provide information on the key climatic drivers affecting conditions.

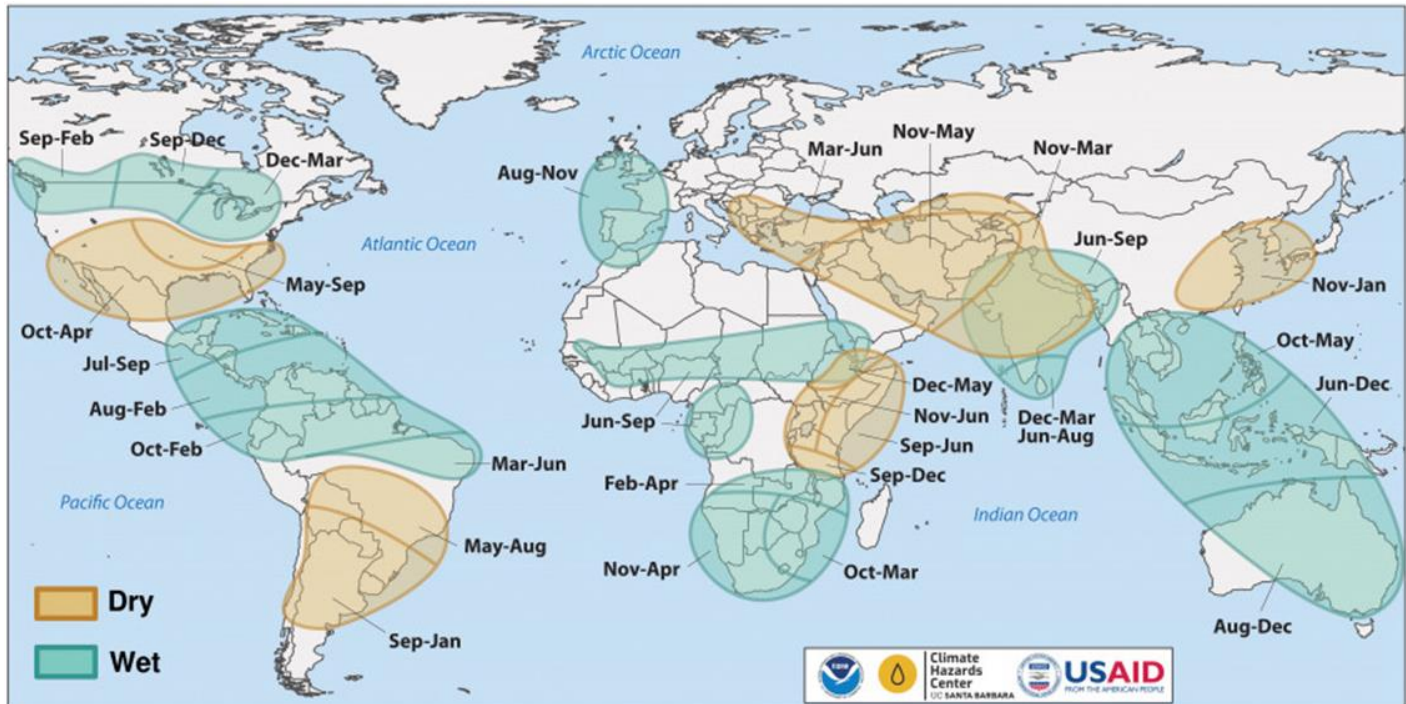
## Global Climate Influences

The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase, according to the IRI/CPC. La Niña conditions will likely continue into early 2023 (80% chance for September to November and 60% chance for December to February).

Negative Indian Ocean Dipole (IOD) conditions are present and may continue into December, according to the Australia Bureau of Meteorology forecast (99% chance for October and 63% chance for December).

During the next several months, there are increased risks of severe drought across the Horn of Africa, and heavy rainfall and flooding in Australia and southeast Asia. Additionally, a third year in a row with La Niña conditions raises concerns about repeat dry conditions in eastern East Africa, southern South America, Central and Southern Asia, and southern North 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://fews.net/la-ni%C3%B1a-and-precipitation>

## Regional Outlooks

Both the two-week forecast (Figures 1 & 2) and the long-term September-October-November 2022 forecast (Figures 3 & 4) are influenced by the current La Niña phase, and a Negative Indian Ocean Dipole (IOD).

The two-week forecast (Figure 1) indicates a likelihood of above-average rainfall over southern Greenland, northern Iceland, south-central Canada, north-central, central, and southern areas of the United States, Central America, southern Brazil, southern Sahel areas, western areas of East Africa, eastern areas of the Democratic Republic of Congo, Ireland, France, Hungary, Poland, Belarus, Ukraine, west, east, and southeastern areas of the Russian Federation, Mongolia, South Korea, southern Japan, Taiwan, eastern Pakistan, central and northern India, southern Myanmar, southern Thailand, southern Laos, southern Viet Nam, eastern Malaysia, central and eastern Indonesia, southern Papua New Guinea, Australia, and northern New Zealand.

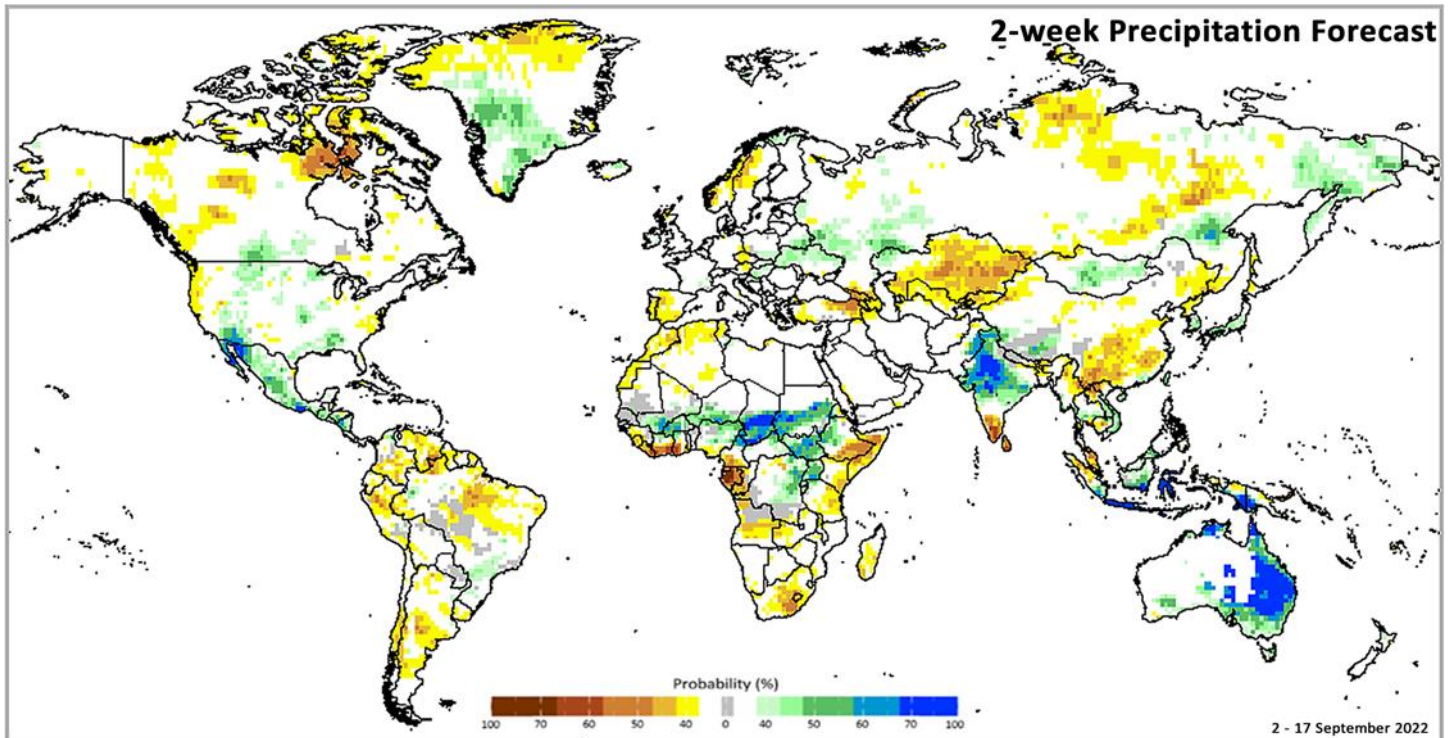


Figure 1: IRI SubX Precipitation Biweekly Probability Forecast 2-17 September 2022, issued on August 29th, 2022. The forecast is based on statistically calibrated tercile category forecasts from three SubX models. Source: [IRI Subseasonal Forecasts Maproom](#)



## 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 5-25% below-average. This is only used when conditions are not likely to be able to recover, and impact on production is likely.

**Failure:** Crop conditions are extremely poor. Crop yields are likely to be 25% or more below-average.

**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, environmental, and anthropomorphic 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

**Pest & Disease:** Destructive insects, birds, animals, or plant disease.

**Socio-economic:** Social or economic factors that impact crop conditions (i.e., policy changes, agricultural subsidies, government intervention, etc.)

**Conflict:** Armed conflict or civil unrest that is preventing the planting, working, or harvesting of the fields by the farmers.



### Crop Condition Indicators:

**Current Crop Conditions:** The current crop condition indicators are based upon only the crops that are currently in season. Crops with "No Data" are not counted. The crop condition is considered "Positive", with a green-coloured crop symbol, when 85-100% of active crops are currently under favourable to exceptional conditions. The crop conditions are considered "Mixed", with an orange-coloured crop symbol, when only 70-85% of active crops are under favourable to exceptional conditions. The crop conditions are considered "Negative", with a dark red-coloured crop symbol, when only 0-70% of active crops are under favourable to exceptional conditions.

**Crop Condition Comparisons:** Crop condition changes are measured between the current month's conditions compared to the previous month and to exactly one year ago. Only active crops are considered. If there is a -5% change in global crop conditions, then the crop conditions are considered "Deteriorating" (indicated by a down arrow). If there is a +5% change in global crop conditions, then the crop conditions are considered "Improving" (indicated by an up arrow). Otherwise, crop conditions are considered "Stable" (indicated by a dash).