GEOGLAM Crop Monitor February 2015

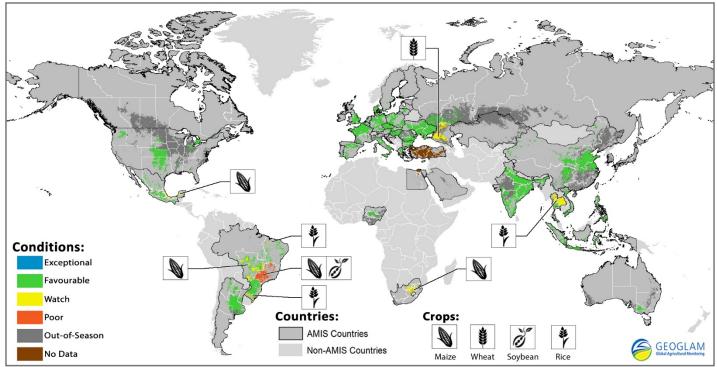
No. 15





Prepared by members of the GEOGLAM Community of Practice





Crop Conditions 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 less than favourable conditions are displayed on the map with their crop symbol.

Highlights

Wheat In the southern hemisphere harvest is complete and conditions at the end of the season were mixed in Australia and Argentina. In the northern hemisphere winter wheat is mostly dormant. In the EU, US, China, Ukraine and Canada the crop is dormant and progressing without any major concern. In Russia, conditions for the dormant crop are generally favourable except in the southern regions where there is some concern over limited protective snow cover and warmer than usual weather. In India, conditions are favourable.

Maize In the southern hemisphere conditions are mostly favourable. In Brazil, conditions are mixed for the first crop, due to the lack of rains in main producing areas and planting of the second crop has begun. In Argentina, planting is mostly complete and conditions remain generally favourable. In South Africa, Mexico and India, conditions are generally favourable.

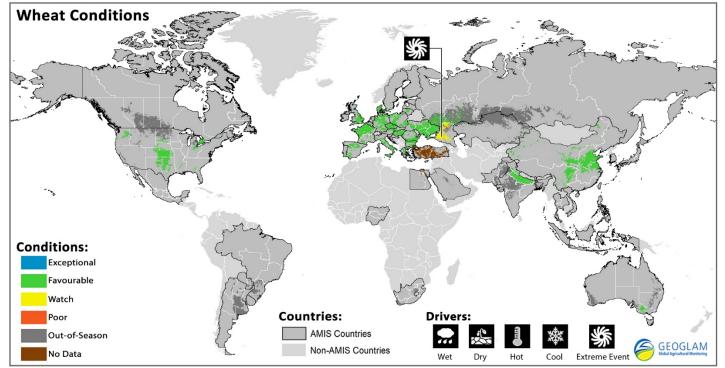
Rice Conditions are favourable. In Thailand, harvest is almost complete for the wet season rice and conditions are generally favourable though there is some concern due to dryness. Dry season conditions are mixed due to dryness and cold weather. In India, Vietnam, Indonesia, and Philippines, conditions are generally favourable. In Brazil, conditions are mixed due to excessive rainfall in the southern region.

Soybeans In the southern hemisphere conditions are favourable. In Brazil, conditions are generally favourable though there is some concern over crop development in southern producing areas due to lack of rains. In Argentina, planting is progressing slowly but is mostly complete and conditions are generally good for both first and second soy.

El Niño situation update

The much anticipated El Niño of 2014/2015 has so far failed to materialize. While the U.S. National Oceanic and Atmospheric Administration (NOAA) and the International Research Institute for Climate and Society (IRI) still foresee a 50 percent chance of oceanic and atmospheric conditions meeting the criteria for an El Niño declaration in February and March, the Australian Bureau of Meteorology (BOM) has reset its El Niño-Southern Oscillation (ENSO) Tracker from "El Niño Alert" to "Neutral". BOM explains that El Niño conditions typically decay after January and that current model forecasts are consistent with this outlook. With all these expert determinations in mind, it is unlikely that the remainder of the southern hemisphere growing season will see the impacts of a classical El Niño event.

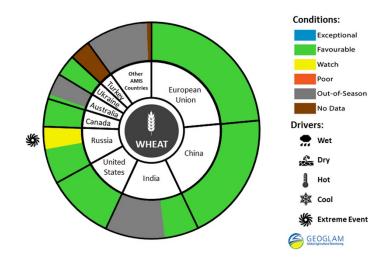




Wheat Conditions for AMIS Countries

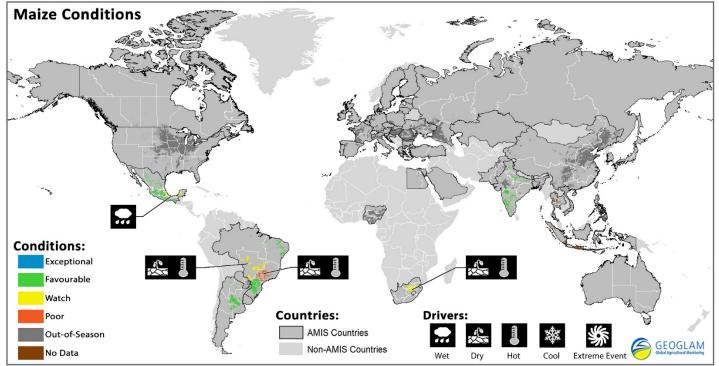
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Wheat: In the southern hemisphere harvest is complete and conditions at the end of the season were mixed. In Australia, harvest was completed in all areas under generally favourable weather though conditions were mixed due to dry hot weather earlier in the season. In Argentina, harvest is complete and end of season conditions were mixed. In the northern *hemisphere* winter wheat is mostly dormant. In the EU, the crop is dormant and progressing without concern. In the US, the crop is developing normally. In China, conditions are favourable for the dormant crop. In Russia, the crop is dormant and conditions are generally favourable. In the southern regions, there is some concern over limited snow cover and warmer than usual weather that thawed soils prematurely. Impacts, if any, will be determined in the spring. In Canada, the crop is dormant and progressing without concern. In India, conditions are favourable and the crop is in vegetative to reproductive stages. In Ukraine, conditions are favourable for the dormant crop. Short periods of very cold temperatures occurred though there was adequate snow to protect the crop. Warmer than usual temperatures followed in the south and western regions, leading to unstable snowcover, and soils thawing.



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 area within each slice is divided between crops in-season (colour) and out-of-season (gray). The in-season portion is coloured according to the various crop conditions within that country. When conditions are labelled as 'poor' or 'watch', icons are added that provide information on the key climatic drivers affecting conditions. The coloured areas reflect conditions by area rather than overall national production.

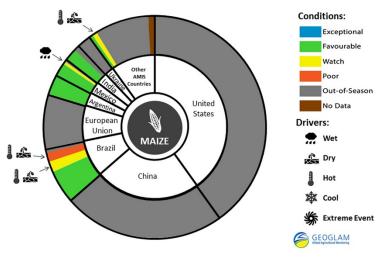




Maize Conditions for AMIS Countries

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.

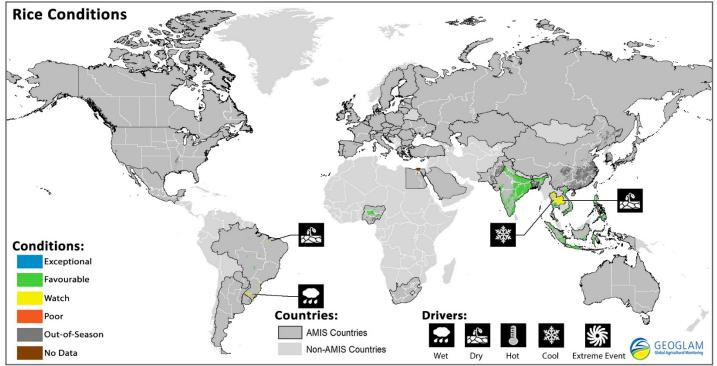
Maize: In the *southern hemisphere* conditions are mostly favourable. In Brazil, conditions are mixed. There is concern over the first maize crop as there is a delay in development due to the lack of rains in main producing areas. Planting of the second maize crop (larger production) has begun. In Argentina, planting is mostly complete, though progressed slowly due to both excess and deficit moisture, and conditions are favourable. Rainfall in the northern regions has helped to moderate some of the higher temperatures in recent weeks. In South Africa conditions are generally favourable. Rainfall was predominantly abundant over the production region during the planting season. Hot and dry conditions during January with a more isolated to scattered nature of thunderstorms resulted in isolated areas experiencing losses. In Mexico, conditions are favourable and harvest has begun for the spring-summer crop. Sowing of the autumn-winter crop has begun and conditions are also favourable. In



Top producers of maize within AMIS participating countries and their current crop conditions (as of January 28th). (The description is as for wheat)

India, harvest has begun and conditions are mostly favourable. There is some localized concern in a small area of the southern region due to moisture stress.

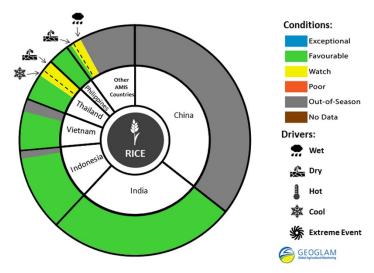




Rice Conditions for AMIS Countries

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.

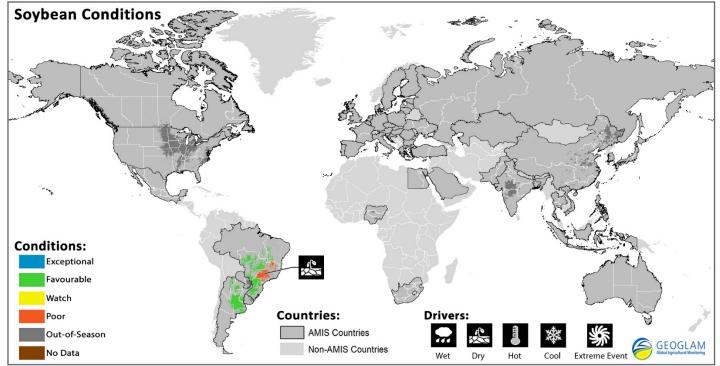
Rice: conditions are favourable. In **India**, conditions are favourable and harvest is mostly complete for the first season of rice. Planting has begun for the second season crop and the crop is in favourable condition. In Thailand, harvest is almost complete for the wet season rice and conditions are generally favourable though there are some concerns over rice in the northeastern region due to dryness during the tillering stage. Dry season rice conditions are mixed due to insufficient water and cold weather. In Vietnam, the summer crop is in good condition and harvest is progressing. The dry season rice is being transplanted and conditions are favourable. In Indonesia, the dry season crop is in good condition due to favourable weather. It is currently between vegetative to maturity stages. Planting has begun for the wet season crop and conditions are good owing to adequate irrigation and sunlight. In Brazil, conditions are favourable and development is



Top producers of rice within AMIS participating countries and their current crop conditions (as of January 28th). (The description is as for wheat)

proceeding normally despite excessive rainfall in the southern region, which is the main producing area. In the **Philippines**, dry season rice conditions are favourable owing to good weather. The crop is in tillering to panicle forming stages.

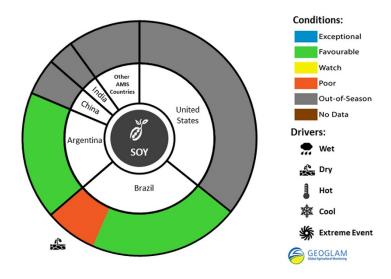




Soybean Conditions for AMIS Countries

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 the *southern hemisphere* conditions are favourable. In **Brazil**, conditions are mostly favourable and planted area has increased relative to last year. The crop is primarily in vegetative to reproductive stages. There is some concern over crop development in southeastern producing areas due to lack of rains. In **Argentina**, planting progressed slowly though is mostly complete and conditions are generally good for both first and second soy, owing to favourable weather.



Top producers of soy within AMIS participating countries and their current crop conditions (as of January 28^{th}). (The description is as for wheat)

Appendix 1: Definitions

More detailed information on the GEOGLAM crop assessments is available www.geoglam-crop-monitor.org.

For more information regarding on the new crop monitor and pie charts: http://www.geoglam-crop-monitor.org/content/about-geoglam-crop-monitor.

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (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), Russia (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 multi-agency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts. Map data sources: Major crop type areas based on the IFPRI/IIASA SPAM 2005 beta release (2013), USDA/NASS 2013 CDL, 2013 AAFC Annual Crop Inventory Map, GLAM/UMD, GLAD/UMD, Australian Land Use and Management Classification (Version 7), SIAP, ARC, and JRC. Crop calendars based on

GEOGLAM partner crop calendars and USDA crop calendars.

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.

*"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 or may not result in production impacts and they can act as either positive or negative drivers of crop conditions.

Wet: Higher than average wetness.

Sources & Disclaimer

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.)



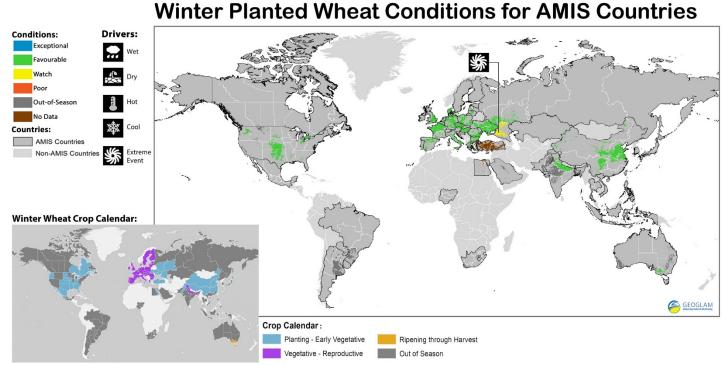
Extreme Event



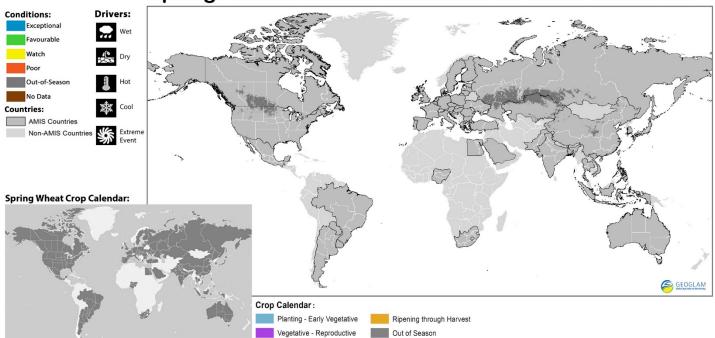




Appendix 2: Crop Season Specific Maps



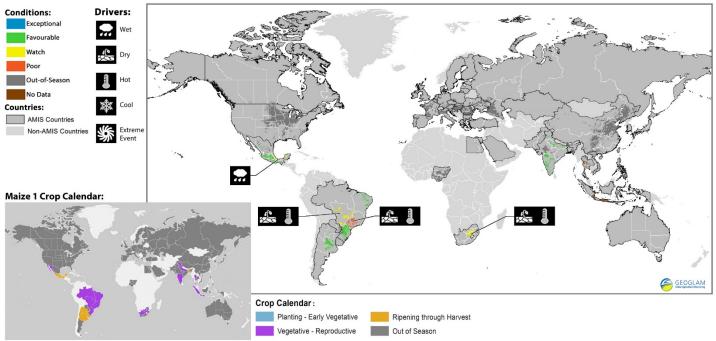
Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers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

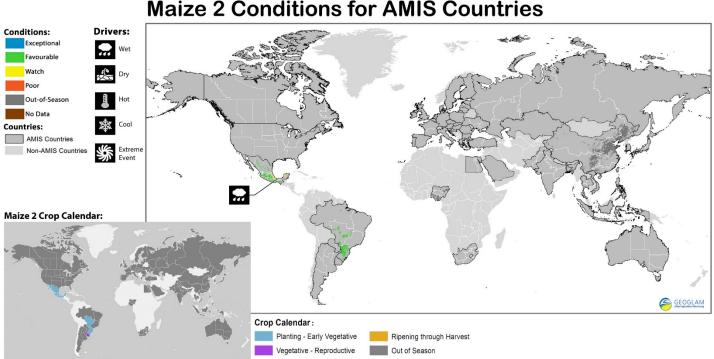
Spring Planted Wheat Conditions for AMIS Countries





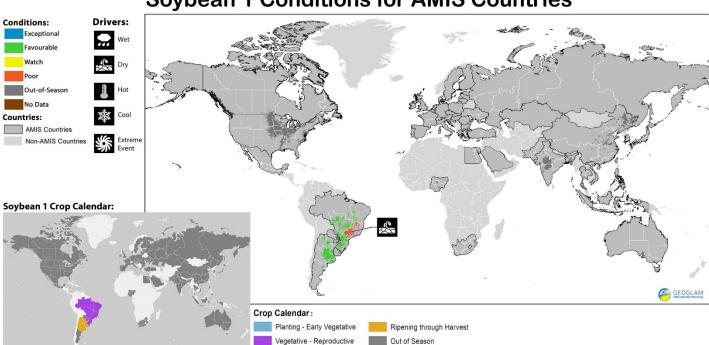
Maize 1 Conditions for AMIS Countries

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.

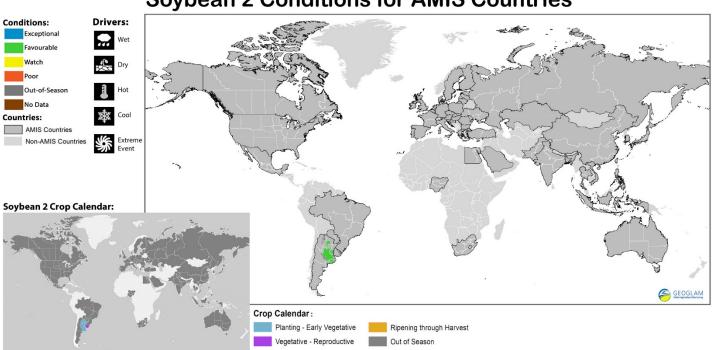


Maize 2 Conditions for AMIS Countries

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 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 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.

Soybean 1 Conditions for AMIS Countries

GEOGLAM