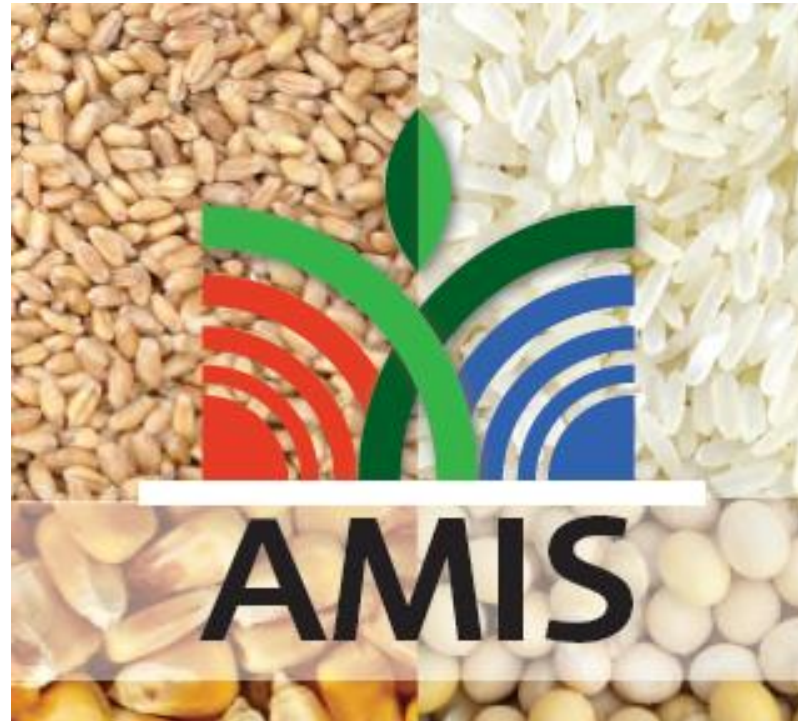




Food and Agriculture Organization  
of the United Nations



## GEOGLAM: Crop Monitor

Inbal Becker-Reshef





Food and Agriculture Organization  
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# GEOGLAM: Group on Earth Observations Global Agricultural Monitoring Initiative

*Launched alongside AMIS, by G20 in 2011 under the French Presidency,  
within the Action Plan on Food Price Volatility and Agriculture; re-affirmed in 2016*



## G20 Final Declaration

44. We commit to improve market information and transparency in order to make international markets for agricultural commodities more effective. To that end, we launched:

- The "Agricultural Market Information System" (AMIS) in Rome on September 15, 2011, to improve information on markets ...;
- The "**Global Agricultural Geo-monitoring Initiative**" (**GEO-GLAM**) in Geneva on September 22-23, 2011. This initiative will coordinate satellite monitoring observation systems in different regions of the world in order to enhance crop production forecasting data.

to continue to tackle the issue of price volatility. In particular, we commit to pursue the implementation of the concrete initiatives of the 2011 G20 Action Plan on Food Price Volatility and Agriculture in dedicated forums: Agricultural Market Information System (AMIS) and the Rapid Response Forum, **GEO Global Agricultural Monitoring Initiative (GEOGLAM)** for market and production international monitoring, and risk management tools, such as the Platform for



## AMIS Request to GEOGLAM

- Provision of monthly, transparent, timely, crop condition assessments in primary agricultural production areas
- Reflecting an international consensus, building on existing systems
- 4 Crops: Wheat, maize, soybean, rice
- Focus: main production/export countries (AMIS Countries)
- Output: Crop Monitor, published in Market Monitor



[www.cropmonitor.org](http://www.cropmonitor.org)





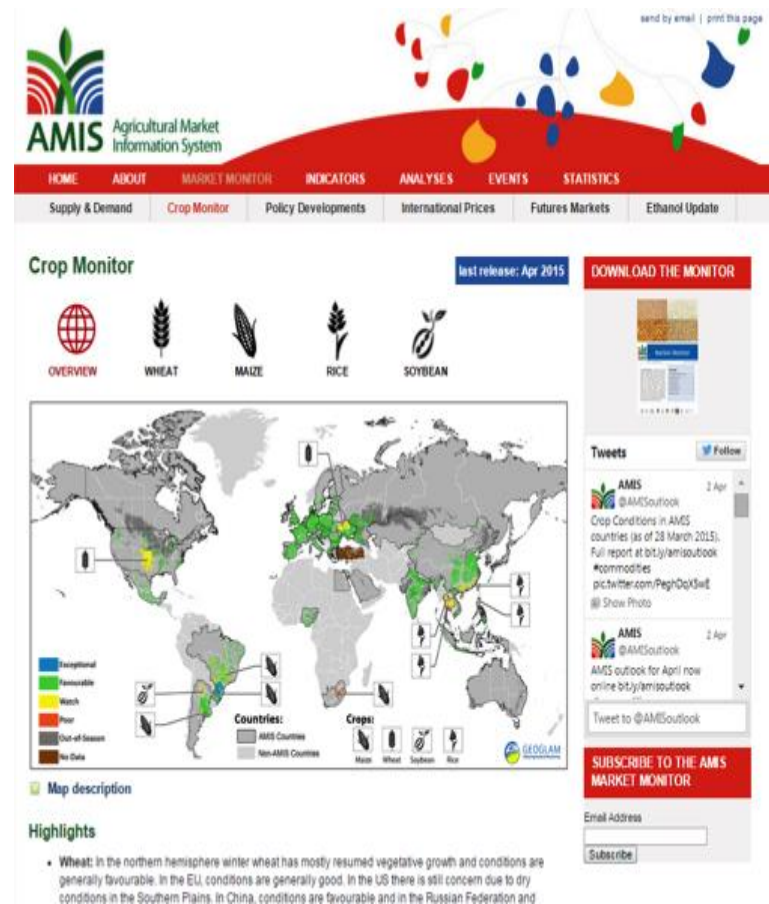


# AMIS: Agricultural Market Information System

Improve market information and transparency



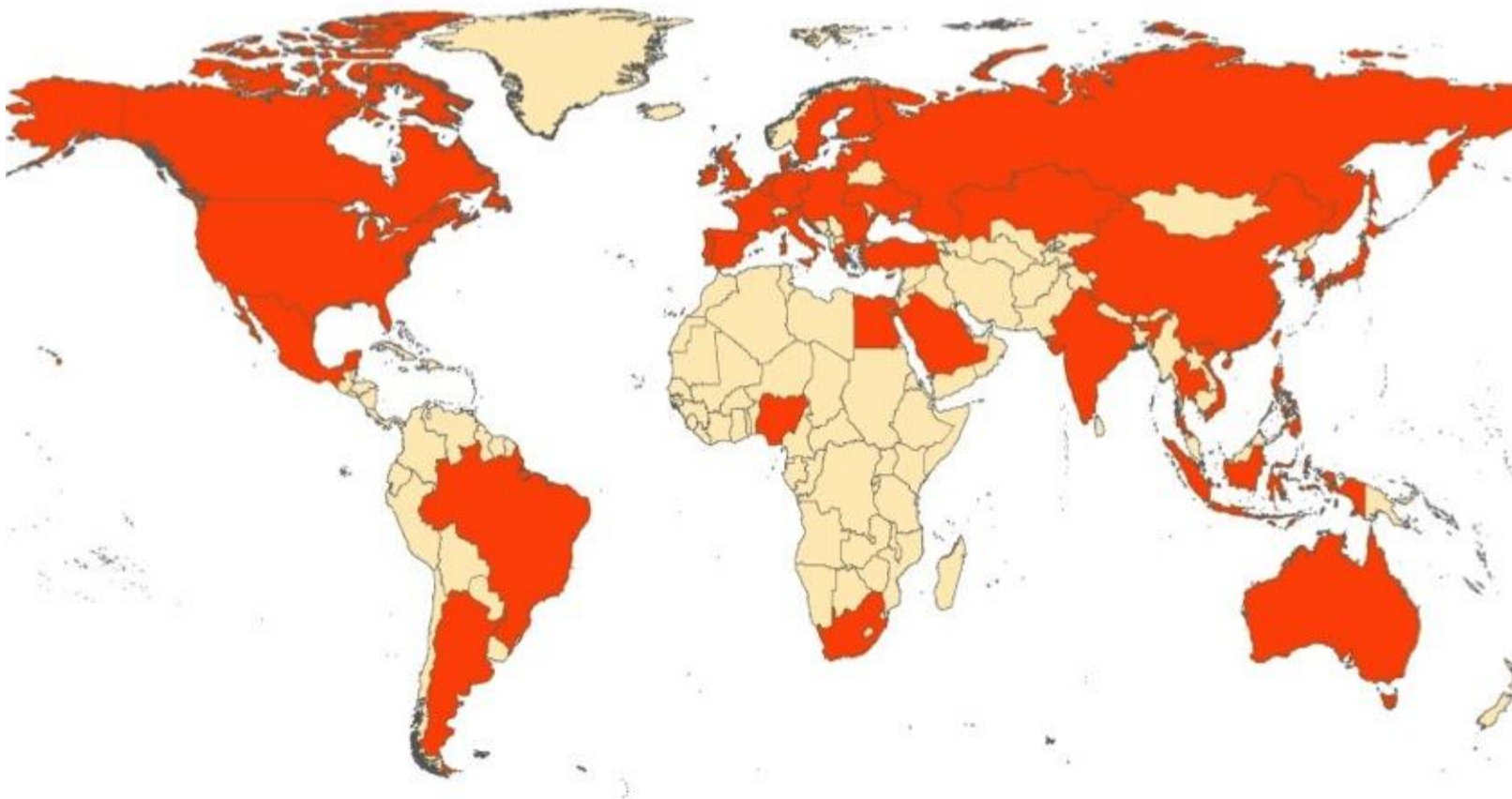
The screenshot shows the AMIS homepage. At the top is the AMIS logo and navigation links: HOME, ABOUT, MARKET MONITOR, INDICATORS, ANALYSES, EVENTS, and STATISTICS. Below the navigation bar is a large banner image of wheat with the text "Monitoring markets" and a sub-headline: "April update. The global cereal supply is proving to be exceptionally high this season in view of the latest upward adjustments to wheat and maize inventories." Below the banner are four columns of content: "LATEST NEWS" (Market Monitor, Market Indicators), "ANALYSES" (Price transmission from global benchmarks, Improving feed estimates), "STATISTICS UPDATE" (Online Database, View statistics), and "MEETINGS" (Expert Meeting, Stocks measurement, 21 November 2014). At the bottom are logos of partner organizations: FAO, IFAD, IFPRI, IGC, OECD, UNCTAD, WORLD BANK GROUP, and WFP.



The screenshot shows the AMIS Crop Monitor page. It features the AMIS logo and navigation links. Below the navigation bar is a section titled "Crop Monitor" with a "last release: Apr 2015" badge. The section includes icons for OVERVIEW, WHEAT, MAIZE, RICE, and SOYBEAN. A world map is displayed, showing crop conditions by country. Below the map is a "Map description" section. To the right of the map is a "Tweets" section with two tweets from @AMISoutlook. At the bottom right is a "SUBSCRIBE TO THE AMIS MARKET MONITOR" section with an email address input field and a "Subscribe" button.

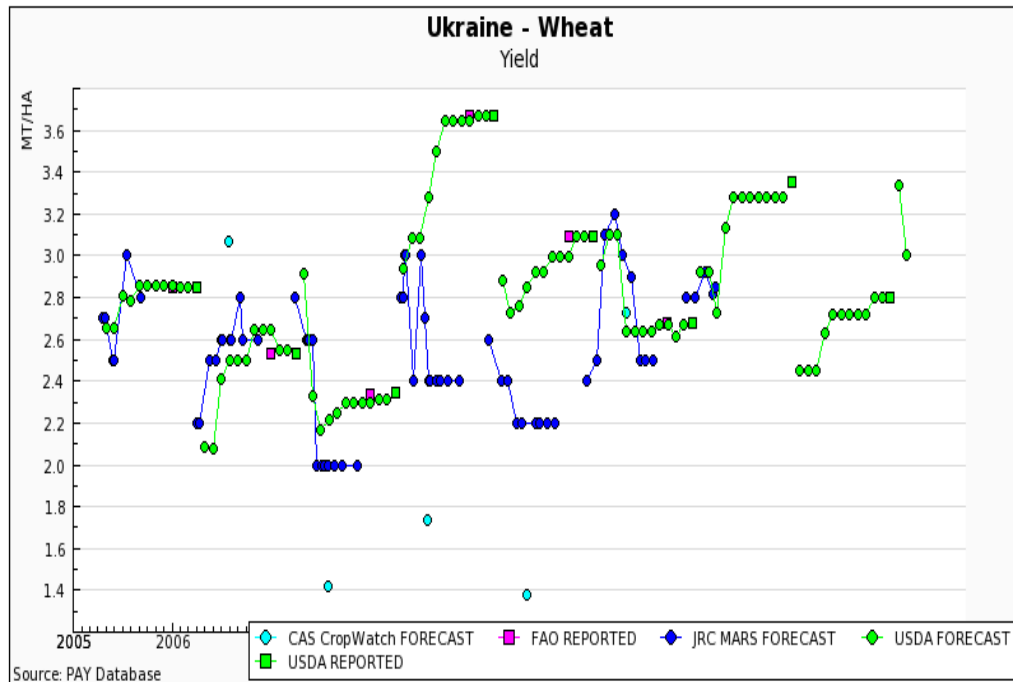
# AMIS Countries

Account for close to 90% of global production of 4 main crops



# Context: need for improved forecasts & transparency

- Within season forecasts vary between agencies
- Critical particularly in anomalous years



Colors indicate different agencies

■ Squares indicate reported  
end of season estimates

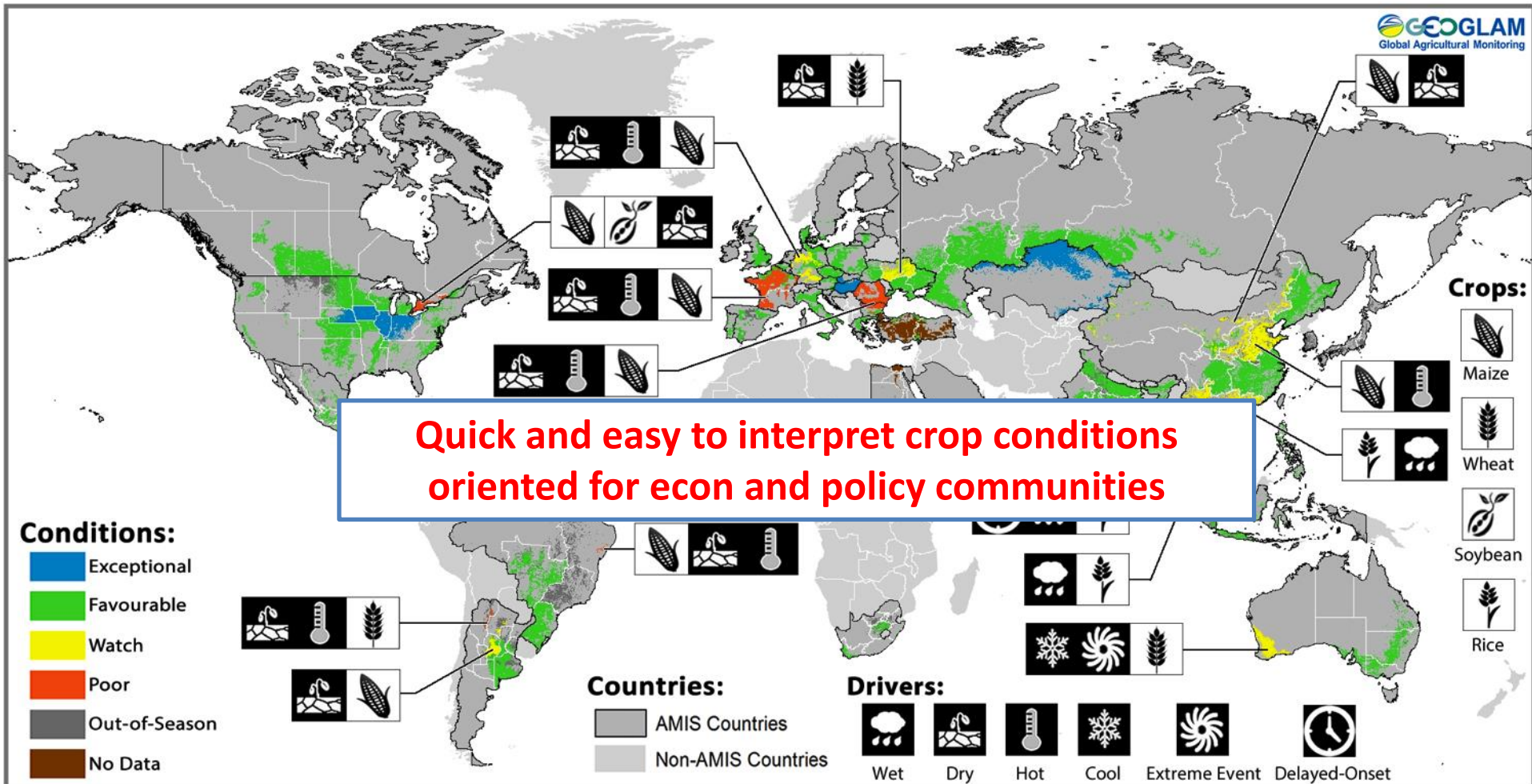
● Circles indicate in-season forecasts

**Important Note** - This is a preliminary, unofficial version of the PAY website. All numbers published on this website are unofficial. It is requested that users [read about the data sources](#) before using the data.



# Output Crop Condition Maps Covering AMIS Crops

Conditions as of September 28<sup>th</sup> 2016



Crops that are in other than favorable conditions are displayed on the map with their crop symbol & driver.

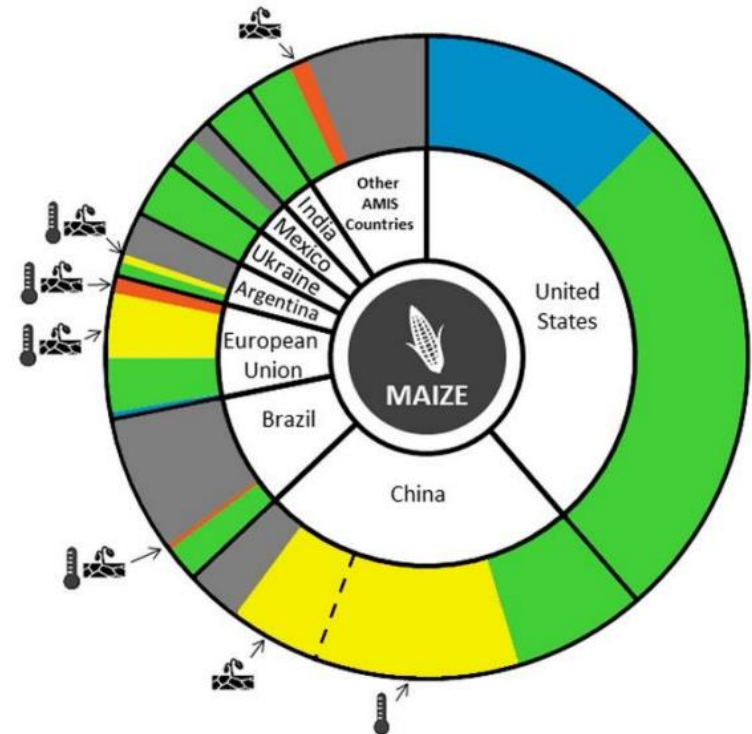
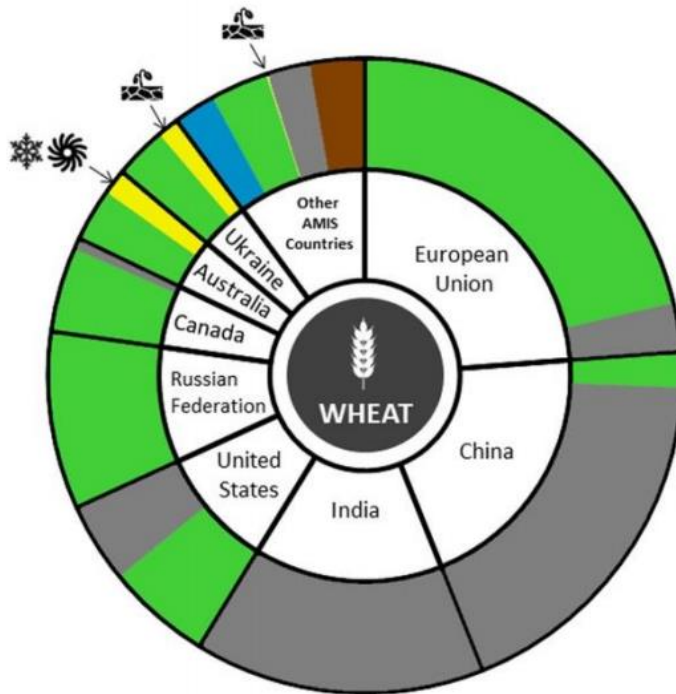
# Crop Conditions Pie Charts by Crop

*as share of AMIS total production*

## Conditions:



## Drivers:



Crop Conditions as of September 28<sup>th</sup>, 2016





Food and Agriculture Organization  
of the United Nations



Agricultural Market  
Information System

# GEOGLAM Crop Monitor Partners

*40 Partners and Growing*



Canada



ISRI



71<sup>st</sup> Session of the Committee on Commodity Problems

Side Event: Rome, 6 October 2016

# Crop Monitor is an integral part of AMIS Market Monitor and work

*GEOGLAM became the 11<sup>th</sup> member of the AMIS Secretariat in 2016*

## Contents

|                             |    |
|-----------------------------|----|
| World supply-demand outlook | 1  |
| Crop monitor                | 3  |
| Policy developments         | 6  |
| International prices        | 7  |
| Futures markets             | 9  |
| Market indicators           | 10 |
| Monthly US ethanol update   | 12 |
| Fertilizer outlook          | 13 |
| Explanatory notes           | 14 |



**MARKET  
AMIS MONITOR**

No.40 – July 2016

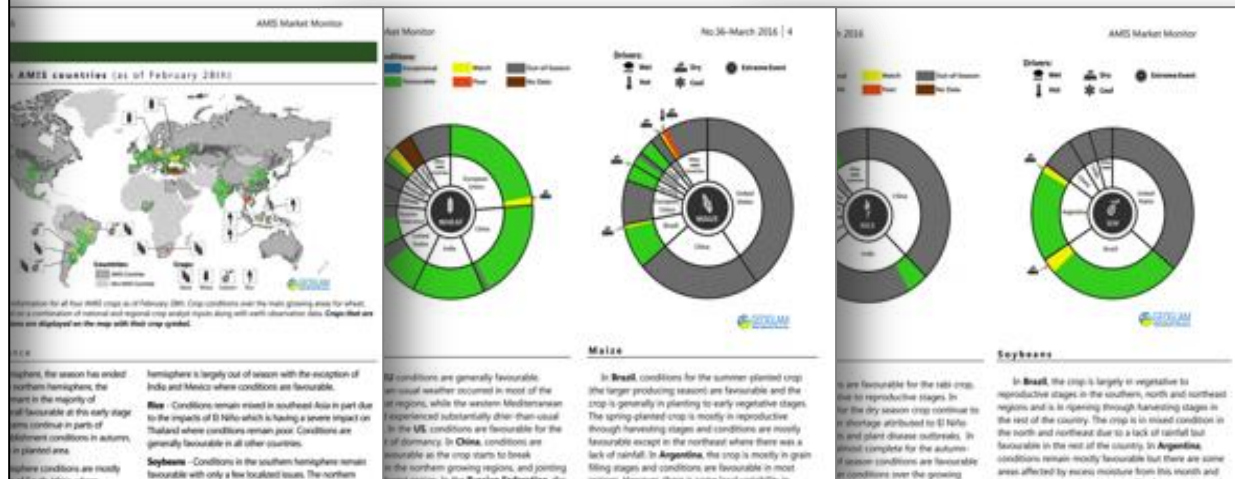
## Roundup

Unsettled weather made markets for AMIS crops volatile even before the start of the turmoil associated with the UK referendum on 23 June. In the meantime, the overall supply and demand outlook for 2016/17 season has changed little since last month. In the coming months, weather is likely to play a critical role for northern hemisphere maize, soybeans and rice crops, which are several months away from harvesting. The UK's vote to leave the EU adds further uncertainty, with first shock waves already observed in financial markets.

## Markets at a glance

|          | From previous forecast |
|----------|------------------------|
| Wheat    | ▲                      |
| Maize    | ▼                      |
| Rice     | ▲                      |
| Soybeans | ▼                      |
| ▲ Easing | ▼ Neutral              |

The Market Monitor is a product of the Agricultural Market Information System (AMIS). It covers the international market for soybeans, giving a synopsis of major market developments and the policy and other market drivers behind them. The of the market situation and outlook by the eleven international organizations and entities that form the AMIS Secretariat. Visit us at: [www.amis-outlook.org](http://www.amis-outlook.org)



- First time the international community comes together to produce operational crop assessments with 40 contributing organizations & Ministries of Agriculture
- Strong collaboration between GEOGLAM and AMIS
- Bridging the gap between the EO and Econ communities
- Crop Monitor operational since 2013



# Gave Rise to the Early Warning Crop Monitor

*Focused on countries most vulnerable to food insecurity*

Africa: Synthesis

GEOGLAM  
Global Agricultural Monitoring

Crop Conditions in May 2016 showing devastating effects of southern Africa drought that left millions in need of humanitarian assistance

CROP MONITOR FOR  
EARLY WARNING

NO. 4

APRIL 2016

Brings together the international, regional, and national organizations monitoring crop conditions within countries at risk of food insecurity. The focus is on developing timely consensus assessments of crop conditions, recognizing that reaching a consensus will help to strengthen confidence in decision making. The EWCM grew out of a successful collaborative relationship, the AMIS Crop Monitor, which monitors the main producing countries (<http://www.amis-outlook.org/>). This is the first bulletin but future EWCM assessments will include all countries shown in blue in the adjacent panel.

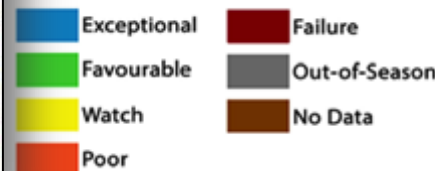


Crop Monitor  
a geoglam initiative

GEOGLAM  
Global Agricultural Monitoring  
GROUP ON EARTH OBSERVATIONS

Countries

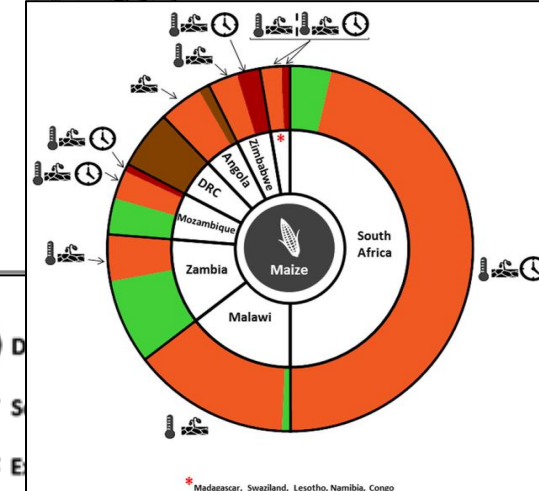
Conditions:



Drivers:

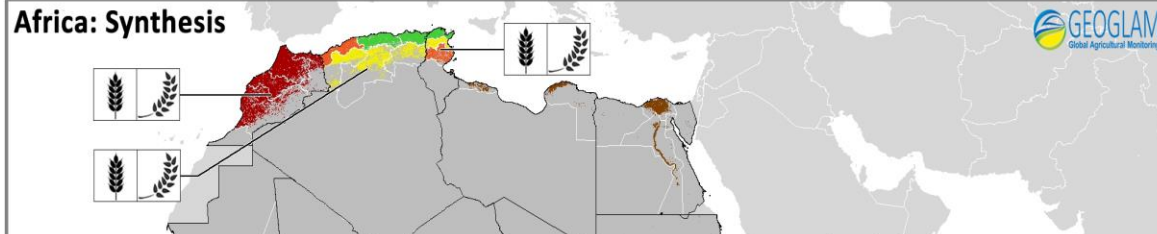


Crops:

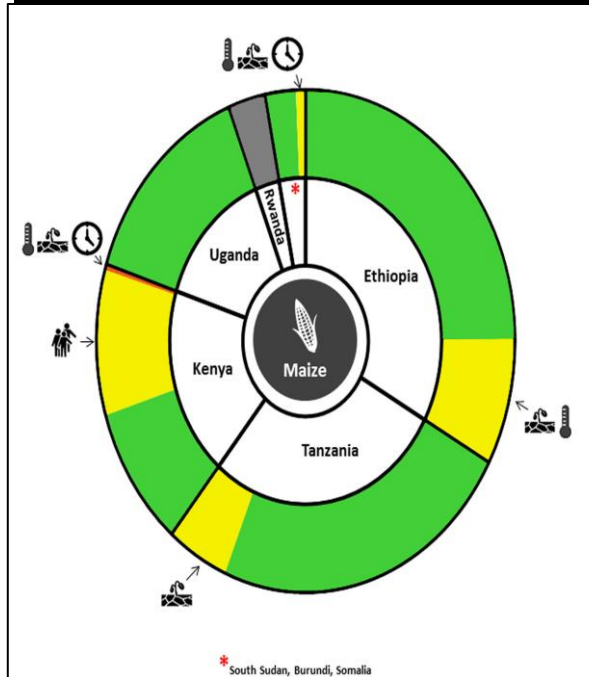




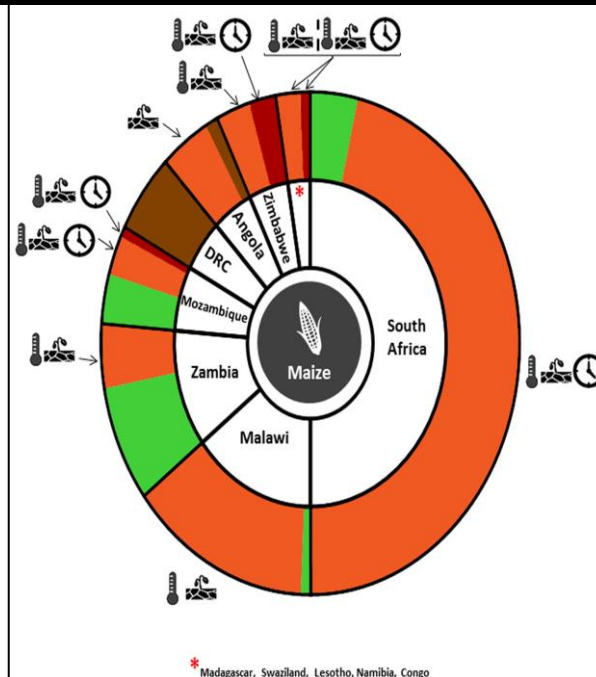
# Africa May Assessment



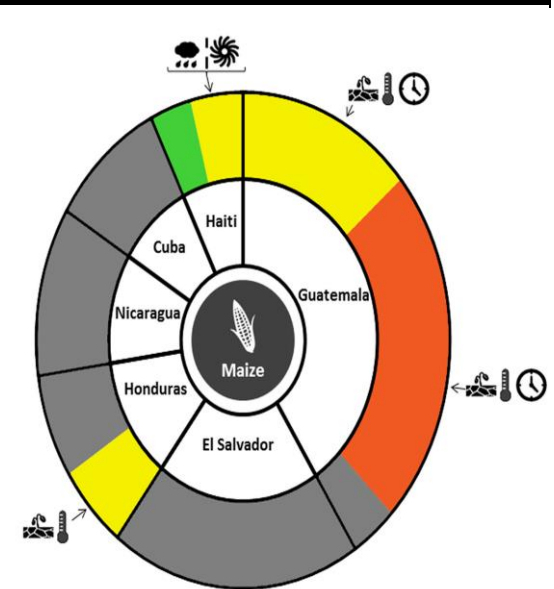
## Maize East Africa



## Maize Southern Africa



## Maize Central America



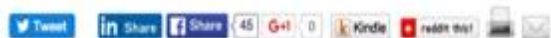
### Conditions:



### Drivers:



Business / Land & Agriculture  
Dry and brown Southern Africa will need food aid  
BY EMIKO TERAZONO AND ANDREW ENGLAND, FEBRUARY 15 2016, 05:52



### Related articles

- Escalating costs hammer Pioneer
- Food prices to soar as drought bites
- High red meat prices could mean a crash in the market

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Zimbabwe: WFP Extends Food Aid to 2017

Tagged: Food and Agriculture • Aid and Assistance • External Relations • International Organisations • Southern Africa • Zimbabwe

Vegetation Status and Crop Production Perspectives

WFP VAM Report

Southern Africa Growing Season 2015-2016: A Season of Regional Drought

Left: April in late February 2016, as a percentage of a 12-year average. Orange shades indicate below-average vegetation, green shades indicate above-average vegetation. Right: Winter production perspectives from a multi-agency assessment (GEOGLAM).

South Africa's maize production estimates for this season have been revised downwards slightly in February, to about 7.2 million tons, 27 percent below last year's and 38 percent below the 5-year average. The USDA Foreign Agriculture Service is more pessimistic, estimating production at 6.5 million tons. Similar variations may be expected for Zimbabwe, possibly Mozambique and Malawi, with more moderate losses in Zambia.

FEWS NET Special Report

FEWS NET

SOUTHERN AFRICA Special Report

Monitoring

Illustrating the extent and

A severe drought, related to El Niño, is ongoing the current lean season. While April/May have been expected to be wetter, this report presents a water availability, crop and rangeland conditions current and expected.

Already informing agricultural decisions

Southern Africa

Friday 25 March 2016 09:40

ANA

ARC, South Africa

FINANCIAL TIMES

Southern Africa warned of severe food crisis

Thursday 24 March 2016 - 4:04pm

GEO Announces Launch of Early Warning Crop Monitor: A New Tool to Fight Food Insecurity

March 14, 2016 09:00 AM

White Paper: White Paper: Review of Humanitarian Assistance in Development Settings

The Group on Earth Observations announced the launch of the Early Warning Crop Monitor, a new tool to fight food insecurity. The announcement was made during the GEO 3rd Executive Meeting held in Geneva on 8-9 March.

The Famine (FEWSNET) insecurity and 2016-2017 drought when

In a new special report, the extent and FEWSNET expected for April/May, the 28, crop failure in Swaziland, Zimbabwe

Crop conditions in western Malawi, northern Mozambique

Financial Times

South African corn withers amid worst drought on record

Impact of extreme weather on food prices set to remain serious

Joint Statement

El Niño Set to Have a Devastating Impact on Southern Africa's Harvests and Food Security

WFP World Food Programme

FEWS NET

European Commission

Food and Agriculture Organization of the United Nations

2015-2016

has warned after two





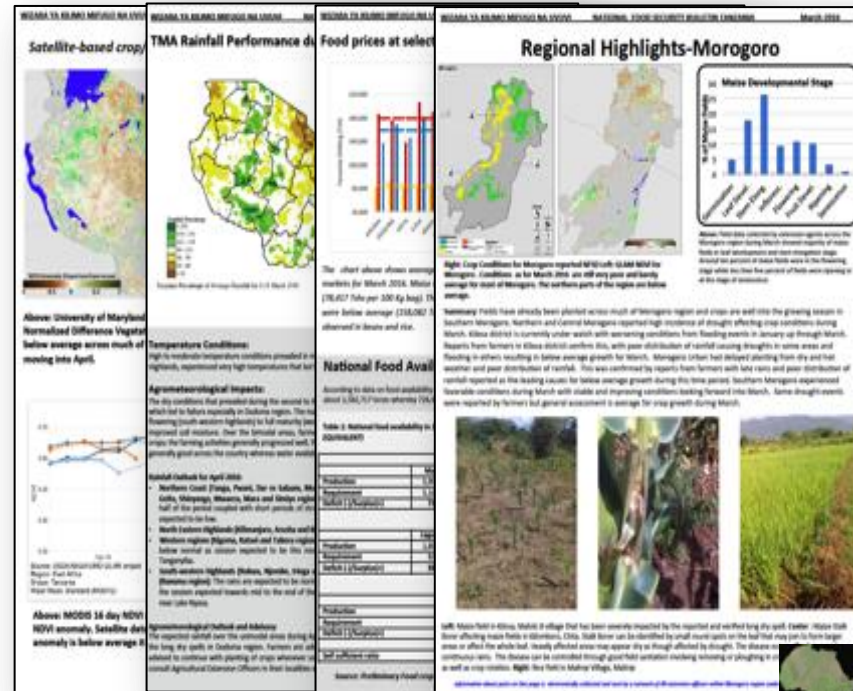
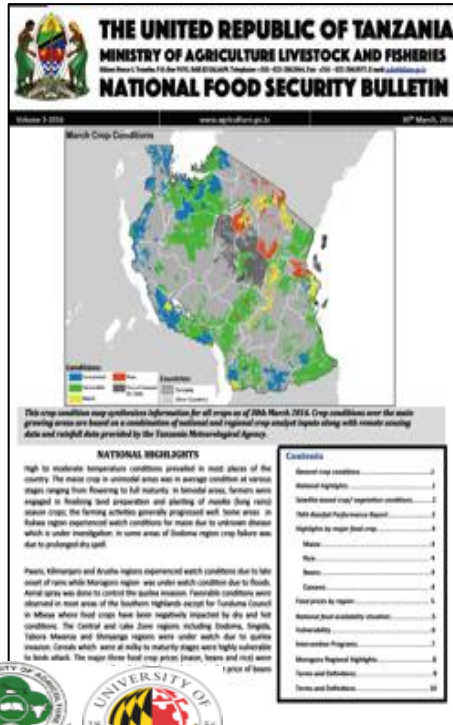
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# National Crop Monitor: Tanzania Example

Operational since June 2016

GEOGLAM in discussion with multiple countries including Ukraine







## GEOGLAM Partnership with AMIS

### *A strong and fruitful relationship that is:*

- Providing public good: open, timely, science-driven information on crop condition to inform decisions and actions
- Bridging the gap between the policy/economics and the satellite earth observations communities
  - Ensuring the user community is driving the satellite monitoring agenda
- Increasing communication and knowledge transfer amongst countries and monitoring systems
  - Thereby strengthening national monitoring systems
- Critical to facilitate research to operations- validation of products, intercomparison of methods, models and systems that can be scaled up



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**Thank You!**

Inbal Becker-Reshef  
[ireshef@geoglam.org](mailto:ireshef@geoglam.org)

