

# Global Agricultural Monitoring International Coordination: GEOGLAM

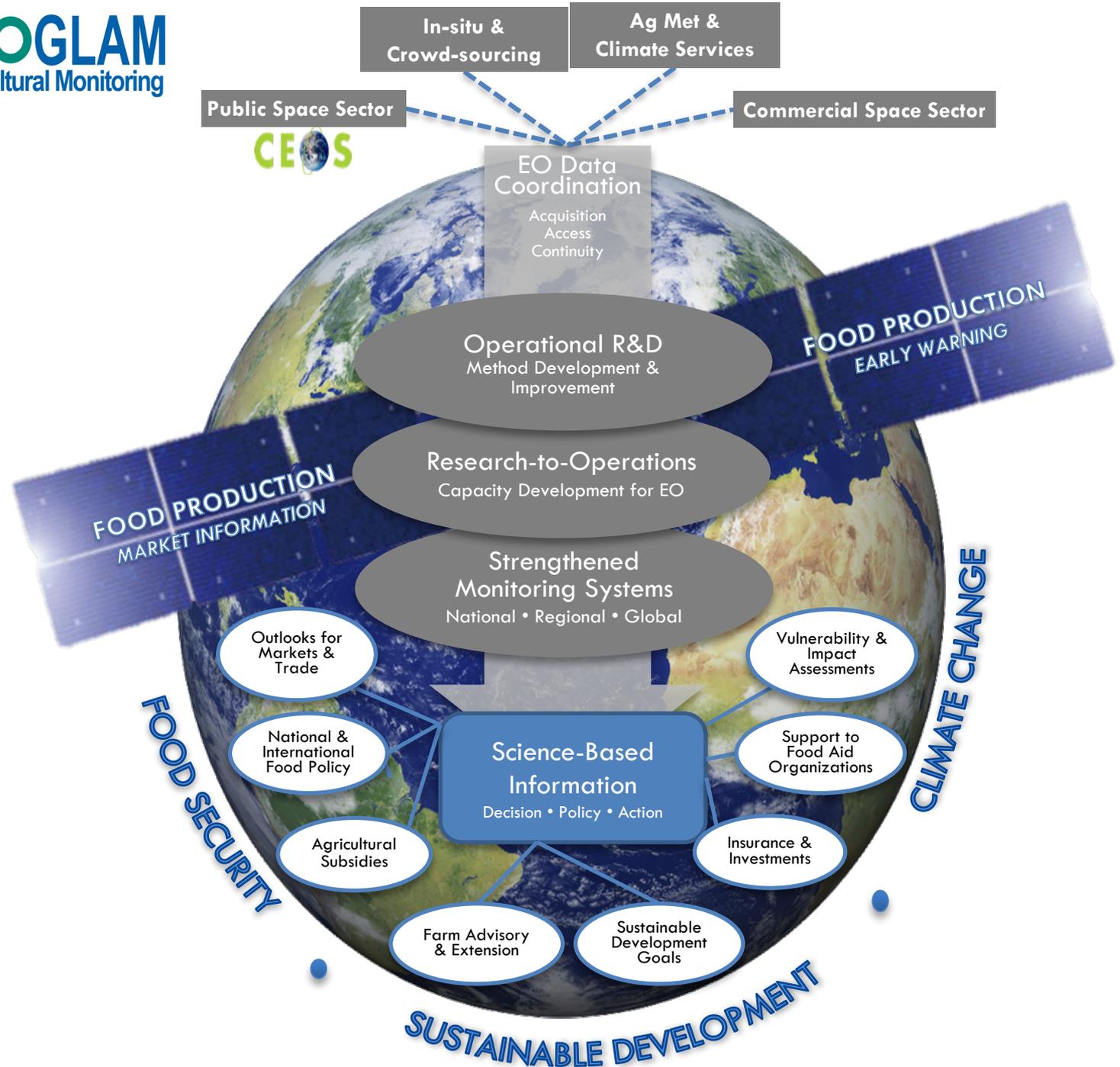
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# GEOGLAM: a GEO Initiative

- Vision: the use of coordinated, comprehensive and sustained Earth Observations to inform decisions and actions in agriculture... through a system of agricultural monitoring systems
- Aim: Strengthen the international community's capacity to utilize Earth Observations to produce and disseminate relevant information on agricultural production at national, regional and global scales
- Approach: Building on existing monitoring systems – strengthening international and national capacity
- Emphasis on: producer countries (G20+), countries-at-risk and national capacity building
- <http://www.earthobservations.org/geoglam.php>



# Policy Framework for GEOGLAM

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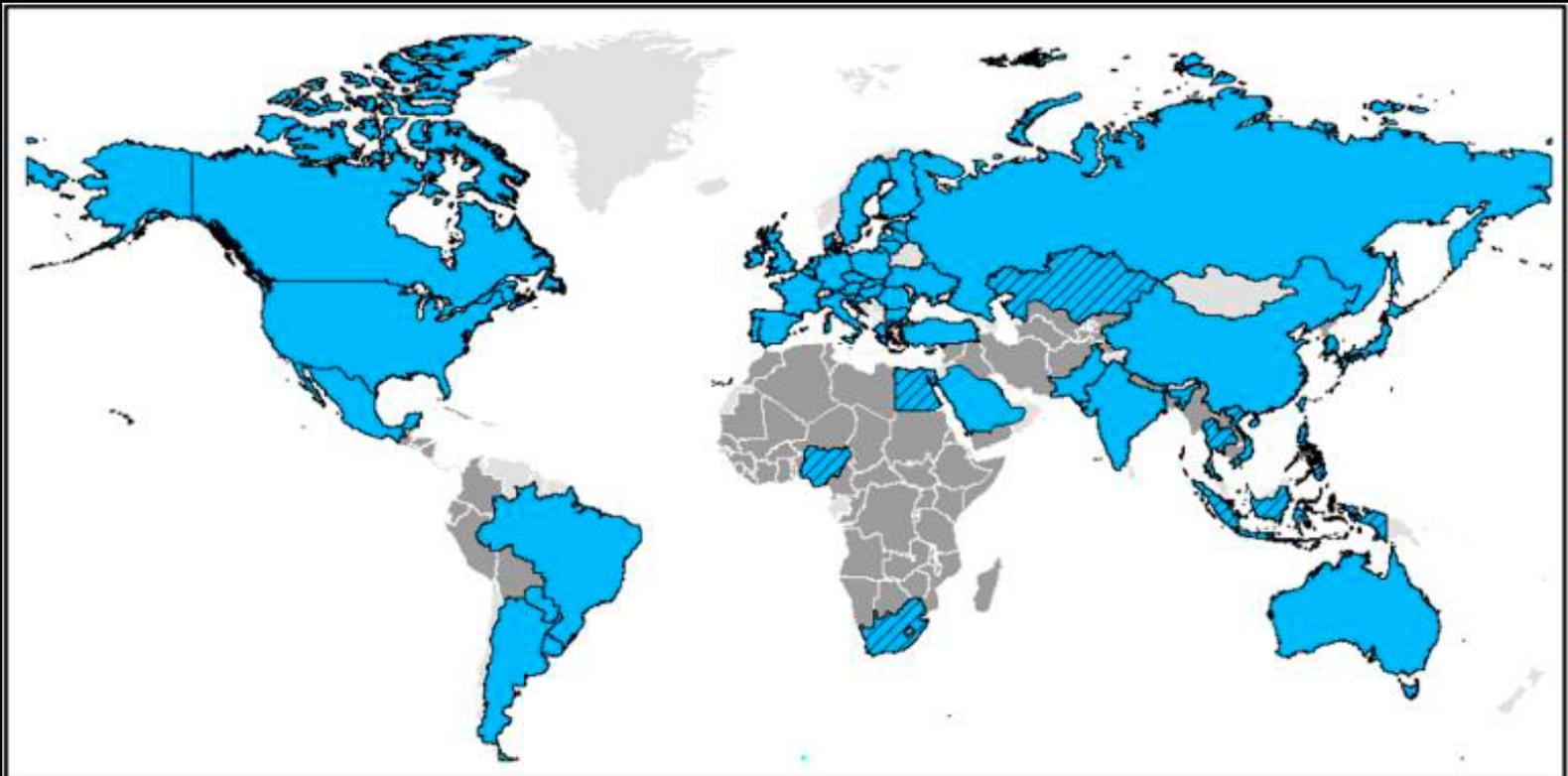


## G20 Final Declaration

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 projections and weather forecasting data.



# AMIS COUNTRIES





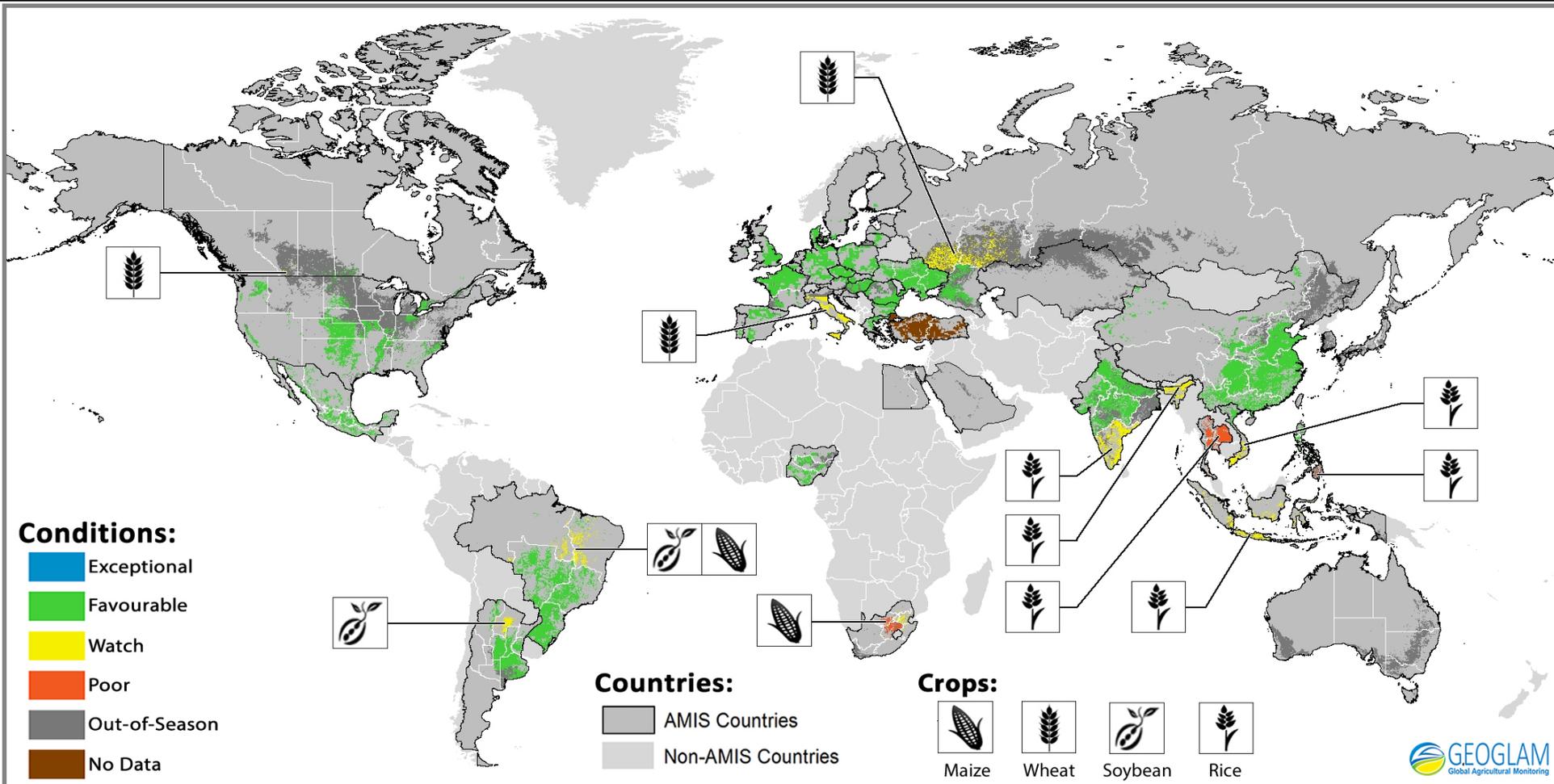
# GEOGLAM AMIS Crop Monitor Partners



**> 35 Partners and Growing**



# Crop Monitor : an international consensus assessment - March 28<sup>th</sup>



Crop condition map synthesizing information for all four AMIS crops. Crops that are in other than favorable conditions are displayed on the map with their crop symbol.

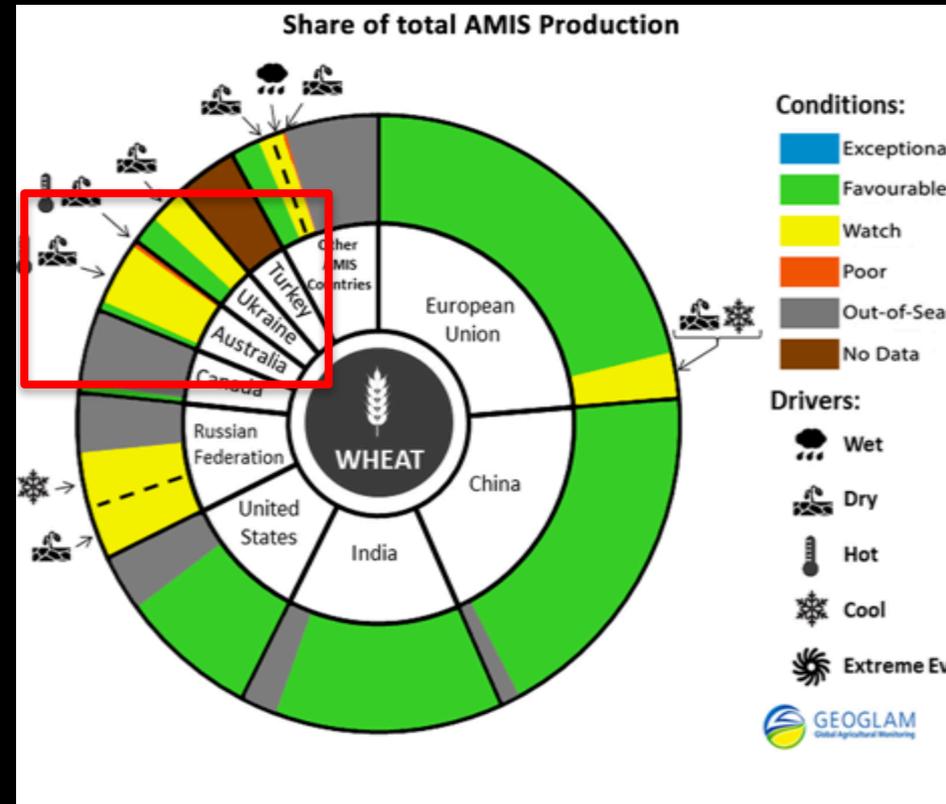
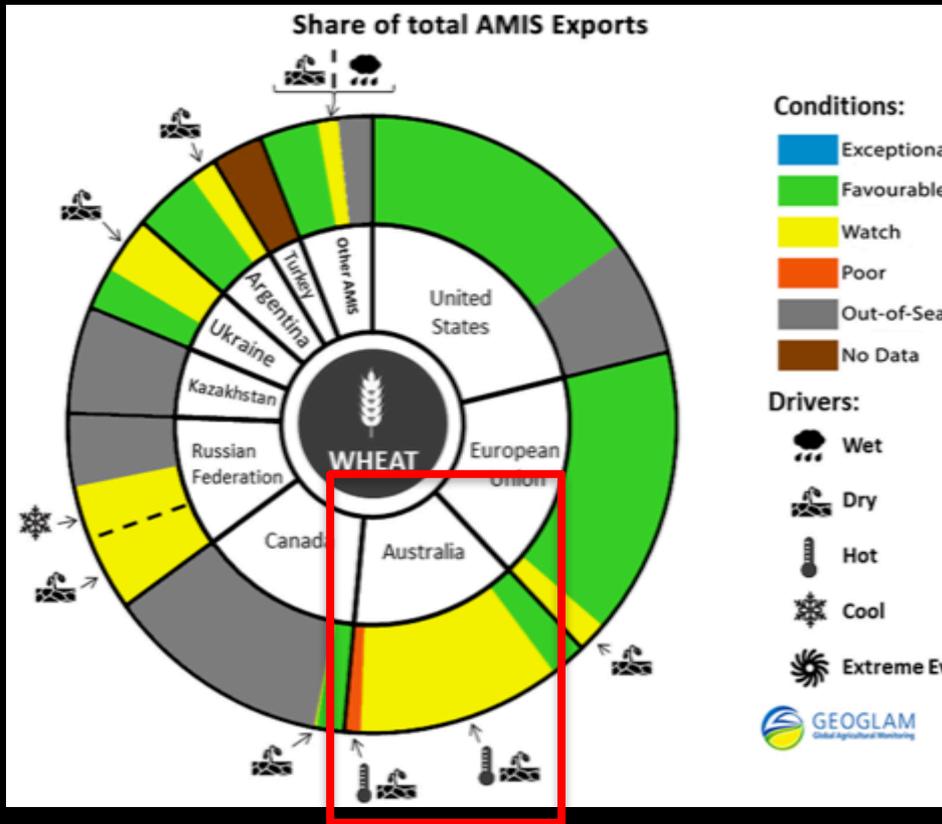
(Cropland area shown is an aggregation of all cropland areas)



# Wheat Production and Exports Pie Charts

As Share of total AMIS Exports

As Share of total AMIS Production



Crop Conditions as of October 28<sup>th</sup>, 2015



# G20 Agricultural Ministers

## 2011 Action Plan on Food Price Volatility and Agriculture

### AMIS – Markets/Stocks

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**AMIS MARKET MONITOR**  
No. 47 – April 2017

**Roundup**  
Based on the first AMIS projections for the 2017/18 marketing season, the supply and demand outlook for wheat, maize and rice points to continued stability in world markets. Even in the event of any unexpected production shortfalls, carryover stocks are large enough to provide a sufficient buffer in the new season. Regarding the soybean market, which is still in the midst of the 2016/17 season, the latest indications point to larger supplies than earlier expected, while global demand should expand at a regular pace.

**Markets at a glance**

	From previous forecast	From previous season
Wheat	n/a	▲
Maize	n/a	▼
Rice	n/a	■
Soybeans	▲	▲

▲ Easing   ■ Neutral   ▼ Tightening

The Market Monitor is a product of the Agricultural Market Information System (AMIS). It covers the international markets for wheat, maize, rice and soybeans, giving a synopsis of major market developments and the policy and other market drivers behind them. The analysis is a collective assessment 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)



### GEOGLAM – Condition/Supply

**GEOGLAM CROP MONITOR FOR AMIS**

**NO. 38**  
April 2017

The Group on Earth Observations' Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objective is to provide AMIS with an international and transparent multi-source, consensus assessment of crop growing conditions, status, and agro-climatic conditions, likely to impact global production. This activity covers the four primary crop types (wheat, maize, rice, and soy) within the main agricultural producing regions of the AMIS countries (G20+7). The Crop Monitor reports provide cartographic and textual summaries of crop conditions as of the 28th of each month, according to crop type. There is another Crop Monitoring initiative called the Early Warning Crop Monitor (geoglam-crop-monitor.org/), which has grown out of this initiative.





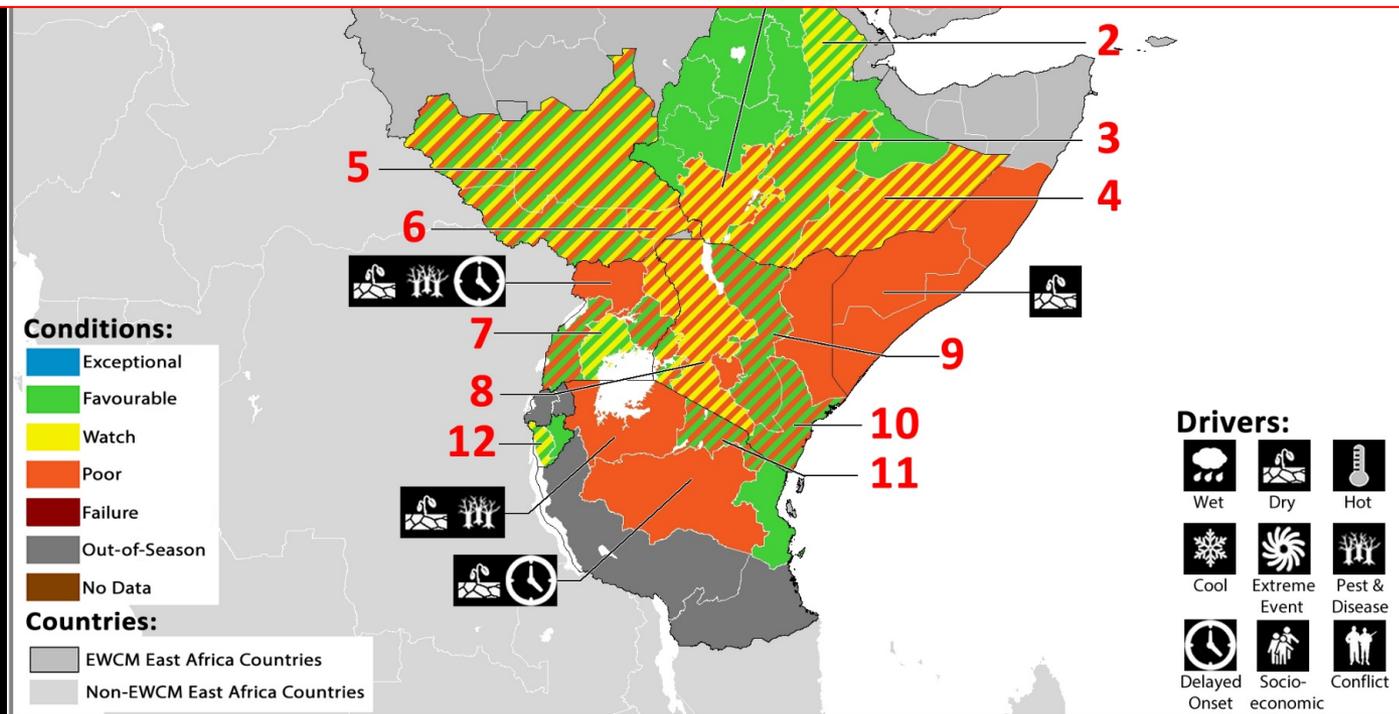


# Example discrepancy map

- Hashed areas show conflicting crop condition entries from different agencies

East Africa & Yemen: **Preliminary Maize 1 Map**

July assessment had **710 entries** over **61 countries** and **39 sub national regions with crop condition discrepancies** that were discussed and ultimately we reached a full consensus





Business / Land & Agriculture

### Dry and brown Southern Africa will need food aid

BY EMIKO TERAZONO AND ANDREW ENGLAND, FEBRUARY 15 2016, 09:52

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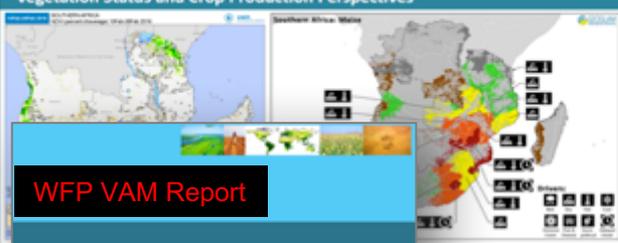
THE HERALD

### Zimbabwe: WFP Extends Food Aid to 2017

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programme (WFP) yesterday for the first time ever – not

### Vegetation Status and Crop Production Perspectives



**WFP VAM Report**

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

Left: NDVI in late February 2016, one month after the start of the growing season. Change shades indicate below-average vegetation; green shades indicate above-average vegetation. Right: Maize production perspectives from a multi-agency assessment (GEOGLAM).

spread drought. A joint assessment of crop production perspectives carried out by GEOGLAM confirms a very pessimistic picture across most of the region: the situation is nearly year production in the rest of the country. Similar outcomes extend to the tropics can also expect crop failures in its southern regions. Only regions such as northern Mozambique, Tanzania, northeast Zambia, northern Malawi and parts of Angola face normal production scenarios, as they benefit from El Niño induced rainfall enhancements typical of East Africa.

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**

**SOUTHERN AFRICA Special Report**

Illustrating the extent and impact of drought

**Monitoring the globe**

A severe drought, related to El Niño, is ongoing across the southern part of the continent. While April/May harvests will provide some relief, the report presents a series of maps which show water availability, crop and rangeland conditions, food prices, current and expected impacts on

FEWS NET Special Report



ARC, South Africa

**Southern Africa**

Friday 25 March 2016 09:40

ANA

W

**FINANCIAL TIMES**

MARKETS OPINION LIFE & ARTS PORTFOLIO

Financial Times

**Food crisis**

Thursday 24 March 2016 - 4:04pm



**Southern Africa**

Friday 25 March 2016 09:40

ANA

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

White Paper White Paper Reveals Hidden Gains in Soil Science Software

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 March.



**Drought EWCM**

for Zimbabwe

**The Family Food Security (FEWSNET) 2016-2017 drought where**

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

Crop conditions in western Malawi, 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

South Africa, southern Zimbabwe and

has warned after two

2015-2016

ected in April/May, the GEOGLAM Early Warning Crop Monitor (EWCM) had shown that as of February 28, crop failure had been confirmed in Lesotho, Swaziland, northern Mozambique, southern Zimbabwe and eastern Botswana.

Already informing agricultural decisions