

# GEOGLAM

Earth Observations for National Adaptation Plans  
(EO4NAPs)

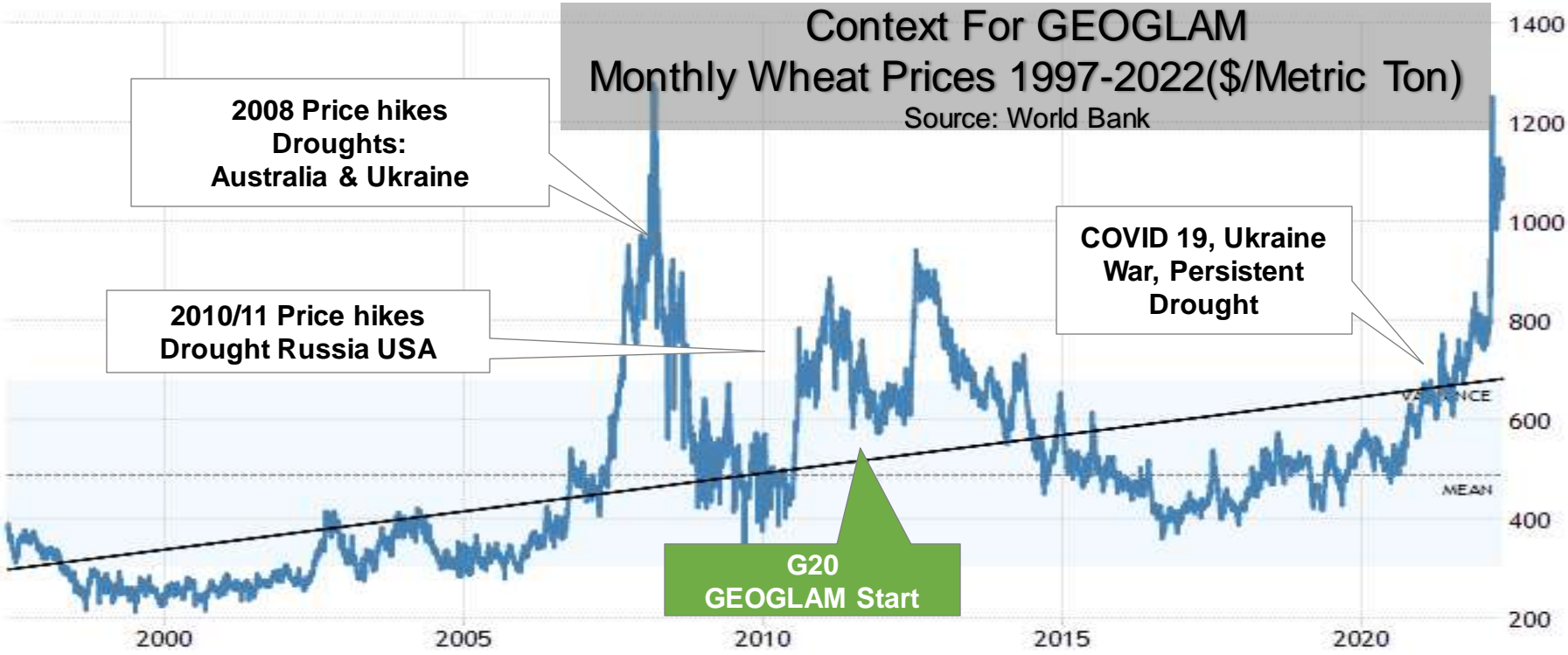
NAP Expo  
Gaborone, Botswana  
August 22 - 26, 2022



# GEOGLAM Launched by the G20 Agriculture Ministers in 2011



**Context For GEOGLAM**  
**Monthly Wheat Prices 1997-2022(\$/Metric Ton)**  
 Source: World Bank



## G20 Final Declaration

...it to improve market information and transparency in order to improve international markets for agricultural commodities more effectively. To that end, we launched:

...the "Global Agricultural Market Information System" (AMIS) in Rome on September 15, 2011, to improve information on markets ...;

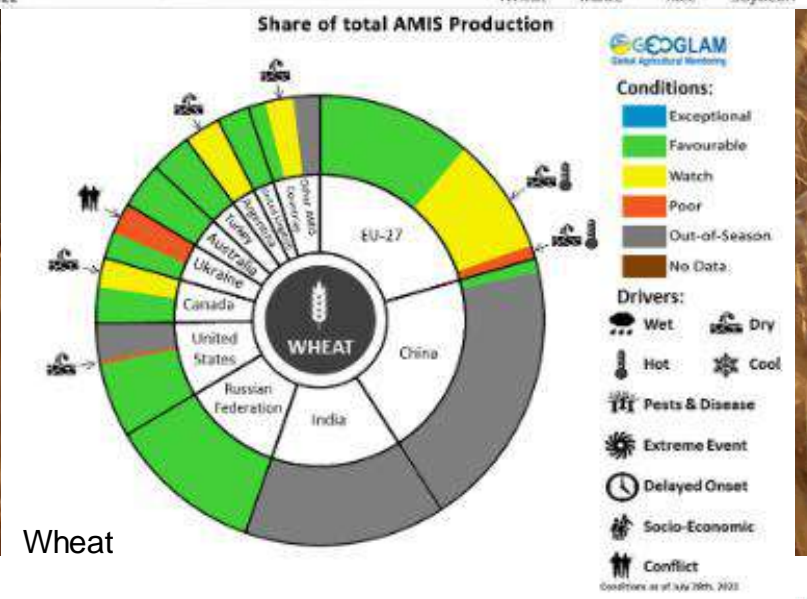
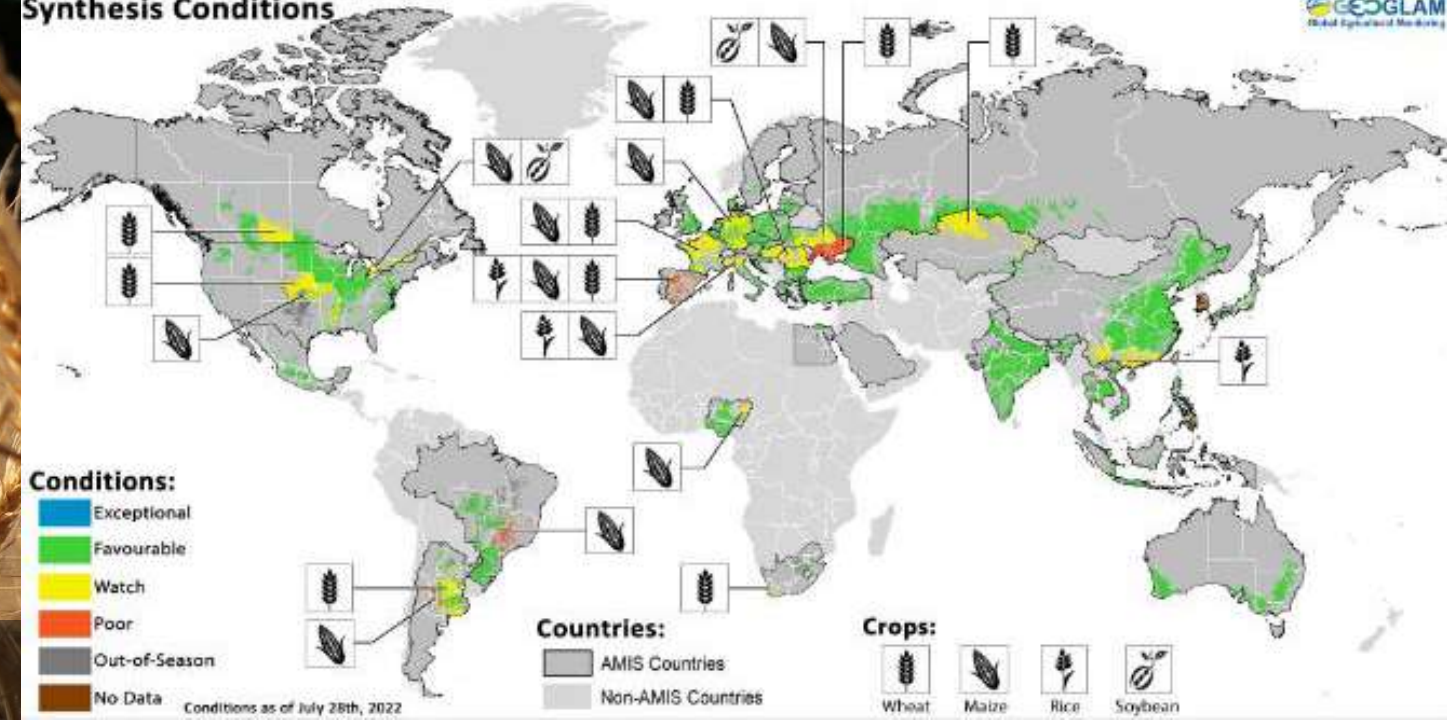
...the "Global Agricultural Geo-monitoring Initiative" (GEO-GLAM) on September 22-23, 2011. This initiative will coordinate and harmonize monitoring observation systems in different regions of the world in order to enhance crop production projections and weather monitoring data.





Responding to the  
Challenge Since 2013:

**GEOGLAM CropMonitor.org**  
July 2022 Crop Conditions



Wheat







# .... and a further Expanded Mandate



## Supporting policy priorities:

- Climate Change Adaptation and Mitigation
- Sustainable Development Goals
- Disaster Risk Reduction/Early Warning





# GEO Supplemental NAP Guidance / Agriculture

## Structure

### Part I: Introduction

- EO for Climate change analysis
- Essential Variables for CCA
- Institutional & Technical requirements for EO

### Part II: EO in thematic areas

- Agriculture & Food Security, Biodiversity & Ecosystems, Coastal Zones, DRR, Urban Areas, Renewable Energy, Water Resources, Forests, Public Health, Mountains

### Part III: EO in Agriculture & Food Security

- Essential Agriculture Variables (EAVs)
- National Crop monitoring system
  - Capacity co-development
- Data, tools and analytics

**TABLE 1. STEPS UNDER EACH OF THE ELEMENTS OF THE FORMULATION OF NATIONAL ADAPTATION PLANS, WHICH MAY BE UNDERTAKEN AS APPROPRIATE<sup>a</sup>**

#### **ELEMENT A. LAY THE GROUNDWORK AND ADDRESS GAPS**

1. Initiating and launching of the NAP process
2. Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process
3. Addressing capacity gaps and weaknesses in undertaking the NAP process
4. Comprehensively and iteratively assessing development needs and climate vulnerabilities

#### **ELEMENT B. PREPARATORY ELEMENTS**

1. Analysing current climate and future climate change scenarios
2. Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels
3. Reviewing and appraising adaptation options
4. Compiling and communicating national adaptation plans
5. Integrating climate change adaptation into national and subnational development and sectoral planning

#### **ELEMENT C. IMPLEMENTATION STRATEGIES**

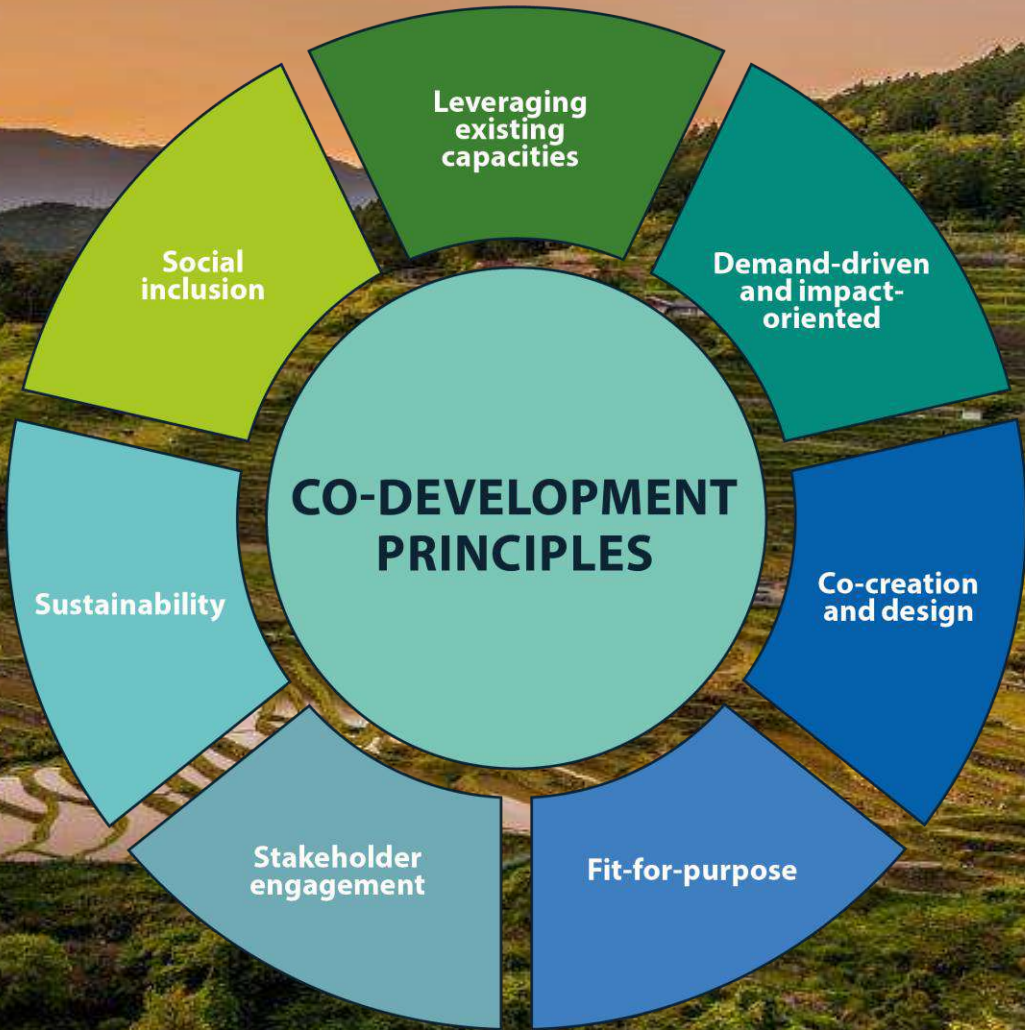
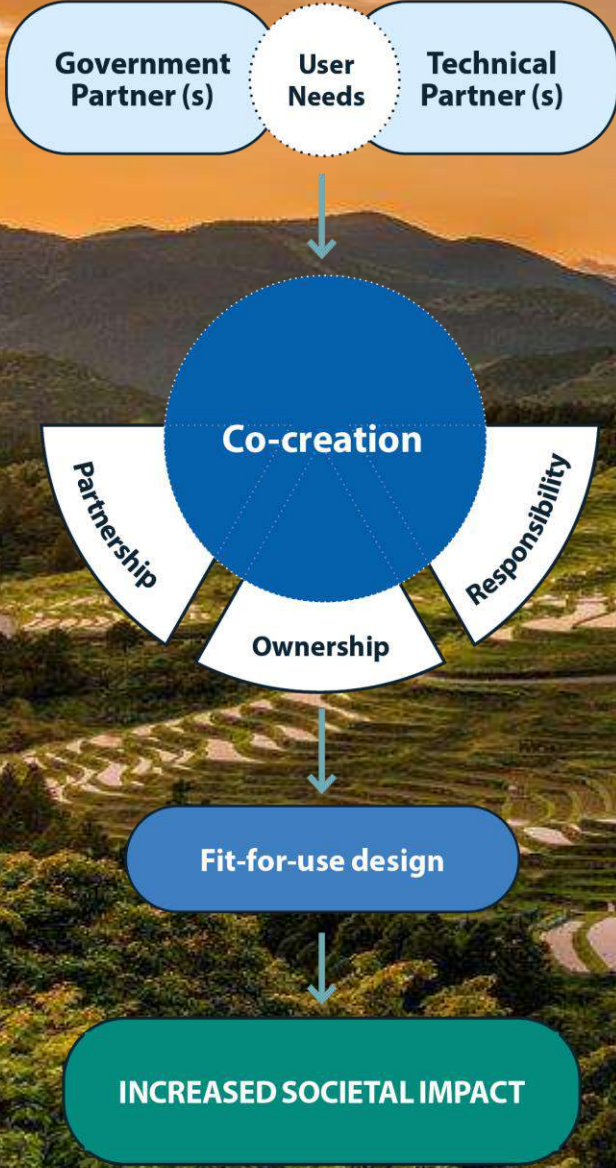
1. Prioritizing climate change adaptation in national planning
2. Developing a (long-term) national adaptation implementation strategy
3. Enhancing capacity for planning and implementation of adaptation
4. Promoting coordination and synergy at the regional level and with other multilateral environmental agreements

#### **ELEMENT D. REPORTING, MONITORING AND REVIEW**

1. Monitoring the NAP process
2. Reviewing the NAP process to assess progress, effectiveness and gaps
3. Iteratively updating the national adaptation plans
4. Outreach on the NAP process and reporting on progress and effectiveness

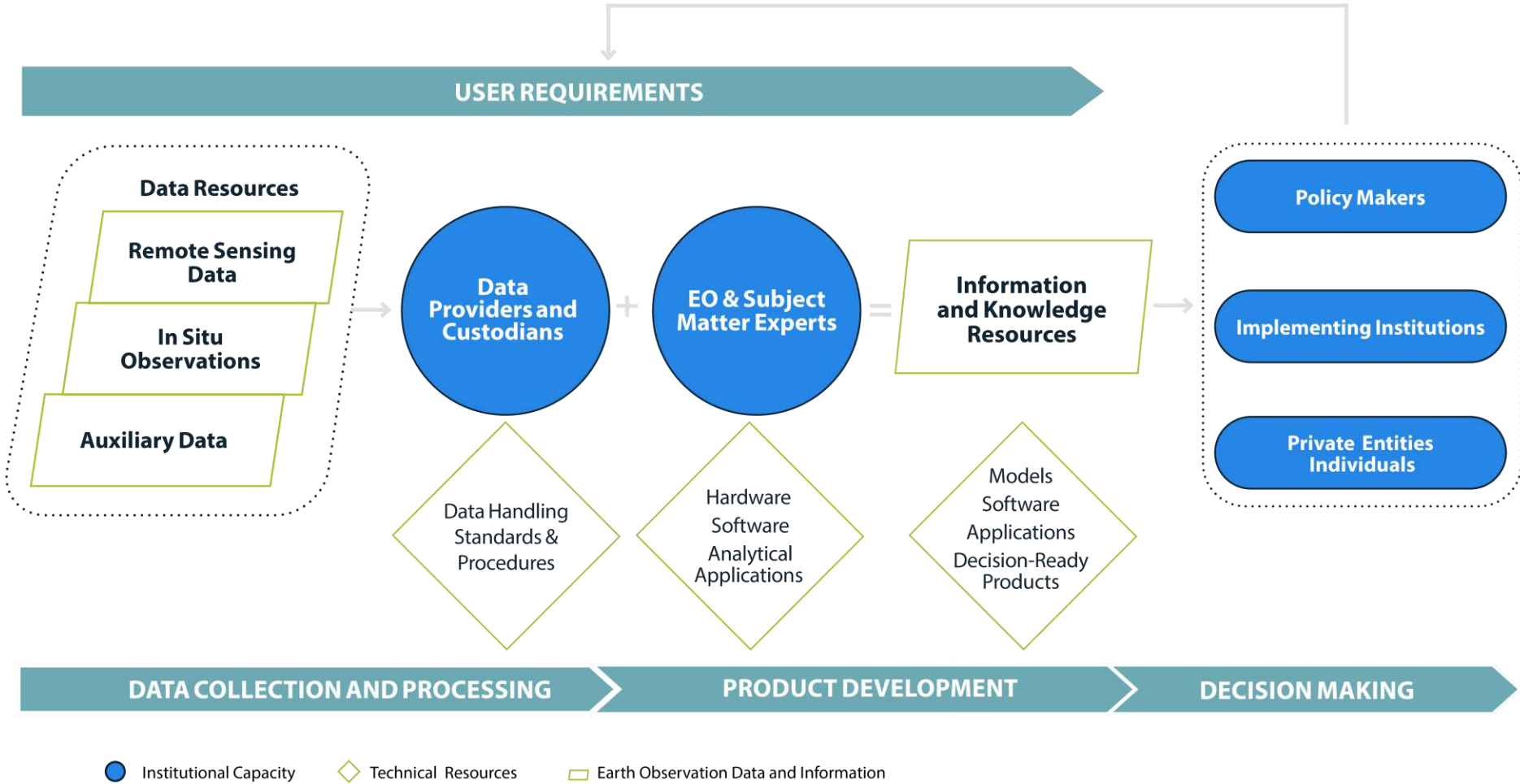


# Capacity Co-Development



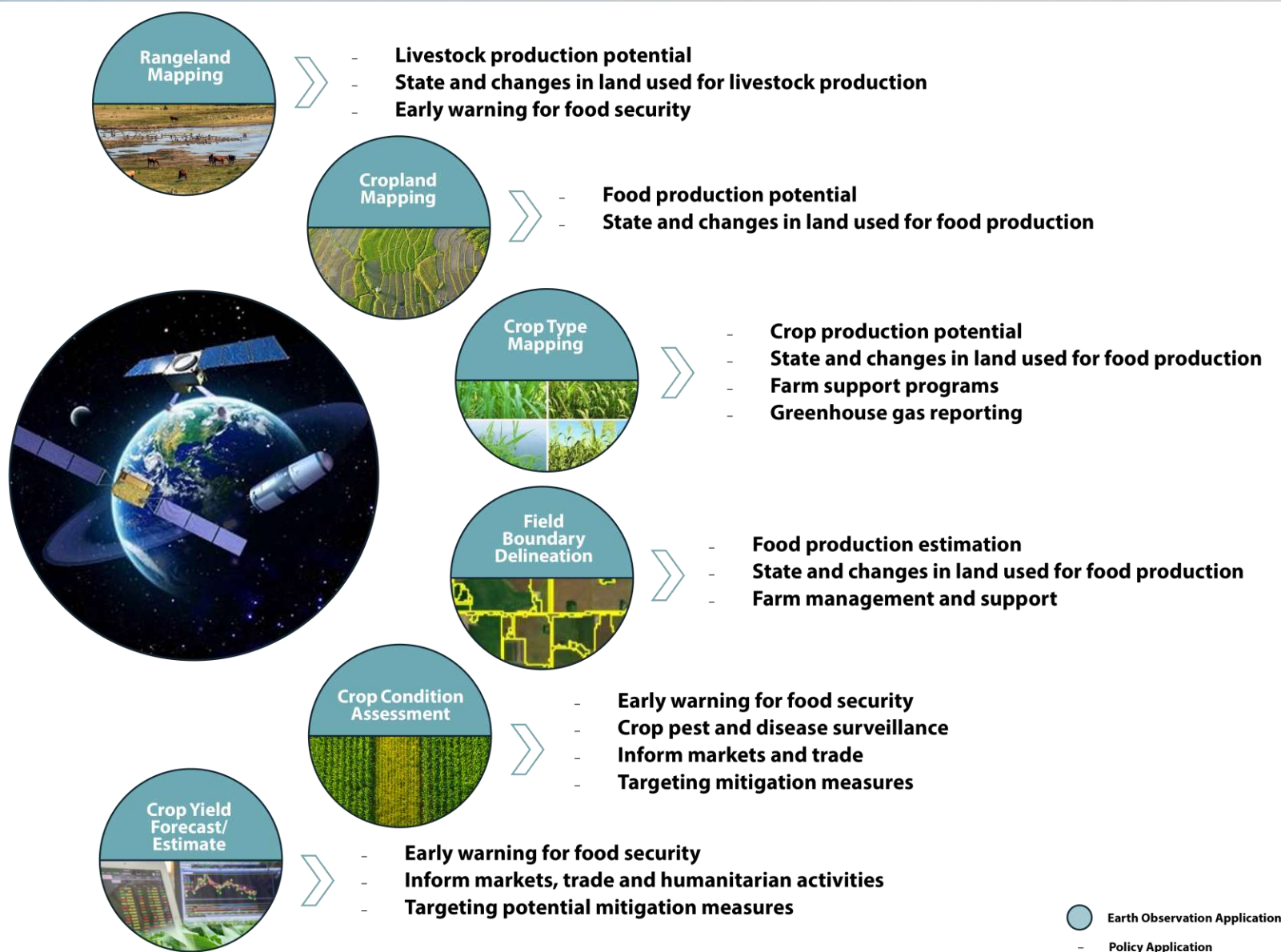


# General Earth Observation Architecture





# Monitoring and measuring agriculture trends using Earth Observation









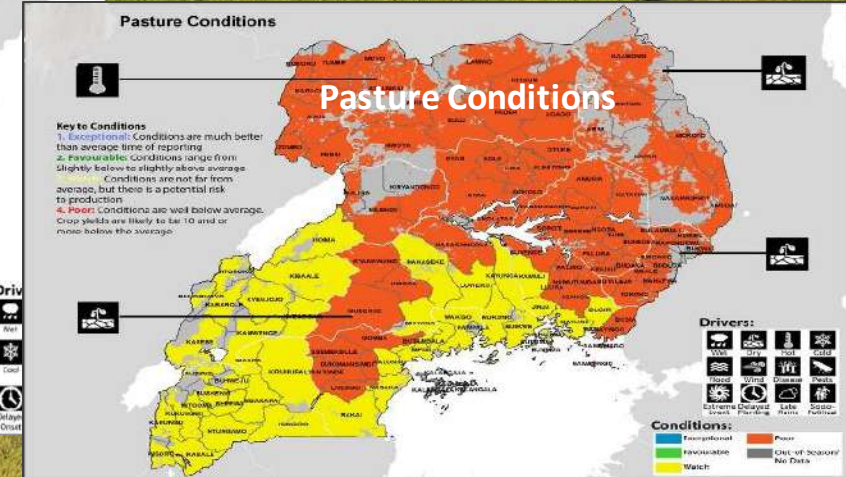
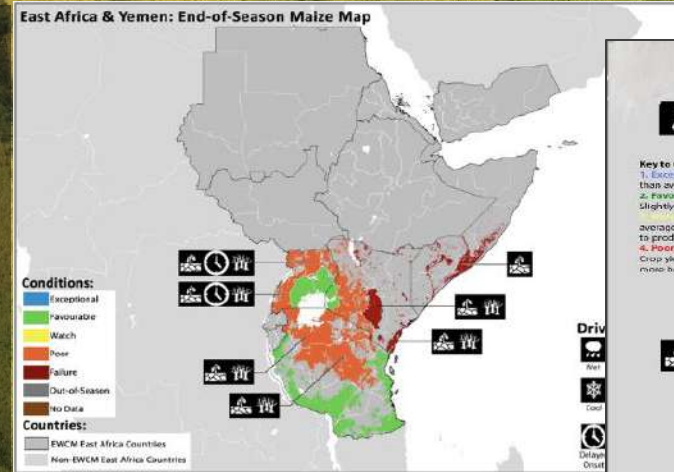
# National Impact Stories, Food Security Africa- Uganda

## Karamoja Uganda, 2017

- GEOGLAM worked with the Ugandan Office of the Prime Minister to develop a crop monitor in 2016
- In 2017 the crop monitor provided **3 months** early warning of a likely crop failure due to drought, time to proactively **mitigate loss and damage**
- Monitoring triggered the Disaster Risk Financing (DRF) fund to scale-up public works projects in Karamoja, off-setting agricultural losses

**End result: USD 2.6 million saved, 150k people helped**

Crop Monitor  
August 2017 for Uganda



**“In the past we always reacted to crop failure, spending billions of shillings to provide food aid in the region. 2017 was the first time we acted proactively because we had clear evidence from satellite data very early in the season”**

Martin Owor, Commissioner Office of the Prime Minister (OPM)





# Impact: COVID Response



**Cina Lawson**

*Togolese Minister of Post, Digital Economy  
and Technological Innovation*

“This map provides unmatched clarity into the nature and distribution of agricultural land nationwide [and helps] **provide decisive knowledge being used to design social protection policies** aimed at improving the livelihoods of agrarian rural communities.”





# ... how to follow up...

- GEOGLAM is interested in supporting countries that want to further investigate to application of Earth observations-based agriculture monitoring to support the development and implementation of their National Adaptation Plans
- Interested countries should contact the GEOGLAM Secretariat for a follow up discussion.
- Future events include a learning exchange early 2023 on the implementation of crop monitors with a focus on East Africa, and future events will be planned as dictated by demand

To register interest:  
Email to: [geoglam@geosec.org](mailto:geoglam@geosec.org)



Place holder for Jane's slides

