

→ EARTH OBSERVATION FOR SUSTAINABLE DEVELOPMENT

Agriculture and Rural Development

Stakeholder Meeting EO4SD Agriculture Cluster
6 October 2017 | ESRIN, Frascati, Italy

Agricultural production changes as a result of IFI project interventions in Uganda

Remco Dost (eLEAF)

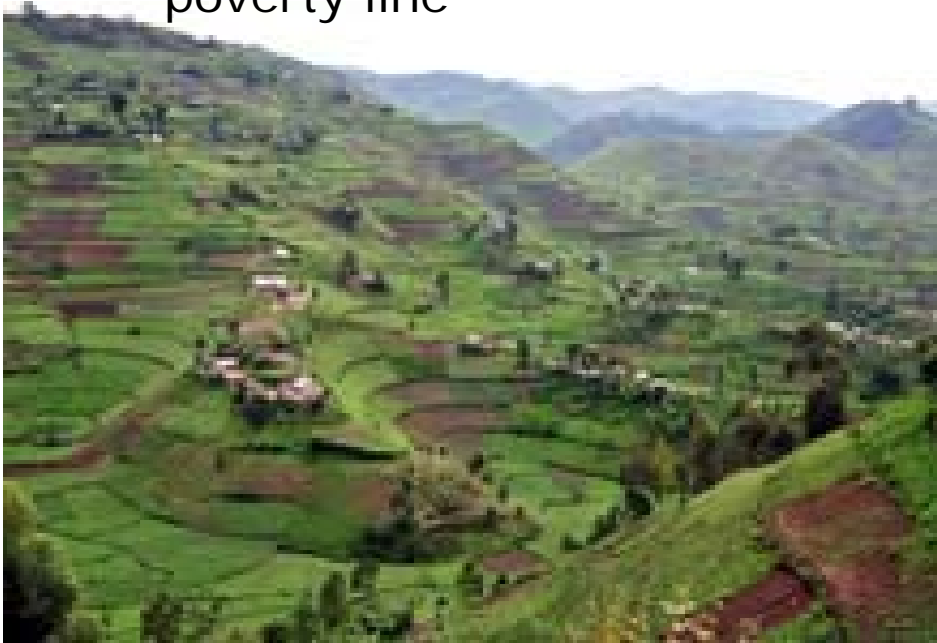


Setting the stage



Uganda is known as the pearl of Africa

- Agriculture is the mainstay of Uganda's economy
- Population of 35.8 million, 80% involved in agricultural production
- 40% of rural population lives below the poverty line



Exploitation of agricultural potential impeded by:

- Climate
- Land degradation
- Pests
- No access to extension services and inputs (seeds/fertilisers)
- No access to finance and insurance

Agricultural productivity ↔ Access to information

Earth Observation can provide the tools to monitor the baseline, status and trends of production of agricultural areas in Uganda

A powerful technique for **continuously assessing** the status of **agricultural production** on a wide range of spatial and temporal scales.

It provides **historical** as well as **actual** global information on a regular basis, and thus can **rapidly reveal where change has happened** in a consistent and repeatable manner.

Collaboration and local capabilities



- **G4AW Market-led User-Owned ICT4Ag Enabled Information Service (MUIIS)**

That can contribute to:

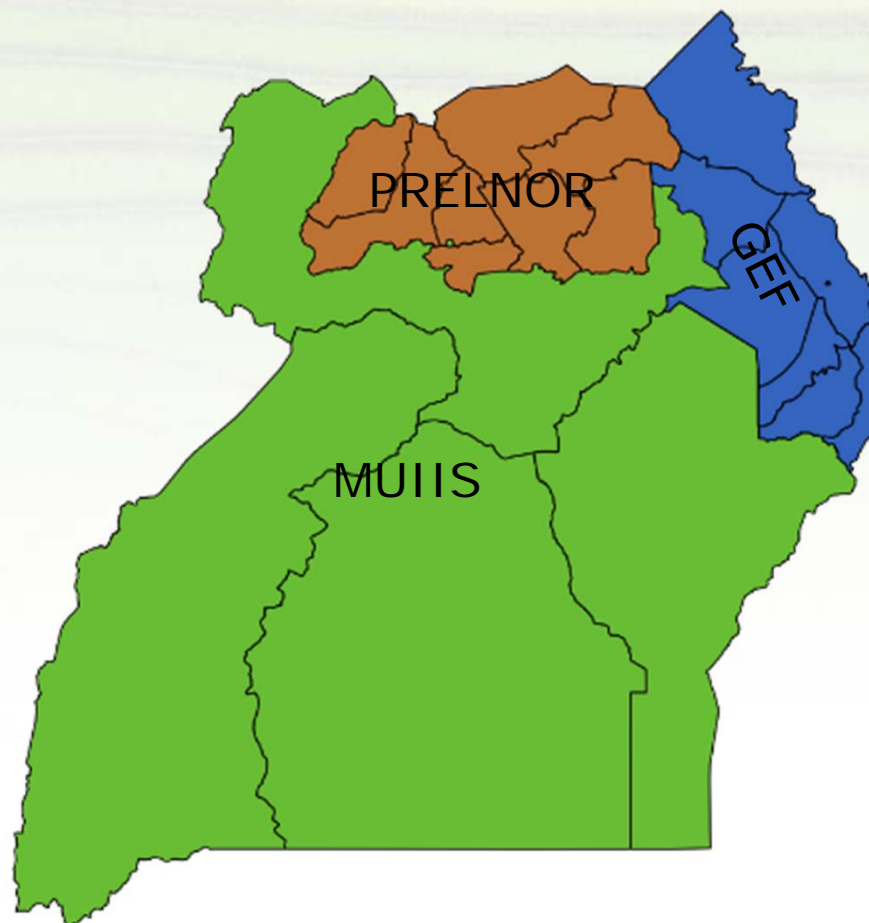
- **IFAD ASAP: The Project for Restoration of Livelihoods in the Northern Region (PRELNOR)**
- **GEF: Integrating climate resilience into agricultural and pastoral production in Uganda, through a Farmer/Agro-pastoralist Field School Approach**
- **Food Security IAP: Fostering Sustainability and Resilience for Food Security in Karamoja sub-region**

Overall goal: **increase agricultural production**

- Provide baseline information
- Provide agronomic tips to farmers
- Provide access to financial services
- Enhance long-term sustainability



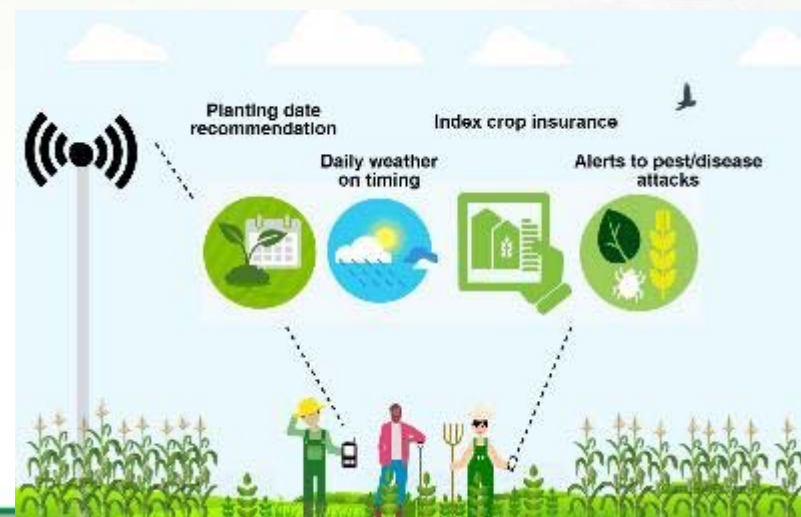
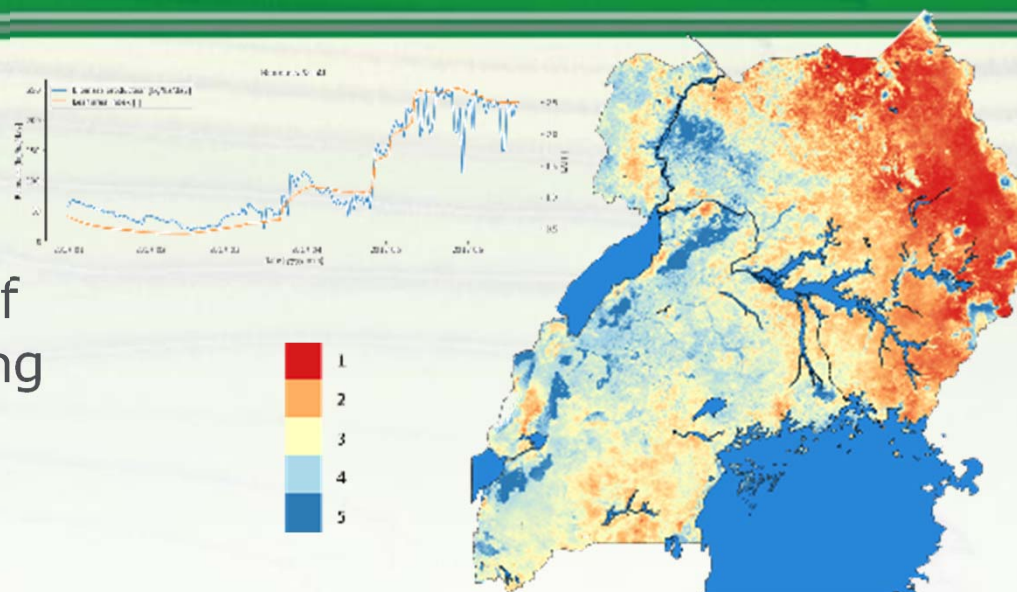
Areas of engagement



Service description



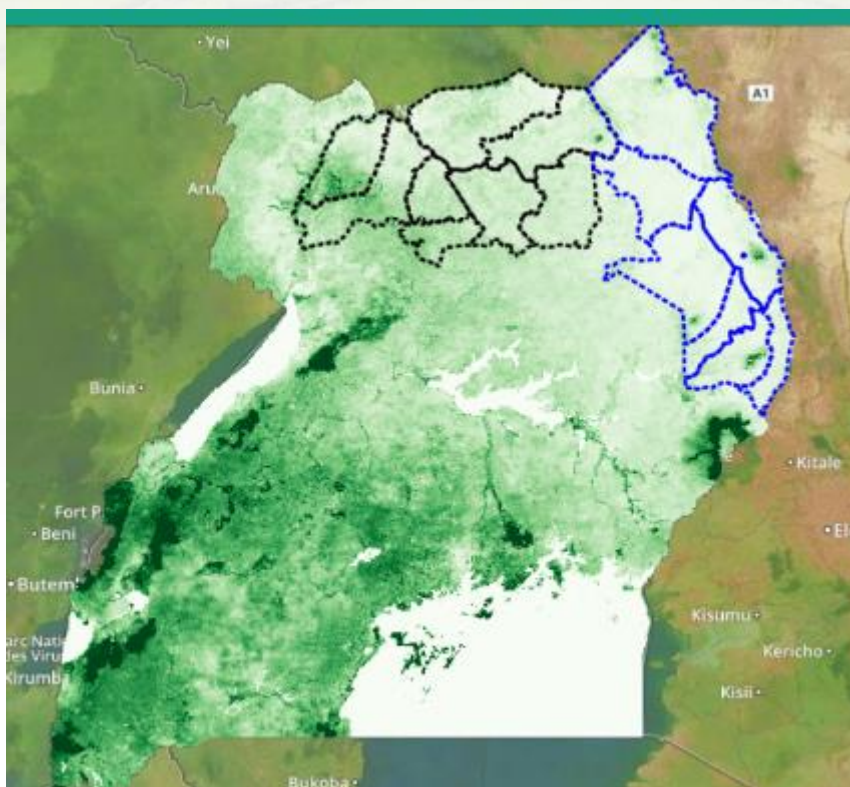
- Set the baseline and monitor productivity changes resulting from project interventions in order to evaluate the impact of the interventions (implementing entities)
- Aid smallholders in understanding of climate resilient production and gain confidence in the methodologies of the interventions (stakeholders)



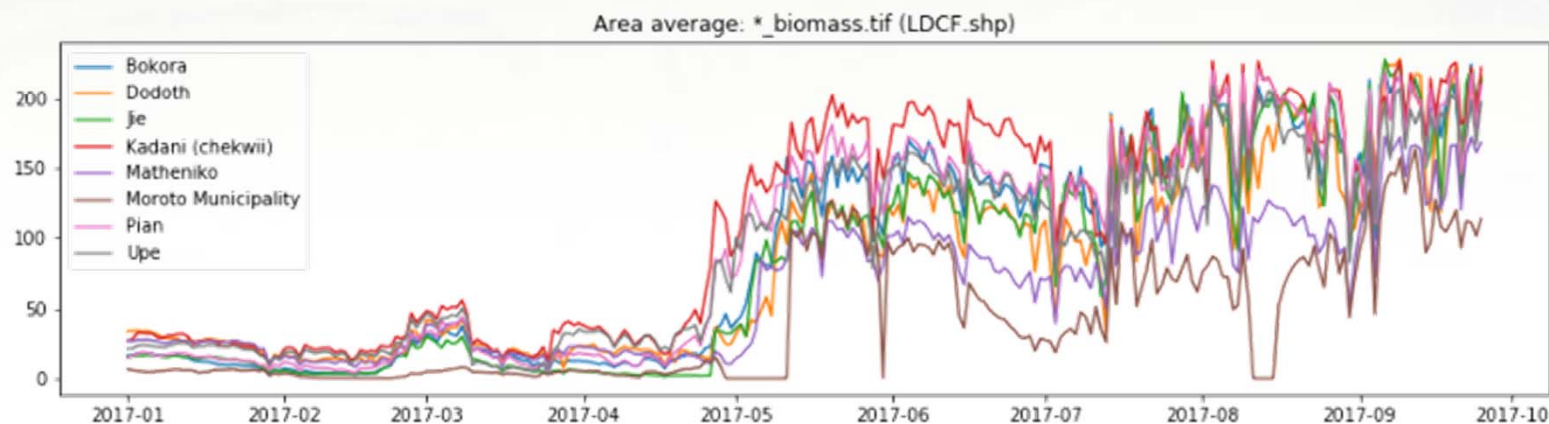
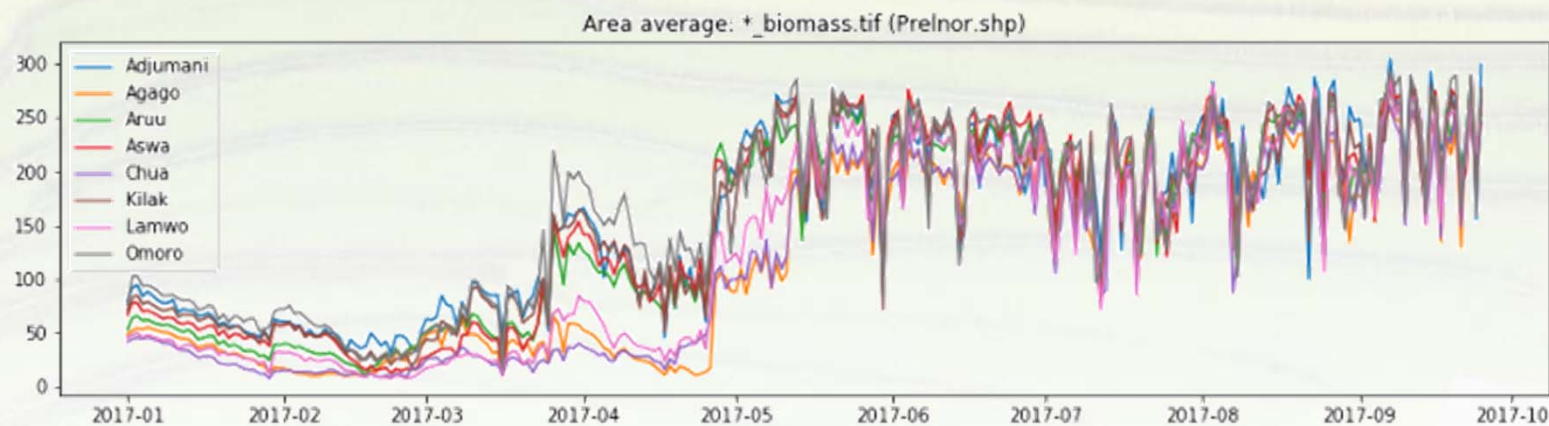
Setting the baseline at project start and actual situation after implementation



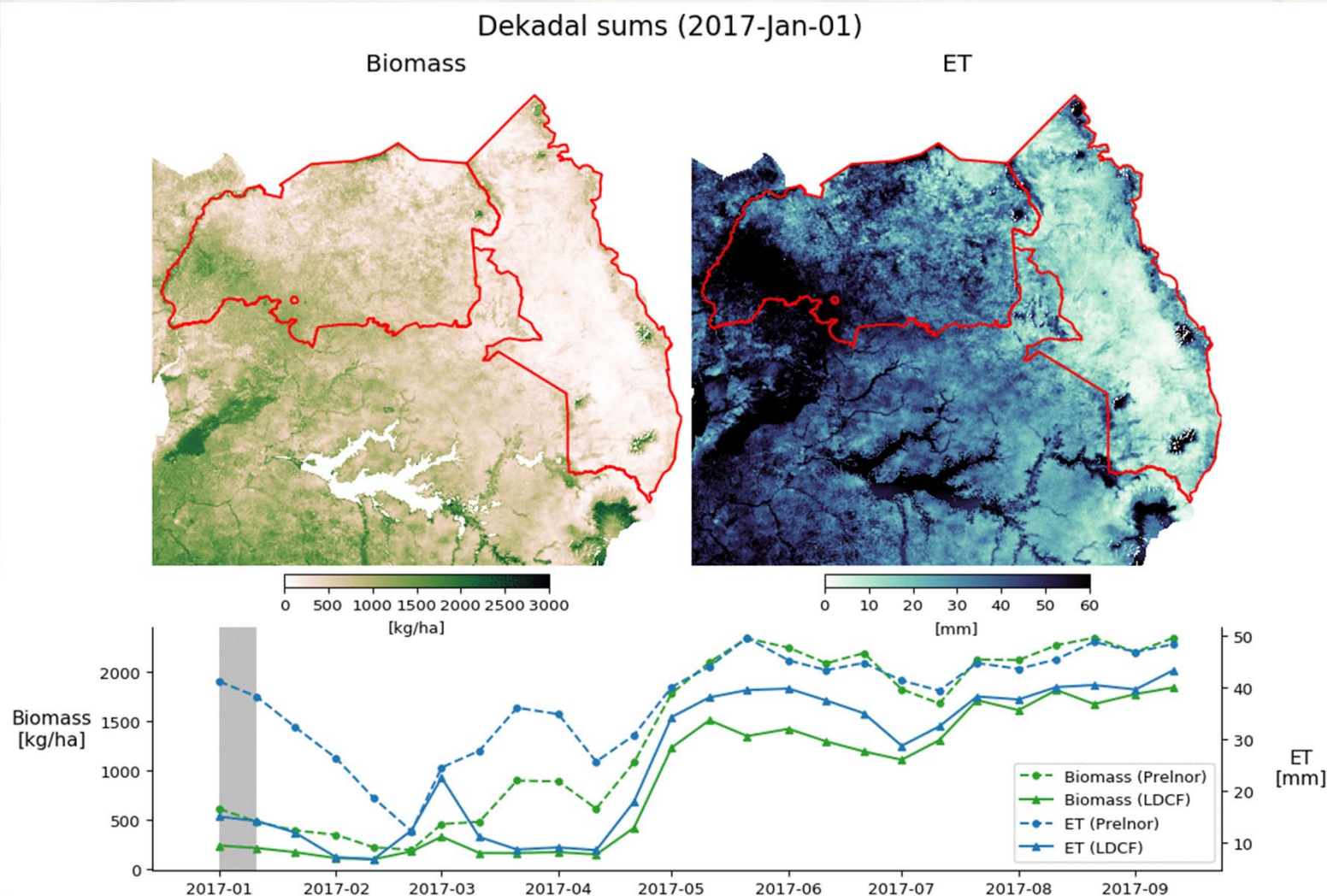
Example productivity over time



Monitor production per (intervention) region



Monitor production over time



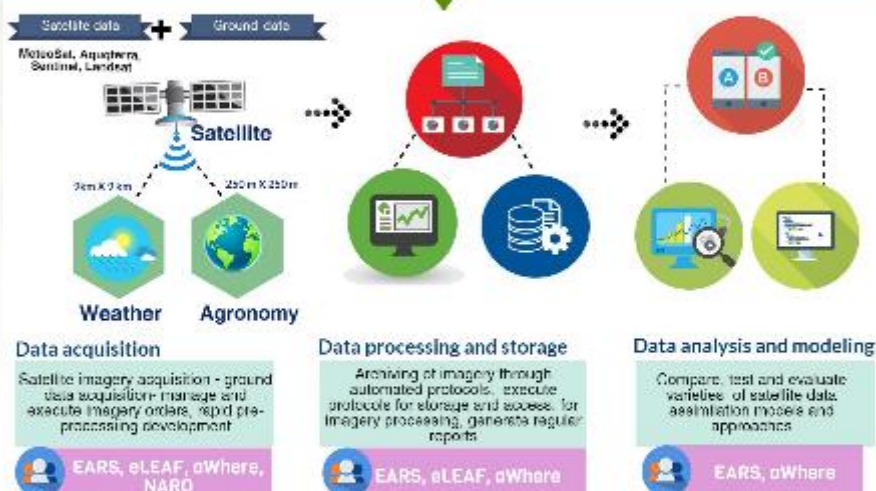
Provide advisory services - MUIIS



MUIIS: Innovative agricultural information services in Uganda



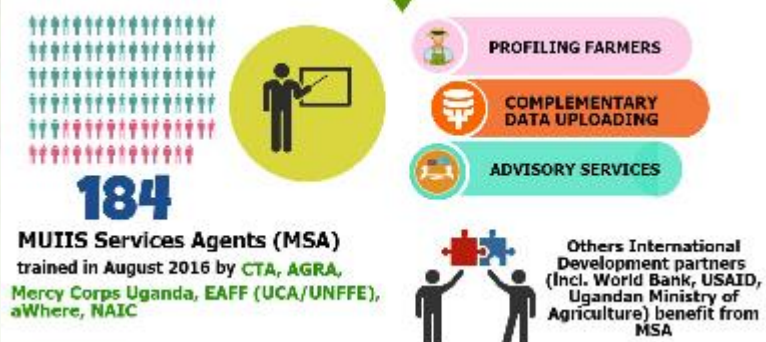
DATA MANAGEMENT



INFORMATION MANAGEMENT



KNOWLEDGE MANAGEMENT



As of August 2017

90 170

farmers had been profiled (digitally registered) by MUIIS services agents



Weather data
Agricultural tips
Financial services
Market information



Profiled farmers subscribe to the service via mobile phone

DURING THE FIRST YEAR

18 200 food producers have been reached.



8.026 women were reached.
(Target was 7.000)

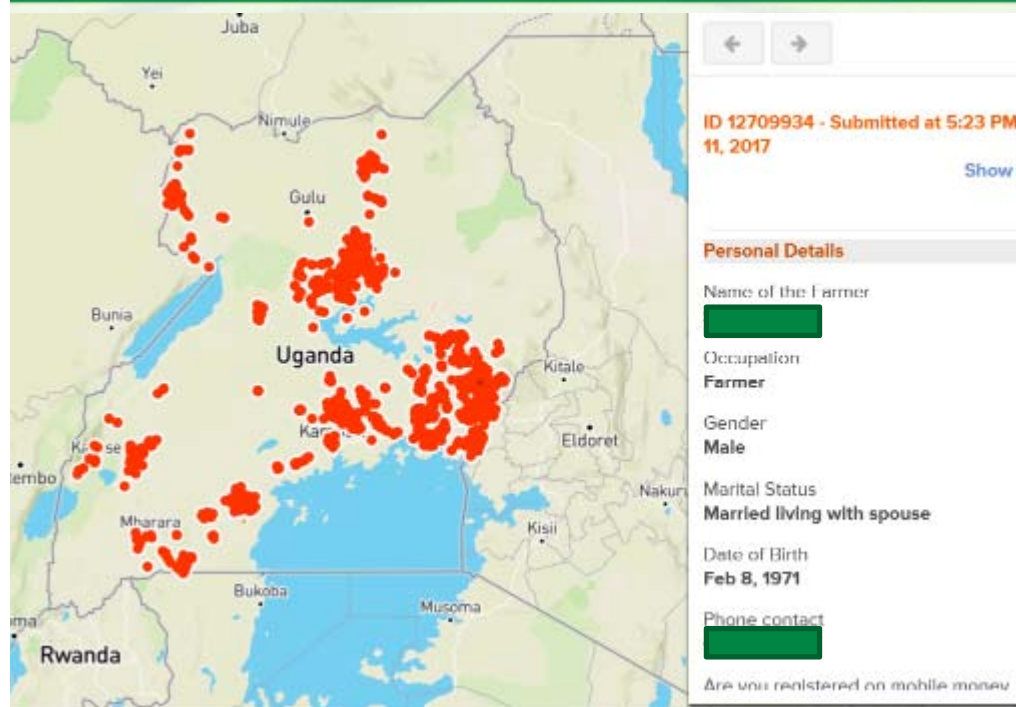
MUIIS is a project implemented by CTA in partnership with AGRA, aWhere Inc., EAFF, EARS-E2M, eLEAF and Mercy Corps Uganda



European Space Agency

muiis.cta.int

Transfer capabilities



- Continue the provision of data until May 2019:
 - Water consumption and deficit
 - Leaf Area Index (LAI)
 - Biomass production
 - Biomass water productivity
- Add high resolution data for a specific region based on Sentinel
- Connect to MUIIS project:
 - Exchange of experiences
 - Opportunity to collaborate
 - Capacity building
- MUIIS:
 - Scale up to Ghana
 - Looking for IFI support for Sudan

Critical succes factor



- Uptake of biomass data in PRELNOR – ICRAF Landscape portal
- Inclusion in FAO GEF IAP or ICRAF project
- Collaboration agreement with MUIIS

Capacity building plan



CB activities planned:

- Will be outlined to match with MUIIS events.
- First opportunity:
 - December 2017 – Finalization CB plan with FAO/IFAD
 - 1 day workshop with LDCS – pending discussion Anna / Rome
- Participants welcomed in Burkina / Ethiopia CB event

Local office:

- Support from MUIIS secretariat for engagement and planning

Thank you



<http://eo4sd.esa.int/agriculture>
<https://eo4sd.lizard.net/>

