AfriGEOSS Symposium 2017: Sesssion-4 Description

When	Session 5 (Day-2, Wed. 14-June): 09:00 – 10:30
Session Title	Earth Observations for Food Security and Sustainable Agriculture

1) Purpose: background, topic and objectives of the session

a) *Background:*

Food security is one of the SDG and is of special significance to this continent where climate variability, infrastructure, information, and technology constraints result in many countries experiencing food security stresses following even minor disruptive weather events. Having reliable, affordable and operational crop production and yields estimation and monitoring systems is crucial in planning for imports and exports and also for moving food from one region to another depending on the severity of challenges. Furthermore, crop health monitoring is important in minimizing crop losses because it affords rapid and informed interventions to minimize impacts. Currently, crop surveying and monitoring techniques in many parts of Africa rely on manual field surveys, which can be costly and are not timely. Timely access to early warning information is essential for averting disasters and mitigation planning.

b) *Theme:*

This session will address topics relating to technologies, systems and data sources available to countries on the continent for estimating, forecasting and monitoring crop yield estimation, crop growth and production.

c) *Objectives:*

1. To create awareness amongst decision-makers that operational EO based systems exist.
2. To illustrate the feasibility and cost effectiveness of these systems.
3. To alert scientists to the possibilities of adapting / adopting these systems locally.

2) Key questions to be addressed in the session

- What is the progress made in coordinating food security and agriculture activities under AfriGEOSS i.e. the AfriGEOSS Agriculture Monitoring (AfriGAM) Initiative;
- What affordable data sources exist for feeding crop estimation and forecasting systems?
- Which systems are affordable, functional and sustainable for deployment in countries in Africa?
- What capability and capacity exists for supporting implementation of such

systems?

3) Expected outcomes from the session

- Update on the implementation of AfriGAM;
- Understanding of available data, and EO systems that enhances decision -making for food security purposes
- Contribution and value of EO based systems for supporting food security related policies;

4) Format of the session and expected audience

Panel discussion of 1 hour 45 minutes, consisting of remarks by speakers followed by a moderated session with speakers and the audience.

5) Speakers

Name	*Organisation*
TBC	Ghana
Abel Ramoelo	CSIR, South Africa
Andrew Chitesa	Min. of Agric., Zimbabwe
Johnson Owaro,	Office of Prime Ministers, Uganda
Lilian Ndungu	RCMRD
Mercedes M. Vall-llossera	UPC, Spain
Michele Meroni	JRC

6) Moderators and Rapporteurs

Name	*Organisation*
George Chirima (Moderator)	ARC, South Africa
TBC (Rapporteur)	

7) Schedule

- Introduction of the session by Moderator (George Chirima, ARC) (**5 min**)
- Speaker remarks / presentations (**8 min**)
    - National capabilities, challenges and data requirements towards meeting food security in Ghana, (TBC)

    - Towards Southern Africa wide assessment of rangeland condition using remote sensing , Abel Ramoelo, CSI, South Africa
    - Use of remote sensed NDVI in maize yield estimation, Andrew Chitesa, Min. of Agric., Zimbabwe
    - Early warning crop monitoring – GEOGLAM at national level, Johnson Owaro, OPM, Uganda
    - SERVIR East and Southern Africa Food Security thema, Lilian Ndungu, RCMRD
    - AfriGEOSS soil moisture and agricultural outreach support project, Mercedes M. Vall-llossera
    - Recent developments in agricultural monitoring with EO for policy support, Michele Meroni, JRC
- 30 minute moderated panel discussion – converge on issues of collaboration (*see key questions to be addressed in the session*)
- Summary of session by moderator