Greenhouse Gas Observation
& Climate-Smart Agriculture

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First findings from SEACRIFOG Stakeholders Consultation Workshops

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SEACRIFOG project promotes the EU-Africa cooperation dialogue at different levels (policy, science, society) on the following themes: ***land use, land use change, climate-smart agriculture, food security, carbon cycle and greenhouse gas (GHG) observations***.
In order to identify user needs, SEACRIFOG project initiated the **process to engage relevant stakeholders** from Africa and EU to exchange and gather existing knowledge. Two workshops have been organized in **East Africa** in Kenya, Nairobi (31st May 2017) and **West Africa** in Ghana, Sunyani (16th June 2017). In total, 44 participants from 19 organizations across Africa attended the first two SEACRIFOG Stakeholder Consultation workshops.

Main findings of SEACRIFOG Stakeholders Consultation workshops

The two SEACRIFOG Stakeholders Consultation Workshops (East Africa and West Africa) underlined the importance of **sharing data and knowledge** and the need to develop not only technologies and research infrastructures, but also strong and collaborative networks. For all three thematic groups (LUC, food security, GHG and CSA) **data availability, accessibility, and accuracy** was the core of all discussions. The workshops also identified an urgent need to address a farmers responsive research to provide accessible know-how in terms of technology and good agricultural practices.

Aims of SEACRIFOG Consultation workshops

The aim of the SEACRIFOG Stakeholder Consultation Workshops was to identify general user needs and knowledge gaps in the area of research infrastructure related to: **1) Land use change implications on food security, 2) GHG observations, carbon stocks and climate change mitigation, 3) Climate smart agriculture in Africa**.

TAB 1: Summary of workshops findings

TOPICS	REMARKS
DATA NEEDS AND GAPS	Presence of lots of data but: - Low data availability, accessibility, sharing, networking, accuracy and visibility - Data in not usable/understandable format - Problems of time and spatial resolution, low interoperability and quality of data and metadata, needs for data repository and increased frequency of data up to-date - Satellite images as useful tool for information sharing and communication with stakeholders about the state of the art of the environment.
INFRASTRUCTURES	- Investment needed (e.g. into technologies and equipment) - Many efforts in place, but coordination lacking, specific government subsidies required, inadequate road connections from farms to the main markets
CAPACITIES	- Not full exploitation of the human capacity potential - Need for data management skills - Need for capacity building to understand and implement guidelines for GHG emission reporting
CONSTRAINTS	**Financial resources** -Inadequate financial resources **Land** - Complex land tenure systems - Land suitability, affordability and fragmentation - Land grabbing and illegal activities (mining, charcoal, logging, etc.) **Urbanization** - Pressure on farming land and land conversion (from farms to urban areas) **Market & Prices** - Poor and inadequate infrastructures to access to the market - Inadequate storage and processing facilities - Price insecurity of agricultural products - Inadequate system to certify low carbon emission products - Communication, use of different terminology
SOLUTIONS	**Communication** - Improve the connection between existing systems (research infrastructures, datasets, etc.) - Farmers responsive research, in response to farmers needs - Bridge between scientific and traditional knowledge for innovative solutions - Considering central rule of farmers as data source and data users of scientific information, products, services, etc. - Citizen science could be a new kind of low cost monitoring infrastructure - Improvement and promotion of climate smart agricultural practices with pilot farming systems (multi-cropping, appropriate irrigation systems, agroforestry, etc.) **Know-how and connections** - Accessible know-how sharing (mobile technology and innovative technologies, education, communication networks, etc.) - Land classification and land productivity assessment - Increase the use of RS data and GIS application - Improved connection between government and farmers through the extension offices
ADAPTATION VS. MITIGATION	Adaptation is a priority for Africa, while mitigation is not. Mitigation can be seen also as an opportunity: mitigation practices are often linked to adaptation practices; sustainable productions (soil health, nutrient and carbon conservation, etc.); market opportunity for new technologies

SEACRIFOG workshop side event at SASSCAL Science Symposium
18th April 2018
8.30-13.00, Muchinga room