

Soil Carbon Network for sustainable agriculture in Africa

CaSA Network is a collaboration between African and European researchers convinced of the need to promote and defend soil carbon. The network members belong to 21 research teams from 11 African countries and France. The network's central aim is to build knowledge allowing better evaluation of soil carbon and agricultural systems ensuring sustainable food production and ecosystem services.



CaSA

Coordinators

Pr. Tantely Razafimbelo,
Laboratoire des Radiolotopes, Université d'Antananarivo

Dr. Martial Bernoux,
IRD, UMR Eco&Sol, Montpellier

www.reseau-carbone-sol-afrique.org



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CaSA, Soil carbon network for sustainable Agriculture in Africa

The CaSA Network is mainly developed in order to encourage alternative agricultural production systems focused on optimal management of organic materials and preservation of soil carbon.

The main objective is to replace soil and soil carbon as the central component of sustainable agricultural systems.

Priorities of the members :

- show that maintaining adequate soil carbon stocks is essential to ensure soil quality and sustainable yields
- quantify the impact of management practices on soil carbon sequestration for various African soils and climatic conditions
- promote cooperative research in relation with the civil society and development agencies
- facilitate the communication of research results to policy makers and to improve dissemination to civil society and farmers
- strengthen the capacity of the network members' expertise and training

Main activities

Standardizing soil carbon measurement methods among network members

- Agrosystem carbon stock quantification with synchronic and diachronic approaches
- Bulk density measurements
- Use of pre-existing soil survey data
- Infra-red spectrometry development

Making the best use of the network data

- Production of a manual of adequate methods for the estimation of C stocks and sequestration rates,
- Data meta-analysis and synthesis of carbon sequestration and yields in relation to different traditional or innovative agricultural practices such as biochar.



Capacity building

- Establish a scientific think-tank on the management of soil carbon for a sustainable agriculture in Africa ;
- develop a network of African experts on issues of global changes and their impacts on agriculture and sustainable development ;
- share knowledge through training (teaching at different levels including Bachelor's degree, master's degree , Graduate Schools), mobility and student exchange within the network.

