



DSCATT

Agricultural Intensification and Dynamics
of Soil Carbon Sequestration
in Tropical and Temperate Farming Systems

2019

2023



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The project

DSCATT proposes to explore the potential for sequestering carbon in cultivated soils, while achieving sustainable intensification of agriculture.

The project aims to identify and examine interactions between biophysical and socio-economic drivers across temporal and spatial scales. A better knowledge of which practices lead to carbon sequestration and of the conditions of their adoption and adjustments by stakeholders will help to better consider soil carbon in existing and alternative farming systems and agricultural policies.

To achieve these objectives, transdisciplinary, multiscale, systemic and multi-actor approaches are needed.

The DSCATT project is part of the objectives of the initiative **4 per 1000**.



The international initiative 4 per 1000, launched by France on 1 December 2015 at the COP 21 consists of federating all voluntary stakeholders of the public and private sector. The ambition is to encourage stakeholders to transition towards a productive, highly resilient agriculture, based on appropriate management of lands and soils, creating jobs and incomes hence ensuring sustainable development.



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The objectives of the project

Identify efficient strategies that foster long term soil carbon sequestration in agricultural systems

- **Quantify** and **model** soil carbon sequestration dynamics and its determinants in different agricultural systems at crop-soil, farm and landscape scales
- **Deliberate** amongst stakeholders about soil carbon sequestration pathways
- **Share** knowledge, tools and experience on soil management options

The sites

DSCATT will be carried out on 3 study sites in Sub Saharan Africa and 1 site in the Mediterranean region of France. These study sites show large complexity in natural resource management:

In Senegal: Agro-sylvo-pastoral systems in the GroundNut Basin

In Zimbabwe and Kenya: Crop livestock systems, conservation agriculture and integrated soil fertility management

In France: Agroforestry in Mediterranean region



Partners



DSCATT is supported by Agropolis Fondation
(through "Programme d'investissements d'avenir" ANR-10-LABX-0001-01)
and TOTAL Foundation





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