# Ad hoc support : CID'2021

## Adaptation and resilience of agriculture in West Africa: agroecological innovations and integration of territories

### ABSTRACT

In West Africa, agriculture is an essential sector to achieving the sustainable development goals (SDGs). It must both provide healthy and lasting nourishment to rural and urban populations, while preserving soil and ecosystem balances in a natural space fragilized and threatened by the current climate change and population growth needs. An agroecological transition model (TAE) is put forward by international bodies (FAO, UN) and more and more by national public policies, whether in Europe or Africa (for example the DyTAES initiative in Senegal).

Agroecology, which aims to review the sciences of agriculture through the prism of the sciences of ecology and nature, is an approach that relies on advanced knowledge on the functioning of soils associated with the cycle of water, plants, microorganisms associated with plants and ecosystems. This need for knowledge was widely perceived by the human and social sciences interested in closing the gaps to the barriers of adoption in agroecological practices. By better understanding the diversity of production systems on the one hand (livestock, cropping, agroforestry system), and the strategies of agricultural households on the other hand (intensification, extensification, income diversification, etc.), it will be then possible to draw the paths of an efficient agroecological transition.

The conference on sustainable intensification, CID, which is in its third edition (CID'2021) fits into a broad international context the themes of research and training on the sustainable intensification of agriculture and food security in West Africa, in line with the SDG 1 (Zero poverty), SDG 2 (Zero hunger), SDG 4 (Education), SDG 5 (Gender), SDG 6 (Access to water), SDG 13 (Fight against climate change) and SDG 15 (Life on land). After the 2017 and 2019 editions, the CID'2021 will be organized under the theme "Adaptation and resilience of agriculture in West Africa: agroecological innovations and integration of territories" to exhibit and discuss recent mechanisms, processes, approaches and reflections for the mobilization of natural resources (water-soil-biodiversity) and the scaling up of innovative agroecological and sustainable agricultural production systems in West Africa and elsewhere in the world.

The objective of the CID 2021 is to exchange and mobilize scientific advances and innovations in agroecology to meet the needs of African populations in the context of climate hazards, economic, social and health, to make agricultural systems performant and resilient. This 3rd edition is also associating civil society actors (DyTAES) with the aim to strengthen cooperation between actors. The event will highlight the activities of the Agropolis Fondation research units network on agroeocology

issues in sub-Saharan Africa and identify future research needs to develop sustainable agriculture in Sub-Saharan Agroecosystems.

The project will finally consolidate the international agroecological network around research and innovation application for a successful agroecological transition (TAE) in Sub Saharan Region.

Year: 2021 Project number: 2100-004 Type of funding: SP Project type: PC Research units in the network: ECO&SOLS AGAP IPME LSTM AIDA SELMET Start date: 2021-03-01 End date: 2021-11-30 Flagship project: no

Project leader : Laurent Laplaze Project leader's institution : IRD Project leader's RU : DIADE



#### Budget allocated : 5000 € Total budget allocated ( including co-financing) : 5000 € Funding : Labex

#### GOAL

These two objectives will be tackled in parallel and will feed each-other. The project is organized in four work- packages, the first three being dedicated to field research, and the last one dedicated to the building, structuration and animation of the interdisciplinary consortium and to the project management.