Research Project

Project SustainSahel (H2020) (Synergistic use and protection of natural resources for rural livelihoods through systematic integration of crops, shrubs and livestock in the Sahel)

Website

https://www.sustainsahel.net/

Objectives. The overall objective of SustainSAHEL is to enhance the resilience and intensification potential of smallholder agricultural farming systems to climate change through scalable innovations on crop-shrub-livestock (CSL) integration (2020-2025). It will promote practices which enhance soil quality and yields, build resilience towards climate change, and contribute to food security and better livelihoods. The project's approach is embedded within the themes of agroecology, organic agriculture and elements of conservation agriculture. More specifically, SustainSahel aims to:

- develop systematic CSL systems with innovation networks of farmers, value-chain operators, extension services and researchers at various scales to improve agricultural production potential and farmers' income through capacity building
- assess adoption and farm-level sustainability performance of existing intensification strategies
- evaluate socio-economic impacts and scaling potential of the improved practices
- select shrub/tree species, test their systematic integration at farm level and monitor agronomic performance in various farming systems
- quantify the effects of systematic integration on soil biological, chemical and physical functioning, as well as on water availability and soil fertility and productivity
- improve livestock nutrition, productivity and health through facilitating increased availability of shrub and crop diversity and biomass
- model potentials and biophysical impacts of shrub/tree integration across ecological gradients (e.g., aridity) and scenarios of climate change and socio-economic settings
- disseminate project results to end-users, agricultural development agencies and donors, and scale up good practices using farmer-to-farmer training videos in local languages of the region.

Duration Sept 2020 – Aout 2025

Leader : Dr. Andreas Fliessbach, FiBL, Deparment of Soil Sciences /Dr. Harun Cicek, FiBL, Department of International Cooperation, Ackerstrasse 113, 5070 Frick, Switzerland.

Geographical Dimension : West Africa (Senegal, Mali, Burkina-Faso)

Partners

Senegal (ISRA, CSE) /Mali (IER, AOPP) /Burkina-Faso (INERA, CPF, AFAAS)/France (CIRAD, IRD) / Suisse (FiBL)/Allemagne (UHOH, Uni Kassel)/Angleterre (Minerva)

Funding; Horizon 2020

Keywords

Agroforestry, crop-shrub-livestock, resilience , Intensification, West Africa