



Sustainable Intensification of Food Production through resilient farming systems in West and North Africa



Nabaloum Habilou, market gardening in the village of Laogo, Kourweogo Province, West Africa.

www.sustinafrica.com



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IN A NUTSHELL

5-year EU funded Horizon 2020 project
(7 million EUR)

Agricultural action research in:

5 countries: Burkina Faso, Egypt, Ghana, Niger,
& Tunisia

13 Agro-Ecological Zones; **39** communities

Gathers **17** partner organisations from **11** countries -

Partners in Europe

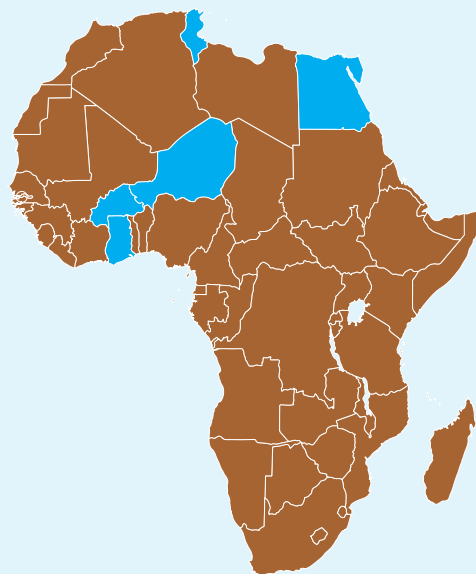
Finland: Natural Resources Institute Finland (Luke); University of Helsinki

Germany: Leibniz Institute for Agricultural Engineering & Bioeconomy; University of Hildesheim

Italy: International Center for Advanced Mediterranean Agronomic Studies (CIHEAM Bari)

Portugal: Lisbon School of Economics & Management; FCIências.ID

Austria: University of Natural Resources & Life Sciences Vienna *Ireland:* Self Help Africa



Partners in Africa

Ghana: University of Cape Coast, University for Development Studies; DexAfrica Ltd.; Farmerline Ltd.

Burkina Faso: University of Dédougou

Niger: Abdou Moumouni University

Egypt: Heliopolis University for Sustainable Development

Tunisia: Olive Tree Institute



Sana Guira Zoenabo pictured with her children, Ouedraogo Aboubacar, Ouedraogo Yidiane, Ouedraogo Aboul Rasmane and Ouedraogo Oumarou, Poedogo 1 Village, Loubilia, Oubritenga, Plateau Central, Burkina Faso.

Objectives

SustInAfrica is an EU-funded Horizon 2020 research project started in 2020 which aims to **empower West and North African smallholder farmers** and **small- and medium-sized enterprises (SMEs)** to facilitate **sustainable intensification of African farming systems**, and to develop and deploy a reference framework on best **agricultural practices and technologies**.



Binta Kanazoe Liouligou Village, Yargo, Kourittenga, Centre-East, Burkina Faso.

Why this is important?

Large areas of agricultural land in West and North Africa are heavily degraded, with water scarcity, low soil fertility and poor plant health, due to the use of unsuitable agronomic systems and inappropriate management. In West Africa, poor water, organic matter and nutrient retention limit food productivity, whilst in North Africa, salinization, wind erosion, formation of crusts and compaction threaten rainfed cropland and silvopastures. The low food productivity, poor resilience and unsustainability of current approaches have severe socioeconomic and environmental consequences.

Approach & structure

SustInAfrica applies a transdisciplinary systems approach to testing and implementing landscape, soil, water and plant health management strategies and sustainable agricultural practices to ensure that the agricultural technologies being developed are sustainable, economically viable, resilient to current and future climate shocks and stresses, and provide ecological provisioning services across the targeted regions of Africa. Practices are also screened and adapted to maximise the benefits to female farmers and value chain actors as well as the nutrition of farmers, their families and consumers.



The design and evaluation of the strategies, practices and technologies is based on **detailed analysis**, with data managed by the Ghanaian company [Farmerline using its own ICT4Ag platform Mergdata](#). SustInAfrica is working on:

- The development of **smart farming technologies**, using remote sensing and AI-based algorithms to detect crop pests, and the [Bluleaf](#) app to manage irrigation systems.
- Participatory on-farm **research and demonstration trials** of agroecological crop production practices using the Mergdata platform to measure impact on crop yields, economic returns, soil health, pest management and resilience to climatic shocks.
- **Training** agronomists, MSc and PhD students, farmers and frontline agriculture extension staff.
- Developing technology **exploitation** plans for those that are scaling ready, producing business plans and public policy recommendations

The progress of SustInAfrica can be followed through the [website](#) and the newsletter developed as part of the **communication and dissemination** activities, which also runs stakeholder workshops in targeted countries.

CROPS

Country	Region	Target crop
Tunisia	1 - Beja 2 - Sousse/Monastir 3 - Kairouan	Olive
Egypt	4 - Behhira 5 - Giza 6 - Sharqia	Cotton Date Palm Olive
Niger	7 - Goure (Zinder) 8 - Jiratawa (Tahoua) 9 - Kalfou	Millet
Burkina Faso	10 - Hauts-Bassin	Cotton
Ghana	11 - Tamale 12 - Ejura 13 - Komenda	Mango Maize Pineapple



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