

INNOVATION FUND

Accelerating inclusive green growth through agri-based digital innovation in West Africa (AGriDI)

PROJECT CONSORTIUM



PROJECT COORDINATOR

International Centre of Insect Physiology and Ecology (icipe), Kenya



PARTNERS

Université d'Abomey-Calavi (UAC), Benin

Gearbox Pan African Network (GB), Kenya

Agropolis Fondation (AF), France

LOCATION



Western Africa

PERIOD



February 2021 – January 2025

TOTAL BUDGET



EUR 4,942,312

EU FUNDING



EUR 4,199,977

PROJECT CONTACT



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AGriDI

Accelerating inclusive green growth

CHALLENGE

The uptake of digital technologies for production and marketing among women and youth working in the agricultural sector in Western Africa is low, while approximately 50% of smallholder farmers in the region are women. The low uptake is exacerbated by a high level of digital illiteracy and a lack of focus on human-centred and context-specific product design. This situation means that farmers are losing out on potential added value and is one of the main reasons hindering the transformation of traditional agricultural management practices into a digital approach to sustainable agricultural development.

FOCUS

The identification and adaptation of agri-based digital technologies that are suitable in a Western African context will be explored. Linkages between the research community, industry and policy actors will be strengthened, and the policy environment will be improved to enable the scaling of agri-business digital innovation and to support technology transfer processes. The uptake of digital technologies will enable farmers and small and medium-sized enterprises (SMEs), including women and youth, to produce and market their goods and services more easily and efficiently.

RATIONALE

Agriculture is the dominant economic sector in Western Africa, accounting for over a quarter of the region's GDP.

It is necessary to maintain high agricultural productivity to keep up with population growth. Measures are also needed to mitigate or adapt to the adverse effects of climate change, which can alter the agro-ecological system and worsen the problems of pests and diseases.

As limited access to good-quality farm inputs and poor links to markets for farm produce constrain agricultural productivity in the region, digital innovation - digitising of agriculture-related activities and data - is an opportunity to transform agriculture and boost employment, in particular for youth. For this to happen, public and private sector actors need to join forces to unlock the potential of digital technologies (big data analytics and machine learning, block chain, robotics and drones).

A 'food systems' approach that looks at various segments of responsible food production and consumption, coupled with transformative digital innovations, is an effective way to address the challenges of poverty and food and nutrition insecurity, while reducing negative externalities on the environment and human health.

Digital innovation will offer innovative ideas that make it possible to better understand and analyse food environments and co-design agro-ecosystems. These innovations will also inform governance of sustainable food systems, while enabling better management of waste and resources in order to promote a green economy, and a better understanding and handling of the interactions of biotic and abiotic stresses on plants, animals and humans, and of political, social and economic risks.





Female farmer receiving a voice SMS about prices from ESOKO in Ghana (2018)

METHOD

AGriDI operates at the core of the innovation ecosystem for digital technologies for agriculture. It brings together the research community, the public sector (policy makers), farmers and the private sector (SMEs, innovators) to enhance digital literacy, knowledge and capacities to adapt and use emerging digital technologies, especially by traditionally underrepresented groups, such as women and youth.

AGriDI promotes local participation and dialogue to ensure ownership and alignment with national and regional development priorities, and the improvement of innovation policies for the development and application of ICT. Through rigorous scientific reviews, documentation, knowledge creation and dissemination of lessons on what works, AGriDI shares knowledge and strengthens multi-stakeholder, multi-country and multi-sector partnerships.

AGriDI provides financial support to partnerships that will execute inclusive digital innovation projects, selected through calls for proposals (see website for further details), under the following categories:

- Co-development and adaptation of innovative digital solutions for agricultural productivity enhancement (for academic and research institutions).
- Development of policies for digital innovation (for government officials responsible for ICT or science, technology and innovation (STI)).

- Digital innovation for establishing market linkages for farmers' produce (for farmer cooperatives in multi-stakeholder partnerships).

AGriDI also provides technical support, both online and offline, to the selected projects and transfers skills and know-how through training workshops, business coaching and mentoring, networking and partnership building, curriculum strengthening for sustainability, and annual fora for sharing experience and cross-learning.

Potential training topics include entrepreneurship and business model development, intellectual property (IP) management, data management and security, business incubation, design thinking, market research and marketing, financial management, and resource mobilisation.

EXPECTED RESULTS

Impacts

Conducive environment for agri-based digital innovations, especially for women and young farmers, that will accelerate inclusive green growth in West Africa.

Outcomes

- Increased uptake of agri-based digital technologies by farmers' cooperatives and SMEs.
- Strengthened collaboration between research communities, industry and policy actors in digital innovations.
- Improved knowledge on policy making that facilitates scaling of agri-business digital innovations.

Outputs

- Farmer's cooperatives and SMEs provided with innovative digital solutions adapted to their needs.
- Enhanced capacity of SMEs, leaders of farmer's cooperatives and policy actors - especially women and youth - in using digital solutions for agri-business development.
- Functional multi-stakeholder networks established.
- Improved stakeholder awareness of digital innovation in the Inclusive Green Economy (IGE).
- Improved awareness of policy makers on the importance of agri-based digital innovations.

PROGRAMME PRIORITIES

Access to digital literacy, knowledge and use of emerging technologies.

Synergies in the R&I ecosystem (private sector, technology transfer, R&I uptake).

SECTOR

Agriculture, ICT

KEYWORDS

digital technologies, multi-stakeholder networks, capacity building, technology transfer, food systems, SMEs, farmer cooperatives, government agencies



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Phantom 4 multispectral drone optimised for digital mapping in agriculture Burkina Faso (WASCAL, 2021)