

Digitization of climate-smart practices in vegetable crops to support sustainability of production and improve livelihood of smallholder's farmers

Annex 1

Technical Narrative Report of the Digit_Crops

Quarterly Report Period: September 1, 2024, to January 10, 2025	
Name of reporting entity: WASCAL_CEACCBAD-UFHB	
Editor (s)	Technical team of the Digit_Crops -AGriDI project

Introduction

For many years, indigenous populations in Côte d'Ivoire have been growing tomatoes, peppers, and eggplants around their homes for family consumption. Initially a marginal agricultural activity, vegetable farming has, since the 1980s-1990s, evolved into a significant speculative production within agricultural systems, leading to notable regional and seasonal specialization. These crops' production activities engage a substantial portion of the population, comprising nearly 60% women and youth in urban and peri-urban areas.

Vegetable production in Côte d'Ivoire is rapidly expanding, representing approximately 678,000 tons on 161,000 hectares of irrigated and rain-fed crops. However, the country still imports about 100,000 tons annually to meet the production shortfall. Despite its agro-economic dynamism, the sector faces significant threats: (i) soil fertility degradation, requiring mitigation through integrated agroecological management; (ii) increasing pest pressure, necessitating efforts to reduce the impact of diseases and pests and update phytosanitary mapping; (iii) climate change, compelling a revision of technical itineraries and the adoption of climate-smart adaptation practices based on local knowledge and endogenous innovations; (iv) insufficient support structures, calling for a renewal of support approaches for sector actors by improving access to information and technological knowledge through digital advisory services.

The Ivorian government, aware of the sector's weaknesses, has made efforts to organize farmers into cooperatives and value chain actors into interprofessional platforms to enhance efficiency and address stakeholders' needs. Agricultural professional organizations (OPA), the private sector, and universities are mobilized to play a central role in achieving objectives aimed at increasing production.

In response to this situation, the WASCAL-CCBAD African Center of Excellence secured funding from the AGriDI initiative, coordinated by ICIPE, for the **"Digit_Crops Project: Digitalization of Climate-Smart Practices in Vegetable Crops to Support Production Sustainability and Improve the Livelihoods of Smallholder Farmers."**

The Digit_Crops project aims to sustainably transform agriculture in Côte d'Ivoire by promoting climate-smart agricultural practices in vegetable crop production. Its objective is to strengthen the resilience of agricultural systems, increase productivity, and improve the livelihoods of smallholder farmers through digital innovations and sustainable agricultural approaches. The project will also focus on mapping and identifying pests to optimize their management. Data collected for this purpose will be

integrated into an interactive digital database accessible via a mobile application for vegetable producers.

As part of this project, activities will be implemented to improve the livelihoods of smallholder vegetable farmers in the regions of Yamoussoukro, Abidjan, and Korhogo in Côte d'Ivoire, encouraging the adoption of diverse sustainable production systems. By the end of the project, the main expected outcomes are as follows:

1. **R1:** Increased use of climate-smart agricultural practices by smallholder vegetable farmers.
2. **R2:** Enhanced capacity of smallholder vegetable farmers to implement climate-smart agricultural practices.
3. **R3:** Operationalization of the Digit_Crops platform.
4. **R4:** Development of entrepreneurial skills among young vegetable farmers in rural areas, focusing on the production of plants with biopesticidal properties.

This report outlines the activities conducted from September 1, 2024, to January 10, 2025. These activities include the mission to inform and raise awareness among stakeholders about the objectives of the Digit_Crops project and the organization of the project launch meeting.

1 Information and Awareness-Raising for the Stakeholders of the Project

From December 2 to 12, 2024, an information and awareness-raising mission was carried out in the localities of Korhogo, Yamoussoukro, and Songon as part of the DIGIT-Crops project.

In Korhogo, activities began on December 3 with workshops organized in the villages of Korhogokaha, Gbonzoro, and Bodonon. An additional workshop was held in Koko on December 4. These sessions mobilized 195 participants, 80% of whom were women, highlighting significant female involvement in this region.

The mission then continued in Yamoussoukro from December 6 to 9, 2024, with meetings initiated by community leaders involved in vegetable production. A final workshop, held in Djamalabo with the PCOPMAYA cooperative, brought together 32 producers from various localities, including Yamoussoukro, Zatta, Toumodi, and Dimbokro. These participants will play a key role in disseminating the information received within their respective communities.

The mission concluded in Songon, where 14 community leaders involved in vegetable production participated in discussions from December 10 to 12, 2024.

With a total of 241 participants, including 165 women, this mission successfully raised awareness among a broad range of stakeholders, thereby strengthening community engagement with the objectives of the DIGIT-Crops project (Annex 1: Photos).

2. Kick-off of Digit_Crops AGriDI Project

On December 20, 2024, the WASCAL-CCBAD Center at Félix Houphouët-Boigny University in Bingerville hosted the launch ceremony for the Digit_Crops project. This project aims to digitalize climate-smart agricultural practices to enhance the sustainability of vegetable production and improve the livelihoods of smallholder farmers in Côte d'Ivoire.

The event brought together a wide range of participants, including representatives from ministries, technical and financial partners (ICIPE), professional agricultural organizations (OPA), researchers, and academics. This diversity of stakeholders laid the groundwork for an inclusive and structured collaboration.

The ceremony began with a welcome address, followed by the official opening by Professor KOUASSI Édouard, Director of WASCAL. Presentations highlighted the challenges facing Côte d'Ivoire's vegetable production sector, such as soil degradation, pests, and climate change, as well as the need to integrate digital services to support farmers.

The Digit_Crops project, funded by AGriDI, was detailed by Dr. M'BO Kacou Antoine, outlining clear objectives: developing digital tools to manage pests, building farmers' capacities through targeted training, and improving their resilience to climate challenges. Dr. KASSI Fernand presented the results framework, illustrating the milestones and expected impacts.

An interactive session allowed stakeholders to exchange ideas, ask questions, and express their commitment to the project. The event concluded with the adoption of a clear action plan and a strengthened collaborative dynamic.

This launch marks a decisive step towards more resilient and sustainable agriculture in Côte d'Ivoire, thanks to the digital innovations of Digit_Crops (Annex 2: Photos) (Print Media Reference: *Fraternité Matin*, Tuesday, January 7, 2025, No. 18006, page 10, www.fratmat.info; <https://youtu.be/cdCvbKaEJ7Q?si=Pyg6gaLsGJ2cIlfR>).

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Appendix 1:

Follow-up mission for field activities

Participation to the Information and Awareness Workshops for Digit_Crops Project Stakeholders



a) Information and Awareness Session on the Digit_Crops Project and Field Visits in Songon



b) Information and Awareness Session on the Digit_Crops Project and Field Visits in Yamoussoukro



c) Information and Awareness Session on the Digit_Crops Project in Korhogo

Appendix 2

Digit Crops Project kick-off meeting at Wascal-CEACCBAD

Illustrative image from the launch workshop of the Digit_Crops Project



Figure 1: Overview of participants at the Digit_Crops launch workshop



Figure 2: Dr. JONAS MUGABE's presentation of the AGriDI Project



Figure 3: Photo of participants at the Digit_Crops project launch