

SPECIAL NEWSLETTER



OPENING CEREMONY

From **February 4 to 5, 2025**, Abidjan became the epicenter of a crucial meeting on plant health with the official launch of the **Plant Health Convening**, themed: **“Building Synergies to Strengthen Plant Health in a One Health World”**

Organized by the **WAVE Regional Center of Excellence**, in collaboration with **CABI**, and the **Permanent Interstate Committee for Drought Control in the Sahel (CILSS)**, the convening brought together leading experts, policymakers, researchers, and strategic partners committed to protecting plant health and ensuring food security in Africa.

The welcome address was delivered by **Prof. Ballo ZIÉ, President of the University Félix Houphouët-Boigny**, who underscored the critical role of plant health in food security, noting that it is often overlooked despite being essential to agricultural productivity and sustainable development. In his remarks, he congratulated **WAVE** for its contributions and achievements in plant health research and advocacy.



Prof. Justin S. PITA, Executive Director of the WAVE Regional Center of Excellence, highlighted the efforts of this program in plant health research and capacity-building across Africa. Expressing gratitude to governments and partners, he stressed the urgency of collaboration to tackle plant health challenges.



On the other hand, the **United Kingdom Ambassador to Côte d'Ivoire, Her Excellency Catherine BROOKER**, who honored this event with her presence, reaffirmed the United Kingdom's commitment to supporting plant health initiatives in the fight against food insecurity and poverty.

The convening was officially opened by **Prof. Arsène TOKA KOBÉA, Chief of Staff of the Ministry of Higher Education and Scientific Research**, who emphasized the need for stronger partnerships among researchers, academic institutions, and plant health professionals.



KEYNOTES AND INSTITUTIONS' PRESENTATIONS

To set the tone for the discussions, the opening ceremony of the Plant Health Convening was followed by keynote speeches from four institutions:

- **Dr. Adriana G. MOREIRA** from **IPPC (International Plant Protection Convention)** gave a presentation on « Plant health in a One Health world » and underscores the urgent need for a cross-sectoral approach to plant health, ensuring food security and economic stability.
- **Dr. Saliou NIASSY** of the **AU-IAPSC (African Union – Inter-African Phytosanitary Council)** took an in-depth look at the strengthening of phytosanitary health systems and highlighted key initiatives such as **ePhyto** (digital certification), **Phytosanitary Capacity Evaluations (PCE)** and the **African Phytosanitary Programme (APP)**, which aim to boost Africa's phytosanitary frameworks and stimulate agricultural trade while protecting biodiversity.
- **Dr. Sylvain OUEDRAOGO** from **CILSS (Inter-State Committee for Drought Control in the Sahel)** gave a presentation on strengthening plant health in West Africa and the Sahel. He stressed the need to increase regional phytosanitary surveillance, pest control and seed quality certification to improve food security and agricultural resilience.
- **CABI (Centre for Agriculture and Bioscience International)**, through **Dr. Victor CLOTTEY**, made a strong plea for the optimisation of data-based approaches, biocontrol methods and farmer training to strengthen Africa's phytosanitary systems and combat agricultural pests.



Dr. Adriana G. MOREIRA

IPPC (International Plant Protection Convention)



Dr. Saliou NIASSY

l'AU-IAPSC (African Union – Inter-African Phytosanitary Council)



Dr. Sylvain OUEDRAOGO

CILSS (Inter-State Committee for Drought Control in the Sahel)



Dr. Victor CLOTTEY

CABI (Centre for Agriculture and Bioscience International)

One of the major plant health challenges to be underlined by these keynote speeches is **the need for a collective response at regional level**. Faced with climate change, food insecurity and plant diseases, **no single institution can meet these challenges alone**.

This **Plant Health Convening** provided a platform for key institutions to showcase their activities and specify their roles in plant health management across Africa.

- **WAVE** is identifying and mapping plant diseases, setting up early warning systems, and strengthening countries' preparedness to respond to the incursion of exotic plant pathogens.
- **CORAF** coordinates regional research and risk management.
- **CILSS** focuses on governance, early warning systems, and policy harmonization.
- **CABI** focuses on governance, early warning systems, and policy harmonization.
- **AWARD** focuses on governance, early warning systems, and policy harmonization.
- **ILRI** applies cutting-edge bioscience solutions.
- **ICRPE** leads nature-based pest control strategies.
- **IITA** addresses hunger, poverty, and natural resource degradation.
- **CIFOR-ICRAF** focuses on sustainable land management, forestry, and agroforestry.
- **AFRICA RICE** is dedicated to improving rice production and food security.
- **The N.A.R.S** ensures that scientific innovations reach local communities.



WAVE



CORAF



CILSS



CABI



AWARD



ILRI



ICRPE



IITA



CIFOR-ICRAF



AFRICA RICE



N.A.R.S

Together, these institutions form a strong network working towards **sustainable, resilient agriculture and food security in Africa**.

WAVE LABORATORIES VISIT

Building on these discussions, the convening led to an **exclusive visit to the WAVE Regional Center of Excellence's research laboratories**, where scientists showcased groundbreaking innovations in plant health and disease control. Participants had an immersive experience in the **four laboratories of WAVE Côte d'Ivoire**:

Valorization of Symbiotic Microorganisms Laboratory



Key Research Activities :

- Conducting field surveys and sample collection to analyze symbiotic microorganisms beneficial to plant health.
- Sample analysis and characterization of microbial strains for agricultural applications.
- Testing of microbial strains for potential biofertilizer development.
- Capacity-building and training programs for scientists, agronomists, and students.
- Development of biofertilizers using beneficial microorganisms to improve soil health and plant growth.

Virology Laboratory



Key Research Activities :

- Field Surveys: Conducting visual assessments of disease symptoms and severity in crops. Sample collection from infected plants for laboratory analysis.
- Diagnostic Techniques: PCR/qPCR for pathogen detection. ELISA for virus detection. Oxford Nanopore MinION sequencing (under development) for advanced genetic analysis of pathogens.
- Insect Pest Identification: Special focus on cassava whiteflies, known for their role in disease transmission.
- Training Programs: Hands-on training in molecular biology techniques, including: Nucleic acid (DNA/RNA) extraction. PCR and RT-PCR techniques. Primer design for pathogen detection. Analysis of Sanger sequencing results.

Plant Tissue Culture and Propagation Laboratory



Key Research Activities :

- Plant sanitation: Cleaning plant materials to eliminate pathogens before propagation.
- In vitro plant conservation: Preserving plant germplasm in sterile conditions for long-term use.
- Mass production of plants through vitroplant technology, ensuring high-quality, disease-free planting materials.



Service Provision Laboratory



Services Provided :

- Detection of plant pathogens using PCR (Polymerase Chain Reaction) and quantitative PCR (qPCR) for accurate pathogen quantification.
- Routine disease detection using ELISA (Enzyme-Linked Immunosorbent Assay) for plant health diagnostics.
- Plantation sampling for pathogen identification and monitoring.
- Pathogen and insect identification by sequencing, enabling precise species classification.
- Health inspection of farms to evaluate plant health and detect possible disease outbreaks.
- Training and capacity building for students, technicians, and researchers in plant health management techniques.

Products Developed :

- High-quality healthy planting material to support disease-free agricultural production.
- High-performance biofertilizers to enhance soil health and crop productivity.



BREAKOUT SESSIONS AND ALLIANCE SETTING UP



The second day of the convening began with the presentation of **questionnaire findings**. **Professor Angela Eni, Deputy Executive Director of WAVE**, presented key findings from a survey sent to participants, mapping plant health competencies, capacities, and infrastructure across **West and Central Africa**. She emphasized that the success of the alliance depends on **collective action and integrated approaches**, as isolated solutions often fail to address **cross-border plant health threats**.

The next activity was the **Breakout Sessions**, where participants were split into four groups to discuss and brainstorm three key thematic areas:



1. Mapping plant health competencies, capacities, and infrastructure across West and Central Africa
2. Reviewing plant health priorities and main activities in West and Central Africa
3. Developing strategic pathways for inclusive engagement among key plant health practitioners in Africa

Following the breakout sessions, the **wrap-up discussion** focused on establishing a structured, functional, and sustainable alliance to address plant health challenges across the region. The ultimate goal was to establish an **impactful alliance** that drives **collaboration, advocacy, and action-driven policies to improve plant health** in **West and Central Africa**.



Duncan Barker
Adviser at FCDO

Speaking from a donor perspective, **Mr. Duncan Barker, Food and Agriculture Adviser at FCDO**, provided key recommendations for strengthening plant health systems, including:

1. Prioritization
2. Interdisciplinary Inclusion
3. Quick Wins
4. Accelerated Innovation and Delivery to ensure that research findings reach farmers effectively.

SIGNATURE OF NEW PARTNERSHIPS



A key highlight of the convening was the **signing of a strategic partnership agreement** between:

- **WAVE and the CILSS**
- **WAVE and AWARD Fellowships**



WAVE and AWARD Fellowships



WAVE and CILSS

This reinforced their joint commitment to **strengthening plant health initiatives**.

The **Plant Health Convening** was more than just an event, it marked the launch of a movement. A movement laying the groundwork for the **West and Central Africa Alliance for Plant Health**.

The session concluded with a **call to action**, urging stakeholders to continue working together toward a **resilient and impactful alliance** dedicated to building a **more effective and sustainable plant health system** in West and Central Africa.

