

## “ACAI is contributing to the bigger goals of agricultural growth”



Zanzibar

Agronomic recommendations being developed by the African Cassava Agronomy Initiative (ACAI) are contributing to the goals and national priorities of Zanzibar, says Ms. Maryam Abdalla, Principal Secretary of Zanzibar’s Ministry of Agriculture, National Resources, Livestock and Fisheries.

Ms. Abdalla who was the Guest of Honor at the 2019 ACAI annual Review & Planning that was held in Zanzibar (9-12 December) said the ACAI project was “contributing to the bigger goals of Zanzibar’s agricultural growth”.

Located 25-50 kilometers off the Tanzania coast, Zanzibar is a semi-autonomous region in Tanzania whose population depend mostly on cassava and sweet potato as staples.

Over the last 4 years, ACAI has worked with the Zanzibar Agricultural Research Institute, conducting both on-station and on-farm trials on agronomy in cassava and sweet potato farming systems.

“These two crops—cassava and sweet potato are among the most significant sources of food on the island that are locally produced by farmers,” Ms. Abdallah said.

In 2018, Zanzibar launched its second phase of the Zanzibar Agricultural Sector Development Program (ZASDP) in collaboration with actors from different sectors of the economy as part of efforts to improve agricultural productivity, food security and sustainable livelihoods.

Ms Abdallah said the ACAI project was playing a complementary role and significantly contributing to the ZASDP.

“We are happy that in the course of time, initiatives such as the ACAI came up to contribute to the bigger goals for our

agricultural growth,” she added.

She reiterated the commitment of the government to agricultural transformation, adding that Zanzibar would continue to provide the necessary support that would help the ACAI project achieve its goals and by extension the government’s common agenda of improving the lives of people in Zanzibar.

Dr Bernard Vanlauwe, Principal Investigator for ACAI and IITA Director for Central Africa lauded the government of Zanzibar and Tanzania for their support to the success of the ACAI project.

He said the choice of Zanzibar for the annual meeting was driven by the fact that cassava and sweet potato – the two crops ACAI is working on—were very important in the archipelago.

“This makes the work of ACAI in the country relevant,” he added.

Reflections from 2019 ACAI Annual Review & Planning Meeting in Zanzibar archipelago

The 2019 annual review and planning meeting of the African Cassava Agronomy Initiative (ACAI) has come and gone but the memories and scenes are still lingering.

The meeting, which can be described as an indaba of close to 80 experts: agronomists, breeders, social scientists, development partners, farmers and policymakers, provided an ample opportunity for reflection of ACAI’s activities not just for 2019 but also in the last 4 years of the project. Furthermore, it was a time for implementers of the project to look into the future of ACAI with emphasis on 2020 work plan.

Unlike in the past, this year’s meeting focused on dissemination: How dissemination activities took off in 2019, and what momentum is needed for 2020.

As Dr Pieter Pypers, ACAI Project Coordinator simply puts it: “It’s about scaling and dissemination first, and how we have started gaining momentum with going on ground with Akilimo.”



Dr. Pieter Pypers addressing participants during the ACAI meeting in Zanzibar in December 2019



Field visit in Zanzibar provides insights to Akilimo's work on the field

There was also the unveiling of Akilimo—the new face of ACAI. Simply put, Akilimo is an all-in-one agronomic advisory service to support cassava growers with knowledge and recommendations to intensify their cassava-based cropping systems. AKILIMO is built with and for smallholder cassava growers. The name 'Akilimo' is portmanteau of two Swahili words: 'akili', which means smart and 'kilimo', which means agriculture. Akilimo's recommendations are based on knowledge gathered from field trials in over 5,000 farmers' fields. Akilimo combines this data with weather and soil data in spatial crop models to calculate expected yield increases and revenue gain from investments in improved agronomic interventions. These include customized advice on fertilizer application, tillage regime and best planting practices, cost-effective weed control measures, intercropping practices and tailored planting and harvest schedules.

But more than the scaling of Akilimo, there were scientific sessions where the science behind ACAI recommendations were presented. A session by the PhD students on

the ACAI project added glamour and insights to the scientific work of the project.

Christian Witt, Senior Program Officer with the Bill & Melinda Gates Foundation could not hide his admiration for ACAI's approach to agronomy and scaling. In his words: "One thing that stands out ACAI is the science behind what you do."

Back at the foyer, different dissemination partners of ACAI mounted booths with videos and ACAI Decision Support Tools displaying the practice of scaling.

This session, probably the most ingenious by ACAI, was about 'Beyond Rhetoric'. The session focused on 'the how' and 'the tools' that partners are using to disseminate agronomic recommendations to farmers in their different communities. Attempts to judge the best partner was a herculean task based on the competitiveness of presenters at the booths. In the end, everyone was a winner.

A quiz competition under the leadership of former IITA Board Member, Dr Roel Merckx

spiced up the momentous event. Again, no losers: We ALL Know Cassava!

While science and dissemination formed the core of the meeting, organizers also provided space for teambuilding that attracted fun among team members in the ancient Stone Town city.

The team building activity: "Lost in Stone Town" was about members of a team working together to accomplish specific tasks within a given timeframe. The activity showed clearly that without teamwork, little or nothing can be achieved.

At the end of the 3-day event, Dr Alfred Dixon, IITA Director for Development & Delivery expressed confidence that ACAI was showing the way to revolutionize cassava agronomy.

"I am a breeder of cassava ... I spent years breeding but I think it is time to look towards agronomy to narrow the yield gap," he said.

For Dr Bernard Vanlauwe, IITA Director for Central Africa, the 2019 ACAI annual meeting was super-excellent.



Dr. Bernard Vanlauwe addressing participants during the ACAI meeting in Zanzibar



Partners showing video activities at their booths



Dr. Christian Witt shares thought about ACAI



L-R Dr. Alfred Dixon (IITA), Dr. Christine Kreye (IITA) and Bernard Soku (CAVA) in Zanzibar

# Dr Dixon proffers tips on how to achieve sustainability and scaling of agricultural innovations



Dr. Alfred Dixon

The Director of the Development and Delivery Office of the International Institute of Tropical Agriculture (IITA), Dr. Alfred Dixon, has called for multiple linkages and collaborations for the dissemination of agricultural research outcomes.

He made the call recently while presenting his contract review seminar titled “Scaling up and scaling out of agricultural innovations at IITA – Duo for systemic change”

Dr. Dixon stressed that the churning out of innovations to boost agricultural productivity must be supported by strategic partnerships and collaborations for the farmers and the target population to feel the impact.

He explained that while “scaling out” entails linking with the private sector, the farmers and the markets; “scaling up” involves working with the governments and policy makers. He maintained that the role of the government was to create the right policy environment for the adoption of the new technologies by farmers and other stakeholders.

According to Dr. Dixon, IITA cassava projects have been able to reach millions of farmers because of the linkages made with several

stakeholders including government agencies.

He gave an example of the advocacy role that former President Olusegun Obasanjo is playing in cassava transformation and also cited how the African Cassava Agronomy Initiative (ACAI) is disseminating its research outcomes using strategic partnerships in addition to technologies like the Akilimo application, the Six Steps to Cassava Weed Management & Best Planting Practices videos, radio programs, Viamo’s 3-2-1-service, Cassava Matters website and many more.

Dr. Dixon pointed out: “Just having agricultural productivity or increase in agricultural production will not necessarily lead to increase in income for farmers unless it is linked to the markets... You still need the policy environment... You need the private sector, that is, the processors, the agro-dealers, the farmers... And you also need the government to give you the right policies and the powerful backing.”

The renowned cassava breeder further observed that, Africa’s increasing population growth rate poses a huge challenge as agricultural productivity growth rate lag behind. He stressed that with Nigeria’s population expected to hit 400 million

by the year 2050, there is need to double agricultural productivity.

“We are making progress but our productivity is still low,” he worried. “Our population growth keeps increasing. Therefore, we must increase productivity far more than the rate we are doing now to achieve food security.”

He advocated for stronger ties between IITA’s Research for Development (R4D) and Partnerships for Development (P4D), emphasizing, “both are needed to contribute to sustained agricultural transformation for scaling up and scaling out of agricultural innovations.”

“We need R4D to do the science, and P4D to do the scaling. All of them must work together to link up with policymakers, that is, the government... We must link up with the national agricultural research systems (NARS)... We need to link up with the private sector for the scaling out and to the development investors for scaling up because we need the resources to work.”

He concluded by reiterating the need for future projects to consider sustainability and exit strategies before project design and implementation of activities.

# IITA-ACAI trains Liberians on Six Steps to Cassava Weed Management & Best Planting Practices



Participants at the training in Liberia

A team of researchers working under the International Institute of Tropical Agriculture (IITA) led African Cassava Agronomy Initiative (ACAI) has trained about 70 extension service providers drawn across Liberia as part of efforts to transform the Liberian cassava sector.

The extension service providers were trained on the IITA-ACAI developed agronomy toolkit known as the Six Steps to Cassava Weed Management & Best Planting Practices which when applied on the field helps farmers to double their cassava yield per hectare.

The training was conducted by Prof. Friday Ekeleme, ACAI Principal Weed Scientist; Godwin Atser, Digital Extension & Advisory Services Specialist; Dr Peter Kolawole, IITA Head of Mechanisation, and Dr Michael Edet, IITA Country Representative in Liberia.

The training was on the request and in the framework of the Smallholder Agriculture Productivity Enhancement and Commercialization (SAPEC) Project of the Ministry of Agriculture with funding from the Global Agriculture and Food

Security Program (GAFSP) and the African Development Bank.

During the 4-day meeting, participants were exposed to the success/learnings of the IITA Cassava Weed Management Project, the basics of agronomy in cassava farming systems, calibration and the use of the IITA Herbicides Calculator, safe use of herbicides, overview of mechanisation and cassava varietal identification.

SAPEC coordinator described the training as an excellent program that would help transform cassava in Liberia and provide incomes to farmers.

Like Nigeria, cassava in Liberia has been undermined because of poor weed control. Hand weeding which is often carried out by women is not only back-breaking but has also limited farm sizes in Liberia.

Mrs Abibatu, a director with Liberia's research institute (CARI) said: "Please IITA, we need you to support us to tackle weeds. Don't leave us alone."

The training which was held 21-24 October 2019 attracted participants including County Agriculture Coordinators (CAC), SAPEC focal persons, technicians, farmer-based organizations, cassava farmers, National Cassava Production and Commercialization Union and stakeholders with interest in cassava farming, among others.

The participants were drawn from eight of Liberia's fifteen Counties including Margibi, Bong, Bomi, Grand Bassa, Montserrado and Sinoe.

Dr Edet said the workshop was intended to provide participants with basic knowledge in cassava production and especially weed management.

"This is part of what we are supposed to do in the SAPEC Project, we are supposed to empower the farmers, the focal persons, technicians with the knowledge on weed control because weeding consumes a lot of money and as such farmers run away from cassava farms as the result of the huge cost of the control of weed."

This newsletter is produced by African Cassava Agronomy Initiative (ACAI) in collaboration with the BASICS projects.

**Advisers:** Drs Bernard Vanlauwe, Alfred Dixon, Hemant Nitturkar, Friday Ekeleme and Pieter Pypers

**Editor:** Godwin Atser (g.atser@cgiar.org)

**Contributions:** Patrick Akpu and David Ngome