

DG visits Burundi and meets with partners



DG Sanginga (left) is welcomed by the Hon. Rufyikiri Gervais, Burundi second Vice President.

Dr. Nteranya Sanginga, IITA's Director General, was in Burundi for a 3-day visit, 18-20 August, to strengthen collaboration with the Burundi Government and also to meet partners in the Institut des Science Agronomiques du Burundi (ISABU), Ministre de l'Agriculture et de l'Elevage (MINAGRIE), and Agrobiotec Tissue Culture Laboratory. He also visited the Hon. Rufyikiri Gervais, Burundi's Second Vice President, and the Hon. Odette Kayitesi, Minister for Agriculture.

The visit also provided an opportunity for sharing updates on research for development with the IITA-Burundi staff and discussing management and welfare issues.

While receiving DG Sanginga, Ir Dieudonné Nahimana, ISABU Director General, acknowledged the impacts of IITA's presence and activities in Burundi. "IITA's activities align with Burundi's agricultural strategy and development plans... this is very important for Burundi where more than 80% of the population is involved in agriculture and the economy depends entirely on agriculture for domestic growth," he said.

He highlighted some IITA-implemented projects which had benefited the people of Burundi. These included the Consortium for Improving Agriculture-based

Livelihoods in Central Africa (CIALCA), Humidtropics program towards sustainable agricultural intensification, training of ISABU researchers, regeneration of genetic materials of cassava and banana, upgrading of ISABU laboratories with standard equipment and materials, biological control of aflatoxins on grain crops, and pest risk management for major food crops (cassava, banana, potato) in collaboration with other CGIAR centers.

At the Agrobiotec tissue culture lab—one

of the largest private banana tissue culture labs in Africa, with the capacity to produce more than 5 million plants annually—Dr. Sanginga saw that the partnership promoting the concept of tissue culture mother gardens had increased the demand for plantlets and bridged the gap between the farmers and private suppliers. This ensures the distribution of stronger healthy plantlets and true-to-type varieties by disseminating healthy banana planting material from properly managed plots, thereby preventing the spread of pests and diseases and unknown varieties.

DG Sanginga thanked the Burundi Government and said he was impressed by its support to IITA and its activities. "The Government has provided an enabling environment to foster agricultural research and strong partnership with NARS, NGOs, and the private sector. Infrastructure is also available to host CGIAR centers for economic, productive, and sustainable development," he said.

He urged the Government to continue to advocate for more research centers and projects and to also partner with IITA to reduce youth unemployment through the involvement of young people in agribusiness.



DG Sanginga accompanied by IITA-Burundi staff, pose with Hon. Odette Kayitesi, Minister for Agriculture and Livestock (third from right).

Got a story to share? Please email it with photos and captions to Andrea Gros (a.gros@cgiar.org), Katherine Lopez (k.lopez@cgiar.org), Jeffrey T. Oliver (j.oliver@cgiar.org), Catherine Njuguna (c.njuguna@cgiar.org), or Adaobi Umeokoro (a.umeokoro@cgiar.org).

Experts highlight threat of cross-border migration of cassava diseases into Zambia



Meeting participants representing collaborating organizations in Zambia.

Agricultural experts working under the project *Mitigating Cassava Disease Threats in the Eastern Province of Zambia* said that there was an imminent threat of cassava diseases crossing over into Zambia especially from Malawi unless a safety system was immediately put in place. The diseases—cassava mosaic (CMD) and cassava brown streak (CBSD)—if left unchecked, could have severe economic and social repercussions on thousands of Zambian farmers and on the country's thriving cassava industry. This was highlighted during the project's annual review and planning meeting held on 18-19 August in Petauke District in the Eastern Province attended by 32 participants from the project's various collaborating organizations.

The cassava project is one of six under the umbrella of the Zambia Feed -the-Future Research and Development Program; this is funded by the USAID and coordinated by IITA.

"Presently, we are still okay," said Dr Pheneas Ntawuruhunga, IITA cassava breeder and the project's manager,

referring to the state of cassava in Zambia. "However, it's a precarious situation. The enemies—CMD and CBSD—are at the border. It is imperative that these diseases do not make it through; otherwise our cassava farmers will be in a big mess."

"Current production practices of growers make it difficult to maintain the status quo," added Dr Patrick Chikoti, senior plant pathologist with the Zambia Agriculture Research Institute (ZARI). "Cassava growers along the porous border with Malawi continuously exchange planting materials with their cross-border neighbors, who are often also familial relatives. And since our disease surveys show that both CMD and CBSD are prevalent in areas on the Malawi side, there is a very high probability that these planting materials are infected."

"In essence, this project aims to provide that safety system for cassava in Zambia against these diseases. One of our main activities is to test for the presence of CMD and CBSD in the planting materials that farmers are using in the Eastern Province and monitor their movement,"

Dr Ntawuruhunga said. "Our other disease mitigating strategies include raising awareness about these diseases and how they spread, identifying and monitoring possible disease hotspots, multiplying and deploying clean planting materials and resistant varieties at the farm level, and training farmers on disease identification and good cultural practices.

Farmers and all stakeholders in the cassava sector need to stay vigilant to ensure that these diseases do not creep up on us and catch us unprepared."

Already in its last year of implementation, Dr Ntawuruhunga says that the Cassava Disease Mitigation project is on track in achieving its target of ensuring the safety of cassava in Zambia from CMD and CBSD. "Admittedly, there have been challenges along the way given the complex nature of this project," he explained. "But we are still on track to achieve our set outputs and objectives. We will do our best to ensure that when the project ends, Zambian cassava farmers are more knowledgeable and better equipped to handle these disease threats."

IITA acquires local cocoa germplasm to strengthen crop improvement program



Newly acquired cocoa germplasm loaded in a truck bound for IITA.

IITA is working with local, regional, and international partners to strengthen its cocoa improvement program. In June this year, the germplasm of 14 elite parental clones was acquired from the Cocoa Research Institute of Nigeria (CRIN). These are clones used in the development of hybrids.

Additionally, IITA has been successful in acquiring 2,000 cocoa seedlings of a popular hybrid from Osun State and has been involved in a World Cocoa Foundation (WCF)-funded project to fingerprint 10,000 accessions of cocoa germplasm using SNP markers. These accessions came from breeders' collections and seed gardens in five

participating countries (Nigeria, Ghana, Cameroon, Côte d'Ivoire, and Togo).

"This opens an opportunity for IITA to explore and contribute towards the research and development of this crop," said Dr Ranjana Bhattacharjee, Molecular Geneticist, who has been working on cocoa research and development. "IITA is establishing the parental clones to duplicate for safety and for experiments using the hybrid population. I am sure we can plan many more exciting and joint initiatives on this crop with CRIN and other partners."

Ranjana said that IITA is trying to build a strong cocoa research program and that

we are working with some progressive young farmers whose dream is to become the first chocolatiers in Nigeria.

Tied to this, from 11 to 14 November, the WCF African Cocoa Initiative (ACI), in conjunction with the African Cocoa Breeders Working Group (ACBWG), is organizing a symposium (<http://worldcocoafoundation.org/regional-symposium-2014/>) in Ibadan, Nigeria, on the next generation of cocoa research for West and Central Africa. Ranjana serves on the local organizing committee.

The symposium will cover recent innovations in research priorities for cocoa improvement across both the

public and private sectors. It will provide opportunities for sharing experiences, identifying needs, and developing national, regional, and global alliances to unleash the potential of the crop.

It will also provide a platform for consultation and the development of a regional strategy for improving the cocoa sector based on the following: genetic enhancement; pests and diseases, and mitigation of risks of climate change; postharvest handling and quality; mechanization/labor-saving technologies; markets, institutions, and policies; and value chain analysis.

Nigerian engineers join forces with IITA to halt devastation by weeds



Project Leader, Cassava Weed Management Project, Dr Alfred Dixon, with an imported motorized weeding machine flanked by IITA staff and Nigerian engineers.

The battle to control weeds on cassava farms received support from Nigerian engineers who are joining forces with experts from IITA to seek sustainable solutions to the menace.

The team of engineers, drawn from academia, IITA, and the public and private sectors, is exploring mechanical weeding options used elsewhere in the world with the hope of adapting them to African cropping systems.

The team plans to build on the motorized equipment already available in the market by studying their limitations in the African farming context, understanding those limitations, and modifying the equipment for maximum efficiency.

At a meeting in Ibadan to start the collaboration on 13 August, Dr Alfred Dixon, Project Leader for the Cassava

Weed Management Project, described the partnership as a key milestone that would redefine the mechanical control of weeds in crops such as cassava in Nigeria in particular, and Africa in general.

"For us to maximize yield in Africa, we need to mechanize weeding. The challenge before us is to innovate and develop the means to take drudgery away from farmers, and make the farms weed free so that the crops will grow and express their full potential," Dr Dixon said.

Weeds account for between 50% and 80% of the total labor budget of cassava growers and are major disincentives to African farmers. As traditional agriculture is still predominant, women and children in Nigeria have the main burden of weeding, investing between 200 and 500 hours annually in clearing one hectare of

cassava to prevent economic root losses. The drudgery involved in weeding places a yoke on women, compromises productivity and, more importantly, jeopardizes the education of children aged 5-14 years as most are forced out of school to assist their parents.

Dr Dixon said unless solutions to the problem were made available, African farmers would not be able to increase their farm sizes and enjoy the gains of agricultural growth. "They can plant only what they can weed," he concluded.

Prof Olawale John Olukunle, Head, Department of Agricultural Engineering, Federal University of Technology, Akure (FUTA), welcomed the proposal to work jointly with the Nigerian experts through the IITA Cassava Weed Management Project, and praised the Institute's efforts towards addressing

the problem of weeds in cassava and other African crops.

The Cassava Weed Management Project was launched early this year and is confronting the problem on several fronts including the use of best-bet agronomic practices by combining improved varieties with proper planting dates, plant populations, plant nutrition options, and also focusing on intercropping and tillage research. The integrated approach of the project also includes the use of herbicides that meet globally accepted conventions and have safety thresholds appropriate for smallholder farmers.

The project intends to widely share knowledge on cassava weed control with farmers so they can make informed and better choices in controlling weeds on their farms using labor-saving options.

Africa RISING Malawi fast tracks the development of communication products through a 'writeshop'



Plenary discussion on development of research products during the Africa RISING-Malawi writeshop.

Partners working under the Africa RISING project in Malawi gathered in the scenic township of Mangochi in the southern region on 28-31 July for a 'writeshop' to fast track the development of scientific and extension materials based on the wealth of research information generated by the project.

About 40 multidisciplinary participants—from agronomists and agricultural economists to GIS experts and communication specialists—working together to develop concepts and seminal research products met at Club Makokola for the writeshop. The products ranged from journal articles and online GIS atlases to information, education, and training materials for use in farmers' field schools and in extension.

"The main idea is to synthesize and

package knowledge that has been gained to date by Africa RISING in Malawi," said Dr Regis Chikowo, Senior Research Associate with Michigan State University (MSU) and IITA/Africa RISING's focal point person in Malawi. "We intend to produce simple products that can be readily used by farmers and other stakeholders in different value chains. The goal of this exercise is to promote the scaling out of sustainable intensification that is relevant to the production circumstances of smallholder farmers in Malawi and, possibly, elsewhere."

"Getting these people from various fields of specialization working on the same project in one place not only expedites the production process but, more importantly, allows the cross-fertilization of ideas, thereby adding more value to the research

and extension materials produced," explained Dr Mateete Bekunda, Principal Investigator for Africa RISING in Eastern Africa.

During the 4-day writeshop, the participants produced outlines and drafts of two journal articles, and a narrative on declining established lands and extensification using a large archive of remotely sensed data; three scientific papers; one policy-technical brief on "doubled-up" legumes; three crop and technology fact sheets on soybean, groundnut, and "doubled-up legumes"; one digital GIS atlas for remote sensing, four extension materials on crop-livestock interactions, and one training module on soil nutrient intensification for use in farmers' field schools.

The participants also developed a workplan for completing the materials, indicating responsibilities and timelines. "I am very excited about the proposed variety of materials," Dr Mateete added. "We are all looking forward to the tangible products, which could be realized within the next 3-6 months. These could really have a positive impact on the realization of Africa RISING's mission and vision not only in Malawi but in other countries where the project operates as well."

This event in Malawi came on the heels of a similar activity held by Africa RISING partners in Babati, Tanzania, 21-24 July (see related story in IITA Bulletin Issue No. 2238).

Financial Management Capacity Building: meeting held for SARD-SC accountants and others

To facilitate smoother fund management and easy financial reporting of the four commodities (maize, rice, wheat, and cassava) under the SARD-SC project, a 3-day session on financial management was held for accountants, some commodity specialists, monitoring and evaluation specialists, procurement specialists, and other staff from AfricaRice, ICARDA, and IITA. The training took place 23-25 July at the Africa Rice Center, Cotonou, Benin Republic, and was organized by the SARD-SC project. Oluseyi Fashokun, IITA/SARD-SC Project Accountant, facilitated the meeting.

The training aimed to, among other things, familiarize project staff the required processes and format of financial reporting and the fund management guidelines of the African Development Bank, the sponsor of the SARD-SC project. The use of proper reporting procedures and templates will aid in the timely submission of fund requests, accountability, and hence timely execution of the project. The discussion centered on finance and issues relating to processes and procedures inhibiting speedy financial reporting.

Some of the issues discussed and resolved include the following: Acceptable format for project financial statements, modality for timely project financial reporting acceptable to AfDB, process involved on reimbursement request, process and procedure for special accounts replenishment, process and procedure for direct payment request, external audit requirements, next external auditor's institution visit and work schedule, and plans and brainstorming for the next replenishment

Dr Chrys Akem, Project Coordinator, chaired the last day of the meeting and discussed issues as well as upcoming events in the year such as the following: preparation for the project's mid-term review, relevance and validity of the Project Implementation Manual, content and volume of all reports required by AfDB for the project, SARD-SC Project web site, AFDB's review and last External Auditor's Report.



Participants at the three-day SARD-SC project Accountants training.