IITA
Research to Nourish Africa
CGIAR

No. 2292 7–11 September 2015

THE BULLETIN

Former IITA researcher inaugurated as AfDB President

Former Nigerian Minister of Agriculture and Rural Development and IITA researcher, Akinwumi Adesina, was formally inaugurated as President of the African Development Bank (AfDB) on 1 September at Abidjan, Côte d'Ivoire,

IITA Director General Nteranya Sanginga graced the investiture ceremony as a mark of solidarity with the AfDB, which provides funds to IITA to support numerous projects. Recently, the Bank funded IITA's Agricultural Transformation Agenda Support Program Phase 1 (ATASP-1) project designed to help create additional income opportunities for many producers and entrepreneurs in the agricultural sector in Nigeria, and provide about 120,000 jobs along the value chain of priority commodities with a particular focus on young men and women.

DG Nteranya Sanginga (rightmost) and other guests with Akinwumi Adesina (second from right) during the inauguration.

During his speech at the inauguration, the new President pledged to "expand opportunities and unlock potentials—for countries, for women, for the youth, for the private sector, for the continent." Adesina also vowed to vigorously pursue and implement five priorities as AfDB President.They are: Light Up and Power Africa; Feed Africa; Integrate Africa; Industrialize Africa; and Improve quality of life for Africans.

As Minister of Agriculture, Adesina was instrumental in promoting research outputs from IITA especially in the cassava transformation project of Nigeria and also supporting the IITA Youth Agripreneurs to tackle youth unemployment in Africa. Adesina had commended the Institute for developing many improved technologies which have brought about transformation in the crop production systems across sub-Saharan Africa. Specifically, he cited IITA's interventions on cassava, maize, soybean, and aflasafe™, the biological control product for aflatoxin management, as pivotal in transforming economies across Africa.

IITA intends to continue to synergize efforts with the Bank towards achieving food security and lifting millions of Africans out of poverty.

IITA holds workshop for implementing its genetic improvement strategy

"By 2020 IITA should have raised crop yields by 60%, raised farm income by 50%, removed 11 million Africans out of poverty, reduced the number of malnourished children by 30%, and revitalized 7.5 million hectares of degrading farm lands."

The strategy to achieve this vision for crop improvement was the crux of the deliberations by over 55 IITA scientists (see photo below) from the Southern, East, West, and Central Africa hubs who converged in Ibadan on 8–10 September.

The scientists came together to discuss approaches for implementing IITA's Genetic Improvement Strategy for 2015–2020 as a means of responding rapidly to the food and income security needs of smallholder farmers in Africa.

The discussions centered on highlighting the current status of breeding programs in the Institute and the challenges, opportunities, and risks to be considered in the development of a roadmap to full strategy implementation.

During the opening, Ylva Hillbur, Deputy Director General, Research for Development, underscored the timeliness and relevance of the workshop, noting that genetic improvement of staple crops was a key component of the work of IITA that will have an impact on the food systems of the region.

"This workshop is extremely important, happening at a time when the Institute really needs to fashion out realistic ways of implementing our strategies… Several scientific breakthroughs in cassava, banana, and biocontrol led participants at a convening organized by the Bill & Melinda Gates Foundation to select IITA as the lead for the crop arm of a proposed initiative for the application of modern biosciences for crop and animal improvement in West Africa...Our focus now should be on knowing what the targets, priorities, and the needs are, defining IITA's role in this regard, initiating effective plant breeding programs, showing progress, and communicating our approach effectively," said Hillbur.

Robert Asiedu, Director, West Africa and for Crop Improvement and Biotechnology, highlighted the challenges in increasing the yields of staple crops, building resilience to biotic and abiotic stresses, increasing nutrient density, and improving the suitability of staple crops to new utilization pathways. He enjoined scientists to focus on these areas during their deliberations.

He said, "Yield resilience and quality of staple crops contribute to food and nutrition security of Africans as well as the sustainability of agriculture but many African farmers still use hoes and machetes, own small plots, and undertake limited mechanization. Effective plant breeding and genetic improvement efforts therefore come into play to achieve the targets we set for ourselves."

Scientists presented and discussed emerging and ready-to-go technologies aimed at improving crops of nutritional and economic importance for the African region.

IITA pushes improved soybean technologies at Malawi Agriculture Fair

Malawi's Minister of Agriculture, Allan Chiyembekeza, has urged players in the agriculture sector to urgently bring modern technology to farmers and help Malawi move from a predominantly food-importing importing nation to an exporting one.

The Minister spoke at the opening of the 12th National Agriculture Fair held on 27–29 August with the theme "Accelerating agriculture for economic transformation." The fair provided IITA and participating organizations an opportunity to showcase new agricultural technologies to farmers, processors, consumers, producers, suppliers, and other partners.

"As government, we laud the wide participation of different players in agriculture at this fair as it shows commitment to expose farmers to emerging technologies, promote partnerships and linkages, share ideas, experiences, and innovations in agribusiness ventures, and facilitate their access to knowledge. We are committed to increase agro-income for farmers to realize economic growth," he added.

Concurring with the Minister is the N2Africa Project National Coordinator, Lloyd Phiphira, who said IITA is complementing government efforts by encouraging innovations and promoting improved soybean and other legume varieties. In fact, he says there has been substantial response from farmers especially in the Central Region in adopting new legume technologies. However, he cautioned that a lot still needs to be done to promote adoption of such technologies in other regions.

Olivia Kacheyo of IITA-Malawi handing out a soybean product to a visitor, who was also trying out the soy milk.

Also showcased at the IITA stand was the new USAID-funded Feed-the-Future (FtF) Malawi Improved Seed Systems and Technologies project which aims to increase soybean production and productivity through a sustainable improved seed system.

Additionally, IITA exhibited different improved legume technologies and derived products such as soymilk, soy cake, soy vegetables, soy flour, cowpea fritters, groundnut snacks, and many other products. Institutional and project information materials were also distributed to visitors.

Compared to the 2014 Agriculture Fair, which was also organized by the Malawi Confederation of Chambers of Commerce and Industry, more people visited the IITA pavilion this year with the recorded number exceeding 800. This, according to Phiphira who participated in both exhibitions, shows that people are becoming more appreciative of IITA's work in Malawi.

Got a story to share? Please email it with photos and captions every Wednesday to 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).

Forging partnerships with NARES from the Gambia

Top officials from the National Agricultural Research and Extension Systems from the Gambia who attended an international conference at the University of Ibadan, visited IITA on 26 August.

The delegation comprising Ansumana Jarju, Director General, National Agricultural Research Institute; Sait Drammeh, Director of Agriculture, Ministry of Agriculture; and Duto Sainy Fofana, Principal Veterinary Officer, Ministry of Agriculture, met with Alfred Dixon, Head of IITA's Partnerships Coordination Office, and discussed ways to strengthen partnership between IITA and the Gambia.

Both parties renewed their commitment to work together for a hunger-free continent by harnessing agricultural and natural resources.

Discussions with the Gambia intensified after the country invited Dixon and James Whyte (IITA Advisor to Sierra Leone Agricultural Research Institute) recently. The two-person team had explored areas of collaboration with the country last year.

The Gambian delegates at the IITA Cassava Weeds Management office.

Dixon explained: "One area where IITA and the Gambia could collaborate is on capacity building. We need to build the capacity of the national partners there and especially the younger scientists. A second area is the exchange of germplasm. The Gambia needs improved crop varieties to raise agricultural productivity."

Located in West Africa, the Gambia is mostly surrounded by Senegal with a short strip of its coastline bordered by the Atlantic Ocean at its western end. It is the smallest country on mainland Africa. Godwin Atser, Communication & Knowledge Expert, Cassava Weeds Project, took the team around the campus.

AfricaYam to tackle effects of climate change through modern yam breeding techniques

In line with the capacity building output of the AfricaYam project on strengthening the yam breeding programs in Benin, Côte d'Ivoire, Ghana, and Nigeria, a one-week, hands-on training workshop was organized at IITA, Ibadan on 24–28 August. The training, which involved 21 participants from the four project countries, provided an opportunity to share experiences and to promote the adoption of modern breeding techniques.

In his opening remarks, Robert Asiedu, IITA Director, Research for Development (West Africa) advised participants on the need to identify yam varieties with good qualities and yield that can improve the productivity of farmers who face the threats of climate change as they lose farm land due to poor soil conditions and erratic rainfall. He noted that yam may become less competitive if breeders do not produce varieties that meet the needs of consumers.

David De Koeyer, AfricaYam Project Leader, delivered a presentation on the objectives and expectations of the workshop and emphasized the need for partners' cooperation in the project. The training session featured presentations facilitated by a team of IITA scientists and technicians on botany and breeding of yam, basic yam agronomy, physiological and morphological characterization of yam, leaf sample collection and shipping for DNA extraction, parent selection for crossing, barcoding, and geo-referencing in breeding.

Antonio Lopez-Montes, IITA Yam Breeder (center) with the training participants in the field.

Hands-on, practical training was also provided with visits to yam fields where participants tried their hand in pollinating male and female yam flowers, and screenhouses with yam seedlings at various stages of growth and where vine multiplication was demonstrated. The participants gained some experience with disease phenotyping with virus and anthracnose scoring in the field.

To round up the training session, participants visited the bioreactor and aeroponics system developed under the Yam Improvement for Income and Food Security in West Africa project as rapid propagation technologies for yam multiplication.

IITA and PICS 3 conduct ToT for extension officers in Ghana

As part of preparations to commence activities of the Purdue Improved Crop Storage (PICS) bags Project (formerly Purdue Improved Cowpea Storage bags), three training-of-trainers (ToT) workshops were organized on 18–21 August for 148 extension agents in Ejura (Ashanti region), Techiman (Brong Ahafo region), and Tamale (Northern region) in Ghana.

Project staff demonstrates the use of PICS bags to training participants.

The PICS bag provides farmers with a chemical-free, simple, and cheap method of storing food crops so that they can preserve and sell farm produce when the price is high and thus make more money. The bags are made up of two layers of polyethylene, surrounded by a third layer of woven polypropylene, thus creating a hermetically sealed environment in which harvested grains are stored. This oxygen-deprived environment proves fatal for weevils found in stored grains thereby reducing postharvest losses due to weevil infestation. The storage bag was originally developed to store cowpea but is now proven to be equally effective for other cereals such as maize, rice, and sorghum.

These training equipped the extension agents with the requisite knowledge and skills about the PICS technology, with the expectation that they will show the efficacy of the technology to farmers in 1000 rural communities located in the Ashanti, Brong Ahafo, Northern, Upper East, and Upper West regions of Ghana between September 2015 and June 2016. At least 5000 farmers are expected to conduct demonstrations with PICS bags using various crops during this storage season in these regions of Ghana.

During the training, participants were exposed to topics such as the life cycle and behavior of grain eating weevils, the history of the development of the technology, a practical demonstration of how to use the PICS technology, as well as the economic and health benefits associated with adopting PICS.

The facilitators of the training were Tahirou Abdoulaye, IITA Impact Economist; Joan Fulton of Purdue University; Mumuni Abdulai of the Savannah Agricultural Research Institute (SARI), and Onu Anyebe of IITA-Kano.

IITA leads the Ghana component of the project in partnership with the Adventist Development and Relief Agency (ADRA), Rural Education and Agricultural Development International (READI), Presby Agricultural Services (PAS), Professional Network (ProNet), and the Ministry of Food and Agriculture offices in the regions.

Indian envoy to Nigeria visits IITA headquarters

The Indian High Commissioner to Nigeria, A.R. Ghanashyam (in photo below, center, in light colored suit), accompanied by M.S. Kanyal, First Secretary (third from right), visited IITA Ibadan on 28 August to establish ties and discuss potential collaboration with the Institute. The visitors were received by DDG Ylva Hillbur and R4D Director Robert Asiedu and also taken on a guided tour around the facilities in Ibadan.

Announcements

- TROPENTAG (day of the tropics) 2015, Humboldt University, Berlin, 16-18 September. IITA will have a special session to present its research portfolio and an exhibition to showcase its work as a CGIAR research institution.
- Africa RISING Program Strategy Workshop, Mali, 6-8 October.
- Third Annual CEO Forum, private sector and government assembly to end poverty and hunger in the world by 2030 in line with the overall aim of the Sustainable Development Goals, 7 October, Offices of Ford Foundation Lagos.
- R4D Week, IITA Ibadan, 22-28 November.
- Joint World Cowpea and Pan-African Grain Legume Research Conference 2016, co-organized by IITA and the Feed-the-Future Legume Innovation Lab, Zambezi Sun Resort Hotel, Livingstone, Zambia, 28 February to 4 March 2016. For more information, visit the conference website or download the conference announcement.