



## Agricultural scientists: Systems research offers solutions to tackling poverty, hunger, and environmental degradation

Agricultural scientists and researchers from over 30 countries met this week at IITA headquarters in Ibadan, Nigeria, for the [International Conference on Integrated Systems for Sustainable Intensification in Smallholder Agriculture](#).

Conference speakers and exhibitors, representing the implementing partners of three systems research programs of the CGIAR Consortium presented strategies and results that respond directly to the Sustainable Development Goals (SDGs) outlined by the United Nations, and have a marked impact on the lives and livelihoods of smallholder producers and consumers of developing countries.

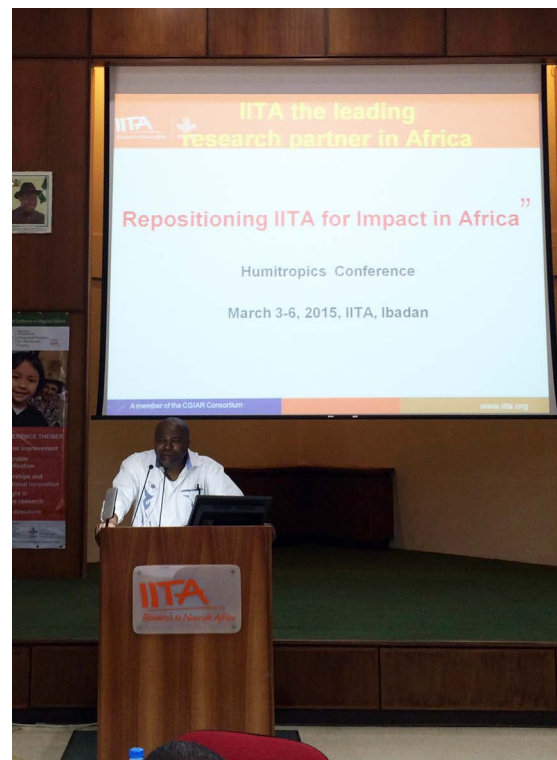
The conference aimed to: (1) demonstrate and share experiences and evidence that show the effectiveness of Systems Approaches in agriculture research in contributing to livelihoods and natural resource management; (2) share methods, tools, and research approaches used in Systems Research; (3) explore opportunities for new partnerships in Systems Research for development; and (4) identify opportunities for cross-system learning, and methods to do this effectively.

The [conference](#) covered the following research themes: integrated systems improvement and sustainable intensification; sustainable intensification in practice; partnerships and institutional arrangements for innovation, scaling up, and impact; and foresight in systems research for development impact.

Among the CGIAR research managers who attended this multidisciplinary event were Dr [Nteranya Sanginga](#), Director General of IITA; Dr [Kwesi Atta-Krah](#), Director, CGIAR Research Program on Integrated Systems for the Humid Tropics (Humidtropics); Dr [Frank Rijsberman](#), CEO of the CGIAR Consortium; and Dr [Ann Tutwiler](#), Director General of Bioversity International. Other key partners present at the meeting were Dr [Yemi Akinbami](#), Executive

Director, Forum for Agricultural Research in Africa (FARA) who took part in the opening program on 4 March; Prof [David W. Norman](#), Professor Emeritus, Kansas State University; Dr [Bernard Hubert](#), President, Agropolis International; Dr [Andy Hall](#), Agriculture Flagship, Commonwealth Scientific Industrial and Research Organization (CSIRO); Dr [Dennis Garrity](#), UN Drylands Ambassador & Senior Fellow, ICRAF; Dr [Linley Chiwona Karltun](#), Swedish University of Agricultural Sciences; among many others.

According to Dr Atta-Krah of the [CGIAR Research Program on Integrated Systems for the Humid Tropics](#) (Humidtropics), “The conference offers a platform for sharing of experiences and research results in systems research for development, from different countries and regions of the world. It provides a reminder of the challenges facing global agriculture and food systems, and the solutions that integrated systems research offers as part of a global effort to tackle poverty, hunger and environmental degradation.”



*DG Sanginga addresses participants at the Systems Research Conference in IITA, Ibadan.*



*Keynote speakers during the media briefing.*

The event featured 45 plenary and oral presentations, and over 50 poster presentations, representing one of the most important and stimulating international platforms for knowledge exchange on the latest scientific results, developments and experiences in the agricultural systems research for development sector.

The conference called upon the donor community, agricultural research institutions, partners in the wider research and development community, the private sector, as well as policy and decision-makers to work jointly and strengthen the use of systems approaches in agricultural research for development, to further advance the contribution of science to the international community's commitment to end hunger completely by 2030.

The international meeting was organized by the IITA-led Humidtropics, in partnership with the [CGIAR Research Program on](#)

[Aquatic Agricultural Systems](#) (AAS) and the [CGIAR Research Program on Dryland Systems](#) (Drylands).



*Participants at the opening program of the Systems Research Conference.*

## **African Development Bank, Nigerian Government, and IITA join forces in developing a youth scheme for food security and income in Africa**

The African Development Bank (AfDB), the Federal Ministry of Agriculture and Rural Development (FMARD), and IITA have [launched](#) the Agricultural Transformation Agenda Support Program Phase 1 (ATASP-1) today, 6 March at IITA's office in Abuja, Nigeria.

The ATASP-1 is financed by AfDB to the tune of US\$170 million and aims at creating additional incomes to an increased number of producers and entrepreneurs in the agricultural sector in Nigeria by providing about 120,000 jobs along the value chain of priority commodities. An additional 20 million tons of key commodity food crops including cassava, rice, and sorghum will be added to the domestic food supply each year.

A significant part of the project is developing outreach models with young entrepreneurs in agriculture, "IITA youth agripreneurs". This component will be implemented by IITA which has established a Youth Agripreneurs scheme at its Headquarters in Ibadan, Oyo State, and in DR Congo, Kenya, Tanzania, and Zambia. The Agripreneurs are promoting agriculture among other young people in their regions through peer education, training and demonstration of agricultural best practices, and business skills in value chain development.

"Many young people are migrating to cities in search of a better life. We need to create opportunities to engage them productively in agriculture and other business enterprises," said Dr Nteranya Sanginga, IITA's Director General during the launch in an interview with reporters.

"This project aims to build on the youth model developed in IITA to change mindsets of young men and women and gainfully engage them in agriculture," he added.

AfDB's Chief Country Program Coordinator, Andoh Mensah, explained that the project would capitalize on IITA's participatory approach and would train and retrain young men and women along the commodity value chains. According to him, the ATASP-1 is part of the Bank's efforts in contributing to the Agricultural Transformation Agenda (ATA) of the Government of Nigeria, which aims to create 3.5 million jobs along key crop value chains.

The Minister of Agriculture and Rural Development in Nigeria, Dr Akinwumi Adesina underlined that "Africa's future millionaires and billionaires will make their money from agriculture," as the governments marshal out plans to unlock wealth from the soil. He estimates that the bulk of this new wealthy population will be made up of young people adept at creating jobs for millions in each African country and bringing business opportunities to rural communities all across the continent. The Minister further enjoined the youth to stop seeing agriculture as a tool for development but as a business.

He reasoned that agriculture is now an exciting sector. "Today, major local and international investors are investing in this sector. The number of seed companies alone has risen dramatically and the banks are lending to the sector more than ever before."



*Akinwumi Adesina, Minister of Agriculture (in glasses, center) and DG Nteranya Sanginga (in pink tie) with guests during the stone-laying ceremony in IITA, Abuja.*

Adesina is among the five candidates who have been shortlisted to contest the presidency of the African Development Bank. The AfDB Board said the selection of the most eligible candidates to succeed President Donald Kaberuka was done by a Steering Committee of the Board of Governors at a meeting held in Abidjan on 11 February 2015. Ethiopia's Finance Minister, Sufian Ahmed; Cape Verdean Finance Minister, Cristina Kamara; the current Vice President of the Islamic Development Bank, Birama Sidibe; and Chad's Finance Minister, Kordjé Bedoumra have also been shortlisted for the elections slated for May 2015.

## CGIAR top managers visit IITA Business Incubation Platform

While participating in the [Humidtropics conference](#) on systems research this week, CGIAR top managers [Frank Rijsberman](#) and [Ann Tutwiler](#) found some time to visit IITA's Business Incubation Platform (BIP). They were accompanied by IITA Board member [Roel Merckx](#) and IWMI's Africa Director [Timothy Williams](#), and welcomed by the IITA's DG [Nteranya Sanginga](#) and the [IITA Youth Agripreneurs](#). The Agripreneurs are promoting agriculture among other young people in the region through peer education, training, and demonstration on agricultural best practices and business skills in value chain developments.

"All over Africa, many young people are migrating to cities in search of business opportunities, leaving behind an increasingly ageing population. The challenge is to create business opportunities for productive activity in agriculture and non-farm enterprises, for increased food security but also for combating youth unemployment," said Dr Sanginga.

CGIAR CEO Rijsberman congratulated IITA for "pioneering the agripreneur approach" and underlined that a precise investment model on integrating the challenge of youth unemployment into research on food security had not yet been established in the consortium. Bioversity DG Tutwiler was in particular pleased that the Agripreneurs were working on nutritional cash crops, vegetables, and soy milk, and were investing in fish farming.

"When we decided in CGIAR on our main crops, we might have forgotten the nutritional values that vegetables and fish can bring to a diet – not only to improve food deficiencies, but also as a measure against obesity," she said. Dr Sanginga emphasized that the annual return on investment in the fish ponds managed by the IITA Youth Agripreneurs was about \$400,000.

The goal of the BIP [aflasafe](#) plant and laboratories is to develop cheaper, more effective formulations and manufacturing methods for a product which is combating the deadly [aflatoxins](#) found in major staple crops in Africa. The plant is compatible with African farming and business models and can easily be transferred to the private sector. The aflasafe plant is also busy manufacturing the urgently needed product



*DG Nteranya Sanginga explaining about the soybean inoculant Nodumax, IITA Business Incubation Platform.*

to answer increasing requests from all over the continent. On the day of the visit, the plant was about to produce 8 tons of aflasafe to be air-shipped to Kenya in the evening.

"This is our answer to a request from the Kenyan Government," explained [Lawrence Kaptoge](#), the aflasafe plant manager. "In Kenya we need to fight aflatoxins now because strains of the plant fungus have already killed many people, as well as increasing the cases of deadly diseases, such as liver cancer."

The plant can produce up to 40 tons of aflasafe a day but the BIP's main goal is to get interested parties to invest in plant construction and laboratories all over Africa. More plants and reference laboratories are expected to be built, as the aflatoxin strains are different in each region; they need to be identified before the right aflasafe product can be developed and manufactured. "The many existing requests from countries such as Kenya, Nigeria, Zambia, or Senegal prove that the BIP has developed a business opportunity that improves food safety and might help to save many lives in Africa," said Kaptoge.

[NoduMax](#) is a new legume inoculant for soybean that was recently developed at BIP with the award-winning [N2Africa Project](#). Each package of NoduMax costs about \$1.03 to produce and, with

manufacturer's and retailers' inputs, is expected to be sold for about \$2.60, sufficient to inoculate 10 to 20 kg of soybean seeds. The product compares favorably to inoculants produced in other countries where product quality is closely regulated. Product development and efficacy testing continue and the first packages of NoduMax intended for sale are now being produced. The registration of the product for commercial distribution in Nigeria is under way and the first peak production run is just starting as 16 tons of the soybean inoculant are to be produced by April 2015.

The visitors were visibly impressed: "A new vision, passionate people, and promising developments – there is huge potential in IITA's approach for developing the BIP," concluded Dr Rijsberman.



*IITA Business Incubation Platform.*

*Watch out for the special issue on Women's Day and Integrated Systems Conference early next week.*

# Female scientists win the Young Rice Scientists Award for research on consumer preferences

Two female scientists, [Gaudiose Mujawamariya](#) and [Esther Leah Achandi](#) from AfricaRice Tanzania, won the Young Rice Scientists Award at the recently concluded [Fourth International Rice Congress 2014](#) in Bangkok, Thailand. The [SARD-SC project](#), funded by the [African Development Bank](#), sponsored their participation at the award ceremony.

The awards were presented to the two economists and their colleagues Rose Fiamohe and Maimouna Ndour in collaboration with their partners in the national agricultural research and extension systems for their work on throwing light on consumers' preferences for rice in the urban centers of Dar es Salaam and the market participation of smallholder rice farmers in the country, using a double hurdle analysis.

Gaudiose Mujawamariya, an economist, and Esther Leah Achandi, a research assistant for the rice value chain at [AfricaRice](#) in Dar es Salaam, received the award for their work on [Demystification of consumer preferences for rice in urban areas of Dar es Salaam](#) and [Market participation by smallholder rice farmers in Tanzania: a double hurdle analysis](#). The researchers used the "experimental auctions approach" to investigate how consumers value rice quality characteristics and assess the determinants of the "willingness-to-pay (WTP)" for alternative quality aspects of rice. "Good" rice production in terms of quantity and quality and the existence of



*Ms Gaudiose Mujawamariya and Ms Esther Achandi being honored with the Young Rice Scientists Award at the Fourth International Rice Congress 2014 in Bangkok, Thailand.*

market and road infrastructure enhance the participation of farmers in markets. <http://africarice.blogspot.com/2014/05/breaking-myth-of-urban-consumers-rice.html>).

Ms Mujawamariya and Ms Achandi indicated their pleasant surprise at being considered for the 'Award'. "It has made us realize that we can contribute to the national, regional, and global rice science agenda and this has boosted our enthusiasm at work. The award has further made us realize that guidance,

contributions, and support from AfricaRice colleagues are critical to teamwork and success. We are very grateful for the generous support of the SARD-SC project that has enabled us to contribute to rice research for development by offering us a platform for knowledge sharing with like-minded people and making contributions to food security through rice research. We are encouraged and looking forward to more interesting challenges and opportunities," they said.

## Events

**External Midterm Review of Africa RISING East/Southern Africa Project**, 22 February to 16 March, Tanzania and Malawi

**International workshop on BBTV Learning Alliance**, 9-13 March, IITA Conference Center, Ibadan, Nigeria

**Regional/Station Administrators Meeting**, 16-17 March, Vigna Room, IITA-Ibadan, Nigeria

**African Cocoa Breeders' Working Group meeting**, 9-11 March 2015, Ikeja Guest House, Lagos, Nigeria

**Hands-on training for breeders to handle genotyping data using SNPs**, 9-11 March 2015, IITA-Ibadan, Nigeria

**18th International Association of Research Scholars and Fellows (IARSAF) Annual Symposium**, 23-24 March, IITA Conference Center, Ibadan, Nigeria

**N2Africa-Nigeria 2015 Annual Planning Meeting**, 24-25 March, Hotel De Bently Utako District, Abuja, Nigeria

**Annual Review and Planning Meeting** of the Africa RISING West Africa Project, 24 and 25 March, Mensvic Hotel, East Legon, Accra, Ghana

**Women Empowerment Platform**, 25 March, Vigna Room, IITA-Ibadan, Nigeria

## Announcement



The IITA Women's Group will host the **International Dinner** on 6 March at the International House. The fundraiser will start at 7:30 pm.

Attractions include the IITA School Dance Troupe, raffle draws, good food from the Humidtropics region, dancing, and lots of fun.

Tickets are on sale at the Wellness Center (salon and gym), I-House, CRC, IITA School, and Cappa Bar.

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