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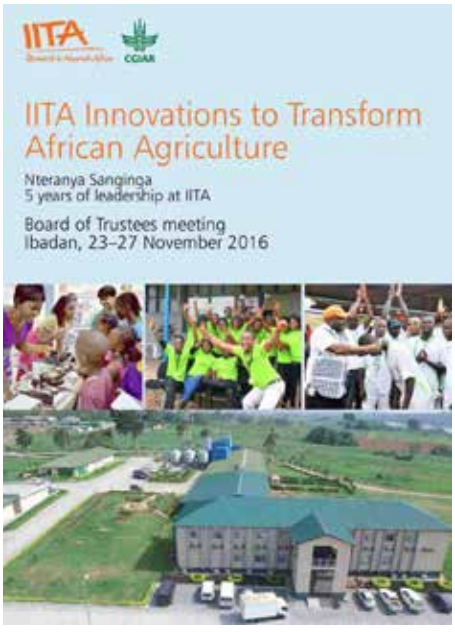
DG Sanginga details blueprint of operations for the next five years

DG Nteranya Sanginga laid out the Institute's priorities for his second term, saying that the move is necessary to correct the imbalance resulting from the influx of projects, funds, staff, and partners from 2011 to 2016. These were laid out in his recent report to the IITA Board of Trustees.

According to the report, for the next five years, IITA's operations need to be "reorganized to manage and operate efficiently for delivery and impact". This will be achieved by addressing operational inefficiencies for better delivery both in support services and R4D, and positioning IITA's support system to manage new mega projects.

Already Management has rolled out a new organizational structure to show some of the changes.

"One of the major objectives in the reorganization of IITA is to strengthen the corporate services and finance functions to be able to improve operational efficiencies in support of improved delivery of IITA's technologies and build a support system to manage mega projects and transform IITA into the capital of Research for Development in Africa. In the process IITA will evaluate and strengthen human resource capabilities across the organization and build capacity across the upper levels of IITA management, create an environment where scientists work with minimum disruption, and facilitate autonomous hubs where decision making rests with the hub director," DG Sanginga said.



He also noted that IITA must increase its funding support to about $200 million per year over the next five years to deliver targeted impacts on African agriculture.

"This funding strategy recognizes both the urgency of immediate action and the importance of longer term investment for lasting solutions. It both maintains a critical mass and diversity of scientists in Africa and improves the laboratory facilities to cutting edge levels and increases the efficiency of our operations…IITA's major tasks are to launch an aggressive resource mobilization effort and restructure the organization to have impact in this new and changing environment, especially in Africa. Applying country and donor priorities therefore provides the most viable basis on which to make decisions… engaging the private sector and young entrepreneurs, demonstrated capacity development, and transparent technical and financial reporting—all reflective of IITA's four strategic pillars of impact, quality of research, partnerships, and internal organization."

DG Sanginga

In addition to aligning the Institute's R4D programs to CGIAR CRPs, other identified priorities include fast tracking research investment and delivery of successful products such as Aflasafe, NoduMax, and GoSEED as well as revitalizing research priorities, and developing country specific strategies for implementing projects.

He expressed optimism that these goals will be achieved in the stipulated time.

"The second stage of our journey has just begun. I have no doubt that this next journey would be a better one. I am optimistic that everything will only get better. I am looking forward to journeying through the next 5 years with my ship and crew.

Next year is IITA's 50th year—a big year. These are my priorities: that we succeed in getting the two mega projects—TAAT and ENABLE—off the ground and working with our partners, and that we further strengthen our internal capacity to better ensure delivery and impact among our beneficiaries. This is an opportunity for us to celebrate our successes but also an opportunity to think of how we can better deliver on our goals!

Humidtropics markets its legacy products to other CRPs

Humidtropics, in partnership with the Forum for Agricultural Research in Africa (FARA), organized a "Systems Marketplace" workshop on 15-17 November at IITA, Ibadan. It showcased its portfolio of systems research legacy products for uptake in the new CGIAR Research Programs (CRPs).

The more than 100 specially invited participants included leaders and researchers at the CGIAR System, Center and Program levels, representing subject, organizational, and cultural variety. For three intensive and productive days they shared their knowledge and experiences to facilitate integration of systems thinking, tools, methods, approaches and partnerships in other research for development (R4D) initiatives. This is especially important for the transformation of the current commodity CRPs into the next generation of "agri-food systems" (AFS) CRPs that start January 2017.

IITA Director General Nteranya Sanginga, during his welcome address, reiterated his strong history with and commitment to integrated systems research. He said that even though CGIAR will no longer fund stand-alone systems research programs in its new portfolio, IITA will continue to support systems research and site integration efforts to successfully help with Africa's agricultural transformation agenda, and encouraged the participants to do the same.

Sanginga said "I feel honored today, by the work of Humidtropics. Systems research has been shown to be very important for improving livelihoods of smallholder farmers, which is attracting the interest of governments and some key donors. I want you to look into the future, and see how adopting a systems research-for-development approach can help with the transformation of agriculture in Africa".

According to Kwesi Atta-Krah, Director, Humidtropics, the need to present key findings of Humidtropics in a special event in 2016, and also to learn from 2nd cycle CRPs in relation to integration of systems approaches, was decided during its annual plan of work and budget meeting in 2015. The Marketplace event was organized in an innovative format, to produce maximum opportunities for interaction and discussion. As a marketplace, it consisted of 'sellers' and 'buyers' in interchanging roles, and with lots of opportunities for 'negotiation'.

Humidtropics Director Kwesi Atta-Krah speaking to participants.

Presenting an independent and general perspective on systems research in the new CRP portfolio, Professor Maggie Gill, Chair of the ISPC (Independent Science and Partnership Council) CGIAR, said that she came to learn what systems research products were on offer, and how new CRPs integrate systems approaches to enhance their contribution to achieving the development outcomes outlined in the CGIAR strategy and results framework. She said "I have to encourage the group, to consider the investments made, products realized, and approaches taken by the systems CRPs in the last five years that are important to continue to have impact on development".

R4D Director Bernard Vanlauwe

The genesis of systems research and its integration into the new CRP portfolio was presented by Peter Gardiner, Director of Research of the CGIAR Systems Office. He was excited to see such wide participation and strong interest to share systems research products and lessons learned about its approaches for inclusion in CGIAR's future research.

ISPC's Maggie Gill

Humidtropics Independent Advisory Committee (IAC) was represented by Christine Okali, former IAC Chair and independent researcher, and Prof Krishnamurty Sriramesh of Purdue University. Okali presented lessons learned from Humidtropics gender research on making sense of gender equity and women's empowerment. She said, "Integrated systems research is about people, women and men particularly, and their relationship to each other, it is about improving people's livelihoods, impacting on one another as individuals. CGIAR research has no value unless people are interested and gender norms considered". Sriramesh' presentation on partnerships and multicultural dimension in systems research concluded that evaluating and developing partnerships is both an "art" and a "science". He said "partnerships need to be better understood and draw from communication research as they are key to the success of CGIAR and its contribution to development outcomes."

Humidtropics' Chris Okafor

Presentations were given by leadership and representatives of the various CRPs: AFS: Maize, Wheat, Rice, RTB, FTA, Livestock, and Nutrition and of GIP: CCAFS, WLE, and PIM. They focused on three key issues: (1) their perception on relevance of systems research, thinking and analysis in their CRP; (2)

mainstreaming of systems research in their CRP, and; (3) opportunities for cross-CRP collaboration in systems research. Systems research experiences by others were also presented: Quang Bao, Drylands Systems CRP; Asamoah Larbi, Africa RISING; Sylvain Perret, CIRAD. Legacy products, experiences, and approaches were shared by a larger number of researchers in plenary and marketplace sessions. The world-café style poster session which engaged participants in small group presentations and discussions on the research they did was especially exciting and meaningful and was one of the highlights of the event.

Experiences with the management of Humidtropics' place-based research were shared by its Flagship Managers: Lisa Hiwasaki (Central Mekong), Rein van der Hoek (Central America and Caribbean), Latifou Idrissou (West Africa), and Chris Okafor (East and Central Africa). The importance of investing in multi-stakeholder processes such as R4D and innovation platforms and the need for solid monitoring, evaluation and learning in relation to spawned research activities were emphasized. These on-site lessons with implementing results-based management (RBM) to enhance performance, transparency, and accountability was preempted by a presentation on critical perspectives on implementing RBM based on Humidtropics experiences by Eric Koper, Chief Officer Management, Humidtropics, IITA.

The event considered ways of future communication in the shape of a Virtual Community of Practice (COP) that would serve as an exchange for systems research experiences that are now integrated into the various CRPs and other initiatives. The COP aims to nurture a network of systems researchers that contribute to an increasing body of knowledge and lends opportunity to interact. The core partners of Humidtropics: IITA, ILRI, CIAT, ICRAF, IWMI, CIP, Bioversity, WUR, FARA, AVRDC and icipe) were appreciated for the progress made in the various initiatives.

Eric Koper and DG Nteranya Sanginga present a birthday cake to Kwesi Atta-Krah.

The closing thoughts and perspectives on the marketplace event were given by the Hon. Adolphine Muley, Minister of Agriculture, South Kivu, DR Congo, Peter Gardiner, Graham Thiele, CRP Director RTB, and Journalist Sola Aderele. They gave rich insider and outsider perspectives on the importance of integrating systems research in helping to transform food systems and address important development needs while acknowledging that there is still much more to do and learn.

IITA scientists cited for their work on battling pests and diseases to save the banana

Two IITA scientists have been cited for their work in helping to eradicate the tropical race 4 disease (TR4) that threatens to destroy the Cavendish banana and the multibillion dollar industry associated with it.

In an article entitled *Can the Banana be Saved* published by the NOVANEXT journal on 3 November, IITA scientists Rony Swennen and Allan Brown commented on how their research is helping to combat many key diseases and pests by using wild bananas.

An excerpt from the article reads: Some banana breeders are holding out hope that TR4 may cause plantation owners to rethink the global Cavendish monoculture. "Race 4 is a threat, but it's also an opportunity to start growing more diversity," says Rony Swennen, the lead banana and plantain breeder for the International Institute of Tropical Agriculture (IITA) based in Arusha, Tanzania. "We need much more wild bananas, from everywhere in Asia—especially from places like Indonesia and Papua New Guinea, where good tasting bananas first originated," Swennen says.

A wild banana used in the IITA banana breeding program.

There are certainly opportunities to grow better tasting bananas. "Cavendish is the Red Delicious of bananas—it stores forever but has a horrible taste," says Allan Brown, a fruit breeder also at IITA.

TR4 isn't the only disease threat. Today's banana will need bolstering with resistance against other key diseases too, such as against the black sigatoka fungus, the bunchy top virus (BBTV), bacterial wilt as well as important pests such as nematodes and weevils. There are currently no sources of resistance against the BBTV and bacterial wilt, but it may be lurking in wild bananas yet to be collected. Limited sources of resistance have been identified against the other threats. A big challenge is to combine the resistance to provide "all-round" protection, a challenge Swennen and Brown are taking very seriously with the cooking bananas that they are working on in East Africa. Their efforts are supported by IITA colleagues screening banana germplasm against those pests and diseases. "We want to breed for long-term resistance, to win the never-ending battle against diseases for at least a longer time," Swennen says.

Read full article here.

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).

Tanzania's Youth Deputy Minister hails IITA's Youth Agripreneur program and seeks to strengthen collaboration

The Deputy Minister in the Prime Minister's Office, responsible for Labor, Youth and Employment, Hon Anthony Mavunde, has praised IITA's Youth Agripreneurs Program in Tanzania and would like to tap into the Institute's experience and expertise to strengthen and implement a newly launched Youth in Agriculture Strategy for the country.

An IITA team from the East Africa hub led by Victor Manyong, R4D Director (right), visited with the Deputy Prime Minister in the Prime Minister's Office.

Hon. Mavunde was speaking to a delegation from IITA that visited him at his office in Dodoma in response to an invitation from his Minster Honorable Jennesta Muhagama. The delegation comprised Victor Manyong, Director for Eastern Africa, Regina Kapinga, Head of Advocacy and Resource Mobilization, Abass Adebayo, Cassava Value Chain Specialist, and Veronica Kinchata, Team leader of the Tanzania Youth Agripreneurs.

Hon. Mavunde informed the visiting team that Tanzania had developed an ambitious strategy to address youth unemployment and one of the channels was through engaging the youth in agriculture. The ministry was therefore pleased to learn that IITA was already implementing a successful program on youth in agriculture and can therefore provide valuable technical expertise to the government's initiative.

"As a government we have developed a strategy to involve the youth in agriculture which we launched recently under the umbrella of the Ministry of Agriculture, Livestock and Fisheries. This is an interministerial initiative involving the ministries of agriculture, government, and regional administration and youth," he said.

"Many youth would like to be involved in agriculture but they face many barriers which we as a government cannot address alone. We will need support from many partners and we see IITA as a key partner that is credible and with vast experience on issues around youth and agriculture," the Hon. Assistant Minister said.

Hon. Mavunde assured the team that the government was fully committed to tackling youth unemployment through agriculture and had a new policy in place that all districts should allocate five percent of their revenue to youth development programs. Likewise, every ward has to allocate at least 20 acres of land for youth to engage in agribusiness activities on the value chains of their choices.

On his part, Manyong congratulated the Hon. Minister for the new strategy which he said was the right step to take in the right direction.

"There are very many opportunities for employment and income generation for the youth in agriculture. We started the IITA Youth Agripreneurs program as a pilot to support, coach, and mentor young graduates as we expose them to various new technologies we are generating from research and agribusinesses. We decided to specifically target graduate youth to attract other youth and change their attitude towards agriculture," he said.

"The program has been successful and has attracted a lot of attention and support from major donors including the African Development Bank which has started a new Africa-wide initiative known as ENABLE Youth (Empowering Novel Agribusiness-Led Employment) in which IITA is heavily involved. Currently 26 countries have expressed an interest in rolling out this program," Manyong added.

Veronica Kebwe Kichanta briefed the Hon. Deputy Minister on the group's current activities, including processing cassava and soybean, providing agriculture services such as modern weeding technologies using herbicides, and vegetable production using greenhouse technology and drip irrigation.

She said it was very important to change the youth's mindset towards agriculture by exposing them to the various opportunities for income generation in agriculture. The youth are therefore attached to the program for a maximum of 18 months during which they are involved in the various agrobusinesses to learn and gain experience.

At the end of the meeting, the IITA team was tasked with developing a concept note on the various ways it can support the Tanzania government in the Youth Agenda and there will be further discussions to cement the partnership and move the proposal forward.

Events

- **P4D (Partnerships for Delivery) Week**, IITA, Ibadan, Nigeria, 21–25 November.
- **Launch of the aflasafe Technology Transfer Commercialization (aTTC) project**, IITA, Ibadan, Nigeria, 1 December.
- **Marketplace Event**, Humidtropics, IITA, Ibadan, Nigeria, 15–17 November.

YIIFSWA: Yam is no longer a seasonal crop

"With the aeroponics system (AS), yam production is no longer seasonal," Norbert Maroya announced in his keynote address at the launch of a newly established AS for high-quality pre-basic and basic seed planting materials production at the The Council for Scientific and Industrial Research-Crop Research Institute (CSIR-CRI) in Kumasi, Ghana, on 10 November.

The Yam Improvement for Income and Food Security in West Africa (YIIFSWA) breakthrough product AS is a high ratio propagation technology developed to address the foremost constraint on yam production. The scarcity of high-quality seed yam of local popular and improved varieties is an endemic challenge for yam production in both Ghana and Nigeria.

Maroya, YIIFSWA's Project Leader, said that "Yam are conventionally propagated from whole tubers, or tubers cut into an average of 3 to 6 pieces only. This means that 6 new crops are grown from the tuber per year unlike maize where one cob can produce 200 plants in the next season. The seed yam problem is worsened by tuber dormancy which prevents year-round production and uncontrollable sprouting after breaking dormancy, resulting in storage losses and reduced profits. This means only one cycle of production is possible each year, in contrast to cereal crops which can be grown 3–4 times a year with irrigation. With AS, yam production is no longer seasonal. Under irrigation yam can be produced all year-round due to the types of planting materials generated from plants in the AS for seed yam production."

The inaugural event was chaired by the Ministry of Food and Agriculture Regional Director of Ashanti Joseph Faalong, who declared the breakthrough technology phenomenal and a necessity for yam development given that Ghana is a major yam marketer and exporter.

The event was attended by representatives of farmer associations, Ministry of Food and Agriculture (MoFA) agencies, the Grains and Legumes Development Board (GLDB), the Plant Protection and Regulatory Services Directorate (PPRSD), and research institutes such as CSIR-CRI, the Savannah Agricultural Research Institute (CSIR-SARI), and the Catholic Relief Services (CRS). The YIIFSWA delegation consisted of Beatrice Aighewi (Seed System Specialist), Djana Mignouna (Impact Monitoring and Evaluation Specialist), Morufat Balogun (Tissue Culture Specialist), Oiwoja Odihi (Communication Specialist), Braimah Haruna (Country Manager), Joseph Ayamdoo (Ghana Seed Production Field Officer), and Prince Otabil (Ghana Impact Monitoring and Evaluation Field Officer).

YIIFSWA Project Leader Norbert Maroya cutting the ribbon during the launch of the aeroponics system at CSIR-Ghana.

The establishment of the AS began after an additional grant agreement was signed with the Crops Research Institute's Biotechnology laboratory in June 2015 on the building of a functional aeroponics system (screenhouse and power house) with 10 boxes of 4 tables each connected to nutrient tanks in a power house for high quality pre-basic and basic seed yam production. The aeroponics screenhouse was completed in July and populated with high-quality plantlets of popular landraces and improved varieties released in Ghana.

So far three improved varieties TDr 89/2665, TDr 95/19177, and Mankrong Pona in addition to three popular varieties Kukrupa, Matches, and Muchumudu are growing at the time of launching in AS.

Astonishingly, the AS exhibition at CSIR-CRI included 3-week-old one-node AS vine cuttings from 3-month-old plants. The vine cuttings had already developed roots and vigorous shoots indicating that the plants were ready for transplanting into the field. During her presentation on the establishment of the AS at CRI, Marian Quain indicated that as a result of the successful establishment and operationalization of the system, they were ready to supply the seed industry with portable AS vine cuttings (42 plantlets) for seed yam production.

Based on the lessons learned AS is fully supported by a solar-powered system which is also connected to the national grid.

Aeroponics screenhouse in CSIR-CRI, Kumasi, Ghana.

IITA to serve as potential ambassador to EU's project

A delegation consisting of Cristina Russo, Director for International Cooperation and Director General Research and Innovation; Jens Hoegel, Head of Sector Health, Nutrition and Resilience; and Nienke Buisman, Policy Officer, Science, Technology and Innovation (STI) relations with Africa from the European Commission were at IITA, Ibadan on 10 November, to learn about the scope of research conducted by IITA and to discuss how IITA can partner with the European Union in implementing its Horizon 2020 research and innovation program.

Horizon 2020 is the EU's program for research and innovation across the globe to conduct innovative research that will benefit all spheres of life. Buisman stated that "We would like to focus on the role of IITA as an information multiplier on Horizon 2020 in the country and the potential Nigerian involvement in the ERANET COFUND on EU-Africa cooperation in food and nutrition security". The EC delegates also mentioned a workshop to be organized in Brussels in January 2017, during which potential future focus areas of research for EC programming will be developed. The delegation indicated that steps would be taken to ensure that IITA is invited to this workshop, and also sought IITA's assistance in getting Nigeria to the table.

Affirming IITA's capability to undertake the task, IITA Director General Nteranya Sanginga said the Institute is open and fully equipped to partner with both the public and the private sector to bring about the much anticipated agricultural revolution in Nigeria and the entire African continent. He stated that "It is interesting that many private sector organizations are now involved in various agriculture-related businesses. IITA believes the private sector will be the major driver to transform agriculture on the African continent and that is why we put a high priority on these partnerships. When you go around IITA, you will see new prototypes of our business that could be used for seed multiplication, as well as biocontrol products and biofertilizer businesses. These innovations are receiving great acceptance by the private sector, and I am sure the European Union will be interested too."

The delegates went on a tour around IITA, where they got acquainted with several IITA projects. On behalf of the team Hoegel commented "We are exceedingly satisfied and awed with what we have seen. We will be very happy to initiate future collaboration with Nigeria through IITA and to see how IITA can serve as an ambassador of Horizon 2020 research." To take issues forward, Hoegel was nominated as the focal person on the EC side, while Kwesi Atta-Krah would be the focal person for IITA.

Plant Pathologist Alejandro Ortega-Beltran briefing the European Commission team that visited the aflasafe factory in Ibadan.

Plant Production and Health Management team review project

Scientists from all IITA hubs working on Plant Production and Health Management (PPHM) convened at IITA Ibadan, for a 3-day Implementation Review Workshop, 16-18 November.

The workshop aimed at reviewing the achievements, gaps, challenges, and opportunities for improvement, and also explored ways of working with institutions and backing up areas where necessary, within and outside Africa. Specifically, the main objective focused on environmental friendly pest management options, and climate responsive cropping systems and technologies. The program comprised a series of plenary presentations and group discussions.

In her welcome address, Ylva Hillbur, Deputy Director-General for Research, IITA, talked about the advantage that the PPHM team of IITA has. She said the IITA team has a tremendous opportunity because of its broad competence level, which only a few other centers and key players in the research arena can boast of. She highlighted the fact that pest and disease management is becoming more prominent, and then encouraged the IITA team to use that opportunity to strengthen and develop their research agenda. "I am very happy to be here. This workshop is a great idea and very important. Pest and disease management is becoming more visible on the global research agenda, and it is for the IITA team to use that opportunity and strengthen their research agenda", she said.

David Chikoye, Director for the PPHM thematic area, said the workshop was necessary to interact and learn from one another, which will make their program move forward. Chikoye said, "This workshop is absolutely necessary to have a good interaction with one another. I am glad that everyone is active. We are of different levels in terms of success. We will exchange ideas in our fields, learn from each other, and explore ways to work together as a team. As a result, the program moves forward. Through this event, we will know the challenges in implementation, the needs for the future, and have a better understanding of the way forward as a team".

At the end of the workshop, the scientists identified the priority areas and grand challenges, and tackled the challenges as a group. These are expected to increase impact on food production, income of farmers, pests and diseases, and reduce forces that counter the efforts of the scientists in increasing productivity.