



IITA affirms commitment to sustainable agricultural productivity through Biosciences

In the face of the disquieting population growth, poverty, climate change, and the low agricultural productivity currently ravaging sub-Saharan Africa, IITA has reinforced its commitment to the efficient advancement and application of Biosciences tools

and products to tackle the resultant challenges of chronic food insecurity, raise levels of nutrition, productivity, and health, and enhance potentials for improved livelihoods in West Africa.

Following IITA's participation in the Biosciences Landscape Survey

Validation conference which aimed at providing insights and recommendations for a strategy to address the gaps and challenges related to the entire agricultural value chain of West

Africa, Dr Nteranya Sanginga, IITA Director General, signed a statement document formalizing this commitment on 17 September.

In this pivotal initiative, IITA and 23 other Biosciences regional organizations, programs, and institutions in Nigeria, Ghana, Mali, Burkina Faso, and Senegal will be partners in four thematic and cross-cutting areas of crop improvement, livestock improvement, feed and forage, food safety and nutrition, as well as capacity building. IITA was also selected to serve as Thematic Area Coordinating Center (TACC) for crop improvement.

As a first step of stirring stakeholders into action, Dr Sanginga will present a paper on Promoting Youth Employment in African Agriculture and

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Participants to the Biosciences Validation Conference held in Nairobi with IITA DG Sanginga (seated, 3rd from left).

ARCs must scale out technologies if smallholder farmers are to reap tangible benefits from research

Agricultural research centers (ARCs) working on development initiatives in Zambia have been urged to shift their focus from upstream R&D and into scaling out the myriad of mature technologies developed by them if these are to have concrete benefits and impact on smallholder farmers across the country.

The appeal was aired by the Honorable Mulenga Chilese, Permanent Secretary (PS) of Zambia's Eastern Province, as he keynoted the opening of the 3-day Annual Review and Planning Meeting of the Zambia Feed-the-Future Research and Development (FTF R&D) Program held at the Protea Hotel in Chipata on 17 September 2014. After the opening, the PS accompanied the meeting

delegates on a tour of the Zambia Agriculture Research Institute's (ZARI) Msekera Station, also in Chipata.

"I think enough has been done on the R&D side – now is high time for us to scale out these technologies so that they start making tangible and positive impact on the lives of our smallholder farmers," Mr Chilese emphasized.

"Although the country has seen positive economic growth these past years, these have not really translated to concrete benefits to the people, especially our farmers," the PS added. "A lot of things could have been done better – and this where you, researchers, come in.

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A woman maize farmer participating in the Zambia FTF R&D Program consulting a ZARI researcher about a witchweed problem in her field. Eastern Province Permanent Secretary Mulenga Chilese urged researchers to disseminate mature technologies so that more farmers tangibly benefit from them.



(Left photo) Chama Mwila, IITA Research Assistant with the Aflatoxin Mitigation project, briefing PS Chilese (in suit) about Aflasafe at the program exhibition in Msekera Research Station as Harry Ngoma of USAID (middle) and other delegates listen. (Right photo) Delegates to the 2014 Zambia FTF R&D Program Review and Planning Meeting in a group photo with the PS (first row, middle).

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You have the gift of foresight – of ‘seeing the future’ way ahead of others and developing solutions now in anticipation of tomorrow’s challenges.”

“My challenge to you, therefore, is this: get these technologies into the hands of each and every farmer in Zambia,” the PS said. “So how do we do this? We need to address some of the lacking essential linkages in the dissemination of research results and information, we need to partner more closely with the private sector, and we need to work better with marketing agencies and extension services.”

“We also need to properly integrate research results into national planning. For example, this program meeting could have been held before the national annual budget hearing so that your activities could have been integrated into the national government’s workplan,” he added.

Harry Ngoma, USAID Activity Manager for the FTF R&D Program, reiterated the sentiments of the PS. He said that so far “the program

has made significant strides in its R&D efforts, and at this point we already have a clear picture of what technologies are working and how they are working.”

“USAID is very excited that the technologies from this program are already starting to bear fruit. What follows for this year is to make economic analyses and risk profiles of these technologies. Of course, we would also come up with very clear strategies for scaling up and scaling out to impact thousands of farmers not only in this province but across Zambia,” he added.

“I share the sentiments of the PS – we need to share data, information, and knowledge about these technologies that would hopefully lead to policy recommendations that support an enabling environment for enhancing the productivity of smallholder farmers and improving their lives.”

At Msekera, PS Chilese and the meeting delegates toured the station’s research facilities, visiting the Soils Lab, Aflatoxin Lab, and an exhibition

by the different project components of the FTF R&D program.

The Zambia FTF R&D Program, which started in 2011, is a 4-year program implemented through collaboration of IITA, CIMMYT, ICRISAT, CIP and Harvest Plus, ZARI, Zambian universities, private sector, and other stakeholders. The program seeks to build the capacity of Zambia’s national agriculture research institutes, to raise farm productivity, to help enhance nutrition, and promote adoption of improved varieties and low-cost technologies for farmers.

The program has six component projects: Sustainable Intensification of Maize-Legume Systems; Improving Groundnut Farmer Incomes and Nutrition through Innovation and Technology Enhancement; Mitigating Cassava Disease Threats for Improved Cassava Production; Dissemination of Pro-Vitamin A Maize; Aflatoxin Mitigation in Maize and Groundnut; and Effective Use of Orange-fleshed Sweet Potato.

PASIC participates in validation of Uganda’s National Seed Policy

The Policy Action for Sustainable Intensification of Ugandan Cropping systems (PASIC) project has jointly facilitated the validation process of Uganda’s National Seed Policy. The process was jointly facilitated by PASIC, the Integrated Seed Sector Development Program, and USAID’s Feed-the-Future Enabling Environment in Agriculture Activity under the leadership of the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF).

The review of the National Seed Policy was brought up at a PASIC Stakeholders’ Meeting held on 28 May that gathered public and

private sector actors to discuss the status of national policies related to agricultural intensification. The formal validation process of the National Seed Policy began on 29 July with a request for its recall from MAAIF to widen the consultation process. The policy was then subjected to a technical review by international and national experts, followed by a stakeholder technical review by research organizations including the National Agricultural Research Organization (NARO), the Plant Genetic Resources Board, private sector, civil society organizations, academia and farmers’

organizations engaged in local seed business in Uganda’s informal seed sector.

In Uganda, the formal and regulated seed sector comprises only 20% of the country’s seed industry, producing primarily certified hybrid seeds. This sector is made up by private seed merchants and seed companies. The quality assurance process for the formal sector is managed through internal regulatory mechanisms and externally by the National Seed Certification Service of Uganda. The rest (80%) of the sector is informal composed of self-quality declared

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seed and farmer-saved seed classes which are generally unregulated.

Following the technical review process that took place in Jinja, Uganda on 25-26 August, a validation of the revised policy was held on the 15 September involving members of parliament, ministry officials, civil service society, research organizations including IFPRI and IITA, local seed businesses, private seed companies, district agricultural officials, and other development partners.

The draft of the National Seed policy was generally accepted; however,

recommendations were made to further strengthen its legal and institutional framework. The policy is vital because, once finalized, it will serve as the basis for the regulation of the entire seed industry of Uganda and ensure wider access and use of improved seed by farmers. The draft policy will soon be resubmitted to MAAIF for further discussion by the ministry's top management.



Participants at work during one of the break-out sessions of the PASIC-facilitated validation workshop of Uganda's National Seed Policy held on 15 September.

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Agribusiness on 29 September during the Year of Agriculture celebration by the African Development Bank in Abidjan, Côte d'Ivoire.

Dr Sanginga was also selected as one of the key advocacy persons for promoting this initiative. He said that the initiative was aligned with IITA's Refreshed Strategy. He added that IITA is fully committed to continue investing its wealth of experience, infrastructure, facilities, and expertise to this end, and also to work closely with national and international partners to ensure that meaningful results are achieved.

"We are pleased to play the role of

TACC for crop improvement. Our seasoned scientists are currently applying genomic tools in accelerated breeding schemes for both grain and clonally propagated crops. This is one of the many kinds of resources and expertise that we will advance as TACC."

Dr Robert Asiedu, Director of Crop Improvement at IITA, added that the initiative is a step in the right direction.

Dr Melaku Gedil, Head of IITA's Bioscience Center, said that the aim of the commitment was towards establishing a Biosciences Center of Excellence in West Africa for

research, product development, and training with broad and up-to-date competences in genomics, transgenics, diagnostics, tissue culture, bioinformatics, and data management.

"This Bioscience initiative is a big one because Africa is lagging behind in applying Biosciences for improved agricultural productivity. We are taking a cue from advanced societies to comparatively place West Africa comparatively on the same level as other Biosciences-advanced regions and also drive innovative ways of improving agricultural production in Africa."

SARD-SC project coordinator tours sites to evaluate activities in Tanzania

To ensure the smooth implementation of the cassava value chain program of the SARD-SC Project in Tanzania, Dr Chrysantus Akem, Project Coordinator, recently made a week-long tour to inspect activities in project sites implemented through IITA and the national agriculture research and extension system (NARES) partners.

Dr Akem visited project sites in the coast region in the Mkuranga district, the Lake Zone Agricultural Research and Development Institute, Ukiriguru, Mwanza, and Kigoma districts.

He also visited the project's cassava agro-trials in the Mikocheni Agricultural Research Institute sub-station in Mkuranga district, with Dr Adebayo Abass, SARD-SC Country Coordinator, Dr Veronica

Uzokwe, Cassava Agronomist, and Mr Frederick Ntagwabira, consultant. The Station Manager, Mr Samuel Mgema, and Mr John Msemo, representing the Root and Tuber/Sugar Cane Research, Kibaha, welcomed the team to the sub-station and took them on a tour.

Dr Akem inspected the multiplication plot (1 ha) of elite cassava varieties established by IITA/SARD-SC and NARES partners. Afterwards, the visitors proceeded to the small-scale cassava processing center, Ukaya farm, Mkuranga district, where one of the on-farm fertilizer trials was set up.

Other sites visited included Kikoo village where the agro-trial and farmers' characterization plots were set up, Visiga in Kibaha district to observe the small-scale cassava



Mr Selunze (2nd from left) explaining a development about his farm to the visiting SARD-SC team led by Dr Akem (2nd from right)

processing center, and the Kibondo Big Power Group which consists of various stakeholders including farmers and processors across the cassava value chain.

N2Africa wins prestigious global nutrition award

In late 2013, the IITA-coordinated N2Africa project took part in the Harvest Nutrition competition organized by the SecureNutrition Knowledge platform of the World Bank, Global Alliance for Improved Nutrition, and Save the Children. Recently, the contest organizers named N2Africa as among the three winning project entries. The competition aimed at showcasing projects around the globe that have bridged gaps between agriculture and nutrition.

As one of the winning projects, N2Africa will receive a multimedia report of its activities to promote the great work being done and also to highlight interventions that might be

emulated by other agricultural projects trying to improve impact on nutrition.

Andrea Spray, Nutrition Specialist at the World Bank and responsible for producing the multimedia report, visited N2Africa project sites in northern Ghana on 10-11 September and in Rwanda on 15-16 September to gather material and to document nutrition outcomes of the project in the two countries.

(Top) A woman farmer demonstrating processing of soya kebab to other women during the award body team visit to northern Ghana; (Bottom) The use of inoculants for legume crops being demonstrated to agro-input dealers in Muhunga district during the team's visit to Rwanda



YIIFSWA hands over Yam Aeroponics System to Biocrops Biotechnology Nigeria Ltd

On 18 September, Dr Robert Asiedu, Director of IITA-West Africa, handed over the new Aeroponics Facility to Biocrops Biotechnology Ltd for basic seed production at the FCT Agency for Science and Technology (FAST) secretariat.

Present at the event were Mrs Rosemary Umanah (FAST Director), Dr Gbasse Tarawali (IITA-Abuja Station Representative), Dr Norbert Maroya (YIIFSWA Project Manager), Dr Shola Odusanya (Consultant, Biocrops Biotechnology Ltd), Mr Francis Onukwue (Manager Biocrops Biotechnology Ltd), Dr Beatrice Aighewi (YIIFSWA Seed System Specialist), Dr Adebayo Akinola (YIIFSWA Seed System Economist), Mr Ebenezer Zidafamor

(representative, NASC Director General), and Dr Adamu Shuaibu (representative, Project Coordinator FCT MDGs)

Mrs Umanah welcomed IITA and guests and thanked the Institute for investing in Biocrops Biotechnology Ltd, an organization hosted within the Agency's premises. In her welcome remarks she assured IITA of the support of the Agency in the running of the Aeroponics facility and indicated the Agency's interest in continuing the partnership with IITA, particularly in making Abuja the seed capital of Nigeria.

In his opening remarks, Dr Norbert Maroya stated that YIIFSWA had fulfilled all its responsibilities in the agreement signed between IITA

and Biocrops. This including the training of Biocrops scientists on nodal cutting multiplication in tissue culture

Dr Asiedu cutting the ribbon on the new Aeroponics facility at FCT Agency for Science and Technology (FAST) secretariat.



and bioreactors, and the supply of clean stocks of yam plantlets under multiplication in Biocrops laboratory. The project had given Biocrops a total of 235 plantlets and 9 potted plants, the specific fertilizers (275 kg), and the appropriate chemicals and reagents for tissue culture and disinfection of the Aeroponics screen house. YIIFSWA will work closely with the Biocrops team to ensure the success of the project.

Biocrops is expected to produce 1800 mini tubers for certified seed yam. However, Mr Onukwue of Biocrops said that the organization was capable of producing more with the support of the supplementary grant and will therefore have the target of producing 20,000 mini tubers.

In his keynote address, Dr Asiedu indicated IITA's R4D effort is to ensure a favorable impact at the farmers' level. He said that transferring research technology to enterprising organizations was vital for sustainability even after the project had ended. He assured the agency of IITA's support and wished Biocrops successful utilization of the facility. Dr Asiedu later cut the ribbon symbolizing the formal hand-over of the facility to the company.