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THE BULLETIN

N2Africa makes good progress in disseminating legume technologies in Tanzania

The N2Africa project has made tremendous strides in bringing together a wide range of partners from the public and private sectors to jointly promote innovative technologies to increase the production of grain legumes in Tanzania. This was emphasized in the presentations and discussions of the project implementing team and partners during an annual planning and review workshop held at IITA-Tanzania in Dar es Salaam on 29–30 September.

The project, "Putting nitrogen fixation to work for Africa's smallholder farmers" or N2Africa, is seeking to improve the production of legumes not only to boost the food security and income of rural smallholder farmers but also to improve the soils to increase the productivity of other crops. Secondly, it seeks to improve farmers' health and nutrition by improving diets. With funding from the Bill & Melinda Gates Foundation, N2Africa began its second phase in January 2014.

Speaking at the opening of the workshop, Victor Manyong, IITA Director for Eastern Africa, noted that N2Africa is a very important project for IITA because of its efforts to improve agricultural productivity and tackle the challenges of hunger and poverty in sub-Saharan Africa.

"There is a big gap between the yields in research fields and in farmers' fields, and legumes can play a big role in reducing this yield gap through fixing nitrogen," he said.

This was echoed by Frederick Baijukya, the N2Africa Country team leader for Tanzania: "Legumes are an engine to intensify and diversify farming systems of smallholders in sub-Saharan Africa. They can improve productivity and also provide food and protein, income, and animal feed. N2Africa is using technologies assembled from different research institutions and advancing these technologies to farmers".

In Tanzania, the project team and partners are focusing on pilot testing various improved technologies to boost legume production. These include new improved varieties that are high yielding, good and innovative agricultural management practices such as the appropriate use of fertilizers as well as postharvest management and processing technologies.

N2Africa team members and partners in Tanzania.

The project is also testing innovative technologies to disseminate and create awareness and promote adoption among smallholder farmers including the use of radio and mobile applications.

The meeting brought together all the current and potential partners of the project and implementing staff drawn from the national agricultural research institutes, NGOs, and the private sector. Also present at the meeting were the project's overall Coordinator, Fred Kanampiu; Monitoring & Specialist, Theresa Ampadu-Boakye; and Senior Business Development Officer, Edward Baars.

Feed-the-Future MISST project making waves in Malawi

Only on its first year, the Feed-the-Future Malawi Improved Seed Systems and Technologies (MISST) project is already making headway towards its goal of making high-quality seed of improved varieties and technologies more readily available and accessible to smallholder Malawi farmers.

During the year, IITA actively collaborated with the farmer organization, the National Association of Smallholder Farmers (NASFAM), to successfully establish 50 technology demonstration plots in seven of the Feed-the-Future's (FtF) Zones of Influence (ZoI) of Lilongwe, Mchinji, Dedza, Ntcheu, Balaka, Machinga, and Mangochi districts. This activity aimed at creating awareness and stimulating the adoption of improved varieties with appropriate crop management practices. Technologies demonstrated in the ZoI's included Tikolore variety with inoculant and P- fertilizer; Makwacha variety with inoculant and P-fertilizer;

A project participant, Jiya, showing the early maturing characteristic of Tikolore at her demo plot.

Nasoko variety with inoculant and P-fertilizer; and Tikolore variety with fertilizer only.

Additionally, 8 tons of basic seed of the Tikolore variety were distributed through NASFAM to 333 community-based seed producing farmers to multiply certified seed. Also through NASFAM, selected seed farmers were trained on seed production and quality control.

To capture farmers' perception and technological preferences, the project held 31 field days across the seven districts, attracting more than 2,300 farmers. The field days showed that that the majority (59%) of the farmers preferred the Tikolore variety with inoculant and P-fertilizer because of the variety's earliness, high yield, and drought tolerance. Tikolore withstands drought conditions better than Nasoko and Makwacha. Despite the dry spell in the country that affected most soybean farms, Tikolore-planted fields showed good performance, with farmers recording average yields of 1.5 t/ha.

To ensure the availability and accessibility of seed of the preferred variety at community level, 94.44 tons of certified seed were produced by 333 community-based seed producers. The seed produced will be distributed and marketed within the districts. A total of 79.5 tons of quality basic seed was also produced through a contractual arrangement with seed producers, using seed revolving funds.

MISST is a project being implemented by a consortium of four CGIAR centers: IITA, ICRISAT, CIMMYT, and CIP. The soybean component of the project, which is being led by IITA, aims to increase the availability and accessibility of high quality seed of improved soybean varieties in the country. This is being done by supporting seed production, increasing adoption through variety demonstration and promotion, capacity building and strengthening of seed partnerships, and promoting public–private partnerships in seed production, distribution, and marketing.

IITA, AFAP ink MoU paving way for future collaborations

On 25 September, representatives of IITA and the African Fertilizer and Agribusiness Partnership (AFAP) signed a memorandum of understanding (MoU) formalizing their partnership and paving the way for future collaboration. The MoU signing was one of the highlights during the First Annual Meeting of the East and Southern Africa Fertilizer Trade Platform (EFAP) held at the Hotel Intercontinental on 24–26 September in Lusaka, Zambia.

The MoU was signed by David Chikoye, IITA Regional Director for Southern Africa, and by Jason Scarpone, President and Chief Executive Officer of AFAP. The signing was witnessed by Namanga Ngongi, a member of IITA's Board of Trustees and also concurrently the Chair of AFAP's own Board of Trustees. Ngongi was also instrumental in facilitating the MoU between the two organizations.

"This MoU will facilitate the complementation of both IITA and AFAP's research focus and development objectives, which align neatly with the CGIAR's four system-level outcomes of increasing food security, reducing rural poverty, reducing undernutrition, and achieving sustainable natural resource management," said Chikoye.

David Chikoye (left) and Jason Scarpone (right) signing the MoU between IITA and AFAP during the 1st Annual Meeting of EFAP in Lusaka, Zambia on 25 September. Looking on is Namanga Ngongi (center), member of the IITA Board of Trustees and Chair of the AFAP Board.

Under the MoU, IITA and AFAP will undertake initiatives that include, but are not limited to: exchange of scientific information and development of specific cooperative programs and projects; linkages between IITA and AFAP scientists; annual consultative meetings and personnel visits between both organizations; exchange of research materials, publications, and other materials of mutual interest; inclusion of results of collaborative research; capacity building efforts to improve technical expertise in both institutions; and participative collaborative technology development.

AFAP is a nonprofit organization that focuses on fostering private sector investment and development partnership to build sustainable markets capable of providing African smallholder farmers with affordable fertilizer to improve crop production and food security. It is a result of collaboration between and among the New Partnership for Africa's Development (NEPAD), the International Fertilizer Development Center (IFDC), the Alliance for a Green Revolution in Africa (AGRA), the African Development Bank (AfDB), and the Agricultural Market Development Trust (AMDT).

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).

Gates Foundation Officer visits YIIFSWA activities in Ghana and Nigeria

Lauren Good, the new Senior Program Officer (SPO) overseeing the Yam Improvement for Income and Food Security in West Africa (YIIFSWA) project at the Bill & Melinda Gates Foundation, visited project field sites in Ghana and Nigeria on 19 August to 2 September. In an earlier trip to IITA, Ibadan, in April, Good had indicated interest in seeing and learning about YIIFSWA's activities, including those carried out by partners, geared towards establishing a sustainable seed system.

Group photo at the seed multiplication plot in CRI.

The SPO was accompanied by the YIIFSWA Management Team composed of Project Leader Norbert Maroya, the Seed System Specialist Beatrice Aighewi, Country Manager for Nigeria John Ikeorgu, Country Manager for Ghana Haruna Braimah, and the Communication Specialist, Oiwoja Odihi. Also part of the delegation was the CAY-Seed Regional Coordinator, Kingsley Osei of the Crop Research Institute (CRI), Ghana.

"Yam is new to me. It is critical to know about the development of the seed yam system at the formal and informal levels. We need to know and understand the processes, interactions, and output of the two systems—for instance what goes into the systems, who are the actors involved, what's coming out of them, and how it reaches the farmers," Good said.

A one-day workshop at the IITA-Abuja Station was also organized during the tour with YIIFSWA partners making presentations on their activities. Present at the workshop were partners from the National Centre for Genetic Resources and Biotechnology, National Root Crop Research Institute (NRCRI), National Agricultural Seed Council (NASC), Missionary Sisters for Holy Rosary (MSHR), the Arimathea Foundation for Development (AFD), the Justice Development and Peace Movement (JDPM), Umuasua–Isuikwuato Small Holder Oil Palm Farmers Multipurpose Cooperative Society (SHOP), and Biocrops Ltd.

The field trip in Nigeria included visits to NASC, Biocrops Biotechnology Nigeria Limited, MSHR, NRCRI, Romarey Ventures seed multiplication plots/ CAY-Seed demonstration plots on positive selection, AFD, and SHOP plots.

In Ghana the field trip included visits to the Council for Scientific and Industrial Research-CRI, the Grains and Legumes Development Board (GLDB) seed multiplication plots, CSIR-Savanna Agricultural Research Institute (SARI), Sustainable Agro-Ventures (SAVE), the Ecumenical Association for Sustainable Agriculture and Rural Development (ECASARD), and CAY-Seed demonstration plots in Ejura, Atebubu, Kintampo, and Tolon in Ashanti, Brong Ahafo, and Northern regions.

During a radio interview in Abuja, Good said: "I am very proud of these two projects (YIIFSWA and CAY-Seed) because they work with farmers to show them new techniques and technological packages, and give farmers the chance to decide on whether the technologies are good and profitable for them and their households. It makes me proud of our partners and farmers who are working very hard and also listening and saying 'yes, we want to learn and we want to do things to improve the productivity of yam'. Farmers are seeing the potential of the technologies and are happy to be a part of this. We have seen examples of numerous farmers who showed us the houses they have built with income from yam and their children going to school. The benefits from adopting these technologies on improving their livelihoods are really what we seek."

On the way forward, Good said: There is need to determine what the business case is for the research institutes if they are to continue producing pre-basic seed yam.

Announcements

- **Open Day, IITA Ibadan,** Nigeria, 14 November
- **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, Livingstone, Zambia, 28 February to 4 March 2016.
  For more information, visit the conference website or download the conference announcement.
- **IITA and CGIAR 2014 annual reports now available online!**

- The CGIAR 2014 Annual Report was officially launched this week. With a special feature on nutrition and health, the annual report has been widely shared through the social media (Twitter, Facebook, Linkedin) and the CGIAR networks. The document is available on the following link http://annualreports.cgiar.org.

- The IITA 2014 Annual Report is also available at http://www.iita.org/annual-reports. This report highlights breakthroughs in our research-for-development efforts in biotechnology, genetic engineering, agribusiness, climate change, research, and natural resource management, including achievements of some CGIAR research programs, and innovative partnerships for 2014. The interactive PDF and online version are available at http://bit.ly/1Ff30As and http://wpar12.iita.org/.