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# THE BULLETIN

## Going live……all set for IITA's migration to open access on CGSpace

IITA's switch to open access on CGSpace for all knowledge products moved closer to becoming a reality this week as two parallel meetings and one seminar focusing on content and technical aspects of the switch took place in Ibadan, Nigeria. The meetings, which were organized through the IITA Capacity Development Office, took place on 19-22 October, and were facilitated by CGSpace experts—Alan Orth and Abenet Yabowork from the International Livestock Research Institute (ILRI). Also taking part in the meetings were knowledge management specialists from the Africa Rice Center which also plans to link its databases to the space.

*Alan Orth of ILRI speaking about CGSpace.*

"We believe that if all goes according to plan, we will complete the switchover to CGSpace by 23 October as a ready-to-use repository. However, the migration of the existing publications from our publication database and some necessary curation into CGSpace might take a few weeks," noted Martin Mueller, IITA E-Research Coordinator.

With IITA joining CGSpace, eight out of the 15 CGIAR centers will now be using the platform as their institutional open access repository of choice, thereby making the body of documents available for public access more robust. At the moment, the space already hosts nearly 50,000 documented agricultural research outputs and results produced by the CGIAR centers and their partners.

"This is the right time for the switch because CGSpace gives the Institute advantages such as increased visibility, usage, and impact for our research outputs," explained Zoumana Bamba, Head, Capacity Development Office.

With over half of the CGIAR centers already collaborate on CGSpace, it is anticipated that other centers will soon join in to curate their knowledge products on the space.

Discussions are currently underway for the involvement of the CGIAR Consortium Office and the International Food Policy Research Institute (IFPRI).

For IITA all the groundwork has been done in terms of setting up the display implementation, data migration, equipping data with metadata, training staff members, and applying the new CGIAR metadata core, the standard tagging system that will be used under the open access implementation.

It is just a matter of time now before the IITA community goes live.

## Participants list ways to transform maize agronomy in Africa

The participants at the first annual planning meeting organized by the Taking Maize Agronomy to Scale in Africa (TAMASA) project noted that poor agronomy practices continue to limit farmers' productivity. They reiterated that serious measures must be taken to assist farmers bridge the gap in attainable yield for maize in Africa, with a view to transforming maize agronomy and boosting economic returns from cultivating the crop.


*Peter Craufurd moderating the discussions during the planning meeting.*

In Nigeria for instance, about 1.7 million hectares of land are cultivated to maize from which only about 7 million tons is realized per year. Recommended approaches to move farmers from their current yields of between 1.5 to 2 t/ha to an achievable 7 t/ha included early engagement of partners, identifying farmers' actual needs, and involving farmers and partners in co-developing useful tools and applications to reach scale.

The discussants represented principal partners from Ethiopia, Nigeria, and Tanzania where TAMASA is being implemented—IITA, the African Soil Information Service

(AfSIS), the International Maize and Wheat Improvement Center (CIMMYT), and the International Plant Nutrition Institute (IPNI); and partners from the private and nongovernmental sector, including SG2000, Doreo Partners, Notore Fertilizer Company, and SeedCo seed company. They converged at Sandralia Hotel in Abuja on 13–15 October, to review and share experiences on the project's activities, challenges, and opportunities since inception in May 2014.

In his remarks, Peter Craufurd, TAMASA project leader, said that TAMASA was initiated to demonstrate the usefulness of variety tools, nutrient expert, and agronomy applications as systematic approaches that can help maize farmers to maximize their yields. He, however, noted that their application was hindered by the availability of relatively little information about yield.

"Analytical tools require some idea of attainable yields from farmers' fields… Existing maize maps are inaccurate and show little about soil constraints and micronutrient deficiency across sites. These limit the potential to recommend practices and fertilizer blends appropriate to various soil needs across regions."

Craufurd said that TAMASA will work to deliver its promise of increasing by 75% the yields of 600,000 households within 18 geographies by mapping maize-producing areas to note soil constraints across regions, as well as attainable yields over space, and then developing simple location-specific tools that will enable farmers to use fertilizers more efficiently, choose the right varieties, and increase productivity.

"In addition," he said, "the overall goal is to make a visible transformation in maize production for sub-Saharan Africa's farmers and generate evidence that will change the ways that industries, NARS, and civil society organizations invest in promoting agronomy at scale".

Bernard Vanlauwe, Director, IITA Central Africa Hub and for Natural Resource Management, highlighted how strategic agronomy can help overcome the challenges the project might encounter in implementation. He noted that the development of workable tools and the empowerment of partners to use them are important ingredients for success.

"Agronomy includes everything but the project must identify partners and work towards the specific needs of those already engaged in maize value chains." Vanlauwe also urged the TAMASA team to ensure that by 2018, developed tools should already be in the hands of partners and farmers who need them.

TAMASA is supported by a US$12 million grant from the Bill & Melinda Gates Foundation to adapt modern technologies and promote evidence-based maize agronomy and value-chain strategies in the three target countries.

# Africa RISING gears up for Phase 2

October 2015 marks a critical moment for the IITA-led Africa RISING projects in East/Southern Africa and West Africa. It is the beginning of the final year of the first phase of the two USAID-funded projects after four years of action research in five countries.

In preparation for the second phase, project partners from eight CGIAR centers, national research systems, and other international research centers recently held a meeting on 6-8 October in Bamako, Mali, to write up the components for the second phase proposal. The strategy meeting was also attended by USAID Senior Sustainable Agricultural Systems Advisor Jerry Glover.

Participants at the meeting developed write-ups on various components for the Phase 2 proposal including systems approach, research questions, program theory of change and impact pathways, vision of success, communication approach, data management, stakeholder engagement, gender strategy, monitoring and evaluation as well as the scaling approaches to be used. Importantly, the team also agreed on the activities and milestones still to be achieved until the final proposal is submitted to USAID in June 2016.

"This is the perfect time to stand still, look back, and reflect on the way forward. Africa RISING is recognized within the CGIAR as a systems research program and there is renewed motivation to advance systems research which we believe offers an opportunity to address the challenges faced by smallholder farmers," noted Bernard Vanlauwe, IITA Director for Central Africa Hub and outgoing Chair of the Africa RISING Program Coordination Team (PCT).

Also speaking during the meeting was the current Africa RISING PCT Chair, Siboniso Moyo of ILRI who noted that a lot of technologies had been developed for smallholder farmers during Phase 1 of the program and it was therefore of utmost importance to ensure that they are successfully scaled for adoption by smallholder farmers in the project countries in the second phase of the program.

While several cost–benefit analyses for various technologies developed in the program have been conducted or are being conducted, partners taking part in the meeting also agreed that in addition to economic factors, other sustainable intensification indicators will also be used to evaluate the scalability of the technologies. Africa RISING will pioneer this aspect with a set of sustainable intensification indicators for evaluating technologies. It was agreed that the program's core business remains research which will be complemented by scaling through successful partnerships with development projects funded through in-country USAID missions and other development actors.

"We've had a lot of success in showing the high level of research outputs from Africa RISING within USAID. Recently, we've had several good opportunities of showing the

*Participants at the Africa RISING program strategy meeting in Bamako, Mali.*

good results to missions in Zambia, Mali, and Tanzania. We need to keep working at it to sustain the interest," noted Glover.

"The program is well positioned to do an even much better job in meeting the Feed the Future goals in the second phase. We will work with development partners funded by USAID country missions like the NAFAKA in Tanzania," added Irmgard Hoeschle-Zeledon, Africa RISING West Africa and East/Southern Africa Coordinator.

A proposal writing team of four scientists has now been charged with putting the write-ups generated from the meeting into a complete proposal.

# Stakeholders call for better policies for more efficient water use in agriculture

Lack of harmonization and linkage of water management and natural resource policies, lack of maintenance of water infrastructure, gender-blind technologies, farmers' inability to use appropriate technologies due to lack of know-how, and poor access to credit were identified as some of the key factors that hinder the efficient use of water in agriculture in Tanzania. These in turn contribute to conflict over water among various users as well as wastage of the scarce resources.

The issues were identified by stakeholders from the relevant sectors such as agriculture, the environment, and land and water at a meeting in Dar es Salaam that aimed at identifying the key issues affecting efficient use of water for agricultural production including use of appropriate technologies and making policy recommendations.

The workshop is part of the activities of the Policy Action for Climate Change Adaptation (PACCA) project whose goal is to inform and link policies and institutions from national to local level for the development and adoption of climate-resilient food systems in Uganda and Tanzania.

The discussions were based on the findings of a study on the Cost-Benefit Analysis on Water Use Technologies (WUT) in Tanzania, which was funded by PACCA and conducted by the Sokoine University of Agriculture (SUA).

"We need to increase our agricultural production to ensure that the country is food and nutrition secure as its population is increasing rapidly. At the same time, we are facing climate change and the diminishing water resources are at crisis level, hence we need to use water resources efficiently so they can cater for both agriculture and other sectors of the economy," said Frederick Kahimba, one of the researchers.

The researchers conducted a cost–benefit analysis of existing appropriate water use technologies for smallholder farmers to assist policymakers in identifying the best options to promote. From the study, drip irrigation was found to have the highest monetary return with a nearly double return for every shilling invested. System of Rice Intensification (SRI) and community micro-dams were other technologies that had high returns at nearly 40% and 21%, respectively. Other technologies include traditional canals/furrow system and construction of terraces.

At the end of the workshop, the participants came up with a set of recommendations on the priority issues to be tackled including review of and harmonization of existing water-use policies.

According to Perez Muchunguzi, a Multi-stakeholder Specialist with the IITA and part of the PACCA project team, the workshop was very useful and marked an important milestone for the project.

"This event is part of a series of meetings that the project has been conducting to support the development of appropriate policies on food security and climate change that are informed by science. We were able to bring relevant decision makers and implementers in one room to dialog and identify priority issues and gaps and give policy recommendations for the water sector which is very important for climate change and food security, using input from research," he said.

The opening of the workshop was officiated by Magdalena Mtenga, Assistant Director, Environmental Pollution Control Section, in the Vice President's Office on behalf of the Deputy Permanent Secretary. The closing was done by the Acting Director-General of the National Irrigation Commission (NIC), Seth Luswema. They both lauded the event for its effort to support the country put in place measures to prepare for climate change.

*A farmer in Zanzibar using drip irrigation to water his tomato. The technology was found to be efficient in water use, appropriate for small-holder farmers and had the highest monetary return for every shilling invested.*

PACCA is a project of the CGIAR Program on Climate Change Agriculture and Food Security (CCAFS) led by IITA in collaboration with the Environmental Management Unit of the Ministry of Agriculture, Food Security and Cooperatives.

## Announcements

- **Young Africa Works Debate:** 29 October, Westin Cape Town Ballroom, Cape Town, South Africa. Moderator: Dr Eleni Gabre-Madhin, Debaters: Dr. Nteranya Sanginga (affirmative) and Jim Sumberg (negative). Proposition: *Agriculture is a sector of economic opportunity for youth in sub-Saharan Africa*. Sponsored by The MasterCard Foundation.
- **Open Day, IITA Ibadan,** Nigeria, 14 November
- **R4D Week,** IITA Ibadan, 22-28 November
- **7th International Conference of the Africa Soil Science Society;** Theme: Critical soil solutions for sustainable development in Africa. 2-8 December, Salle de Banquets in Ouaga 2000, Ouagadougou, Burkina Faso.
- **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.

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).