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THE BULLETIN

A look at IITA's gender journey

Although IITA has made great progress in integrating gender in its research there is still a lot that needs to be done to transform the Institute to a lead center in gender research and development outcomes. This was said by Dr Amare Tegbaru, IITA's Gender Specialist, Unit Head and Humidtropics Gender Research Coordinator, during a seminar presentation entitled *Engaging in IITA Gender Research aiming at enhancing equity and social inclusion in African Agriculture and Rural Development,* held at IITA- Tanzania on 18 June 2015.

"When I joined IITA, gender was not a priority. We did not have any concerted efforts to integrate gender into our Research for Development. There was some gender research going on but it was mainly donor-driven and based on individual interpretations of what that meant," Dr Tegbaru said. "It did lead to some successful outcomes and outputs which were strengthened and built upon by the CRPs (CGIAR Research Programs) which stressed gender research."

Emelda Mujamai, a change agent involved in the IITA MIRACLE project.

"Currently, Dr Tegbaru said, "IITA's is ensuring that all its research programs are gendered so that all technologies generated are able to benefit women and other vulnerable people. The Institute also has a gender policy in place and is emphasizing training on gender mainstreaming in addition to hiring more gender experts."

Dr Tegbaru speaking during the seminar.

Why gender research?

"Gender is not just about numbers. It's also about voices and access to assets and improvement in decision-making. IITA's vision to reduce hunger and poverty and malnutrition through increasing the yield of important staples can happen only when gender concerns are taken seriously. Our quest to enhance efficiencies and improve nutrition in the continent will not happen if we do not understand the context. We also need to know how our efforts will affect women and how they will lead to gender equity between men and women and other marginalized groups," he said.

Dr Tegbaru gave examples of some of the initiatives he had been involved in at the Institute that had integrated gender into their research agenda for greater impact. These included developing a gender strategy for the Humidtropics to address gender issues in systems thinking. "The strategy is distinct in that it is guided by the social science definition of gender as one among other systems of classification, such as those based on age, generation, kinship, race, ethnicity, religion, and social class. It emphasizes social inclusiveness of marginalized and minority ethnic groups and goes beyond gender responsive/adoptive research approach to a transformative research approach that contributes to change in power relations and the empowerment of women."

Addressing Gender norms constraints

According to Dr Tegbaru, innovations in agriculture and Natural Resource Management (NRM) are constrained by existing gender norms which legitimize gender inequality in the control over and use of productive assets and resources. This holds back development.

Lydia Sichecheni recounts the revitalization of her life during the MIRACLE project.

On the other hand, more gender-equitable control over and use of resources leads to higher levels of poverty reduction, food security, nutrition, and sustainable resource use.

He gave examples of the Making agricultural innovations work for smallholder farmers affected by HIV and AIDS, in short, the MIRACLE project. This was implemented in Malawi, Mozambique, and Zambia, and sought to address the immediate health and nutritional needs of people living with HIV and AIDS. But in the end, the women who were marginalized and excluded owing to their HIV/status rose up in the community to become change agents and some were even elected as community leaders.

"The project and its innovation platform partners contributed to more transformational changes in the form

of a reduction of the stigma and improvements in social inclusion. We are now trying to understand how the project transcended from addressing the immediate health and nutritional security needs and unlocked the hidden and suppressed potential of women. "Backed by measurable evidence we are working to produce the stories of these women. They had become change agents and innovative champions serving their communities as lead farmers, elected community leaders, and some of them in the Training of Trainers on post-harvest processing and value addition," Dr Tegbaru said. In conclusion he said there was still a lot of work ahead to be done to consolidate these gains and strengthen gender research at IITA. This in turn would ensure there was a sustained analytical capacity that could effectively translate IITA's science-based outcomes of change not only in terms of income and improved nutrition but also in enabling the empowerment of women and other marginalized groups in decision-making and change in social and power relations.

IITA's Youth Agripreneurs program takes root in Uganda

The Uganda chapter of the IITA Youth Agripreneurs (IYA) program that seeks to attract educated young people to agribusiness was officially launched on Wednesday 24 June 2015 in Mukono District.

The Uganda Youth Agripreneurs (UYA) was started in Nabbale, Mukono District, in collaboration with the National Agricultural Research Organisation, Makerere University and Mukono Local Government. It brings together university graduates in the area from diverse backgrounds that will be trained on modern farming methods, processing, value addition to agricultural produce, and entrepreneurship.

IITA DG speaking to one of the Uganda youth Agripreneurs during a field visit to see some of the farming activities they are already engaged in.

The project was launched by Mr Katooto Habib, a Member of Parliament, in an event that brought together different stakeholders including policymakers, researchers, civil society, and the private and public sectors.

In his speech, MP Habib encouraged the youth to take advantage of the cutting edge technologies in agriculture and urged them to be patient and embrace the saving culture as well. Dr Maggie Kigozi, former Director of Uganda Investment Authority and a major shareholder in Pepsicola Uganda, urged the young people not to see themselves as powerless but instead use the different networks that they have already established to start something meaningful.

The IITA Director General, Dr Sanginga Nteranya on his part advised the youth to be aggressive and very fast and to always consider gender equity in whatever they are doing."IITA is going to support you in technology, knowledge, and advocacy but you should do the rest of the activities by yourselves," he said.

The Uganda National Agricultural Research organization (NARO) was also going to provide the youth with technologies that would help in furthering this new journey they had started, according to Dr. Ambrose Agona, NARO Director General. He noted there was a lot of energy in the youth that could be tapped and put to good use.

Dr Piet van Asten, IITA–Uganda country representative, said the formation of the youth program was in response to the high priority during stakeholder engagement exercises that was placed on youth unemployment in Mukono and Wakiso, two districts where the IITA-led Humidtropics program is operating.

"Starting this program today here in Mukono," he said, "is an indication not only of the usefulness of stakeholder engagement in priority setting but also of the willingness on the research side to follow through what is demanded by the stakeholders."

Others at the event were Dr Victor Manyong, IITA Director for East Africa; Mr Buyungo Musa, the Coordinator for Parliamentary Forum on Food Security and Population Issues in the Parliament of Uganda, representatives of IYA from Nigeria, Kenya, and Tanzania, and representatives from other partnering institutions such as Makerere University, Uganda Christian University (UCU) as well as various farmers' organizations.

IYA from Uganda, Nigeria and Tanzania in a group photo with some of the dignitaries present at the launch.

Africa RISING program coordination retreat concludes; plans for Phase 2 proposal put in motion

A four-day retreat by the Africa RISING program coordination team concluded on 5 June with the submission of a proposal to USAID for funding the second phase of the program. The retreat was held in Washington DC at International Food Policy Research Institute (IFPRI) headquarters and attended by Africa RISING Program's chief scientists from IITA and International Livestock Research Institute, a Science Advisory Group representative, and colleagues from the IFPRI monitoring and evaluation team. "During the retreat we were able share insights from the recently carried out regions' project reviews, do a SWOT analysis and, based on this, decide on priorities for focus until end of phase 1 in September 2016. We also brainstormed on a common vision for the future of Africa RISING and a new, more effective management structure. Eventually, we came up with a roadmap of preparatory steps towards the phase 2 proposal. A significant milestone will be a Program Strategy workshop in October 2015. Also of significance is that we had an opportunity to make a presentation at USAID Headquarters about what Africa RISING is, what it has achieved so far, and how it will continue to deliver on the Feed the Future goals for Africa. This presentation was followed by a session during which USAID program leaders asked questions, e.g., on how Africa RISING can be of support to other USAID projects," noted Dr Irmgard Hoeschle-Zeledon, Coordinator Africa RISING West Africa and East/Southern Africa Projects.

Participants at the Africa RISING program coordination retreat.

Phase 1 of the Africa RISING program is expected to end after five years in September 2016. The program design has been focused on achieving the goal of "providing pathways out of hunger and poverty through sustainably intensified farming systems." Through the collaborative efforts of research partners involved in the project, various farm-scale level agricultural technologies have been developed to meet this goal. Research-for-Development (R4D) platforms have also been established as a means of ensuring demand-driven research and the involvement of communities and local authorities. It is therefore anticipated that the second phase of the program will be focused on scaling out the "best-bet" technologies generated from the research work in phase 1.

IITA leads two of the three Africa RISING projects in West Africa (in Mali and Ghana) and East/Southern Africa (in Tanzania and Malawi). ILRI leads the Africa RISING project in the Ethiopian highlands.

Panel discussion at Future Food Summit puts aflatoxins in the limelight

Aflatoxins and their impact on health and how to control them were one of the topics of a panel discussion at The Future of Food: The Nexus of Food and Health summit co-hosted by the global affairs magazine *Diplomatic Courier* and Mars Incorporated at the National Press Club, Washington DC, on 13 May 2015.

The topic was "Aflatoxins, the most urgent food safety challenge facing the world? The panel members were Dr Kitty Cardwell, National Program Leader; the US Department of Agriculture (USDA); the National Institute of Food and Agriculture (NIFA); John Lamb, Principal Associate, Agriculture and Food Security, Abt Associates Inc.; Barbara Stinson, Senior Partner, Meridian Institute; and the Project Director, Partnership for Aflatoxin Control in Africa (PACA) –in which IITA is a key partner. The event was moderated by Dr Howard-Yana Shapiro, Chief Agricultural Officer, Mars Incorporated.

The discussion highlighted the toxic threats faced by many communities in developing countries especially in sub-Saharan Africa and Asia. Dr Shapiro said over 4.5 billion people were affected by aflatoxins annually and termed it "a crisis", yet the issue is underfunded and does not receive adequate attention.

Green growth of Aspergillus fungus on maize.

Dr Kitty Cardwell, a former plant pathologist at IITA and leader of maize research, said it was during her research at IITA that the alarm was raised on aflatoxins when very high levels were found in maize in Nigeria. Barbara Stinson spoke on the ongoing efforts by PACA, a Pan-African initiative launched in 2012 and led by the African Union (AU), to put in place measures to control the poison including a comprehensive policy regime across the continent. She also mentioned the biocontrol technology in which IITA is taking a lead as one of the solutions PACA is promoting. John Lamb from Abt said adequate reporting and investment were both lacking for aflatoxins although it was a major development problem. They had a negative impact on agriculture affecting animals, livestock, fish, and humans directly. They also had a huge impact on the value of agricultural produce in the market. The poison is suspected to directly cause stunting, lowered immunity, and liver cancer and increases vulnerability to hepatitis B, TB, and HIV/Aids. There was a lot to be worried about in health, agriculture and nutrition, and trade. The summit brought together leading experts on issues concerning food, health, nutrition, and wellness and looked at the vital role collaboration across sectors can play in sustainably addressing the world's most pressing food and health challenges. It was attended by representatives from diverse organizations such as the UN World Food Programme; the University of California, Davis; and the White House. See video on the session here.

A sea of greenery – towards sustainable intensification of smallholder maize-legume production systems within the humidtropics highlands of central Africa

In May 2015, Celestin Ndayasiba (Rwanda Agricultural Board), Mathias Nkundabatware (*Eglise Presbyterriene au Rwanda*), Alain Hero (IITA), and Nester Mashingaidze (IITA/Wageningen University) made a field visit to Kayonza district of Rwanda. There they witnessed the lush growth and potentially high yield of the improved and iron-fortified common bean variety (RWR 2245) in the Humidtropics demonstration plot of Mr Anastase Kamanzi-a farmer who participated in the trials.

Mr Anastase Kamanzi, a smallholder farmer in Kayonza district of Rwanda, is impressed with performance of the improved and fortified bean variety grown on his farm.

In the Great Lakes region of Africa, bean production is an integral component of almost every smallholder farm production system as beans are an important part of household diets and contribute to farm income. In the previous season, a set of the most promising maize-soybean intercropping systems from the *Consortium for Improving Agriculture-based Livelihoods* was established on the same field with and without inorganic fertilizer.

The farmer's own maize / soybean production practice was used as the control. The aim of growing the maize-soybean intercrop in the short rain season followed by common field beans in the next is to demonstrate to farmers the potential of improved crop varieties, cropping systems, and Integrated Soil Fertility Management

to lead to sustainable intensification under smallholder farming conditions.

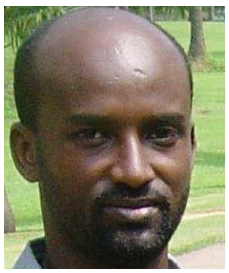
The diversified maize-legume system is one of several Humidtropics entry points that were identified by multi-stakeholder Research-for-Development platforms at the regional action site level and implemented with Innovation Platforms at more local field sites. The integrated systems research approach will be used to assess the benefits and tradeoffs of adoption of technical and institutional innovations at plot, farm, and community levels in terms of production, natural resource management, nutrition, income generation, and labour for farm households with different resource endowments. In addition, for crops such as soybean, there will be training courses on the processing and utilization of crop products for enhanced household nutrition, For market-oriented farming households, available produce markets will be explored and linkages to these developed through multi-stakeholder platforms.

Humidtropics partners monitor the growth of improved common field bean variety grown on Mr Anastase Kamanzi's field in eastern Rwanda during May 2015.

Agricultural Research for Food Security in Africa: Graduation of three IITA-NUI Galway PhD Scholars

In 2009 the National University of Ireland Galway (NUIG) established an MoU with the International Institute for Tropical Agriculture (IITA) to establish a collaborative research and training program on agricultural research for development and food security in Africa.

A key feature of the MoU agreement has been a focus on the training of NUIG-IITA PhD Research Scholars with the Plant and AgriBiosciences Research Center (PABC) at NUIG. Three of the first NUIG-IITA PhD Research Scholars trained under this scheme graduated on 29 June from NUI Galway, having been conducting their crop research between IITA research stations (Kenya, Nigeria) and NUI Galway over the past four years.



Dr Girum Azmach from Ethiopia has been conducting his PhD research (funded by Irish Aid) on developing more nutritious maize varieties that contain higher levels of vitamin A. Such biofortified crops are being developed by IITA and partners to combat "hidden hunger" malnutrition amongst the rural poor. Dr Azmach has returned to Ethiopia to contribute to the national maize breeding program.

Dr Mercy Kitavi from Kenya has been conducting her PhD research (funded by Irish Aid) on East African Highland banana, a staple crop of smallholder farmers in the Great Lakes region of sub-Saharan Africa. Her research has revealed that all varieties of East African Highland banana lack genetic diversity and are at high risk of being wiped out by new strains of the deadly banana wilt fungus. Dr Kitavi now works on capacity building in East Africa for sweet potato research.

Dr Gezahegn Tessema from Ethiopia has been conducting his PhD research (funded by the Dutch Ministry of Foreign Affairs) on understanding the genetic diversity of yam, an important staple crop in Africa. His research has improved the understanding of how yam genetic diversity can be better harnessed in breeding programs to make the crop more resilient and productive to meet future challenges such as climate change. He is currently working with IITA on developing improved cassava varieties for food security in sub-Saharan Africa.

The research of the three IITA-NUI Galway PhD Scholars was co-supervised by Prof. Charles Spillane (PABC, NUI Galway) and the world-leading IITA scientists Dr Abebe Menkir, Dr Melaku Gedil, Dr Jim Lorenzen, and Dr Morag Ferguson. Prof. Spillane commented, "*The innovative crop research work of these three IITA-NUI Galway PhD Scholars contributes significantly to the broader goals of IITA, NUI Galway's PABC, and Irish Aid of conducting agricultural research for improving food security and nutrition in developing countries, particularly in Africa.*"

Events

Annual Review and Planning Meeting - Africa RISING, NAFAKA and TUBORESHA CHAKULA Scaling Project, Dar-es-Salaam, Tanzania, 8–10 July

Africa RISING ESA Project Annual Review and Planning Meeting, Mangochi, Malawi, 14–16 July

Africa RISING ESA Project Steering Committee Meeting, Mangochi, Malawi, 16 July

Tropentag 2015, Humboldt Universitaet zu Berlin, Berlin, Germany, 17–19 September

First World Congress on Root and Tuber Crops, Nanning, Guangxi province, southern China, 5–10 October

The 7th International Conference of the African Soil Science Society Announcement of Special Program: Soil Fertility Management for Sustainable Intensification in West and Central Africa, Ouagadougou, Burkina Faso, 25 October – 1 November

Got a story to share? Please email it with photos and captions every Wednesday to Andrea Gros (a.gros@cgiar.org), 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).