

IITA joins other CGIAR centers to provide support to rebuild Somalia's Agriculture sector

ITA and eight other CGIAR centers have met with officials from the Government of Somalia and several agriculture development partners to put together a plan to rehabilitate Somalia's agricultural sector following years of conflict in the country. The meeting took place on 24 September at ICRAF offices in Nairobi, Kenya.



Edward Baars in field engagement session with local farmers.

Donor organizations with development programs in Somalia convened the meeting hoping to introduce the improved technologies from <u>CGIAR</u> centers. These organizations, including the <u>US Agency</u> for International Development (USAID), the European Union (EU), the <u>UK Department</u> for International Development (DFID), and Japan International Cooperation Agency (JICA), also want to see improved approaches in the agriculture and natural resource management sectors applied in the country.

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The other centers represented at the meeting include Center for International Center for Tropical Agriculture (CIAT), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), International Forestry Research (CIFOR), International Maize and Wheat Improvement Center (CIMMYT), International Livestock Research Institute (ILRI), International Potato Center (CIP), International Rice Research Institute (IRRI), and World Agroforestry (ICRAF). Each organization shared what they could do, or are already doing, in Somalia.

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IITA Kano hosts CSAT project implementation partners from Mali and Niger Republic

A team of CSAT/IITA project staff and collaborating partners from Mali and Niger Republic visited <u>IITA</u>, Kano Station on 15 October as part of the four-day exchange visit aimed at facilitating knowledge transfer and sharing experience on improved agricultural technologies in the development of smallholder agriculture productivity.







The Head of IITA Kano Station, <u>Alpha Y. Kamara</u> and some senior staff of the station received the delegation, which was led by Dr Alassan Maiga, a Malian and Mr Mani Mamman, a Nigerien.

In his opening remarks, Kamara stated that the aim of agricultural technologies when developed is to create impact and should not to be kept on the shelf. In his brief presentation titled "Key Approach to Scaling up Agricultural Technology to Increase Productivity and Income", highlighted key elements to he in scaling out technologies use high impact. These include for effective partnership, use of scalable technologies, use of decision support tools to target suitable ecologies for the technologies, awareness creation, field demonstrations, capacity building of users, and use of market linkages to create demand.

He concluded the presentation by encouraging the project team and partners to always send their financial and technical reports on time to avoid late release of funds and to adhere strictly to the agreement in the implementation of the project activities.

In his remarks, Mr Tofa Abdullahi gave a report on his field visit to Mali and Niger Republic in September 2019. He disclosed the successes and failures of the implementation of the projects in some regions of both countries with particular reference to Kaye in Mali and Dosso in Niger where the NGOs did not do their work properly. He said the team must have learned from their past mistakes and admonished them to consolidate on the achievements made so far.

The visiting team showed excitement about the dynamism in the strategy used by IITA Kano in technology dissemination that improves smallholder farmers' agricultural productivity. On their part, they highlighted some of the challenges and difficulties they have encountered in marketing soybean in the two countries. They proffered solutions to some of the problems such as training of households in the processing and utilization of soybean to create demand for the crop.



Alpha Y. Kamara addressing the visiting team.



Mr Reuben leading the field visit. Photo by Sarah Sallau.

It could be recalled that the visit was also in part to meet with the newly recruited field coordinators and Supervisors under WS2 and WS8; to visit some of the modelling CSAT activities under WS8, and on-farm and on-station activities carried out in Nigeria to monitor the performance of agronomic technologies.

During the four-day visit, the team toured several IITA Kano on-station and out-station research fields at Bayero University Kano Research Farm, Early Generation Seed Production field, Teaching and Research farm of Audu Bako College of Agriculture

Danbatta, IITA Research Farm in Shika, Zaria, and Kafin Madaki Ganjuwa LGA in Bauchi State.

During one of the visits, the visitors had a brief meeting with Prof Jibrin M. Jibrin, Director Centre for Dry Land Agriculture, BUK, where they discussed issues concerning the crop-modelling component of the project. An interactive session was also held between the IITA Agronomy team headed by Tofa and the visiting team and partners on protocols for the on-farm harvesting and data collection. The team left Nigeria with great excitement.

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The meeting chair was Mohamed Abdinoor, Chief of Party of the Somalia Growth, Enterprise, Employment and Livelihoods (GEEL) project. GEEL is a USAID-funded project that aims to boost Somalia's exports of quality agriculture and fish produce, increase dairy production, reduce reliance on imports, and increase jobs in a country recovering from years of conflict and recurrent natural disasters. "After 30 years of conflict, Somalia is coming back," Abdinoor said.

The suggestions for support from CGIAR included providing technical backstopping in formal and informal capacity-building programs, genebank conservation, supporting crop performance trials, or support in direct implementation.

They also canvassed for the introduction of climate-smart crops such as sesame, sorghum, cowpea, sweet potato, cassava, and millet. These include short-season and/or drought-tolerant varieties that can enhance livelihoods and promote the resilience of smallholder farmers. Combining these with trees that are suited to the different agro-climatic zones can further enhance productivity and lead to more sustainable agricultural systems.

Senior Business Development Officer Edward Baars led the team from IITA. He pointed out that IITA's contribution could include the introduction of a strategic multiple stress-tolerant crop roadmap for Somalia, including science-based crop improvement trials and demo plots to identify appropriate varieties. This should also include use of crop Genetics and Molecular breeding to speed up breeding. The crops should also be tolerant to biotic stresses such as cassava brown streak disease (CBSD) and mosaic disease (CMD) and include other IITA crops including banana and cowpea.



Edward Baars facilitating discussion in Somalia. Photo by CEFA Somalia.

Other activities discussed include establishing a vibrant seed system to support and maintain the crop improvement activities; and capacity building and training of researchers in crop improvement and seed systems.

He also suggested IITA could support banana production by introducing tissue culture propagation to provide clean planting materials; and developing and scaling-up Aflasafe®, an innovation that helps keep maize, sorghum, and other agricultural products free from aflatoxins to meet the EU standards for safe consumption and export.

Both ILRI and IITA mentioned livestock-crop index insurance and synergies between them as a potentially high impact innovation for Somalia, following initial successes elsewhere.

ICRISAT's Senior Cereal Breeder Eric Manyasa advocated for farmer-led seed

production, describing a successful project with CARE in 2002 in Lower Shebelle where the two organizations had produced 400 tonnes of seed under irrigation.

CIP proposed to bring Irish and orangefleshed sweet potato (OFSP) that are adapted to all environments and are climate resilient. Furthermore, 125 grams of OFSP provides 100% of the required daily allowance of Vitamin A for a child under 5 years old.

World Agroforestry described its work in the Regreening Africa project to restore landscapes in a country that has been devastated by among other things, the felling of trees for charcoal production and export to Gulf States.

Culled from ICRAF blog: <u>http://www.</u> worldagroforestry.org/blog/2019/09/24/ agriculture-resurges-somalia-cgiar-centresgovernment-fao-and-donors-plan-help-it

Events

1st Aflasafe for Africa Conference, Arusha, Tanzania, 4–5 November
Food Security Synthesis Caravan Conference, IITA headquarters, 5 November
International Plant Protection Congress (IPPC) 2019, Hyderabad, India,10–14 November
5th Nutritious Food Fair, IITA headquarters, 13–15 November
Board Meeting and R4D Week, IITA headquarters, 18–22 November



Got a story to share?

Please send your story with photos and captions every Tuesday to iita-news@cgiar.org or Katherine Lopez (k.lopez@cgiar.org) and Uzoma Agha (u.agha@cgiar.org) for headquarters and Western Africa, Catherine Njuguna (c.njuguna@cgiar.org) for Eastern and Southern Africa, and David Ngome (d.ngome@cgiar.org) for Central Africa.

Success Stories: Turning cassava into cash in Malawi

Kaboma Banda, sitting under the shadow of a partially leafy tree in his courtyard, peels a gigantic cassava tuber. His grass-thatched house located in the somewhat hilly terrain of Chintheche village in Nkhata Bay District of Northern Malawi is only accessible through craggy paths lined with shrubs and arid grass.

But the 48-year old has lofty aspirations. He dreams about constructing a splendid house, adorned with modern furniture, connected to piped water and fully electrified.

When those glorious days finally come, as he believes they will, the seasoned farmer would probably love to see his children, who usually put on ragged clothes, dressed in designer shirts.

His hopes of better days are inspired by his newly found income earner—cassava. Banda has become the crop's seed multiplier and supplier under the Root and Tuber Crops (RTC-ACTION) Project, which <u>IITA</u> is implementing with support from <u>Irish Aid</u>.

The initiative's purpose is to increase the contributions of RTC to food security, nutrition, and incomes of small-scale farming households in the country.

Cassava's tuberous root is an essential staple for millions of people globally especially those residing in low rainfall areas. Its usefulness does



The Banda family peeling cassava.

not end there: Its stems are seeds; its leaves can be converted into nutritious vegetables; while its peel is used as animal feed.

In spite of its enormous value, in Malawi, cassava, as Banda and many others can testify, has remained a crop grown largely by marginal farmers, often for their own subsistence rather than economic gain.

"Until recently, I have been growing cassava just to feed my family," he asserts.

IITA selected Banda as a seed multiplier last year. He has, thus far, sold 300 bundles of cassava stems earning him around K400 000.

Today, Banda, who is a subject of Group Village Headman Chipolopolo in Traditional Authority Fukamapiri in Nkhata Bay, is enjoying a new experience. "I am constructing a shop along the main road and again, I am able to pay school fees without problems," he said.

YIIFSWA-II exhibits at Annual NASC Seed Fair and Farmers Day

The National Agricultural Seed Council (NASC) held its annual Seed Fair and Farmers Day on 17 October, at their headquarters in Sheda, Abuja.

The theme of this year's event was "Making quality seeds available, accessible and affordable to Nigerian farmers." The new Federal Minister of Agriculture and Rural Development, Alhaji Sabo Nanono indicated that there is a strong correlation between intensification of food and commodity production and biotechnology. He noted the need to strengthen National Agricultural Research Institutes to continue researching and developing improved varieties through biotechnology for farmers.

He said: "The application of modern biotechnology to plant breeding is considered to be more efficient than conventional breeding techniques in the development of new and resilient crop varieties." He urged Nigerians to embrace these technologies, which will help the country in its pursuit of food security.

After the opening ceremony, he toured the stands of seed companies and



Oiwoja Odihi of YIIFSWA-II showcasing seed tubers generated from AS vine cuttings.

research institutes showcasing seed of improved varieties and technologies for boosting agricultural productivity in Nigeria. YIIFSWA-II showcased Aeroponics vine cuttings and seed tubers generated from AS vine seedlings ranging from 1 kg to less than 10 g. During the tour of the exhibition, the Minister and his delegation stopped at the YIIFSWA-II stand and were impressed to see that seed yam tubers can be generated from vines. The Project Team attended to visitors and responded to their inquiries on seed yam tubers and good agronomy practices that could boost their ware yam production.

Data Focus: Equity in Open Access

The world observed Open Access week 2019 from 21 to 27 October. The theme, "Open for whom? Equity in Open Access" raised important considerations about the various users of open access data and publications as well as the usage of such open access materials or data.

According to <u>Opensource.com</u>, Open Access means making your work accessible without any form of restrictions for public use. Therefore, if you have a database that requires authentication before you can access the resources in that database, such a database is not fully open access compliant. This also applies to publications.

Open access is good for research or academia. Knowledge from previous research could be reused to bring out a new output. It encourages innovation and promotes knowledge management provided necessary credit the author receives necessary credit and the knowledge from the open access is used to improve society. Academia and researchers build on past works when developing new theories or ideas.

In a world where many data lakes are not open access, data in a data warehouse with well annotated ontology and metadata may attract not just researchers but the private sector for commercial use. When a researcher has worked for years to warehouse datasets, they may be concerned who accesses the data and the purpose for which the data is being used. When the business community makes use of data that is completely open, for instance with CC BY, the author of such data may not have any additional gain from the new product that may be developed from the accessed data.

Many businesses make huge sums of money from open access, whether from data or publications, without recourse to the source of the data or publication. Such situations cheat <image><image>

Increasing the visibility and accessibility of research output through Open Data is one novel pathway for young scientists to disseminate new ideas, increase interdisciplinary conversations, and carry out collaborative research on a global scale.

Pat Udomkun, Postdoctoral Fellow | Food Scientist and Technologist

researchers or data owners in many cases. So, when we talk about open access, we need to know who this data is open for and how this will be used. This leads to type of open access license. <u>The Creative Commons</u> <u>Licenses</u>, sets the standard for open access usage. These licenses are supposed to be respected when open access information or data is reused for other purposes apart from academic or research purposes.

There should be equity in open access when it is being used for commercial purposes. Researchers should be able to have some incentives from the secondary result of the initial effort of the data owner or first author. This kind of incentive will boost the morale of researchers, knowing fully well that when they open their data, they also stand to gain beyond the immediate value of the information that is made open.

As donors keep requesting for open access for all publicly funded research, the interest of the researchers should also be protected, or a guaranteed incentive be provided to the research community to ensure credits are given to authors as well as financial incentives to such author(s) when the work leads to another innovation.