



Push for Green Revolution in Africa demands improving soil fertility, says DG



Participants at the GCP-organized meeting in Kampala, Uganda

The push for a “Green Revolution” in Africa to increase agricultural production for food and economic development will not bear much fruit if adequate attention is not paid to managing soil fertility in the continent, says DG Nteranya Sanginga.

“Solid soil fertility management is key. For cassava commercialization and our Green Revolution, we need to use fertilizers—organic and inorganic—alongside the high-yielding and disease-resistant varieties,” says Dr. Sanginga.

Across Africa, current application of soil nutrient, whether organic or inorganic fertilizers, is estimated at 8 kg/ha. Researchers say the amount is low, and it is one of the major setbacks to the continent’s vision of adequately feeding itself.

In support of this, the African Union has called on countries in the continent to increase application of soil nutrients to 50 kg/ha combining both organic and inorganic fertilizers.

Addressing participants at the Global Cassava Partnership meeting in Kampala, Dr. Sanginga says Africa cannot achieve a Green Revolution without first having a ‘Brown Revolution’—referring to the improvement of soil conditions through the application of organic and inorganic fertilizers.

While acknowledging that much investment had gone into developing high-yielding cassava varieties that are resistant to some of the major pests and diseases, the DG says the gains achieved in the breeding work cannot be realized if these varieties are grown on poor soils.

He said it was unfortunate that cassava had been tagged for many years as a poor man’s crop that does not require much input such as fertilizers. He argued that the crop harvests as much nutrients from the soil as other crops and that these nutrients need to be replenished. “Nutrient use in cassava has been very minimal as it is considered a poor man’s crop. However, if we are talking about cassava transformation, about increasing cassava production not only for food but also for commercial use, we must change these wrong perceptions. If we think of growing cassava in soils that are too poor for other crops such as maize,” he said, “then, we are missing the other half of the equation.”

“Soil fertility is one of the missing links in the struggle to commercialize cassava. For now entrepreneurs involved in cassava processing are saying that there isn’t enough cassava, whereas famers, on the other hand, are saying that there are no markets.”



Sanginga (left) addresses participants at the IITA-cosponsored Global Cassava Partnership Conference in Kampala, Uganda



Staff bulletin to come out soon; naming contest launched

A staff bulletin will be launched starting next month as part of efforts aimed at ensuring more effective internal communication and exchange of information among staff, units, projects, and stations/hubs in IITA.

The monthly newsletter will focus on human interest stories, news and announcements about staff and institutional activities and events. It will be published every first week of the month by the Human Resources Service in collaboration with the Communication Office.

The newsletter has no name yet. A staff bulletin naming contest is being launched by HRS to choose the best name. Criteria for choosing the best name include relevance, representativeness/suitability, impact, and maximum of two words. The staff member who submits the winning name will receive a prize.

The deadline for submission is 6 July. Staff are encouraged to send suggestions to s.obasemola@cgiar.org and w.oladokun@cgiar.org.

Dashiell underscores need for capacity building in basic molecular tools

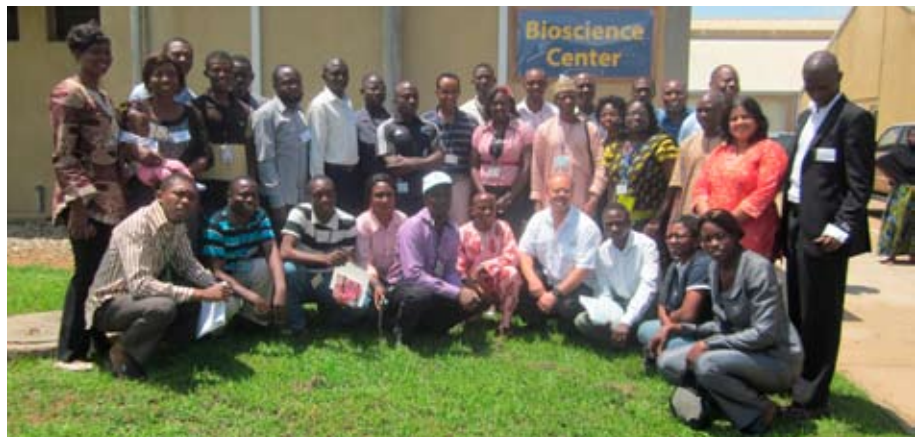
The Deputy Director General, Partnerships and Capacity Building, Dr. Kenton Dashiell has underscored the need for capacity building in using molecular tools to help solve the problems confronting agricultural development in Africa.

Addressing young scientists during a workshop under the auspices of IITA's International Association of Research Scholars and Fellows (IARSAF), Dr. Dashiell encouraged them to learn more to be able to serve Africa and contribute to research in general.

The four-day workshop on "Basic molecular biology techniques and bioinformatics" was jointly organized by IARSAF and the Bioscience Center.

The workshop had 25 participants including IARSAF members, students from the University of Ibadan, professionals from research institutes, and private laboratories in Ibadan.

The workshop was designed to combine both theory and practical sessions to equip the participants on basic molecular biology techniques. The special workshop gave participants the opportunity to understand the different steps in DNA or RNA analysis. Dr.



IITA- IARSAF and other participants at the workshop pose for a group photo

Ranjana Bhattacharjee talked about biochemical principles involved in biotechnology; Dr. Ismail Rabbi introduced the participants to new techniques and urged participants to imbibe self-training to keep up to date on the rapid evolution of molecular tools; Dr. Melaku Gedil conducted a theoretical session with a lot of bio-analytical methods to enable students to collect and handle samples, and analyze and interpret data. Dr. Gedil

showed the various websites (BLAST, NCBI, etc.) on which molecular biology databases and tools could be obtained to design primers with free website tools.

The practical session covered DNA extraction from cassava leaves, PCR cocktail preparation and running, and agarose gel casting and running under the full supervision of research supervisors.

Training Coordinator Lola Idowu, issued certificates to the participants.

IITA to scale up investments in Southern Africa hub

IITA will invest in first class research facilities and increase the number and diversity of scientists working at its regional hub in Lusaka, Zambia to strengthen its efforts to fight hunger and poverty in Southern Africa.

IITA Director General, Dr Nteranya Sanginga said the institute has decentralized its activities to have more impact as part of its ambitious plan to get 20 million people out of poverty in sub-Saharan Africa in the next 10 years as spelt out in its refreshed strategy. The hubs are in Nigeria for West, Tanzania for Eastern, Zambia for Southern, and Democratic Republic of Congo for Central Africa.

Speaking to various partners including donors, national research partners, media, and the private sector while in Lusaka, Zambia on 11-15 June; Dr. Sanginga said the institute would focus especially on building the capacity of researchers from national research institutes and institutions of higher learning.

He noted that many countries in Africa were heading towards a crisis as the current experienced civil servants in the agricultural sector who were retiring did not have qualified successors to take over.

"In Zambia, Congo, Kenya, and in many other African countries, the situation is the same. We have scientists at the prime of their career being forced to retire because they have attained the retirement age of 50-55 years. On the other hand, there are very few experienced staff to take over from them. So at IITA we are exploring how to make use of the knowledge and skills of these retirees and how to build the capacity of young researchers and attract the young people to agriculture," he said.

This was welcomed by the Acting Director of ZARI, Dr. Moses Mwale and the Dean of the Faculty of Agricultural Sciences, University of Zambia, Dr. Mick Mwala and their colleagues.

Dr. Sanginga also noted that there was a need for African countries to diversify their staple crops particularly to avoid overreliance on maize. This was supported by country representatives of FAO, Mr. Adrianus Spijker and Africa Development Bank's, Dr. Freddie Kwesiga who noted that overreliance on maize as a food staple and income crop in Zambia was not sustainable particularly in the face of climate change and dependency on rainfed agriculture.

They identified cassava as one crop that they were keen on promoting as it was a hardy crop with uses that went beyond just being a food crop.

Dr. Sanginga assured them that IITA had many years of working along the cassava value chain and would lend its expertise to support the country in its diversification efforts.

He gave an example of Nigeria where the policy of including 20% cassava flour will save the country millions of US dollars from reduced wheat importation and create jobs for thousands of young people.

FAO country representative, Mr Spijker noted that IITA and FAO had achieved significant success in dealing with cassava disease in DRC. He said IITA's new disease-resistant varieties distributed all over the country, with support from FAO and other partners, had averted a major disaster. He was therefore more than happy to collaborate with IITA to make a difference in Zambia.

Dr. Sanginga said the institute was also focusing on strengthening its research on natural resource management, partnerships with national agricultural research systems and nurturing young scientists.

Dr. Sanginga was accompanied by the IITA director for Southern Africa, Dr. David Chikoye. Others were Dr. Steve Boahen, and Dr. Alene Arega, the Country representatives for Mozambique and Malawi, respectively. Dr. Sanginga also made brief presentations at the University of Zambia and FAO offices.



DG Sanginga tours ZARI lab; looking on are Drs. Moses Mwale, acting ZARI director; and Steve Boahen, IITA Mozambique