



DG Sanginga: Africa should not be denied the opportunity to use organic and inorganic inputs

For Africa to witness a “Green Revolution,” the continent must sustainably intensify its agricultural production system, use organic and inorganic inputs, and also pay attention to the youth by engaging them in every sector of agriculture.

Delivering a lecture on ‘Agronomy or Brown Revolution needed in sub-Saharan Africa? Engagement of the Youth in Science-driven Agribusiness’, Director General Nteranya Sanginga said, “Africa needs to avoid opening up new lands and clearing forests to increase yields which have negative consequences on the environment and lead to a loss of biodiversity.

To sustain agricultural intensification, Africa must increase food production from existing farmland while minimizing pressure on the environment. This would address the challenges of increasing demand for food from a growing global population in a world where land, water, energy, and other inputs are in short supply, overexploited, and used unsustainably.

He advocated a radical shift from the current agricultural system that is characterized by low inputs and poor scientific knowledge.

Dr Sanginga said that if Africa had been efficiently using inputs including both organic and inorganic—herbicides and fertilizers—the continent would have benefited from the genetic gain recorded by researchers over the years through breeding programs.



L-R: Vice-Chancellor, Osun State University (UNIOSUN), Prof A. B. Okesina; Dr Sanginga; and Chairman, Governing Council, UNIOSUN, Prof Gabriel Olawoyin, during the 2013 Distinguished Annual Lecture at the College of Agriculture, Osun State University.

“For example, if you take cassava, we have had genetic gains through breeding but instead of getting 50 t/ha we are getting 15 t/ha on most farmers’ fields. If we were applying fertilizers, we would have recorded higher yields...and this is the situation not only with cassava but with several other crops,” he explained at the 2013 Distinguished Annual Lecture organized by the College of Agriculture, Osun State University.

Dr Sanginga reiterated that no continent on earth had ever developed its agriculture without the use of inputs such as fertilizers and stressed that Africa should never be

denied the opportunity to use inputs.

“If you look at the agricultural revolution in Asia or even in Europe, inputs were used to transform agriculture...I believe that Africa should take the same path,” he noted.

Tied to natural resource management, Dr Sanginga also underscored the need to engage the youth in agriculture and presented the IITA Youth Project as a model that Africa could adopt.

The IITA Youth Project engages young people from different disciplines, trains and equips them with the hands-on skills and knowledge that empowers and encourages them to go into agriculture.

Dr Sanginga said getting the youth on board was critical for the sustainability of agricultural reforms, citing current statistics that indicate that most agricultural researchers and even farmers are old.

The DG said that the Institute would continue to partner with other institutions and deliver those innovations that would improve the productivity and livelihoods of farmers. “Central to the activities of IITA is capacity building,” he added.

Prof. G.A. Olawoyin, the Chairman of the Governing Council of the university, noted the need for a “Brown Revolution” in Africa, and agreed that the engagement of the youth in agribusiness is relevant to the situation of Nigeria and Africa in general.

He described the lecture as a catalyst to solving the menace of youth unemployment and food insecurity.

Dr Sanginga was accompanied by Dr Gbassey Tarawali, Godwin Atser, and members of the IITA Youth Project.



Dr Sanginga (center, in blue tie), with the IITA contingent and hosts from the Osun State University.

IITA Emeritus Scientist, Peter Neuenschwander, elected Fellow of the African Academy of Sciences

Peter Neuenschwander, IITA Scientist Emeritus, was recently elected a Fellow of the African Academy of Science. This award recognizes his scientific career and devotion to biological sciences over 40 years, most of this time in Africa.

Neuenschwander joined IITA in 1983. He was recruited as Research Coordinator for the biological control project against the cassava mealybug under Dr Hans Herren and served in this position of principal scientist for 10 years. He took over from Dr Herren as Director of the Plant Health Management Division which he led for almost another 10 years. In the now famous cassava mealybug project, for which several awards including the World Food Prize were bestowed on Dr Herren, Neuenschwander led and executed research in about 25 African countries, focusing on impact assessment while training numerous African students and scientists. The team soon expanded into similar research on the mango mealybug and other pests. Later it specialized on the biological control of floating waterweeds and brought together specialists from all over Africa to write the book *Biological Control in IPM Systems in Africa*, a comprehensive review of biological control efforts.

In 2003, Neuenschwander retired and was nominated as the first IITA Scientist Emeritus, with an office in IITA-Bénin where he still works part time. Apart from assisting IITA colleagues in preparing manuscripts and project proposals, Neuenschwander was involved in several consultancies including one for the African Development Bank on an IPM project for the Lake Chad Basin Commission and one for UNDP on the biological control of water hyacinth in Côte d'Ivoire. He helped reestablish the Bénin section of the International Union for the Conservation of Nature (IUCN) with another important achievement, editing and publishing a book on endangered species for the Red List of Bénin.

In his prolific scientific career, Neuenschwander has produced 113 peer-reviewed journal articles, two books, and over 30 conference papers and training manuals. He has been a founding member of BioNET INTERNATIONAL, has received a Recognition Award from the African Association of Insect Scientists, and has been elevated to Honorary Member of the International Organization for Biological Control.

For over 15 years, Neuenschwander has been living in a small village north of



Neuenschwander

Cotonou. There he has rehabilitated farmland and bush to a species-rich secondary rain forest where a rare endemic monkey roams and attracts tourists. In 2014, these 14 ha of rehabilitated forest will be handed over to IITA as part of the Biodiversity Center in Bénin for the study of interactions among biodiversity, biotic stresses, and climate change, as anchored in the new IITA strategy.

N2Africa project prepares for second phase with US\$25 million grant



Woman farmer tending a soybean field

Project team and partners of the N2Africa project gathered in Nairobi to share and learn from the successes of its first phase and plan for the second after receiving the good news of additional funds from the Bill & Melinda Gates Foundation.

The project started in 2009 and works with smallholder farmers in Africa to exploit the nitrogen-fixation potential of legumes to improve soil fertility and contribute to improving food security and nutrition. It has reached more than 250,000 farmers across eight countries with better legume varieties and improved farming practices—including the use of phosphorus fertilizers and rhizobia inoculants.

Many of the beneficiary farmers more than doubled their legume yields and also significantly increased the yields of successive crops as a result of improved levels of soil nitrogen. Annual net household income rose by an estimated average of \$355.

The project was led by Wageningen University together with IITA and the International Centre for Tropical Agriculture (CIAT). The first phase, funded by the Gates Foundation and the Howard G. Buffet Foundation, was implemented in the Democratic Republic of Congo, Ghana, Kenya, Liberia, Malawi, Mozambique, Nigeria, Rwanda, Sierra Leone, and Zimbabwe.

With the new funding from the Gates Foundation, N2Africa Phase 2 will focus on five core countries—Ghana, Nigeria, Ethiopia, Tanzania, and Uganda—but will maintain activities in the other countries involved in Phase 1.

In addition to enhancing production in the major legume-growing areas of each partner country, Phase 2 will strengthen partnerships with both the public and private sectors, such as seed, inoculants, and fertilizer companies, to ensure a sufficient and consistent supply of inputs to the smallholder farmers and to improve markets.

“In the second phase, we will build on the successes we achieved in Phase 1. We will work with the public and private sector to create sustainable input supply and marketing chains to ensure the best legume technologies, including the inoculants, are easily available and affordable to African smallholder farmers,” says Bernard Vanlauwe, IITA’s Director for the Central Africa Hub and natural resource management. We will drive the adoption of these technologies by linking the smallholder farmers to local, regional, and international legume markets.”

Phase 1 focused on identifying inoculants for soybean. The second phase extends the search to include inoculants for other legumes such as common bean, cowpea, and groundnut, among others, to enhance legume production. It will also build the capacities of national researchers to conduct research on legume and rhizobial inoculants, based on the priorities for each participating country.

Forbes Award: IITA alumni congratulate Dr Adesina

Former and current staff of IITA have congratulated Dr Akin Adesina, the Nigerian Minister for Agriculture and Rural Development, for winning the prestigious award—Forbes Africa Person of the Year.

Dr Olumuyiwa Osiname, Chair of the Local Organizing Committee of the 2014 IITA Alumni Reunion, described the award as a well-deserved victory.

“It demonstrates and supports the need for African governments to use technocrats in government for better results... I think this is the message,” Dr Osiname said.

Dr Adesina was selected for his bold reforms in Nigeria’s agriculture sector. Other nominees included Aliko Dangote of Dangote Group; Chairman of the Zenith Bank Group, Jim Ovia; Strive Masiyiwa, founder of the global telecoms group, Econet Wireless in Zimbabwe; and South African mining magnate, Patrice Motsepe.

His reforms in the agricultural sector are empowering Nigerian farmers and have ended the protracted mess in the procurement of agricultural inputs, including fertilizers.



Dr Adesina holding the Forbes prize

Dr Nteranya Sanginga, IITA’s Director General and a former colleague of Dr Adesina, describes the award as a victory for smallholder farmers and agriculture in Africa.

“It shows that things are beginning to take

shape in Africa,” Dr Sanginga said.

Dr Adesina is a passionate defender of smallholder farmers, and has been instrumental in unlocking opportunities for farmers and changing Africa’s narrative on agriculture away from poverty reduction to wealth creation.

He was a program leader in the IITA Resource and Crop Management Division based in Cameroon from 1992 to 1998.

As host, Dr Adesina’s government has been very supportive of CGIAR in general and IITA in particular and its programs that are directed at alleviating poverty, enhancing health and nutrition, and improving the quality of life of the poor, including women and the youth, in Nigeria, sub-Saharan Africa, and other tropical regions.

In his acceptance speech, Dr Adesina said, “I am truly honored and humbled by this prestigious award, which I dedicate to Africa’s farmers and the new cadre of young business entrepreneurs who have discovered the hidden gem for sustainable wealth creation on our continent – Agriculture.”

CGIAR restates pledge to support Sierra Leone to develop agriculture

Sierra Leone has received a high-level commitment from CGIAR that the global network of international agricultural research will support the country’s agricultural reform program.

The pledge to support Sierra Leone came after a 3-day consultative dialog that sought to set the vision for Environment, Science, Technology and Innovation in promoting agriculture, fisheries, and industrial development.

Dr Marco Wopereis of AfricaRice Center, who represented Dr Frank Rijdsberman, the Chief Executive Officer of the Consortium, said, “CGIAR is also ready to assist Sierra Leonean research institutes in developing 10-year research strategies and 5-year rolling implementation plans to ensure highly relevant research, while building a strong science capacity in Sierra Leone and mobilizing global knowledge in these areas.”

CGIAR centers present at the dialog which ended in the capital Freetown on 13 November included the World Agroforestry Center, IITA, AfricaRice, and CIAT. Others to be brought on board are ILRI and WorldFish.



Drs Dashiell (left) and James (right) at the dialog

The plan is to assist Sierra Leone in putting into practice the development strategies for key commodities, in particular rice, cassava, forestry products, livestock, and aquaculture.

Over 200 participants, including cabinet ministers, heads of MDAs, development partners, members of parliament, private sector players, farmers’ organizations, and civil society activists, participated in the dialog.

Dr Kenton Dashiell, IITA Deputy Director General (Partnerships and Capacity Development) and Braima James, IITA

Country Coordinator for Sierra Leone, represented IITA at the consultative dialog.

The mandate of the dialog, according to President Koroma in his closing address, was to set out a 5-year integrated and comprehensive program and action plan for promoting agriculture, fisheries, and industry in Sierra Leone.

He told the participants, “I am reliably informed that all participants have demonstrated great commitment to achieving this objective, and we now have a rough draft of what needs to be done. I applaud all of you for your worthy contributions.” The President paid glowing tribute to the cooperation of development partners who participated in the dialog, including World Bank, CGIAR, FARA, and CORAF. “We also applaud the contributions of our compatriots, the special advisers, my Ministers, and the staff of the MDAs. You have all done a great job,” he said.

President Koroma reiterated his Government’s commitment to meeting the objectives of the 3-day landmark conference with regard to all challenges that the workshop was trying to address, adding, “It is only in an ideal world of unlimited resources and capacities that we can do all that needs to be done.”

Professor Monty Jones, Coordinator of the conference, said the consultative dialog discussed various issues to come up with the actions and activities needed to develop the comprehensive and inclusive 5-year program. This will be implemented through collaboration among various arms of Government and Ministries: Agriculture, Forestry and Food Security, Fisheries and Marine Resources, Trade and Industry, Education, Science and Technology, Health and Sanitation and Youth Affairs.



President Koroma (front left) addressing participants at the dialog.