

IITA announces its 50th anniversary in grand style

As the core celebration of the Institute's golden jubilee draws near on 24 July, [IITA](#) recorded three simultaneous "firsts", all on 30 June when management went all-out to announce the anniversary celebrations in Lagos State, Nigeria.

For the first time in 50 years, the Institute convened over 60 representatives from the local, regional, and international press at its

facilities in Ikeja, for a briefing to highlight successes in the last 50 years and the direction for the next five decades.

On the panel answering questions and clarifying issues from the press were [Kenton Dashiell](#), Deputy Director General (DDG), Partnerships for Delivery; [Hilde Koper-Limbourg](#), DDG, Corporate Services; [Robert Asiedu](#), Director, West Africa; and [Kwesi Atta-Krah](#), Director, Systems and Site Integration and Chair, IITA50 Anniversary Committee.

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Press conference on IITA50 at the Ikeja Guesthouse, Lagos.

DG Sanginga furthers IITA-SLU collaboration on key areas

The Institute is on course to strengthen its cooperation with the Swedish University of Agricultural Sciences ([SLU](#)) on vital research and exchange areas including gender, agriculture,

youth agripreneurship, bioinformatics, and plant breeding.

The discussions were initiated during a visit by IITA Director General [Nteranya](#)

[Sanginga](#) and [Bernard Vanlauwe](#), IITA R4D Director, Central Africa, to the SLU Ultuna campus, in Uppsala, Sweden on 8 June.



DG Nteranya Sanginga and Director Bernard Vanlauwe with the SLU contingent that includes Dr Ylva Hillbur, (center, in glasses) now Pro Vice-Chancellor for International Relations, SLU.



Sanginga and Hillbur in a huddle.

Sanginga and Vanlauwe spoke on the existing collaboration between both institutions and on the role of IITA as the destination for novel agricultural research products that will transform Africa. They maintained that the identified entry points for cooperation

were necessary to further enhance best practices for farming in the continent.

The duo were received by [Ylva Hillbur](#), former IITA Deputy Director General for Research and now SLU Pro Vice-Chancellor for International Relations as well as Peter Högberg, Vice-Chancellor; Karin Holmgren, deputy vice chancellor; Anders Malmer, Director, SLU Global; Ioannis Dimitriou, Associate Director, SLU Global; Johanna Bergman Lodin, Department of Urban and Rural Development; Kostas Karantininis, Department of Economics; Erik Alexandersson, Department of Plant Protection Biology; Gert Nyberg, Department of Forest Ecology and Management; Erik Bongcam Rudloff, Department of Animal Breeding and Genetics,

Bioinformatics; Ulf Magnusson, Department of Clinical Sciences; Sara Brännström, Division of Planning; Christer Frånlund, SLU Holding; and Mats Söderström, Department of Soil and Environment, External Collaboration Specialist in precision agriculture.

To give a clear picture of how the partnership will work, the SLU team delivered various presentations highlighting ongoing efforts in the areas of interest. Both institutions agreed to maintain the existing cooperation between their scientists and constitute a task force that would identify areas of interest in response to upcoming EU calls, explore short-term and new scientists' exchange programs, and co-supervise sandwich PhD projects.

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They also spoke on ongoing research, partnerships, funding, governance, host country relations, facilities, R4D directions, research impacts, the IITA50 celebration, and future research focus.

The team then proceeded to the 22nd floor of the [Nigerian Stock Exchange](#) (NSE) on Lagos Island where IITA initiated a partnership proposal with the NSE and also recorded another feat—ringing the closing gong on the trading floor!

The ringing of the bell either at the beginning or close of stock trading is a highly publicized ritual recognized to be an honor and a symbol of an achievement. It is observed everywhere in the world. Furthermore, due to the amount of coverage that the opening/closing bells receive, many companies coordinate new product launches and other marketing-related events to start on the same day as the company's representatives ring the bell. This particular ceremony was aired live on CNBC Africa and Channels Television. DDG Dashiell also received a miniature replica of the closing gong on behalf of the Institute.



Kwesi granting interview on TV.

Speaking on behalf of NSE CEO Oscar Onyema, Ade Bajomo, Executive Director, Market operations and technology, said the "NSE celebrates with IITA because it recognizes the Institute's role in Africa's food security goal."

"The NSE is part of a sustainable stock exchange association and believes in the sustainability goals. As a result, NSE specifically associates with institutions and individuals who showcase best practice and make a big impact in society in general. We (NSE) know the role of IITA is particularly



Dr Dashiell speaking on behalf of IITA Management.

important in Africa today, considering that the continent will continue to increase in terms of population and economy over the next 30 to 50 years and food security will become a strategic and survival issue to power Africa's emergence into the 21st century and into a global economy over the years to come. We are extremely proud of the work you are doing and hope you continue to do it," Bajomo said.

In response, Dashiell said "We do see this as a starting point for a partnership. We at IITA are willing, able, and have the experience working with various businesses in Nigeria, giving advice and technologies needed to get the biggest returns in cassava, maize, soybean, yam, banana, plantain, and beans. We have expertise in the full value chains of these crops and stand ready to help any company listed on the exchange with that technical information. We hope you encourage them to come visit us."

To cap the day, Kwesi Atta-Krah was interviewed live for 10 minutes on [CNBC Africa](#) where he spoke elaborately on how IITA—working with government and national agricultural research systems—is helping to harness the next generation of farmers. Watch the interesting video [here](#).



Management of NSE and IITA after the ringing of the gong at NSE.

IITA alumnus and AfDB President bags prestigious 2017 World Food Prize

IITA rejoices with its own champion, alumnus, avid supporter, and mentor of the [IITA Youth Agripreneurs](#), Dr Akinwumi Adesina, President of the African Development Bank ([AfDB](#)), who was announced the 46th laureate of the most coveted food and agriculture award—the World Food Prize.

The award recognizes his exemplary efforts in driving transformational changes in Nigeria's agriculture during his time as Minister of Agriculture and Rural Development, organizing the 2006 Africa Fertilizer Summit as Associate Director for Food Security at the Rockefeller Foundation, and for leading a major expansion of commercial bank lending to farmers as Vice President of the Alliance for a Green Revolution in Africa ([AGRA](#)).

Every year since 1986, the World Food Prize Foundation founded by Nobel Peace Prize recipient Dr [Norman Borlaug](#) recognizes the achievements of individuals who have advanced human development by improving the quality, quantity, or availability of food in the world.

According to Ambassador Kenneth Quinn, President of the World Food Prize Foundation who made the announcement on 26 June, Adesina was found most deserving of all the candidates the body considered for 2017 because *"the reforms he implemented increased food production by 21 million metric tons and attracted 5.6 billion dollars in private sector investments. Dr Adesina's selection further gives impetus to his profound vision for enhancing nutrition, uplifting smallholder farmers, and inspiring the next generation*



World Food Prize laureate Akin Adesina (in bowtie) with DG Nternaya Sanginga and Agripreneurs.

of Africans as they confront the challenges of the 21st century," Quinn said.

Adesina will—on 19 October—be presented with the award and the accompanying US\$250,000 in an elaborate ceremony in Des Moines, Iowa, USA.

In his congratulatory message, IITA Director General [Nteranya Sanginga](#) sums up the feeling of the Institute in these words:

"It is with great joy and no surprise that we received the news that you had been named the 2017 World Food Prize winner. This is a singular honor to you who have consistently spent your life improving the lives of the millions of Africans in the agricultural communities of sub-Saharan Africa and ensuring the food security of many of our African brothers and sisters, but more so for us in IITA here in Nigeria, where you had spent part of your career, and which you are now supporting through your various development programs as part of the [High 5 priorities](#) of the AfDB.

We are proud to be associated with you and to work with you and the Bank on our mission to transform agriculture to feed Africa, generate jobs for the teeming millions of Africans, especially the youth, in agribusiness, and lift millions out of poverty.

One example of the impact of your work is captured in an important paper published recently in a prestigious journal by IITA economists on the impact of policies undertaken when you were the Minister of Agriculture in Nigeria. The paper shows vividly the impact of your innovative mobile phone-based input subsidy program in the country... We are honored to be linked to your successes here in Nigeria and Africa in general, and will always be supportive of your initiatives in ensuring that Africa becomes a major player in securing food supplies and providing healthy food and jobs for Africans.

Congratulations, and we look forward to continue working with you and the Bank for many more years to come".

IITA Forest Unit staff gets international award

IITA Forest Unit field supervisor Olukunle Olasupo or Kunle, is the 2017 recipient of the March Christian Award of the prestigious Botanic Gardens Conservation International ([BGCI](#)). The award recognizes him for his relentless contribution to Plant Conservation in botanic gardens. This award comes with a cash prize of £1,000 and a Certificate.

[Deni Bown](#), Head, IITA Forest Unit, who nominated Kunle for the award says of Kunle:

"...Kunle's interest and expertise in collecting fruits, extracting and sowing seeds is outstanding, as evidenced by the Forest Unit's successful propagation of 137 indigenous tree species of which 28 are listed as threatened on the IUCN Red

List, including the critically endangered endemic Cola nigerica Brenan & Keay. His skills and commitment are crucial in developing Nigeria's first arboretum for ex situ conservation of threatened trees, and in guidance and capacity building for staff, conservation partners, teachers, students, and postgraduates. Kunle never misses an opportunity to explain the importance of trees in conserving biodiversity and providing the basics for sustaining human lives. Whatever someone has in mind when visiting the nursery or enquiring about trees, they are persuaded to plant Nigeria's trees for Nigerian people!"

Deni officially accepted the award on Kunle's behalf during the award

presentation ceremony at the Global Botanic Garden Congress in Geneva on 30 June. Congratulations, Kunle! IITA is proud of you!



Olukunle Olasupo, IITA Forest Unit

IITA's forest unit partners with BGCI to address depleting forest resources

Nigeria's forest cover is now less than 5% of its original state and far below the recognized target of 25% to mitigate climate change. According to the country's [Biodiversity Strategy and Action Plan](#), all of its forests will be gone in less than 3 years unless urgent steps are taken to halt and reverse this trend. Botanic Gardens Conservation International ([BGCI](#)), funded by the Mohamed bin Zayed Species Conservation Fund (MbZ), has partnered with the [IITA Forest Unit](#) in Ibadan to raise awareness of the threats facing Nigeria's forests and to begin practical conservation of threatened trees by collecting seeds, propagating trees, and contributing training and capacity building for reforestation and forest restoration projects.

Nigeria has one of the highest deforestation rates in the world, with an annual deforestation rate of 3.5%. About 20% of the country was previously covered in what are known as Guineo-Congolese lowland rainforests. Both legal and illegal forestry practices, combined with agriculture, have reduced this by 95%, resulting in hardship for rural communities that then migrate to cities.

A number of trees in these forests, such as mahoganies (*Khaya* and *Entandrophragma* spp.), Iroko, and African walnut (*Mansonia altissima*), are also important to Nigeria's economy, and at one time [African whitewood](#) (*Triplochiton scleroxylon*), known locally as *obeche*, contributed 80% to Nigeria's GDP. These forests also contain 84% of African primates, 68% of African passerine birds, and 66% of African butterfly species, making them important also in the conservation of biodiversity and endangered species.

The first step in setting up the project was compiling a list of 58 threatened tree species, four of which are high priority:

Nigerian kola ([Cola nigerica](#)), sapele ([Entandrophragma cylindricum](#)), afrormosia ([Pericopsis elata](#)), and cherry mahogany ([Tieghemella heckellii](#)). Only a few of these species are represented in botanic gardens globally and the endemic Nigerian kola, which has no reported collections, is assessed by the IUCN Red List as critically endangered.

Of the 58 species, the Forest Unit has so far collected propagation material from 31 tree species, including surplus seeds from 13 target species, which are now stored in the [IITA genebank](#). When threatened species are successfully propagated, young trees are planted in the IITA Tree Heritage Park. A total of 34 threatened species have been planted so far as an insurance policy against extinction and as a source of propagation material for future reintroductions. The Forest Unit has also conducted propagation trials for 10 target species, and has completed Red List assessments for eight.

The team is still trying to collect propagation material from other species on the list. However, funding for the MbZ project closed on 31 May, and though supplementary funding for certain aspects of the project were awarded by the Australian High Commission Abuja until October 2017, further funding is urgently needed to sustain the conservation of Nigeria's most threatened trees.

To raise awareness locally, the Forest Unit held a workshop in June to which representatives from the Forestry Research Institute of Nigeria ([FRIN](#)), the National Centre for Genetic Resources & Biotechnology ([NACGRAB](#)), and the Nigerian Conservation Foundation ([NCF](#)) were invited, together with staff of universities, state departments of forestry,



Secondary forest growth, IITA forest.

and national parks. While maintaining connections with conservation partners, the Unit is now focused on compiling a Manual of Propagation for Nigerian Trees that will be available to download free when the new website is active.

[Deni Bown](#), Head of IITA's Forest Unit, pointed out the threat of encroachment, clearance, logging, unsustainable collection of non-timber forest products, and illegal timber trading to the country's forests. She urges everyone to take immediate action to prevent the irreversible decline of hardwoods such as mahogany, afrormosia, and Senegal rosewood (*Pterocarpus erinaceus*). She also encourages planting native, fast-growing trees instead of exotics such as teak, Gmelina, and eucalyptus normally used in tree planting activities.

Bown also suggests that increased international pressure should be put on the Federal Government to take measures to conserve Nigeria's forests.

Sources: *National Biodiversity Strategy and Action Plan, 2015, and Prioritising and Protecting Nigeria's Most Threatened Trees, Deni Bown*

NACGRAB scientists trained on operating bioreactor for high ratio propagation of yam plantlets

With the installation of a new SETIS bioreactor facility at the National Center for Genetic Resource and Biotechnology ([NACGRAB](#)), two senior research officers were trained on using the high ratio propagation (HRP) technology by the Yam Improvement for Income and Food Security in West Africa Phase Two ([YIIFSWA-II](#)) bioreactor team at IITA, Ibadan. YIIFSWA-II Project Leader [Norbert Maroya](#) welcomed the participants and explained that the 3-day training program on the HRP technology for quality yam plantlets multiplication is important because it will help advance yam production in Nigeria.

The training was based on three sequential procedures beginning with the development of pathogen-free in vitro cultures, followed by the multiplication of clean stocks in vitro using the [SETIS Temporary Immersion Bioreactor](#) (TIB), and lastly the hardening of TIB plantlets for potting in soil or planting in aeroponics for pre-basic and basic seed production, respectively. NACGRAB is well versed in propagating and commercially distributing pineapple plantlets using the "bama bottle" type of TIB for multiplication, but yam is a new crop for them and it uses a new propagation system.



NACGRAB staff watching as Julius Taiwo subcultures yam vines into the Bioreactor.

According to [Morufat Balogun](#), YIFSWSA's principal scientist on TIB technology, "as the focal point for HRP of pre-basic seed yam in Nigeria, the national scientists needed the training on using the SETIS bioreactor; implementing quality standards approved by the regulatory bodies of Nigeria using the seed yam quality management protocol (YQMP) for sustaining seed quality, health and certification of pre-basic plantlets; and implementing improved seed health management methods that incorporate virus elimination techniques

and virus indexing especially for pre-basic seed yam production."

According to Felix Ejiroghene Lawyer, a training participant, "the training has been very educative. Through it I have been able to identify loopholes that have been causing contamination of our plantlets... They are very organized here in IITA. When we get back, my colleague and I will get together with the team at NACGRAB to address our inadequacies so that we can start achieving tremendous results. Thank you, IITA, for

giving us this platform. This training has given us the boost we needed to achieve our goals."

NACGRAB is expected to contribute to the establishment and sustainability of the yam seed system by multiplying and commercially distributing sufficient quantities of high quality plantlets of improved varieties to the National Root Crop Research Institute (NRCRI) for the supply of pre-basic seed yam for basic seed yam production along the seed system.

Celebrating IITA50 in Rwanda: *How collaboration between CGIAR and scaling partners can make science work for farmers*

IITA Rwanda took the International Scientific Conference organized by University of Rwanda on 14-16 June as an opportunity to showcase its research for development in the country and to mark IITA's 50th anniversary. Conference participants from all over the world got to see and hear about IITA's work.

[Emmanuel Njukwe](#), IITA country representative, Rwanda, presented on "Variation of banana yields in banana-bean production systems in Rwanda", and chaired the session on Sustainable Crop Production and Soil Fertility Management. Another oral presentation on "Nutrient use efficiency in maize response to fertilizers in smallholder farms of Rwanda" was delivered by Leon Nabuhungu from the IITA Bukavu station. In collaboration with different partners such as the [Rwanda Agricultural Board](#) (RAB), a poster with results of the integrated systems research in North-West Rwanda was presented.

IITA took a prominent place in the conference exhibition, showing materials from projects such as [N2Africa](#), [CIALCA](#), and [RTB](#) in collaboration with partners.

Private sector partner Africa Food Supply Ltd. shared their experience with the

cost-effective banana macropropagation technology that was developed by IITA and Bioversity International under CIALCA. The live banana materials in the exhibition booth, including a full demonstration of a propagation unit, attracted attention from conference participants.

On 15 June, IITA hosted a field visit to the Kamonyi Agricultural Resource and Training Centre in the Southern region. As a first stop the banana macropropagation and nurseries were visited. Visitors were welcomed by Udahemuka Aimable, mayor of Kamonyi District. The mayor said the district now produces clean banana seeds, thanks to the support of IITA. With the opening of the resource and training center up to 300,000 banana suckers can be produced each year.

A second stop was made at the banana plantation in Kamonyi. Here visitors saw the result of the macropropagation: healthy banana plants of different varieties, including plantain. [Marc Schut](#), IITA social scientist, spoke on IITA's presence in Africa, some of the activities and achievements in Rwanda, and the celebration of IITA's golden jubilee in 2017. Marc emphasized the importance of close collaboration between research and public and private sector scaling partners, so that science-based innovations—such as the production of clean planting materials through macropropagation—can make a difference for farmers. He also mentioned that IITA Rwanda station is looking ahead, developing plans for innovative research in the region in areas such as nutrition and ICT for agriculture.

Njukwe also highlighted the strong relationships in Kamonyi with partners such as Africa Foods Ltd. and Union des Jeunes pour le Développement Rurale (UJDR). IITA has been working on improving banana production in this area since 2012. Emphasis has been on



Top: IITA staff Njukwe (left) and Schut (right) with a partner. Bottom: Women tending to macropropagated banana plantlets.

tackling key challenges in the banana system, such as diseases, availability of planting material, and access to varieties. Asked about the role of women by one of the visitors, Njukwe noted that both male and female farmers are being targeted with interventions. And with the presence of the resource and training center today the site offers opportunities for youth too.

For IITA Rwanda this was an important and successful event that provided a platform for sharing experiences, outputs, and impact in the region to an interested and enthusiastic audience. IITA Rwanda showcased the Institute's many interesting projects and certainly made IITA's presence felt, and emphasized that "IITA is ready for another 50 years of exciting research and development work together with partners."



Participants in a field tour.

Looking back

The start of IITA's Training Program, and progress to date

A. Hugh Bunting, Chairman of IITA's Board of Trustees from 1978 to 1979, wrote a report on training for staff of national programs in 1986. Bunting indicated that these trainees constituted a living link between IITA and its national research systems—one that may be reinforced but never replaced by publications, conferences, and other forms of communication.

In January 1970, only three years after Decree no. 32 was passed, the Institute established a training committee. By the 20th, IITA's first African trainee, M.A. Noor from Somalia, came to study field techniques for research on root and tuber crops. W. Hap Reeves was recruited in 1973 to become the head of training. By the end of that year, IITA had already provided training for 56 people from 13 different countries.

Now, 50 years later in 2017, the Capacity Development Office reports that more than 140,000 individuals have been trained by IITA from 68 countries, with more than 40,000 of them women (see table below). These professionals, mostly from sub-Saharan Africa, advanced their knowledge and acquired skills directly through IITA training, and many others indirectly through the knowledge passed on to them.

In graduate studies, a total of 2,000 students have addressed a wide range of research topics. Of this number, 1,128 are MSc (67% male and 33% female) and 872 are PhD (73% male and 27% female) students.

Likewise, more than 2,000 interns have benefited from the experience of IITA staff over the years. This does not include the undergraduate students who also benefit from IITA's training scheme.

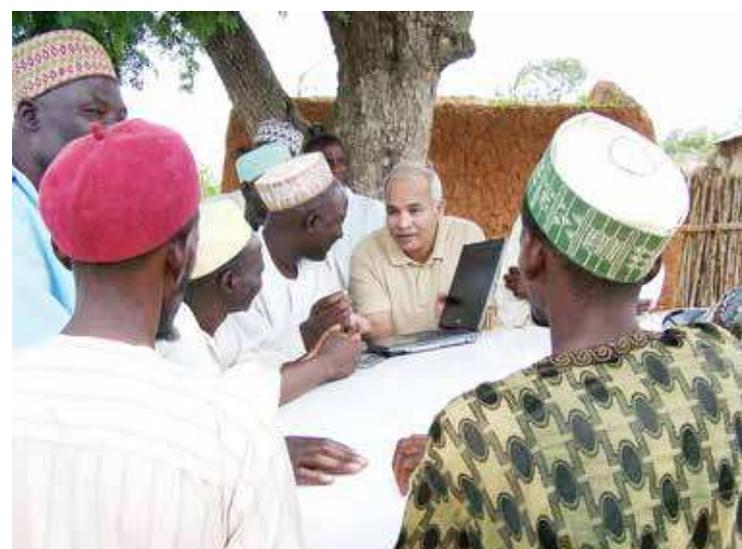
Many of the graduates from IITA's training program are now leading research and development institutions in their home countries.

Sources:
 Lawani, S. 1992. *History and Evolution of IITA's Scientific Program. Sustainable Food Production in sub-Saharan Africa. Ibadan, Nigeria.*
 Ortiz, Rodomiro, compiler. 2017. *IITA: 50 years after. IITA, Ibadan, Nigeria. 120 pages.*



Prof. Arthur Hugh Bunting

Source: Arthur Hugh Bunting, Edward Bunting, https://www.myheritage.com/photo-1500641_116741731_116741731/arthur-hugh-bunting



IITA training happens inside the classroom and outside, under the trees.

IITA training by category and gender.			
Category	Female	Male	Total
Group Training	40,793	97,610	138,403
BSc	69	102	171
MSc	375	753	1,128
PhD	239	633	872
Post-Doc	1	46	47
NARS Short-Term	181	685	866
Internship/Volunteers	1,251	943	2,194
Visiting Scientists	25	228	253
Total	42,934	101,000	143,934