

Nigeria's Minister of Agriculture commissions ATASP-1 Youth Training Center for Agribusiness in Abuja: Flags off youth training on seed production technology

The newly constructed Agricultural Transformation Agenda Support Program, Phase One (ATASP-1) Youth Training Center for Agribusiness at the IITA Station in Abuja, was commissioned by Nigeria's Minister of Agriculture and Rural Development, [Chief Audu Ogbeh](#) on 27 March.

"I want to thank IITA for the great job they are doing in transforming Nigeria's agriculture," the Minister who was visiting the station for the first time said.

After listening to the testimonies from some of the [IITA Youth Agripreneurs \(IYA\)](#) in Abuja Station who had benefitted from several training sessions conducted by the ATASP-1 program, the elated Minister said "I am very impressed by the passion our youth have displayed here today and the excellent work these young people are doing in agriculture. I will bring you (IYA) on TV to talk to other Nigerian youth about agribusiness." During the Minister's tour of the mini food and tools exhibition, he also promised to set up a mini processing center for IYA, where they can scale up their value-adding confectionary.

The Minister was conducted around the new building, where he took time to see the

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The Honourable Minister cutting the tape.

Breeders charged to develop yam varieties responsive to tomorrow's challenges

In early March, 50 international breeders gathered in Ibadan, Nigeria, for the AfricaYam project's third annual progress review and planning meeting, which looked at the progress of yam research in West Africa.

One of the conference participants, Jim Lorenzen, senior program officer at the [Bill & Melinda Gates Foundation](#), discussed the benefits of creating diverse yam varieties and encouraged researchers to think



Group photo.

about solutions to the complex challenges plaguing farmers and households in Africa.

“As the problems that affect African farmers and households in relation to yam change, breeding and research approaches must also change to reflect the needs of people. People are increasingly worried about climate change, about soil and nutrient depletion, and about the amount of money they can generate on their investments. For our efforts as a project to achieve the desired impact, our approaches must anticipate tomorrow’s needs and provide answers to these challenges,” Lorenzen said.

Yam is undoubtedly a key crop for West Africa in terms of value of production and as a source of food for over 300 million households, yet breeding is very challenging and sensitive. As a result, the crop is yet to achieve its full potential in the continent.

The project was set up in 2015 to use the latest technologies in plant breeding to develop high-yielding varieties of white yam (*Dioscorea rotundata*) and water yam (*D. alata*) that will show great promise in resisting infestation by nematodes, viruses, and anthracnose, known to greatly limit productivity in West Africa’s most preferred staple crop. The project is also mandated to enhance active yam breeding programs in Nigeria, Cote d’Ivoire, Ghana, and Benin—the countries in West Africa producing over 95% of Africa’s yam. It will employ faster and more precise genomic tools to improve

the efficiency of yam breeding programs as well as improve yam genotypes adapted to production systems and suited to market preferences.

To reach its goals at scale, AfricaYam is engaging the participation of experts from the Japan International Research Center for Agricultural Sciences ([JIRCAS](#)), the National Root Crop Research Institute ([NRCRI](#)), Ebonyi State University ([EBSU](#)), the Council for Scientific and Industrial Research ([CSIR](#)), the Savanna Agricultural Research Institute, le Centre National de Recherche Agronomique ([CNRA](#)), and l’Université d’Abomey-Calavi ([UAC](#)), Dassa Center, Benin, Centre de Coopération Internationale en Recherche Agronomique pour le Développement ([CIRAD](#)), France; the Iwate Biotechnology Research Center ([IBRC](#)), Japan; the James Hutton Institute ([JHI](#)), UK; and the Boyce Thompson Institute for Plant Research ([BTI](#)), Cornell University, USA.

“Everywhere we went, we always got the question—what is the impact of your work? IITA has found new ways to answer this question by engaging more partners in the national agricultural research systems and the private sector to ensure a wider reach for the technologies generated from IITA’s research,” said [Robert Asiedu](#), IITA Director, Research for Development, West Africa, at the meeting’s opening program.

Debunking the peculiar belief that yam was unresponsive to research, Asiedu noted that already, IITA has released 17 successful improved varieties through

various interventions. He said that yam research could prosper more if the same kind of attention as has been lavished on cassava for instance is devoted to yam.

“Yam if given the right kind of attention can respond in the same way as other crops. Yam can be as successful as many other crops in Africa,” he said.

What’s next? AfricaYam has made great progress in empowering its partners to breed for better yam. It has digitized the collection of data on yam and feeds such into a repository known as [Yambase](#) from where breeders anywhere in the world can get information they need to advance the crop.

[Patrick Adebola](#), Project Leader of AfricaYam, disclosed that the project is now exploring options to convince governments in other countries to learn from Ghana that has included yam in its national agricultural development strategy. Ghana now captures 95% of the yam export market with significant exports to US, UK, Europe, and Canada.

Going forward, the project plans to establish functional yam breeding programs to support partners and in the long run, feed into another complementary project—Yam Improvement for Income and Food Security in West Africa (YIIFSWA), also funded by the Bill & Melinda Gates Foundation, to develop healthy yam seeds for West African farmers through an effective seed production and delivery system.

Nigeria’s Minister of Agriculture commissions ATASP-1 Youth Training Center for Agribusiness in Abuja **Cont’d from page 1**

facilities, and asked questions about the content and duration of the youth training. He also promised that his Ministry will support the training programs.

The ATASP-1 Youth Training Center which is strategically located at the entrance of IITA station in Abuja, houses a training room, conference center, and offices for the ATASP-1 Project staff and the ENABLE Youth Program. The center in Abuja is expected to serve the youth around the North Central part of Nigeria, the center

in Kano caters for the youth in North East and North West, and the center in Onne in Rivers state will focus on the youth in South East and South-South Nigeria. Under the ATASP-1 Program, about 200,000 youth are expected to be trained along the cassava, rice, and sorghum value chains.

The Head of Abuja Station, [Gbassey Tarawali](#), who doubles as the Outreach Coordinator of ATASP-1 and represented the IITA Director General at this event, explained to the Minister that “Our Youth

Agripreneurs program is meant to address poverty and the high unemployment rate among the young people.”

“One of the major challenges facing farmers in ATASP-1 intervention is shortage of quality seeds. The trained youth will at the end of the program produce seeds for farmers in their various locations,” Haruna Akwashiki, National Program Coordinator of ATASP-1 stated.

During the event, the Minister also flagged off the national youth training on seed production and processing technology, which ran concurrently in Kano and Niger states. “This training is very strategic, as the availability of quality seeds at the right time is crucial to enhanced productivity,” the Minister stated.

It will be recalled that the foundation laying stone ceremony for the ATASP-1 Youth Training Center was done in 2015 by the President of the African Development Bank, Akinwumi Adesina while he was Nigeria’s Minister of Agriculture and Rural Development.



The Youth Training Center in Abuja.

Zambia IITA Agripreneurs Program train 11 youth on cassava-based food production

The Zambia IITA Youth Agripreneurs (ZIYA) Program successfully conducted a training course on cassava value addition for 11 ZIYA members—all female—on 6–16 March at the IITA Southern Africa Research and Administration Hub (SARAH) campus in Kabangwe, Lusaka Province. The 11 women came from different youth groups from Kaoma District in Western Province, Monze District in Southern Province, and Serenje and Mkushi districts in Central Province partnering under the ZIYA umbrella.



The ZIYA trainees presenting their cassava food products to Koper-Limbourg, Chikoye, and other IITA-Zambia staff.

The training course was conducted with support from the Support to Agricultural Research for Development of Strategic Crops in Africa (SARD-SC) project. Facilitators included Emmanuel Alamu, Food Scientist; Prisca Chileshe, Postharvest Utilization Research Assistant; Nhamo Nhamo, ZIYA Youth Coordinator; and Jeremiah Hantolo, Zambia SARD-SC Maize Coordinator, all based at IITA-SARAH.

The 10-day, hands-on course covered the various steps in preparing cassava-based food products—from root preparation (cleaning, peeling, chipping, and drying) to processing and cooking/baking. Specifically, the youth were taught how to make confectionary products such as biscuits, *chin-chin*, fritters, titbits, and cupcakes.

At the end of the training, the trainees presented the different food products that they had produced to IITA-Zambia staff as well as to [Hilde Koper-Limbourg](#), Deputy Director General for Corporate Services, who coincidentally was also in Zambia on a familiarization and monitoring trip to the southern Africa Hub.

“These are very impressive products that you have prepared,” [David Chikoye](#), IITA Southern Africa Regional Director, said during the presentation by the trainees. “I sincerely hope that you will apply what you’ve learned here—and what you will still learn in the future from ZIYA—in your respective groups when you go back,” he added.

“These are really delicious,” added Koper-Limbourg. “I see a really good business opportunity for these products, and a great business venture for the ZIYA youth. You should be proud of yourselves and what you have accomplished here.”

Asked what they will do with the knowledge that they gained from this training, Caroline Liwena, ZIYA Youth Chair, who also participated in the course, related that they would also train other members of their respective youth groups. “Apart from echo training, we will also start some small businesses producing and selling these food products. And, of course, start making money,” she proudly added.

House of Representatives Eleme Constituency, Rivers State, pledges support to IITA-Onne

Impressed by IITA’s decision to reignite activities at its station in Onne, Honorable Josiah John Olu of Eleme Constituency in the Rivers State House of Representatives, during a courtesy visit to the station on 22 March, pledged to use his office to help upgrade the access road linking the station.

He said the location of the station will create easy access for the youth of his constituency to products from agricultural research. As such, it is necessary to have a good road network to facilitate operations at the station.

[Richardson Okechukwu](#), Head, IITA station in Onne; [David Oluwadare](#), Chief Security Manager; and [Godwin Adomah](#), Community Liaison Officer, welcomed Hon. Olu and expressed IITA’s appreciation for the offer.

Okechukwu reiterated IITA’s commitment in transforming rural agriculture and noted

that the station was open to provide training on cassava, banana, and other related agribusiness activities to help reduce unemployment and empower youth in the area.

A week earlier, Francis Nwilene, Country Representative for AfricaRice Nigeria, accompanied by Abraham Shaibu, AfricaRice Ibadan, were at IITA in Onne on a working visit. Nwilene was also excited to see that activities were already progressing at the station after only one year of coming back into operation.



(L-R) David Oluwadare (Chief Security Officer), Josiah Olu (House of Rep. Eleme Constituency), Richardson Okechukwu (Head of Station), and Godwin Adomah (Community Liaison Officer).

CRP Grain Legumes Director visits IITA-Benin

Sobana Sivasankar, Director of [CRP Grain Legumes and Dryland Cereals](#) based at [ICRISAT](#), Hyderabad, and the program communication officer Satish Nagaraji, visited IITA-Benin on 18–20 March, to get acquainted with the ongoing efforts towards biological control of cowpea pests in West Africa.

The centerpiece of the visit was a field trip to the Ouémé Valley, more precisely to the localities of Akpome and Hlankpa on the river Hlan. These localities were chosen because the Benin legume team had been releasing natural enemies of the cowpea pod borer (*Maruca vitrata*) around this area over the past eight months with the participation of local communities, the Ministry of Agriculture, and the national agricultural research institute INRAB.

The guests saw the impressive beauty of these natural environments, but more importantly, the tour highlighted the fact that IITA's biocontrol efforts are also

targeting the pod borer populations during the off-season, when cowpea is not present.

In fact, all along the inland valleys and river systems like the Ouémé basin, there is an abundance of legume trees such as *Pterocarpus santalinoides* and *Millettia thonningii*, both hosting large pod borer populations during their flowering period in the dry season.

With the onset of the planting season, controlling cowpea pests on these host plants before they move to the fields is of paramount importance. The station has evidence from wild host surveys that this is already happening right now.

Sivasankar met Augustin Kindozandji, Head of the division for alternative pest control at the Ministry of Agriculture, and also with cowpea farmers of both localities, while Satish took the opportunity to carry out some live



Visitors went to the Akpome and Hlankpa localities along the river Hlan where natural enemies of the cowpea pod borer were released.

interviews for a short movie to be streamed on the CRP Grain Legumes website. Both visitors were impressed by the program being carried out and wished IITA a successful 2017 cowpea campaign.

DDG-Corporate Services visits IITA-SARAH

Deputy Director General for Corporate Services, [Hilde Koper-Limbourg](#), was at the IITA Southern Africa Research and Administration Hub (IITA-SARAH) at Kabangwe, Lusaka Province, Zambia, 14–17 March, as part of her familiarization and monitoring tour of the regional hubs.

During her visit, Koper-Limbourg toured the campus and facilities,

and interacted with staff based in Zambia and in Mozambique (via video conference). Her discussions with regional management and staff highlighted, among other things, enhancing the efficiency of the various units under her directorate to ensure effective delivery of services to and within the regions to support R4D work. The DDG also focused on issues that relate to staff benefits, welfare, and professional development. She also discussed the results of the staff satisfaction survey carried out a few months ago across the Institute.

The DDG's visit also coincided with two events at IITA-SARAH: the first year anniversary of the movement of the Hub office to the SARAH campus on 15 March, and the completion of the training course of the Zambia IITA Youth Agripreneurs on cassava processing and utilization (see *related story*).

On the occasion of the former, Koper-Limbourg congratulated the Hub management and staff for a job well done on establishing and developing IITA-SARAH and its facilities. To commemorate

the date, she led a simple cake-cutting ceremony along with [David Chikoye](#), Regional Director for Southern Africa.

"It's my honor and pleasure to be here and share this memorable occasion with you all," she said, addressing staff. "The IITA southern Africa Hub has really gone a long way in establishing a foothold in this country and in this region, particularly in developing the facilities here at SARAH."

"Rest assured that the Corporate Services Directorate, myself specifically, will always be on hand to support SARAH as we look forward to more years here in Zambia and in southern Africa," she reiterated.

"On behalf of the staff of IITA-SARAH, I would like to thank you for visiting us and joining us on our anniversary celebration of moving to this campus, and also for gracing the completion of the training of our ZIYA members," Chikoye told the DDG. "We also extend an open invitation to you to come and visit us again soon. I promise you, you will see even more improvements to SARAH the next time you come," he concluded.



The DDG-CS cutting the cake.

Got a story to share? Please email it with photos and captions every Wednesday to 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).

WASHC project ends; participants share successes

The Alliance for a Green Revolution in Africa ([AGRA—Soil Health Program](#)) funded project—Supporting the West Africa Soil Health Consortia (WASHC), which was initiated to facilitate a wider uptake of better adapted Integrated Soil Fertility Management ([ISFM](#)) practices with visible positive impacts on rural livelihoods, has officially ended today 31 March 2017.

To celebrate the milestones recorded between 1 October 2013—31 March 2017, when the project was active, project participants converged on 22-23 March, in Ibadan and shared their experiences in helping to promote good soil health in West Africa.

Led by [IITA](#), the project successfully established six soil health consortia in Burkina Faso, Ghana, Mali, Niger, and two in Nigeria, covering the northern and southern regions. These soil health consortia expended a lot of efforts on raising awareness and sensitizing various stakeholder groups on ISFM through training and sensitization workshops, having observed that knowledge and information on ISFM is rather limited. The consortia are also now generating a lot of enthusiasm and support from relevant bodies.

In each of these countries, there is a strong consensus on the need for a soil health consortium and platform for various stakeholders to propagate and facilitate the scaling of ISFM, even though it is not an easy proposition and difficult to sell. Consortia in each country have likewise taken steps to formalize themselves and as such assure continued operation of the consortia, while also looking for funding opportunities for the benefit of each of the consortia.



Kayode Are explaining the information products produced by IAR&T at the display of materials produced by the various partners during the project.

“To improve the dissemination of ISFM information, products and extension materials spanning a wide range of crops, soil and water management practices for wide scale distribution and repositories for ISFM information for easy online access were developed by the project,” said Jeroen Huising, project leader.

The consortia also proceeded to identify and prioritize ISFM technologies and practices to be further scaled out, based on perceived effectiveness and high adoption potential of these practices. Agronomic trial data was also collected to provide supporting evidence for the selected technologies and practices.

The research data collected shows a bias towards research on maize and organic resource management as part of ISFM, and also identifies research gaps. Through policy briefs and position papers the consortia have advocated for policy support and more attention being devoted

towards sustainable intensification of agricultural production through ISFM in their respective countries.

WASHC was implemented with US\$ 1,499,844 donated by AGRA and brought together partners from various stakeholder groups, research institutions, development and outreach partners, farmer organizations and groups, as well as government organizations, private sector input providers and financial institutions.

It was implemented in collaboration with the Council for Scientific and Industrial Research ([CSIR](#)) Ghana; Institut National de la Recherche Agronomique du Niger (INRAN) Niger; Institute of Agricultural Research ([IAR](#)), Zaria, Nigeria; Institute for Agricultural Research & Training ([IAR&T](#)) Nigeria; Institut de l'Environnement et de Recherches Agricoles ([INERA](#)) Burkina Faso; and Institut d'Economie Rurale (IER), Mali.



WASHC Project Closeout Meeting participants in IITA, Ibadan.

NextGen Cassava Breeding Project conducts three workshops on Database, Digital Phenotyping, and Experimental Design

The [NextGen Cassava Breeding Project](#) conducted a series of training workshops on the use of the [breeding database](#), [PhenoApps](#), and Experimental Design. The three workshops were held at IITA, Ibadan on 13, 17, and 18 March. The cassavabase workshop was facilitated by four cassavabase developers led by Lukas Mueller from the [Boyce Thompson Institute](#), Cornell University and was attended by 15 breeders and researchers from IITA, the National Root Crops Research Institute, Umudike, Nigeria ([NRCRI](#)); the [Africa Research Institute](#), Tanzania; the Boyce Thompson Institute, Cornell; and EMBRAPA, Brazil. The users familiarized themselves with key aspects of the breeding database tools including search, visualization, upload, and download of data. The workshop participants were also trained on different analysis tools available in the open-access database including the use of Genomic Selection.

The PhenoApp workshop was held on 17-18 March. PhenoApps are a suite of free, open-source Android apps designed for breeders to accurately and efficiently capture and analyze phenotypic data. The workshop was facilitated by Prof Michael Gore from Cornell and his team, and was attended by 35 participants from IITA; NRCRI, Umudike; [NaCRRI](#), Uganda; [Bayero University](#), Kano; the National Horticulture Research Institute ([NIHORT](#)); the Africa Research Institute, Tanzania; the French Agricultural Research Centre for International Development ([CIRAD](#)); and [Makerere University](#) Uganda. All registered participants went away with smartphones/tablets for use in their respective breeding programs.

The training included practical field sessions on software-based whitefly counting, measurement of storage root size and geometry, estimation of root deterioration, and the FieldBook app for collecting field evaluation data. Equipping the trainees with these tools and a tablet/smartphone each is expected to greatly improve the effectiveness of data management, reduce researcher workload and error as well as contribute to having high-quality phenotypic data. All these are in turn expected to lead to higher genetic gains in breeding programs.



Participants to each of the three cassava training held in IITA, Ibadan, Nigeria, in March 2017.

The third workshop on Experimental Design and Analysis, also held on 13 and 17 March, was conducted by Prof Jean-Luc Jannink and Ani Elias from Cornell University and attended by 29 trainees from IITA; NRCRI, Umudike; NACRI, Uganda; ARI, Tanzania; and the Lake Zone Agricultural Research and Development Institute, Tanzania (LZARDI). The trainees were

empowered to design efficient field trials using free programs implemented in the R statistical language. Novel analyses such as spatial autocorrelation to account for field variability were taught.

These workshops were oversubscribed and the organizers are considering repeats on a regular basis.