

IITA prepares to provide strategic support to governments during COVID-19 pandemic

IITA Director-General, [Dr Nteranya Sanginga](#) has said that the Institute is strategically working towards providing support for the federal and state governments in Nigeria as well as the other countries where IITA hubs are situated, during this trying time across the world. Sanginga said this at a meeting of staff and management to announce Institute-wide measures to curb the spread of the global COVID-19 pandemic.

At the meeting, the DG also announced the partial shutdown of the Institute with effect from 30 March. This is in accordance with the government's directive for organizations to put in place mechanisms that will support efforts to tackle the spread of the coronavirus (COVID-19). IITA would be operating on

to page 3



IITA DG, Nteranya Sanginga, addressing all staff at the meeting.



Lilian Mendoza, Head of Human Resources Management, highlighting plans of the Institute during the partial shutdown.



Dr Samson Adeleke, Head of IITA's clinic, reinforcing information on precautions for COVID19.

Strengthening cassava virus diagnostic capacity in DR Congo

A training workshop on "Application Molecular Diagnostics for Cassava Virus Surveillance" took place 2 to 6 March, at [IITA-Kalambo](#), Bukavu, Democratic Republic of Congo (DRC). This course is part of the USAID-funded project on "Actions to Control Cassava Brown Streak Disease in the Democratic Republic of Congo". Twenty-three participants attended the workshop including six female participants from the DRC and the Congo Republic. Participants trained in the application of Recombinase Polymerase Amplification (RAP) for the detection of viruses responsible for cassava mosaic disease (CMD) and cassava brown streak disease (CBSD).



A practical session in the laboratory.

The Project Manager, [Sikirou Mouritala](#) said, "CMD, endemic to all regions in DRC, is controlled using the disease-resistant cassava cultivars, whereas CBSD--localized in eastern provinces--is controlled using virus-free propagation material." He continued, "Work is in progress to develop CBSD resistant cultivars suitable for cultivation in DRC, while intensive efforts are focused on preventing the westward migration of CBSD. Another threat to cassava production, particularly in Western DRC, is dry root rot disease (DRRD), the cause of which is not yet clear. However, studies have shown that DRRD is not associated with any virus infection."

"Reliable diagnostic tools are necessary for research and extension services for surveillance, production of virus-free planting material, and seed health testing," said [Lava Kumar](#), Head of Virology & Molecular Diagnostics, IITA-Ibadan, Nigeria, who was the key resource person for the training course. He mentioned that simple technologies usable with minimum equipment under laboratory and field conditions immensely benefit CBSD mitigation efforts in DRC.

Participants consisted of researchers and laboratory staff from different stations of the Environmental Institute for Agricultural Research (INERA) and IITA-Kalambo, as well as seed inspectors from the National Seed Service (SENASSEM) and extension agents (SNV, 'Service National de Vulgarization'). In addition, two participants from Congo-Brazzaville, the neighboring country, also benefited from this course. Participants were trained in:

- Recognition of cassava virus disease symptoms in the field
- Recognition of disease incidence and distribution within the field
- Early disease diagnostics for disease control
- Sampling and sample preservation for virus testing
- Conducting surveillance surveys
- Use of RPA and Loop-mediated Isothermal Amplification (LAMP) methods for cassava virus detection under laboratory and field conditions.

Participants visited INERA-Mulungu station in South Kivu, to demonstrate cassava breeding activities conducted at the station, and practice smartphone-based applications for disease reporting from the field and field virus detection using the RPA method.

"Diagnostics capacity will help the establishment of the CBSD control network with partners and the support of Dr Kumar are of vital importance for preventing CBSD spread in DRC," said Mouritala.

Also speaking during the workshop, the DRC country representative, [Zoumana Bamba](#) said, "Development of national program capacity in tackling virus diseases is critical to improve cassava production and halt the expansion of CBSD spread

towards Western DRC." He thanked the continued support of USAID for improving cassava production in the country.

As a follow-up to the course, the USAID project will establish four cassava virus diagnostics laboratories in Mulungu, Mvuazi, Ngandadjika, and Yangambi INERA stations to support CBSD mitigation efforts. As part of this, each of the stations will receive the minimum equipment required for performing diagnostics tests.



Top: Participants practicing smartphone-based applications for disease reporting and field virus detection using the RPA method. Middle: A practical session in the field. Bottom: Group photograph of participants and resource persons.

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a skeletal schedule with a few essential members of staff to ensure that ongoing research that is key to addressing food security in Africa is not affected.

Sanginga mentioned that while staff should endeavor to follow correct precautionary measures, IITA would continue its core research function, which is important to the food security of Africa and the rest of the world. "This is why our activities have to continue as Africa's food security is dependent on the research we do at the Institute," he added.

A session of the meeting was dedicated to a health talk, which was delivered by Dr Samson Adeleke, Head of IITA's Clinic. This was to further reinforce information on precautions, causes, and control measures while also increasing awareness about COVID-19 among staff while the partial shutdown is being observed. "Hand washing and physical and social distancing are key activities that everyone is required to observe; standard handwashing should take at least 20 seconds. The use of hand sanitizers should support hand washing," he said.

[Lilian Mendoza](#), Head of Human Resources, highlighted the plans of the Institute during the partial shutdown. Mendoza explained that the Institute would continue critical operations with essential staff. Meanwhile, Sanginga assured all staff during the briefing that salaries will be fully paid during the shutdown.

The decision of the partial shutdown comes when IITA has decided to not only focus on protecting staff across all hubs but also to protect the research that is key to Africa's zero hunger target and the world's food security.



IITA staff present at the outdoor meeting with DG Sanginga.

IITA trains scientists on Data Management Planning

On 13 March, the [IITA](#) Western African Hub organized a seminar for scientists across all IITA hubs. The seminar, themed "Creating a living data management plan for research reproducibility," aimed to educate scientists on data management planning (DMP).

Olatunbosun Obileye, the Institutional Data Manager, talked on areas such as the meaning and reason for DMP, elements of DMP, and how to create a functional and living DM plan. "At the end of the lecture, participants should be able to come up with a winning DM plan when there is a request for a proposal (RFP)," he said.

Emphasizing the importance of DMP to research work, Obileye stated that IITA had lost some projects due to inconsistency in data management planning, which is not in line with the expectation of donors. In agreement, [Kwesi Atta-Krah](#), Director, Advocacy and Country Alignment, said, "For a research institution like IITA, data is life."

Some of the advantages of DMP include clear communication on ways data will be handled during and after a project; regeneration of consistent, reproducible, valid, and accurate data; and increased visibility. DMP enhances the reproducibility of data such that there is always a fall-back plan in the case of any unplanned incident.

After playing a video of a couple who, due to negligence, lost data on a cure for cancer, which they got through years of research, Obileye mentioned that the Comprehensive Kerbal Archive Network (CKAN), the platform adopted by IITA for its data repository, is one good storage platform that ensures the preservation and sharing of data after a project has been completed.

Two years ago, IITA ranked 15th in the [CGIAR](#) Data Management scale for archived data and findable, accessible, interoperable, and reusable (FAIR) compliance. Today, IITA ranks second in terms of archived data and among the first in terms of FAIR data compliance. In terms

of numbers of data in the repository, the Institute is working towards becoming the first by July 2020.

The seminar will not only help the data life cycle of IITA, it will also position the Institute for more funding, which will make room for more awareness creation seminars across the hubs, according to [Sylvia Oyinlola](#), Head, Administration, Western African Hub, who said: "This is one of the many seminars Obileye has in mind for us."



Olatunbosun Obileye, IITA Data Manager, training scientists on Data Management Planning.

IITA participates in 2020 Science, Technology, and Innovation Expo

The Nigerian Federal Ministry of Science and Technology, in pursuit of its mandates of popularizing science, technology, and innovation, organized the Technology and Innovation Expo 2020 to facilitate the commercialization of research and development results and encourage inventions and good innovations in the country.

Declaring open the 2020 Science, Technology, and Innovation Expo, the President of Nigeria, Muhammadu Buhari noted: "Nigeria's greatest resource is its human capital. This is richly embodied in our youth who make up tens of millions of incredibly talented persons, constantly pushing and striving towards greatness". The President said the future of Nigeria belongs to our youth. He reiterated the commitment of the Federal Government to partner with the private sector on science, technology, and innovation sector development towards ensuring that the sector plays a very important role in advancing the frontiers of knowledge for nation building. "Government will continually support the creation of intervention funds to strengthen research and development, human capacity building programs, and collaboration with the organized private sector; we will continue to work towards the realization of the National Research and Innovation Fund," he said.

The theme for the Expo, which was "Enhancing the growth of a diversified economy through science and technology," aimed at highlighting the role of innovation in economic diversification. The Expo helped promote commercialization and publicize IITA's research results, inventions, and innovations. The forum took place 16 to 20 March at the Eagle's Square, Abuja.

Participating for the third time in three years, IITA showcased recent advances in yam seed production as the major innovation for the Expo. The IITA stand also featured samples of products/seeds from mandate crops and many research materials, including publications. ENABLE-TAAT was also well represented.

In recognition of an excellent exhibition at the end of the five-day event, IITA was presented with a Certificate of Participation in the 2020 Science, Technology, and Innovation Expo.



Top: An IITA staff showcasing the Institute's products and research materials at the IITA stand.
Middle: IITA showcasing recent advances in yam seed production.
Bottom: The Certificate of Participation received by IITA in the 2020 Science, Technology, and Innovation Expo.

IITA Forest Center trains coordinators of its conservation clubs

On 13 March, the [IITA](#) Forest Center organized a workshop for coordinators of its newly established School Conservation Clubs (SCCs) at the IITA headquarters. The purpose of the workshop, themed “Training the Trainers” was to familiarize the coordinators with the modus operandi of conservation clubs and give insights into innovative ideas that could help the clubs make a meaningful impact.

In addition to the 43 already established, 20 new SCCs have been established in primary and secondary schools across Oyo, Osun, and Ekiti states. The aim is to enrich the nature experience of school children and create a harmonious relationship between them and their natural environment. The training workshop, which was anchored by Ademola Ajayi, Forest Center Environmental Education Officer, had an array of seasoned facilitators from chosen fields.

In her welcome address [Sylvia Oyinola](#), Head, Administration of the Western Africa, said: “In Nigeria, we have been ‘consuming,’ it is necessary for us to change the trend and start conserving.” While delivering his presentation on “Biodiversity Conservation” Forest Center Manager Adewale Awoyemi highlighted the benefits of biodiversity to humans, encouraging everyone to ensure our continued existence.

The workshop featured Risk management as related to SCCs, jointly presented by Rasheed Fagbenro and Sylvia Oyinola; Child protection by [Derek Smith](#), Head Teacher of IITA International School; An introduction to Environmental education by Anu Akinola from the [Nigeria Conservation Foundation](#); Gardening and nursery tending operations by Olukunle Olasupo; and Waste to wealth (upcycling) by Jumoke Olowookere, CEO of the [African Creative Hub](#).

In his goodwill message, Russell Brooks, Public Affairs Officer of the [US Consulate](#), said: “We are all responsible for the Earth.” Brooks also expressed his delight in what the Forest Center has done with funds provided, being one of the donors for the project and supported by the [Leventis Foundation](#).



Top: Jumoke Olowookere, CEO African Creative Hub, educating participants on ways to turn waste to wealth.
Middle: Anu Akinola from the Nigeria Conservation Foundation, conducting a session on Environmental education.
Bottom: Group photograph of coordinators and trainers.

AfricaYam project concludes product advancement and refinement meeting in Abuja

[AfricaYam](#), a project with the main objective of enhancing yam breeding for increased productivity and improved quality in West Africa, has concluded its product advancement and refinement meeting in Abuja. The five-day meeting that took place in Grand Pela Hotel was organized for yam product profile refinement and advancement.

Stakeholders at the meeting consisted of farmers, traders, representatives of Ministries, Exporters, AfricaYam partners from Benin and Côte d'Ivoire, and different crop scientists from [IITA](#) who were all given an opportunity during the meeting to share experiences, challenges, and achievements through paper presentation, discussions, and general remarks.

In his opening address, IITA Director of Research for West Africa, [Robert Asiedu](#) appreciated the organizers for their excellent efforts in bringing stakeholders together but regretted the fact that some colleagues from Ghana could not attend the event as a result of the travel restrictions placed on their country due to the coronavirus pandemic. He enjoined participants to vibrantly share experiences, learn from one another, challenge each other, and come up with discussions that will be significant and add value to the output of farmers. Finally, he encouraged them to interact and share knowledge with

each other so that whatever decisions were taken at the workshop will advance the cause of yam in Africa.

AfricaYam Project Leader [Patrick Adebola](#), who had earlier welcomed all participants, during his presentation titled "AfricaYam Achievements and Phase II Focus," gave an overview of the AfricaYam project. The project started in October 2014 and will be terminating in April 2020. He mentioned the four operational countries for the project: Benin, Côte d'Ivoire, Ghana, and Nigeria. According to Adebola, the major objective of AfricaYam is to enhance food security and improve livelihoods by increasing productivity and the sustainability of yam cultivation and reducing the costs for smallholders, producers, and consumers in West Africa. During his presentation, he highlighted the activity streams of the AfricaYam project, which lie primarily in capacity building, development of genomic resources, and breeding population development. The Project Leader also gave a summary of the project achievements in phase I and the prospects of AfricaYam project phase II.

The AfricaYam product Advancement and Refinement meeting featured several presentations from scientists and invited stakeholders on different topics. Six paper presentations divided into two sessions were presented daily with discussions



Dr Robert Asiedu giving his remarks.

on papers presented coming up after each session. General reflections were examined to ascertain the outcome of the project and the way forward.

In his closing remarks, Asiedu described yam as a powerful engine for poverty alleviation. He stressed the need for a lot more advocacy for the crop, stating that not many people understand the crop. He advised the need for greater attention to seed production and quality of varieties being developed as the impact will only be seen in the future. He finally encouraged the scientists to tap from the abundant indigenous knowledge about the crop, which will serve as a catalyst for developing new varieties.



Group photo of participants.

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.gha@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.

