

COVID-19 Update: Extension of lockdown measures

Due to the COVID-19 pandemic, IITA has announced that the Institute will be extending the temporary lockdown measures in its different locations until further notice. Deputy Director General, Corporate Services, Hilde Koper-Limbourg announced this on 9 April, in an email communique to all staff.

She noted that there might be further announcements if the governments in the different countries the Institute operates in announce changes. "In all the places we work, the general rule is still that we follow Government directives," she said.

She enjoined staff to "hang in there" in these difficult times and keep taking all precautions to keep themselves and their families safe.

IITA has instituted a partial lockdown in some of its locations, while in places such as Rwanda, there is a total lockdown in line with government directives. Despite the current situation, IITA is continuing its work, in some cases remotely, to ensure the "transformation of African agriculture."

Help stop the spread of COVID-19!

Keep your hands clean. | Practice physical distancing. | Avoid touching your face. | Keep away from crowds. | Cough into your elbow. | Stay home.

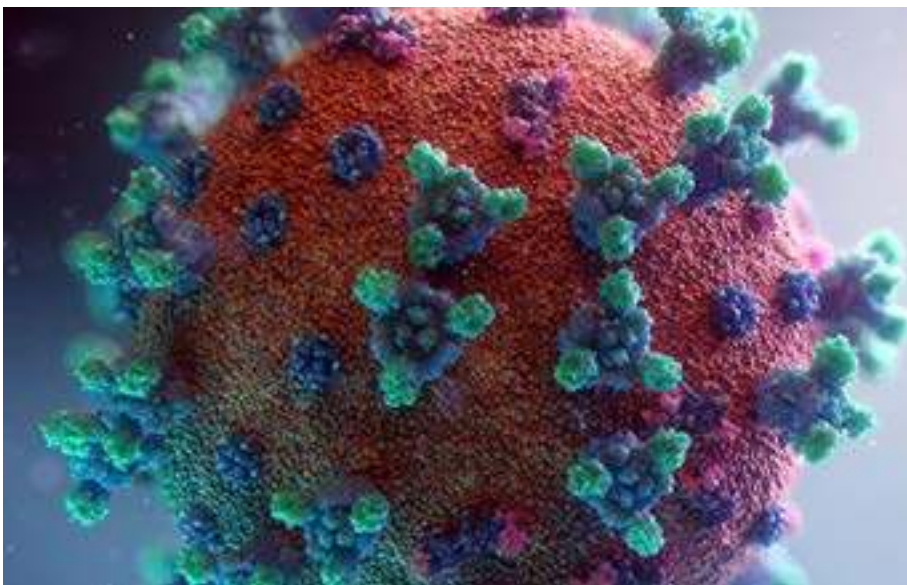


Photo by Fusion Medical Animation on Unsplash.

IITA alumnus to represent One CGIAR at UN Food Systems Summit

CGIAR Special Representative to the UNFSS, Dr Kanayo Nwanze.



Former President of the International Fund for Agricultural Development (IFAD) and Director General of AfricaRice, and an IITA alumnus, Dr Kanayo F. Nwanze has been appointed as CGIAR Special Representative to the United Nations Food Systems Summit (UNFSS), which is tentatively scheduled to take place in late 2021. At the Summit, he will be bringing the voice of independent agricultural research and broad-ranging partnerships to the global forum.

Accepting his appointment, Nwanze highlighted the need for representation at the UNFSS. "To be reengaged with CGIAR, to me, is both a privilege and a unique opportunity to serve the System," Nwanze said. "CGIAR must be represented in the UNFSS; we cannot just sit on the sidelines. We've got to bring to the table our scientific knowledge, our wealth of experience, and our partnerships—we have so much to offer."

An Africa Food Prize Laureate, Nwanze has worked for more than 40 years in the CGIAR System and Rome-based agencies, most recently serving as President of IFAD. He is currently a member of the CGIAR System Management Board.

Nwanze is a fitting representative for CGIAR at the Summit as a voice for independent science and broad partnerships to bring food systems innovations to scale. This was noted

by Marco Ferroni, Chair of CGIAR's System Management Board, in a post announcing the appointment. "Dr Nwanze is an ideal candidate to make the case for science and strong partnerships in agriculture from the global to the local level. We are honored to have him represent CGIAR and our commitment to achieving a future free of poverty and hunger," Ferroni said.

The appointment comes as CGIAR prepares to mark its 50th anniversary in 2021, with celebrations planned for the organization's transformational innovations for food systems over the past five decades.

It also comes at a time when CGIAR is preparing to unify the governance and operations of its 15 Research Centers under a single system, as One CGIAR, to drive progress on meeting the SDGs by 2030. As a unified system, CGIAR will pursue a revised mission to "end hunger through science to transform food, land,

and water systems in a climate crisis," focusing its efforts on the five key impact areas of nutrition, poverty, gender, climate, and environment.

The UN Food Systems Summit aims to catalyze and accelerate the transformation of the world's food systems—how we grow, catch, transport, process, trade, and consume food—to meet the challenges of mitigating and adapting to climate change, and to achieve the Sustainable Development Goals (SDGs) by 2030.

"I would be very optimistic about the outcome of this Summit," Nwanze said. "I would hope that we will not come out of it with just another declaration or call for action, but with very clear milestones, timelines, funding envelopes, and commitments for partner engagement for delivery in the next ten years. And I think CGIAR must be central to this."

Data management gets a boost

Data management in IITA got a boost with IITA's participation in Research Data Alliance 15th Plenary for Interest Group on Agriculture Data online held on 9 April.

IITA was asked to present on its efforts at promoting agricultural data. Institutional Data Manager Olatunbosun Obileye presented on the topic, "Improving data integrity by integrating crop bases with the institutional repository: Case of Cassavabase integration with CKAN at IITA". Cassavabase is an integrated field breeding and genomics database which enables accelerated genetic gain in cassava. Meanwhile, CKAN is an open-source DMS (data management system) for powering data hubs and data portals and is what IITA uses for its institutional research repository.

Obileye highlighted the institute's efforts at creating a one-stop shop for finding research data within the institution by using the integration of Cassavabase into CKAN. In his presentation, he indicated that only IITA data within Cassavabase is being harvested into the institutional data repository. The integration brings in digital object identifier (DOI) for the data and ensures data citation. He highlighted the importance of partnership at achieving this feat.

In another instance, the enhancement on IITA's CKAN and the quality of data published by IITA, especially the assignment of DOI to experiment data while retaining IDs of data from Cassavabase, the use of annotated ontology and conformity with AGROVOC in published data was commended by some data leaders. Marie Angelique Laporte of Alliance of Bioversity and CIAT was glad to see adaptation of CKAN to maintain data quality while Medha Devare of IFPRI expressed satisfaction with the

quality of IITA's data in GARDIAN. GARDIAN is an online portal that provides access to agricultural research data produced by CGIAR Centers, their implementing partners, and beyond.

The Research Data Alliance (RDA) has over 10,000 members from 144 countries. RDA provides a neutral space where its members can come together to develop and adopt infrastructure that promotes data-sharing and data-driven research.



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.



AgroEcoHealth focus: Agriculture's role in the development of mosquitoes

IITA Molecular Entomologist and Head of the AgroEcoHealth Platform in Cotonou, Rousseau Djouaka, has revealed the role of agriculture in the proliferation of mosquitoes concerning the spread of Buruli ulcer (BU). Djouaka highlighted this in his presentation, "The IITA AgroEcoHealth Platform, Starting from Ground Zero towards New Challenges," which he gave at the IITA HQ in Ibadan, Nigeria.

Buruli ulcer, caused by *Mycobacterium ulcerans*, is a chronic and devastating disease that mainly affects the skin and sometimes bone. The organism belongs to the family of bacteria that causes tuberculosis and leprosy, and provides an opportunity for collaboration with these two disease programs. *M. ulcerans* is an environmental bacterium and the mode of transmission to humans remains unknown. Currently, early diagnosis and treatment are crucial to minimizing morbidity and costs and preventing long-term disability (WHO 2019).

Thirty-three countries in Africa, the Americas, Asia, and the Western Pacific have reported cases of Buruli ulcer. Most cases occur in tropical and subtropical regions except in Australia, China, and Japan. Out of the 33 countries, 14 regularly report data to WHO. In Africa, the majority of cases are reported from West and Central Africa, including Benin, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Ghana, and Nigeria.

To understand and combat the mode of transmission of the BU disease in the wet agroecosystems, Djouaka said, "A system thinking initiative is the required approach for fighting BU because this neglected, yet emerging disease, occurs in the humid agroecosystems of West Africa. Also, it seems to be exacerbated by water types, soil types, human practices, and environment, which hurt communities' livelihoods and increases the level of poverty in households."

The mosquito, a major carrier of malaria, was considered vital while evaluating the mode of transmission of BU for better prevention of the disease. Research on insecticide resistance analyzed the molecular



Head, AgroEcoHealth Platform, Rousseau Djouaka giving his presentation.

basis of resistance in malaria vectors (the *Anopheles* mosquito). Insecticide resistance, which refers to changes in an insect that increase its ability to withstand or overcome the effects of one or more insecticides, has been discovered to be caused by agriculture (agricultural insecticides), vector control (insecticides), urbanization and industry (pollutants), natural xenobiotics (allelochemicals), and microbiome (host interactions). Moreover, insecticide resistance management includes biological control, physical control,

chemical control, and integrated vector management.

Agriculture favors the development and resistance selection in *Anopheles* by providing water for breeding, flower (nectar) for feeding, and leaves for resting.

"We are working with extension workers to relay information derived from research to farmers at the grassroots on how to grow rice with fewer mosquitoes and how to avoid stagnant water for vegetable farmers," Djouaka said.



<https://blog.klm.com/assets/uploads/2015/08/Anopheles-mosquito.jpg>

Rwandans benefit from IITA Women's Group scholarship for the first time

The IITA Women's Group has awarded scholarships to 14 Rwandan students in its annual scholarship initiative, which reached Rwanda for the first time since inception. The award ceremony was held in February 2020 in Kamonyi District, southern Rwanda.

The award scheme is designed to assist IITA junior national staff in sponsoring their children for an academic session. Eligible students must not be above 21 years old. Since IITA Rwanda junior staff did not have children in that age range, the eligibility was extended to children in districts that partner with IITA. Kamonyi District was selected as it hosts many IITA activities.

Twenty-six Rwandan children competed, and 14 passed the test and were awarded prize money and certificates. Among the 14, two students who scored 70% and above got full scholarships and the other 12 who scored over 50%, but less than 70%, got half scholarships.

Munyaneza Denis, who scored 83% and received \$50 on top of the \$250 scholarship award, wrote a thank-you note to IITA commending IITA Women's Group for motivating and financially supporting Rwandan students. He said that the scholarship is a success enabler. "The award you gave us motivated me, and I promise you that I will work hard and succeed," Denis said.

Students from Rwanda performed well in tests of mathematics, English, and essay writing, while general aptitude results indicated that more effort is needed to improve performance.

The IITA Women's Group perceives its scholarship initiative not only as a way of promoting equality and supporting junior staff but also as an opportunity to nurture future scientists through motivation and financial support of young children.

"As a research institution, we know that future researchers come from children who go to school, so it is important to promote education to encourage the development of future scientists, not only for IITA but also for the entire society," says Speciose Kantengwa,

Technical and Partnerships Officer at IITA Rwanda.

Students qualify for the annual grant through a competitive written exam

and an oral interview done throughout IITA stations. Junior-Secondary students who score 70% win US\$250, Senior-Secondary laureates win US\$300, and Post-Secondary winners get US\$350.



Students displaying their award certificates.



Beneficiaries with their parents.