

New era in Open Access marked in IITA

IITA moves closer to being Open Access (OA) compliant with the launching of a data repository called CKAN or Comprehensive Knowledge Archive Network.

CKAN is an open access management system for storing and distributing open data and is IITA's repository for numeric data. It was launched on 21 July at IITA, Ibadan, with researchers, students, and trainees from various research areas and units in attendance.

CGIAR Open Access policy mandates its members to make research data accessible, discoverable, and free to the public, with comprehensive implementation by the end of 2018. IITA therefore has an obligation to come up with OA repositories for various information products. While IITA already uses OA repositories for text, multimedia, and special files, the repository for tabular (mostly numeric) data was lacking.

With the launch of CKAN, IITA researchers can now easily drop their data in the repository in compliance with the Open Access policy. CKAN displays the metadata immediately, and after an embargo period (usually 12 months), makes the data sheet itself available. These repositories make the work of IITA's scientists easily accessible, and enable other researchers to use the data in the repository.

The Data and Information Management Unit (DIMU) implemented and deployed the open access data repository for public access.

Martin Mueller, IITA's E-Research Coordinator, DIMU, reminded staff that under the Open Access policy of the Institute, everyone should ensure that their work is easily accessible and available. "The CKAN platform provides researchers a medium for saving and sharing research findings, and linking to other online OA repositories," he said.

This means that OA repositories can (theoretically) link various data storage archives. Through this network, metadata in the content of other repositories can be accessed via CKAN. Also, other repositories can display CKAN content.

Olalekan Anifowoshe, Data Programmer, DIMU, said, "The Institute supports its researchers to become OA compliant. Staff members should assist the Institute's mission of providing free online Open Access to its research by publishing their research outputs, data, publications, and information products under OA licenses."



Olalekan Anifowoshe, IITA Data Programmer, DIMU, talking about CKAN.

Staff should fill in the metadata capture sheet in the site on SharePoint and send it together with the data immediately after data collection to iita-ckan@cgiar.org. During the launch, the use of the capture sheet was also explained in detail.

The launch marks the official start of the use of the CKAN platform to help Unit and Project Managers familiarize themselves with the changes brought about by the introduction of Open Access policies. Also with this launch it is now mandatory for every researcher to use CKAN for all research data under the OA policy.

Established OA and data management implementation guidelines and policies have been developed by CGIAR as part of its commitment to enhance the visibility, accessibility, and impact of its research and improvement activities.



Martin Mueller, E-Research Coordinator, anchors the launching of the CKAN platform.

IITA opens another incubation center!

In 6 months, a group of IITA Youth Agripreneurs (IYA) has developed another thriving agribusiness center in Imo State, southeastern Nigeria.

Imo State Governor Owelle Rochas Okorocha announced this on 31 July during the official launching of IITA's incubation center piloted by IYA at the Imo State Polytechnic in Umuagwo.

Speaking further on the importance of the proposed partnership, Governor Okorocha said most of the food consumed in the State comes from northern Nigeria, so involving the youth in agriculture will help reduce the food importation and hunger in the state.

"In 2011 when I became the Governor, I was worried that everything we consumed came from the north. I started asking questions—if our northern brothers fail to provide us with food, does it mean we would all starve of hunger? But in 2017, it was as if IITA heard my worries. I am glad that you are using the youth in bringing an agricultural revolution to the state," he said.

According to him, IITA's youth program will help groom the younger generation to embrace agriculture as a business, help reduce food insecurity, hunger, and unemployment, and promote national security.

He stressed that much needs to be done to change the mindset of the youth so they can go back to the basics and realize that agriculture, through agribusiness, can provide better opportunities for them.

"I congratulate these young IITA entrepreneurs because their mindset

has changed and that is what I want you to do for every youth in this state. With a changed mindset, a tricycle rider can become a wealthy farmer just like the IITA Youth Agripreneurs. If these young people groomed by IITA can do it, I see no reason why every other youth in the State cannot do the same," he said.

While responding to the Governor, the Head of IITA station in Onne, Richardson Okechukwu said IITA is ready to extend its technologies in agriculture to the farmers and youths in the state. He added that piloting the youth-in-agribusiness training center in the southeastern part of the country was one of the ways of extending IITA's benefits to the people of the region. He said more youths in the state will have the opportunity to be trained in agribusiness once the ENABLE Youth program kicks off in Nigeria.

The Rector of the host institution—Imo state Polytechnic, Reverend Fr. Wence Madu, said IYA has made a lot of impact within a short period of its existence in the State.

"My students are amazed by what these young people are doing and I am surprised that many of them go to the incubation facility to offer assistance during their leisure time. By doing this, they are also learning," he said.

Delivering a speech on behalf of the IITA Youth Agripreneurs in Imo, electrical



Director General Nteranya Sanginga (right) welcomes Imo Governor.

engineer Silver Ahanonu, an intern with the IYA Imo team, said "Part of what we do is horticulture; we produce tomato, cucumber, and pepper in a 5000-m² greenhouse. Whenever we take the tomato to the market, buyers think they are imported from South Africa or the north. They don't believe they are grown in Imo. So we take photos of our tomato and our activities in the greenhouse to convince them. We also produce eggs, which we sell daily but it is difficult to meet demand. For the tomato, we have a projected revenue of 1.5 million naira per cycle as we plan to produce all year round with our irrigation facility.

In January 2017, Director General Nteranya Sanginga and the Director, Agriculture and Agro-industry Department of the African Development Bank, Dr Chiji Ojukwu, visited Imo to explore areas of expanding the youth initiative to the southeastern part of Nigeria.

The team discovered some abandoned poultry, fish, and horticulture facilities at the state polytechnic that could be used to train the youth and also establish enterprises. Some youths were transferred from IYA in Ibadan and Abuja to Imo and within 6 months they renovated and stocked 23 ponds with 10,000 catfish with a projected revenue of 13 million naira (~\$41,200). They also stocked a 3,000-capacity poultry house with 2,940 broilers and layers with an egg production of 24 crates daily, and a greenhouse with tomato, pepper, and cucumber.

They have also cultivated 15 hectares of soybean and 50 hectares of cassava.

They are currently training 11 unemployed graduates who just completed their National Youth Service Corps year.



Agripreneurs showing off the fish ponds.

Got a story to share? Please email it with photos and captions every Wednesday to Katherine Lopez (k.lopez@cgjar.org), Jeffrey T. Oliver (j.oliver@cgjar.org), Catherine Njuguna (c.njuguna@cgjar.org), or David Ngome (d.ngome@cgjar.org).

Germplasm Health Unit launches single access point platform

IITA's [Germplasm Health Unit](#) (GHU) commissioned the "[GHU Online](#)" platform on 31 July at IITA Ibadan as a comprehensive resource for managing research services and data on germplasm health.

The newly launched online software will serve as a single access point to various services, simplifying the service request procedure, allowing users to manage the data, including uploading and downloading data files. It provides real time progress monitoring at various stages and enhances overall operational efficiency. The online tool was developed using the Liferay Portal (open source software) jointly by GHU and the IT Unit of the Data and Information Management Unit (DIMU). It is accessible to all IITA users in all the stations/regions using the existing user login and password.

Inaugurated by [Hilde Koper](#), Deputy Director General (DDG), Corporate Services; [Robert Asiedu](#), Director, R4D West Africa; and [Tony Omwansa](#), Director, R4D Research Support, GHU Online will be a gateway for the international exchange of germplasm. Koper said "This online system will improve operational efficiency and reduce service costs. I am pleased to inform you that all support service units are also moving in a similar direction."

While encouraging the efforts of GHU in developing the software, Omwansa said, "This technology was developed internally. It is actually timely and in the context of Research Support, we are looking for how to support the broader institutional agenda."

"This platform is an excellent advancement that will facilitate and significantly raise the efficiency of our interaction with users of GHU services," said Asiedu.



L-R: [Tony Omwansa](#), Director, Research Support; [Hilde Koper](#), Deputy Director General, Corporate Services; and [Robert Asiedu](#), Director, West Africa Hub, and [Lava Kumar](#), Head Germplasm Health Unit, launch GHU Online.

Concurring, [Michael Abberton](#), IITA focal point of the CGIAR Genebank Platform, added: "This is a good step forward; IITA is a center of excellence for germplasm health in CGIAR. This development has been copied by other centers; some developments have been brought in by [Lava Kumar](#), who has been leading the GHU module in the CGIAR system; we have respect for the work that he is doing. The Genetic Resources Center (GRC) works very closely with GHU."

"Our next step is to link it to the [Nigerian Agricultural Quarantine Service](#) (NAQS) system; they would have access to the platform, streamlining documentation processing, which will help reduce transaction time and costs. IITA has the potential to develop programs like this in-house; it is very simple. We will organize user training courses to adopt this easy-to-use system," stated Lava Kumar, GHU Head, as he laid down the steps towards moving the online platform forward. He

also thanked Kenneth Oraegbunam who programmed the online platform.

GHU is responsible for ensuring phytosanitary compliance in line with various national and international (IPPC) standards during the movement of biological materials, primarily germplasm of clonal and seed crops of IITA held in GRC, as well as from the breeding programs of IITA's mandate crops. This process requires facilitation of import and export (phytosanitary certificate) permits, production of virus-free germplasm, active growth stage inspection, seed health testing to ascertain germplasm freedom from the regulated quarantine pests and pathogens, seed treatment, and post-entry inspection. GHU's core business has been to offer these functions to IITA researchers as "research services on demand".

The GHU Online is accessible with IITA login and user name at <http://ghu.iita.org/ghu>.



[Lava Kumar](#) introducing a new platform that is expected to enhance transactional efficiencies.

Capacity of youth in agribusiness gets a boost

About 38 youth drawn from Onne, Rivers State, were trained on agribusiness and entrepreneurship and improved agronomic practices and value addition for cassava and plantain/banana. The 3-day training was facilitated by the [ATASP-1](#) project, the Plantain and Banana Improvement Program, and the Youth Agripreneurs at IITA Onne, 17-19 July.

Francis Adunoye, in his welcome note to the participants on behalf of the Director General, Dr Nteranya Sanginga and the Head of IITA-Onne, Richardson Okechukwu, stated that training aimed to equip participants in cassava and plantain/banana production and spur their interest in agripreneurship to become employers.

Enlightening the participants on cassava production, Mr Obiadinma Chukwuma, ATASP-1 Training officer, explained the best agronomic practices expected for high root and stem production. He further demonstrated the appropriate method of herbicide application, which the participants also practiced. He discussed the potential business opportunities in training other farmers in stem and root production and herbicide application.

Similarly, Ms Jacinta Ezurike, ATASP-1 Training officer, encouraged the participants to embark on postharvest value addition to increase the shelf life of roots and prevent spoilage or food loss. She said the industrial uses of cassava are important for the confectionary, brewing, textile industries and many others. She stated, "Cassava is all about money; however, the industrial market is underexploited and there is little technical expertise on postharvest value addition for resource-poor farmers, leaving them vulnerable to market fluctuations."

Also speaking on best agronomics practices for plantain/banana production, Josephine Agogbua, Postdoctoral Research Fellow, stated that factors such as site selection, field preparation, and various propagation techniques are required to get optimum yield and high productivity.

The IYA Onne team represented by Ms Dorcas Ogunwole and Mr Obinna Atu briefed the participants on the benefits of acquiring entrepreneurial

skills needed to successfully operate small-scale farm businesses. Ogunwole urged the trainees to identify and exploit business opportunities to create wealth. She said, "There are a lot of business opportunities in agribusiness. One could take advantage of the input-supply sector, production and processing, value addition and packaging, transportation, storage facilities, marketing, or service provision." To further emphasize the need for a successful business enterprise, Atu explained the importance of farm budgeting, planning, and record keeping to avoid under or overspending. He said it is the road map that guides the process of production.

The participants were thrilled with the knowledge gained on improved techniques of production and had questions and discussions on how best to establish a successful business. Reacting to the training, a trainee Oluji Ogosu Samuel said, "I love agriculture! The training has been an eye opener for me especially in the area of best planting methods, plant spacing, improved cassava varieties, management of cassava, and plantain/banana production. It has also shed light on other areas of agriculture." The majority of the participants appreciated IITA stating that no institution in Onne had ever offered this type of empowerment. The training ended with an exhibition of products made by the participants and the issuance of certificates of attendance.



Top: Ms Jacinta Ezurike showing participants how to make various value-added products. Bottom: ATASP-1 Training Officer demonstrates how to apply herbicide.



Group photograph with participants.