



IITA

Youth Agripreneurs

Agriculture is the future

Special Issue February 2014

IKYA and the odyssey to Nigeria

Following the successes recorded by IITA Youth Agripreneurs in Ibadan, the Central Africa Hub under the leadership of Dr Bernard Vanlauwe has replicated a similar pilot model known as IITA Kalambo Youth Agripreneurs (IKYA) in DR Congo. To ensure a smooth takeoff of the project, three youths from that region—Eric Sika, Liliane Bahati and Gracia Kahasha— were in Nigeria on a learning visit.

The visit provided a platform for the IKYA to learn and share opportunities with their Nigerian counterparts.

The objectives of the four-week trip were:

- To provide a learning experience to IKYA to understand the research component of IITA's work.
- To learn from the existing group in IITA so that they can replicate the same in DR Congo and, in particular, learn how to process some IITA mandate crops into various profitable products.
- To assist the youth group to position itself properly in order to seize any opportunity in the agricultural value chain and agric business.

The travel log covers activities undertaken by the group since their arrival to IITA Ibadan, captures their excitement and experiences, offers inspiration, and highlights some of the lessons learnt either actively or silently.

Arrival

We arrived at IITA Ikeja on 1 February 2014 where we spent the night and were driven to IITA Ibadan the next day.



Dr Abberton (2nd right) and Mr Folarin (left) with members of IKYA during a visit to the GRC

On arrival, we were warmly welcomed by the IITA Youth Agripreneurs (IYA) based in Ibadan.

Our first day in Ibadan (2 February) was characterized by two significant, happy events: a guided tour and a welcome party. The guided tour was led by five members of the IYA in order to acquaint us with IITA Ibadan campus. The visit was marvelous and very helpful to us because it allowed us to get to know our hosts while discovering the huge gap between IITA-Ibadan and IITA-Kalambo in terms of infrastructure for research and development.

Trainings in different programs

Our second day was marked by the visit of laboratories (Bioscience Center and Genetic Resource Center) and a discussion with the Head of the Capacity

Development Office, Dr Zoumana Bamba.

In the Bioscience Center we were introduced to the molecular lab where Miss Yemi explained to us the different steps of DNA and RNA extraction. She took us to the tissue culture lab where she explained how to prepare the media for different crops (yam, banana, cassava etc.) and how to grow plants in vitro.

Finally, we were received by the Head of the Bioscience Center Dr Melaku Gedil who encouraged us to write a proposal for getting support from different donors for the success of our mission (production and marketing of quality food and seed) and gave us some relevant contacts.

In the Genetic Resources Center we were introduced to Dr Michael Abberton who explained to us the importance of running a gene bank. The gene bank is divided into two components: Crop Seed conservation and Clonal Germplasm conservation. Seed conservation can be long or medium term. Long-term conservation is done at -20° C and the medium term at 5° C using specific packages; aluminum containers for long-term conservation and plastic containers for medium conservation.

The last step was to witness how conservation is done in the field. Mr Folarin, the field manager, took us to the yam and cassava field where they conserve planting materials.

After lab and field visits, we were taken to the Capacity Development Office where we had a candid discussion with the Head Dr Zoumana Bamba about training needs for youths.



Members of IKYA at the Bioscience Center

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Four weeks of learning in Nigeria



DG Sanginga with members of IYA and IKYA in Ibadan

Later we had a chat with Mr Samiran Mazumdar followed by a tour round I-House. The chat with Mazumdar focused on the composite bread (40% cassava flour and 60% wheat flour), and soybean by-products (soya cookies, soya samosa, soya cutlets, and ginger orange soya cup cake). Mr Mazumdar talked about the opportunities in the agricultural value chain which youths could harness.

At the Pathology Unit, Miss Olasupo gave us an overview of their work based on plant pathogens' identification from different crops (maize, groundnut, cassava, yam, rice etc.). The unit is currently working on the control of aflatoxins—toxins produced by the fungus *Aspergillus flavus* that are poisonous to humans and animals. Aflatoxins contaminate mostly maize and peanuts. IITA's work on the control of aflatoxins has earned the Institute a global award.

We had a meeting with the Director General of IITA, Dr Nteranya Sanginga. In attendance was Dr Gbasse Tarawali, who represents the Director General and the Deputy Director General, Partnerships and Capacity Development in Abuja. During the meeting we jointly reviewed a proposal and Dr Tarawali shared some lessons learnt from a recently concluded youth conference in Senegal. The IYA also reviewed their 2014 work plan. Some of the lessons learnt at the meeting would be adopted by IKYA. What an interesting exercise!

Thereafter, we received an unexpected host—Nadine Sanginga, who urged us to get to know one another by sharing our motivations and our individual and collective vision for the next three years. We really enjoyed the life experience that Nadine Sanginga shared with us and it was really motivating and encouraging.

At the Farm Office, we met Mr Abeng who explained the different choices and use of machines. According to him,

several factors including agroecological zone and the type of crops to be cultivated may influence the choice of equipment to be used.

We also visited the cassava breeding unit. Mr Niyi Adetoro took us through all steps of cassava processing from peeling to the final products (boiled cassava, cassava flour, gari, abacha, tapioca, and cassava chips). He also gave us an introduction to the cassava breeding program, explaining how long it takes to develop new varieties.

Our colleagues in Nigeria—IYA—took us to the seed processing unit and banana macropropagation unit. Currently, the seed processing unit is much used by the youth to process healthy seeds of maize and soybean. After harvesting, the seeds go through several processing steps including shelling, cleaning, drying, weighing, and packaging. In the last season, they

produced 9 tons of maize and sold all of them (1 Kg for \$1.5) though they still store it for farmers. After explaining all about seed processing, the youth took us to the screenhouse to showcase their macropropagation of plantain since this crop has a very good market in Nigeria.

We were also hosted by Dr Kristina Roing de Nowina, the Proposal Development Coordinator. She explained her role in the Institute which is proposal development, looking for funds, and helping to write proposals. She spoke about characteristics of a good proposal emphasizing that a good proposal must have good content, look professional, be clear, concise, and precise (can be easily read and scored), and be persuasive and informative. She finally emphasized that the instructions and deadline given by donors should be strictly adhered to.



Members of IKYA with Dr Roing de Nowina

Changing youths' perception towards agriculture



Members of IKYA and IYA on a maize field

We were also introduced to the Crop Utilization Unit. There we met Dr Deji Alamu who gave us an overview of the unit and took us around. He highlighted the main goal of the unit which is to link agriculture to health and nutrition by adding value to the IITA mandate crops (soybean, banana, maize, yam, cassava, and beans). This implies that the crop utilization unit works closely with the breeding unit in order to assist them in their decision making processes. They

perform various analyses in order to generate data for breeding decision making and ensuring the quality of the product for consumers.

After the overview of the crop utilization unit, we were introduced to some practical sessions which involved the processing of soybean and cassava by-products (tofu, cassava doughnut, cassava egg rolls, and chinchin). We really enjoyed the lesson and learn a lot from it.

On 11 February we spent the whole day with our colleagues (IYA) in their office. In the morning Mr Andrew Obinna, one of the agripreneurs, made a presentation on cassava and its commercialization. The presentation focused on cassava planting, processing, and some elements of cassava business. The presentation was very interesting and elicited several questions from participants.

The next day we went for a field trip to Ogbomosho. The objective of the trip was to showcase IYA's cassava farms and maize storage facilities so that we can learn from their achievements in order to replicate the same initiative in the DR Congo. We visited all the cassava farms (12 ha in total) and the store where 9 tons of maize harvested in the last season are kept. In the cassava field they planted different varieties: two newly released yellow varieties and two white varieties. For the yellow varieties the youths are targeting stems to be disseminated to farmers and roots for processing and marketing. Since the white, improved varieties are in the area, the focus is more on roots for processing and marketing.

On 13 February we spent the whole day in IYA's maize farm applying fertilizers.

This activity was helpful to us since it allowed us to have practical experience.

Visit to Nigeria's biggest cassava factory

On 17 February, we visited Thai Farms, a high-quality, cassava flour-making factory located about two hours from IITA Ibadan. It is one of the biggest cassava factories in Nigeria. The company's mission is to contribute to the industrialization of cassava in Nigeria. At the factory, we were received by Mr Aranju Adeleke, who gave us a tour of the plant. He told us how the company was established in 2006, and the different stages involved in the production of cassava flour.

The company employs 90 full-time staff and produces more than 100 tons of flour per day. Their target is to produce more than 200 tons. The company supports small-scale farms providing a readily available market for cassava roots.



Members of IKYA and IYA at Thai Farms

Cassava bread on the way from Nigeria to DR Congo

Congolese youth have been trained by IITA specialists on cassava bread production in efforts to create markets for cassava roots and possibly reduce wheat importation in the DR Congo.

The youngsters who spent four weeks in Nigeria gained skills in gari—a granulated and roasted form of cassava— production.

As they return to their home country, they are hopeful that the knowledge transferred will help the poor in rural areas fulfill their nutritional needs at low cost.

DR Congo is the second largest producer of cassava in Africa after Nigeria, and the use of cassava in diverse forms will have a significant impact on the livelihoods of millions of Congolese.



Members of IKYA with "cassava bread" shortly after baking

What the youths say

If someone had asked me yesterday what I want to become, I would have answered without hesitation: a PhD holder. But if you ask me the same question today you will be amazed to realize how my dream has changed. The reason? I now want to become a farmer. Then the question arises: why this unexpected and sudden change? During our training in IITA headquarters in Ibadan, the IITA Youth Agripreneurs took us to Niji Farm where we discovered a young person who owns 6000 hectares of land with 2500 planted with cassava. The most surprising thing is that he has not inherited the land. He began by renting and over the years he began to own. Today he is the largest exporter of cassava flour and gari in Europe and is the head of Niji Group ... Yes I want to be a farmer also. -- Eric

My training in IITA-headquarters as an agripreneur has been a source of inspiration to me. I now see agribusiness as a perfect way for positively changing my life by making me self reliant. Before my trip to Ibadan, making products such as gari, tapioca, and cassava bread was just head knowledge. Now I have seen these products, learned how to make them, and I am able to take that technology to my country and even contribute to make it a Congolese technology. During my training I was blessed to visit Niji Farm which has really motivated and inspired me for life. It was my first time seeing someone fully engaged in agribusiness, very determined in his activities, and earning a lot of money from it. It was like a dream, I was very surprised to hear from somebody about the huge amount of money they were earning from a farming business. From that day my decision has been: I have to be a millionaire by making a lot of money in Agribusiness. Liliane Bahati



Mr Sika baking his cassava bread

My training in Ibadan was a great experience in my life because it has helped me to see and appreciate agriculture in various forms. Previously, I had a negative view of agriculture but this training has changed it positively. During this training I got an opportunity to visit Thai Farms and Niji Farm and these visits motivated and encouraged me.

In fact, it's helped me to be aware of the many agricultural opportunities youth have to engage in agribusiness, especially for this year of family farming. I really appreciate this initiative of IITA that aims to engage more youths in agribusiness as a means of alleviating national and international youth unemployment, a major challenge of our decade. Gracia Kahasha



Miss Bahati admires her cassava cookies



Miss Kahasha making some cassava recipes after training