



OFAB Newsletter

Open Forum on Agricultural Biotechnology in Africa



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Commodity trade workshop a sign of progress - DG NABDA



■ **Prof. Lucy Ogbadu, DG/CEO NABDA** responding to the Press

The Director-General/CEO, National Biotechnology Development Agency (NABDA) Professor Lucy Ogbadu said that the meeting is a sign of progress made by the biotechnology and biosafety stakeholders.

In her remarks, at the Genetically Modified Organisms' Commodity Trade workshop at Newton Park Hotel & Resort on the 19th July 2014, she stated, "we are making progress otherwise we will not be at this stage".

She explained that it is difficult to be a Nigerian, biosafety bill issue has been a difficult task, it has been difficult for us to penetrate, but all the same we are making progress".

"It is normal when you are getting close to a destination the journey becomes tougher. It is for this reason that at this stage we will not relent", she disclosed.

DG NABDA added "We are almost there, we should continue with the same tempo and energy by ensuring that we achieve our desired result".

"The meeting is a sign of progress that we are ready to commercialize GM products, we must ensure that everything that needs to be put in place is in order", she said.

She noted "the workshop is to give room for us to interact with our counterpart from trade and investment ministry to prove to them that we are ready.

Biotechnology Finally Reaching Commodity and Trade

The Former Director-General/CEO, National Biotechnology Development Agency (NABDA) Professor Bamidele Ogbe Solomon applauded the Agencies working for passage of the biosafety bill.

In his closing remarks at the Genetically Modified Organisms' Commodity Trade workshop at Newton Park Hotel & Resort on the 19th July, 2014, he said, "We are finally reaching commodity and trade, which will make biotechnology a household work in Nigeria".

"Through combined efforts of activities of NABDA and Agricultural Research Council of Nigeria (ARCN), the Federal Ministry of Agriculture together with the Federal Ministry of Environment, particularly the biosafety Unit is yielding positive results. At this point that the Bill is ready to be passed and enacted into law, it is much appropriate for us to start clearing the ground for commercialization. "So, this workshop is apt", he concluded.



■ Prof. Bamidele Ogbe Solomon, Former DG/CEO NABDA responding to Press at the GMO Commodity Trade Workshop held in Abuja recently.

GM foods are as safe as conventional foods -OFAB Coordinator.

The OFAB Nigeria Chapter Coordinator, Mrs. Rose Gidado reiterated that GM crops/foods are as safe as crops/foods produced conventionally and there is promise for more nutritious food.

In her presentation the workshop, she explained that negative environmental impact resulting from GM crops production is often less than that of conventional agriculture.

"Genetic Modification Technology is an important tool for the plant breeder; it makes it easier for the breeder to transfer genes of desired traits from an unrelated specie of crop to an unrelated specie other solving problems that can't be solved in conventional breeding", she highlighted.

Mrs Gidado assured participants that the benefits of biotechnology will be evenly spread amongst biotech companies, farmers and consumers.

"Biotechnology creates Opportunities, increases crop yields, reduces crop losses to insects, pests and disease, post-harvest storage problems and enhances the nutritional value of some crops. Resistance to abiotic stress, such as drought and high soil salinity, resulting in increased crop production and empowerment of youths in poor rural areas are other accruable benefits", she asserted.



■ Mrs. Rose Gidado, Coordinator OFAB Nigeria Chapter

Position of Biosafety Laws in Africa



■ **Mr. Ademola Usman,**
Deputy Director,
Biosafety Unit, Federal
Ministry of Environment



■ **Dr. Chiedozie Egesi**
Assistant Director & Head
Cassava Breeding, National
Root Crops Research
Institute (NRCRI)
Umudike, Abia State



■ **Mr. Yarama Ndirpaya,**
Deputy Director,
Agricultural Research
Council of Nigeria
(ARCN)



■ **Mr. Rufus Ebegba,**
Deputy Director,
Biosafety Unit, Federal
Ministry of Environment

The Deputy Director, Biosafety Unit, Federal Ministry of Environment, Mr. Rufus Ebegba, informed participants that Modern Biotechnology under a regulated system would enhance economic growth, food security and Job/wealth creation, while protecting our environment and ensuring safety of human health, in his presentation at GMOs Commodity & Trade workshop, he added that Africa stands to prosper from Biosafety law. "Biosafety is to reduce or eliminate the potential risks resulting from modern biotechnology activities and its products and to minimise or eliminate the possible harm/effects to the environment, Biodiversity and human health by the use of policies and regulations", he explained.

According to him, the issue of biosafety regulation in Africa is rapidly gaining momentum as more African countries are embracing GMOs. Nearly all-African countries have signed and ratified the Cartagena Protocol on Biosafety and also developed their Bills with some having their own Bills passed into law already. This is same with the Nagoya Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety

where some African countries have equally signed.

He added that of the four major economies in Africa, which are, South Africa, Nigeria, Egypt and Kenya, it is only Nigeria that does not have a Biosafety law. The advantage of a Biosafety Law for each of these countries is enormous. South Africa is the first country in Africa to have a Biosafety Law and the introduction of GM crops has made the country a significant exporter of GM products. The South African Biosafety Law was passed in 1989 has in fact been reviewed. He said the African Union has developed a model Biosafety Law to assist member states develop their biosafety laws. As a follow up, the AU- NEPAD African Biosafety Network of Expertise project has been put in place to develop the capacity of Member States in biotechnology and Biosafety.

In a similar development, the Deputy Director, Biosafety Unit, Federal Ministry of Environment, Mr. Ademola Usman remarked that all hands are on deck to ensure that commercialization will commence as soon as Mr. President assents to the Biosafety Bill. He made the remarks at the GMOs Workshop adding that this is the time for food sufficiency, wealth creation, and environmental sustainability. He prayed for a

successful and a useful outcome.

Also, the Deputy Director, Agricultural Research Council of Nigeria (ARCN), Mr. Yarama Ndirpaya at the Workshop applauded the stakeholders working to ensure that Nigeria adopts and domesticate biotechnology. According to him, "The Biosafety Unit of the Federal Ministry of Environment has taken all the necessary steps to make all the necessary preparations while awaiting the signing of the Biosafety Bill into Law. "Our neighbours in Burkina Faso are making \$1 billion in a year from Bt-Cotton, you can imagine what we can make from Bt-Cotton in Nigeria, the earlier we have the technology now, the better for us," he concluded.

The Assistant Director and Head, Cassava Breeding, National Root Crops Research Institute (NRCRI) Umudike, Abia State, Dr. Chiedozie said that there is no any GM cassava commercialized, but only confined Field Trials (CFT) going on in Nigeria. In his respond at the interactive session at the workshop, he advised that people should avoid drawing conclusions and disseminating false information on critical issues. He added that since there is no biosafety law in the country there is no way GM crop can be allowed to flow in the country.

Many cannot differentiate between high breed & GMO - Expert

Professor Muhammed Ishiyaku has said that it is ignorance that leads to so many misinformations about GMO.

In his remarks at the workshop, he said many people couldn't differentiate between Hybrid crops and GMO or Biotechnology crops.

"Hybrids are grown out of scientific parents, there some that can fertilize themselves and are called self pollinated crops and there are those plants that cross fertilize. In human terms, it is like community that allows marriages among cousins and relations, and another community that never allows. Self pollinating crops, are rice, tomato, soybeans, cowpea, the flowering is structured in such a way that as soon as pollen grain is ready, it fertilizes itself, meaning marriages between sisters of the same parent crops- that is how self pollinating crops work", he explained.

"They are off springs resulting from the breeding of two genetically distinct individuals. Its like marriage between a horse and a donkey gives

you a stronger animal, which is called mill. While in plants, hybrid consists of crosses between populations, breeds or cultivars within a single species. Hybrids have desirable characteristics not found in the parent individuals or population. It has nothing to do with biotechnology", he further reiterated.

"Biotechnology is a marriage between rice and maize. Rice and maize are from different families/species of crops. It was impossible before to cross breed between species and families. Because of this possibility now, people from different backgrounds feel since it is coming for the first time, they are conscious about it; whether it will have negative effect on our health and environment and that's the reason for regulation", he further elucidated.

"The Biosafety Unit of the Federal Ministry of Environment in Nigeria is charged with the responsibility of ensuring safety of the GM foods and crops before they get to the market. If you see any GM product in the market worldwide, be



■ Prof. Muhammed Ishiyaku

sure that it has been scientifically proven that there is no cause of alarm", he emphasized.

"People should be rest assured that scientists are also human beings, they love their country also and will not do anything to harm their fellow human beings", he asserted.

GMOs would address Starvation & Malnutrition in developing countries

Also at the Workshop, the Country Representative of PBS, Dr. Mathew Dore said that GMOs would help address some of the most serious problems that people, especially the poor in developing countries face, such as starvation and malnutrition.

He added that others consider GMO as capable of creating serious and unpredictable health and environmental problems with resultant negative economic repercussions particularly in the developing countries.

In his presentation at the GMOs Commodity Trade workshop, he explained that the different countries

involved in the domestication of this technology want to ensure that these GMOs do not pose a threat to human health or the environment by the enactment of Biosafety Law in place.

Dr. Dore stated that biotechnology industry provides products for human health care, industrial processing, environmental bioremediation, and food and agriculture.

"Apart from suspected health or environmental hazards, the reason for the restricted global uptake of GM crops may find its rationale in fear of export loss due to the political and regulatory environment in many countries outside the Americas that oppose GMOs", he said.



■ Dr. Mathew Dore,
PBS Country Representative

Biotechnology is inherited from our forefathers - DG NABDA

The Director-General, National Biotechnology Development Agency (NABDA) Professor Lucy Ogbadu said that biotechnology is not a new science, but science inherited from our forefathers.

In her speech at the 'Catch them Young' OFAB Sensitization Programme Government Secondary School, Karshi in July, she explained that biotechnology is not new, but advancement from what our forefathers did.

The Director-General/CEO, NABDA, who was represented by Ag. Director Agricultural Biotechnology Department, NABDA, Dr. Mrs. Gloria Obioh said there is need for the involvement of the youth, "catch them young".

She informed the students that NABDA is a focal point for the deployment of Biotechnology in the country and there is need for the youth to imbibe this technology.



■ **Dr. G. Obioh**, Representative of the Director General/CEO NABDA answering some questions raised by students

Dr. Mrs. Obioh added that Nigeria's population is the fastest growing population, and the land is diminishing, our problem is how to feed our population.

"Biotech is not a new

technology, it has been there in practice from time immemorial. I urge you all to embrace the technology so that together we can work towards development of our country Nigeria," she said.

OFAB appeals to students to take biotech as their future career

OFAB Nigeria Chapter Coordinator, Mrs. Rose Gidado said that Biotechnology provides a solution to most agricultural, medical and industrial challenges facing the world today.

In her presentation at G.S.S karshi, she explained that If biotechnology were human, it would be a young person, because biotechnology is sharp, intelligent, quick, resourceful and almost always on point.

She appealed to the students to take the life science subjects seriously so that they can study Biotechnology in their universities.

She explained that Biotechnology is the use of biological substances/techniques to manufacture a useful product. It involves: - Selection: Choosing the best characteristics for crop/animal

“ Biotechnology is taking mankind beyond ever known depths of understanding of chemical and physical basis of life ”

production Breeding: Actively breeding plants and animals to establish desired traits.

According to Mrs. Gidado, Biotechnology is a new wave that is blowing: the one that combines the biological potentials with physical and chemical possibilities - an -all -



■ **Mrs. Rose Gidado**, Coordinator, OFAB Nigeria Chapter

encompassing approach with a deep root in life and computer science.

"Biotechnology is taking mankind beyond ever known depths of understanding of chemical and physical basis of life", she concluded.

G.S.S karshi appeals to OFAB for science equipment

The Principal Government Secondary School Karshi, Yahaya Ibrahim Kobo appealed to the Open Forum on Agricultural Biotechnology (OFAB) to assist in getting the school Laboratory with additional equipment to further equip the school laboratory.

In an interview with the press after the awareness visit to the school, he added that it would be good to partner with agencies that are science oriented to give a helping hand.

He explained that the school is trying to train the students in

technology department to come up with the new challenges of science subjects. He disclosed that the school has teachers who are well trained in science subjects like Chemistry, physics, Biology.

He urged the students to listen to the benefits of biotechnology, and also take the message home for their parents especially farmers on how biotechnology can transform their farming systems

He appreciated OFAB for choosing his school as worthy of benefiting from the ongoing biotechnology awareness in the country.



Mr. Yahaya Ibrahim Kobo,
Principal of G.S.S Karshi, Abuja.

OFAB gives hope to idle People - Senior Prefect

The Senior Prefect of the school, Muhammad Saidu Bello Karshi of SS2B, thanked OFAB team for choosing to come to G.S.S karshi on biotechnology awareness.

In his vote of thanks, he commended OFAB for the awareness adding that it will assist his fellow students in choosing a lucrative career.

He said the forum will give hope to the less privileged and idle people in the society and that agriculture would be revived in the country.



A student asking the Representative of the DG NABDA Dr. G. Obioh a career question



Some students of Government Secondary School Karshi, asking questions after the presentations



A students of GSS Karshi, responding to the Press



■ Group photograph of OFAB Team, Staff, Teachers and Students of Government Secondary School, Karshi, during OFAB visit to the school



■ Cross section of participants at the event (back view of the school's assembly hall)



■ Students taking notes during the presentation



■ Students listening to the presentations



■ Cross section of students listening and taking notes during the presentation



■ Dr. G. Obio Ag-Dir Agric Biotechnology Dept, NABDA, Mr Yarama Ndirpaya from ARCN and Mrs Rose Gidado at the Principals office



■ Members of the OFAB Nigeria PC walking out of the principals office



■ Some Teachers of the school and members of OFAB Nigeria Team at the event



■ Some Teachers of the school and members of OFAB Nigeria Team at the event



■ The Principal of the school giving a vote of thanks at the event



■ The Vice Principal of the school giving a vote of thanks at the event



■ Mr. Y. Ndirpaya during the opening remarks



■ OFAB Nigeria Coordinator Mrs Rose Gidado making a presentation

DG/CEO NABDA urges NASS on passage of Biosafety Bill

The National Biotechnology Development Agency (NABDA), has called on the National Assembly to fast track the passage of the Biosafety Bill now before it in view of its socio-economic benefits to the country.

The Director General/CEO, Prof. Lucy Ogbadu made this appeal at the media briefing on the need for a Biosafety law for the adoption of biotechnology in Nigeria, to discountenance all insinuations about the Bill and critically appraise its potential benefits to current efforts targeted at making Nigeria adapt technology to key areas of national development, especially the agricultural and allied sectors.

She maintained that some saboteurs had been feeding false information to the public to frustrate the efforts being put in place to introduce Genetically Modified Foods in the country, adding that those that want Africa to remain backward to keep using misguided anti-technology views to justify their antics.

Prof. Ogbadu, who agreed that Biotechnology cannot solve all problems, however, explained that Nigeria needed to use biotechnology to create wealth and eradicate poverty in the country.

"We are not saying but it can



Prof. Lucy Ogbadu, Director Genral/CEO National Biotechnology Development Agency

contribute immensely to agricultural productivity, affordable health care delivery services, sustainable environment and industrial growth", she clarified.

Citing the examples of other countries that have been using technological tools, especially biotechnology to fast track their national developmental programmes, the seasoned scientist pointed out that the Bill held much promise for Nigeria in its efforts to improve agricultural productivity and quality of crop yields and the foreign exchange earning potentials.

She said: "The Biosafety Act is a safety valve for harnessing the potentials of modern technology in that, it will proscribe procedure for the application of the technology, risk assessment before the adoption and use of any genetically modified organisms and penalties for contravening the Biosafety Act.

"The Bill when enacted into law shall apply to safety administration of any activity of importing and exporting of genetically modified organisms and the products derived thereof in and out of Nigeria".

- Regina Otokpa and Temitope Jegede, National Mirror, July 10, 2014.

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