



THE REGULATOR

NBMA...ENSURING PROPER REGULATION OF MODERN BIOTECHNOLOGY.



OFFICIAL NEWSLETTER OF THE NATIONAL BIOSAFETY MANAGEMENT AGENCY

THE REGULATOR 2021

MINISTER OF STATE FOR ENVIRONMENT PRESENTS DRAFT NATIONAL BIOSECURITY POLICY TO STAKEHOLDERS



NBMA DELIVERING ON ITS MANDATE OF ENSURING SAFETY OF HUMAN HEALTH AND THE ENVIRONMENT



NBMA SIGNS MoU WITH FCCPC ON REGULATION OF GM PRODUCTS



NIGERIA MAKES MAJOR STRIDE IN THE REGULATION OF BIO-SECURITY - DG/CEO



EDITOR'S NOTE

I want to welcome our readers to this new edition of our newsletter "THE REGULATOR". As usual this edition is packed full with juicy stories about the NBMA, all for your reading delight.

Our headline story talks about how the Agency was able to gather stakeholders both Nationally and Internationally for the review of its National Biosecurity Policy which is meant to properly ensure biosecurity in the country. The NBMA has indeed made a land mark stride with this document as it is expected to bring together all sectors in country to join hands in a bid to contain harmful biological agents so they do not cause harm to human health and the environment. An interesting read I must say and one you must not miss out on.

In this edition you will also get to read about what our industrial attachment (IT) students are up to as we have a special feature on an IT student (Assumpta) who talks about her life as an IT student in NBMA.

These and many more stories you will find quite interesting as you journey with us to know what the Agency has been up to in recent times. As you turn each page it is my hope that you will find something captivating that will make your reading experience worth the while.

Do not forget to follow our social media pages Facebook; national biosafety management agency, Instagram; @biosafetynig and also feel free to check up our website www.nbma.gov.ng. we would love to hear from you so do send us a mail via nbma@nbma.gov.ng.

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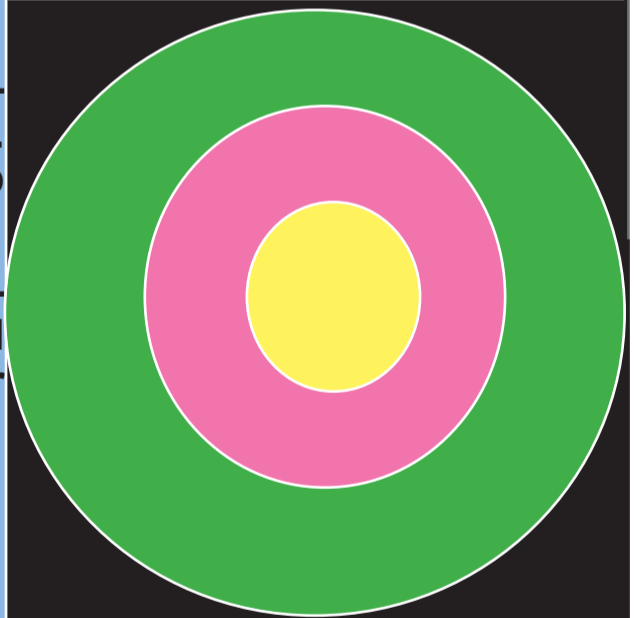
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COVER STORY

MINISTER OF STATE FOR ENVIRONMENT PRESENTS DRAFT NATIONAL BIOSECURITY POLICY TO STAKEHOLDERS.



The Honourable Minister of State for Environment Sharon Ikeazor formally presented zero draft National Biosecurity Policy to stakeholders.

The Minister, who made the presentation in Abuja today (10th DEC 2020), said the Zero draft National Biosecurity Policy has been developed with the full recognition of Biosecurity as a multi sectoral discipline, with all efforts geared towards a one health approach, collaborative approach and an understanding of the responsibilities of various sectors which include governments, NGOs, CSOs, communities and individuals.

The honourable Minister said “ to maintain Biosecurity, significant attention should be paid to strategies for the prevention and early detection of, as well as rapid response to, harmful and potentially harmful organisms.

She noted that to afford true protection, policies, regulations and management strategies must be implemented through a comprehensive approach adding that fragmented efforts, undertaken without corporation and coordination among agencies, will not suffice”.

She commended the National Biosafety Management NBMA for the feat and for coming out with a document that will help guide the Nation in ensuring that harmful Biological agents are eliminated or controlled.

The Director-General/Chief Executive officer of the NBMA, Dr Rufus Ebegba said the National biosecurity Policy is expected to help Nigeria to be ready to prevent or eliminate any harmful biological agent so it does not cause harm to human health and the environment.

Dr Ebegba said the NBMA has been given the mandate to ensure the Biosecurity of the country from treats that may arise from harmful Biological substances.

He expressed hope that at the end of the process Nigeria will have a very strong National Biosecurity Policy that will stand the test of time and will serve as a model for other countries to follow, noting that this policy when in place will help Nigeria to have a well positioned early warning signals of biosecurity treats and also adapt strategies to ensure that whatever will come is either prevented or its impact mitigated.

He said “at the end of this formal presentation, line ministries, sister agencies and stakeholders will be meeting from time to time to fine tune this document to meet our National aspirations. The issue of Biosecurity does not only affect human health and the environment, it also has a great effect on our national economy”.

Programme officer for the African Union Development Agency (AUDA-NEPAD), Mrs Modupe Adeyemo in a remark said the presentation is critical as it offers the opportunity for incorporating considerable legislative, institutional and infrastructural change as a response to the dynamic scope of Biosecurity.

She reiterated the commitment of AUDA-NEPAD to promoting strategic partnerships and providing appropriate support that will have a transformative impact on the continent which in this case includes improved health and well-being of human populations being the ultimate outcomes of well functioning biosecurity systems.

Mrs. Adeyemo expressed hope that this historic step by Nigeria, will contribute to a sustainable and functional biosecurity system in the country.

The event had representatives from various Ministries , agencies, world health organization, civil society groups and other international stakeholders in attendance.

NBMA VALIDATES GUIDELINES ON GM FOOD AND FEED SAFETY



The National Biosafety Management Agency (NBMA) has validated the national guidelines on Genetically Modified (GM) food and feed to ensure the confidence of Nigerians on the products.

Dr Rufus Ebegba, NBMA’s Director-General, at a stakeholders review and validation meeting on GM food and feed in Abuja on Friday, said that the agency wanted to meet best international practices.

Ebegba said the guidelines would be subjected to in-depth review by stakeholders, adding that it had undergone various review sessions.

“We will give it a final look and validate it so that stakeholders can accept, own and make it a national document.

“The issues of food are very critical. The health of any nation is sometimes determined by its food and environment.

.....to be continued on page 02

NBMA MAKES MAJOR STRIDE IN THE ENSURING BIOSECURITY.



The honourable minister of state for environment Sharon Ikeazor has commended the National Biosafety Management Agency (NBMA) for its major stride in ensuring Biosecurity in Nigeria’

The Minister who gave the commendation at the first stakeholders review meeting of the draft National Biosecurity Policy in Abuja, said the national Biosecurity Policy is aimed at improving health, agriculture and the environment.

The Minister of state who was represented by the director Human Resources Management in the Ministry of Environment said that the success of this policy review will lead to the implementation of an integrated biosecurity approach at National and sub-national levels which will require the use of the document as a clear framework that defines the roles and responsibilities of relevant stakeholders.

The Director General/CEO of NBMA Dr Rufus Ebegba, while welcoming stakeholders said that the federal government is ready to tackle threats from biological agents in the country noting that the NBMA will ensure that such harmful agents are properly contained and eliminated so it does not cause harm to human health and the environment.

Dr. Ebegba stressed that at the end of the review process, stakeholders will hand over a refined and robust biosecurity policy that will measure up to global standard to the country. “By the instrumentality of the Federal Government and supports from international organizations we have been able to institutionalize safe practice of modern biotechnology and much effort in including all other emerging technologies”. Cutting-edge research, science and technologies are major drivers of the economy and development in recent years which Nigeria must key into. “

The NBMA has been able to entrench consciousness in the mind of Nigerians and the exigency to put up policies to regulate biosecurity as proactive measure against bio threats and bio hazards, the DG said. He also revealed that Nigeria is one of the major players in the global arena of biosecurity matters “and in fact, we play major role in African. Our policies have become models for other African countries to copy and we are proud of this.”

DG NBMA acknowledged the support from the World Health Organization in particular and all other global organizations making concerted effort to have a safe world while harnessing the opportunities modern biotechnology promise. “I urge everyone to put in your very best in reviewing this document. This is a national assignment before us and we must do our best for the safety of all Nigerians.”

In goodwill message, the Director General Nigerian Agricultural Quarantine Service Dr Vincent Isegbe stated that, there was no time better than now to have this policy in place having learnt from the unprecedented, linger

ing and devastating covid19 that has no wonder drug yet. He noted the importance of bringing all the stakeholders to review this document, he said “this provides scope for the many concerned in this area to make their positive inputs in refining the draft document and I first off, appreciate NBMA for the knowledge and skills put together in drafting this document”.

The representative of the World Health Organization in a goodwill message charged NBMA to remain undeterred and see that proper things are always done. He acknowledged the effort of the NBMA and pledged more supports from the WHO like before to facilitate whatever programme NBMA has to do. He noted that previous policies developed by NBMA were world standard and should remain steadfast.

The Commissioner for Health Lagos state Prof. Akin Abayomi said the state is ready to work and develop the policy together with the NBMA adding that Nigerians need to take issues of Biosafety serious following the devastating effect of COVID19 pandemic.

The two-day review meeting had in attendance the representatives of the World Health Organization, African Biosafety Network of Expertise, Programme for Biosafety System, Food and Agriculture Organization, European Union delegate to ECOWAS in Nigeria and many more.

.....continue from page 01

“Genetically Modified foods are products that have been given special attention so that they are healthy foods that do not contain toxin and allergy,” he said.

The director-general further assured the public on foods safety, saying GM products are highly scrutinised, gone through a lot of evaluation and assessment to ensure that the outcome was safe.

Dr Rose Gidado, Assistant Director, National Biotechnology Development Agency, also said the guidelines would help improve indigenous crops as the country have too many underutilise crops.

According to Gidado, we will look at the crops, see the type of challenges farmers face with some of them and use the technology to mitigate the challenges and need of the farmers.

She said that technology could be used to address challenges such as drought, flood and insects.

“We will use the technology to our own advantage by making the country food sufficient to increase our productivity as it is very low.

“There is no way you can be successful in agriculture without technology. Technology is critical, it is a matter of urgency.

“Technology cut down production course and the end product will be affordable to the public,” she added.

Meanwhile, Mr Frank Tietie, Executive Director, Citizens Advocacy for Social and Economic Rights, said that Genetically Modified Organisms (GMOs) are progressive scientific development that Nigeria has embraced for more than a decade.

Tietie stated that technology could guarantee food safety and food security and called on Nigerians to celebrate the application of biotechnology in food production.

The one-day stakeholders review/validation had line ministries, sister Agencies, civil society groups and the media in attendance.

NBMA TRAINS STAFF ON BIOSAFETY REGULATIONS

BY OGBAKI GLORIA

The National Biosafety Management Agency (NBMA) has organized a biosafety refresher course for its staff.

The training which took place today (31 May 2021) in Abuja, was organized in collaboration with the programme for biosafety systems (PBS).

The Director General/Chief Executive Officer of NBMA Dr Rufus Ebegba in a remark at the training said NBMA will serve the country well and continue to ensure a holistic biosafety system for the safety of human health and the environment in the area of regulation of modern biotechnology.

According to the DG/CEO, the training was to update staff on emerging biosafety issues and to improve the proficiency of the staff of the Agency as biosafety is a dynamic issue.

“We are also mindful of organisms that are harmful to human health and the environment of which we are making strives by developing national policy on biosecurity to ensure that biosecurity is enshrined in the country. This will exhibit our competence to ensure that our mandate is delivered in the area of ensuring biosecurity”.

The DG/CEO stated that no genetically modified organisms that is unsafe will be allowed in the country as all previous GMOs were confirmed safe before release and acknowledged the wonderful support of other ministries, agencies and organizations who have worked with the Agency so far to drive the mission and vision of the agency forward.

While highlighting the importance of the media, Dr Ebegba stressed the fact that media should not use their channel to spread false information, instead spread the honest truth in order to promote the development of the nation.

Country Director Programme for Biosafety System in Nigeria, Dr Matthew Dore, gave a goodwill message and appreciated the growth of the agency during the past six years of its existence. He further expressed his joy on

the capacity building training held by the agency as this was a great opportunity to learn and support the growth of the economy and protection of the environment.

The training had various presentation such as national policy in biotechnology, the NBMA act 2015 as amended (which includes the application of gene drive, gene editing and synthetic biology), confined field trial inspections, the Cartagena protocol on biosafety, Biosafety risk assessment and risk management, all bothering around regulations of Biosafety and ensuring Biosecurity in the country.

The training also saw presentation on introduction to genome editing (which dealt with regulation of gene editing across different countries like Argentina, Canada and United States of America and were deeply explained during the training), national biosafety policy and introduction to food safety.

The one-day capacity building training which had over forty staff of the Agency in attendance introduced staff to the basic elements of biosafety, the procedure of Biosafety inspection, biosecurity, Biotechnology Policy and the NBMA Act 2015 (as amended), Cartagena Protocol on Biosafety and the National Biosafety Policy 2017.

NBMA SIGNS MoU WITH FCCPC ON REGULATION OF GM PRODUCTS



The National Biosafety Management Agency (NBMA) has signed a memorandum of understanding with the Federal Competition and Consumer Protection Commission (FCCPC) on the regulation of genetically modified organisms (GMOs) and its products.

Director General/Chief Executive Officer of the NBMA Dr. Rufus Ebegba who speaking during the signing of the MoU in the office of the FCCPC in Abuja today, said the NBMA is ready to collaborate and synergize with the FCCPC in ensuring the safety of human health and the environment from unapproved GMOs.



“The NBMA is always available to work transparency with line ministries, sister agencies and stakeholders as this will help us in our work at ensuring safety of the consumers. The collaboration with FCCPC today is to ensure transparency and to build the trust of the public to understand that whatever the Agency has confirmed safe is safe indeed”.

“What we are doing today is in tandem with the programmes and aspirations of the Federal government to ensure that Agency collaborate to save cost, synergy, effectiveness, transparency and what ever is needed to ensure that operations are smooth and mandates are achieved. Let me also assure you that signing of this MoU today will bring about a greater working relationship between the FCCPC and the NBMA”.

The Executive Vice Chairman of the Commission Babatunde Irukera commended the NBMA on its collaborative efforts and strategies stating that this collaboration is very important due to the mandate of both Agencies.

“This signing of MoU has presented itself an opportunity to collaborate and institutionalize framework to corporate and ensure a robust mechanism for protecting consumers. The FCCPC and the NBMA has mutual roles at ensuring safety of Nigerians and this is the best strategy to ensuring that our mandates are achieved”.

The auspicious event had heads of departments of both the National Biosafety Management Agency and the Federal Competition and Consumer Protection Commission in attendance.

NBMA trains staff on GMOs risk assessment

The National Biosafety Management Agency (NBMA) on Thursday trained its staff to effectively carry out risk assessment for Genetically Modified Organisms (GMOs) products in the country.

The training which is part of the mandate of NBMA became necessary following growing concerns about the safety of GMOs to humans and the environment.

The Director-General of NBMA, Dr Rufus Ebegba, while speaking at the training held in Abuja, said the training would help participants to understand the various principles behind risk assessment and management.

Ebegba noted that there was need for constant upgrading and strengthening of capacity and proficiency of the agency’s staff to handle challenges associated with GMOs.

According to him, there are three pillars of biosafety risk assessment which he identified as risk assessment, risk management and risk communication.

“The risk assessment is basically to look at any GMO before they are used or deployed for any purpose, to consider whether those GMOs are harmful to human health or to the environment.

.....TO BE CONTINUED ON PAGE 14

NBMA POISED TO ENSURE BIOSECURITY – DG/CEO

BY EDACHE ISIAH.

The Director General/Chief Executive Officer of the National Biosafety Management Agency (NBMA), Dr Rufus Ebegba has said that the Agency is working round the clock to ensure the completion and submission of the draft National Biosecurity policy to the Federal Executive Council (FEC), for consideration and approval.

Dr Ebegba who said this when the Senate Committee on Environment visited the NBMA for an oversight function in Abuja today, noted that the Agency is also carrying out expert reviews of other regulatory instruments and possible validation such as the National Biosafety Guidelines on Genetically Modified (GM) Fish, tree, birds, animals and mosquitoes.

“The NBMA will continue in the bid to ensure that her mandate is delivered and we will be doing so much such as processing of Biosafety Applications, nationwide Survey and Tracking of GMOs and Inspection of GMO Farms, companies and Research Institutes, Risk management plan and strategy development for protecting human and, animal health and the environment, Template development for Risk assessment, Establishment of National Biosafety Management Agency Data Centre and Integrated GMO Monitoring System, Participation in UN COP-MOP, among others”.

While making his presentation on the overview of the National Biosafety Management Agency’s 2020 achievements, Dr Ebegba highlighted the achievements of the Agency in the past year 2020 to include, Creation of the Department of Biosecurity, organization of a National Stakeholders’ Consultative Meeting, drafting of a National Biosecurity Policy which was formally presented by the Honourable Minister of State, Federal Ministry of Environment, Sharon Ikeazor at a National Stakeholders meeting, among other very many and laudable feats which include development of various sectoral documents.

The DG/CEO said that despite these success stories, the NBMA is still bedeviled by some challenges such as lack of befitting office space for its national headquarters, poor funding among others and requested the committee to assist and collaborate with the Agency in finding solutions to the challenges.

Chairman senate committee on Environment, distinguished Senator Ike Ekweremadu commended the NBMA on its efforts in securing the health of Nigerians and the environment despite low funding of the Agency.

Distinguished Senator Ekweremadu promised to ensure that the needs of the Agency will be adequately met adding that they are prepared to work with the Agency in the bid to achieve its mandate of ensuring safety to human health and the environment.

Members of the committee also commended the DG/CEO for his detailed presentation and his efforts in ensuring that Nigerians are safe from any adverse impact of modern Biotechnology and its products.

The Members of the committee visited the Agency’s GM detection and Analysis laboratory and commended the state of the art equipment they saw in the lab.



BIOSAFETY REGULATION IN NIGERIA: 2015 – PRESENT

WORKING TOWARDS THE STRATEGIC AND SUSTAINABLE USE OF MODERN BIOTECHNOLOGY IN NIGERIA

BY OGBAKI GLORIA.

The National Biosafety Management Agency (NBMA) was established by the NBMA Act 2015 to create and implement a regulatory framework for the safe practice of modern biotechnology in Nigeria. Since coming into existence, the NBMA has put regulations, guidelines and policies in place to ensure that the products of modern biotechnology can be deployed safely in Nigeria.

Chief amongst the achievements of the Agency is the successful accreditation of some of Nigeria's research institutes. These include the National Cereal Research Institute, Badeggi; and National Root Crop Research Institute, Umudike. Through its accreditation procedures, the NBMA certifies that institutes operate in accordance with global best practices. As a consequence, Nigeria has become a regional leader in locally-driven research trials of GM crops. Confined Field Trials of GM Rice, Cassava, Soybeans, Maize and Cotton are at various stages of progress around the country. These crops promise lower production costs and significantly enhanced agricultural yield which will undoubtedly play a role in boosting large-scale commercial agriculture in Nigeria with safe products.

The NBMA has also established Nigeria's first GM Detection and Analysis Laboratory and this lab has been going through constant upgrade all in the bid to ensure proper tracking and analysis of GMOs. Prior to this, GM foods and grains flooded the country's markets unregulated and untested. With a well-equipped GM laboratory, the NBMA is able to test GM grains and foods to ensure they pose no risk to human health or the environment before they are allowed into the country.

Another notable achievement of the NBMA is the progress it has made in educating and enlightening the public

about its role as a regulator and how the risks of modern biotechnology can be managed based on scientific evidence. Misinformation and misguided activism against certain technologies pose a risk to their adoption and ultimately, the economic progress of the nation. The NBMA prioritizes public awareness at all levels, and has successfully engaged policy makers, academia, farmers, the general public and the youth with a view to encouraging informed dialogues about modern biotechnology and biosafety.

Leveraging the administration's commitment to youth employment and empowerment, the Agency successfully recruited a cadre of young, vibrant staff who are passionate about science, agriculture and national development. The Agency has also engaged them in capacity building programmes designed to equip them with the skills they need to regulate, enforce and oversee the practice of modern biotechnology in Nigeria. With the continued support of the Federal Government, the Agency is set to make greater strides and cement its reputation as one of the leading biosafety regulator in Africa.

Seeing the progressive efforts of the Agency and the need to further empower the Agency to regulate new and emerging modern technologies as well as Biosecurity, in 2019 the act of the NBMA was amended to include the regulation of emerging technologies such as gene drive, gene editing, synthetic biology and to ensure biosecurity. Due to this very important role added to the mandate of the Agency, a new department was created called biosecurity department and NBMA swung into action by developing guidelines, regulations and the National Biosecurity Policy all in the bid to enable her ensure the safety of human health and the environment.

So far the Agency has developed its guidelines on gene editing which is very key to regulating gene edited products that come into the country. The Agency has in her kitty eleven guidelines that have been developed as the staff work day and night in ensuring that the Agency comes up with robust and well-articulated documents that will ensure the safety of Nigerians from unapproved

GMOs and harmful technologies. The Agency also successfully developed a Biosafety regulation and an approved National Biosecurity policy.

This feat has earned the Agency very high regards in Africa and the international community. Many countries have come to use documents developed by the Agency as models in the development of their own documents. Currently Nigeria chairs the African Union Biosafety Regulators Forum which is a feat that came as a result of the dogged efforts of the DG/CEO Dr. Rufus Ebegba who has constantly strived for the best, having the interest of the Nigerian citizens in mind in the course of the discharge of his duties as Director General of the Agency as he sees holistic Biosafety as a hall mark of the Agency.

As part of efforts to expand our monitoring and surveillance, the Agency has signed various memorandum of understanding (MoU) with some sister agencies such as Standards Organization of Nigeria, Nigeria Agricultural Quarantine Service, National Seed Council, Nigerian Customs Service ensuring that the Nigerian borders are well monitored in case of any unapproved GM import. Other stakeholders we have signed MoU with include the Varietal Release Committee and the Department of Veterinary and Pest Control Services under the Federal Ministry of Agriculture and rural development. Most recently, the NBMA has signed an MoU with the Federal Competition and Consumer Control Commission and the essence of this collaboration is to strengthen relationship and to ensure the safety of consumers from unapproved GMOs.

Despite oppositions and attacks from those who are against the technology, the NBMA has remained undeterred as it has constantly strived to ensure that human health and the environment is safe in the deployment of GMOs in Nigeria. Nigerians need not be scared and entertain fear or pressure from certain quarters as the Federal government has put in place mechanism for their safety when it comes to GMOs and the Agency has capable hands officers who have been training and are constantly retrained to meet up with advances in the science and technology.



ADDRESS DELIVERED BY THE DIRECTOR GENERAL/CEO NATIONAL BIOSAFETY MANAGEMENT AGENCY,

DR RUFUS EBEGBA,
AT THE PRESS BRIEFING

HELD ON TUESDAY, 4TH MAY, 2021
ON THE STATE OF BIOSAFETY IN
NIGERIA.

I am delighted to welcome you all gentlemen of the press to this press briefing. It has indeed been a while since we last met to discuss issues of biosafety in Nigeria.

A lot has happened recently in the relation to biosafety in Nigeria and these happenings have warranted the need for me to call you all to brief you and bring you up to speed with the correct state of affairs as it relates to the state of Biosafety in the country.

A lot of misinformation has been going round the public especially in the media space as some people have taken it upon themselves to misinform Nigerians and backlash the Agency for doing its job and fulfilling its mandate of managing biosafety matters in Nigeria.

It is important to state here that the NBMA is charged with the responsibility of providing regulatory framework and institutional and administrative mechanism for safety measures in the application of modern Biotechnology in Nigeria, with a view to preventing its adverse effects on human health, animals, plants and environment.

Nigerians should know that the NBMA was not created to stop GMOs but to ensure that Nigerians and the environment are safe from any adverse impact they may have on human health and the environment.

This meeting is aimed at updating the general public on the activities of the Federal government in the area of Biosafety management in the country.

Globally, safe science and technology have been known to be drivers of economic change world over, Nigeria cannot afford to be left behind that is why the federal government through NBMA makes sure it approves only safe application of modern biotechnology for the economic development of the country particularly in the Agricultural sector.

I have said it before and will say it again, the NBMA is very thorough in its dealings and before any approval is granted, the National Biosafety Committee and the Na-

tional Biosafety technical Committee meet to analyze, deliberate on the product which most times spans for two days and decisions are taken after careful and thorough analysis of the application. The NBMA does not act on its own as these committees comprise of experts drawn from sister Agencies, line ministries, scientists, Non-governmental Organizations, farmers and many other expert stakeholders who after their review make their recommendation to the NBMA for further action.

I want to restate here that the fruits and beans available in the Nigerian market presently are not genetically modified as insinuated rather they are either hybrids or improved. The federal government through NBMA is always poised to protect the health of its citizens and the environment by providing case by case analysis of GMO and risk assessments.

Since the inception of the National Biosafety Management Agency (NBMA) in 2015, the obvious impact of the Nigerian Biosafety Authority has been felt all over the globe. From the decision to approve Bt Cotton for environmental release in 2016 to the decision to approve PBR Cowpea for environmental release in 2019, the NBMA has made decisions based on scientific facts for the benefit of the Nigerian people and just like our activities that have not gone unnoticed in Africa, it has not gone unnoticed worldwide.

This is why the Nigerian Biosafety system is well sort after in Africa and the world as our regulations and guidelines have become models that other countries use in developing their own guidelines and regulations. The Nigerian biosafety system is a source of inspiration to other African countries and this is mainly due to our doggedness in ensuring that our mandate is achieved no matter the challenges, safety is our watch word.

As part of efforts to expand our monitoring and surveillance, the Agency has signed various memorandum of understanding with some sister agencies such as Standards Organization of Nigeria, Nigeria Agricultural Quarantine Service, National Seed Council, Nigerian Customs Service ensuring that the Nigerian borders are well monitored in case of any unapproved GM import. Other stakeholders we have signed MoU with include the Varietal Release Committee and the Department of Veterinary and Pest Control Services under the Federal Ministry of Agriculture and rural development.

The NBMA has not been resting on its oars in ensuring that only safe and approved genetically modified seed and grains for food and feed processing are allowed into the Nigerian market hence the constant upgrading of our GM detection and analysis Laboratory and our constant Inspection of GMO facilities, confined field trial sites and multi-locational trial sites. This is for proper Surveillance, tracking and monitoring of GMOs in Nigeria.

In line with the mandate that has been added to the Agency, on regulating new modern biotechnologies such as gene drive, gene editing, synthetic biology and ensuring Biosecurity, the Agency has developed a draft National Biosecurity policy which was presented to stakeholders by the Honorable minister of state for environment last December.

The Agency has equally developed gene editing guidelines which have been validated by stakeholders. The guidelines will ensure the proper regulation of gene edited products. However, some plants edit their genomes themselves independent of human efforts that is naturally hence cannot be expected to be regulated. But any man-made or scientifically inserted gene into an organism or plant will be regulated.

While gene editing and modern biotechnology are both genetic engineering tools, it will be out of ignorance to say all gene edited products are GMOs. A product can be termed GMO only if it contains a transgene. However, gene editing does not in all cases require introduction of new gene into the genome of an organism. It could be deletion or suppression of a gene.

I want to use this medium to assure Nigerians that Federal Government through the Agency is doing everything possible to ensure that we are all safe. Let me say this categorically that whatever the Agency says is safe is indeed safe. Nigerians should learn to trust the federal government and allow the Agency do what will be in their best interest. Nigerians need not be afraid as their health and wellbeing are paramount in the mind of the Agency as they relate to Biosafety.

I wish to appeal to the media not to serve as media of dissemination of falsehood and creating panic. We are aware of the malicious intention of a particular NGO to poison the minds of the members of the public on the application of safe modern biotechnology and the attempt to discredit the NBMA. The Agency has a responsibility towards the safety of Nigerians, the environment, the realization of government objectives in the diversification of the Nigerian economy towards the actualization of green economy and the economic prosperity of Nigerians.

The media have been major partners of the NBMA since inception and the Agency appreciates the work you are doing to ensure that our activities do not go unnoticed.

Thank you all for listening and I hope for better collaboration and synergy so that proper and correct information will be passed unto the public. Let us join hands together to dismantle misinformation and ensure right information for the growth and development of our Nation.

PHOTO



| Year | Instrument |
|-----------|---|
| 1994 | Guidelines, under Federal Ministry of Agriculture and Natural Resources |
| 1997 | Biodiversity-Biosafety activities under the defunct Federal Environmental Protection Agency (FEPA) |
| 1999 | National Biosafety Unit, Federal Ministry of Environment |
| 2001 | 2nd National Biosafety Guidelines, under Federal Ministry of Environment (FMEnv) |
| 2000-2003 | Nigeria signed and ratified the Cartagena Protocol on Biosafety |
| 2002-2006 | Development of National Biosafety Framework - (NBF) |
| 2002-2006 | Development of National Biosafety policy |
| 2002-2006 | Draft Biosafety Bill among others |
| 2012 | Nigeria signed the Nagoya Kuala Lumpur Supplementary protocol to the Cartagena Protocol on Biosafety (but yet to ratify it) |
| 2012-2015 | Development of other Biosafety Guidelines, and Draft Biosafety regulations |
| 2015 | National Biosafety Management Agency Act 2015 |
| 2015 | Establishment of the National Biosafety Management Agency (NBMA) 2015 |
| 2015 | Development/Review of draft Biosafety Regulations and Guidelines |
| 2015-2017 | Operationalization of NBMA Act |
| 2015-Date | Approval of National Biosafety Policy |



GALLERY



NBMA VALIDATES NATIONAL BIOSAFETY GUIDELINE ON GENE EDITING

BY ENE JOY ABOUNU

The National Biosafety Management Agency (NBMA) has formally validated its National Biosafety Guidelines on Gene Editing and has presented it to the public.

The Director General/Chief Executive Officer of the NBMA, Dr Rufus Ebegba while speaking during the Validation exercise in Abuja today (09/12/2020), said the Agency has been evolving and the Federal government is poised to drive the economy and the livelihood of the people noting that Nigeria has keyed into science and technology as major drivers of the economy globally, hence the need for the NBMA to ensure that these technologies are safe and does not have adverse impact on human health and the Environment.

He said *“we seriously believe that gene editing needs adequate regulation so that products that will be developed will not be harmful to the environment, human health, plants and animals and it is on that note that the need for amendment of the act to include emerging aspects of Biotechnologies in the area of synthetic biology, gene drive, gene editing and Biosecurity where made in 2019. The Federal Government is very proactive on the issue of this growing technologies that is why Government through the NBMA decided to develop guidelines on one major aspect which is gene editing”*.

Dr. Ebegba said the NBMA, working with other sister Agencies has over the months worked on the development of this guideline and it has gone through various internal and external reviews and processes.

“We have subjected this guideline to national and international review and even scientist from research institutes reviewed it in a bid to make sure we come up with a robust document that will ensure the proper regulation of gene editing and its products for food and feed processes, confinement, contained use and commercial release.

Programme officer for the Africa Development Agency (AUDA-NEPAD) Mrs. Modupe Adeyemo said with the biosafety legal framework of Nigeria already in place, the focus is to put in place additional regulatory tools to ensure informed, effective and efficient processes.

She said currently, there is no approved policy on the regulation of gene edited products even though the scope of the Biosafety law covers it noting that to address this capacity need, the National Biosafety Management Agency (NBMA) developed a policy document (national guidelines for the regulation of gene editing) which has been subject to series of reviews by key stakeholders.

“This validation meeting is important as it offers the opportunity for us to work together towards creating an enabling legal environment for the regulation of gene editing in Nigeria. We need to create platforms for dialogue that will enable us nurture personal and institutional relationships that are required for a functional biosafety system”.

Mrs. Adeyemo said AUDA-NEPAD ABNE remains committed to forging strategic partnerships that will have a transformative impact on the continent and expressed hope that this validation meeting will contribute to a sustainable and functional biosafety regulatory system in Nigeria.

Head planning research and statistics Mrs. Bello Scholastica gave a brief overview of key sections of the guideline and the Legal Adviser of the NBMA Mrs Nkiruka Onyilofofor Aja lead the validation process.

Representative from the Federal Ministry of Justice Folatan Olamide moved the motion for the validation and was seconded by representative from the National seed council, Mr Zidafamor E.J.

The document was presented to NBMA’s DG/CEO, who presented it to the public announcing that the guideline has become a public document.

The event had various stakeholders, civil society organizations and the media in attendance.





DIARY OF AN IT STUDENT

Fam, in my opinion, The thought of living in Abuja hits differently. For the past 2 years, I had envisaged on how my stay here would be as I had made enquiries. Well, it is my first time in Abuja and I tell whoever that cares to listen that I now live in paradise. Lol.

The beauty of the city where I stay and the organized state of things makes me marvel. To me, It's totally the opposite of some parts of Lagos where rowdiness was the other of the day.

Actually, it's the most organized place I have been to. The way traffic rules are obeyed here is incredible. I envision making here my permanent place of residence after my studies. Who knows, I might be lucky to meet with the president on my way to work someday.

But, one striking thing I noticed about Abuja is the obvious bridge between the rich and the poor.

I work at NBMA (National Biosafety Management Agency). Generally, the Agency is committed to ensure regulations of Modern Biotechnology and its products (GM PRODUCTS) so it doesn't cause harm to humans and the environment. □

Being posted to the lab, I've had the opportunity to gather suspected GM samples randomly, analyze it, been able to detect if its genes has been modified — the purity and concentration of the extracted DNA— and of course, been able to tell if such food/feeds is safe for humans.

I've been taught mostly theory throughout my stay in the university, seeing laboratory equipment and machines here is like seeing pure gold. That feeling when you are not only told the functions of a machine but have the opportunity to handle it. Sincerely, the

feeling is out of this world.

Now, I can carry out some important practicals single-handedly with my full chest.

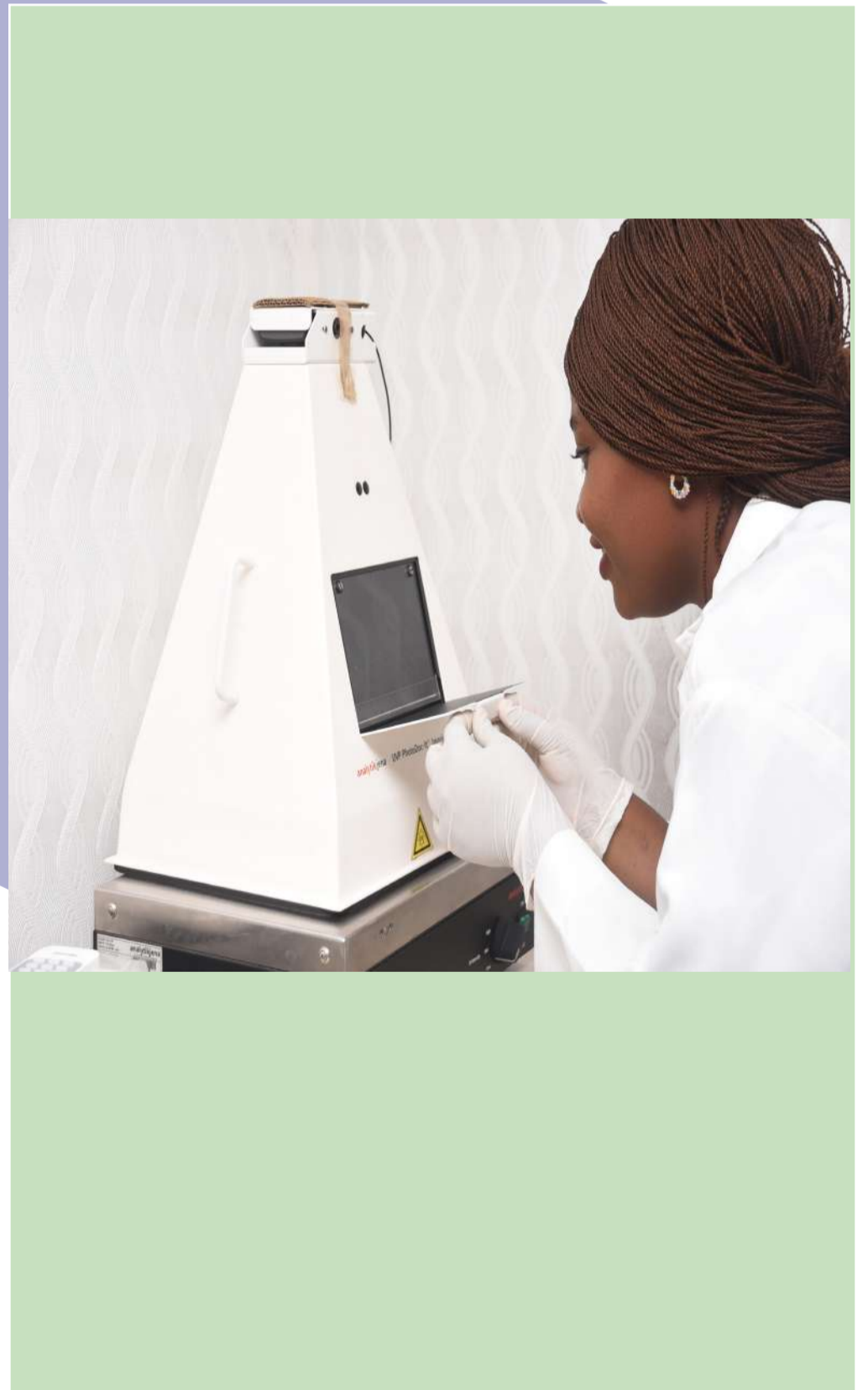
Nobody laments about power supply here, unlike in the Nigerian university setting, where one is restricted most times because of inadequate power supply.

I didn't expect any compliment from our Head of Lab today. Her words; "I'm impressed with you, Assumpta" increased the size of my head, nearly bursting it. Lol. I was really surprised to hear it.

I've come to understand that being inquisitive is one thing and taking bold steps daily to know about things around you in your field is yet another wonderful thing. Stress placed on "taking bold steps daily."

This Abuja Sun blesses me with daily headaches that affects every part of my body—so scorching and intense. I hope I get used to it real soon.

Let's meet next time, FAM as I continue to serve you more tales of my IT experience undiluted.





Nwaocha Chikeluba Chidi, is an Administrative and Protocol officer in the office of the DG/CEO in the Agency. He was previously assigned as an Admin officer to the Department of Socio-Economic and food safety and has also served in the General Service unit. He was born on the 4th of September and hails from Ogbaru LGA of Anambara State. He bagged a BSC in International Relations from Lead city University Ibadan, Oyo state. He is also a member of the Institute of Strategic Customer Service and Trade Management. He is innovative, humble, honest and enjoys playing football, basketball, jogging, watching movies and listening to music.



Abisabo Adamu, is a Principal Scientific Officer and the head of Biosafety Intelligence unit of the NBMA. He is an indigene of Nasarawa State from Obi Local Government Area of the state. He was born on the 15th May and he holds a BSC in Microbiology from the University of Jos in the year 2006 and an MSC in Microbiology from University of Agriculture Makurdi in the year 2012. He is happily married and loves reading, researching and playing badminton.

Akinmade Samson Olukoya, is a Senior Store Officer. He holds a HND in Business Administration and Management from Federal Polytechnic Ede in the year 2012. He hails from Irele Local Government Area of Ondo state, And was born on the 23rd June. He is happily married and loves researching, reading and adventures.



Edwin Ruth is a Scientific Officer 2 with the NBMA, she hails from Apa Local Government Area of Benue state. She was born on the 9th of August she also bagged a BSC in chemistry from the University of Maiduguri Borno State in the year 2010. She is married with kids and she loves traveling, praying, reading, having quite time and listening to music.



NBMA DELIVERING ON ITS MANDATE OF ENSURING SAFETY OF HUMAN HEALTH AND THE ENVIRONMENT – DG/CEO



Director-General/Chief Executive Officer of the National Biosafety Management Agency (NBMA) Dr. Rufus Ebegba has said that despite oppositions, the Agency has remained resilient in the bid to ensure safe delivery and application of modern Biotechnology and its products.

Dr. Ebegba who said this at the 2nd edition of training and interactive workshop for Biosafety legal Officers on Biotechnology and Biosafety, noted that NBMA is delivering on its promise to ensure safety of human health and the environment.

“The Agency has continued and will continue to ensure safety to humans, animals, environment and agriculture, economy, ensure biosecurity, build public confidence in safe product of the technology, carry out risk assessment and risk management and make decisions based on best available science while maximizing benefits and minimizing risks”.

“Since inception, the NBMA has fulfilled her mandate in ensuring safety by establishing Biosafety Operational and Implementing Instruments, regulations and guidelines, we have Created a well-equipped National GM detection and analysis Laboratory, development of effective Communication Channels, accreditation of Institutions, certifications of containment facilities and have granted Permits for commercial release. We have also encouraged Synergy among Stakeholders for effective regulation of GMOs and their Products, we have well trained staff who have attended local and international training making them capable for the job”.

The DG/CEO said NBMA is well positioned to ensure

safety in the use of modern biotechnology by providing a holistic approach in the regulation of genetically modified organisms, provide an enabling environment for indigenous and foreign scientists to practice modern biotechnology safely under a robust legal framework, open new avenues for research institutes and the entire biotech industry to break new grounds that will enhance the various sectors of the economy, mentor other African countries on the tactics of establishing and operationalizing a sound biosafety regulatory system.

Dr. Ebegba said contrary to opponents, the law establishing the NBMA was not rushed as Nigeria has been a major global player in the issues of Biosafety since 1993 and in 2000, signed the biosafety agreement known as the Cartagena protocol on Biosafety. The protocol mandated its members to domesticate it by setting up an agency to regulate activities of modern biotechnology hence the establishment of NBMA which is to ensure that modern Biotechnology and its products do not cause harm to human health and the environment.

Legal adviser of the Agency Mrs Nkiruka Onyolor-Aja while speaking on the purpose, objectives and expected outcomes of the workshop, said the workshop is a follow up training for legal officers in the Agency as part of its capacity building and capacity strengthening drive.

She said the training is geared towards enhanced knowledge and understanding of the science, processes and procedures as it relates to the practice of modern Biotechnology and Biosafety, to learn about biosafety policies, regulations and the legal issues involved in international and national biosafety regulatory frameworks.

The legal adviser said the training is also expected to nurture a new generation of experts who will provide Nigeria’s Biosafety authorities with solid legal advice and guidance while sharing best practices and policies on Biosafety, and identify strengths and weaknesses of biosafety systems in Nigeria and beyond.

The two-day workshop had an array of speakers from various parts of Africa who gave presentations on the regulation, the science and treaties/conventions guiding Biosafety globally.

The workshop also had participants drawn from legal officers of various stakeholders and line agencies in attendance.



WE REMAIN COMMITTED TO THE SUSTAINANCE OF NIGERIA'S BIODIVERSITY – DR. EBEGBA



The Director General/CEO of the National Biosafety Management Agency (NBMA) Dr. Rufus Ebegba has said that the NBMA remains committed to ensuring that Nigeria's biodiversity is safe and protected in the application of modern biotechnology.

Dr. Ebegba who stated this at a stakeholders' review meeting of Biosafety draft guidelines for GM fish, GM Animals, GM food/feed safety and GM grain import today (4th may 2021) in Abuja, said the review of the guidelines was aimed at giving all the stakeholders the opportunity to make their inputs for the country to have standard guidelines noting that the review of the draft is one of the many efforts by the NBMA to ensure a robust biosafety system in country.

"It is important to state here that developing guidelines are being done all over the world as measures to protect the human health and ecosystem from the adverse effects that could result from the practice of modern biotechnology. We recognize the controversies surrounding GMOs globally and we are ready to address them hence the development of guidelines for smooth operation".

DG restated the firm position of the Agency to continue to partner line ministries and agencies to ensure the mandate and objectives of the NBMA are realized. "our position is to guarantee safety of human health and environment while deriving the benefits of modern biotechnology. Safety is our watchword" **DG added.**

DG stated that no doubt the proficiency of the staff is something to be proud of, more so training workshops are organized from time to time to acquaint and upskill the staff to keep them abreast with the system.

Deputy Director department of planning research and statistics Mrs. Bello Scholastica while speaking on the objectives of the workshop noted that the federal government recognizes the significance of driving the economy with science and technology hence establishing a regulatory agency (NBMA) to superintend the practice. She further added that the NBMA will continue to discharge its responsibility for the good of all.

The country coordinator programme for biosafety systems (PBS) Dr. Mathew Dore acknowledged the great work the NBMA has been doing since inception and encouraged them to maintain the status quo.

He stated that Nigerians have become more aware of the presence of the NBMA and the great work it stands for.

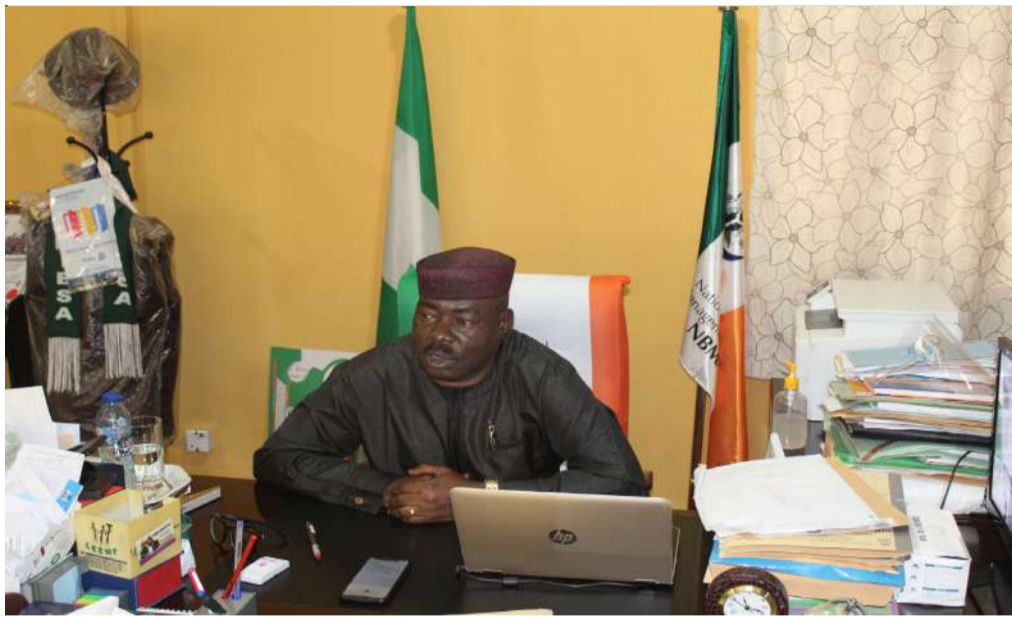
He further added that the Agency's impact is felt beyond Nigeria and the government should put in resources to enable it discharge its responsibility the more. Many African countries now look up to Nigeria's guidelines to replicate, he added.

The draft guidelines that were reviewed included GM fish, GM animal, Gm food/feed safety and the guidelines on grain import was validated by stakeholders.

Stakeholder in attendance at the meeting included National Agency for Food and Drug Control (NAFDAC), Nigeria Agricultural Quarantine Service (NAQS), National Biotechnology Development Agency (NBADA), Ministry of Agriculture and Rural Development (department of Fisheries, Department of Veterinary Control), Federal Ministry of Justice and Agricultural Research Council of Nigeria (ARCN)



NBMA ENGAGES EXPERTS IN DEVELOPMENT OF GUIDELINES FOR GENE EDITING AND NATIONAL POLICY ON BIOSECURITY--DG/CEO



The Director General/Chief Executive Officer of the National Biosafety Management Agency (NBMA), Dr Rufus Ebegba has said that it is important for experts to make input into the guidelines for the regulation of gene editing and the National Policy on Biosecurity that are being developed by the Agency.

The DG/CEO who said this during a two-day meeting to review the guidelines on Gene editing and National Biosecurity policy in Abuja (28 and 29 October 2020), said that the two documents have gone through rigorous internal review by the Agency, hence the need to bring the documents to be subject to review by external experts.

Dr Ebegba said that the NBMA is concerned about the human health and the safety of Gene edited products and how viable it can be to the economy of the country.

He said “the reason for the development of the guideline on Gene editing, is to enhance the regulation of Gene editing, to ensure that it is in conformity with international standards and serves as a model for other countries, to make the guidelines and their accompanying preliminary consultative form more practicable and easier for biosafety applicants to understand.

The DG/CEO said the meeting is also to ensure that other necessary administrative and scientific information from the stakeholders and research community, that ought to be in the guidelines is well captioned and to have a preliminary draft National Biosecurity Policy in place for further review.

“This review meeting is to enable stakeholders subject the guidelines and Biosecurity policy to a rigorous process so that the NBMA can come up with holistic guidelines and Biosecurity policy, for the benefit of Nigerians”.

“The COVID19 pandemic is a Biosecurity issue and this National Policy will help the federal government have a proper Biosecurity Framework to enable the country tackle harmful Biological Agents that can cause harm to human health and the environment”.

“This policy is expected to serve as a blue print in dealing with issues of Biosecurity and will be subjected to a larger stakeholders’ review after which it will be sent to the Federal Executive Council through the Federal Ministry of Environment for adoption”.

Chairman of the board of the NBMA, Ibrahim Nakande called for concerted effort in creating awareness so that Nigerians can understand the regulatory role of the Agency, noting that Nigerians should trust the Agency as what it has approved to be safe should be considered safe.

He said “the Federal Government has put in place measures to ensure that products of modern Biotechnology are regulated so that any potential harm these products can cause to Nigerians and the environment will be checked”.

This is the first external review of both documents and these documents are expected to be subjected to a larger stakeholder review before it can be sent for adoption.

CONTINUED FROM PAGE 04

“Risk assessment is to determine whether there are harms. If there are risks, to quantify the risks at various levels.

“Also whether there are management strategies to mitigate the risks that are associated with the organization. If there are management strategies, the product can still be adopted.

“This training basically is to enable the staff of the Agency to develop the capacity to carry out risk assessment review.

“Any GMO that are being introduced, the applicant is expected to carry out the risk assessment and the dossier is very crucial to the Agency, for us to review the findings to identify whether there are risks, and if there are risks, we will find out whether it can be managed,” he explained.

Mrs Bello Scholastica, Head, Planning, Research and Statistics Department of NBMA, said that it was important to carry out risk assessment because of the concerns about GMOs products for safety of humans and the environment.

“This training is to ensure that we have a crop of young men and women who are able to effectively carry out a risk assessment, so that whatever GMO is approved in Nigeria, it is 100 per cent sure to be safe for humans and the environment,” she said.

Also, Ehikwe Darlington of Native Base Limited enjoined the participants to pay attention to the training for them to identify the hazard associated with GMOs and its management.

culled from NAN





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