

Information sharing workshop on the genome editing technology potential applications in Burkina Faso



Group picture of part of participants during the meeting

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Information sharing workshop on the Genome Editing technology potential applications in Burkina Faso

AUDA-NEPAD and the National Biosafety Agency in Burkina Faso (ANB) organized an information sharing workshop focused on potential applications of the emerging Genome Editing technology and its related regulatory implications, on 27 November, in Ouagadougou. Participants were drawn from key decision-making bodies representatives including the National Biosafety Agency, which is the National Biosafety Competent Authority, the National Scientific Biosafety Advisory Committee, the Ministry of Environment and various research institutes representing the scientific community.

The main objectives of this meeting were to share up-to-date information on the status of genome editing applications including experiments ongoing in the country, improve understanding and knowledge on the fundamentals of gene editing technology and elucidate the connection between gene editing and gene drive. The meeting also aimed to facilitate discussion on the regulatory challenges associated with applications review and decision making on gene edited products and to introduce participants to ongoing preparatory work for the international COP-MOP negotiations on emerging technologies such as synthetic biology, gene editing, and living modified (LM) fish.

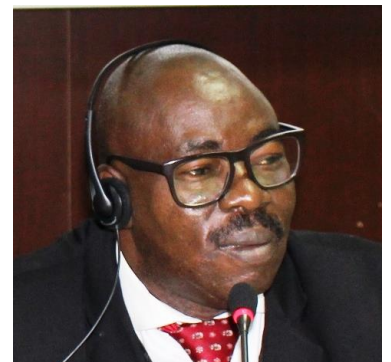
Several presentations were made during the meeting, mainly on the science behind genome editing, the regulatory principles and practices in relation with genome editing, governance considerations related to genome editing, and a review of national regulations in line with fast advancing biotechnology. The presentations received high attention and appreciation from participants and several recommendations were made to keep improving the regulatory governance on emerging technology products. The key recommendations include continuing to share up-to-date information on innovative technologies development and relating regulatory governance implications, fostering interactions at the regional level between regulatory agencies and dedicating awareness raising and information sharing interventions to other national departments, with priority to be given to the Ministry of Environment which hosts national focal points for the United Nations' Convention on Biological Diversity (CBD) and its protocols such as the Nagoya protocol on Access and Benefit Sharing (ABS) and many other multilateral agreements.

AUDA-NEPAD will continue to support Burkina Faso to safely harness relevant scientific and technical tools to adequately address some of the most critical agricultural challenges that are still impeding the sustainable development of the country.

Nigeria's NBMA validates national biosafety guidelines on gene editing

The National Biosafety Management Agency (NBMA) formally validated its National Biosafety Guidelines on Gene Editing on December 9, 2020, in Abuja.

In his address during the validation meeting, Dr Rufus Ebegba, Director General/Chief Executive Officer of the NBMA said that "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 the amendment of the NBMA act 2015 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”.

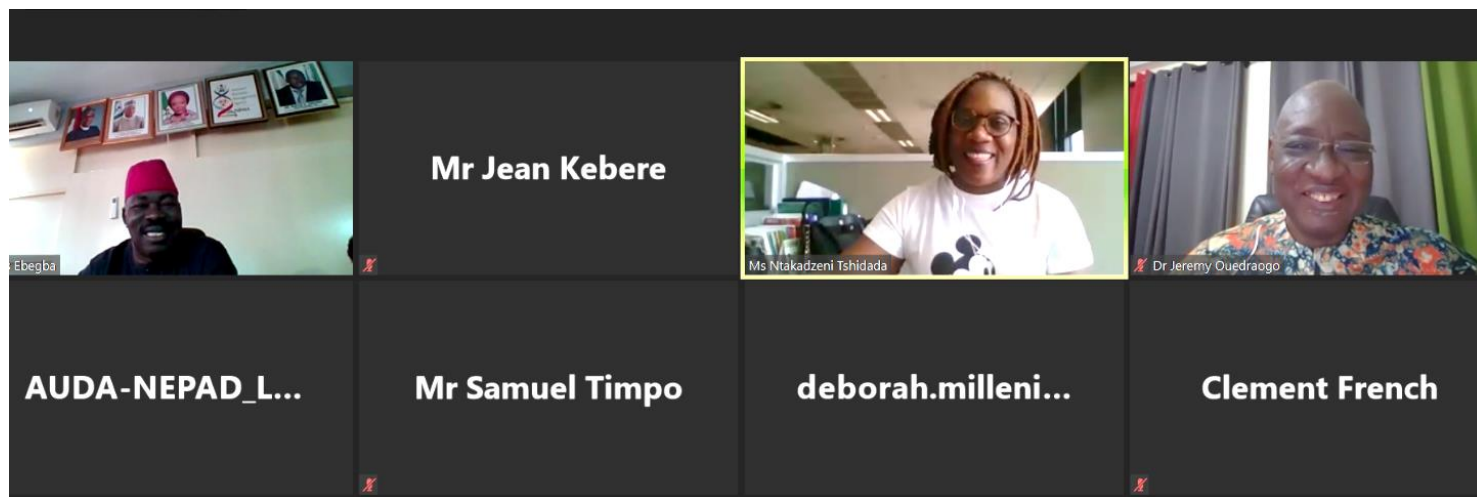
On behalf of Dr Jeremy Ouedraogo, Head of the AUDA-NEPAD West Africa Office in Dakar and Head of the African Biosafety Network of Expertise (ABNE), Mrs Modupe Adeyemo, AUDA-NEPAD Programme Officer congratulated Nigeria for this achievement and said “this validation meeting is important as it

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”.

She added that AUDA-NEPAD ABNE will continue to forge strategic partnerships that will have a transformative impact in Nigeria and in the other African countries.

Biosafety Regulators and Negotiators of the African Group Meet to Prepare for Upcoming Virtual Sessions of SBSTTA 24/SBI 3

AUDA-NEPAD, hosted an online meeting in in collaboration with the African Union Biosafety Regulators’ Forum (AU-BRF) and South Africa (as the African Chair) to prepare for upcoming virtual sessions of the 24th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 24) and the third meeting of the Subsidiary Body on Implementation (SBI 3). More than 40 regulators and policy makers who are members of the AU Biosafety Regulators Forum, members of national delegations to the meetings of the Conference of Parties, representatives of the Bureau, designated Cartagena Protocol focal points, members of the Ad-Hoc Technical Expert Group (AHTEG) on risk assessment and synthetic biology participated in this meeting which was moderated by the Chairperson of the AU-BRF.



From left to right are Dr Rufus Ebegba, Chairperson of the AU-BRF, Ms Ntakadzeni Tshidada from South Africa and Dr Jeremy Ouedraogo, Head of the AUDA-NEPAD West Africa Office in Dakar during the meeting.

In her opening remarks, Ms Ntakadzeni Tshidada, representing South Africa as the African Chair, welcomed participants and thanked AUDA-NEPAD for facilitating the organization of this meeting. She commended African countries for the new developments in biosafety as well as Access and Benefit Sharing (ABS) and added that “there is a need for capacity building support for other African countries that have no

biosafety framework.”

Dr Jeremy Ouedraogo, Head of AUDA-NEPAD West Africa Regional Office also welcomed participants on behalf of AUDA-NEPAD CEO and said “successful negotiations at the meetings of the Conference of Parties require a good preparation to address key points of interest to the continent”.

Dr Rufus Ebegba, Chair of AU-BRF, highlighted that “with the advent of COVID-19, there will be a need for more technological advancements and the negotiations for COP-MOP will look at emergency issues raised by the pandemic. Parties will need to be more pro-active and Africa will have to unite as one continent and have a common position to present at the next COP-MOP to advance Africa’s interests”.

During the meeting, presentations were made to bring all participants to a common understanding of the key issues. Ms Ntakadzeni Tshidada provided a debrief on the overall post-2020 process and related SBSTTA-24 agenda item 3. Mr Eric Okoree, CEO of the National Biosafety Authority of Ghana and member of the Bureau of the CBD conference of parties, also updated participants on discussions ongoing at the COP Bureau. Finally, Mr Samuel Timpo, AUDA-NEPAD Principal Programme Officer presented draft elements for decisions on SBSTTA 24 agenda item 5 (Risk assessment and risk management of LMOs).

Member states present reiterated the importance of highlighting biosafety as a regional priority during the 8th Special Session of the African Ministerial Conference on Environment (AMCEN). A request was made to AUDA-NEPAD to continue supporting member states in attending and participating in these negotiations. Member states also recalled paragraph 9(d) of decision 9/7 and requested that the CBD Secretariat be reminded of their obligation in facilitating the participation of an adequate number of biosafety experts, including those with expertise on the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress, in the development of the relevant elements of the post-2020 GBF, including in the relevant consultation workshop(s).

The meeting concluded with plans for additional online meetings at both continental and the Regional Economic Community levels to discuss and obtain consensus on other agenda items that would be the subject of discussions at upcoming SBSTTA24 and SBI 3 virtual sessions.

Consultative Meeting on Biotechnology and Biosafety in Ethiopia

AUDA-NEPAD, in partnership with the Biosafety Directorate of the Commission for Environment, Forest and Climate Change, organized a consultative meeting on biotechnology and biosafety in Ethiopia, from 29 – 31 October, in Addis Ababa. Participants were government officials from the main institutions involved in biotechnology and biosafety matters in the country, including the Ethiopian Institute of Agricultural Research (EIAR), the Ethiopian Biotechnology Institute (EBTi) and the Biosafety Directorate of the Commission for Environment, Forest and Climate Change.



A view of part of participants during the meeting

The objective of the meeting was to have a deeper insight on the state of affairs about biotechnology from both the regulatory and technology side and refine planning for the delivery of biosafety services in the remaining part of 2020. The meeting also discussed the needs for 2021 that AUDA-NEPAD/ABNE may partner with Ethiopia to support biosafety service delivery.

During the meeting, AUDA-NEPAD highlighted the technical support it provided to Ethiopia since 2012, and the impact that such engagement has brought in building functional biosafety regulatory system for the safe use of biotech for agricultural and economic development in the country. The presentation also emphasized areas where this meeting ought to focus on, as identified by previous engagement with the leadership of the three institutions virtually and in person.

A subsequent presentation by the EIAR dealt with the status of agricultural biotech in Ethiopia and plans for moving ahead especially concerning the drought-tolerant and the insect resistant maize (TELA maize).

This was followed by a presentation by the national

regulatory body focusing on the progress made in putting regulatory and administrative tools in place and opportunities and challenges that lie ahead for making further progress.

Salient issues discussed included regulatory pathways and timelines for product development and release, modalities for public participation and media engagements, understanding the profile and knowledge gap of members the National Biosafety Advisory Committee (NBAC) for capacity building, the need for additional technical experts for review of biosafety applications, suggestion of participants for the upcoming activities, and focus areas for workplans for 2021.

At the end of the meeting, participants highly appreciated AUDA-NEPAD's biosafety capacity building support to Ethiopia and called for more support for biotech regulatory capacity building, taking note of emerging technologies such as genome editing and gene drives which Ethiopia aspires to delve into, scrutinize and possibly adopt for a sustainable development of the country.

Technical Support on Gene Drive Stage 2 Dossier Review in Burkina Faso

AUDA-NEPAD in partnership with the National Biosafety Agency (ANB) in Burkina Faso organised a training workshop to support to the National Biosafety Committee (NBC) on stage 2 dossier review, on December 3 – 5, 2020, in Bobo-Dioulasso, Burkina Faso. In addition to the NBC members, and based on recommendations from previous in-country consultations, the meeting audience was extended to include researchers, faculty members and PhD students. The meeting brought together 25 participants

Amongst the countries piloting the gene drive research in the continent, Burkina Faso has successfully completed the activities in stage 1 of the process and is now contemplating to commence stage 2. An application has been prepared and submitted to the national regulatory agency, following a successful pre-review by the Institutional Biosafety Committee (IBC).

In August, AUDA-NEPAD IVM programme, based on a

request from the national Biosafety Competent authority, provided support to introduce the IBC members on the application review and decision-making processes. Following this training, the IBC members most of whom were exposed for the first time to such a highly technical exercise, made a recommendation for another opportunity to be provided for deeper familiarization with the processes.

Based on the conclusions of a need assessment conducted recently, training materials were prepared jointly by the AUDA-NEPAD IVM and ANB teams and were used to deliver the present training. Biosafety risk communication principles and stakeholders' engagement process were also presented, based on practical experience from ANB regulators and the IRSS / Target Malaria scientists working on genetically modified mosquitoes.

From the discussions during the meeting, it was recommended to AUDA-NEPAD and ANB to keep engaging with the same expanded group so as to consolidate the



A view of participants during the meeting

basis for the national platform on Integrated Vector Management. and provide support. It was also emphasized to provide support to augment awareness among faculty staff and students at the universities, and to enhance regulatory capacities at the International Centre for Research and Development on Livestock in Sub-humid Zones (CIRDES) which is an international centre headquartered in Bobo-Dioulasso and engaged in vector control research-development..

Participants from the research community recommended that the operationalization of the AUDA-

NEPAD centre of excellence on science, technology and innovation is accelerated to effectively boost research-development programmes in the continent. The need for enhanced scientific capacities including lab equipment for emerging technologies was also emphasized.

AUDA-NEPAD ABNE will continue to fully play its role in the provision of the necessary technical support to help Burkina strengthen its biosafety regulatory capacity to safely harness science and technology, including emerging technologies like the gene drive, for a sustainable development of the country.

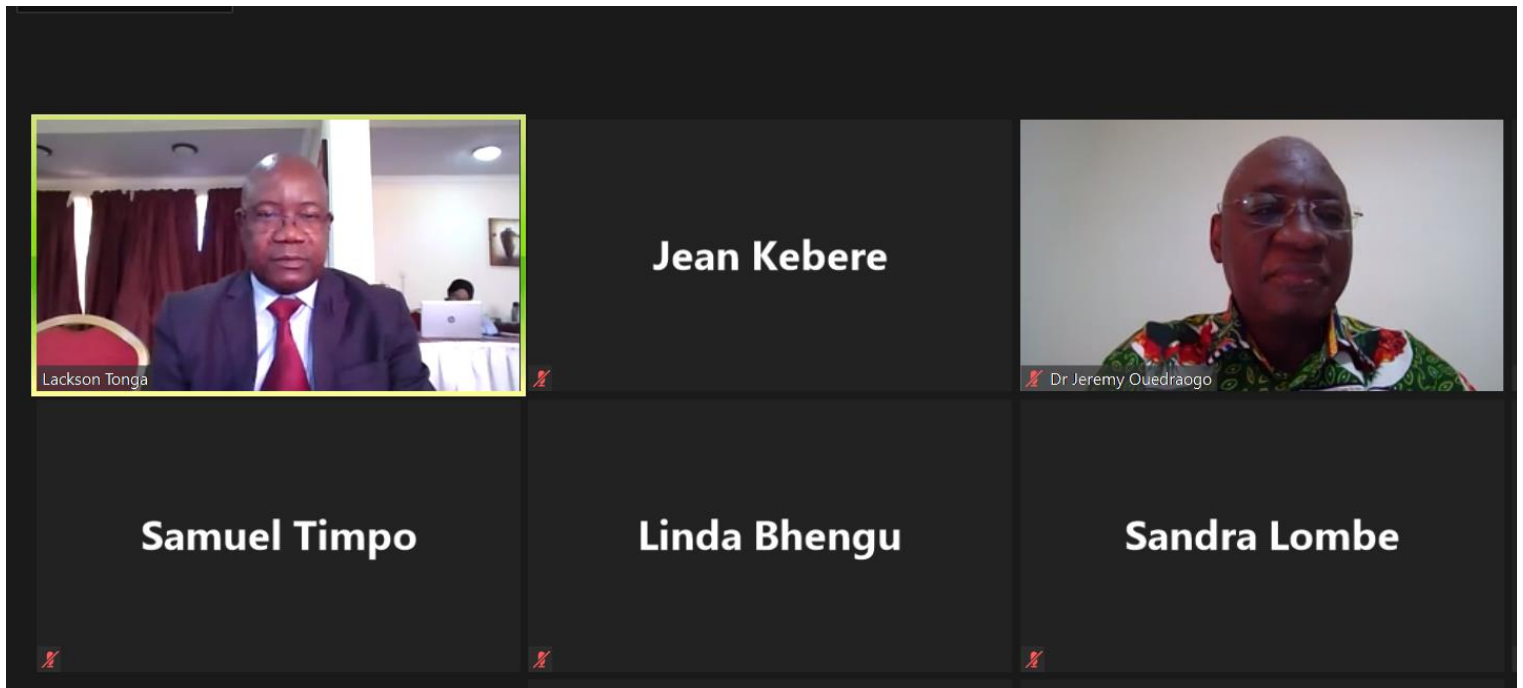
Technical Support to Zambia in Review of legal and policy document and the development of a national biosafety communication strategy

AUDA-NEPAD ABNE in partnership with the Zambian National Biosafety Authority (NBA) organized a virtual meeting to review the draft biosafety guidelines and follow up on progress in the revision of Zambia Biotechnology and Biosafety Policy 2007. The meeting took place on October 27 and brought together 11 staff of the Zambian National Biosafety Authority and ABNE.

During the meeting, The AUDA-NEPAD-ABNE team provided technical review comments in the

guidelines and regulation and discussed with Zambia NBA for input. Zambia NBA agreed to input the proposed changes. It was proposed that Zambia NBA develop a Risk Analysis Guideline which is the Key decision tool for all approvals from research, product development to commercialization.

Subsequent to this meeting, a virtual workshop was organized on December 14 to build the capacity of the NBA in biosafety communication. Key aspects of biosafety communication were addressed including the principles and practices of biosafety communication, key components of a national biosafety



From left to right are Mr Lakson Tonga and Dr Jeremy Ouedraogo during the online workshop

Speaking during the workshop, Mr Lakson Tonga, CEO of the NBA, thanked AUDA-NEPAD for the support provided to Zambia over the years in the biosafety area. He called for a continued support to strengthen biosafety capacity within the country.

Dr Jeremy Ouedraogo, Head Head of the AUDA-

NEPAD West Africa Office in Dakar and Head of the African Biosafety Network of Expertise (ABNE) assured that AUDA-NEPAD, as per its mandate, will continue to support Zambia and the other African countries, to build functional biosafety regulatory systems that would help the countries safely harness science, technology and innovation opportunities for a sustainable development.

Burkina Faso Stakeholders consultations on Gene Drive Technology for integrated vector management towards malaria elimination

Under its flagship Integrated Vector Management (IVM) Programme, African Union Development Agency (AUDA-NEPAD) in partnership with the National biosafety agency (ANB) of Burkina Faso organized an information sharing workshop on the applications of "Gene Drive" technology and facilitated discussions for the establishment of a consultative group on integrated vector management in Burkina Faso. The meeting was held from November 30th to December 1st, in Ouagadougou and brought together healthcare, environmental and biosafety regulators and other decision makers from different relevant institutions in

the country.

The objectives of this meeting were to share up-to-date information on the emerging Gene Drive emerging, and to move forward with the national IVM platform establishment and operationalization process. Safe application of Gene Drive technology has been identified by the African Union High Level Panel on Emerging Technology (APET) as a potential promising tool that could be added to the toolbox for malaria control and elimination in sub-Saharan Africa.



Regulators and other experts from the health, biosafety and environment sectors took part in this meeting.

During the meeting, presentations were made on key topics pertaining to a safe utilization of gene drive technology to control malaria. These include an overview of the status of vector borne diseases such as malaria and their impacts, existing vector control strategies and their limitations, innovative Genetic based vector control strategies, regulatory and governance considerations related to Gene Drive, stakeholders engagement, public communication aspects, policy considerations at global, continental Africa, regional ECOWAS levels, implementation progress of the West Africa Integrated Vector Management (WA-IVM) programme, and also the perspectives for continental IVM and associated

Advisory Panel.

Following enlightening and constructive discussions, critical challenges were identified in relation to the status, institutional anchorage, operationalization of the national IVM plate-form in Burkina Faso and a list of a core team members was proposed for an interim constituted body.

At the end of the meeting, participants expressed gratitude for the support provided by AUDA-NEPAD through its twin IVM and ABNE programs, and they requested the Agency to continue to provide such support to ensure full operationalization of the national IVM platform in Burkina Faso.

Biosafety sensitization workshop for media practitioners in Ethiopia

AUDA-NEPAD in partnership with the National Biosafety Authority in Ethiopia organized a biotechnology and biosafety sensitization workshop for journalists from key media houses in the country, both public and private

media. The workshop took place on 7 December 2020 in Addis Ababa.



A view of part of participants during the meeting

The key objective of the workshop was to share information on biotechnology and biosafety for journalists as well as public relations personnel from key institutions working on biotechnology and biosafety. Media houses represented included among others the Ethiopian Broadcasting Corporation (Radio & TV), Fana Broadcasting Corporation, Oromia Broadcasting Network, Addis TV, Capital News Paper, Ethiopian News Agency, Addis Media Network, and Sheger FM.

During the workshop, participants were introduced to the basics of biotechnology, and regulation processes in place in Ethiopia.

This was an opportunity for participants to raise important observations on the subject and get the right information both from leading scientists and biosafety authorities. Through the discussions, it appeared that Ethiopian media were getting somehow informed about biosafety issues, but they needed reliable sources to confirm or invalidate some information they were getting from anti-technology activists.

It is expected that after this capacity strengthening exercise, participants will be able to convey regular fact-based information and educate the public about biotechnology and its regulation in Ethiopia.



African Biosafety Network of Expertise

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