

COMMUNIQUE FROM THE AFRICA BIENNIAL BIOSCIENCES COMMUNICATION (ABBC 2021) SYMPOSIUM HELD IN A HYBRID FORMAT

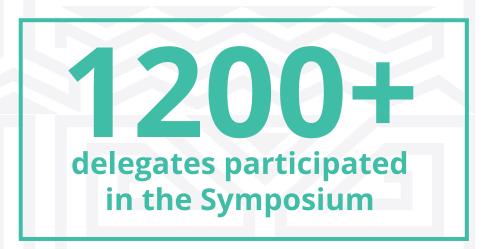


## Background

The fourth edition of the Africa Biennial Biosciences Communication (ABBC 2021) Symposium, was held from 20th-24th September 2021, in a hybrid format with in-person attendance in six African countries (Ethiopia, Ghana, Kenya, Malawi, Nigeria and Uganda) and virtual participation from the rest of the world. It was themed 'Accelerating Africa's Biotech Tipping Point: Taking Stock and Celebrating the Gains'. Accelerating Africa's biotech tipping point is about positioning the continent in her rightful leadership space on matters of agricultural biotechnology, not only as a consumer but also as a developer of biotech applications including the highly promising genome editing. The theme embodied remarkable success in the development and adoption of biotech crops, and provided the basis to reflect on the achievements made and lessons learned for synergy and inspiration in Africa.

The Symposium also provided an opportunity to highlight the advancements and prospects of using genome editing in Africa following ABBC 2019 resolutions, drew attention to regulatory progress and communication efforts currently in place, and culminated in launching of the "African Coalition for Communicating about Genome Editing" and celebration of excellence for outstanding achievement in various biotech enterprises.

ABBC 2021 attracted a wide range of stakeholders in crop biotechnology, biosafety and genome editing. More than 1200 delegates participated in the Symposium. They comprised scientists and university scholars, lawmakers and policy advisors, biosafety regulators, communicators, media practitioners, biotech and agricultural industry players and farmers.



## **Key observations from ABBC 2021 Symposium**

It was observed that Africa has made remarkable progress especially over the past three years (2018-2021) in crop biotechnology development, deployment and adoption, with seven countries having commercialized at least one biotech crop and 11 others at different stages in the conduct of research on biotech crops. Genome editing was recognized as an important tool for which Africa should take advantage of and be on the forefront in its adoption by employing facilitative regulatory frameworks. There are, however, some challenges which should be addressed. Key among these challenges are: unsustainable political goodwill, overlapping regulatory mandates, weak institutional capacities, inadequate state of the art facilities, limited local biotech private sector and aggressive activism against modern biotechnology leading to high levels of misinformation which regrettably continue to cost Africa massive losses in crop damage and low productivity. It is, therefore, critical that Africa takes the necessary steps to deliver modern technologies to farmers and other stakeholders in the agricultural value. With better technologies, the continent will be better prepared to combat the effects of climate change and boost the efforts aimed at realizing food security, industrialization and global competiveness.

## **Priorities for different stakeholders**

To sustain the biotech gains and register continued progress, each of the key stakeholder categories recommended specific measures, which could support access to biotechnology benefits by African farmers:



**Policy Makers** called for closer engagement with scientists and communicators, especially on expounding on benefits of the technology to individual countries.



**Biosafety Regulators** called for increased engagement with scientists on technical issues for purposes of streamlining safety assessment of the technology and its products.



Science Communicators and Media Practitioners advocated for nontechnical information from scientists devoid of scientific jargon with more consistent and proactive messaging that highlights benefits of biotechnology and its products.



**Technology Developers (scientists)** called for political goodwill, clear regulatory systems and scientific infrastructural support from national governments.



**The Private Sector Players** expressed interest in understanding the technology but more of the business opportunities along the biotechnology value chains, and how they can participate in the development, production, and distribution of biotech products.



**Farmers** requested for more involvement/consultation in priority setting for biotech research, easy access to affordable biotech seeds (and timely delivery), exposure to successful models through seeing-is-believing study tours, and establishment of field demonstration of biotechnology products to serve as centers of excellence for education and mentorship.



**Development Partners** expressed interest to be part of ABBC planning and logistical backstopping towards ABBC 2023. This will ensure optimum support and sustainability of this initiative.

Participants appreciated ABBC2021 organizational structure but called for involvement of more partners and a Standing Committee to steer future symposia in order to ensure adequate preparations

## **Key Challenges, Lessons and Opportunities**

#### Lessons

1. Three key drivers responsible for biosafety decision-making in Africa are:

- functional and science-based regulatory frameworks;
- sustained political good will; and
- the presence of supportive and adequate regulatory capacity in terms of infrastructure and personnel.

2. To actualize the potential of biotech crops on the continent, stakeholders must come together and forge collaborations;

- create own and more appealing narrative that is centered on projecting biotechnology as an enabler to solutions that benefits society;
- keep biotechnology people-focused; and
- change biotechnology communication from "us vs them" debate to constructive dialogue on the technology among the public and across government ministries, not just agriculture.

### **Opportunities**

- African Scientists have the necessary knowledge and skills to develop biotech solutions for African needs. They only need budgetary/infrastructural support
- 2. The seven countries commercializing biotech crops and the many others that are conducting research at different levels provide opportunities for learning by other countries.
- 3. Several African countries are at different stages of formulating genome editing regulatory guidelines and the leadership shown by Nigeria and Eswatini with elaborate genome editing regulatory frameworks will act as models to facilitate growth by other countries.
- 4. Leading biosafety development partners in Africa are open to working with stakeholders through the Africa Coalition for Communicating about Genome Editing.
- 5. The ABBC symposium is an ideal platform for stock-taking, knowledge and experience sharing in order to strengthen regional and international collaboration in communication about agricultural biotechnology.





## Challenges

- 1. Though Africa has made some progress in development, adoption and commercialization of biotech crops, the continent has foregone enormous benefits from slow and low adoption of the technology.
- Mixed perceptions, intense and inconclusive debates fueled by persistent disinformation and/or misinformation about cost and safety of GMOs have stifled growth of agricultural biotechnology and adoption of biotech crops in Africa over the last two decades.
- Though remarkable progress has been recorded in science communication and stakeholder engagement programs, ineffective communication by scientists and low-level participation of key stakeholder groups still impede public engagement on biotech crops.
- 4. Restrictive and/or overlapping biosafety regulatory mandates have significantly hindered progress and adoption of biotech crops in some African countries.
- 5. Limited political will and budgetary support for biotechnology from national budgets have created over-dependency on donor funding, which in turn not only injures project's domestic relevancy and sustainability but also makes biotech appear a foreign and top-down concept imposed on Africa.
- 6. Limited collaboration among crop biotech scientists and other experts in Africa blocks any opportunity for them to share useful intellectual and material research resources and transdisciplinary learning thus hampering the efficiency to deliver biotech crops to farmers.
- 7. Biotech stakeholders are not well resourced to proactively engage the public on agricultural biotechnology, giving room for anti-GMO crusaders to dominate the debate. There is low-level involvement of the Africa Union and African experts in telling the biotech story.





## Recommendations

In view of the aforementioned facts, we the delegates of ABBC 2021, hereby draw the following recommendations for consideration by the Africa Union, National Governments and Development Partners:

- **1.** Forge strong scientific collaborations: To nurture scientific excellence, optimize resource use, facilitate cross learning, and set demand-led priorities in the crop biotech sector in Africa, national and international institutions should forge strong scientific collaborations across the region to realize optimum success.
- 2. Budgetary allocations for crop biotech: Funding is key in the success of relevant and priority national biotech development and African countries must avail adequate financial support to develop biotechnology programs, including outreach, on the continent.
- 3. Embrace the Africa Coalition on Communicating about Genome editing as a continental platform: The Africa Union member states, public and private sector partners should consider supporting the Coalition as a regional entity for sustaining a science-based narrative around crop biotechnology and emerging bio-innovations.
- Strengthen scientists' capacity to communicate: Intensive efforts should be put in place to enhance scientists' capacity to effectively communicate and engage the public about agri-biotechnology.
- 5. Theory and practice of stewardship enhanced: As more countries adopt and embrace biotech crops, knowledge and practice of stewardship should be a priority since it is key in ensuring technology integrity and confidence of the pertinent stakeholders in this area.
- 6. Inter-university and agricultural research institutions collaborations should be enhanced: There should be enhanced inter-university and agricultural research institutions' collaborations and synergized efforts, including establishment of knowledge hubs, in bolstering understanding about biotechnology for addressing misinformation thereof.

- 7. Biotechnology should be incorporated in national school curricula: In order to prepare the next generation of researchers for bioscience innovations, stakeholders must look into ways of introducing biotechnology initiatives/subject in national school curricula, as this will cultivate interest for biotech among pupils and students.
- 8. Involving policy makers in biotech projects: Policy makers should be brought on board at early stages of biotech research towards swift acceptance, development and approval of biotech products. This will ensure buy-in and sustained political goodwill for crop biotechnology in Africa.
- **9. Harmonization of legal frameworks:** Regional biosafety agencies need to meet and initiate deliberations on harmonization of Africa's legal frameworks to ensure that the relevant commissions work on one platform. This should include synchronization of data collection for approvals and data transportability across countries.
- 10. Incorporating the private sector in biotech development and dissemination: Local/ in-country private sector must be fully brought on board in the realm of crop biotech development in Africa including identification of agribusiness opportunities along the biotech value chain. This is key in establishment of bio-entrepreneurship initiatives and hubs that will create opportunities in biotechnology for the next generation scientists. Thus, policies and regulations should be streamlined to allow efficient participation of the private sector.
- **11. Enhanced capacity building for media practitioners:** Media sensitization and training for journalists and editors should be enhanced and sustained to improve their understanding of crop biotechnology and increase their appreciation of the benefits that come with the technology in their countries. In order to enhance more accurate media reporting on biotech, a databank/gallery of crop biotech visuals that can easily be accessed by the media should be created in order to put to an end the use of media pictorials that perpetuate negativity about the technology.
- **12. Community outreach groups for crop biotech:** To accelerate adoption and integration of biotech crops among smallholder rural communities, farmers need to form community outreach groups. In addition, a biotech sensitization week needs to be set aside annually to be fully dedicated towards enhancing public education and improving awareness and knowledge about the benefits of biotech crops.

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