Gene Editing Technology Initiative

The Network of African Science Academies (NASAC) in collaboration with African Harvest and with the Support of Crop Life International held three webinars on gene editing technology initiative. The objectives of the webinars were:

1. To create awareness and policy advocacy on gene editing technology and enhance public acceptance and support.
2. To build support for the adoption and utilization of gene editing technology among scientists and researchers in academia and research institutions.
3. To support the development of enabling regulatory policies on gene editing technology to enhance product commercialization.

The first webinar focused on sharing information on gene editing technology initiative and exploring project expectations. The participants discussed the roles of gene editing working groups (GETI) and the discussion were led by Dr. Florence Wambugu, Chief Executive Officer, Africa Harvest. Dr. John McMurdy who is the director of emerging markets and development partnership (Crop Life International) led discussions on expectations on gene editing technology initiative (GETI).

The last two webinars focused on capacity enhancement for the working groups. Participants proposed several professional names for the working groups and decided to vote for a name which was best suited for the group. They voted overwhelmingly for “African Association of Gene Editing Professionals for Sustainable Agriculture”. Partipants discussed drafting of policy briefs for targeted audience and they divided themselves into groups of Researchers, Regulators, Policymakers and public. They eventually did a report and made presentations on the last webinar. The challenges and public perceptions of Gene editing technology were also discussed and participants made it clear that there is a big difference between gene editing technology and genetically modified organisms (GMO).
From the President

Gene editing technology initiative fits the mandate of NASAC. Indeed, besides facilitating the creations of science academies in countries where none exists, we promote platforms for scientists to deliberate on big societal questions and tackle Africa’s most “wicked” problems for concrete solutions. Take hunger for instance, we are yet to realize the vision of ensuring sufficient and nutritious food for citizens in many countries. It is for this very reason that we engage scientists in different countries to offer practical solutions that will remain relevant to influence policy and engage government on pertinent issues. NASAC promotes scientific excellence (science for science) and facilitates the translation of research into practice (science for society). In order to realize both, our members offer credible science advice that influences national and regional policies (science for policy). We need to advocate for gene editing technology with all its possible useful applications. For that, we need a clear arsenal of communication for both public and policy makers, and a legal framework for gene editing technology as well as the harmonization of regulation policy for the continent. We need to strongly involve academies, scientific bodies and all stakeholders in this development, and well explain, in appropriate way, the difference between genetically modified organisms (GMO) and gene editing technology. We need to advocate for gene editing technology with all its possible useful applications.

In just three zoom meetings, we succeeded in apprehending the shapes of the challenge of gene editing technology for sustainable agriculture in Africa. We succeeded in adopting a name for the association and, most importantly, in highlighting that the members should have in mind the attitude of humility, open mind, openness for feedback. We should be able to know our limitations and be open to positive contributions from all sides, to be permanently in the state to learn more each day from our own experience and from others at national, regional and international levels. Open frank dialogue will be useful. We know the task will not be easy. It will take its temporality, but the most important thing is our common commitment which will definitively guarantee the success of our concerns for the benefit of our continent.

The last word always belongs to science. So, let us trust on science as scientists and work for gene editing technology initiative for a sustainable agriculture in Africa.

Yours faithfully,

PROF. MAHOUTON NORBERT HOUNKONNOU
NASAC President and Chair of the Board
Activities and Events

The Nigerian Academy of Science Annual General Meeting
The Nigerian Academy of Science held its Annual General Meeting virtually on Thursday, 28th of January, 2021. The meeting was preceded by the NAS 2nd Annual Scientific Conference (held on the 26th and 27th of January, 2021). At the Annual General Meeting, the Nigerian Academy of Science inducted Professor Ekanem Ikpi Braide FAS as the 19th President of the Nigerian Academy of Science and the first woman to hold the position. In addition, 9 scientists were elected into the NAS Fellowship.

Nigeria’s Response to Public Health Emergencies
The Nigerian Academy of Science (NAS) will be conducting a project aimed at strengthening Nigeria’s policy response to the coronavirus disease (COVID-19) outbreak, and possible future public health emergencies. Through this project, NAS will be engaging with policymakers from key states in Nigeria, who are involved in the nation’s response to COVID-19. The objectives of the project are to conduct an appreciative inquiry into the policy response to COVID-19, to determine what has worked well so far, why, and how to build on these; discuss issues/challenges of evidence to policy with respect to COVID-19 in the Nigerian context as well as document lessons learnt from the policy response to COVID-19. These outputs would strengthen the country’s health system in tackling future public health emergencies. Further details will be made available on the NAS website (www.nas.org.ng).

Académie des Sciences et Techniques du Sénégal (ANSTS) Press Conference
Académie des Sciences et Technique du Sénégal (ANSTS) in collaboration with Prof. Souleymane Mboup (President of the Institute for Health Research, Epidemiological Surveillance and Training) held a press conference to discuss the British variant of Covid-19 in Senegal. The press conference was held on the 29th of January 2021.

Mauritius Academy of Science and Technology Working Group on Science & Technology and Societal Issues
The Mauritius Academy of Science and Technology (MAST) Council constituted a Working Group (WG) in Science & Technology and Societal Issues to discuss global themes with a national focus. The deliberations were crystalized into policy recommendations that are expected to contribute to sustainable development.
Announcements and Appointments

Bereavement

The Nigerian Academy of Science announces the death of their past President, Professor Oyewusi Ibidapo-Obe FAS. Professor Ibidapo-Obe was a Vice President of the Network of African Science Academies among several other international appointments. He was an academic who was able to also influence the corporate world.

This sad event occurred on Sunday 3rd of January 2021. Professor Ibidapo-Obe served from January 2009 to January 2013 as the 16th President of the Academy. His tenure helped to stabilize NAS financially and staff-wise.

Professor Ibidapo-Obe contributed significantly to the development of Science, Technology and Research in Nigeria and globally, particularly in his specialty of Stochastic Control and Information Systems Engineering. His death is a huge loss, not only to the Nigerian Academy of Science, but also to the science and technology community in Nigeria and the world.

Academy of Science of South Africa (ASSAf) elects Foreign Associate Members

ASSAf recently elected three Foreign Associates to serve as Members. These Members are outstanding scientists/scholars, currently based in a foreign country, who were either born in South Africa, and/or have performed a significant part of their work here, and/or have contributed significantly to science and scholarship in the country, especially where this has been turned to public benefit. They are nominated by an ASSAf Council member. The newly elected Foreign Associates are:

Prof. Mahouton Norbert Hounkonnou, President of the Network of African Science Academies (NASAC), Full Professor of Mathematics and Physics at the University of Abomey-Calavi, Republic of Benin

Prof. James Gibson, Sidney W. Souers Professor of Government, Washington University, St. Louis, United States of America and Extraordinary Professor, Stellenbosch University

Prof. Lehana Thabane, Interim Chair: Department of Health Research, Evidence & Impact, McMaster University, Ontario, Canada

ASSAf currently has four Foreign Associates, the fourth being Prof Mohamed Hassan. Prof Hassan is the Past-President of the African Academy of Sciences (AAS) and NASAC and current Co-chair of the InterAcademy Partnership (IAP). Note that Late Dr Sydney Brenner, 2002 Nobel Prize Laureate in Physiology or Medicine, was also elected Foreign Associate Member of ASSAf.

Benin National Academy of Sciences, Arts and Letters new Board Members

The Benin National Academy of Sciences, Arts and Letters (ANSALB) recently elected new members of its Executive Board to serve the Academy for the term 2021-2023.

President

Full Professor of General Surgery, Professor
Emeritus of the National Universities of Benin, Academician Nazaire Padonou replaces Academician Norbert Hounkonnou, current President of the Network of African Academies of Sciences (NASAC), at the head of the Benin National Academy of Sciences, Arts and Letters. He took office on January 8, 2021.

**Vice President**

PhD in organic chemistry, specialist in natural substances/essential oils and aromas, Professor Emeritus, University Professor in Benin, France, Togo and Congo and former Perpetual Secretary of the Academy of Benin, Academician Mansourou Moudachirou is elected Vice-President of the Benin National Academy of Sciences, Arts and Letters.

**Perpetual Secretary**

Professor of Cardiology, Former intern of the Hospitals of the Languedoc-Roussillon region, Former Head of Cardiology Department of the National Hospital and University Center of Cotonou, Academician Hippolyte AGBOTON is the Permanent Secretary of the Benin National Academy of Sciences, Arts and Letters.

**AAS Executive Director Honoured**

The acting Executive Director of the African Academy of Science Prof. Catherine Ngila was honoured by the L’oreal – Unesco for Women in Science Award. She was recognized for her ground breaking contribution to water quality and water resource management in Africa.
On the spotlight

Rapid consensus study (under the NASAC-IAP CBG Scheme 2020)

The Nigerian Academy of Science (NAS), Académie Nationale des Sciences, Arts et Lettres du Bénin (ANSALB), and the Nigerian Young Academy (NYA), are collaborating on a rapid consensus study on the Mechanisms for Science Advice in West Africa: Science Advice in Health Emergencies. The goal of this study is to strengthen the provision of evidence-informed science advice, particularly in emergency situations, in West Africa. The partner academies constituted a committee, comprised of eleven experts drawn from within and outside of West Africa (including the United States), to carry out this rapid study. Specifically, the Study Committee was tasked with identifying the established mechanisms for science advice currently used in the West African sub-region; assessing the effectiveness of these mechanisms in emergency and non-emergency situations; as well as proffering recommendations for strengthening the advisory function of West African national science academies and other sub-regional science advisors during health emergencies. The Study Committee fulfilled this mandate through a review of available evidence, and engagement with relevant stakeholders in the West African science-policy nexus. In order to get the perspectives of stakeholders- academies, scientists, and policymakers- on the advisory landscape in West Africa, and how advice is provided during public health emergencies, a two-day bilingual stakeholders’ webinar was convened on the 3rd and 4th of December, 2020. The webinar had in attendance 80 participants from 11 countries, and created a forum for them to discuss science advice in health emergencies in the West African context, as well as offer recommendations for strengthening science advice in emergency situations. Day One of the webinar featured presentations by experts on the complexities of science advice in emergencies and uncertainties, as well as case studies of how advice works during public health emergencies; using COVID-19, Lassa fever, and the 2014 Ebola Virus Disease outbreak as examples. The second day of the webinar was an interactive session during which predesigned questions were posed to participants to draw out their perspectives and recommendations for strengthening science advice in health emergencies.

Based on findings from available literature and the stakeholders’ webinar, the Study Committee is developing a policy brief detailing its recommendations for strengthening science advice in West Africa during public health emergencies. This policy brief is intended for use by stakeholders in the West African sub region, as well as across the African continent.
**Member Academy Feature**

**The Academy of Sciences, Arts, Cultures of Africa and the African Diasporas (ASCAD)**

The Academy of Sciences, Arts, Cultures of Africa and the African Diasporas (ASCAD) was founded on the 1st of December 2001. An independent scientific organization, ASCAD is a special public body, attached to the Presidency of the Republic. As such, it is placed under the high authority of the President of the Republic. It is an organization of Scientists, Philosophers, Writers, artists, creators and inventors, whose works honor African civilization and participate in socio-economic development as well as the influence of Côte d'Ivoire, Africa and African diaspora.

**The Organs of ASCAD**

1) The committee comprising all the members is the supreme decision-making body

2) The Board is in charge of defining and following the scientific and cultural orientations of the Academy. It is composed of seven members:

- **President:** Pr. HAUHOUOT ASSEYPO ANTOINE
- **Vice-president:** Prof. GADEGBEKU ANANI SAMUEL
- **Academy Secretaries:**
  - Prof. N’GUESSAN Yao Thom
  - Prof. MALAN KLA Anglade
3) The Science Council is composed of twenty members including seven members of the Executive Committee and thirteen others chosen from within the Committee. It assists the executive committee in the implementation of the decisions and directives.

4) The permanent commissions are five in number and each is directed by a committee of three members. They are:

- Social and Cultural Affairs committee
- Finance committee
- Projects and Studies committee
- Awards committee
- Scholarships committee

**Objectives of ASCAD**

Space for progress and knowledge sharing, the Academy's main objectives are

- To contribute to the development and influence of African cultures, arts and African diaspora
- To appreciate and encourage initiatives
- To promote exchanges between Ivorian and international researchers
- To edit and publish books and journals
- To contribute to the integral development of the human person

To support the culture of peace
About NASAC

The Network of African Science Academies (NASAC) was established on 13 December 2001 in Nairobi, Kenya and is currently the affiliate Network for InterAcademy Partnership (IAP) in Africa.

NASAC is a consortium of merit-based science academies in Africa that aspires to make the “voice of science” heard by policy and decision makers within and outside the continent. NASAC is dedicated to enhancing the capacity of existing national science academies and champions in the cause for creation of new academies where none exist.

As at November 2019, NASAC comprised of the following twenty-eight members:

1. African Academy of Sciences (AAS)
2. Algerian Academy of Science and Technology (AAST)
3. Académie nationale des Sciences, Arts et Lettres du Bénin (ANSLAB)
4. Botswana Academy of Sciences (BAS)
5. Académie Nationale des Sciences du Burkina (ANSB)
6. Burundi Academy of Sciences and Technology (BAST)
7. Cameroon Academy of Sciences (CAS)
8. Académie Nationale des Sciences et Technologies du Congo (ANSTC)
10. Academy of Scientific Research and Technology, Egypt (ASRT) – Provisional Member
11. Ethiopian Academy of Science (EAS)
12. Ghana Academy of Arts and Sciences (GAAS)
13. Kenya National Academy of Sciences (KNAS)
14. Madagascar’s National Academy of Arts Letters and Sciences
15. Mauritius Academy of Science and Technology (MAST)
16. Hassan II Academy of Science and Technology in Morocco
17. Academy of Sciences of Mozambique (ASM)
18. Nigerian Academy of Science (NAS)
19. Rwanda Academy of Sciences (RAS)
20. Académie des Sciences et Techniques du Sénégal (ANSTS)
21. Academy of Science of South Africa (ASSAf)
22. Sudanese National Academy of Science (SNAS)
23. Tanzania Academy of Sciences (TAS)
25. Tunisia Academy of Sciences Arts and Letters
26. Uganda National Academy of Sciences (UNAS)
27. Zambia Academy of Sciences (ZaAS)
28. Zimbabwe Academy of Sciences (ZAS)

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