

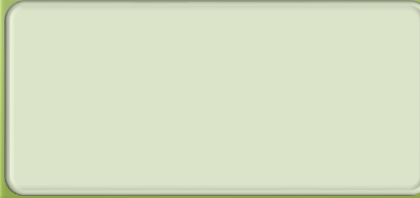
Genome Editing Policy and Guidelines – Africa Union Members States

**Virtual Workshop on Regulatory Approaches for Agricultural
Applications of Animal Biotechnology**

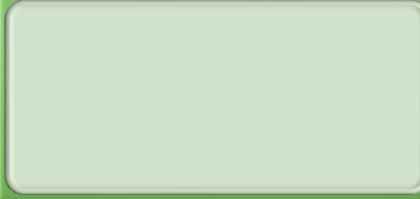
SEPTEMBER 29, 2020

AUDA-NEPAD-ABNE Team Silas Obukosia,

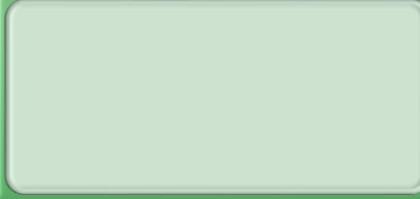
Contribution of Agenda 2063 and SDG



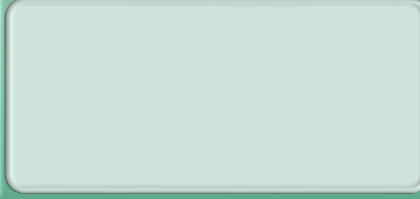
The African Union Agenda 2063 with Seven Aspirations and 20 Goals of Africa Union Agenda 2063.



ABNE Contributes directed to ASPIRATION 1: a prosperous Africa based on inclusive growth and sustainable development, Goal 5- Modern agriculture for increased productivity and production and



Science Technology and Innovation Strategy for Africa- STISA - 2024



APET Freedom to Operate- Crop Science, Animal , Health Industry and Environment.

Mandate, Vision, Mission

In line with AUDA-NEPAD mandate and core functions and towards the objectives of the AU Agenda 2063

AUDA-NEPAD Mandate



Provide knowledge-based advisory services and technical assistance to African Union Member States and regional economic communities to strengthen their capacity



Act as the continent's technical interface on policy development recommendation and implementation with partners and stakeholders



Coordinate and execute priority regional and continental projects enshrined in Agenda with the aim of accelerating regional integration so as to achieve the Africa We Want



Undertake the full range of resource mobilization





 **Need To harness Emerging Technologies**

 **First focus was on gene drives for control and elimination of malaria**

 **Genome Editing Technologies**

 **Member states requested capacity strengthening in Genome Editing**

Political will expressed through the need to harness Emerging technologies....Gene Drive and Genome Editing

- All 55 AU member states requested for trainings on Genome Editing, development of regulatory guidance tool
- Regional and continental approach is needed in ***developing a harmonized policy on genome editing***



Training on Genome Editing and Constitution of the AU-Biosafety Regulators Forum (June 2019)

Workshop on Genome Editing

01

**Attended by 31 AU
Members States, 61
Participants**

**Follow on Training in
Nigeria**

02

**Science-Based approach
to Regulation Genome
Editing**

**Training in Eswatini
and Malawi**

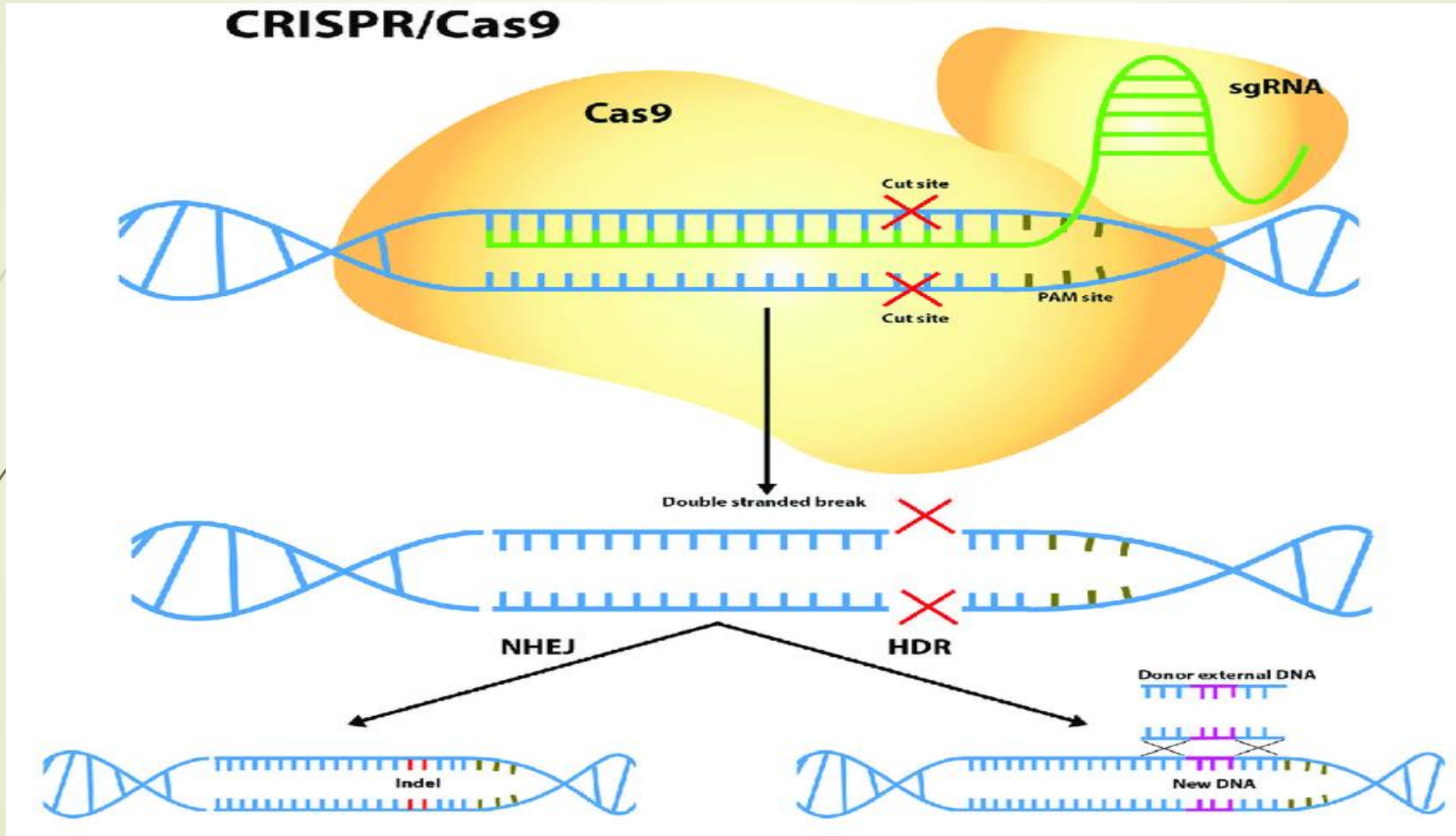
Biosafety landscape

Focus countries

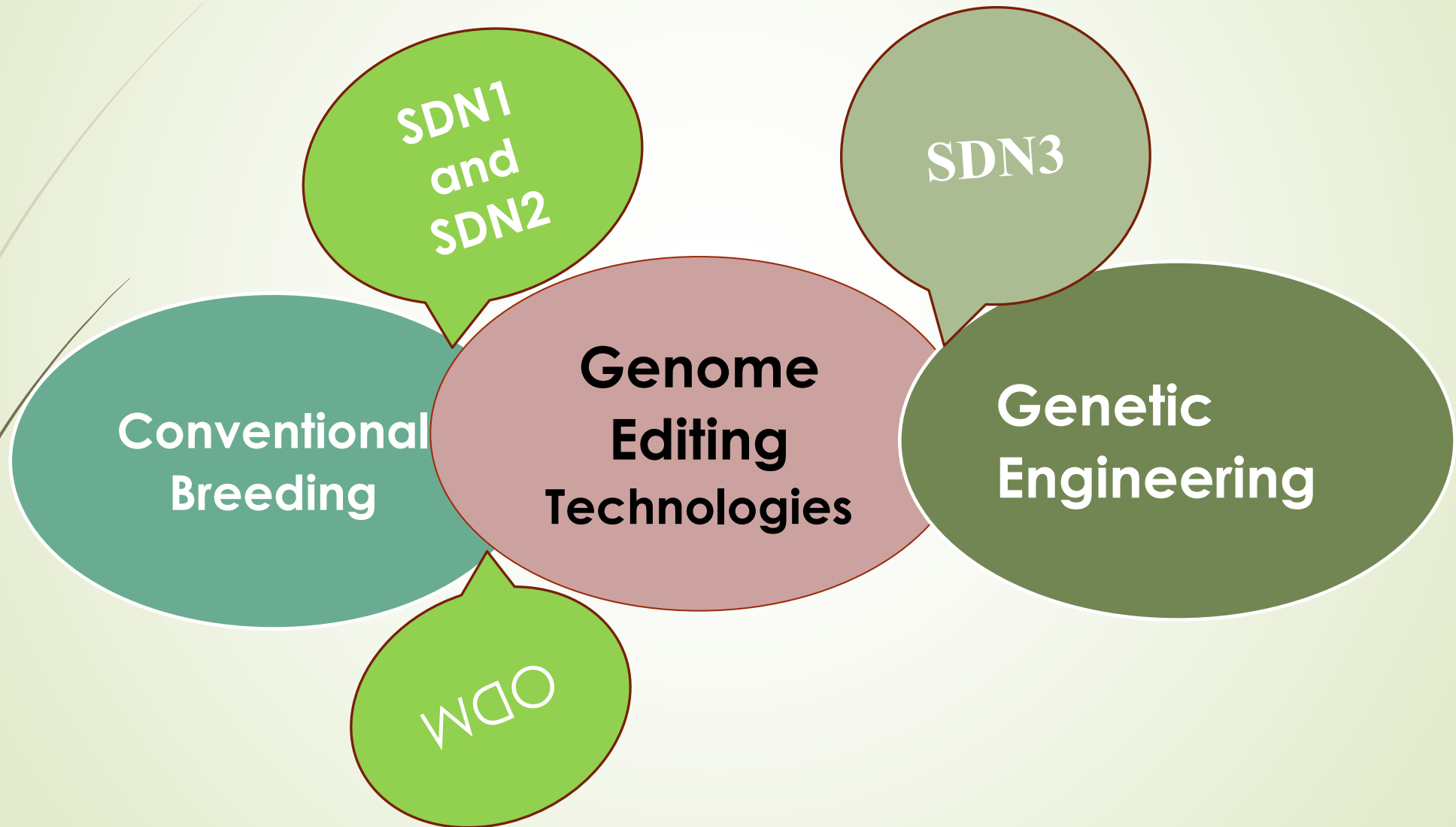
- East Africa**
- 1. Ethiopia
- 2. Kenya
- 3. Uganda
- 4. Rwanda
- 5. Tanzania
- 6. Sudan
- West Africa**
- 1. Burkina
- 2. Côte d'Ivoire
- 3. Ghana
- 4. Mali
- 5. Niger
- 6. Nigeria
- Southern Africa**
- 1. eSwatini
- 2. Malawi
- 3. Mozambique
- 4. Namibia
- 5. Sudan
- 6. Zambia
- 7. Zimbabwe
- Central Africa**
- 1. Cameroon



Science Based Approach????



RELATIONSHIP IN FOUR APPROACHES



Africa Union Panel of Experts on Emerging Technologies

- APET- technical documentation on the science and regulation of genome editing technologies
- Specifically guidance on the regulation of genome editing- site directed nucleases (SDN) based
 - CRISPR and Cas associated proteins,
 - Zinc Finger Nucleases (ZFNs),
 - Meganucleases also called Homing Endonucleases
 - Transcription- Activator Like-Effector Nucleases (TALENS)
- Oligonucleotide DNA Mutagenesis ODM.
- This documents will serve a baseline for Africa Union Member States to develop sovereign regulatory frameworks to regulate the science of genomic editing in their specific countries.

Conclusions and Observations

- Africa Policy support use of Science Technology and Innovation for Social economic development
- Animal, Health, Crop and Industry
- Emerging Technologies including Genome Editing
- Will be developing a Policy for member States on Genome editing
- Acknowledgments-Sam Timpo, Moussa Savadogo, Jeremy Ouedraogo, Sunday Akile, Jean Kebere, Wolde Sinebo- MSU Team Karim Maredia, Ruth Mbabazi