

6TH AFRICAN

ANIMAL WELFARE CONFERENCE

31ST OCTOBER - 2ND NOVEMBER 2022

**TRAVELODGE HOTEL,
GABORONE, BOTSWANA**

THEME:
ANIMALS, PEOPLE AND
THE ENVIRONMENT
IN A RAPIDLY CHANGING
21ST CENTURY.

SUB -THEME:
TECHNOLOGY, EDUCATION,
INNOVATION AND RESEARCH

TOPIC OF PRESENTATION

**BUILDING HUMAN CAPACITY IN RESEARCH ANIMAL SCIENCES,
WELFARE AND ETHICS ACROSS AFRICA: PAN-AFRICAN NETWORK FOR
LABORATORY ANIMAL SCIENCE AND ETHICS (PAN-LASE)**

BY

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Introduction / Preamble

- It is important to start with the statement that Great strides and development in almost every area of humanity has been driven by research over the years (Kantiyok, J. 2019).
- The greatest impact have evolved from scientific/biomedical research with the use of animals.
- These animals are used in scientific (medical and Veterinary) Research to:-
 - * Investigate the progression of known disease: new infections.
 - * Test new drugs and vaccines.
 - * Test new surgical techniques.
 - * Carry out toxicity studies.
 - * Cosmetic research to test for allergic reaction (Taiwo, V. O. 2017).
- The benefits from the use of animals in research have among others led to:
 - * Development of new vaccines / medicines.
 - * Development of successful transplant procedures.
 - * Major medical advances.
- Animal welfare have become a critical and important subject in the use of animals in research not only for the sustainability and livability of animals but for the quality of research.

- The Development of animal welfare strategies/principles for animals used in research became necessary. To ensure humane treatment to animals.
- In line with the above, in the 1950s while working with University Federation for Animal Welfare William Russell and Rex Burch developed the concept of the 3Rs- Replacement, Reduction and Refinement contained in their seminar book Principle of Humane Experimental Techniques. (Ufaw.Org).
- The 3Rs principles have been broadly accepted as the framework under which animal research should be conducted.
- The 3Rs principles presents three ways to lessen the impact of scientific research in Animals.

2. Animal Welfare in Scientific Research

- Globally many organizations / institutions are in the forefront of advocating for animals to live free from any form of human exploitation and abuse including the use of animals in research.
- The success of the 3Rs principle and other welfare strategy in animal research is facilitated by the establishment of Institutional Animal Care Use Committee (IACUC) or Animal Ethics Committee (AEC).

- The IACUC or AEC is the body responsible for approving and monitoring the research in line with rules, guidelines and laws governing animal use in research.
- Legislations/laws where available and applied strengthens animal welfare compliance and delivery of quality research that will be acceptable.
- Today some international Journals/Publishers only accept papers from researches/studies that went through IACUC or AECs.
- Thus the increasing need for Animal Research Legislations / Laws to ensure ethical and acceptable research / studies are conducted.

3. Animal Welfare Standards in Research

- Legislations / polices are made based on standards set.
- Animal welfare standards setting is done by the OIE as agreed by member countries.
- The Office International des Epizooties (OIE) was created through International agreement signed on January 25th, 1924. The office was later named World Organization for Animal Health (WOAH) in May 2003 and recently adopted for use.

- It is made up of 182 member countries (2018) and was created based on the need to fight global disease at global level.
- Maintains permanent relations with nearly 75 other international and regional organizations. It has regional and sub-regional offices.
- The organization developed and adopted the “OIE Global Animal Welfare Strategy” in 2017, after the 4th OIE Animal Welfare Conference in 2016.
- One of the focus of the strategy is Development of International standards on animal welfare, in consultation with member countries and key international stakeholders.
- It was developed to achieve: A world where the welfare of animals is respected, promoted and advanced in ways that complement the pursuit of **animal health, human well-being, socio-economic development and environmental sustainability.**
- The OIE terrestrial code and aquatic code contain the work on animal welfare regarding animals in terrestrial environment and aquatic environment respectively .

- For Animal use in research the 3Rs principle is the main framework for animal welfare as enshrined in the OIE terrestrial code.
- According to OIE Terrestrial Code, Animal Welfare means the physical and mental state of an animal in relation to the conditions in which it lives and dies.
- The OIE developed five freedoms in 1965 as the guiding principles for conditions terrestrial animals should experience under human control.
- They include: freedom from hunger, malnutrition and thirst; freedom from fear and distress; freedom from heat stress and physical discomfort; freedom from pain, injury and disease and freedom to express normal patterns of behavior.
- The animal welfare standards set for use of animals in research are the basis for Animal Research Legislations or policies in member countries. The OIE standards are taken as minimum standard.

4. Background to Formation of PAN-LASE

- In Africa animals are commonly used for scientific and medical purposes (research), in a search of solutions to challenges in the continent.
- These include prevention and treatment of diseases, food safety and security, climate change, nature conservation etc.
- There are none or limited opportunities available for education and training in animal welfare and laboratory animal science (LAS) in many African countries.
- The governance framework for the care and use of animals for research purposes are variable.
- Some African countries have legislations or standards while others broadly lack laws, standard or guidelines for care and use of animals for experiments.

- In many countries and regions of Africa, political instability, corruption, disease, food insecurity or other resource constraints are responsible for low level priority given to education and training especially in animal welfare and ethics.
- Recognizing the gaps/issues above African LAS associations in liaising/collaboration with international associations /institutions.
- Created community of practice to promote standards for the care and use of animals for scientific and medical purposes by hosting national or regional education and training events.
- The African LAS associations include South African Association of Laboratory Science (SAALAS), Tunisia Association of LAS (ATLAS), Animal Care and Use in Research, Education and testing (ACURET), West African Association for Laboratory Animal Science (WAALAS) among others.
- The international institution - International Council for Laboratory Animal (ICLAS) and it's regional committee for Africa served as the International resource/link to the African Associations.
- A collective decision by the above African Associations, ICLAS and other stakeholders was taken to form Pan-African Network for laboratory Animal Science and Ethics (PAN-LASE)

- To start a support network for the development and provision of education and training in LAS and ethics in the African continent.

5. Establishment of PAN-LASE

- PAN-LASE was formally established on 3rd November, 2017 as part of the programme of the International Conference jointly convened between SAALAS and ICLAS in Stellenbosch, South Africa.
- Theme of the conference: **“One Africa, One World”** signified Unity among African countries; Unity between Africa and the global community: collaboration towards the common good and harmonization of standards.
- A total of 143 delegates from 23 countries attended the conference.
- The outcome of the conference was the unanimous decision among partners that individual associations or institutions in Africa would be empowered through membership of the collaborative partnership with expertise, resources and intervention, in line with agreed priorities/objectives of the network through the stages of their development.

6. Agreed priorities/Objectives of PAN-LASE

- To create accessible, sustainable, Africa-centric education, training and life long opportunities for all persons involved in the care and use of research animals across Africa, including scientist, animal caretakers, animal facility staff, technicians, veterinarians and animal ethics committees.
- To promote good practices in the care and use of research animals and enhance the welfare of such animal across Africa.
- Establish and enhance sound ethical review and approval systems for the care and use of research animals (for science and medical purposes). Including establishment of Animal Ethics Committees across Africa.
- Support/promote the development of appropriate governance systems for animal care and use for scientific and medical purposes including regulations, standards and policies.
- Establish Africa-regional communities of practice to share good practice, experience, resources, provide mentorship and to support colleagues, institutions and associations across the region.

- Empower the African research community to be better equipped to undertake world-class research and provide solutions for complex African challenges especially in health care.

7. **PAN-LASE collaborative Pan-African Educational Activities and Partnership**

- Funding is a major challenge in educational development and delivery in resource-constrained regions like Africa.
- The network was able to get funding in partnership with some organizations in the past years to carry out educational activities across Africa.
- Some of the institutions or organizations that supported include University of Leeds, United Kingdom Research and Innovation (UKRI), Higher Education Funding Council for England (HEFCE), Biotechnology and Biological Sciences Research Council (BBSRC).
- PAN-LASE in collaborative partnership with local associations, institutions, regulatory bodies, animal welfare organizations co-created and co-delivered educational activities in Seven African countries.
- The Seven African countries include Egypt, Kenya, Nigeria, Algeria, South Africa, Tunisia and Uganda.

- Education and training were tailored need according to the region or country, since regions or countries are at different level of development.
- Local educators and leaders used for trainings expanded credibility and trust.
- Participants at the education and training opportunities on LAS and ethics created and delivered in Africa by PAN-LASE partners since establishment in 2017 total 3367 persons. Distributed as follows:

From Low - and middle - income African Countries	-	3260
From Low and middle - income Non-African Countries	-	25
From High-income countries	-	82
Total	-	3367

Table 1: Showing Total Number of Education and Training Activity carried out , Total Number of Days, and Total number of Participants in each country in Africa.

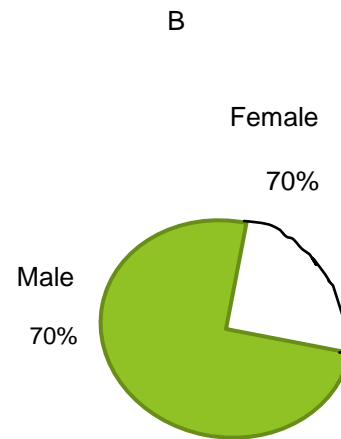
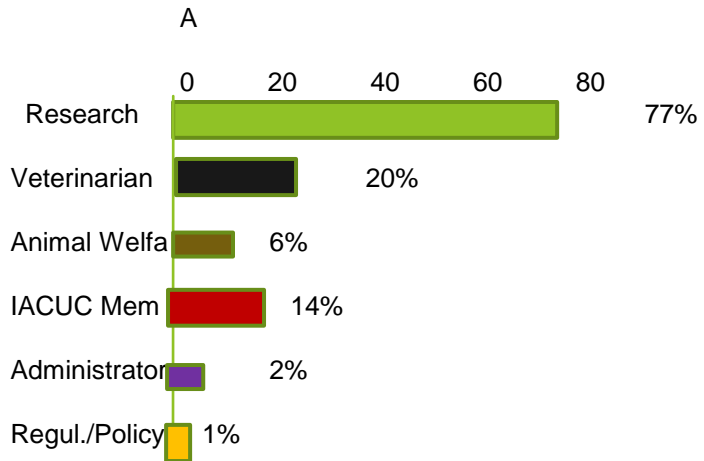
Country	Total No. of Education Activity	Total no. of days	Educational Approach	Total No. of Participants
South Africa	17 (2017-2022)	56.5 days	Active learning, experiential	1,223
Tunisia	4 (2019-2022)	14days	Digital hybrid, active learning, experiential	357
Egypt	5 (2017-2022)	44days	In-person, digital, active learning, experiential	683
Uganda	2 (2021)	5days	Digital, active learning.	256
Nigeria	2 (2019, 2021)	9days	Hybrid, active learning, experiential in-person(2021)	438
Kenya	1 (2021)	2days	Hybrid, active learning.	110
Algeria	6 (2017-2022)	17days	In-person, digital, active learning, experiential	300
Total	37	147.5days	-	3,367

Table 2: Showing Total Number of PAN-LASE Education and Training Activity, Total Number of African and other Participants between 2017-2022 across Africa.

Year	Total No. of Education and Training Activity	Total No. of African Participants	Total No. of other Participants
2017	5	284	29
2018	6	469	9
2019	8	560	25
2020	3	95	0
2021	9	1342	30
2022	6	510	14
Total	37	3260	107

8. Analysis of Reach

- 1025 participants from 19 countries (15 African)



9. “Guidelines for the Establishment and Functioning of Animal Ethics Committees (Institutional Animal Care and Use Committee) in Africa”

- The lack of ethical review processes and structure in many parts of Africa has affected good practice in LAS, animal welfare and ethics.
- To rectify the above, PAN-LASE brought together 32 African experts from 12 African Countries in a workshop at the Ecole Nationale de medicine Vet. De sidi Thabet Tunisia in 2019.
- Delegates shared experiences and expertise from across Africa to co-create the “guidelines above”.
- Guidelines were produced based on the following considerations:
 - a. Existing legal frameworks, standards and policies relating to care and use of animals for scientific purpose in Africa.
 - b. The cultural, religious, political and socio-economic diversity in Africa.
 - c. References to relevant aspects of international recommendations.

10. Challenges Encountered

- Lack of Africa led and Africa - centric educational resources.
- Lack of priority to animal welfare and research animal sciences related education and training in Africa.
- Funding and sustainability.
- Weak governance frameworks.
- Weak ethical review systems.
- Africa is a vast continent, resource constrained, with significant distances between institutions. Thus travel challenge to educational intervention.
- Awareness, attitudes and behavior, due to differences in culture, language and religion.
- Information technology.
- Different stages in journey / development.

11. Positive Results/Outlook from Activities of PAN-LASE

- Many trainers are trained in LAS and ethics to continue with training of indigenous professionals or stakeholders in the care and use of animals.
- Facilitating the introduction of robust ethical review processes in research animals.
- Enhancing animal welfare and quality of research from African researchers.
- Global recognition and acceptance of outcomes of research from Africa for publication in international journals.

- Increase in the community of practice with more associations and institutions involved within regions sub-region and country.

The challenges, successes and the lessons learnt from PAN-LASE journey are applicable to other Low-and middle-Income Countries (LMICS) across the world seeking to enhance animal welfare and ethics in their own country or region.

12. The Way Forward

- So far PAN-LASE have successfully created and delivered a portfolio of educational opportunities in seven African Countries.
- In those countries there is wider community of colleagues equipped with knowledge, expertise and educational resources to deliver these interventions in their countries and networks.
- There is however gaps in provision to other countries across the continent.
- The way forward to fill the gaps and meet the objectives of PAN-LASE include:
 - a. Expanding provision: Stakeholders, regions and life-long learning. **Partnership / Collab. with AU-IBAR.**

- b. Entrench ethical review processes.
- c. Co-creation of sustainable, predominantly online/blended, Africa centric education, training and life-long-learning opportunities.
- d. Broaden stakeholder base and partnerships.
- e. Building national, regional and Pan-Africa communities of practice.
- f. Approval and implementation and partnership with relevant professional bodies, statutory regulatory bodies, institutions and government agencies.
- g. Design in sustainability and growth.
- i. Formalization of network / associations.

13. **Appreciation:**

- * Partners
- * Participants
- * Institutions
- * Professional, regulatory and Statutory Bodies
- * Critical Friends
- * Funders
- * AU-IBAR
- * ANAW / AAWC Participants

14. **Your Thoughts and Reflections**

- * Any comments on way forward?
- * Any other Suggestions?
- * Any potential solutions?
- * Want to be involved in any aspect?

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Thank you

Commemoration of World Rabies Day: One Health Zero Death. Flag-off of Free Anti-Rabies Vaccination By HRH Dr Josiah T. Kantiyok at Zonal Veterinary Office within Zikpak (Fantswam) Chiefdom Traditional Community, Kaduna State, Nigeria on October,8, 2022.

