



COMMUNIQUÉ/ PRESS RELEASE

**“Assessment of Animal Genetic Resources
Characterization, Inventory and Monitoring
tools/protocols to guide revision and
harmonization processes”**

25 - 27 September 2014

Giraffe Ocean View Hotel - Dar-es-Salaam, Tanzania

INTRODUCTION

1. The African Union - Inter African Bureau for Animal Resources (AU-IBAR) organized from 25th - 27th September 2014, a workshop, focusing on *the “Assessment of Animal Genetic Resources Characterization, Inventory and Monitoring tools/protocols to guide revision and harmonization processes”*.
2. The workshop was organized in the framework of the implementation of the Project *“Strengthening the Capacity of African Countries to Conservation and Sustainable Utilization of African Animal Genetic Resources”*.
3. The workshop aimed at:
 - i) Assessing the existing characterization and inventory tools/protocols.
 - ii) Designing a strategy to improve the utilization of the existing characterization and inventory tools/protocols.
 - iii) Identify key actors and outline their roles and responsibilities.

The meeting was attended by participants drawn from 22 African countries (Algeria, Burkina Faso, Burundi, Cameroun, Democratic Republic of Congo, Egypt, Republic of Central Africa, The Gambia, Ghana, Gabon, Cote d'Ivoire, Kenya, Nigeria, Uganda, Togo, Tunisia, Tanzania, Malawi, Rwanda, Senegal, Sudan, and South Africa). The participants mainly comprised of technical experts stationed in livestock ministries, National, Regional and International research and training organizations/institutions. These included CIRDES, ILRI, BecA, NAGRC&DB, KALRO, ITRA, ISRA/LNERV, APRI, NARO, ARC-API, South Africa, Rwanda Agriculture Board, the Nelson-Mandela African Institute of Science and Technology “NM-AIST” of Tanzania, University of Tlemcen, Algeria, Nassarawa State University of Nigeria, University of Burundi, University of Koudougou, Burkina Faso, University of Dschang, Cameroon, University of Ghana, University of Education, Winneba, Ghana, Makerere University, Uganda, ESA de Mateur - University of Carthage, Tunisia, University Félix HOUPHOUËT-BOIGNY, Côte d'Ivoire;).

4. The opening ceremony was chaired by Dr N'Guetta Bosso, Technical Assistant for the Genetics Project, representing the Director of AU-IBAR. In his welcome remarks Dr Bosso, on behalf of the director of AU-IBAR, extended sincere greetings to all participants to the Workshop. He further extended special thanks and appreciation to the government of the United Republic of Tanzania for accepting to be the host of this workshop. He noted that worldwide efforts are being made to conserve and use genetic resources in a sustainable way and AU-IBAR, has also engaged in the field of sustainable utilization of genetic resources which includes conservation. He emphasized on the knowledge gap in characterization, inventory and monitoring, especially of African AnGR and recalled the objectives of the workshop. He mentioned that it would provide a practical platform to undertake a thorough assessment on the degree of adoption of the existing FAO guidelines. He ended wishing a constructive participation and the adoption of the best possible roadmap for the development of tools/protocols.
5. Dr. Yohana Budeba, Acting Permanent Secretary to the Ministry of Livestock and Fisheries Development, welcomed the participants to the workshop. Dr. Budeba on behalf of the Minister of Livestock and Fisheries Development, Dr. Titus Mlengeya Kamani, He extended a warm welcome to all the participants to the workshop and the appreciation for having chosen Tanzania to host the workshop. He noted the significant contributions of livestock to food security, livelihoods and as a key driver of wealth creation and economic development in many African countries. Despite these contributions, budgetary allocations to the sector continue to be relatively low compared with other sectors. One of the major reasons for this is the lack of information and appreciation of these valuable Animal Genetic Resources, particularly by policy and

decision makers, and especially their contribution to national economies. He mentioned that characterization, surveying and monitoring are key elements in the development of effective AnGR utilization and management plans. He hoped that the deliberations will contribute to improvements in the records and information on the unique and invaluable animal genetic resources Africa is endowed with. He affirmed the commitment of the Federal Republic of Tanzania and took the opportunity to express sincere gratitude to AU-IBAR for its support. He concluded by declaring the workshop opened and wished success in the deliberations.

6. In the process of the workshop, the following series of presentations were made in plenary:
 - a) Overview on Characterization tools especially Phenotypic tools by Dr. Mwai Okeyo (ILRI) and Molecular genetic tools by Dr. Charles Dayo (CIRDES) and Prof. Morris Agaba (BeCA).
 - b) The outcomes from e-discussions regarding
 - i) the assessments of characterization, Inventory and Monitoring tools/protocols;
 - ii) the proposed approaches to improve utilization of Characterization, Inventory and Monitoring tools/protocols tools, by Dr. Mary Mbole-kariuki (AU-IBAR)
 - c) An Introductory overview on Inventory and monitoring tools/protocols by Dr. Abdulmojeed Yakubu (Nassarawa State University - Nigeria).
7. The presentations were followed by in-depth group discussions focussing on the following topics:
 - a) Assessment of strengths, weaknesses, opportunities and threats (SWOT) of characterization and inventory tools
 - b) Identification of most appropriate AnGR tools for Africa and establishment of suitable approaches to improve utilization of the selected tools within the continent.
 - c) Development of a Roadmap, identifying key actors and their roles in the implementation of the road map.

OUTCOMES OF THE WORKSHOP:

1. *Identification of the most suitable tools for use in Africa:*

The participants identified the following tools as the most appropriate for use in the continent:

- For the Phenotypic characterization: A concise and combined version of phenotypic descriptor lists and Production Environment descriptors - PEDs. This encompassed capturing data on five key categories/aspects - Environmental traits, Morphometric traits, Quantitative traits, Socio-economic traits, Adaptive traits and Indigenous knowledge. In addition, collection of various biological samples.
- For the Molecular characterization: SNPs were mostly recommended, though the use of Single Strand Repeats -SSRs may be used as basic bio-technology training tools. Projections were made towards participating in Next generation sequencing through consortia.

- For Inventory and Monitoring: Livestock surveys were recommended versus census due to the continued lack of financial capacities within member states.
- Standardized formats of Photographing and coding were agreed upon.

2. *The Priority areas of improvement on the appropriate tools for use in Africa*

The participants also suggested adaption and adjustment of critical areas on the tools to improve their utilisation. The improvement focused on the following points, for each of the selected/identified tools:

- For Phenotypic characterization tools, a range of 5 key data collection areas were identified and agreed upon;
- Regarding the identified molecular tools, suggestions were rather in regards to identifying specific steps to be implemented at national level and those to be carried out at identified centres of excellence cum Regional facilities e.g BeCA, CIRDES.
- For Inventory and Monitoring tools, participants agreed to embrace livestock surveys as the preferred inventory tools. This would involve the random counts of livestock across selected areas in respective countries. It was proposed that member states should capitalization on the devolved government systems as a means to easy data collection and inventory.

3. *A Roadmap developed, identifying key actors and their roles in its implementation*

The participants after deliberations within the working groups developed a road map for implementing the actions identified to guide revision and harmonisation processes. The actors, institutions and timelines were outlined.

The key steps identified included:

- Compilation of the First draft - this involves harmonization of the different key areas of data to be collected as discussed across the three working groups and synchronization of photography and coding formats. These activities will be undertaken by AU-IBAR, ILRI, BeCA, FAO, CIRDES and TAG (Taxonomy Advisory Groups) and completed by end of February 2015.
- Raising awareness Campaigns on the tools under revision. All stakeholders and implementing partners will actively sensitize the member states throughout the activity's life span.
- Revision and refinement of first draft - All stakeholders will share their inputs and the action completed by March 2015.
- Training for enumerators in selected countries. This will be undertaken by AU-IBAR and will be completed by May 2015.
- Piloting the tools and revision through feedback and preliminary data analysis will be undertaken by AU-IBAR and the implementing partners. This action should be achieved by July-August 2015.
- Ratification of the revised characterization and inventory tools by countries and various stakeholders should be completed by November 2015
- Subsequent training of trainers and final roll-out of the tools for extensive use will be achieved in 2016.

4. *The participants expressed their special thanks and appreciation to the Government of Tanzania for the hospitality and the perfect organisation of the workshop.*

5. *Recommendations*

Some recommendations were formulated to effectively sustain the achievements of the workshop:

- a. Regarding the implementation of the Road map, the participants, agreed to:
 - Set-up taxonomy advisory groups these will comprise of specific livestock species expert teams;
 - Identify and establish national and regional financial support mechanisms
 - Align national and sub-regional activities for an improved utilization of the AnGR tools
 - Mainstream and link the application and utilization of these tools to academic curricula through RUFORUM and other relevant institutions.
- b. The participants recommended regularly review and update of tools based on lessons learnt and needs.
- c. Regarding the improved utilization and adoption of the tools, the workshop recommended to ignite National coordinators and sub-regional focal points.
- d. The workshop also recommended that all approaches to promote the use of the tools, should integrate farmers and promote their capacity development.
- e. For an efficient utilization and the promotion of the tools, the workshop recommended:
 - A mutualization of resources (technical and human) on the continent;
 - The establishment of regional projects involving transboundary breeds.

6. *Way forward*

As way forward, the following actions were pointed:

- The Workshop report to be finalised and circulated within two weeks,
- The workshop communique (French and English) to be finalised and circulated within two weeks,
- The roadmap to be implemented as soon as possible.

Dar-es-Salaam, 27th September 2014.

