

***Experts Consultation Meeting on
“The movement and exchange of animal genetic
materials and implementation of the Nagoya
protocol on ABS in Africa”
20 - 22 April 2015
Cotonou, Benin***



**AFRICAN UNION
INTERAFRICAN BUREAU
FOR ANIMAL RESOURCES**



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“The movement and exchange of animal genetic
materials and implementation of the Nagoya
Protocol on ABS in Africa”**

**Hôtel du Lac
20 - 22 April 2015
Cotonou, Benin**

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Acronyms

ABS	Access and Benefit Sharing
AgBD	Agricultural bio-diversity
AMCEN	African Ministerial Conference on Environment
AnGR	Animal genetic resources for food and agriculture
APA	Partage des Avantages issus de l'exploitation des ressources génétiques
ARFP	African Regional Focal Point for Animal Genetic Resources
AU	African Union
AUC	African Union Commission
AU-IBAR	Inter-African Bureau for Animal Resources
BCP	Bio-cultural Community Protocols
CBD	Convention on Biological Diversity
CGRFA	Commission on Genetic Resources for Food and Agriculture
COMIFAC	Commission des Forêts d'Afrique Centrale
COP	Conference of the Parties
DREA	Department of Research and Environmental Affairs
ECOWAS	Economic Community Of West African States
ERFP	European Regional Focal Point
EU	European Union
FAO	Food and Agriculture Organization
GEF/UNEP	Global Environment Facility/United Nations Development Programme
GIZ	Gesellschaft für Internationale Zusammenarbeit
GPA	Global Plan of Action
GRFA	Genetic Resources for Food and Agriculture
GRTKF	Genetic Resources, Traditional Knowledge and Folklore
IGC	Intergovernmental Committee
IIN	Indigenous Information Network
ILC	Indigenous and Local Communities
ILRI	International Livestock Research Institute
INRAB	Institut National des Recherches Agricoles du Bénin
IPR	Intellectual property rights
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
ITWGs	Intergovernmental Technical Working Groups
LPPELD	League for Pastoral Peoples and Endogenous Livestock Development
LTTE-ABS	Team of Technical and Legal Experts on Access and Benefit-sharing
MTA	Material Transfer Agreement
MS	Member States
NBSAP	National Biodiversity Strategies and Action Plans
NFP	National Focal Point
NGO	Non-governmental organization
OAU	Organization of African Unity
OIE	World Organization for Animal Health
PIC	Prior Informed Consent
RECs	Regional Economic Communities

REDD	Reducing emissions from deforestation and forest degradation RGA Ressources Génétiques Animales
TK	Traditional Knowledge
TOT	Training of Trainers Program
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UEMOA	Union Économique et Monétaire Ouest-Africaine
UNFCCC	United Nation Framework Convention on Climate Change
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

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AU-IBAR records its appreciation especially to the facilitator in ensuring the high quality of the discussion and output. Special thanks go to the participants for their substantive contributions and in particular to the presenters of the papers. This greatly helped the Meeting achieve its objectives, thereby producing considerable progress in the process of developing technical standards and protocols (including property rights and benefits sharing) for the exchange and use of genetic materials.

Sincere thanks to the European Union and the African Union Commission for their financial support through this project.

Summary

The Experts consultation meeting on *“The movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa”* took place at Hotel du Lac in Cotonou, Benin from 20 to 22 April 2015. The Experts consultation meeting was attended by participants from seven African countries namely: Cameroon, Benin, Ethiopia, Germany, Kenya, Namibia and Tunisia and from international and regional organizations namely: AUC, FAO, ILRI, ECOWAS; from NGOs namely: League for Pastoral Peoples and Endogenous Livestock Development (LPPELD), Indigenous Information Network (IIN).

The Experts consultation meeting consisted of 2.5 days of plenary where papers were presented by some of the participants. The opening session included the welcome remarks from AU-IBAR and the official opening by the Government of Benin, namely the Permanent Secretary of the Ministry of Agriculture, Livestock and Fisheries.

Participants considered key issues related to the framework for the implementation of the Nagoya protocol in Africa. The meeting was structured around two major themes: 1) Access and benefit sharing on AnGR and 2) Exchange of AnGR materials. Also taking into consideration the fact that the Africa Union has developed a framework for the implementation of the Nagoya protocol the Experts consultation provided a venue for sharing experiences and information and was a forum to further consult and solicit inputs on the framework.

The remainder of the Experts consultation meeting was devoted to Working Groups and their reports to the larger group. The session was concluded with group works on the “Establishment of the Status of the implementation of the Nagoya protocol in Africa: issues, challenges, opportunities and priority actions to fast-track implementation”. Key aspects considered were:

- Perceptions of the Nagoya protocol as an environmental issue-difficult to raise in parliament, hence little focus on animal genetic resources. Animal genetic resource sectors and other subsectors being unaware of the Nagoya protocol on ABS,
- The perception of the conservation sector is that the agriculture/livestock sector is enemy of biodiversity,
- Little awareness is on the implications of the Nagoya protocol on AnGR and the impact of it on ABS to other subsectors e.g compared to medicinal genetic resources,
- Institutional set-up at national level, namely the role of the National Coordinators/Focal Point and the involvement of other subsectors,
- The legislation/signing takes time to be achieved,
- Some African countries see no need to pass legislation; rather they can use existing legislation or regulations e.g legislation for protected areas etc,
- People working in the livestock sector have no knowledge and no training that focussed on genetics and improvement,
- The Nagoya Protocol itself is a mystery, animal resources people are not aware that AnGR is part of the Nagoya Protocol,
- In most African countries, pastoralists are the ones managing breeding system with little support from the government officers,
- Many actors and departments are involved in the management but do not communicate (Cameroon: aqua - Benin: CBD, APA, Phyto-genetic (INRAB)),
- Focal Points are considered as a subsidiary activity associated with a malfunction,

- Lack of legal instrument governing the management of AnGR,
- Human Resources: lack of legal experts on ABS,
- Lack of inventory (with quantification) of AnGR,
- Capacity building.

The third session was also concluded with group works on the “Identification of the technical standards, legislation or regulatory requirements for the exchange and movement of genetic materials” and “Identification of the issues to be considered for Access to genetic material”. Key aspects considered were:

- Utilization: Why do users want the genetic material?
- Compliance: is utilization defined in the national legislation and the protocol?
- What are the potential benefits offered?
- What are the capability statement-Competence criteria?
- What are the existing exclusive accesses to other user?
- Confidentiality about the access,
- Database/tracking system to allow identification of non-compliance. Establishment of a clearing house e.g National Council for Science and technology (Uganda),
- Ownership of the resource (State/Community): Resource under community who have right to grant access and deny access,
- Trans-boundary access-multiple sources of access of the genetic material.

The two Working Groups addressed both themes of the Experts Consultation Meeting, concentrating on issues generated from the presentations and discussions following the presentations.

The Focus Session was devoted to discussing the movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa. During the discussions, a number of activities were identified in priority order to achieve some of the aspects of the movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa, and others in order to fill in the gaps of knowledge that exist. In addition to the information generated from the sessions described above, meeting minutes were taken and a committee was put in place to draft a message to be sent to all ABS National Focal Points and AnGR National Focal Points in all the AU Members States (including those that have ratified the Nagoya Protocol).

This document summarizes the discussions that took place during the Experts Consultation Meeting. The Agenda are attached in Annex 1. The list of participants is attached in Annex 2.

General observations and recommendations

This report includes a priority list of recommendations which were discussed both by the entire gathering and in Working Groups.

- Creating awareness on the need of mainstreaming AnGR issues in ongoing discussions/initiatives on ABS,

- Develop adapted awareness and sensitisation tools/ materials on ABS for local communities' involvement and ownership of the ABS issues,
- Best practices, experiences and lessons learned on ABS, MTA or other contractual issues to be collected and disseminated,
- Develop regional action plans/strategies to implement ABS at regional level,
- Within the regional action plan, organise joint capacity building activities for both ABS National Focal Points and AnGR National Focal points,
- Fast track the implementation of AU guidelines and monitor its implementation,
- Develop policies and agreements (MTA template) related to the exchange of genetic materials and ABS,
- Pilot the BCP (Bio-cultural Community Protocols) in pastoral areas of West Africa and explore the opportunities of expansion on the Continent including providing guidelines for such process.

Introduction and Background

The main challenge for sustainable development in the 21st Century is poverty reduction. Millions of people depend on biological (genetic) resources and traditional knowledge for their livelihoods. While the concept of an access and benefit sharing (ABS) regime is new, access to biological resources and transfer of associated traditional knowledge is centuries old. ABS regimes facilitate access, thereby increasing the use of biological resources and associated traditional knowledge, while ensuring that the benefits are shared with the traditional owners. Given the abundant biological resources found, ABS can be an effective tool for poverty reduction.

Africa is rich in biodiversity and is regarded as one of the most biologically diverse region of the world. Africa has a relatively sound knowledge of its resources, adequate scientific capacity and infrastructure, and vast and managed protected areas. Genetic resources from Africa have to a very high degree been exposed to ‘piracy’ by multinational corporations, companies and traders with subsequently little if any benefits having reached the local communities, which are the custodians of these resources and the associated traditional knowledge. Generally the livestock industry has for decades made extensive use of genetic resources from Africa, and partly due to the absence of a continental legal regime/legislative framework on access and benefit-sharing (ABS). However, Africa is now drafting legislations that will fill this vacuum.

Some observers have argued that changes in the legal, technological, and economic environment now imply that international exchanges of animal genetic resources (AnGR) systematically benefit rich countries at the expense of poor countries. Throughout history, livestock producers have relied on a vibrant international exchange of genetic resources to achieve improvements in the quality and productivity of their animals. Today, development and use of biotechnology, especially reproduction biotechnology in the past, and breeding methods, for example genomic selection in the future, result in accelerating generation intervals and selection intensities; although there are differences between species and breeds they generally tend to increase gene flow. Zoo-sanitary regulation, animal welfare considerations, freight costs, and exchange and inflation rates have become major restrictions of gene flow, affecting importing and exporting parties differently.

The high level of breeding and trade organization in developed countries gives them a considerable advantage over developing countries in exploiting and spreading their genetic resources. Most flows of genetic material originate from developed countries and occur among developed countries, most of which are without zoo-sanitary restrictions, and involve animals suited to high-input production systems. However, when expressed as a proportion of all global trade in livestock genetic material, the share moving from developed to developing countries increased from 20% in 1995 to 30% in 2005. Gene flow originates from developing countries in rare cases where unique genetic resources with desired traits or genes exist independent of the level of breeding organization. It is argued that international flows of AnGR are displacing the indigenous animal genetic resources of developing countries, and also that the genetic wealth of the developing world is being expropriated by rich countries. Given the low volume of South–North exchange, it seems doubtful that sufficient revenues could be acquired through a “benefit-sharing mechanism” to have any substantial impact on in situ or ex situ conservation efforts, or to generate benefits for poor livestock keepers in developing countries.

The topic of access to genetic resources and benefit-sharing was brought to the global negotiation table in 1992 at the Earth Summit in Rio, but only at the COP 10 of the Convention on Biological Diversity (CBD) in October 2012 in Japan, was a protocol adopted: the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from the utilization of the Genetic Resources. The Convention on Biological Diversity is an international treaty that provides national governments with sovereign rights over genetic resources and associated traditional knowledge. The aim of the CBD is to ensure that countries receive a fair share of the

benefits from their biological resources and traditional knowledge in return for conserving and allowing access to these resources. The Nagoya Protocol has a broad scope with many overlaps with other international regimes such as the United Nations Food and Agriculture Organization's Commission on Genetic Resources for Food and Agriculture, the International Treaty on Plant Genetic Resources for Food and Agriculture, also under the umbrella of the FAO. The Nagoya Protocol has the objective for "the fair and equitable sharing of the benefits arising from the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding, thereby contributing to the conservation of biological diversity and the sustainable use of its components"

The legal concept of benefit sharing is relevant in other international processes, outside the framework of the CBD and other biodiversity-related conventions. These include negotiations on the relationship between the CBD and the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO); the protection of genetic resources, traditional knowledge and traditional cultural expressions in the framework of the Intergovernmental Committee (IGC) on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (GRTKF) of the World Intellectual Property Organization (WIPO); the framework for sharing influenza viruses and access to vaccines and other benefits under the World Health Organization (WHO); and reducing emissions from deforestation, forest degradation, sustainable forest management, forest conservation and enhancement of carbon stocks (REDD-plus) under the UN Framework Convention on Climate Change (UNFCCC).

There has been a significant evolution of the use of the legal concept of benefit sharing in the context of the Convention on Biological Diversity (CBD) and its contribution to indigenous and local communities' livelihoods. In particular, according to the text of the Convention and the decisions of its Conference of the Parties (COP), the concept of benefit sharing has been evolving not only in relation to the use of genetic resources, but also, with remarkably different legal connotations, in relation to the conservation and sustainable use of biodiversity.

The initiatives leading to the Protocol on ABS does not only come from Indigenous Peoples organizations and a number of national governments but also from global companies, who are seeing the benefits from a regulated regime that will reduce piracy and outright theft of genetic resources. Also, increasing consumer awareness of fair trade conditions has translated into policies of responsible companies to include transparency in trade with genetic resources, hence creating a shared interest between the private sector and national government/local communities. There are no formal estimates of the economic benefits of biological resources and traditional knowledge in Africa, but they are likely to be substantial. It should be noted that although much has been written on how benefit-sharing should work, most countries lack the scientific expertise to determine limits for the sustainable use of their resources. In 1998, the World Wildlife Fund for Nature (WWF) examined the experiences of ten countries and discovered that many of them were experiencing problems in developing and/or implementing a legislative framework for access to genetic resources and benefit-sharing.

Given the predominant North-South gene flow, benefits potentially arising from the use of genetic resources accessed from the South may not be sufficient to encourage breed conservation in the South. Other measures may need to be explored to encourage these breeds' conservation and sustainable use. As intensive production based on few trans-boundary breeds continues to supply the bulk of global production, and the threat of extinction for local breeds increases particularly in regions of fast structural change, defensive measures to reduce gene flow related threats to genetic diversity may be more appropriate. The usefulness and applicability of market-based tools such as a levy on international movement of animal genetic material to support developing-country

communities, breeding associations, and breeding and conservation programmes could be investigated.

The biodiversity of animal genetic resources (AnGR) offers opportunities for livestock production to adapt to changing environments, particularly climate change. AnGR have been developed over many years and have also been exchanged or shared among livestock breeders, keepers and other stakeholders. It is important to distinguish the differences between livestock breeders and livestock keepers. These two categories have somewhat different roles as one group represents those who have developed livestock breeds to suit their requirements and environments, while livestock keepers are users as well as custodians on the production side of the developed livestock breeds. This is particularly important on issue where the various stakeholders have different expectations in terms of access and benefit sharing (ABS) as well as IPR on AnGR.

In the past centuries, there was increased movement of AnGR from the North to the South during the colonization of Africa as the colonialists tended to prefer the breeds they were already familiar with in their countries of origin. There has been a lot of crossbreeding with local indigenous breeds resulting in some composite breeds being formed. However, Africa has some breeds with very special traits suited to the environment where they have been bred for centuries. Some of the traits include tolerance to disease, heat, water and nutritional stress. With the increased threat of climate change, it is highly likely that exchanges and sharing of AnGR, particularly those with special traits to withstand or tolerate the adverse effects of climate change, will increase.

There appears to be little recognition in terms of Intellectual Property Rights (IPR) of those livestock breeders who have dedicated so much of their time and energies in the development of these breeds. The trans-boundary nature of AnGR also makes it imperative to have workable systems for the access, equitable sharing and exchange of genetic resources as well as protection of IPR where applicable. This is particularly important where transhumance and trade in AnGR are practiced with animals moving back and forth across national borders as well as globally. According to the Nagoya Protocol, the sharing and exchange of genetic resources shall be based on “mutually agreed terms” between the contracting parties. There is therefore, a need to coordinate the implementation of the Nagoya Protocol in Africa through the development of appropriate guidelines on access, benefit sharing and IPR to assist African Member States in the management of AnGR.

There are some key drivers which will influence trends in sharing, exchange and transfers of AnGR and these include globalization, biotechnology, climate change, emerging diseases and disasters. These drivers are already to a large extent, influencing the movement of AnGR across national, regional and international borders. The World Trade Organization’s agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) allows countries to exempt plants and animals from patentability. However, for plant varieties there is a requirement for an alternative “sui generis” system of IPR protection, but this is not stipulated for animals. This effectively means that the IPR of animal breeders are not as protected as those of their counterparts in plant breeding. Currently, most of the exchanges, especially at local level appear to be based on “gentlemen’s agreements” with no proper protection or acknowledgement to the breeders’ IPR. It is imperative that countries in their regions cooperate and develop collaborative initiatives on AnGR to ensure that there are harmonized and coordinated approaches to the access, sharing and exchange of AnGR to ensure the sustainable utilization and conservation of these valuable resources.

With support from the European Union, AU-IBAR is currently implementing a project "Strengthening the Capacity of African Countries to Conservation and Sustainable Utilization of African Animal Genetic Resources" aiming at strengthening the capacity of African countries and Regional Economic Communities to sustainably use and conserve animal genetic resources (AnGR)

through institutionalizing national and regional policy, legal and technical instruments and implementing actions that will result in judicious exploitation of AnGR in Africa. One of the key result areas of the project is to develop policy frameworks for the sustainable use of AnGR. Accordingly, one of the main specific activities to achieve the goals of this result area is to develop technical standards and protocols (including property rights and benefits sharing) for the exchange and use of genetic materials.

The Project at AU-IBAR is directed towards Access and Benefit Sharing (ABS) in Africa. The Project has embarked in the follow up developments in the Nagoya Protocol implementation at the continental level (meetings, capacity buildings initiatives) in the above regard; the Project is undertaking an assessment of the adoption/implementation of the Nagoya Protocol in African countries since the ratification. The Project is involved in collection of the information and examples illustrating current practices in AnGR trade and exchange/access to better understand potential implications of the Nagoya Protocol in the sector. The other area of work is undertaken on Ex-situ conservation and it focuses on development of Material Transfer Agreements (MTA). The Project is currently establishing a Genebank Network for AnGR. The African Network of Genebanks for AnGR will support the Ex-situ conservation and sustainable use of AnGR in Africa under common terms of agreement. The African Network of Genebank for AnGR will be a platform operating under the umbrella of African Regional Focal Point for Animal Genetic Resources (ARFP) in the area of Ex-situ conservation. In the area of ABS, it aims to facilitate African approach for international cooperation and exchange of AnGR in the context of the implementation of the Nagoya Protocol for Access and Benefit-sharing.

Objectives

The objective of the Experts consultation is to take stock and assess challenges and constraints in the implementation of the Nagoya Protocol in African countries since the ratification, review continental developments and mechanisms relevant to the movements and exchange of animal genetic material. Also taking into consideration the fact that the Africa Union has developed a framework for the implementation of the Nagoya protocol the Experts consultation will be a forum to further consult and solicit inputs before its adoption.

More specifically the meeting will:

- Assess the legal environment for the exchange and movement of animal genetic material,
- Assess the adoption/implementation of the Nagoya Protocol in African countries since the ratification,
- Assess challenges and constraints in the implementation of the Nagoya Protocol in African countries since the adoption/ratification,
- Propose technical standards, legislation or regulatory requirements for the exchange and movement of genetic materials,
- Propose a guideline for the exchange and movement of genetic materials including benefits to local communities who are the custodians of genetic resources and associated traditional knowledge,
- Propose a legislative framework for the establishment of regional genebanks,

The focus was on legal, policy and practical implementation challenges with the objective to contribute to the debate on outstanding issues, future research directions and technical assistance and training activities related to the implementation of the ABS Protocol.

Participants

The Experts consultation meeting was attended by participants from seven African countries namely: Cameroon, Benin, Ethiopia, Germany, Kenya, Namibia and Tunisia and from international and regional organizations namely: AUC, FAO, ILRI, ECOWAS, from NGOs namely: League for Pastoral Peoples and Endogenous Livestock Development (LPPELD), Indigenous Information Network (IIN).

Workshop methodology

In addition to the opening statements, the workshop program comprised introductory presentations. It also included experience sharing sessions. The program comprised group works on specific questions. The program also made provisions for a plenary session to delve further into the issues at stake. The methodology of work made use of introductory statements followed by question/answer sessions and group work sessions.

Opening Session/Ceremony

The opening was facilitated by Dr Pissang who welcomed participants and invited the representative of the Director of AU-IBAR, Dr Simplicie Nouala to give his welcome remarks.

On behalf of the African Union, Dr Nouala extended a warm welcome to all the participants of the Expert Consultation Meeting on “The movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa”. He noted that Africa is rich in biodiversity and is regarded as one of the most biologically diverse region of the world. Genetic resources from Africa have to a very high degree been exposed to ‘piracy’ by multinational corporations, companies and traders with subsequently little if any benefits having reached the local communities, which are the custodians of these resources and the associated traditional knowledge. Generally the livestock industry has for decades made extensive use of genetic resources from Africa, and partly due to the absence of a continental legal regime/legislative framework on access and benefit-sharing (ABS). However, Africa is now drafting legislations that will fill this vacuum.

He reminded the participants that the topic of access to genetic resources and benefit-sharing was brought to the global negotiation table in 1992 at the Earth Summit in Rio, but only at the COP 10 of the Convention on Biological Diversity (CBD) in October 2012 in Japan, was a protocol adopted: the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from the Utilization of Genetic Resources. Dr Nouala mentioned that the Expert Consultation meeting offered a platform to exchange and share ideas and technical information related to the movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS and address key concerns. To the participants he recalled that the meeting would particularly:

- Assess the legal environment for the exchange and movement of animal genetic material,
- Assess the adoption/implementation of the Nagoya Protocol in African countries since the ratification,
- Assess challenges and constraints in the implementation of the Nagoya Protocol in African countries since the adoption/ratification,
- Propose technical standards, legislation or regulatory requirements for the exchange and movement of genetic materials,

- Propose a guideline for the exchange and movement of genetic materials including benefits to local communities who are the custodians of genetic resources and associated traditional knowledge,
- Propose a legislative framework for the establishment of regional gene banks.

He took the opportunity to pay particular tribute to the European Union for the valuable financial support to the Genetics Project and wished the participants a very fruitful and productive Expert Consultation meeting.

The Permanent Secretary, Mr Toko Abdoulaye, started his intervention welcoming all the participants on behalf of the Government to Benin. He reminded that biodiversity for food and agriculture is one of the most important resources of the planet. However, biodiversity, particularly genetic diversity, is being lost at an alarming rate for diverse reasons. The Permanent Secretary noted that Africa has a relatively sound knowledge of its resources, it has adequate capacity and scientific infrastructure and large protected areas managed. Africa's genetic resources, to a very large extent has been exposed to "piracy" by multinational corporations, companies and traders with little or no benefits to the local communities, who are the custodians of the resources and traditional knowledge.

He mentioned that in general, the livestock sector has for decades made extensive use of genetic resources of Africa, and partly due to the absence of a continental legal framework/legislation on access and benefit sharing. However, Africa is preparing legislation that will fill the vacuum. Animal Breeding in Benin occupies a prominent place in the production system of agriculture. It is located at the second position after the crop production in terms of potentially exploitable natural resources and convertible currencies.

The Permanent Secretary stated that policies developed in recent years, in Benin, have favoured the increase of local production. Apart from the general framework setting the strategic options for the promotion of livestock, there are no any legal and political instruments relating to animal genetic resources in Benin. However, he noted the existence of fragmented policies related to the implementation of development projects in collaboration with international partners. The Permanent Secretary mentioned that Benin is pleased to have been chosen to host this meeting, which is of paramount importance for Africa and for all the pastoral communities. The Government, for its part, is ready to do everything in its power to better educate and inform its citizens in this regard. Benin is ready to make a significant contribution to this issue, which now features prominently in the livestock development strategy.

Benin is also committed to greater cooperation, to this end, welcomes the active cooperation with countries of the UEMOA and ECOWAS in the context of the development of the common policy on livestock development, with the international community to finance priority actions and with AU-IBAR in the implementation of Project activities on animal genetic resources. The Permanent Secretary sincerely hoped that the meeting would reach successful conclusions, thanks to the efforts of all its participants. Finally, He declared open the Meeting of Consultation of Experts on the circulation and exchange of animal genetic material and the implementation of the Nagoya Protocol on access and benefits sharing in Africa.

Prior to the opening, all participants introduced themselves giving their names, institution/organization and current activities. The participants adopted the agenda, as presented in Annex II. Dr Nouala acted as Chairman for the Workshop.

Session 1: Access and benefit sharing on AnGR

In this session various topics were presented on the Access and benefit sharing on AnGR in Africa.

1. African Model Law on the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources.

Mr Bather Koné

Mr Bather Koné noted that the Model Law was adopted by the African Union (AU) (the then Organisation of African Union) in 2000. The model law is intended to be used as a guide for African countries developing national laws on local community rights, plant breeders' rights and regulation of access to biological resources. The main objective, which is given in its specific components as well, is the conservation and sustainable use of, and sharing the benefits accruing from, biological resources and community knowledge and technologies in order to sustain all life support systems. The recognition and protection of Breeders' Rights had, already been incorporated in the Model Law as a specific objective.

Mr Bather Koné revealed that it contains some progressive provisions on the rights of indigenous and local communities. It recognises that both the state and its people have sovereign and inalienable rights over biological resources. It requires that states recognise the rights of indigenous and local communities over biological resources, as well as traditional knowledge, innovations and practices. Access must be subject to prior informed consent from communities. It also forbids patents on life forms. The model law recognises the collective rights of communities, and their customary law, whether it is written down or not. It also recognises farmers' rights as in the FAO Treaty on Plant Genetic Resources for Food and Agriculture. And it makes plant breeders' rights subject to recognition of farmers' rights.

Concerns raised during the presentation focused on:

- Is there a monitoring mechanism in place to show how many ABS contracts have been done under the Model Law?
- How is the link between community rights and national competent authorities? This is to allow follow up how many countries have communities and are enabling the communities to take part on ABS.
- How is the technical Advisory committee following up the propositions?
- Collective rights present challenges for governments
- It is good to focus on women; but what place occupies the youths in that context to ensure sustainability?
- Concerning the documents requested, taking the example of someone doing commercial and research, how to combine both?
- There is a need of developing clear policies and strategies on AnGR and ABS.

2. AU Guidelines for the coordinated implementation of the Nagoya Protocol in Africa: Relevance for Animal Genetic Resources and Interface with CGRFA ABS Elements

Petrus Du Plessis

Mr Du Plessis started his presentation giving some background on the Pre-Existing Rights. He noted that all the States have Sovereign rights over their genetic resources from the Charter of the United Nations and that was confirmed in the Convention on Biological Diversity, the Nagoya Protocol and the UN Declaration on the Rights of Indigenous Peoples. For AnGR, private property rights are also important (ownership of breeding stock) and access to genetic resources is subject to Prior Informed Consent (PIC). He further noted that fair and equitable benefit sharing was based on

Mutually Agreed Terms (MAT) and that Parties needed to respect, preserve and maintain the “knowledge, innovations and practices” of ILCs, promote their wider use and encourage benefit sharing. He noted that there were some user measures to ensure compliance, however not effectively implemented. On the background of the Nagoya Protocol, Mr Du Plessis stated that it was a long negotiation process to flesh out the CBD’s ABS provisions “safeguard benefit sharing”.

It was adopted in October 2010 by consensus based on compromise and that some key African positions were not included in the final text. Africa nevertheless agreed to the adoption, believing that the national flexibilities could be used in a coordinated way to safeguard the interests. The key was to: focus on “access for utilisation” and “to conduct Research & Development on genetic and biochemical composition”. Mr Du Plessis gave, as well, the background on the African Model Law. He noted that the Nagoya Protocol raised questions about the status of the 2001 OAU Model Law for the protection of the rights of local communities, farmers and breeders, and for the regulation of access to biological resources. The African Model Law was developed before Nagoya Protocol and the ITPGRFA. Mr Du Plessis mentioned that a study in 2011-12 identified gaps and variances and the 6th Pan-African ABS workshop mandated the AUC to lead the development of the AU Guidelines on Nagoya Protocol to complement Model Law. Mr Du Plessis then gave the timeline for the development of the AU Guidelines. The process has started in September 2012 and ended in March 2015 where the AMCEN 15 endorsed the Strategic Guidelines and the accompanying Practical Guidelines, to be presented for formal adoption by the AU Assembly in June 2015. He presented the structure of the AU Guidelines. He noted that it was composed of two separate but inter-related parts namely: the “African Union Strategic Guidelines for the Coordinated Implementation of the Nagoya Protocol on Access to Genetic Resources” and the “Fair and Equitable Sharing of Benefits Arising from their Utilisation” which provides the basis for African Union Practical Guidelines for the Coordinated Implementation of the Nagoya Protocol in Africa (a hands-on tool for African implementers of the Nagoya Protocol). The AU Guidelines is composed of the general objectives, the content of the strategic guidelines, the practical guidelines and annexes. He listed the strategic and technical guidance and mentioned that the Nagoya and AU Guidelines do apply to AnGR but yet, no specific mention was made of the special characteristics.

Concerning the FAO CGRFA ABS Elements, he noted that in 2011 the CGRFA13 created an ad hoc ABS Working Group. One meeting was organised in 2012 in Svalbard and registered the weak African representation (gene bank managers, no ABS experts, no-one from other GRFA sectors). This resulted in the development of a weak list of “special characteristics” that was seen as first step towards a one-size-fits-all “specialised ABS instrument” that would take all GRFA out of Nagoya (via Art. 4.4 exception). The CGRFA14 did not renew its mandate; instead it created a Team of Technical and Legal Experts on ABS to draft the “Elements” that was adopted by CGRFA15. Mr Du Plessis presented the Elements to facilitate the domestic implementation of access and benefit-sharing for different subsectors of genetic resources for food and agriculture and noted that they provide guidance for national implementation, therefore compatible with the AU Guidelines approach.

Mr Du Plessis concluded his presentation by asking relevant questions and pointing urgent needs:

- Urgency and importance for the AnGR sector to communicate with ABS authorities;
- Need to resolve private ownership of breeding stock vs communal/collective rights to GR/TK;
- Need to balance own need for access with desire to protect against misappropriation;
- What exactly does “utilisation” mean in AnGR subsector? What are ABS triggers?
- ABS for non-farm animals?

- How can existing systems and tools be used for ABS purposes?
- What forms of technology transfer and capacity building (non-monetary benefit sharing) are required in the AnGR subsector?
- What are the Intellectual Property challenges and opportunities in the AnGR subsector?

Concerns raised during the presentation focused on:

- The emphasis is more on protection rather than access i.e. difficulty in having access to /exchange of genetic materials within the continent.
- There is a need to look at Africa from the perspective that it is emerging, protection and access need to be patented. We don't need guidelines but rather to prevent local access.
- There is the need to define AnGR and emphasize on wild animals. The values of AnGR are not well recognised in the wildlife or wildlife relatives.
- We recognise the importance of our local breeds, local knowledge and the need to develop the capacities and legislations for our genetic resources. The model law will help us to protect and use our AnGR.
- The physical ownership acquired even before the entering in force of the CBD expels to the time before entering into force. How to deal with breeds that have been developed within Africa based on the resources of many countries?
- Africa has the highest number of trans-boundary breeds, how to describe ABS on these resources that share borders between countries?

3. Elements to facilitate domestic implementation of ABS for different subsectors of GRFA

Irene Hoffmann

Mrs Hoffmann built her presentation around the following items:

- Distinctive features of AgBD
- Process: Considerations for developing, adapting or implementing ABS measures for GRFA
- Elements

Mrs Hoffmann started her presentation by presenting the CBD COP5 (2000) distinctive features of agricultural biodiversity, mentioning that the agricultural biodiversity (AgBD) is essential to satisfy basic human needs for food and livelihood security. The AgBD is managed by farmers and many components of the AgBD depend on this human influence. The indigenous knowledge and culture are integral parts of the management of agricultural biodiversity and there is a great interdependence between countries for the GRFA. For crops and domestic animals, she noted that diversity within species is at least as important as diversity between species and has been greatly expanded through agriculture. Because of the degree of human management of AgBD, its conservation in production systems is inherently linked to sustainable use. Nonetheless, much biological diversity is now conserved ex situ in gene banks or breeders' materials and that the interaction between the environment, genetic resources and management practices that occurs in situ within agro-ecosystems often contributes to maintaining a dynamic portfolio of AgBD.

She noted that for the FAO Commission on Genetic Resources for Food and Agriculture a Team of Technical and Legal Experts on Access and Benefit-sharing (LTTE-ABS) had meetings with the ITWGs of sectors. Governments were asked for submissions on the conditions under which specific GRFA are exchanged and utilized. Stakeholders were for submissions on voluntary codes of

conduct, guidelines and best practices, and/or standards in relation to access and benefit-sharing for all subsectors of GRFA. Explanatory notes to the distinctive features of GRFA were drafted taking into account the specificities of the different subsectors. Concerning the Distinctive features, she clarified the role of GRFA for food security, The role of human management, international exchange and inter-dependence, the nature of the innovation process, holders and users of GRFA, GRFA exchange practices and the benefits generated with the use of GRFA. She presented the AnGR distinctive features taking the example of the ERFPA submission. She questioned the situation in Africa and stated that considerations for developing, adapting or implementing ABS measures for AnGR should be based on:

- Assessment of the AnGR subsector, including activities, socio-economic environments and use and exchange practices,
- Identification and consultation of relevant governmental entities and non-governmental stakeholders holding, providing or using GRFA (role of NFP),
- Integration of ABS measures with broader food security and sustainable agricultural development policies and strategies,
- Consideration and evaluation of options for ABS measures,
- Integration of implementation of ABS measures in institutional landscape,
- Communication and awareness-raising regarding ABS measures to potential providers and users of GRFA,
- Ex ante assessment as well as monitoring of the effectiveness and impact of ABS measures for GRFA.

Always taking the example of the ERFPA submission, she presented the elements of ABS measures for GRFA for the Exchange/Trade of AnGR. She noted that it should be based on the institutional arrangement, the access to and utilization of GRFA, access to traditional knowledge associated with GRFA, fair and equitable sharing of benefits and the compliance and monitoring. She concluded her presentation with additional questions:

- ABS should support GR conservation - How is the relation between Access and Benefit Sharing and conservation / sustainable use?
- Animal/owner – breed/community – trans-boundary?
- Relevance of AnGR characterization, breeding for Access and Benefit Sharing?
- Role of the Global Plan of Action for AnGR and its Funding Strategy?

She proposed some FAO documents and Information resources relevant to the topic of ABS.

Concerns raised during the presentation focused on:

- The Global Plan of action is more geared to Europe than Africa. There are considerable gaps; we need action plans for AnGR for Africa.
- When meetings are organised at the FAO within the ANGR commission there is no or a rather weak representation of Africa. How could we explain that in term of implementation of actions?
- Why did it take, compared to plant, such long time for FAO to start developing ABS treaties for AnGR?

- There are many exchanges in term of crossbreeding; is there at the FAO, level studies that present the impact of these exchanges?

4. Providing Access and Sharing Benefits on AnGR: Traditional knowledge and capacity needs for the implementation of the Nagoya Protocol.

Ilse Koehler-Rollefson

Mrs Koehler-Rollefson started her presentation by citing 3 main articles:

- Article 5.2: “Each Party shall take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.”
- Article 7: in accordance with domestic law, take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities
- Article 12: parties shall endeavour to support, as appropriate, the development by indigenous and local communities, including women within these communities, of Community protocols in relation to access to traditional knowledge associated with genetic resources

She noted that Biocultural Community Protocols (BCPs) are instruments that set out clear terms and conditions to governments and the private, research, and non-profit sectors for engaging with indigenous and local communities (ILCs) and accessing their local resources and knowledge. They are developed through culturally rooted, participatory decision-making processes within the communities and are based on communities’ customary norms, values, and laws. She then gave the structure and listed what goes into a BCP, namely:

- Historical information about the communities,
- Demographics,
- Culture, norms and values,
- Livelihood patterns and challenges,
- Accumulated traditional knowledge,
- Local biodiversity,
- The community’s relationship with its environment,
- Challenges,
- Rights under national and international law,
- Calls and Commitments.

To illustrate the BCP she took the examples of a BCP in India. She provided some advantages of BCPs (according to practitioners at Livestock Futures Conference held in Bonn in 09/2012). They are a tool for documenting bio-assets, production systems, products, to give a voice to pastoralists and other small-scale livestock keepers, to raise awareness about culture and tradition to address

challenges, such as cross breeding and product innovations, to invoke rights (grazing, breeding) and to generate information exchange and communication with other stakeholders. Concerning the desirable benefits identified by livestock keepers she listed the monetary rewards at national level through payments for environmental services, such as carbon sequestration and biodiversity conservation. The Provision of an enabling environment that supports them to continue their livelihood and breed conservation activities (livestock keepers rights, grazing rights, services) and the Support for developing a special label for livestock products from bio-diversity based production systems (“Ark of Bio-diversity”)

She questioned if the benefit sharing fund/pool at international level could be financed through:

- Livestock genetics companies in the context of Corporate Social Responsibility?
- The GPA funding strategy?
- Companies interested in marketing the products from local breeds?

She presented a table on the human-edible protein balance in the livestock production of selected countries. The table was produced based on FAO data. She concluded by mentioning a new study by Ilse Koehler-Rollefson and Hartmut Meyer published under the title *“Access and Benefit-sharing of Animal Genetic Resources: Using the Nagoya Protocol as a Framework for the Conservation and Sustainable Use of Locally Adapted Livestock Breeds”*.

Concern raised during the presentation focused on:

- How do you share the benefits of the locally adapted crossbreeds? Crossbreeds that have adapted to the local environment?

5. National level implementation of the Nagoya Protocol on ABS in Benin: Challenges and constraints.

Mensah Célestin Bossou

Mr Bossou started his presentation by recalling the process used by Benin in the implementation of the Protocol. He noted that it has started with the Ratification / Implementation, Defined the ABS strategy, the National legislation, the institutional arrangements, the Traditional Knowledge, the trans-border issues, the development of the strategy, all of these based on the Integration of all the different Stakeholders. He noted that the process also involved the setting up of an inter-ministerial committee, categories identification of actors and their roles in the implementation of the ABS Protocol, capacity building of the Committee members and other stakeholders, awareness-raising of stakeholders including parliamentarians to understand the Protocol and its ratification. The Nagoya Protocol was ratified by the parliament on July 8, 2013. The ABS Strategy is based on the realization of the diagnosis of the ABS situation in Benin, Brainstorming on the definition of a strategy, Brainstorming on indicators for assessing the functionality of the ABS process in Benin and the improvement of the Strategy Paper.

Concerning the national legislation and the institutional arrangements, a baseline study was conducted on the Inventory and analysis of regulations, customary, institutional and biocultural access. The study highlighted the importance of:

- Genetic Resources and Traditional Knowledge,
- Benin was a promising destination for bio prospectors,
- There is a political will to be strengthened,

- The limiting factor was the stakeholders engagement,
- Genetic resources are recognized and utilised outside the country,
- There are huge potentialities in Traditional Knowledge linked to Genetic Resources,
- There is an institutional, a legislative and regulatory framework existing but inadequate,
- Practices and initiatives in connection with the ABS are nationwide.

There were some discussions on the approaches to choose a regulatory framework; the approach chosen was multi-sectorial. There were some discussions on the permit system. The consensus was to use a one-stop-shop including a single authority representing many sectors that work together in the same structure. The role of the State in the contract negotiations was also discussed. The consensus was that the State should act as a supervisor giving support and guidance for decisions and negotiations. Concerning the protection of traditional knowledge, the ABS Act which specifies the conditions of access to the CTs needed to be transcribed in the PIC. Concerning the valuation and border issues, the development strategy and the border issues are considered in the ABS strategy but no specific actions are undertaken so far. He provided the achievements based on the action fields, those were achievements of the process and some Outstanding Issues

The next steps proposed were:

- Integration of the ABS issues in broader national strategies,
- Implementation of ABS national legislation,
- Establish institutional arrangements,
- Protection of Traditional Knowledge,
- Take into account cross-border issues,
- Development of a strategy,
- Integration of stakeholders.

The opportunities were that there is a:

- Clear political will,
- Mobilization,
- Organization and Public-Private engagement,
- Existing support options (CBD, APA Initiative, Biodiversity International, GEF)
- Outstanding experiences,
- Regional and sub-regional initiatives emerging regional (LD, AU),

He concluded saying that Benin should not make sudden and hasty decisions that may be challenged in the future.

6. National level implementation of the Nagoya Protocol on ABS in Cameroon: challenges and constraints.

Jean Kenfack

Cameroon is a party to the relevant international conventions in the field of biodiversity: Rio Convention, Cartagena Protocol, Nagoya Protocol on ABS. Cameroon has always stood by the international to fight against the threats on biodiversity. By 2035 Cameroon vision for growth and development and its priority orientations defined within the Growth and Employment Strategy Paper which recognizes the nation's natural resource potential as a natural asset to guarantee the realization of its growth vision and highlights this as an asset for its activities in the sectors such as agriculture, energy, forest, fisheries. That is to show how important is biodiversity and related issues in the economy and in the governmental policy in general. In this regard, Cameroon has updated its NBSAP with a significant place to ABS. The strategic Gold C and D of the said strategy deals with the valorisation and the promotion of the sustainable utilization of biodiversity for wealth creation and the contribution to poverty alleviation. In Target 16 it is said that by 2020, the sharing of benefit from payment for the sustainable utilization of biodiversity, genetic resources and associated knowledge should increase incomes of local communities. In that connection and in view of the Implementation of the Nagoya Protocol on ABS, a set of activities has been carried out, some others are scheduled. In order to carry out these activities, Cameroon gained financial support from certain partners.

He presented the activities carried out in the ratification process from May 2011 with the official launching of ABS project to April 2015 with the signature of the Mutual Agree Terms between Mane et Fils Company and the Local Communities of Magha-Bamumbu and the Ministry of Environment, Protection of Nature and Sustainable Development. He noted that the MAT has been signed for the commercialization of genetic material of roots of the plant *Echinops giganteus*.

On the scheduled activities he noted the:

- Planned sensitization, awareness, education campaigns on ABS and TK;
- Elaboration of the ABS national strategy implementation programme;
- Implementation of NBSAP target 16.
- Capacity building of indigenous and local communities and networks for participation in biodiversity related compensation schemes

Concerning the financial support he mentioned 4 main sources, namely the:

- GEF/UNEP pilot project to support 06 African countries;
- Government budget funds;
- Support from GIZ-ABS Initiative;
- GEF/COMIFAC Project.

Working Group & Break out Session on Access and benefit sharing on AnGR

Participants broke into groups to consider the issues. During the Break Out Session, the discussion focused on:

1. Establishing the Status of the implementation of the Nagoya protocol in Africa: issues, challenges, opportunities and priority actions to fast-track implementation.

On the Access and benefit sharing on AnGR key aspects considered were:

- Perceptions of the Nagoya protocol as an environmental issue, difficult to raise in parliament, hence little focus on animal genetic resources. Animal genetic resources and other subsectors are not aware of the Nagoya protocol on ABS;
- The perception of the conservation sector is that the agriculture/livestock sector is enemy of biodiversity;
- Little awareness is on the implications of the Nagoya protocol on AnGR and the impact of it on ABS to other subsectors e.g compared to medicinal genetic resources;
- Institutional set up at national level, namely the role of the National Coordinators/Focal Point and the involvement of other subsectors;
- The legislation/signing takes time to be achieved;
- Some African countries see no need to pass legislation; rather they can use existing legislation or regulations e.g legislation for protected areas etc.
- People working in the livestock sector have no knowledge and no training that focussed on genetics and improvement ;
- The Nagoya Protocol itself is a mystery: animal resources people are not aware that AnGR is part of the Nagoya Protocol;
- In most African countries, pastoralists are the ones managing breeding system with little support from the government officers;
- Many actors and departments are involved in the management but do not communicate; (examples of Cameroon and Benin are typical)
- Focal Points are considered as a subsidiary activity associated with a malfunction;
- Lack of legal instrument governing the management of AnGR;
- Human Resources: lack of legal experts on ABS;
- Lack of inventory (with quantification) of AnGR;
- Capacity building.

Session 2: Exchange of AnGR materials

In this session various topics were presented on the exchange of AnGR materials in Africa.

1. Managing access to animal genetic resources in national and regional genebanks: what are the options to facilitate exchange?

Irene Hoffmann

Irene Hoffmann started with the legal framework for national gene banks. She presented the gene bank policy including the national policy and agreement between major stakeholders and the legal entity or entities responsible for cryopreservation. She also presented the various types of agreements, including acquiring germplasm for the gene bank and the use of gene bank material. In the Legal Framework, she presented the rights and responsibilities of: the Gene bank, User of gene bank material and Donor of gene bank material.

She also presented the Need for agreements/contracts between owner of donor animal and the gene bank, addressing the transfer of the germplasm

She also presented the elements that may be included in the Agreement. The options for the Acquisition and ownership of germplasm include:

- Transfer of ownership to gene bank;
- Donation of material to gene bank;
- Donor maintains ownership for a specific period of time (e.g. ‘embargo period’);
- Donor maintains ownership;
- Donor maintains the right to use part of the material.

She gave an example of options: for the Acquisition agreement clauses for the ERFp submission and for the request for Access to gene bank material. She also gave an example of USA on Access criteria for breeding example of Netherlands Gene bank–User–Material Transfer–Agreement.

According to her an MTA could include:

- Type and quantity of genetic material provided;
- Statement on intended use (objective);
- Price to pay by user and who will pay potentially high reproduction costs;
- Liability related to:
 - Potential sanitary risks of using gene bank materials,
 - Quality of the gene bank material,
- Rights of gene bank to offspring,
- User will not further distribute/sell gene bank material,
- No IPR claims,
- others...

Typical MTA clauses taking the example of the ERFp submission were shared. She concluded saying that:

- Need for clear policies and possibly a variety of agreements
- Decisions to be made at national level
- There will be a range of options on how to regulate things

Concerns raised during the presentation focused on:

- The provision of estimates of capital or running costs of a genebank.
- In case of a disease outbreak in a gene bank, who is responsible?

2. Technical standard in relation to access and benefit-sharing for animal genetic resources: modalities to facilitate exchange and use of genetic material stored in ex-situ gene banks.

Morris Agaba

Mr Agaba started with some key points to consider namely the Stakeholders (owner, user) and the Potential and realized benefits. He noted that the Benefit Sharing mechanism included the financial, or information, knowhow, technologies. He gave the definition of the Ex-situ gene banks noting the existence of the Zoological collections, the cryo-banks, the Genetic molecules (including genomic DNA, RNA and their sources, and cloned genes) and the Genetic information (genomic and gene sequences). Concerning the Ex-situ gene banks of animal genetic resource in Africa, he noted that they are generally under developed; many countries have gamete banks mainly built for the purpose of breeding and not conservation. Some countries have experimental stock farms that serve for collateral conservation purpose. The museums of some countries have historical AnGR specimen but in reality one is more likely to find African specimen in Europe. Some researchers have cell lines, DNA etc collected as a matter of course in their work, and could be useful.

He presented the Gene Banking Cycle/Process, noting the collection of what is considered valuable, identification and metadata, preservation and disposal of material. He presented the MATs (Mutual agreed terms) and MTAs (Material transfer agreements). He noted that at collection of materials from provider to gene bank, it is a very long term view, the purpose is not very clear, it may appear abstract, the possibilities are obscured by existing technology. At sharing of gene bank material with third parties, important was: the traceability to original source is an issue, the possession is not ownership, the value chain of benefit share – inventor, banker and owner.

He presented the Standard Terms and Conditions, how the MTA's are managed at ILRI. He presented some cases/examples of MTA in Africa and proposed some suggestions. He noted that Live ex-situ gene banks need to be formalized as true conservation of use gene banks – zoos, museums, some stock and research farms.

He noted that the Cryo-banks of gametes, cells and tissues are rather costly to maintain. Their set up at sub regional (or national levels) can provide some safeguard to access and benefit sharing through improved efficiencies. The third party clauses need good articulation. Should communities invest in banks?

Africa does not have a strategic gene bank of gene and genome sequences. So we have resorted to prohibition of “patenting genes” in any case the technologies today allow recovery of life from DNA sequences.

He concluded saying that:

- African did not “domesticate” anything, but presently has relevant wild species that are candidate to influence farm animal genetic resources
- Task a competent body such as the African Academy of Sciences to develop some framework for MTA and other related ABS tools.
- Infuse entrepreneurial spirit into the tools and guidelines.
- ABS mainstreaming into Gene Banks – retrofit or build into.
- Go preach the words AB

Concerns raised during the presentation focused on:

- Semen is difficult to conserve in our countries, the future is DNA conservation for the sustainable use of our local breeds,
- What is an accidental gene bank?

3. Legal environment for the exchange and movement of animal genetic material. **Pierre Du Plessis**

Mr Du Plessis started the presentation by clarifying some notions on genetic material, Genetic resources, information encoded in chemicals and giving some definitions. He presented the jurisdiction, noting that domestic laws are only enforceable in-country, major rationale for negotiating Nagoya Protocol: enforcing law after GR leaves borders, even when there is international law it must be “domesticated” to be enforceable, /E.g. EU Regulation on ABS applies to all Member States but implementing legislation is left to each country; inclusion of a TK only as described in MAT because TK is a “Member State competence”

Customary law are often verbal, facilitative and seeking justice, reconciliation, not punishment. Those are recognised in the Nagoya Art. 12.1: “take into consideration ILCs’ customary laws, community protocols and procedures” and “in accordance with domestic law”. Written law is not always stronger (e.g. Common Law) but national legislation will almost always prevail in court. Community Protocols can aid legal clarity and certainty, but are not easy or cheap, To have strong legal effect, such protocols must be recognised in domestic legislation (e.g. Nagoya Art. 6.2(f), “set out criteria and/or processes for obtaining PIC of ILCs”. Some communities do not want to fix customary law in writing, always potential for intra-community disputes.

Concerning the domestic legislation, regulatory requirements and policy measures, he presented the MAT and the law of contracts. According to him, the law of contracts underpin international trade and are well established, very strong in some respects. The arbitration procedures are well established but much depends on the quality of contract, which depends on the quality of lawyers. He noted that good commercial lawyers are scarce and expensive, especially in Africa. Standard contracts can help, but entail other risks if not handled carefully.

He also presented the compliance with the MAT, the dispute resolution and the access to justice. The Nagoya Art. 18 provides (weak) measures on enforcing the MAT contracts. It was one of the most contentious aspects of the negotiations. He noted that the livestock identification laws were the ones legally prescribed in many countries to combat stock theft, enable traceability systems, and meet veterinary health requirements. He added that the Veterinary health regulations were commonly used to control movements of livestock and animal products, in and between countries, and to stop diseases from spreading.

On the Codes of conduct, guidelines and best practices and/or standards, he noted that in the Nagoya Art. 20, each Party is to encourage the COP to take stock and consider adoption. There are legal doubts about whether e.g. the FAO CGRFA Guidelines would constitute “specialised ABS instrument” under Nagoya Art. 4.4.

He concluded in commenting Public international law/treaties, protocols, conventions, UN bodies:

- Voluntary surrender by States of some national sovereignty in exchange for mutual benefit,
- Must be implemented domestically to work,
- Hard to negotiate, even harder to change,
- CBD, Nagoya, FAO, WIPO, OIE, ...

- Possible treaty on AnGR in the longer term?
- But so far no demonstrated demand,
- Not something to tackle lightly,
- Very difficult even to agree to negotiate.

Concerns raised during the presentation focused on:

- Based on the few contract lawyers that we have in Africa, how are we going to be able to compete on the international arena?
- Could countries involved in the development of their ABS systems benefit from the experience, in term of best practices, from other countries already advanced in the process?
- It was earlier mentioned that the ABS developed at global level is significantly influenced by the European experience, but listening to the presentations it appears that Africa has considerable information and knowledge to share.

4. Movie presented on “ Recognising Customary Rights” The League for Pastoral Peoples

A video was shown presenting pastoralists across the world, those have developed breeds that are invaluable assets for humanity: in conserving biodiversity, adapting to climate change and achieving food security in harsh and challenging environments. This video captures an exercise whereby the ‘Raika’ pastoralist community in India and the ‘Samburus’ in Kenya were helped to establish their bio-cultural protocols. The protocols document the pastoralist communities’ indigenous knowledge with regards to livestock, and articulate the services they provide towards managing their ecosystems.

In today’s world, as pastoral and other communities struggle to keep their place in the world, such protocols could form the basis of workable pathways to their access and benefit sharing in animal genetic resources for food and agriculture. And that could be crucial to developing sustainable food systems, and achieving food security amid a changing climate.

Concerns raised during the presentation focused on:

- Some of the processes when developing the geographical indications and what is described in the bio-cultural protocols are very similar. However the geographical indications needs a legal instrument that can support it.
- How do you decide on the organisation that brings changes around the communities?
- Integrated systems need to be well managed in order to be effectively linked to markets.

Working Group & Break out Session on Exchange of AnGR materials

Participants broke into groups to consider the issues. During the Break out Session, the discussion focused on:

1. What are the technical standards, legislation or regulatory requirements for the exchange and movement of genetic materials?
2. What are the issues to be considered for Access to material?

3. In addition to the information generated from the sessions described above, a committee was put in place to draft a message to be sent to all ABS National Focal Points and AnGR National Focal Points in all the AU Members States (including those that have ratified the Nagoya Protocol).

On the movement of genetic materials key aspects considered were:

- Utilization: Why do users want the genetic material?
- Compliance: is utilization defined in the national legislation and the protocol?
- What are the potential benefits offered?
- What are the capability statement-Competence criteria?
- What are the existing exclusive accesses to other user?
- Confidentiality about the access,
- Database/tracking system to allow identification of non-compliance. Establishment of a clearing house e.g National Council for Science and Technology (Uganda)
- Ownership of the resource (State/Community): Resource under community who have right to grant access and deny access,
- Trans-boundary access, multiple sources of access of the genetic material;

Session 3: Closing and options for a way forward

General discussion

Key points raised during the discussion focused on:

- The need to urgently include AnGR issues in national ABS systems that are currently being reviewed.

Closing of the workshop

Closure of the Meeting On behalf of the AUC, Dr Nouala thanked the experts for their commitment to this challenging phase for Africa, and also expressed its appreciation of the active participation of representatives of international organisations and communities representatives during the workshop. Dr Nouala warmly thanked the government of Benin for hosting the meeting. The meeting was declared closed at 12:30 in order to enable participants to prepare for the trips back home.

Mapping the way forward

During the discussions, a number of activities were identified in priority order to achieve some of the aspects of the movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa, and others in order to fill in the gaps of knowledge that exist. The following way forward, including action points was agreed at the end of the Expert Consultation meeting.

Action	By who?	By when?	Comment
<p>Creating awareness on the need of mainstreaming AnGR issues in ongoing discussions/initiatives on ABS</p> <ul style="list-style-type: none"> - Send messages to all ABS National Focal Points and AnGR National Focal Points in all the AU Members States (including those that have ratified the Nagoya Protocol) - Present the Nagoya Protocol on ABS and ABS AnGR related issues during Animal Production meetings 	AU-IBAR and others (Ilse, Irene, Vivian, Bather, Sonia and Delphin)	July 2015	<ul style="list-style-type: none"> • Message drafted by a committee • Have AU guidelines attached to the message
<p>Develop adapted awareness and sensitisation tools/materials on ABS for local communities' involvement and ownership of the ABS issues</p>	AU-IBAR, Member States		ABS capacity building Initiative (indigenous info network)
<p>Best practices, experiences and lessons learned on ABS, MTA or other contractual issues to be collected and disseminated</p>	AU-IBAR, Member States	November 2015	
<p>Develop regional action plans/strategies to implement ABS at regional level</p>	RECs and MS (AUC)	December 2015	AU-IBAR, Dep Human Resources Science and Technology, Div of Environment at DREA to facilitate/lead
<p>Within the regional action plan, organise joint capacity building activities for both ABS National Focal Points and AnGR National Focal points</p>	RECs, AU-IBAR, CBD, FAO		
<p>Fast track the implementation AU guidelines and monitor its implementation</p>	RECs, AU-IBAR,		
<p>Develop policies and agreements (MTA template) related to the exchange of genetic materials and ABS</p>	AU-IBAR		<ul style="list-style-type: none"> • Regional Gene banks (or national levels) can provide safeguard to access and benefit sharing through improved efficiencies. • Coordination by the commission and within the
<p>Pilot the BCP (Bio-cultural Protocols) in pastoral areas of West Africa and explore the opportunities of expansion on the Continent including providing guidelines for such process</p>	AU-IBAR, LPP, RECs, ABS capacity building Initiative		Within the project budget (cost effectiveness), TOT programs

Annexes

Annex 1: List of participants



EXPERTS CONSULTATION ON THE MOVEMENT AND EXCHANGE OF ANIMAL GENETIC MATERIALS AND IMPLEMENTATION OF THE NAGOYA PROTOCOL ON ABS IN AFRICA

FROM 20TH TO 22ND APRIL 2015, COTONOU, BENIN

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Annex 2: Agenda of the Workshop



Strengthening the Capacity of African Countries to Conservation and Sustainable Utilisation of African Animal Genetic Resources

Experts consultation on the movement and exchange of animal genetic materials and implementation of the Nagoya protocol on ABS in Africa

20-22 April 2015 in Cotonou Benin

Provisional Agenda

Day 1		
	<i>First session: Welcome and opening remarks</i>	
8:30	Registration	IBAR
9:00 - 10:00	Welcome remarks	IBAR
	Introduction of participants	
	Rationale, Background and Objectives of the Workshop	IBAR
	Adoption of the Agenda	All
10:00 - 10:30	Health break and group photo	All
	<i>Second session: Access and benefit sharing on AnGR</i>	
10:30 - 11:00	African Model Law on the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources	Bather Koné
11:00 - 11:30	The AU Guidelines on ABS and the Nagoya Protocol on ABS highlighting the interface with the CGRFA Elements and AnGR	Pierre Du Plessis
11:30 - 12:00	Draft Elements as tool to assist policy makers in developing ABS measures for GRFA	Irene Hoffmann
12:00 - 12:30	National level implementation of the Nagoya Protocol on ABS in Benin: challenges and constraints	Gbaguidi Ahokanou Fernand
12:30 - 13:00	National level implementation of the Nagoya Protocol on ABS in Cameroon: challenges and constraints	Jean Kenfack
13:00 - 13:30	Discussions	All

13:30 - 14:30	Lunch	All
14:30 - 16:30	Group work: 2. Establish the Status of the implementation of the Nagoya protocol in Africa: issues, challenges, opportunities and priority actions to fastrack implementation 3. Identification of legal and regulatory requirements in relation to ABS to Animal Genetic Resources	All
16:30 - 16:45	Health break	All
16:45 - 17:30	Group work continue	All
17:30	End of day	

Day 2		
	<i>Second session: Access and benefit sharing on AnGR (continue)</i>	
9:00 - 10:30	Group work: restitution	All
10:30 - 10:45	Health break	All
	<i>Third session: Exchange of AnGR materials</i>	
10:45 - 11:15	Managing access to animal genetic resources in national and regional genebanks: what are the options to facilitate exchange	Irene Hoffmann
11:15 - 11:45	Technical standard in relation to access and benefit-sharing for animal genetic resources: modalities to facilitate exchange and use of genetic material stored in ex-situ gene banks	Morris Agaba
11:45 - 12:15	Providing Access and Sharing Benefits on AnGR: Traditional knowledge and capacity needs for the implementation of the Nagoya Protocol	Ilse Koehler-Rollefson
12:15 - 12:45	Legal environment for the exchange and movement of animal genetic material	Pierre Du Plessis
12:45 - 13:30	Discussions	All
13:30 - 14:30	Lunch	All
14:30 - 16:30	Group work: 4. What are the technical standards, legislation or regulatory requirements for the exchange and movement of genetic materials? 5. What are the issues to be considered for Access to genetic material	All
16:30 - 16:45	Health break	All
16:45 - 17:30	Group work continue	All
17:30	End of day	

Day 3		
	<i>Third session: Exchange of AnGR materials (continue)</i>	
9:00 - 10:30	Group work: restitution	All
10:30 - 10:45	Health break	All
	<i>Fourth session: Closing and options for a way forward</i>	
10:45 - 11:30	Plenary discussions	All
11:30 - 12:00	Options for a way forward	All
12:00 - 12:30	Wrapping up: Conclusions and next steps	All
12:30 - 13:00	Closing remarks	All
13:00 - 14:00	Lunch	All

Annex 3: The African submission in response to the CGRFA

Notification of 31st January 2013

22 April 2015, Cotonou

The African submission in response to the CGRFA notification of 31st January 2013 on voluntary codes of conduct, guidelines and best practices, and/ or standards in relation to access and benefit-sharing for all subsectors of genetic resources for food and agriculture.

Submitted by the participants of the Expert consultation on the movement and exchange of animal genetic materials and implementation of the Nagoya Protocol on ABS in Africa, held 20-22 April in Cotonou, Benin.

Distinctive Features of the African animal genetic resource sector

The African livestock sector differs from the livestock sectors in Europe and North America with respect to the prevalence of indigenous and locally adapted breeds which form the basis of the livelihoods of a large number of rural people. In particular, African livestock has:

Cultural Significance – The identity of many peoples is based on the association with specific animal genetic resources/breeds.

Livelihood Significance – livestock is a store of wealth and acts as savings bank.

Economic Significance – indigenous and locally adapted livestock breeds make huge contributions to national economies and foreign currency earnings.

Adaptive Characteristics - African indigenous livestock is especially well adapted to harsh conditions. Without these adapted genetic resources we cannot use many difficult environments. For poor people living in harsh and difficult settings high producing breeds are usually not an option, so it is of utmost importance to conserve these genetic resources which may be invaluable in the context of climate change.

Role of communities and Traditional Knowledge

Communities play a vital role and are the main stakeholder in animal genetic resource conservation and sustainable use. Many communities have a rich body of traditional knowledge about animal genetic resource management, and distinct breeds have developed even in the absence of breeding societies due to certain social breeding and exchange mechanisms. Local communities also have deep knowledge about ethnoveterinary practices and the environment, however much of this knowledge has not been documented. This knowledge is transferred orally from generation to generation and not all communities are willing to share their knowledge and traditional practices. There is no specific legal framework that would safeguard Intellectual Property Rights of communities in the breeds they have developed.

Patterns of Exchange of animals

The exchange of animals within communities is usually according to customary practices and along kinship and ethnic lines. This continues to be the major way of exchange of animal genetic material in Africa.

In Africa, species and breeds move across borders in the context of transhumant and nomadic production systems. They are also regularly exchanged across borders and therefore Africa has a high number of transboundary breeds. It has a higher number of regional transboundary breeds of cattle and goats than any other continent and many transboundary breeds in other species. One example is the Maghribi camel breed that occurs in Mauretania, Tunisia, Sudan, Egypt and Libya.

This situation has to be taken into consideration, when developing access and benefit-sharing arrangements.

The low input production systems that prevail are often not suitable for cross-breeding. In pastoralist and transhumant systems there is very little scope for cross-breeding. Sustainable intensification is possible in more favourable situations. For instance, the Azawak cattle can produce 16 kg of milk when fed well by means of pasture development.

Breed improvement has mostly been achieved through the import of exotic high performance breeds, but often this has happened in a haphazard way leading to the dilution of local breeds. Cross-breeding has to be carefully managed.

With some exceptions, there are no community based breeding programmes to improve native breeds through intra-breed selection. Such breeding programmes and systematic recording systems need to be expanded. For this purpose, simplified recording techniques need to be developed to obtain data without disturbing livestock keepers or animals.

In Africa, there are several on-going domestication projects, such as for the agouti (grasscutter) and several types of antelopes.

In Africa, there is a lot of natural selection that ensures adaptation to the environment. In addition, there is large body of traditional knowledge on selection (Karen Commitment).

Conservation

African breeds are the results of traditional knowledge and social breeding institutions. Indiscriminate cross-breeding has been a major factor in diluting breeds, for instance the Red Maasai sheep.

Cryoconservation is hardly available, except of semen (Morris presentation). Somatic conservation is practiced only in North Africa and Southern Africa to some extent.

Africa is dependent on importation of genetic resources from outside for increasing production. Earlier this material came from the North, but an increasing amount comes from South (Brazil).

Export of African genetic resources is limited to those for whom recording programmes and breeding societies have been established (mostly from South Africa) and the sanitary situation allows for it. An exception is camels from Sudan and other countries in the Horn of Africa that are exported to Gulf countries for dairy production and racing.

There are very few breeding societies in Africa, with exception in some countries (South Africa and in Kenya).

Research and information gaps

Africa has a very low level of breed inventories, documentation and breed characterization. In some countries, data are recorded but there is a weakness in collating it.

There is no record of animal movements and much transhumance is undocumented.

Due to low capacities and facilities, much research is undertaken in collaboration with foreign partners, thereby stressing the need for PIC and MAT in research projects. However, these need to be in place even if only national researchers are involved.

There are inadequate structures for ensuring the quality of research, especially with respect to characterization, and for the sharing of research results with international research community or with livestock keepers. The record of publications is low.

Existing guidelines and legal frameworks for ABS

The African Union has developed the *African Union Policy Framework for the Coordinated Implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation* which also provides a framework for animal genetic resources.

This builds on the principles of the *2001 African Model Law for the Protection of the Rights of the Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources*, which has the objective of protecting of genetic resources and associated traditional knowledge against misappropriation and misuse.

Based on these two documents, the African Union

- recognizes that the purpose of fair and equitable sharing of benefits arising out of the utilisation of animal genetic resources is to create sustainable development opportunities from biological diversity and associated traditional knowledge for provider countries and indigenous and local communities;
- acknowledges the potential contribution that access and benefit-sharing of animal genetic resources can make to the conservation and sustainable use of domestic animal diversity, environmental sustainability and poverty eradication, thereby contributing to achieving Africa's sustainable development goals;

African priorities with respect to access and benefit-sharing of animal genetic resources

- Considering the cultural, livelihood and economic importance of locally adapted breeds, African Union Member States shall safeguard and protect the collective rights of indigenous and local livestock keeping communities to their genetic resources and associated traditional, including the right to derive economic development benefits from the utilisation of their genetic resources and associated traditional knowledge.
- Obtaining the prior informed consent or approval and the involvement of indigenous and local communities for access to genetic resources and ensuring that mutually agreed terms have been established in situations where indigenous and local communities have existing rights to grant access to genetic resources
- Considering the need for increasing production, the implementation of community based breeding programmes based on intra-breed selection is encouraged.
- Considering that the indigenous genetic resource base has been diluted by the extensive use of exotic breeds, safeguards need to be instituted to prevent this happening in an unplanned haphazard way.
- Keeping in mind the provisions of the Nagoya Protocol, the development of community protocols for animal genetic resources and local production systems is to be encouraged.