IMPLEMENTATION OF ACCESS AND BENEFIT SHARING POLICIES IN SUB-SAHARA AFRICA: INVENTORY, ANALYSIS AND PROPOSALS
(Final version, June 2013)
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Executive summary

Where formerly plant genetic resources were considered to be in the public domain, the development of Intellectual Property Rights in plant breeding and the subsequent adoption in the past decades of various international agreements has led to profound changes, and has established national sovereignty over genetic resources. Today, individuals, companies and institutes seeking access to genetic resources have to comply with rules and regulations set by national governments, based to a varying extent on the international agreements mentioned above. As each country is following its own interpretations and procedures, this has led to a complex situation, and sometimes even a feeling that in some countries it is not worth the effort anymore to seek access to genetic resources.

Therefore, a project was initiated in 2012 to make an inventory of Access and Benefit-Sharing regulations and their implementation in selected countries in Sub-Sahara Africa, to analyse shortcomings and identify options for improvement, while at the same time establishing a discussion platform between and with policy makers in Sub-Sahara Africa and contributing to trust building between African countries and the Netherlands as the basis for substantial improvements in the exchange of germplasm and the fair and equitable benefit-sharing between the parties involved.

To achieve these objectives, first a desktop study was done on general international Access and Benefit Sharing (ABS) agreements and the specific situation in the four selected countries, Kenya, Burkina Faso, South Africa and Namibia. After this, missions were carried out to these four countries, during which interviews were held with staff involved in ABS in government, research institutes, universities and NGOs, and the views and expectations of these stakeholders were gauged and documented. The third part of the project consisted of a workshop with selected stakeholders from African countries. Finally, on the basis of the findings of the desk study, the missions and the workshop, an analysis was made of the bottlenecks hampering ABS in practice and steps were formulated which could lead to more effective and balanced ABS practices.

The International agreements setting the framework for national ABS systems are the Convention on Biological Diversity (CBD), which entered into force in 1993, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), which entered into force in 2004, and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable sharing of Benefits Arising from their Utilisation, adopted in 2010. The CBD and the Nagoya Protocol stipulate that ABS conditions must be established between countries providing and using genetic resources, through bilateral negotiations and on a case-by-case basis. The CBD was primarily focused on regulating access to genetic resources of wild flora and fauna species used for chemical and pharmaceutical purposes. The objectives of the Treaty are the same as those of the CBD, except that they are specific to plant genetic resources for food and agriculture. Under the Treaty, ABS goals have been translated into a multilateral system (MLS) of exchange of genetic resources. Part of the monetary benefits arising from the use of the resources from this MLS are to be placed into an International Benefit-Sharing Fund.

Burkina Faso is a party to the CBD and the Treaty. The Nagoya Protocol was signed by the country in 2011, and ratification is in progress. Burkina Faso has not yet any specific ABS laws and regulations in place, and when people are seeking access to genetic resources, they contact institutions on an ad hoc basis. A 'National Commission on Plant Genetic Resources Management' has been created to coordinate the implementation of the Treaty with that of the Nagoya Protocol.

Kenya is also a party to the CBD and the Treaty. The Nagoya Protocol was signed in 2012, and ratification is in progress. Specific ABS regulations have come into force in 2006 and are implemented by the National Environment Management Authority (NEMA), where permits are to be requested. A decision on the application is taken by an 'Access and Benefit-sharing Technical Committee',

consisting of representatives of various departments and agencies, and created to ensure wider government consultation and decision making in the permitting process. The Treaty is not yet implemented, and the same standard procedure must be followed for plant genetic resources for food and agriculture. Only a small number of permits have been granted since 2006, and there are many concerns about the complexity of the procedure. NEMA says it is working on streamlining the process.

Namibia is a party to the CBD and the Treaty. The Nagoya Protocol has not yet been signed. No national ABS legislation is in place, but the country is preparing an ABS law and regulations. Currently, ABS is regulated by an Interim Bioprospecting Committee (IBPC), established in 2007 with the mandate to regulate and facilitate bioprospecting issues.

South Africa is a party to the CBD, but has neither signed nor ratified the Treaty. The Nagoya Protocol was signed, but has not yet been ratified. Detailed ABS regulations have been in force since 2008. Only indigenous resources are regulated, and species included in annex 1 of the Treaty are explicitly excluded from the ABS regulations. Different types of permits are distinguished, with separate procedures. Having a local counterpart is necessary for obtaining a permit. A 'Bioprospection Expert Group' examines the application. The number of permits issued since 2008 is only eight, and users complain there is too much bureaucracy. The Ministry of Environment is now trying to streamline the process.

The present project indicates that the main bottlenecks hampering implementation of ABS measures, and exchange of plant genetic resources, in the four African countries are:

- Bureaucracy and complexity of ABS regulatory systems in some countries
- Absence of ABS regulatory systems in other countries
- Responsibilities for CBD/Nagoya and Treaty divided over different ministries
- Lack of clarity on the special status of plant genetic resources for food and agriculture
- Divergent visions on Benefit Sharing between users, providers and other stakeholders
- Perceived non-compliance with ABS regulations
- Limited awareness of ABS within countries
- Limited access due to inadequate conservation of genetic resources

Consequently, steps towards more effective and fair ABS practices would include:

- Reduction of bureaucracy and complexity of existing ABS systems
- Establishment of ABS systems in remaining countries
- More coordination between ministries responsible for CBD/Nagoya and Treaty
- Creation of a clear and separate status of plant genetic resources for food and agriculture in national ABS regulations
- Promotion of discussion and enhancement of negotiation skills to come to Benefit Sharing practices acceptable for both users and providers
- Better monitoring of compliance by users
- Awareness raising within African countries on ABS principles
- Improved access through better ex situ conservation of genetic resources

The Netherlands could play a role by supporting African countries in the adaption of their regulations and the streamlining of the implementation of these regulations. It could also consider extended supporting programmes aimed at raising awareness on ABS within African countries and the enhancement of negotiation skills. The creation of more trust amongst stakeholders in African countries and thereby more opportunities to create a win-win situation, would certainly be helped by improved monitoring of compliance by users in European countries to African ABS regulations, as foreseen in the draft EU Regulation on ABS.

Table of contents

Executive summary		1
Table of contents		3
Acronyms and abbreviations		4
1. Introduction		5
1.1 Background		5
1.2 Aims of the project		5
1.3 Methodology		5
2. International ABS developments		6
2.1 Convention on Biological Diver	sity	6
2.2 African Model Law		6
2.3 International Treaty on Plant G	enetic Resources for Food and Agriculture	6
2.4 Bonn Guidelines		7
2.5 Nagoya Protocol		8
3. ABS in the case study countries		8
3.1 Burkina-Faso		8
3.2 Kenya		10
3.3 Namibia		12
3.4 South Africa		14
4. Bottlenecks hampering Access an	d Benefit Sharing in practice	17
5. Steps towards effective and balance	ced ABS practices in Sub-Sahara Africa	19
6. Conclusions		22
Literature		24

- Annex 1: International agreements: status African countries (December 2012)
- Annex 2: Resource persons met during visit Kenya, 20–24 August 2012
- Annex 3: Resource persons met during visit Burkina Faso, 3-7 September 2012
- Annex 4: Resource persons met during South Africa and Namibia, 16–21 September 2012
- Annex 5: Report of the workshop on development and implementation of ABS regulations in sub-Sahara Africa, Nairobi, 1–2 October 2012

4

Acronyms and abbreviations

ABS Access and Benefit Sharing

BEG Bioprospection Expert Group (South Africa)

CBD Convention on Biological Diversity

CGIAR Consultative Group on International Agricultural Research

CGN Centre of Genetic Resources, the Netherlands

CITES Convention on International Trade in Endangered Species

CNA Competent National Authority

CNSF Centre National de Semences Forestières (Burkina Faso)
FAO Food and Agriculture Organization of the United Nations

IBPC Interim Bioprospecting Committee (Namibia)

ITPGRFA International Treaty on Plant Genetic Resources for Food and Agriculture

KARI Kenya Agricultural Research Institute
KEPHIS Kenya Plant Health Inspectorate Services

KFS Kenya Forest Service
KWS Kenya Wildlife Service
MAT Mutually Agreed Terms

MLS Multilateral system of the ITPGRFA
MSBP Millennium Seed Bank Partnership
MTA Material Transfer Agreement

NCST National Council of Science and Technology (Kenya).
NEMA National Environment Management Authority (Kenya)

NFP National Focal Point

NGO Non-Governmental Organization

PGRFA Plant Genetic Resources for Food and Agriculture

PIC Prior Informed Consent

SANBI South African National Biodiversity Institute

SANParks South Africa National Parks

SMTA Standard Material Transfer Agreement
UNDP United Nations Development Programme

1. Introduction

1.1 Background

Where formerly plant genetic resources were considered to be in the public domain, the instalment in the past decades of various international agreements has led to profound changes, and has established national sovereignty over genetic resources Today, individuals, companies and institutes seeking access to genetic resources have to comply with rules and regulations set by national governments, based to a varying extent on the international agreements mentioned above. As each country is following its own procedures, this has led to a complex situation, and sometimes even a feeling that in some countries it is not worth the effort anymore to seek access to genetic resources. Therefore, the Dutch Ministry of Economic Affairs, Agriculture and Innovation commissioned the Centre of Genetic Resources, the Netherlands (CGN) to undertake an inventory and analysis of Access and Benefit-Sharing (ABS) policies and practices in Sub-Sahara Africa.

1.2 Aims of the project

The aims of the project were to make an inventory of Access and Benefit-Sharing policies and their implementation in selected countries in Sub-Sahara Africa, to analyse shortcomings and to formulate proposals for improvement. In the framework of the project, a discussion platform with policy makers in Sub-Sahara Africa was to be organised, and the project was intended to contribute to trust building between African countries and the Netherlands as the basis for substantial improvements in the exchange of germplasm and the fair and equitable benefit-sharing between the parties involved. This pilot project can be regarded as a first step in a multi-year consensus-building process.

1.3 Methodology

The project included the following components:

- 1. A desk study into ABS legislation and regulations in four target countries, their implementation and current practices with respect to the exchange of germplasm by various stakeholders. The role of various public and private partners regarding the implementation of ABS was studied. Other points of interest were the relationship of national policies with international agreements and initiatives. The following countries were selected as target countries:
- * Kenya (plant breeding and crop production for European markets);
- * Burkina Faso (country with a relatively well developed agricultural sector in West Africa);
- * South Africa (major breeding and crop export industry);
- * Namibia (representing the African region in ABS negotiating forums). In this phase, discussions were also held with Plantum and representatives of several Dutch plant breeding companies, to gauge their views on ABS in Africa.
- 2. Identification missions to Burkina Faso, Kenya, South Africa and Namibia to contact the major stakeholders in these countries and to collect and compare their views on the principles and implementation of ABS policies. The interest of the authorities and policy makers in each of the four targeted countries into the further development of effective ABS policies was also gauged.
- 3. A workshop analysing legislation, implementation, expectations and practices regarding ABS in Africa. Barriers towards the further development and implementation of ABS policies conducive to exchange and to benefit-sharing were identified and options to remove such barriers were discussed.
- 4. A final phase in which the findings of the earlier phases were analysed, proposals for improvement of the present situation were formulated, and all information was incorporated into this final report.

2. International ABS developments

2.1 Convention on Biological Diversity

The CBD was opened for signature on 5 June 1992 and entered into force on 29 December 1993. As of December 2012, there were 193 parties to the CBD (192 countries and the European Union). The United States signed, but did not ratify.

The three objectives of the Convention on Biological Diversity (CBD) are: 1. conservation of biological diversity; 2. sustainable use of its components; and 3. fair and equitable sharing of benefits arising from the utilisation of genetic resources. The CBD is considered the first international instrument to address biological diversity in a comprehensive way. It represents a paradigm shift, away from the concept of heritage of mankind to the concept of national sovereignty over genetic resources.

The CBD stipulates that conditions for access and sharing of benefits must be established between countries providing and using genetic resources and associated traditional knowledge, through bilateral contacts and on a case-by-case basis. Access must be granted on mutually agreed terms (MAT), and is subject to prior informed consent (PIC) of the provider of the resources. Furthermore, there must be fair and equitable sharing of benefits deriving from the use of the resources. Each ABS agreement has to be negotiated with the country of origin and with local communities holding traditional knowledge, with Benefit Sharing arrangements for each concrete case.

As the CBD was primarily focused on regulating access to genetic resources of wild flora and fauna species used for chemical and pharmaceutical purposes, it is difficult to apply to plant genetic resources used for food and agriculture and to agricultural knowledge and practices (Santilli, 2012).

2.2 African Model Law

The African Model Law for the Protection of Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources was adopted in 1998. The version adopted in 1998 did not include provisions on plant breeders' rights, but these were included in 2001.

The Model Law was not a real law or agreement, but rather an information package that could be used in drafting national laws. It served as a framework for African Union member states to develop specific national legislation in compliance with international commitments (Munyi et al., 2012). It is difficult to conclude, however, to what extent the approximately 10 African countries with ABS legislation in place have actually used the Model Law in drafting their laws.

The Model Law is in need of revision (Munyi et al., 2012), but it is not yet decided if there will be a new one. The question is whether it is worthwhile to make a new Model Law, and thinking now goes more towards guidelines for implementing the Nagoya Protocol taking into account the principles of the Model Law. The African Union Commission is working on interpretation of the role of the African Model Law in the implementation of the Nagoya Protocol.

2.3 International Treaty on Plant Genetic Resources for Food and Agriculture

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) was adopted in November 2001 and came into force in June 2004.

The objectives of the Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security (FAO, 2002). So, the objectives are the same as those of the CBD, except that they are specific to plant genetic resources for food and agriculture (PGRFA). The Treaty only regulates access to PGRFA, while access to other genetic resources (e.g. for chemical and pharmaceutical uses) is to be negotiated bilaterally in accordance with national ABS policies in the context of the CBD.

Under the Treaty, ABS goals are to be achieved through a multilateral system (MLS) of exchange of genetic resources. In this system, facilitated access is provided based on a Standard Material Transfer Agreement (SMTA), which sets out the legal conditions that apply to suppliers and recipients. The SMTA establishes benefit-sharing obligations when plant genetic resources are commercialized which incorporate materials received from the MLS.

In Annex 1 of the Treaty a list is given of crops (35 crop and 29 forage genera) which are covered under the MLS, if they are under the management and control of contracting parties and in the public domain, hosted in collections of international organisations, and/or voluntarily included by other legal persons. Criteria for inclusion in Annex 1 were the importance of these plant genetic resources for food security at local or global levels, and the interdependence of countries with respect to these plant genetic resources. It took long discussions, however, to come to an agreement on the composition of the list (Visser, 2013).

With respect to Benefit Sharing, the Treaty states that facilitated access constitutes a major benefit in itself, but also establishes that benefits from the use of PGRFA should be shared in a fair and equitable way by means of exchange of information, access to and transfer of technology, capacity building, and the sharing of monetary and other benefits arising from commercialization. Part of the monetary benefits arising from the use of the resources are to be placed into an International Benefit-Sharing Fund set up and managed by the Governing Body of the Treaty. The Fund supports conservation and crop improvement efforts, especially by small scale farmers in developing countries.

2.4 Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization

The Bonn Guidelines were adopted in April 2002 by the sixth Conference of the Parties to the CBD. They apply to all genetic resources covered by the CBD, with the exception of those covered by the Treaty.

The Bonn Guidelines are voluntary and flexible, and were designed to guide countries in the development of their ABS legislation. They outline the roles and responsibilities of users and providers of genetic resources and encourage stakeholders to use a bilateral approach to facilitate ABS goals.

Key issues dealt with include involvement of relevant stakeholders and capacity building, steps in the ABS process, elements of a prior-informed-consent system, potential monetary and non-monetary benefits, incentives, national monitoring and reporting, and accountability (Carrizosa et al., 2004). The Bonn Guidelines explicitly state that prior informed consent of indigenous and local communities should be obtained when access to genetic resources and traditional knowledge is sought.

2.5 Nagoya Protocol

The 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable sharing of Benefits Arising from their Utilisation' was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting on 29 October 2010 in Nagoya, Japan.

The Nagoya Protocol was established to further advance the implementation of the third objective of the CBD: fair and equitable sharing of benefits arising from the utilisation of genetic resources. It provides an international regime, within the framework of the CBD, to promote and safeguard the fair and equitable sharing of benefits arising from the utilisation of genetic resources.

Important elements of the Protocol are obligations to comply with domestic legislation of the country providing access and contractual obligations reflected in mutually agreed terms (MAT), and provisions aiming at more predictable conditions for access to genetic resources. It also contains provisions on access to traditional knowledge.

As part of the Nagoya Protocol on ABS, benefit sharing should also apply to access and use of "derivatives" (biochemical compounds that result from natural metabolism of biological and genetic resource, such as oils and resins), but its application to the wide range of products considered derivatives is still a matter for interpretation (Ruiz & Vernooy, 2012).

The Nagoya Protocol will enter into force 90 days after having been ratified by 50 Parties. As of December 2012, 93 countries have signed and 9 have ratified the Protocol: Ethiopia, Fiji, Gabon, India, Jordan, Lao People's Democratic Republic, Mexico, Rwanda and the Seychelles (CBD website).

3. ABS in the case study countries

3.1 Burkina-Faso

3.1.1. International agreements

Burkina Faso signed the CBD in 1992, and ratified in 1993. The country became party to the Treaty in 2006. The Nagoya Protocol was signed in 2011, but has not yet been ratified. The Ministry of Environment and Sustainable Development is responsible for the implementation of the CBD and the Nagoya Protocol, while the Treaty is being implemented by the Ministry of Agriculture.

The Primary NFP for the CBD is Mr Somanegré Nana (Ministry of Environment and Sustainable Development, 01 BP 6486, Ouagadougou 01, Burkina Faso; Tel: + 226 50 31 31 66; e-mail: somanegre26nana@gmail.com).

The NFP for the Nagoya Protocol is Mr M. Boniface Soumayila Bancé (Ministry of Environment and Sustainable Development, 01 BP 6486, Ouagadougou 01, Burkina Faso; tel.: +226 50313166 / 70263857; e-mail: bancebo@yahoo.fr).

The NFP for the Treaty is Dr Didier Balma (Ministry of Scientific Research and Innovation, 01 B.P. 476, Ouagadougou 01, Burkina Faso; tel. +226 50308269 / 70247360; e-mail: dbal@fasonet.bf; balma_didier@yahoo.fr).

3.1.2. Current legislation, regulations and practices

Burkina Faso has not yet specific ABS laws and regulations in place. Only in the Seed Act it is stated that authorization is needed for traditional varieties to be moved out of the country, and that benefits from the exploitation of traditional plant genetic resources should be shared with the local population (Garané & Zakane, 2008).

In policy documents, such as the National Biodiversity Strategy and Action Plan, reference is made to Benefit Sharing: it should be extended to all biological resources, not just genetic resources, and benefits derived from the use of biological resources should be redistributed among interest groups (Garané, 2009; Garané & Zakane, 2008).

In 2009, the National Commission on Plant Genetic Resources Management was created to coordinate the implementation of the Treaty in connection with the implementation of the Nagoya Protocol. The Permanent Secretary of this commission is Dr Didier Balma. Members include representatives of the Ministry of Scientific Research and Innovation, the Ministry of Agriculture, the Ministry of Education, the Ministry of Environment and Sustainable Development, the Ministry of Animal Resources, the Ministry of Finance, NGOs, and other actors). The establishment of a commission for plant genetic resources in general is in preparation; it will be responsible for developing a convergence between the actions of the Ministry of Environment and the Ministry of Scientific Research and Innovation.

Burkina Faso is in the process of ratifying the Nagoya Protocol. To this end, two workshops have been held. The first one for stakeholders in the field (such as researchers and associations), the second one (in August 2012) for parliamentarians, because ratification must be done by Parliament. The NFP of the Treaty also participated in the first workshop. The ratification file has been submitted to the Council of Ministers.

At the moment, when organizations or enterprises are seeking access to genetic resources, they contact institutions on an ad-hoc basis, there is no central guidance. According to interviewees, especially much research on medicinal plants is going on in the country. Quantitative information on bioprospecting activities is lacking, however.

A rare example of an ABS agreement in Burkina Faso is that of the Centre National de Semences Forestières (CNSF) in the Millennium Seed Bank Partnership (MSBP) with Kew Gardens. In this partnership, plant genetic resources are collected, and duplicates are kept at CNSF and at Kew. Benefits include training of researchers (MSc's and PhD's in Kew or other institutions), the availability of seeds, and scientific co-publications.

3.1.3. Experiences and views of stakeholders

By some, the current practices of accessing genetic resources are described as 'looting', but they are not illegal.

Various interviewees expect that Burkina Faso will ratify the Nagoya Protocol before the end of 2012. Problems envisaged with respect to the implementation of the Protocol are the lack of financial resources and the fact that there is very little knowledge on ABS among stakeholders, including scientists. It is thought that a lot of work needs to be done on informing and awareness raising on the concepts of ABS.

According to some, the SMTA of the Treaty may perhaps work between institutes, but it does not work between individual researchers, who are still exchanging informally.

3.1.4. Expected developments

When the Protocol has been ratified by Parliament, a specific law will be prepared and structures be put in place. The idea is to establish an inter-ministerial office which will function as an intermediary between researchers and communities.

3.1.5. Further information

Very little written information is available on ABS in Burkina Faso.

3.2 Kenya

3.2.1. International agreements

Kenya signed the CBD in 1992, and ratified in 1994. The Nagoya Protocol was signed in 2012, ratification is in progress. Kenya is also a Party to the International Treaty.

The NFP for the CBD is Mr Ali D. Mohamed (Permanent Secretary, Ministry of Environment and Mineral Resources; NHIF Building, Ragati Road, P.O. Box 30126, Nairobi; tel.: +254 20 2730808,9; e-mail: psoffice@environment.go.ke).

The NFP for the Treaty is Mr Zachary Muthamia (Head National Gene Bank of Kenya, Kenya Agricultural Research Institute (KARI); P.O. Box 30148, 00200 Nairobi; tel.: +254 020 025539 / +254 020 2700462; e-mail: ngbk@wananchi.com; zkmuthamia@yahoo.com).

3.2.2. Current legislation, regulations and practices

Access and Benefit Sharing in Kenya are regulated by the *Environmental Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations* (Legal Notice No 160, 2006). Implementation is by the National Environment Management Authority (NEMA). Before 2006, application for a permit had to be done at the National Council of Science and Technology (NCST).

The ABS regulations came into in force in 2006, also for activities already in place then. There was an exemption for existing activities carried out by recognized research institutions. The regulations are now being enforced, and all research organizations have to comply. However, only recently did international research organizations receive notification on the regulations from NEMA.

The current procedure is that an Access Permit has to be requested from NEMA, and a fee has to be paid: KSh 20,000 (c. € 175) for individuals and KSh 50,000 (c. € 440) for companies. Requirements are PIC, MAT and minutes of meetings, and research authorization from the NCST. In the case of wildlife, PIC should be sought from KWS, in the case of agricultural resources from KARI. If genetic resources are to be taken outside the country, a MTA is necessary. When wild material is to be taken out of Kenya, an export permit has to be obtained from KWS. For plants a phytosanitary certificate may be needed from KEPHIS, for animals clearance from veterinary services. The definition of genetic resources applied in Kenya is broad, and also includes derivatives. Currently, no distinction is made between basic research and commercial use of genetic resources, but this may change.

A decision on the application is taken by an 'Access and Benefit-sharing Technical Committee', consisting of representatives of various departments and agencies, and created to ensure wider government consultation and decision making in the permitting process. The Committee is chaired by Mr Mukonyi Kavaka Watai (KWS, P.O. Box 40241-00100, Nairobi; e-mail: mwatai@kws.go.ke). For specific decisions, members of the relevant agencies are involved. It is the Committee which decides whether the Benefits agreed on are sufficient for granting a permit.

According to the law, a permit can be obtained in 60 days, but in practice this period is extended if not all requirements have been met. Applications for access may be made by both natural and legal persons.

There are no separate regulations to implement the Treaty, and the procedure outlined above must also be followed for crops included in Annex 1 of the Treaty. According to some stakeholders, this non-exemption may be part of the current revision, but efforts to make an amendment to Legal Notice No 160 to exempt plant genetic resources for food and agriculture under the Treaty (Ochieng et al., undated) have, until now, not been successful.

3.2.3. Experiences and views of stakeholders

Only three permissions have been issued until March this year, while 7-11 applications are still pending. The files can be looked into at NEMA, but this costs KSh 5000 (c. € 45) for non-residents.

Many people complain that the system is unclear and there are too many regulators (KWS, KARI. KFS, KEPHIS, etc.). Various agencies have to be consulted, and sometimes even various persons within the same organization. It is said that there is too much red tape, applications cost too much time. Reapplication for continuation of the permit must be done yearly and costs KSh 25,000 (c. € 220). Any change in personnel has to be reported. A problem also mentioned is that you need much longer than a few weeks to get the permit. One CGIAR institute indicated that it runs about 100 projects, and that for each of these projects a permit is necessary. Its Director General tried to get one permit for the whole institute, but did not succeed. The draft Kenya National Biosciences Policy (NCST, 2012) contains the following statement: "The current permit issuing systems are cumbersome, protracted and also make tracking and verification difficult, which has negatively impacted safe and secure research, innovation, conservation and sustainable use of biological resources". NEMA acknowledges that there are many complaints of applicants about the amount of paperwork required, and says that it wants to reduce this paperwork.

The ABS regulations of 2006 also apply to activities already in place then, and one of the challenges that have been experienced by users is the need for compliance for access obtained before 2006.

It has also been said that the argument now is not about having to comply with CBD, but about the obligation for payment imposed by NEMA. According to some, ABS has turned into a fee-paying system, and the CBD spirit is lost in this system. They say more should have been done to inform and train people. Some people say there is nothing visible of any trickling down of the money to local communities. According to NEMA, the fees paid are to be used to cover processing costs and not intended for Benefit Sharing, while KWS representatives clearly express that they see Benefit Sharing as a way to cover costs of conservation of wild genetic resources.

Other stakeholders complain that providers do not always follow the rules. The collection of the Genebank, they say for instance, can be accessed without having to consult communities, and other providers are said to have circumvented the PIC rules.

One Kenyan respondent indicated that in Kenya the involvement of foreign companies is always viewed with a lot of suspicion. There is a lot of mistrust due to past cases of bio-piracy. In addition, there is a feeling that foreigners especially from Western countries are benefiting more from resources obtained from the country than the country itself. These companies are technologically more advanced and have more capacity to use these resources than Kenya itself.

Traditionally, the National Genebank has had the mandate to provide access to its materials without reference to any other institution. However, according to the current regulations, any person intending to access genetic resources for any purposes must apply to NEMA by filling application forms for an access permit. It is therefore not clear whether access to materials conserved at the Genebank is subject to the permit system of NEMA.

ILRI and other CGIAR institutes have entered consultations to be excluded from the ABS system, as they think the costs are much too high and CGIAR institutes are not supposed to pay these kinds of fees. ILRI staff say donors do not like to pay these fees. Negotiations with the government will be started when the CGIAR institutes have reached agreement among themselves.

3.2.4. Expected developments

A new Constitution has been made in 2010, but clarity will only come after the elections of March 2013, when a new government is in place and the new Constitution has been effectuated. Because of the new Constitution, all legislation is being reviewed, and this gives room for comments and improvements. Ministries will be merged, semi-autonomous bodies as well. It is hoped that the system will become simpler, e.g. a single agency instead of different agencies for plants, wildlife, forests etc.

In the draft Kenya National Biosciences Policy (NCST, 2012) it is recommended to establish a national Biosecurity and Bioscience Research Authorization Committee (BBRAC), consisting of representatives from the regulatory institutions involved in bioscience research authorization or permit issuance, and to review existing legislation on research authorization and permitting in order to facilitate the work of the BBRAC. In this Policy, it is also recommended to elevate the KARI genebank into the Kenyan Biological Resource Centre (KBRC), for ex situ conservation of genetic resources.

One of the stakeholders indicated that he foresees a situation where procedures for granting access to materials for basic research will be simplified while a lot of bureaucracy will be introduced for access to materials for commercial utilization.

3.2.5. Further information

Much information can be found on the website of the National Environment Management Authority (www.nema.go.ke), which provides information on the legislation, and the procedures and costs of obtaining permits. The text of the regulations and an application form for an access permit can be downloaded from the website.

3.3 Namibia

3.3.1. International agreements

Namibia signed the CBD in 1992, and ratified in 1997. Namibia is a Party to the International Treaty. The Nagoya Protocol has not been signed. According to staff of the Ministry of Environment and Tourism, the country has not signed the Nagoya Protocol because the Minister was not happy with the outcome of the negotiations in Nagoya and the way these final negotiations had developed.

The Primary NFP for the CBD is Mr Teofilus Nghitila (Director of Environmental Affairs, Ministry of Environment and Tourism, Private Bag 13306, Windhoek; tel.: +264 61 2847111; e-mail: tnghitila@yahoo.com).

Although Namibia has not yet signed the Nagoya Protocol, there is a NFP for the Protocol: Ms Betty Kauna Schroeder (Project Coordinator, Biodiversity and Sustainable Land Management Project (BSLM), Ministry of Environment and Tourism, Private Bag 13306, Windhoek; tel.: +264 61 2842704; e-mail: kauna@met.na).

The NFP for the Treaty is Mr Stephen Carr (Senior Agricultural Researcher, National Botanical Research Institute, Ministry of Agriculture, Water and Forestry (MAWE), Private Bag 13184, Windhoek, Namibia; tel.: +264 61 2022012; e-mail: stevec@nbri.org.na).

An important person for ABS in Namibia is Mr Pierre du Plessis (Centre for Research, Information, Action in Africa, Southern Africa - Development and Consulting (CRIAA SA-DC), Windhoek, Namibia; e-mail: pierre.sadc@gmail.com). He has been involved in ABS since 1995 at the request of the Namibian government, and he was one of the main African negotiators of the Nagoya Protocol.

3.3.2. Current legislation, regulations and practices

In Namibia no national ABS legislation is in place. The country has been working on a draft ABS law since 1998, but this was put on hold in 2006 to wait for international ABS legislation, so that the bill could be harmonized with this legislation. When the Nagoya Protocol was agreed upon in 2010, work on the Namibian law was resumed. The law still has to be passed in Parliament. It was submitted, but has been returned because it was thought that there should be more consultation with and input from the population. Therefore, a countrywide consultation was held to raise public awareness on ABS. The draft law will be resubmitted to Parliament with input of the public incorporated. The idea is to create a 'one-stop-shop', so that applicants do not have to go to different Ministries. In the new law, reference will also be made to the Treaty.

Currently, ABS is regulated by an Interim Bioprospecting Committee (IBPC), established in 2007 with the mandate to regulate and facilitate bioprospecting issues. The secretary of the IBPC is Ms Betty Kauna Schroeder (also NFP for the Nagoya Protocol). Stephen Carr, NFP for the Treaty, is a member of the IBPC. The IBPC uses the law of contract (private commercial law) to execute the role of Competent National Authority granting legitimate access to resources. It is expected that the IBPC will be transformed and will become the Competent National Authority (CNA) on ABS.

The National Genebank at the National Botanical Research Institute (NBRI) has an operational system for germplasm requests for further plant-related research, especially but not exclusively with regard to species in Annex 1 of the Treaty.

An example of an ABS agreement in Namibia is the case of marula (Sclerocarya birrea) oil, between the Eudafano Women's Cooperative in Namibia and the company The Body Shop. In this agreement it is stated that the local people involved will be the preferential suppliers of the oil to the company involved. This is important, because marula not only grows in Namibia, but also in a range of other countries (including neighbouring countries such as Botswana, Zimbabwe, South Africa, Zambia and Angola). The producers are co-owners of a patent on a type of marula oil with enhanced antioxidant properties. In the framework of the marula project in Namibia, selection work is also carried out to identify and multiply sweeter varieties. Also, work is done on management practices of Sclerocarya birrea plants.

Another example is the agreement on Commiphora resin between a Commiphora growing association and a South African cosmetics company (Afriplex Ltd). In this agreement, members of the association receive monetary benefits for their traditional knowledge.

3.3.3. Experiences and views of stakeholders

According to its secretary, the Committee does not function well enough, as its members are often out of the country.

Some NGO's expressed criticism of the Ministry of Environment and Tourism, and say they have not been involved in developing the new legislation. They say that in the process of drafting new legislation, there have been consultations with traditional leaders, but that most of the time people did not understand what it was all about. They also say there are good policies in Namibia, but they are not implemented well. The Ministry of Environment and Tourism, on the other hand, says it tried to get these NGO's involved, but that they only attended one meeting.

3.3.4. Expected developments

People from the Ministry of Environment and Tourism expect the new law on access to genetic resources to be passed in Parliament this or next year. It is expected that once the new law is in place, there will be a transfer of ABS responsibilities from the Interim Bioprospecting Committee to a National Competent Authority based at the Ministry of Environment, where an office will be installed. It is expected that Mr Toivo Uahengo will become the new NFP for the Nagoya Protocol.

3.3.5. Further information

The brochure Sharing the Benefits of Nature: legitimate access to Namibia's biological and genetic resources for scientific and commercial purposes, issued by The Ministry of Environment and Tourism, gives concise information on ABS system. The Ministry also has issued various leaflets on ABS in the country.

3.4 South Africa

3.4.1. International agreements

South Africa signed the CBD in 1993, and ratified in 1995. The Nagoya Protocol was signed in 2011, but has not yet been ratified. The International Treaty has not been signed, and South Africa is one of the few African countries which are not a Party to the Treaty, together with Botswana, Cape Verde, the Comoros, Equatorial Guinea, Gambia, Mozambique, Nigeria, Somalia, South Sudan and Swaziland (Annex 1).

The technical (principal) NFP for the CBD is Ms Malta Qwathekana, Senior Policy Adviser; Department of Environmental Affairs (DEA), Private Bag X447, Pretoria; tel.: +27 12 310 3067; e-mail: MQwathekana@environment.gov.za). The administrative NFP for the CBD is Ms Judie Combrink (Department of Environmental Affairs (DEA), Private Bag X447, Pretoria 0001; tel.: +27 12 310 3452; e-mail: globalengagements@environment.gov.za).

The NFP for the Nagoya Protocol is Mr Jones Muleso Kharika (Director Resource Use, Department of Environmental Affairs; tel.: +27 12 310 35 78; e-mail: ikharika@environment.gov.za).

3.4.2. Current legislation, regulations and practices

South Africa has an elaborate ABS legislation, with as main elements the Biodiversity Act (2004), the Bio-Prospecting, Access and Benefit-Sharing Regulations (2008) and the Amendments to the Biodiversity Act (2009). The stated purpose of the legislation is to not restrict access to resources and collect money, but to ensure that resources are accessed for a purpose that is in the interest of the public. Such interest could include the protection and conservation of indigenous genetic resources, stimulating economic development, and/or promoting scientific research and capacity in South Africa. The legislation refers to 'biological resources', not to 'genetic resources'.

a. Biodiversity Act (2004)

The Biodiversity Act came into force in June 2004. Its objectives are the same as those of the CBD: conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of benefits arising from the utilisation of genetic resources.

Chapter 6 deals with Bioprospecting and Access and Benefit-Sharing. Bioprospecting is defined as 'any research on, or development or application of, indigenous biological resources for commercial or industrial application'. According to the Biodiversity Act, it is illegal to obtain and utilize any extracts from indigenous plants or animals for commercial use without a permit. It mentions PIC and MTA, and establishes a Bioprospection Trust Fund. The Act only regulates indigenous resources. It explicitly excludes the species included in annex 1 of the Treaty. The Act gives no specific details on who is to issue permits and where to apply.

b. Bio-Prospecting, Access and Benefit-Sharing Regulations (2008)

These regulations, passed in January 2008 and come into force in April 2008, provide the details lacking in the Biodiversity Act.

Three types of permits are distinguished:

- 1. The Bioprospecting permit is a permit to engage in the discovery phase and/or commercialisation phase of a bioprospecting project. The issuing authority is the Minister of Environmental Affairs and Tourism. In 2012 the costs of this permit were R 5000 (c. € 440).
- 2 The Integrated export and bioprospecting permit is a permit to export indigenous biological resources for the purpose of bioprospecting. The issuing authority is the Minister of Environmental Affairs and Tourism. In 2012 the costs of this permit were R 5200 (c. € 460).
- 3. The Export permit for research other than bioprospecting is a permit for exporting from South Africa any indigenous biological resource for research other than bioprospecting. The issuing authority is the MEC (Member of Executive Council) responsible for Environmental Affairs in the Province where resource is collected. The biological resource may not be sold, donated or transferred to a third party without written consent of issuing authority; consent not given if resource is to be used for bioprospecting purposes. In 2012 the costs of this permit were R 100 (c. € 10).

The Regulations contain application forms for the three types of permits, standard texts of the three types of permits, a model MTA, and a model Benefit Sharing agreement, including a long list of possible monetary and non-monetary benefits. Procedures of appealing against decisions are also outlined.

Having a local counterpart is necessary for obtaining a permit. Permits are given for a maximum of five years, and an annual status report required. It is not necessary to obtain a separate permit for each species to be accessed, more species per permit are allowed. Biotrading without a permit may be criminally charged.

A permit is not required for:

- research other than bioprospecting, carried out in South Africa;
- trade of commercial products purchased from a bioprospector, provided that the bioprospector has complied with the regulations;
- collection, use, propagation, cultivation or trade of indigenous biological resources for domestic use or subsistence purposes; and
- artificial propagation, multiplication or cultivation of plant species for local and international cut flower and existing ornamental plant markets.

c. Amendments to the Biodiversity Act (2009)

In the Amendments to the Biodiversity Act, coming into force in September 2009, some new definitions are included, such as the 'discovery phase of bioprospecting' (no permit necessary if carried out in South Africa, but notification required) and the 'commercialisation phase of bioprospecting' (permit necessary). Provisions are included on the renewal and amendment of permits. Furthermore, the Amendments state that a commitment has to be signed that, when there is commercialization in the future, you have to go through the application process again.

d. Procedure

When an application is received, it passes through an administrative process and an internal assessment takes place to ascertain that all necessary documents are present. Subsequently, the application is examined by the Bioprospection Expert Group (BEG), an advisory committee with representatives of the Department of Agriculture, the Department of Trade and Industry, the Department of Science and Technology, the Department of Health, public entities such as SANBI and SANParks, and representatives of the 9 provinces. When the committee is satisfied, the application is submitted to the Minister for approval. The BEG convenes 4 times per year; when there are at least 5 applications, there is an ad-hoc meeting. In some cases, with a well-prepared application, it took only 4 months to get a permit. The regulations have been amended to include a passage referring to 'reasonable time'. The Director General has been delegated the authority to approve issuance of a permit if the advice is positive.

3.4.3. Experiences and views of stakeholders

The Bio-Prospecting, Access and Benefit-Sharing Regulations have been in force since 2008. The number of permits issued since then is only eight. Often, applications come in, but are sent back because more information is needed. The majority of the permits issued was to local companies, with a few of them partnering with foreign companies.

Users complain that there is too much bureaucracy. For instance, often various permits are necessary, e.g. for CITES, provincial payments and phytosanitary certificates. It is now attempted to streamline the process. New regulations are being made, but they still need to be approved by the Minister. According to the Ministry of Environment, the biggest challenge is monitoring and ensuring compliance after genetic resources have left the country.

Some critics argue that the policy focus with respect to ABS has mainly been on indigenous plant use and drug discovery, and that PGRFA have been neglected. They argue that South Africa should make a priority of ratifying the Treaty, because it is vital for the country to be part of international systems of exchange, use and conservation of genetic resources, especially because of the process of climate change currently going on (Wynberg et al., 2012).

3.4.4. Expected developments

According to staff at the Ministry of Environment, attempts are made to streamline the process. The ideal situation would be that people only have to apply once for all permits. Also, some definitions in the law, for instance that of bioprospecting, have to be clarified. The Biodiversity Act will be amended to include biotrade in the definition of bioprospecting: not only providers and users are concerned, but also intermediary stakeholders in the chain.

3.4.5. Further information

Much information can be found on the website of the Department of Environmental Affairs (www.environment.gov.za), including guides, forms, models, legislation and issued permits. It also contains a Brief guide to completing a bioprospecting permit application.

The booklet South Africa's Bioprospecting, Access and Benefit-Sharing Regulatory Framework. Guidelines for Providers, Users and Regulators (Department of Environmental Affairs, 2012) gives information for providers, users and regulations. It is also accessible on the website mentioned above.

4. Analysis: Bottlenecks hampering Access and Benefit Sharing in practice

a. Bureaucracy and complexity of ABS regulatory systems in some countries

Users complain about the complexity of the present ABS regulatory systems, for instance in Kenya and in South Africa. The demands are not always clear for users, who do not always know where to go. In Kenya only three permits have been issued since 2006, in South Africa only eight since 2008. In Namibia, the secretary of the Interim Bioprospecting Committee, which regulates bioprospecting in the country, indicates the Committee does not function well enough, because its members are often abroad.

b. Absence of ABS regulatory systems in remaining countries

In Burkina Faso specific regulations on ABS are not yet in place. This leads to practices described by some people as 'looting', without these practices being illegal. Although Burkina Faso is the only country of the four target countries in this study without a specific ABS system, it is by no means the only African country not having an ABS system in place, as only about ten African countries have laws on ABS (Peter Munye, pers. comm.).

c. Responsibilities for CBD/Nagoya and Treaty divided over different ministries

In Kenya the CBD and the Nagoya Protocol are implemented by the Ministry of Environment and Mineral Resources, while the Treaty falls under the Ministry of Agriculture. In Namibia the CBD is under the Ministry of Environment and Tourism, and the Treaty under the Ministry of Agriculture, Water and Forestry. Cooperation between the different ministries is sometimes difficult.

d. Lack of clarity on the special status of plant genetic resources for food and agriculture.

Provisions have been made in the texts of the Treaty and the Nagoya Protocol to enable coherence between the Treaty and the CBD/Nagoya Protocol. Article 1 of the Treaty states that "The objectives of this Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising form their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security", and that "These objectives will be attained by closely linking this Treaty to the Food and Agriculture Organization of the United Nations and to the Convention of Biological Diversity". Article 4 of the Nagoya Protocol states that: "Where a specialized international access and benefit-sharing instrument applies that is consistent with, and does not run counter to the objectives of the Convention and this Protocol, this Protocol does not apply for the Party or the Parties to the specialized instrument in respect of the specific genetic resource covered by and for the purpose of the specialized instrument", while Article 8 says that "In the development and implementation of its access and benefit-sharing legislation or regulatory requirements, each party shall (...) consider the importance of genetic resources for food and agriculture and their special role for food security".

In practice, however, the situation is not always clear. Kenya, for instance, is a party to the Treaty, but has not properly implemented it. For crops included in Annex 1 of the Treaty, the same procedure must be followed as for other genetic resources. Past efforts to exempt Annex 1 species from the general ABS regulations have not been successful. A remarkable situation exists in South Africa, where the species included in Annex 1 of the Treaty are explicitly exempted in the Biodiversity Act, while, at the same time, the country has not signed the Treaty. So, species included in Annex 1 of Treaty are a 'grey area' in South Africa.

e. Divergent visions on Benefit Sharing between users, providers and other stakeholders

The benefits agreed upon in ABS agreements can take many forms. Monetary benefits might include fees per sample, grants to cover agreed research programmes, profit-sharing, stakes in equity, joint ventures, royalties and the prospect of local employment opportunities. Forms of non-monetary benefits include the sharing of research results, participation in research, technology transfer, training and capacity building, scientific co-publications, providing seeds, medical assistance, and investment in local infrastructure (Secretariat of the Convention on Biological Diversity, 2011; Visser et al., 2005).

It has been said that countries supplying materials to industry are increasingly familiar with the costs, risks and delays inherent in product development, and rather than pinning their hopes on the small chance of a royalty payment twenty years or more later, they are increasingly prioritising 'non-monetary' benefits (Ten Kate & Laird, 1999).

Expectations on the types and amounts of benefits differ between stakeholders. According to people from the private sector, the expectations of providers of genetic resources are often too high. In plant breeding, for instance, genes for many different sources are involved in the development of a new variety, and, according to some users, it is not realistic to expect much from Benefit Sharing in these cases.

It is often difficult to determine what 'fair and equitable benefit sharing' entails, as the value of genetic resources may be different for different people and may change over time. Also, although a wide range of non-monetary benefits are possible, and explicitly mentioned in, for instance, the Nagoya Protocol and the South African Bio-Prospecting, Access and Benefit-Sharing Regulations, it seems that many people think of monetary benefits, when they think of benefits.

The fact that the distribution of genetic resources often is not limited to one country makes Benefit Sharing even more complicated, as the CBD and Nagoya Protocol focus on bilateral ABS agreements.

In the case of the Treaty, some respondents think that the Benefit Sharing mechanism does not function well. As one of them puts it: "To have a Benefit Sharing system that is supported by donor funds is not the intention of the Treaty, instead it highlights the limited commitment by accessing entities to the spirit of the Treaty".

f. Perceived non-compliance with ABS regulations

Actual and potential non-compliance with national ABS laws, regulations and/or MAT by recipients remain a big concern in the African countries. NEMA in Kenya, for instance, stated that many recipients of genetic resources have not complied. According to the Ministry of Environment of South Africa, the biggest challenge it faces is monitoring and ensuring compliance after genetic resources have left the country. The NFP for the Treaty in Namibia indicated that his institute lacks the human resources to fully manage and monitor all the MATs that have been signed.

g. Limited awareness of ABS within countries

In Kenya limited awareness of ABS is said to be a problem, although others say that in Kenya awareness is relatively high, and that even people in remote areas are aware of the regulations.

In Burkina Faso, the General Director of the CNSF said that at all levels people have very little information on ABS, and that a lot of work has to be done on informing and awareness raising on the concept of ABS among people active in technical, developmental and scientific structures.

In Namibia a draft law on access to genetic resources was returned from Parliament because it was considered that there should be more consultation with and input from the population. So, a countrywide consultancy was held to raise public awareness on ABS.

h. Limited Access due to inadequate conservation of genetic resources

Although conservation of genetic resources is one of the main objectives of the CBD, the Treaty and the Nagoya Protocol, current practices of and facilities for this conservation are sometimes inadequate. Benefit Sharing can help to cover costs of (in situ and ex situ) conservation, but is not always linked to biodiversity conservation.

People from Burkina Faso indicated that ex situ collections have sometimes been lost due to floods, while in Kenya various stakeholders have indicated that ex situ conservation should be promoted and a recognized depository centre should be established in the country.

5. Steps towards effective and balanced ABS practices in Sub-Sahara Africa

a. Reduction of bureaucracy and complexity of existing ABS regulatory systems

Regulators in Kenya and in South Africa have indicated they are aware that the present regulations in these countries are too complex and that they wish to reduce the complexity. In Kenya, for instance, NEMA wants to increase the practical workability by streamlining procedures, through development of templates for PIC, MAT an MTA, and automation of licensing. The idea to link all different institutions involved in ABS in a country and to create a 'one-stop-shop' for prospective users, as expressed in Namibia, would certainly contribute to decreased complexity and reduction of bureaucracy.

The Netherlands could contribute by helping African countries such as Kenya in the adaption of regulations and the streamlining of their implementation. Representatives of the African Biodiversity Network in Kenya, for instance, indicated that a possible role for the Netherlands government would be to support the drafting of good laws.

b. Establishment of ABS regulatory systems in remaining countries

In countries without ABS regulations, such as Burkina Faso, Access may be easy, but Benefit Sharing depends on the good intentions of those seeking access to genetic resources. To ensure fair and equitable Benefit Sharing, these countries should move forward towards establishing regulatory measures.

Burkina Faso is one of the countries included in the Bioversity/FAO/Treaty Secretariat project aiming at capacity building to implement the Treaty. Some stakeholders from Burkina Faso have indicated that the country lacks financial resources for the implementation of the Nagoya Protocol, but others have indicated that an agreement with UNDP has already been signed for its implementation.

In this kind of activities, cooperation may be sought with programmes such as the ABS Capacity Development Initiative, a multi-donor initiative, established in 2006, that aims to support ACP countries (African, Caribbean and Pacific Group of States) in developing and implementing national ABS regulations.

c. More coordination between ministries responsible for CBD/Nagoya Protocol and Treaty

The situation that usually different ministries are responsible for the implementation of the CBD/Nagoya Protocol on one hand and the Treaty on the other, is a reflection of the fact that the CBD and Nagoya Protocol are primarily based on biodiversity conservation concerns, while the Treaty focuses on agriculture and food production. It is probably not realistic to expect this situation to change fast, but there should at least be some form of coordination between the different ministries involved. In Burkina Faso, for instance, the Ministry of Environment and Sustainable Development, the Ministry of Scientific Research and Innovation, the Ministry of Agriculture and other ministries are represented in a National Commission on Plant Genetic Resources Management, created to coordinate the implementation of the Treaty in connection with the implementation of the Nagoya Protocol.

d. Creation of a clear and separate status of plant genetic resources for food and agriculture in national ABS regulations.

It is important to find ways to deal at the national level with the co-existence of the CBD/Nagoya Protocol and the International Treaty on Plant Genetic Resources. ABS regulations based on the Nagoya Protocol should take into account the MLS of the Treaty.

In countries which are party to both the Treaty and the CBD, regulations should make a clear distinction between plant genetic resources for food and agriculture (covered by the Treaty) and other genetic resources (covered by the CBD). In ABS regulations based on the CBD, requiring bilateral case by case agreements, plant genetic resources for food and agriculture included in Annex 1 of the Treaty should be explicitly exempted, as is the case in South Africa.

Many people think that, from the viewpoint of Access, the Treaty has been more successful than the CBD/Nagoya Protocol: "To date, only the ITPGRFA seems to have resulted in an operational, multilateral ABS system. (...) This contrasts dramatically with the bilateral, case-by-case negotiations that are explicitly promoted by the Nagoya Protocol and all national ABS laws and regulations, and that continue to generate uncertainty, especially at the national level and within the scientific community" (Ruiz & Vernooy, 2012). When regarded from this viewpoint, expansion of the number of species in Annex 1, for instance with horticultural species, would be a logical next step.

On the basis of Article 24, Annex 1 can be amended by consensus of all contracting parties. Positive views on the expansion of Annex 1 of the Treaty have been expressed by various stakeholders in Burkina Faso and Kenya. However, in Kenya the opinion has also been expressed that it is unlikely that attempts to expand the Treaty will be supported, because there is a lot of mistrust, and that there is a feeling in some quarters that the list needs to be trimmed down by removing wild materials. In Namibia, several respondents indicated they are strongly opposed to expansion of the Annex, because they think its Benefit Sharing mechanism is not working well. Expansion seems not feasible before the benefit Sharing mechanism of the Treaty has been improved.

e. Promotion of discussion and enhancement of negotiation skills to come to Benefit Sharing practices acceptable for both users and providers

To better align the ideas of users and providers with regard to Benefit Sharing, discussions among stakeholders on Benefit Sharing expectations and practices should be promoted. It is important that all stakeholders are well aware of the wide range of possible monetary and non-monetary benefits possible, and do not focus on monetary benefits alone.

Improvement of negotiation skills of stakeholders would help to come to Benefit Sharing agreements acceptable for both users and providers, and the Netherlands could play a role in programmes aimed at enhancement of these skills.

f. Better monitoring of compliance

The establishment of structures and the enhancement of expertise to monitor compliance of users to African ABS regulations would be a serious contribution of the Netherlands to create more trust in African countries and thereby more opportunities to create a win-win situation.

Compliance should be monitored and enforced in both the user countries and the provider countries (like with CITES, which is also enforced in user countries). National authorities in the countries where users reside, such as the Netherlands, should play a role in this.

To ensure transparency and traceability and to guarantee that legal requirements in the country of origin have been respected, the idea of an international certificate of origin/source has been proposed (Wekundah, 2012).

g. Awareness raising within African countries

It is important to enhance awareness of ABS regulations amongst relevant stakeholders within African countries. According to the NFP for the CBD in Burkina Faso, it is planned to raise awareness among actors, to explain issues such as which benefits can be obtained, how to access, and how to negotiate. According to the NFP for the Treaty in the same country, there is already a small project to raise awareness of stakeholders (scientists, policy makers, NGOs, seed producers) with respect to the MLS of the Treaty. In Namibia, a countrywide consultancy was held to raise public awareness on ABS.

The Netherlands could have a role in supporting awareness raising programmes like the one carried out in Namibia.

h. Improved access through better ex situ conservation of genetic resources

NCST in Kenya wants to have a strong national facility for ex situ conservation of genetic resources, and thinks there may be a role for the Netherlands in the enhancement of the capacity of institutions in this field (repositories).

6. Conclusions

Burkina Faso is a party to the CBD and the Treaty. The Nagoya Protocol was signed in 2011, and ratification is in progress. Burkina Faso has not yet any specific ABS laws or regulations in place, and when people are seeking access to genetic resources, they contact institutions on an ad hoc basis. A 'National Commission on Plant Genetic Resources Management' has been created to coordinate the implementation of the Treaty with that of the Nagoya Protocol.

Kenya also is a party to the CBD and the Treaty. The Nagoya Protocol was signed in 2012, and ratification is in progress. Specific ABS regulations have come into force in 2006 and are implemented by the National Environment Management Authority (NEMA), where permits are to be requested. Decisions on permit requests are taken by an 'Access and Benefit-sharing Technical Committee', consisting of representatives of various departments and agencies. The Treaty is not implemented, and the same standard procedure must be followed plant genetic resources for food and agriculture as for all other resources. Only a small number of permits have been granted since 2006, and there are many complaints on the complexity of the procedure. NEMA says it is working on streamlining the process.

Namibia is a party to the CBD and the Treaty. The Nagoya Protocol has not been signed. No national ABS legislation is in place, but the country is working on an ABS law. Currently, ABS is regulated by an Interim Bioprospecting Committee (IBPC), established in 2007 with the mandate to regulate and facilitate bioprospecting issues. However, only a small number of permits have been granted by the IBPC.

South Africa is a party to the CBD, but has not signed the Treaty. The Nagoya Protocol was signed in 2011, and ratification is in progress. Detailed ABS regulations have been in force since 2008. Only indigenous resources are regulated, and species included in Annex 1 of the Treaty are explicitly excluded. Different types of permits are distinguished, with separate procedures. Having a local counterpart is necessary for obtaining a permit. A 'Bioprospection Expert Group' examines the application. The number of permits issued is only eight, and users complain there is too much bureaucracy. The Ministry of Environment is now trying to streamline the process.

The present study indicates that the main bottlenecks hampering ABS in the four African countries are:

- Bureaucracy and complexity of ABS systems in some countries
- Absence of ABS systems in other countries
- Responsibilities for CBD/Nagoya and Treaty divided over different ministries
- Lack of clarity on the special status of plant genetic resources for food and agriculture
- Divergent visions on Benefit Sharing between users, providers and other stakeholders
- Perceived non-compliance with ABS regulations
- Limited awareness of ABS within countries
- Limited access due to inadequate conservation of genetic resources

Steps towards more effective and fair ABS practices would include:

- Reduction of bureaucracy and complexity of existing ABS regulatory systems
- Establishment of ABS regulatory systems in other countries
- More coordination between ministries responsible for CBD/Nagoya and Treaty

- Creation of a clear and separate status of plant genetic resources for food and agriculture in national **ABS** regulations
- Stimulation of discussion and enhancement of negotiation skills to come to Benefit Sharing practices acceptable for both users and providers
- Better monitoring of compliance
- Awareness raising within African countries
- Improved access through better ex-situ conservation of genetic resources

The Netherlands could play a role by helping African countries such as Kenya in the adaption of the regulations and the streamlining of their implementation. It could also consider supporting additional programmes aimed at raising awareness on ABS within African countries and the enhancement of negotiation skills. The creation of more trust in African countries in exchange of plant genetic resources and subsequent compliance and thereby more opportunities to create a win-win situation, would certainly be helped by improved monitoring of compliance of users in European countries to African ABS regulations.

Concluding remarks

Some users complain about the existence of ABS regulations, and sometimes it is even suggested that the Netherlands should, like the United States, not have become a party to the CBD and Treaty. It must be borne in mind, however, that the call for sovereignty of countries over their genetic resources and subsequent ABS measures, were a reaction to IP rights over plant varieties becoming stronger in the 1980s and 1990s, which led to fears in developing countries of losing control over their own genetic resources (Santilli, 2012).

On the other hand, ABS regulations should complement and not compromise the other objectives of the CBD and Treaty: conservation of biodiversity and sustainable use of its components. As a respondent from Namibia said: "Namibia believes that benefits must be created before they can be shared, and that it is therefore in its national economic development interest to pro-actively promote biotrade and bio-prospecting". This view is shared by Wynberg et al. (2012) from South Africa: "National access and benefit-sharing policies and laws should support and not impede the continued sharing of plant genetic resources for food and agriculture and related knowledge among farmers".

Finally, the distinction between users and providers is less strict than sometimes thought, and African countries should not only look at ABS as provider, but also as user. Varieties from the MLS are already used on a large scale in African countries, and there is much more to gain for African countries. ABS instruments should enable the countries to benefit both as providers and as users.

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Annex 1: International agreements: status African countries (December 2012)

Country	CE	3D	ITPG	RFA	Nagoya	Protocol
	Signed	Party	Signed	Party	Signed	Ratified
A	4000	4000	0000	0000		
Angola	1992	1998	2002	2006	0044	
Benin	1992	1994		2006	2011	
Botswana	1992	1995				
Burkina Faso	1992	1993	2001	2006	2011	
Burundi	1992	1997	2002	2006		
Cameroon	1992	1994	2002	2005		
Cape Verde	1992	1995	2002		2011	
Central African Republic	1992	1995	2001	2003	2011	
Chad	1992	1994	2002	2006	2012	
Comoros	1992	1994				
Congo	1992	1996		2004	2011	
Côte d'Ivoire	1992	1994	2001	2003	2012	
DR Congo	1992	1994		2003	2011	
Djibouti	1992	1994		2006	2011	
Equatorial Guinea		1994				
Eritrea		1996	2002	2002		
Ethiopia	1992	1994	2002	2003		2012
Gabon	1992	1997	2002	2006	2011	2011
Gambia	1992	1994	2002	2000	2011	2011
Ghana	1992	1994	2002	2002	2011	
Guinea	1992	1993	2002	2002	2011	
Guinea-Bissau	1992	1995	2002	2002	2012	
Kenya	1992	1994		2003	2012	
Lesotho	1992	1995		2005	2012	
Liberia	1992	2000		2005		
			2002		2011	
Madagascar	1992	1996	2002	2006	2011	
Malawi	1992	1994	2002	2002	0044	
Mali	1992	1995	2001	2005	2011	
Mauritania	1992	1996		2003	2011	
Mauritius	1992	1992		2003		
Mozambique	1992	1995			2011	
Namibia	1992	1997	2001	2004		
Niger	1992	1995	2002	2004	2011	
Nigeria	1992	1994	2002		2012	
Rwanda	1992	1996		2010	2011	2012
Sao Tome and Principe	1992	1999		2006		
Senegal	1992	1994	2001	2006	2012	
Seychelles	1992	1992		2006	2011	2012
Sierra Leone		1994		2002		·
Somalia		2009			2012	
South Africa	1993	1995			2011	
South Sudan						
Sudan	1992	1995	2002	2002	2011	
Swaziland	1992	1994	2001			
Tanzania	1992	1996		2004		
Togo	1992	1995	2002	2007	2011	
Uganda	1992	1993	2002	2007	20.1	
Zambia	1992	1993	2002	2006		
Zimbabwe	1992	1993	2002	2005		
ZIIIDabwe	1337	1334	2002	2003		

Annex 2: Visit Kenya

Annex 2: Resource persons met during visit Kenya, 20-24 August 2012

Mr **Mburu Gathuru** (Coordinator, African Biodiversity Network; e-mail: mburu@africanbiodiversity.org).

Dr Fabian Haas (Head of Biosystematics Unit and ABS Specialist, ICIPE; e-mail: fhaas@icipe.org).

Dr Ramni Jamnadass (Global Research Project Leader, Tree Genetic Resources and Domestication, World Agroforestry Centre (ICRAF), United Nations Avenue, Gigiri, PO Box 30677-00100, Nairobi; +254 20 7224169/7224000; e-mail: r.jamnadass@cgiar.org).

Mr **Mukonyi Kavaka Watai** (Kenya Wildlife Service, P.O. Box 40241-00100, Nairobi; e-mail: mwatai@kws.go.ke).

Ms Katja Kehlenbeck (ICRAF, e-mail: k.kehlenbeck@cgiar.org).

Ms Ephy Khaemba (ILRI; e-mail: e.khaemba@CGIAR.ORG).

Ms **Veronica Kimutai** (Senior Standards Officer, National Environment Management Authority, P.O. Box 67839-00200, Nairobi, Kenya; e-mail: wkimutai@yahoo.com).

Dr **Benson Kinyagia**, Senior Science Secretary, National Council for Science and Technology (NCST), Ministry of Higher Education, Science and Technology, P.O. Box 30623-0100, Nairobi; tel. +254 (20) 310571; e-mail: bmkinyagia@gmail.com).

Ms **Priscilla Mutungi** (Kenya Wildlife Service, P.O. Box 40241-00100, Nairobi; e-mail: mwatai@kws.go.ke).

Dr **Daniel Ofori** (Tree Domestication Specialist (World Agroforestry Centre (ICRAF), United Nations Avenue, Gigiri, PO Box 30677-00100, Nairobi; +254 20 7224551/7224000; e-mail: d.ofori@cgiar.org).

Mr **Jeroen Oosterenk** (Manager Finance, Open Innovation & Grants, Unilever R&D, PO Box 114, 3130 AC Vlaardingen, the Netherlands; 010-4605592; e-mail: jeroen.oosterenk@unilever.com).

Ms Linda Opati (IP/Legal Officer; ILRI; e-mail: l.opati@cgiar.org).

Dr **Edwardina Otieno Nidhine** (Senior Science Secretary, National Council for Science and Technology (NCST), Ministry of Higher Education, Science and Technology, P.O. Box 30623-00100, Nairobi, Kenya; tel. +254 (20) 310571; e-mail: eaotieno@ncst.go.ke, edwardinaotieno@yahoo.com).

Mr Fredrick O. Otswong'o (Patent Examiner, Biological Sciences/Traditional Knowledge Unit, Kenya Industrial Property Institute (KIPI), Ministry of Industrialization, P.O. Box 51648 – 00200, Nairobi, Kenya; tel. +254 (20) 6002210/1; website: www.kipi.go.ke; e-mail: fotswongo@kipi.go.ke, fredotsw@yahoo.com).

Dr **Evans Sikinyi** (Executive officer of the Seed Trade Association of Kenya (STAK); Secretary of the Eastern Africa Seed Committee (EASCOM); e-mail: esikinyi@stak.or.ke).

Mr **Hans Wolff** (Counsellor Agriculture, Netherlands Embassy, Riverside Lane, off Riverside Drive, Nairobi; tel: +254 (0)20 4450137; e-mail: nai-lnv@minbuza.nl).

Mr **Peterson Wambugu** (National Gene Bank of Kenya, Kenya Agricultural Research Institute (KARI); P.O. Box 30148, 00200 Nairobi; e-mail: werupw@yahoo.com) had to cancel the planned meeting, but answered a questionnaire by e-mail.

Annex 3: Resource persons met during visit Burkina Faso, 3-7 September 2012

Dr **Didier Balma** (Secrétaire Permanent, Commission Nationale de Gestion des Ressources Phytogénétiques, Ministère de la Recherche Scientifique et de l'Innovation, 01 B.P. 476, Ouagadougou 01, Burkina Faso; tel. +226 50308269 / 70247360; e-mail: dbal@fasonet.bf; balma_didier@yahoo.fr).

Mr Boniface Soumayila Bancé (Direction Générale de l'Environnement, Direction des Conventions Internationales en matière d'Environnement, Ministère de l'Environnement et du Développement Durable, 01 BP 6486, Ouagadougou 01, Burkina Faso; tel.: +226 50313166 / 70263857; e-mail: bancebo@yahoo.fr).

Mr **Mouhamed Drabo** (Expert en Décentralisation Rurale - Gouvernance Locale, Spécialiste en communication pour le développement; tel.: +226 70236005; e-mail: draboh@yahoo.fr).

Dr **Amidou Garané** (Université de Ouagadougou; tel.: +226 76 67 65 18; e-mail: amidou.garane@univ-ouaga.bf; garaneha7@yahoo.fr).

Mr **Somanegré Nana** (Primary NFP CBD; Ministère de l'Environnement et du Développement Durable, 01 BP 6486, Ouagadougou 01, Burkina Faso; Tel: + 226 50 31 31 66; e-mail: somanegre26nana@gmail.com).

Mr **Joseph N. Ouedraogo** (Chef de Service, Service National de Semences, Ministère de l'Agriculture, de l'Hydraulique et des Ressources Halieutiques, Direction Générale des Productions Végétales (DGPV), 01 BP 1764, Ouagadougou 01, Burkina Faso; tel. +226 50361101 / 76650951; e-mail: nisal10@yahoo.com).

Dr **Sibidou Sina** (Directeur Général, Centre National de Semences Forestières. Ministère de l'Environnement et du Développement Durable, 01 BP 2682 Ouagadougou 01, Burkina Faso; tel.: +226 50356111 / 50358013 / 70258574; e-mail: sib_sina@gahoo.fr, sibsina@fasonet.bf).

Mr Bert Vermaat (First Secretary, Embassy of the Kingdom of the Netherlands, 415 Avenue Dr Kwame N'krumah, BP 1302, 01 Ouagadougou, Burkina Faso; tel. + 226 50306134; e-mail: bert.vermaat@minbuza.nl).

Mr Roger Zangré (Directeur, Agence National de Valorisation de Resultats de Recherches (part of CNRST).

Prof. **Jean-Didier Zongo** (Geneticist, Unité de Formation et de Recherches en Sciences Vie et de la Terre (URF/SVT), Université de Ouagadougou, 03 BP 7021 Ouagadougou 03; tel. 70266496; e-mail: zongojd@hotmail.com).

Annex 4: Resource persons met during South Africa and Namibia, 16-21 September 2012

South Africa

Ms **Steph Booker** (Natural Justice: Lawyers for Communities and the Environment, Mercantile Building, 63 Hout Street, Cape Town, 8000 South Africa; e-mail: steph@naturaljustice.org.za).

Mr **Gino Cocchiaro** (Natural Justice: Lawyers for Communities and the Environment, Mercantile Building, 63 Hout Street, Cape Town, 8000 South Africa; tel.: +27 76 83 87 443; e-mail: gino@naturaljustice.org).

Ms **Bridgette Ditshoke** (Department of Environmental Affairs, PB X447, Pretoria, 0001, Fedsure Forum Building, 315 Pretorius Street, Pretoria).

Mr **Eddie Goldschagg** (Technical manager, South African National Seed Organization (SANSOR), PO Box 72981, Lynnwood Ridge 0040, Pretoria; direct tel.: (+27)(012) 349 0072; office tel.:(+27)(012) 349 1438; e-mail: seedcert@sansor.co.za).

Ms Laureen Manuel (Natural Justice: Lawyers for Communities and the Environment, Mercantile Building, 63 Hout Street, Cape Town, 8000 South Africa; tel.: +27 84 43 441 41; e-mail: laureen@naturaljustice.org).

Ms **Grace Mbule** (Department of Environmental Affairs, PB X447, Pretoria, 0001, Fedsure Forum Building, 315 Pretorius Street, Pretoria).

Ms **Lactitia Tshitwamulomoni** (Biodiversity Officer Control, Department of Environmental Affairs (DEA), Sub-Directorate Bioprospecting, Access and Benefit Sharing, PB X447, Pretoria, 0001, Fedsure Forum Building, 315 Pretorius Street, Pretoria; tel.: +27 (0) 123103986, cell: +27 (0) 825939893; e-mail: Lmabadahane@environment.gov.za).

Namibia

Ms **Victoria Haraseb** (Regional Education Assistant, Working Group of Indigenous Minorities in Southern Africa (WIMSA), P.O. Box 80733, 8 Bach Street, Windhoek, www.wimsanet.org; tel. +264 (0) 81 403 0232 / +264 (0) 61 244 909; e-mail: victoria.haraseb@gmail.com).

Ms **Betty Kauna Schroeder** (NFP Nagoya Protocol, contact person 'for general ABS issues'; Project Coordinator, Biodiversity and Sustainable Land Management Project (BSLM), Ministry of Environment and Tourism (MET), Department of Environmental Affairs (DEA), Levinson Arcade, Capital Centre, 6th Floor, Private Bag 13306, Windhoek; Tel. +264 61 2842704; e-mail: kauna@met.na).

Mr **Toivo Uahengo** (Interim Bio-Prospecting Commission (IBPC) Secretariat, Ministry of Environment and Tourism (MET), Directorate of Natural Resources Management; Tel. +264 61 2842506; e-mail: tuahengo@met.na).

Mr **Joram Useb** (Indigenous Peoples of Africa Co-ordinating Committee (IPACC), www.ipacc.org.za; e-mail: joram.ipacc@gmail.com).

Mr **Stephen Carr** (NFP Plant Treaty; Senior Agricultural Researcher, National Botanical Research Institute, Ministry of Agriculture, Water and Forestry (MAWE), Private Bag 13184, Windhoek, Namibia; tel.: +264 61 2022012; e-mail: stevec@nbri.org.na) was not available during the time of my visit, but answered a questionnaire by e-mail.

Mr Pierre du Plessis (Centre for Research, Information, Action in Africa, Southern Africa - Development and Consulting (CRIAA SA-DC), Windhoek, Namibia; e-mail: pierre.sadc@gmail.com) was not in Namibia during the time of the visit, but was interviewed by Dr Bert Visser (CGN) in Svalbard.

Annex 5: Report of the workshop on development and implementation of ABS regulations in sub-Sahara Africa, Nairobi, 1–2 October 2012

Day 1: Monday, October 1

Session 1. Welcome and introduction of participants (Theo van Hintum, Centre for Genetic Resources, the Netherlands (CGN), the Netherlands)

On behalf of Dr Bert Visser, who was not able to participate in the workshop, Theo van Hintum welcomed the participants. All participants introduced themselves.

Session 2. Introduction into the project (Bram de Jonge, Wageningen University, the Netherlands) *Presentation*

The main features (origin, financing, objectives, staff) of the ABS and IPR projects were explained and the workshop programme was presented. It was indicated that the outcome of each project includes a report and a roadmap. The ABS project is considered "a first step in a multi-year consensus-building process".

Discussion

- The question was raised whether the projects were government-led. It was explained that this was not the case: though government funded, the projects are independent, led by the Centre for Genetic Resources, the Netherlands (CGN) and the Law Group of Wageningen University.

Session 3. Plant breeding, access to genetic resources and benefit sharing (Anke van den Hurk, Plantum, the Netherlands)

Presentation

It was stressed that for plant breeding, a continuous flow of genetic resources is needed, "from anywhere to everywhere". ABS rules to be considered by plant breeders include those from the Convention on Biological Diversity (CBD) and those from the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). It was concluded that the ITPGRFA system fits the ABS needs of the plant breeding sector best.

Discussion

- Question were raised such as 'How do we know that you come back when you use our materials?' and 'How can we be sure that a variety is really new?' It was replied that we have the UPOV system, but the most important thing is that 'we need trust'.
- National Focal points for ABS are usually no plant breeders. They often talk about products of biodiversity, not about genetic resources.
- Life forms cannot be patented. The majority of companies are of the opinion that even if varieties could be patented, you should have the right to use these varieties. In the EU, varieties cannot be patented, but traits can (which means an indirect patent of varieties). Some countries allow patenting of varieties and are not kicked out of the system.
- There is a big rift between the Treaty and the Nagoya Protocol, with a very different interpretation of ABS.
- Why are some multinationals refusing to sign MTAs? SMTAs are never-ending contracts, and the industry does not like those; if accessed material has not contributed to the end product, why pay? Therefore they do not sign at the start of the work.' However, this is a problem in the US, not in The Netherlands. The US are neither a member of the CBD, nor of the Treaty. There is a lot of pre-CBD material, and companies are not prepared to sign SMTAs for this. From CGN no material goes out without SMTA.
- Expectations of the different stakeholders on the benefit-sharing (BS) part of the Treaty vary, and there is still insufficient clarity on which expectations there are.

Session 4. A summary of the African Model Law for the protection of the rights of local communities, farmers and breeders, and access to biological resources (Theo van Hintum, CGN, The Netherlands)

Presentation

An introduction was presented on the history and status of the African Model Law, and its main features (including the objectives, definitions, scope, and its treatment of access to biological resources, community rights, farmers' rights and plant breeder's rights). The conclusions were that:

- * some elements of the Model Law may have ended up in national law;
- * the Model Law (parts 5 and 6) is not in harmony with UPOV;
- * the Nagoya Protocol deviates from the Model Law (part 3);
- * the Model Law results in heavy ABS mechanisms;
- * it does not contain provisions accommodating the International Treaty;
- * implementation of the Nagoya Protocol and the International Treaty will necessitate revision of elements of existing national law based on AU Model Law.

Discussion

- Sometimes no distinction can be made between local communities and farmers.
- The Model Law is not only about genetic resources, but about biological resources.
- 'Farmers variety' is not defined in the Model Law.
- About 10 countries have laws on ABS, but it is difficult to say which ones have used the Model Law. However, some of these countries claim that they based their ABS laws on the Model law
- It must be clear that the Model Law was an information package that could be used for national laws, not a real law or agreement like UPOV.
- It is not known if there will be a new, revised Model Law. If developed, it will be a model, and there is no guarantee that it will be implemented. So, the question is whether it is worthwhile to make a new Model Law. The thinking now goes more towards guidelines for implementing the Nagoya Protocol taking into account the Model Law.
- The African Union Commission is working on interpretation of the role of the African Model Law in the implementation of the Nagoya Protocol, but it is not going fast.

Session 5. Status of implementation of the International Treaty and ABS provisions of the CBD, and preparations for the implementation of the Nagoya Protocol in participating countries

a. <u>Burkina Faso</u> (Boniface Soumayila Bancé, Ministère de l'Environnement et du Développement Durable, Burkina Faso; NFP Nagoya Protocol)

Presentation

An overview was presented of the current situation with respect to ABS in Burkina Faso. It is expected that Burkina Faso will soon ratify the Nagoya Protocol, and it is hoped that the country will benefit from funds dedicated to the Protocol to endow Burkina Faso with an ABS law and to develop its capacity to implement the Nagoya Protocol.

Discussion

The question was asked where people should go now when they seek access. It was answered that there some provisions on ABS in laws already, so there is no problem. However, now that both the Treaty and the Protocol are going to play a role, it will become more complicated.

b. <u>Kenya</u> (Veronica Kimutai, National Environment Management Authority (NEMA), Kenya) *Presentation*

ABS legislation is in place, with NEMA playing a central role in the access permit process. Initiatives to improve the process include the development of templates for Prior Informed Consent (PIC), Mutually Agreed Terms (MAT) and Material Transfer Agreement(MTA), the automation of the permitting/licensing activities, a compliance assistance program, and an awareness-raising project aimed at government institutions and communities.

Annex 5: Workshop report

Discussion

- Some information was given on the implementation of the Plant Treaty in Kenya. There is a project funded by Bioversity International for the implementation of the Treaty. The NFP for the Plant Treaty is in place. The difficult issue is how to separate PGRFA from biodiversity in general.

c. South Africa (Martin Brink, CGN, the Netherlands)

Presentation

The presentation contained the following elements: international agreements, national legislation (National Environmental Management Act; Biodiversity Act; Bio-Prospecting, Access and Benefit-Sharing Regulations; Amendments to Biodiversity Act), experiences, and information sources. Conclusions:

- * the Nagoya Protocol has been signed, but the Plant Treaty not;
- * detailed national ABS legislation is in place;
- * ABS legislation refers to 'biological resources', not to 'genetic resources;
- * species included in Annex 1 of the Treaty are a 'grey area';
- * various types of permits are distinguished;
- * local counterpart(s) are always necessary for obtaining a permit;
- * users complain about bureaucracy;
- * revision and streamlining are in progress;
- * Information on ABS regulations is readily available (website, guides).

Discussion:

- It was remarked that the exemption of Annex 1 species in ABS regulation in South Africa would be a good example for Kenya.

d. <u>Namibia</u> (Toivo Uahengo, Ministry of Environment and Tourism, Namibia) *Presentation*

ABS Legislation in Namibia has not yet been finalized, but drafts of the bill and regulation are ready and waiting for Cabinet approval once the inputs from countrywide consultations have been incorporated. In the meantime, an Interim Bio-Prospecting Committee (IBPC) serves as regulatory body. Some examples of biotrade and bioprospecting activities in Namibia were given, and the leading role of Namibia in international ABS negotiations was emphasized.

e. The Netherlands (Theo van Hintum, CGN, the Netherlands)

Presentation

The presentation dealt with national policy, European policy, implementation of ABS principles, awareness and daily practice, and was concluded with the following SWOT analysis of current regulations and practices:

- Strengths: free availability (information and seed) is working.
- Weaknesses: interpretation of international regulations is difficult; there are no regulations for non-agricultural use.
- Opportunities: ornamental breeding needs to get involved; Treaty 1 could be expanded (vegetables).
- Threats: bureaucracy and complexity might hinder exchange

f. <u>Joint analysis of the status. Successes. Bottlenecks. Lessons. Challenges</u> (Martin Brink, CGN, the Netherlands)

The results of the joint analysis are summarized in Table 1 at the end of this annex.

Session 6. Options to facilitate international exchange of plant genetic resources for food and agriculture (Theo van Hintum, CGN, the Netherlands)

The following questions were briefly discussed:

- How do you see the role of the Treaty in relation to the CBD / the Nagoya protocol?
- How does this impact on the ABS regulations?

- How would you characterize the access to and exchange of PGRFA in your country? What are the limiting factors? How could they be improved?

Day 2: Tuesday, October 2

Session 7. ABS negotiation exercise (Anke van den Hurk, Plantum, the Netherlands)

Based on fictional case studies a role playing game was played to better understand the positions of the various stakeholders.

Discussion

- Awareness and knowledge of regulations is important, as well as capacity development on the implementation of regulations. The roles and responsibilities of the various stakeholders must be clear.
- Negotiation skills are important.
- The ultimate goal of negotiations is "Good access and fair and equitable benefit-sharing". But what is fair and equitable BS? Elements mentioned were: transparency, levels of involvement and investments. It was also stated that one should not only look at efforts of companies, but also take into account century-long investments of farmers.
- It is difficult to determine a fair price for something (example of beads in market: one seller asks more than another, is that unfair?). It was suggested to have a third party make a judgement, for instance the government. However, sometimes the government itself is the provider, e.g. KWS in Kenya. Others argue that an acceptable price for the provider may differ from the one determined by third party, and that negotiations should be left to the user and the provider. In some case, however, people have asked after negotiations had failed: where was the government?
- Providers need to know the value of their genetic resources, but it may be difficult to know this value. Also, the value may be different for different people: you should assess a realistic value for yourself. Furthermore, the value may change over time, and there are various types of values: financial, cultural etc. The question was raised whether value should be based on the value for the user or the value for provider. According to some, the government should help asses value of resources. It was stressed that there should be realistic expectations of benefits.
- NGOs may complicate the situation, it is up to governments how to respond to it. NGOs help to keep governments aware of interests local farmers/communities, but government should not accept too much pushing.
- Important terms in Treaty: 'material under management of contracting party', 'material under control of contracting party', 'public domain'.
- Distinction is necessary between research phase and commercialization phase.
- How to come to workable solutions?
- * "Standard multilateral system easiest way to go".
- * "Government should assess benefits for users".
- * "Learn by trying and doing".
- * "Distinction important between material under Treaty (food sources for food security) and outside Treaty (less important, so case-by-case approach; Nagoya protocol)".
- * "Often not clear what countries want, which makes it difficult to come to agreement".
- * "Compliance important" (compliance incorporated in agreements through PIC and MAT).

Session 8. ABS: the way forward (Martin Brink, CGN, the Netherlands)

Discussion

- 1. Once the delegates get home they plan to:
- * initiate a discussion involving the responsible persons to determine the relation between the Nagoya protocol and the Treaty;
- * raise awareness amongst the stakeholders;
- * make an inventory of the local regulations regarding ABS;

- * communicate with the seed business regarding the expectations from the side of the providers
- * try to get the law-making process going, as this is the next step in implementing the ABS regulations.
- 2. Doubts are expressed regarding the chance of success of the Nagoya protocol, whereas the Treaty is seen as a clear instrument that is already accepted world-wide:
- * the doubts are based on the low level of awareness and complexity of the matter;
- * for each of the domains (such as pharmaceuticals) a set of instruments similar to the Treaty is needed;
- * capacity building will be necessary to know what requests fit in what regulations;
- * national (plans for) implementation of the Nagoya Protocol and the Treaty should be inventoried and possibly rethought.
- 3. In some countries there is a clear need for an inventory of the national biological resources. Such an inventory could act as a platform for the exchange of knowledge regarding these resources, and a basis for sustainable exploitation.
- 4. ABS is "tough work".
- 5. "Some of us were exposed to new ideas, we will need time to digest".
- 6. It will be a challenge to come to arrangements that fit in the existing regulations and that serve the interests of both the users as the providers thus creating win-win situations. No access implies no benefit sharing.

Session 9: Capacity development for implementation of the Nagoya Protocol. Current efforts and initiatives. Remaining needs and gaps (Martin Brink, CGN, the Netherlands)

Presentation

Some issues were raised for discussion, including the status of legislation, and views on and experiences with respect to legislation and benefit sharing.

Discussion:

- In many cases capacity building will be necessary to implement the ABS instruments, but first the roles and responsibilities will have to be defined.
- Capacity building will be needed to:
- * draft the legislation (technical and financial capacity);
- * improve negotiation skills to use in the process of negotiating BS arrangements.

Session 10. Options to revise the SMTA and expand the MLS of the International Treaty. The specific treatment of access and benefit-sharing on vegetable and ornamental crops (Theo van Hintum, CGN, the Netherlands)

Presentation

Issues raised in the presentation included the position of plant genetic resources for food and agriculture (PGRFA) in ABS regulations and the status of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and its multilateral system (MLS).

Session 11. Workshop conclusions (Martin Brink, CGN, the Netherlands)

In a discussion session, the workshop participants agreed on the following conclusions:

- 1. It is important to find ways to deal on the national level with the co-existence of the Nagoya Protocol and the International Treaty on Plant Genetic Resources. Participants expressed their intention to promote collaboration between the people involved in implementation of the Protocol and those involved in the implementation of the Treaty.
- 2. For good functioning of national ABS regulations the following issues need particular attention:
- streamlining of requirements and reduction of bureaucracy;
- enhancement of awareness of ABS regulations amongst relevant stakeholders within African countries;
- enhancement of negotiation skills of both providers and users;
- trans boundary aspects (regional approaches).

- 3. Non-compliance with national ABS laws, regulations and/or MAT by recipients remains a big concern. For this reason a mechanism for monitoring and enforcement might have to be put in place.
- 4. It is often difficult to determine what 'fair and equitable benefit sharing' entails, as the value of genetic resources may be different for different people and may change over time. Elements that could be included in the concept are transparency, compliance, participation of stakeholders.
- 5. African countries should not only look at ABS in the role of provider, but also as user. Varieties from the MLS are already used on a large scale in African countries, and there is much more to gain for African countries. Instruments should enable the countries to benefit both as providers and as users.
- 6. ABS regulations should complement and not compromise the other objectives of the CBD and Treaty: conservation of biodiversity and sustainable use of its components.
- 7. The implementation of international ABS agreements (incl. the Treaty) in national rules and legislation should be supported.

Workshop participants

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Workshop programme

Day 1: Monday	v, October 1			
09.00 - 09.15	Welcome and introduction of participants (Theo van Hintum)			
09.15 - 09.45	Introduction into the project (Bram de Jonge).			
09.45 – 10.15	Plant breeding, access to genetic resources and benefit sharing (Anke van den Hurk)			
10.15 – 10.45	A summary of the African Model Law for the protection of the rights of local			
	communities, farmers and breeders, and access to biological resources (Theo van			
	Hintum)			
10.45 – 11.15	Coffee/tea break			
11.15 – 14.50	Status of implementation of the International Treaty and ABS provisions of the CBD,			
	and preparations for the implementation of the Nagoya Protocol in participating			
	countries:			
	11.15 – 11.40 Burkina Faso (Boniface Soumayila Bancé)			
	11.40 – 12.05 Kenya (Veronica Kimutai)			
40.00 44.00	12.05 – 12.30 South Africa (Martin Brink)			
12.30 – 14.00	Lunch			
	14.00 - 14.25 Namibia (Toivo Uahengo) 14.25 – 14.50 The Netherlands (Theo van Hintum)			
	 14.25 – 14.50 The Netherlands (Theo van Hintum) 14.50 – 15.30 Joint analysis of the status. Successes. Bottlenecks. Lessons. 			
	Challenges (Martin Brink)			
15.30 – 16.00	Coffee/tea break			
16.00 – 17.30	Options to facilitate international exchange of plant genetic resources for food and			
10.00	agriculture (Theo van Hintum)			
	agricultura (maa ran rantam)			
Day 2: Tuesda	y, October 2			
09.00 – 10.30	ABS negotiation exercise (Anke van den Hurk)			
10.30 – 11.00				
11.00 – 12.30	ABS negotiation exercise: discussion (Anke van den Hurk)			
12.30 – 14.00	Lunch			
14.00 – 15.00	ABS: the way forward (Martin Brink)			
15.00 – 15.30	Capacity development for implementation of the Nagoya Protocol. Current efforts and			
45.00 40.00	initiatives. Remaining needs and gaps (Martin Brink)			
15.30 – 16.00	Coffee/tea break			
15.30 – 17.00	Options to revise the SMTA and expand the MLS of the International Treaty. The			
	specific treatment of access and benefit-sharing on vegetable and ornamental crops			
17.00 – 17.30	(Theo van Hintum) Workshop conclusions (Martin Brink)			
17.00 - 17.30	Workshop condusions (Martin Billik)			

Table 1: Joint analysis of the status of implementation of the International Treaty and ABS provisions of the CBD, and preparations for the implementation of the Nagoya Protocol in participating countries

	SUCCESSES	BOTTLENECKS	LESSONS	CHALLENGES
	0000000			
Burkina Faso	- ABS included in national action plan on biodiversity - Protocol for access to forest resources - NFPs ABS and Treaty established - ABS capacity building through workshops - Implementation Treaty going on (with help of Biodiversity) -Agreement on implementation ABS	- No ABS regulation yet - Collaboration between actors sometimes difficult - Financial resources for ratification and implementation Nagoya	- Necessity for all government structures to be involved in the process	- Ratification and implementation Nagoya - Harmonization ABS of Nagoya and MS of Treaty - Increase possibilities for commercial parties to engage in ABS agreements
Kenya	- Conservation and utilization NR incorporated in new Constitution - ABS regulations in place - NFPs ABS and Treaty in place - Implementation Treaty going on (with help of Biodiversity) - ABS Technical Committee	- Demands not always clear for users - Limited awareness of ABS in the country	Streamlining of procedures desirable (development of templates for PIC, MAT an MTA; automation of licensing)	- Compliance assistance system - Increase awareness - How to deal with PGRFA? - Monitoring exchange of genetic materials - How to deal with non-parties CBD - Practical workability
South Africa	- Legislation in place - NFP ABS established - Information available	- Only 8 permits in 5 years - Bureaucracy - Treaty not signed: PGRFA are 'grey area'	- Procedures should be simple - Annex 1 species can explicitly be exempted from ABS legislation	- Reduce bureaucracy - Compliance - Sign and ratify Treaty
Namibia	- Chief ABS negotiator for Africa - ABS bill being finalized - Interim Bioprospecting Committee	- Different ministries for CBD and IT; co- operation sometimes difficult	- Countrywide consultation recommended for drafting good ABS bill	- To link all different institutions involved (one-stop-shop) - Practical workability

	SUCCESSES	BOTTLENECKS	LESSONS	CHALLENGES
Netherlands	- No need of PIC and MAT - Simple procedure for all PGRFA: only SMTA - NFPs in place - Good communication CBD/IT	- No regulations yet for non-agricultural use - Interpretation international regulations difficult - Access complex in case of botanical gardens		- Involve ornamental breeding - Possible expansion of Treaty annex 1 (vegetables) - Ensure financial sustainability of providers like CGN - Conscious choice for no need PIC/MAT
General	- NFPs in place - In more and more countries legislation in place or being developed - Engagement of many countries in ABS process	- Usually different ministries for CBD and IT - BS expectations - Interpretation of agreement texts - Treaty and/or Protocol not signed/ratified by all countries	- Limit bureaucracy	- Deal with co- existence of ABS/Nagoya and MS/ Treaty - Reduce bureaucracy - Ensure compliance - Possible expansion of Treaty annex 1 (vegetables) - Practical workability - Ratification of Protocol and Treaty