

**Expert Meeting on ABS and Intellectual Property Rights**  
**5<sup>th</sup> to 9<sup>th</sup> September 2011**  
**Addis Ababa, Ethiopia**

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## **Details of the Workshop**

### **Day Two, 6<sup>th</sup> September 2011**

#### **1. Summary**

During the second day of the workshop, participants:

- Explored the interface between ABS and IPRs through different national case studies.
- Discussed the lessons learnt from these national experiences in context.
- Identified key challenges or issues and key points or features with regards to ABS and IPRs arising from each case study presented and gathered these first pinpointed issues into eight relevant clusters. These were as follows:
  - 1) TK
  - 2) Resource Ownership
  - 3) Valuation, Benefit Sharing and Money
  - 4) ABS and IP Interface
  - 5) Legal and Policy Uncertainty and Lack of Regulations
  - 6) IP and IP Management
  - 7) Capacity Building and Transfer of Technology
  - 8) Monitoring
- Formulated three key questions arising from the observations made with regard to each cluster so as to apply them to various contexts.

#### **2. National Experience in Context**

Following each case study presented, participants were asked to reflect on the following questions:

- 1) Key challenges and issues regarding ABS and IP
- 2) Key points and positive features regarding ABS and IP

Participants were then asked to put their answers on cards (maximum of three cards per group and one question per card).



## 2.1. Namibia

### 2.1.1. Maruline: Patented Marula Oil by Pierre du Plessis from the Centre for Research Information Action in Africa Southern Africa Development and Consulting (CRIAA SA-DC), Namibia

Mr Pierre du Plessis introduced Maruline, an oil derived from the Marula fruit seed. He reported that, for generations, women had traditionally pressed Marula oil, which

was mainly used as food oil and condiment, usually home produced and informally traded. He went on to say that its development as a cosmetic ingredient for formal markets started in 1995 at the request of women producer groups who approached the Presidency to solicit some support to process the oil. Their initial client was the Body Shop Community Trade Programme.

Mr du Plessis explained that the traditional product, called '*ondjove*', was not suitable for formal markets because of inconsistent quality. Developing a new cold press technology and process became essential. The first trials showed that Maruline was very resistant to oxidation and suggested that an IP opportunity could be possible. A consultation process with producers, including producers from neighbouring countries, took place to discuss this opportunity and funds were raised to set up a network. As the IP opportunity was confirmed, it became vital to have a commercial partner with lipids expertise to share the patent costs.

Mr du Plessis highlighted that the Maruline patent protected a particular process used to obtain Marula oil with higher oxidative stability than "standard" oil. It could be seen as defensive patenting but what was patented had nothing to do with TK. TK was involved but peripheral and obvious. In fact, the Maruline obtained by this innovative oil processing technique was different and far more stable than normal Marula oil. The patent was not used to restrict other community producers and the technology was transferred to producer communities that were part of the network.

Mr du Plessis concluded that the key lessons drawn from this entire process were the following:

- Investment in IP opportunities is key to securing commercial partnership for research and development
- Patents are difficult to obtain and expensive to maintain and do not guarantee commercial success.
- Ensure that at least one local is listed as an inventor because this secures legal rights to work the invention independently.
- Don't base a commercialisation strategy on the hope' that IP/patent will make a lot of money. Smaller but steady income from non-IP biotrade is often a more certain form of benefit.



### 2.1.2. Question and Answer Session

**Q1:** *TK is not covered by the patent but led to it. When does TK become significant enough and who determine when it is significant enough?*

**A1:** In this particular case, it is first important to note that the group of women producers who went to the presidency are still the ones who are doing the production. The value of TK is not ignored but

the 'product by process' patent is based on research, not specific TK. Indeed, the patented processing method was in some respects the opposite of what TK indicated.

**Q2:** *How did you identify the communities of producers? Was there any conflict with other communities? How did communities who were not selected react?*

**A2:** Seven different groups were identified during a development-needs survey. These groups were helped to form a cooperative which has now more than 20 communities. Each group nominated two persons to be part of the cooperative's board. Exclusions happened for social reason and were decided at local level. There was no complaint that someone had been excluded from this value chain, except one from an entrepreneur who complained that she had to compete with cooperatives supported by government subsidies. No individual producer has ever complained about being left out of the value chain. As a matter of fact, not a lot of people were initially interested in this economic opportunity.

**Q3:** *Was there a royalty rate agreed upon and if so, how are they shared? Where do the benefits go to/used for? Do they go to the company?*

**A3:** A royalty rate was never agreed, because the IP was not licensed out. The benefits returned to the communities from the IP/'product by process' patent are generated indirectly through the business which has since grown dramatically. As long as the producers stay in the cooperative and participate in the value chain, they will have some returns. People who are in this value chain receive about double the local informal market price for their Marula kernels. The cooperative only covers costs and distributes any profit to primary producers in the form of better prices for their raw material. This secures supplier loyalty and is also administratively much more cost-effective than royalty payments.

### 2.1.3. Results of Group Reflection

Case Study	Key Challenges/Issues Regarding ABS /IP	Key Points & Positive Features Regarding ABS /IP
<b>Maruline (Namibia)</b>	<p>Exclusion of other community members in the process &amp; IP</p> <p>Assure feedback from user on Research and Development activities</p> <p>Inclusion of TK in the patent process &amp; in the benefit sharing</p> <p>Implication of the Maruline patent on other communities outside Namibia interested in marketing the same product</p> <p>When is IP based on TK? "TK threshold" for benefit sharing</p> <p>Was this an appropriate patent strategy</p> <p>How do you determine the contribution of TK to the final product?</p> <p>Integrating ABS with Business concept (PIC, MAT, Benefit Sharing for biodiversity)</p> <p>Biotrade or ABS Case?</p> <p>Turning IP in \$, €, ...</p> <p>Not enough transboundary cooperation</p>	<p>Quick economic gains reaped by community members</p> <p>TK contributed to community livelihoods</p> <p>Supporting local women initiative</p> <p>Direct community involvement in value chain equals income/benefits</p> <p>The involvement of local community on the on-going supply chain</p> <p>Transboundary regional cooperation</p> <p>Proactive approach owned by local community and government</p> <p>Trademark as additional business opportunity on top of patent</p>

## 2.2. South Africa

### 2.2.1. Case Study on *Sceletium Tortuosum* by Lacticia Tshitwamulomoni from the Department of Environmental Affairs, South Africa

Ms Lacticia Tshitwamulomoni began her case study presentation by giving a brief but comprehensive overview of the South African national legislative frameworks relevant to the use of indigenous biological resources and GRs for research and development in the context of ABS:

- The Biodiversity Act (or NEMBA) of 2004 for issues related to national environmental management;
- The Bio-prospecting, Access and Benefit Sharing (or BABS) Regulations of 2008 for all bioprospecting matters;
- The Patent Amendment Act of 2005, and
- The Indigenous Knowledge System Policy.

Ms Tshitwamulomoni then introduced the '*sceletium tortuosum*', commonly known as *Kann*, *Channa* or *Kougoed*, as a slow growing succulent shrub and endemic to the Western, Eastern and Northern Cape Provinces of South Africa. The succulent is traditionally used by the Khoi pastoralists and the San hunter-gathers as a mood-altering substance. Such a use has been recorded in the literature since 1662. Later studies confirmed that '*Sceletium tortuosum*' elevates mood and decreases anxiety, stress and tension.

Ms Tshitwamulomoni reported that, HGH Pharmaceuticals, a South African based organisation, was interested in the '*sceletium tortuosum*' and applied successfully to the South African Government for exploiting it. HGH Pharmaceuticals is currently the only legal permit holder issued in terms of NEMBA and BABS Regulations to research, export and commercialise the '*sceletium tortuosum*'. HGH Pharmaceuticals also acknowledged the San People of South Africa as the primary TK holders and primary beneficiaries of the '*sceletium tortuosum*'. The San People, in turn, acknowledged the Paulshoek /Nourivier Paulshoek /Nourivier Community as second beneficiaries of the '*sceletium tortuosum*'.

She indicated that HGH Pharmaceuticals had acquired seven patents and registered two trademarks while using the San logo on their products. Several types of agreements for the use of the resource exist between the different parties. These are as follows:

- Benefit Sharing Agreement between HGH Pharmaceuticals (Pty) Ltd and the South African San Council;
- Benefit Sharing Agreement between South African San Council and the Paulshoek /Nourivier Community;
- Benefits: fixed value for three years; percentage of net proceeds; percentage for use of San logo (trademark); and
- 50% of the royalties received by the San People will be paid to the Paulshoek /Nourivier Community.

Ms Tshitwamulomoni pointed out that the conservation and sustainable use of the '*sceletium tortuosum*' was an important non-monetary benefit as it contributes to employment opportunities due to the labour intensive nature of its production/cultivation.



Ms Tshitwamulomoni closed her presentation by highlighting the key lessons learnt from this case:

- National legislation is instrumental in facilitating access, ensuring that PIC is obtained, leading to negotiations and entering into MAT.
- Clear identification of TK holders combined with legal

representation is key to any successful benefit sharing agreement.

- Recognition of TK holders throughout the value-chain by HGH Pharmaceuticals reflects transparency of the entire process.
- Remarkable initiative of the primary knowledge holders in acknowledging the Paulshoek /Nourivier Community.
- Enhancement of sustainable utilisation of the resource through cultivation.



### 2.2.2. Question and Answer Session

**Q1:** *What is the percentage of monetary benefits for the San People?*

**A1:** Benefits are upfront payments. Two transactions so far have been successful.

**Q2:** *What were the transboundary agreements in that case?*

**A2:** The species involved is endemic to South Africa so no transboundary issues in this case.

**Q4:** *Indications on the patent should enable to make reference to the TK.*

**A4:** South African Patent Amendment Act requires the disclosure of the original knowledge and location of the resource. Without addressing this requirement, one cannot use GRs included in a patent application to the South African Patent registry. However, this does not apply if the application is received as part of the Patent Cooperation Treaty (PCT) system.

**Q5:** *In terms of benefit arrangements, what happen after the three years? How much had been paid so far to the San People?*

**A5:** The three year payment totalling R 250 000 is the upfront payment. It is not a payment arising from the sale of products. The agreement is also subject to review to assess if there is a need for a revision on terms initially agreed.

**Q6:** *Are the patents for South Africa only or for other countries also?*

**A6:** From the patents acquired, one patent was issued in South Africa. The other six were granted in other countries.

**Q8:** *Could you provide more information on the patent laws?*

**A8:** The Patent Amendment Act clearly states the obligation for patent applicants to disclose the origin of GRs that contributed to the invention as well as the communities holding the knowledge or that assist with the knowledge. It also requires from the applicant to provide a proof of PIC, MAT, and a license issued in terms of the Biodiversity Act.

**Q9:** The 'sceletium tortuosum' though being an endemic plant from South Africa is farmed in Namibia from seeds bought in Netherlands. How do you address this type of issue?

**A9:** We still need to discuss how to address such issues as the legislation is being developed and amended.

**2.2.3. Results of Group Reflexion**

Case Study	Key Challenges/Issues Regarding ABS /IP	Key Points & Positive Features Regarding ABS /IP
<p><b>'Sceletium Tortuosum'</b>  (South Africa)</p>	<p>Challenges of the San Council managing funds on behalf of the entire San community</p> <p>Dealing with free-riders selling the entire plant (Not IP protected)</p> <p>Number of patent owned by HGH Pharmaceutical may lead to a monopoly</p> <p>Draft patent of appropriate scope to cover future innovations</p> <p>TK cross boundary, however species endemic. How to reconcile this?</p> <p>Use of San logo: What are the impacts on San communities outside South Africa?</p>	<p>User and providers are in the same country</p> <p>The use of TK leads to product improvement</p> <p>Government support of local communities in ABS negotiations</p> <p>Clear case of ABS at work: the legal framework can be implemented but is it realistic?</p> <p>Clear identification of holders of TK</p> <p>TK holders/owners recognised and awarded share of benefits</p> <p>Recognition of primarily knowledge of the Nam by the San</p> <p>Coordinated ABS/IP laws /regulations</p> <p>Successful 'sui generis' system of protecting TK &amp; GRs</p> <p>Amendment of Patent Law (Disclosure requirements)</p> <p>Appropriate legislation in South Africa – there is a process in place</p> <p>Better clarity in the process due to existing laws</p>

## 2.3. Kenya

### 2.3.1. Enzyme Case Study in Lake Bogoria by Wilson Busienei from the National Environment Management Authority (NEMA), Fredrick Otswong'o from Kenya Industrial Property Institute (KIPI) and Peter Munyi from the International Centre of Insect Physiological and Ecology/African Insect Science for Food and Health (ICIPE), Kenya



Mr Wilson Busienei presented on the *extremophile bacteria*, microbial GRs found in salty lakes of the Kenyan Rift Valley which, for many years, had been used by communities to wash their clothes and cure diseases. The bacteria contain useful enzymes that can resist extreme conditions such as temperatures, salinity and pressure. Mr Busienei reported that in the 80's, research made by a Kenyan student led to access the genetic material and highlighted that GRs were collected pursuant to a research permit issued to the Kenyan student. The genetic material was then taken to the University of Leicester in United Kingdom, which at the time was collaborating with Genencor International Inc., a biotech company, producer of industrial enzymes based in the United States.

Through this collaboration, the research results were patented in the United States. Two patents were issued for the *Gram-Negative Alkaliphilic* and the *Haloalkaliphilic* Microorganisms.

Mr Busienei indicated that the source of the genetic material could be found on one of the two patents. He went on to say that since, it was suspected that some products derived from the collected GRs had been licensed by Genencor International Inc. to Procter & Gamble. At the time, Kenya had no regulations with regard to GRs. There was no regime on ABS either. The sole regulator on research was the National Council for Science and Technology. Mr Busienei specified that benefit sharing agreements were also difficult to consider as some of the collection expedition happened prior to the CBD.

He closed his presentation by listing the lessons learnt from this case. These were:

- Pre-CBD accessions are still outstanding at national level. How does the Nagoya Protocol assist here?
- IPRs can sometimes disenfranchise claims over GRs.
- There is a need for proper legal and institutional linkages between IPRs and ABS regulatory regimes.

### 2.3.2. Question and Answer Session

**Q1:** *Could you confirm that this is a case of biopiracy?*

**A1:** Yes, to our understanding it is a clear case of biopiracy indeed.

**Q2:** *Would you know if GRs used in the product have been modified or used as found in nature?*

**A2:** There is no definite answer to this question but the various products developed suggest that there must have been modification of the GRs. There were not many expeditions done but the few done were sufficient to collect enough material.

**Q3:** *Did you address the change of intent i.e. non-commercial research to commercialisation goal of the GRs?*

**A3:** Legislation was done in Kenya in this regard but it did not address the issues raised in this specific case.

### Comments from the Audience after Q&Q Session

- At least one of the patents should be invalid as the student should be indicated as the inventor. The name of the inventor should be specified.
- The patent should have expired by now making this case impossible to resolve.

### 2.3.3. Results of Group Reflexion

Case Study	Key Challenges/Issues Regarding ABS /IP	Key Points & Positive Features Regarding ABS /IP
<p><b>'Extremophile Bacteria' Lake Bogoria Kenya</b></p>	<p>Monitoring and legal consideration of change of intent</p> <p>How to value the initial role of TK in long term development chains?</p> <p>No acknowledgment of TK contribution to the product</p> <p>How does Kenya government seek redress on the lost benefits</p> <p>Benefiting from the pre-CBD GR collections (process in CBD had not been applying)</p> <p>Legal Biopiracy pre CBD</p> <p>Clear case of weakness of IPR system:</p> <ul style="list-style-type: none"> <li>▪ No linkages to ABS – CBD – TK</li> <li>▪ Need for effective check points to avoid</li> </ul>	<p>Violation of genetic resources</p> <p>Raising awareness of the importance of ABS Legislation</p> <p>Lessons learnt from previous cases &amp; been adopted</p> <p>Work out agreements between ILCs that provide the TK &amp; GRs</p>

future biopiracy

No research cooperation agreement at all

Local communities and TK are out of the game

Recognition of permits in other jurisdictions,  
user measures, awareness, enforcement

Kenya missed the opportunity to benefit in  
first US patents

Patent ownership lies in the wrong hands (TK  
& Local Communities not in the picture)

Challenging of monitoring of genetic  
resources during the switch from non-  
commercial research to commercial research

## 2.4. Nigeria

### 2.4.1. The Larva of *African Chironomid* Case Study by Mrs Benedicta Falana from the Federal Ministry of Environment, Nigeria

Mrs Benedicta Falana presented on a Japanese patent case related to the *African Chironomid* larva's resistance to desiccation stress, for which, MAT and Material Transfer Agreement (MTA) application process had not been observed. She first gave a general overview of the various Nigerian institutions involved in the management of IPRs and of the requirements for issuance of a patent and/or a trademark certificate. She then highlighted that the patent specification was key in the patent application process.

Relating the case, Mrs Falana stated that the first collection of material occurred pre-CBD while later collections happened between 2000 and 2002. She also mentioned that the same species could also be found in other African countries. She reported that other scientists published their research results on the physico-chemical desiccation mechanism observed. She went on to say that the phenomenon was elucidated and related research published in 2008 at which time it was found out that the discovery had already been patented in Japan. Last, she indicated that the Japanese scientist's request for a MTA was currently being processed and that the benefit sharing negotiations were still on-going.



Mrs Falana closed her presentation by stating that the lessons learnt from this case highlighted:

- The need to harmonise the various institutions managing ABS and IPRs to ensure that benefits arising from the use of GRs get to custodians of the bio-resource;
- The great potential of technology transfer through IPRs.

#### 2.4.2. Question and Answer Session

**Q1:** Clarification of the GIs of the Larva – found in Nigeria or also across Africa?

**A2:** According to the Japanese scientist, the larva can also be found in Malawi and north Uganda but we still have not heard from him.

**Q2:** Is there any TK involved? Do you want a sort of commitment from the scientist? What about the communities and the involvement of the government?

**A2:** No, TK is not involved as yet. The property of the larva was found through the scientist's research. He also had collected some material in Malawi where a MTA had been issued. Nevertheless, the scientist needs another MTA for the material collected in Nigeria.

**Q4:** Is/was there any financial return to Nigeria from the Japanese patent?

**A4:** There is no financial return as yet. The potential return still need to be negotiated but the scientist does not need to collect more genetic material.

#### 2.4.3. Results of Group Reflexion

Case Study	Key Challenges/Issues Regarding ABS /IP	Key Points & Positive Features Regarding ABS /IP
<b>The Larva of 'African Chironomid'</b>	Addressing MTA for resources already accessed and patented without due process – it is a legal (un)certainity and a policy issue	MTA as a proper means to legalise pre Nagoya access to Grs and get benefit sharing
<b>Nigeria</b>	How can providers of GR/TK obtain benefits from IPR?  Is it possible to obtain IPRs outside the geographical location where the resource is obtained? (yes)  No foreseeable immediate benefits  GR related activities difficult to monitor  Democratic  Bureaucratic delays that encourage GRs shopping by bio-prospectors  Needs to enhance capacity to apply ABS in	Possibility of cop development + technical transfer for Nigeria  Disclosure of results findings is useful for future Research and Development and innovation

administrative (state) and research sectors

Over complicated process to get MTA  
disadvantage provider (country)

Is there capacity to receive and maintain  
technology transfer

How legitimising access "ex-post"

Increasing taxonomical capacity /inventory of GRs

Creation of competence authority actively  
following biopiracy case gathering information –  
Peruvian commission

How to involve regional national and international  
patent office to curb biopiracy

How to improve enforcement of effective entry &  
exit check points to check smuggling of GRs

How can providers of GR/TK obtain benefits from  
IPR?

## 2.5. Benin

### 2.5.1. Collaboration between the Laboratory of Pharmacognosy and the Catholic University of Leuven by Dr Fernand Gbaguidi from the Centre for Scientific and Technical Research, Benin

Dr Fernand Gbaguidi explained that, initially, the idea behind this collaboration was to create a laboratory to research the different usages of traditional drugs with the view to improve public health by (i) valorising traditional pharmacopeia and (ii) confirming the virtues of medicinal plants. An agreement referred to as a 'convention', was reached between both parties in 2006 and established the conditions of the collaboration including a confidentiality clause stating that any research result sample was to be sent to Leuven. The agreement referred to IPRs quite thoroughly setting clear guidelines on how to deal with such issues in relation to any research result. Research led to find a number of molecules with great potential for malaria treatment at which time the University of Leuven decided to terminate the collaboration. No clinical test was done and additional funds were needed to complete the research.



Dr Gbaguidi highlighted that despite the existing and comprehensive agreement, both parties found that they encountered a number of issues in relation to:

- Establish PIC and MAT agreements
- Access information on national legislations / regulations
- Determine of the ownership of the GRs
- Foresee a collaboration with all the contributors (with local communities)
- Foresee the precise goal and future potential partners (academic research vs. commercial research)
- Obtain legal counsel to negotiate ABS on the provider part
- Obtain information on applicable laws and financial resources to access the legal system
- Formulate written deals

Dr Gbaguidi specified that the legislation in Benin was not providing for this kind of issues. He went on to say that the legal department of the University of Leuven felt that there was nothing they could do because the convention had expired. He concluded by using the example of Artemisia, a plant being successfully used by traditional healers against malaria to highlight how ABS mechanisms could unleash the potential of TK

**2.5.2. Question & Answer Session**

**Q1:** *Artemisia is also used by the Chinese against malaria. If some TK has already been patented somewhere, is it biopiracy?*

**A1:** If TK is patented without PIC, MAT and benefit sharing of the TK holder or country in question it is usually referred to as biopiracy.

**2.5.3. Results of Group Reflexion**

Case Study	Key Challenges/Issues Regarding ABS /IP	Key Points & Positive Features Regarding ABS /IP
<b>Collaboration between the Laboratory of Pharmacognosy and the Catholic University of Leuven</b>	How to determine the value of the GRs? Access and use of species that are occurring in different parts of the world Absence of legal framework Understanding the legal framework under which the convention has been agreed Weak legal advice regarding commercial law to providing institution Non-commercial research feels out the ABS framework Confidentiality clause vs. transparency and disclosure Inadequate capacity and awareness in contract negotiation	Full communities participation and TK Consideration of technology transfer aspect MAT were established Effective collaborative research are good

Effective inter universities cooperation led to improve understanding of domestic TK (Resource)

Government should invest more in local Research and Development and less reliance on foreign investment

### 3. Identifying Opportunities and Challenges

A team of experts (Manuel Ruiz Muller, Lucy Mulenkei, Fredrick Otswong’o, and Suhel al-Janabi) volunteered to cluster the first issues identified during the group reflexion work as follows:

- 1) TK
- 2) Resource Ownership
- 3) Valuation, Benefit Sharing and Money
- 4) ABS and IP Interface
- 5) Legal and Policy Uncertainty and Lack of Regulations
- 6) IP and IP Management
- 7) Capacity Building and Transfer of Technology
- 8) Monitoring

Participants were then asked to work in six groups to reflect on the eight clusters identified. Two of these groups were invited to take care of an extra cluster. IP and IP Management were combined with Capacity Building and Technology Transfer and TK with Resource Ownership. Each group was asked to consider both the challenges/issues regarding ABS and IP and key points/features already highlighted in the previous session and articulate three key questions arising from the observations made so far with regard to each cluster. It was specified that these three key questions would have to be formulated from a broader perspective so as to apply them to various contexts.

Clusters	Key Challenges/Issues regarding ABS &IP	Strong Points / Positive Features regarding ABS/IP
<b>TK</b>	<p>Exclusion of other community members in the process and IP.</p> <p>How do you determine the contribution of TK to the final product</p> <p>Inclusion of TK in the patent process and in the benefit sharing</p> <p>When is IP based on TK? ‘TK threshold’ for benefit sharing?</p> <p>Implications of the Maruline patent on other communities outside Namibia interested in marketing the same product</p> <p>Challenges of San Council managing funds of the entire San community</p> <p>No acknowledgement of TK contribution to</p>	<p>Clear identification of holders of TK</p> <p>Use TK led to product improvement</p> <p>Full community participation and TK</p>

	<p>the product</p> <p>Local communities and TK are out of the game</p> <p>How to value the initial role of TK in long term development chains?</p>	
<b>Resource Ownership</b>	<p>Recognition of permits/conditions in other jurisdictions, user measures, awareness and enforcement.</p> <p>TK Cross boundary, however species endemic. How to reconcile this?</p> <p>Not enough transboundary cooperation</p> <p>Access and use of species that are occurring in different parts of the world</p> <p>Use of San logo – What impacts on San communities outside South Africa?</p>	<p>Transboundary regional cooperation</p> <p>Worked out agreement between ILCs that provide the GRs and associated TK</p> <p>User and provider are in the same country (South Africa)</p> <p>Recognition of primary knowledge of the Nama People by the San People</p> <p>Government support of local community in ABS negotiations</p> <p>Effective inter-university cooperation led to improved understanding in domestic TK</p>
<b>Valuation, Benefit Sharing, Money</b>	<p>Government should invest more in local research and development. Less reliance on foreign investment.</p> <p>Was this an appropriate patent strategy?</p> <p>Tuning IP in \$, €, ...</p> <p>Integrating ABS with business concept: PIC, MAT, Benefit Sharing for biodiversity</p> <p>No foreseeable immediate benefits (Nigeria)</p> <p>How to determine the value of the GRs?</p>	<p>Quick economic gains reaped by community members</p> <p>TK holders/owners recognised and awarded share of benefits</p> <p>Valuation of GRs</p> <p>TK contributed to community livelihoods</p> <p>Supporting local women initiative</p> <p>The involvement of local community in the on-going supply chain</p> <p>Direct community involvement in value chain equals income benefit</p> <p>Trademark as additional business opportunity on top of patent</p> <p>Proactive approach owned by local community and government</p>
<b>ASB and IP Interface</b>	<p>How can providers of GRs and TK obtain benefits from IPRs?</p> <p>Clear case of weakness of IPRs system:</p> <ul style="list-style-type: none"> <li>▪ No linkage to ABS, CBD, TK</li> <li>▪ Need for effective checkpoints to avoid future biopiracy</li> </ul> <p>Is it possible to obtain IPRs outside the geographical location where the resource is obtained?</p>	<p>Successful '<i>sui generis</i>' system of protection of TK and GRs</p> <p>Clear case of ABS at work. Legal framework can be implemented and is realistic</p> <p>Appropriate legislation in South Africa (process in place)</p> <p>Lessons learnt from previous cases and been adopted</p> <p>Coordinated ABS and IP laws and regulations</p> <p>Amendment Act of Patent Law (Disclosure requirement)</p> <p>MAT were established</p>
<b>Legal and Policy</b>	'Legal' biopiracy pre-CBD	Raises awareness of importance of ABS

<b>Uncertainty and Lack of Negotiations</b>	<p>Benefits from pre-CBD GR collections (process in CBD had not been applied)</p> <p>Weak legal advice and commercial law to providing institutions</p> <p>Understanding legal framework under which the convention has been agreed</p> <p>Over complicated process to get MTA disadvantaged provider (country)</p> <p>Bureaucratic delays encourage GR 'shopping' by bio-prospectors</p> <p>Dealing with free riders selling the entire plant (not IP protected)</p> <p>Non-commercial research feels out of ABS</p> <p>Absence of a legal framework</p> <p>Biotrade or ABS case</p> <p>How legitimising access 'ex-post'?</p> <p>Addressing MTA for resources already accessed and patented without due process</p> <p>No (research) cooperation agreement at all</p> <p>Kenya missed the opportunity to benefit in first US patents</p>	<p>legislation</p> <p>Better clarity in process due to existing law</p> <p>MTA as a proper mean to 'legalise' pre-Nagoya access to GRs and get benefit sharing?</p>
<b>IP/ IP Management</b>	<p>How does the Kenya government seek redress on the lost benefits?</p> <p>Draft patents of appropriate scope to cover future innovations</p> <p>Patent ownership lies in the wrong hands (TK and local communities are not in the picture)</p> <p>Number of patents owners (7) by HGH Pharmaceuticals may lead to a monopoly</p>	<ul style="list-style-type: none"> <li>▪ Disclosure of results findings is useful for future research and development and innovation</li> </ul>
<b>Capacity Building and Transfer of Technology</b>	<p>Increasing taxonomical capacities and inventory of GRs</p> <p>Inadequate capacity and awareness in contract negotiation</p> <p>Is there capacity to receive and maintain technical transfer?</p> <p>Need to enhance capacity to apply ABS in administrative (state) and research sectors</p>	<ul style="list-style-type: none"> <li>▪ Effective collaborative research are good</li> <li>▪ Consideration of technology transfer aspect</li> <li>▪ Possibility of cooperation and technical transfer for Nigeria</li> </ul>
<b>Monitoring</b>	<p>Monitoring and legal consideration of change intent</p> <p>Challenges of monitoring of genetic resources during the switch from non-commercial to commercial research</p> <p>Creation of competent authority actively following biopiracy cases, gathering information (Peruvian commission)</p> <p>How to improve enforcement of effective</p>	

entry and exit check points to check smuggling of GRs

How to involve regional national and international patent office to curb biopiracy

Assure feedback from user on research and development activities

Confidentiality clauses vs. transparency and disclosure

No control of the GRs once it is global

GRs related activities difficult to monitor

#### 4. Ethiopia: The Case of Teff

##### 4.1. Agreement on Access to, and Benefit Sharing from Teff Genetic Resources by Dr Gemedo Dalle Tussie from the Institute of Biodiversity Conservation, Ethiopia.

Dr Gemedo Dalle Tussie presented on the MAT Agreement related to Teff between Ethiopia, represented by the IBC and the Ethiopian Institute of Agricultural Research, and the Dutch company, Health and Performance Food International BV. He highlighted that Teff was the main food commodity and crop species of Ethiopian origin and that its gluten free quality was of great interest for the food industry. He informed the participants that the agreement was a well-intended project, which, unfortunately, did not have a very successful outcome.



Dr Dalle Tussie stated that the terms of the agreement were very comprehensive especially regarding issues such as the scope of access, the effect of the agreement on the sovereign rights of Ethiopia over Teff GRs and any traditional products of Teff, transfer to third parties, IP ownership and monetary and non-monetary benefit sharing. The duration of the agreement (10 years), penalty, conditions of termination such as bankruptcy, dispute settlement, monitoring and follow-up and

applicable laws were also specified. It was highly expected that Teff will be established as a business in Ethiopia and contribute to poverty alleviation but the Dutch company went bankrupt and failed to comply with a number of clauses of the agreement.

Dr Dalle ended his presentation by pointing out three critical issues that exacerbated the situation:

- Limited capacity
- Lack of coordination and information exchange among the relevant stakeholders
- Absence of effective International Regime on ABS when the agreement was signed

#### **4.2. Question & Answer Session**

**Q1:** *Could you clarify what you referred to with 'limited capacity'? 'Limited capacity' and could you precise in relation to what exactly?*

**A1:** Limited capacity should be understood as access to justice. Ethiopia has no expertise at that level. Even though we had the expertise capacity, costs are too high to go to Europe for calling for justice.

**Q2:** *Very long agreements such as this one, 10 years, sometime goes this way. Did you plan such provision in the agreement?*

**A2:** The agreement says that the provider will have access to the accounting of the company but it never happened. The company was not transparent and cooperative enough. The final process was not according to the will of the initial agreement.

**End of Day Two**