

Introduction

The International Co-ordinating Committee of the International Indigenous Forum on Biodiversity (IIFB) takes full responsibility for the selection of the delegates. The committee after every conference of parties selects which region takes over the co-ordination of the next conference of parties. However the co-ordinating committee continues working together throughout the process to ensure success and effective participation of Indigenous Peoples globally. In accordance with existing practice, the following criteria is applied in selecting delegates from the regions in accordance with the principle of balanced regional representation.

- Delegates must be drawn from Indigenous Peoples' organizations.
- Delegates must possess familiarity with the international processes.
- IIFB will ensure that there will be a clear and strict gender balance from the region to allow full an effective participation of Indigenous women in the Conference of Parties processes.
- Delegates must possess familiarity with issues surrounding the Convention on Biodiversity.
- Delegates must have participated in the regional processes.
- Regions are expected during their preparatory meetings in the regions to select their regional representatives who can then be presented and discussed collectively in the preparatory meetings in Bonn.

The IIFB committee of COP9 undertook responsibility in the preparation at the regional levels.

The co-ordinating committee's members of CO9 were:-

- International Alliance of Indigenous and Tribal Peoples of Tropical Forest
- Indigenous Women Biodiversity Network
- North America
- Meso America
- Africa – Indigenous Information Network
- Russia – RAIPON
- Circumpolar – Saami Council
- Pacific – Waikiki Hawaiian Civic Club
- Asia – Asia Indigenous Peoples Pact (AIPP)

The role of the Ad Hoc CC is:-

- To develop the global proposal for the IIFB preparatory meeting and Indigenous Peoples co-ordination during the COP-8 and 9
- To develop an agenda for the IIFB preparatory meeting
- To facilitate the self-selection process in each region, with the IIFB CC
- To support the local host organization with logistical preparations
- To lead the establishment of thematic work groups to prepare for each agenda item
- To assist in document preparation and dissemination
- To assign and follow-up reporting duties for each agenda item



Indigenous Peoples listening carefully during the opening session of COP 9 in Bonn - Germany

Over five hundred members of International Indigenous forum on Biodiversity (IIFB) travelled from all over the world to Bonn to participate in a preparatory meeting for COP 9 that was held in the BMZ –Ministry of German Cooperation and Gustav Stresemann Institute GSI -on 16th to 18th May 2008. IIFB members who participated from the various regions were drawn from Latin America, Pacific, and Asia, Arctic, Russia and Africa regions and were selected through a process by focal points in each region. This was in preparation for the 9th Conference of Parties which was to be held in Bonn. The meeting was co chaired by Gunnbritt Retter (Saami people, Norway) and Onel Marsadule (Kuna people, Panama) who were appointed as co-chairs of the IIFB preparatory meeting by the Ad-Hoc coordinating committee in advance of the meeting, to save time at the start of the meeting. In Retter's absence Lucy Mullenkei (Maasai people, IIN, Kenya) acted as co-chair. It was also noted with appreciation the role played by Malia Nobriega from Pacific and a member of IIFB Ad Hoc committee who assisted all through the process.

1. IIFB Preparatory Meeting

1.1. Briefing on procedure during preparatory meeting and beyond

The chair welcomed participants to the preparatory meeting and opening ceremony prayers was performed by the Pacific Region. Welcoming words were also given by INFOE a local NGO in Germany which was assisting IIFB with logistics. Indigenous Information Network - Kenya, representing the Ad Hoc Co-ordinating Committee (AHCC) also gave a brief. On request from the German BMZ, as part of their preparations for COP 9 and for meeting IIFB, the AHCC prepared a one page briefing note on the main issues in relation to CBD COP 9. (*see attachment in annex*)

The participants were informed by the co chairs of IIFB to note the key issues as they could be used as a starting point for an IIFB declaration or for the opening statement. The note was welcomed and discussed, some changes and additions were suggested. The key issues to be presented were prepared by indigenous peoples who attended the Permanent Forum on Indigenous Issues (PFII). The Cochairs explained that on the agenda there was going to be a briefing from the German ministry, European Union and the CBD officials, among others, who were going to present on matters pertaining to CBD and their positions as well. The indigenous peoples were told they would have the opportunity to ask questions.

1.2. Concerns for Indigenous Peoples and Local Communities

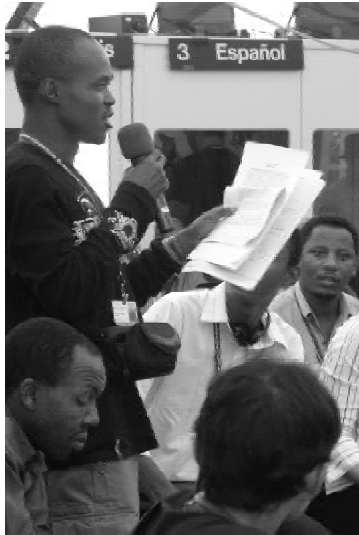
Some of the major concerns of ILC's were identified and discussed during the preparatory meeting and included in the statements and interventions to be submitted to COP. The main issues raised were:-

Forest and Agricultural Biodiversity

Forests are being destroyed at an alarming rate and many legally binding CBD commitments are not implemented on the ground. The economic incentives that lead to deforestation should be identified by CBD; it should also make real commitments to combating illegal and unsustainable logging in indigenous peoples forest, and reject socially and environmentally destructive plantations. The CBD must promote a systemic approach to forest biological diversity that has, at its core, the rights and interests of indigenous peoples and local communities, and ensure their full and effective participation in all negotiations concerning their lands and ecosystems.

The capacity of the world to feed itself depends on sustaining agricultural biodiversity – diverse, and locally controlled seeds, crops, livestock, fisheries and productive ecosystems. The CBD should layout a new path for agriculture, livestock and fisheries with food sovereignty at its core.

The introduction of agrofuels industry is threatening the food security of Indigenous Peoples and local communities and destruction of ecosystems, communities and indigenous food species as well as increasing poverty. ILC's called for the stoppage of biofuels production and end of perverse subsidies that



Gladman from Zimbabwe making a contribution during a preparatory meeting

hurt Indigenous Peoples.

The release of genetically modified (GM) trees poses an unprecedented threat to global forest ecosystems and forest biodiversity. GM trees are overtaking indigenous tree species. The CBD and state parties must put an immediate global stop to the release of genetically engineered trees into the environment.

International Regime on Access and Benefit Sharing

The possible scope of the proposed international regime on ABS was also a matter of concern for indigenous peoples. Any proposed International Regime on Access and Benefit Sharing must accord with the minimum standards set in the UN Declaration on the Rights of Indigenous peoples.

Indigenous Peoples free, prior and informed consent must be obtained before access to their genetic resources and traditional knowledge can occur.

Article 8j

There was speculation as to whether the 9th COP was going to wind up the work on article 8j since it is fundamental to the successful implementation of the Convention. Indigenous Peoples were concerned that the WGABS was threatening to undermine the programme of work of the WG8j.

They called on parties to hold separate meetings on the ABS and 8j working groups and made proposals for a review of the PoW, while calling the Parties to welcome the adoption of the UNDRIP as a framework for future work of the CBD related to indigenous issues

Inland Waters/invasive species

Indigenous peoples expressed their concerns that contamination of inland waters, construction of hydro-electric power stations, development of extractive industries and artificial diversions of rivers has led to loss of biodiversity and related TK of IP's. It is therefore necessary that Parties recognize traditional water resource management and studies should be conducted on the impacts of dams and pollution of inland waters to biodiversity, including transboundary waters.

Protected Areas

Indigenous Peoples were concerned with states eagerness to increase the size of Protected Areas through the creation of more protected areas. Indigenous Peoples were concerned that protected areas have been created without their involvement

hence would want their Free Prior and Informed Consent (FPIC) to be observed before any more protected areas are created. They called for recognition of indigenous bio-cultural territories and community conserved areas and its importance for the maintenance of cultural and biological diversity and priority to be given to implementation of Element 2 of the PoW on protected areas (governance and participation). Indigenous management and governance systems should be fully recognized.

Biodiversity and Climate change, Adaptation and mitigation strategies

Climate change has affected indigenous peoples and they are the first people to have felt the impact to a problem they least contributed to. Climate change is threatening the food sovereignty of Indigenous peoples. The market based mechanisms such as CDM and particularly REDD have continued to violate Indigenous Peoples resources and rights. Indigenous peoples were concerned with disconnect between the UNCBD and UNFCCC yet climate change is a cross-cutting issue and impacts heavily on biodiversity, thus called for more collaboration between the two. Full and effective participation of indigenous peoples and local communities in climate negotiations was called for. Support for biofuels plantations was also highlighted as a problem as in many countries, such as Indonesia, extensive biofuels plantations are imposed on indigenous territories violating human rights and destroying biodiversity.

Financial mechanisms

Indigenous Peoples called on GEF to create direct funding modalities for programmes and projects designed and managed at all stages by indigenous peoples. They expressed their concern that GEF Adaptation Fund and the World Bank's Carbon Partnership Facility are potentially violating indigenous peoples' rights.

Marine and Coastal Biodiversity/Island Biodiversity

Recognizing the fact that Indigenous Peoples have the ancestral knowledge of managing marine ecosystems the approaches must be consistent with ecosystem approach and should include social, cultural, traditional and spiritual elements based on the FPIC of IP's with their full and effective participation. Indigenous peoples also called for clarity on the terms open seas and deep seas.

Communication, Education and Public Awareness (CEPA)

Indigenous Peoples consider CEPA as key component of their PoW and welcomed decision VIII/6 that calls for the inclusion of their representatives in the informal advisory committee and that the key message to be incorporated in CEPA should reflect the role of indigenous peoples in the conservation and sustainable use of biodiversity.

1.3. Meeting with the representatives of the German Government and EU

The first day of the meeting allowed for visitors to give welcoming remarks, addresses and briefing on UNCBD COP 9 issues.

German CBD Focal point

Head of Division International Nature Conservation at the Federal Ministry of Environment, Nature Conservation and Nuclear Safety:

Ms. Nicola Breier

She welcomed Indigenous Peoples to Bonn for the preparatory workshop and to COP 9 of the CBD. As host for COP 9 and German Focal Point she considered the CBD process to be important to Indigenous Peoples and also for the Ministries who organized the meeting and that it presents a unique opportunity for Indigenous Peoples. The German government provided for facilities for Indigenous Peoples to consult because the COP meeting had a difficult agenda with a lot of issues to be discussed. She said that it was important to involve IPs in the process and in the High Level segment for Indigenous Peoples and local communities' representatives to address the Ministers with issues. It was also mentioned that the CBD as usual was expected to be a transparent process and the German delegation would be accessible all the time.



The focal point also said she will try to arrange meetings with German officials and also would help in case Indigenous Peoples experienced problems during the process. As the host, they needed the support of all Parties and groups to make COP9 a success.

Director General, Co-operation with countries and regions; peace building; United Nations Federal Ministry for Economic Corporation and Development:

Ms. Ingrid Gabrielle Hoven

Ms Hoven, who is in charge of specific issues and development co-operation in Asia, Latin America and corporate planning and attached to issues of biodiversity and Indigenous Peoples, welcomed Indigenous Peoples to BMZ German Co-operation. She started her presentation by posing the question of what programs are important to indigenous peoples. She applauded dedication of IPs to the cause of biodiversity and said that the preparatory meeting is to ensure participation of IPs in the process is effective. She said that the German government had worked with the Indigenous Peoples. In 2006, she mentioned, the Ministry published a paper on IPs in Latin America and the Caribbean. This strategy is being broadened to include other regions and to strengthen the work with IPs. She made the following notable points:-



· Supporting Indigenous Peoples rights to self development, participation, and

FPIC is important for BMZ;

- Strategy was developed with the involvement of IPs representatives and it has a binding character and its consideration is obligatory. They have direct relationship with Indigenous Peoples and a mainstreaming approach.
- Sustainable management of resources is an important aspect of the Strategy. It calls for indigenous knowledge on management of these resources. These are relevant to the context of CBD.

Programmes

Work in the Amazon where it collaborates with COICA to support IPs in the development of Amazon Indigenous Agenda and it has been a good platform for IPs to protect IPs rights. The project was aimed at demarcation of Indigenous territories. The regions /areas were demarcated and recognized. In South East Asia they supported communities in Indonesia on Free Prior Informed Consent (FPIC) in forestry sector. In Cameroon they supported a project on customary rights. She reiterated that IPs rights is a central theme and BMZ shares the same goals with IPs in the CBD process, having voted in favor of the UNDRIP. She said BMZ supports ABS to fully take into account IP's rights, including FPIC, in Access to Genetic Resource (GR).

On Protected areas she made the following comments:

- Category of Protected Areas should be expanded to allow sustainable use such as biosphere and Community Conservation Areas (CCAs).
- Conservation and sustainable use of biodiversity will be successful if done with the involvement of communities.

Lifeweb initiative

On the Lifeweb initiative she acknowledged Indigenous Peoples for bringing out specific proposals. She agreed that Lifeweb should have issues of benefit sharing, governance and equity and should also contain CCAs.

Indigenous Peoples were invited to the side event on 29th May to take stock of the COP and what implications to consider for future COP.

The IIFB chair congratulated the corporation official for the good work that German corporation has done with Indigenous Peoples and on starting the Lifeweb initiative.



Migration of Wildebeest from Kenya to Tanzania

European Union; Focal Point for Article 8j

Ms. Cosima Huffer

The EU focal point for Article 8j mentioned that there is only two years left to reach the CBD 2010 target and that Parties need to be strategic about achieving these targets by then. She said that Indigenous Peoples have the opportunity to

reshape work on Article 8j for future and that Indigenous Peoples input to article 8j is vital for inclusive decision making. She believed CBD needs to continue its work on CBD implementation and that Article 8j can be reshaped in the future with several consultations to focus down at implementation level. Article 8j needs to be effective in implementation at the national and international level. In Agricultural biodiversity EU thinks that Indigenous peoples have an actual role to play in maintaining Traditional Knowledge, food security and crop variety.

Ms Huffer also pointed out that at the CBD COP 9 the budget negotiations would be crucial and difficult. There was also need to focus on implementation, both at national and regional level.

- On the 8J Programme of Work (PoW), EU had identified the following crucial elements: Ethical code of conduct need to be finalized as a matter of priority
- Sustainable use in terms of biodiversity need to be emphasized (article 10c)
- Collaboration with WGABS.

She noted that ABS had made progress but needed to finalize international regime work. She said further that ABS needs to be informed by the WG8j. In concluding remarks, she said that there is need to determine crucial themes like climate change, Protected Areas and Agriculture biodiversity. That EU has not yet discussed the thematic program and noted that negotiations are going to be difficult, but work on Article 8j needs to contribute to CBD in future.

Open discussion

The Indigenous Participants raised the following comments after the presentations considering that COP9 is taking place at a crucial moment when climate change is affecting Indigenous Peoples and local communities' livelihoods and driving food prices up:-

- If there is a way indigenous peoples and local communities can help in the implementation of the CBD, the only way is by utilizing Indigenous traditional knowledge.

- In regard to agricultural biodiversity, exchange of seeds and customary law can create adaptation means to help in food security for all mankind.
- Traditional Knowledge is crucial to create a culture of conservation which is important to all humankind.
- Need guidelines for Traditional Knowledge, when recording TK, who will then be in charge/control of the records? We need to proceed on the work with the sui generis system, conduct expert seminars and to conclude with one more report.
- Looking into previous decisions made regarding sui generis system and code of ethical conduct, decisions from COP 6 seem to be forgotten and later decisions have been trying to weaken previous ones. Participants were concerned that the same will happen in COP 9. A timeline is needed for the sui generis work.
- The need for Communication Education Public Awareness, ethical code of conduct and governance was emphasized. Resolution 8/40 states that public awareness should be impartial and transparent and makes references to capacity

building for Indigenous Peoples since they are being set apart due to resource constraints.

- It is the first time the IIFB caucus is meeting with the hosts of COP, a participant said. Indigenous Peoples are considering the possibility of having indigenous Peoples experts within the work of the WG8J. There was a need for an additional category of Protected Areas recognizing Ip's governance. Regions like Latin America do not support the idea of the creation of more Protected Areas. There is negative impact of climate change but mitigation policies taken by governments are also a problem. Indigenous peoples are not considered as part of the solution to climate change impacts and mitigation policies.
- It is important that land and how organic structures work should be considered as well as biodiversity being threatened when discussing climate change. Participation of Indigenous Peoples not only needs to be highlighted in the document, but also need to be present and felt. In these meetings priority is given to governments who are destroying nature. COP should be managed differently so that IPs can express their real proposals. Experts are experts on indigenous studies but are not practical on Traditional Knowledge. It was also said that mega projects/companies are affecting Indigenous Peoples.
- The Amazon region is being affected by biofuels. What position has the German government taken in regard to biofuels?

The EU representative gave the following comments in response to the questions raised

- The expert group on Article 8j is to combine the tasks and complete them before 2010. The expert groups should look at regional balance and be informed by region.
- Protection of Traditional Knowledge is broader than ABS
- There is need to look at how sustainable use can be integrated in policy
- Climate change is done under United Nations Framework on Climate Change (UNFCCC) and the Kyoto protocol and EU does not have much hand in it. CBD also has a limited mandate concerning climate change.

On Protected Areas she had the following comments

- In multi-stakeholder processes Indigenous Peoples should understand that not all issues are solved because there are political issues. IPs should ensure that they are involved in the process and a fair regulation at national level is established.
- FPIC in establishment of protected areas and sustainable use must be observed in terms of looking at other related aspects e.g. population. To maintain the balance between population growth and biodiversity income generating activities must be considered.
- Building the capacity of Indigenous Peoples in adaptation is what needs to be done. It should be noted that climate change is affecting biodiversity. Ensure that it doesn't contradict sustainability criteria (ecological for social sustainability) and food security.

- In response to German stand on biofuels, the BMZ representative said that biofuels and agrofuels should not go against the precincts of biodiversity and that it should be ensured that they do not contradict sustainability criteria -of ecological and social sustainability -and food security. They call for promotion of certification standards so that agrofuels are grown subject to certain quality standards.
- On reviewing prior decisions regarding sui generis the decisions have been weakened since COP 8. In COP 8, COP6 decisions were not taken into account. The issue is how to create protection of systems within the CBD. The call to complete the sui generis elements is urgent but there are concerns about the guidelines of accessing and recording traditional knowledge, who will control these records. The importance of proceeding with the work on sui generic systems is that experts give recommendations showing a way of dealing with TK, it was said.
- There was a suggestion that the donors should fund regional workshops in order for Indigenous Peoples' representatives to give their contribution to ABS work and process.

Further IIFB comments on BMZ and EU presentations

- Important to highlight the importance on the future WG8J. There are challenges that can be used to close the work on article 8j. Need to specify what elements and issues can be addressed by WG8j.
- Agrofuels issue: in Ecuador the oil plantations are being expanded for exportation. to European Companies. Consumption of agrofuels should be confined for local consumption. Need to pressure EU and ask them what the status of certification debate is. There is need to take into account that decisions made at this COP have to include IPs .
- Agrofuels increase poverty as opposed to reducing poverty thus human rights have to be taken into account.
- Issue of sui generis not well addressed. The decisions are supposed to be moving forward for sui generis protection. Need of a timeline and timetable for this. What sort of legislation is being established for the sui generis protection?
 - Future work of the WG8J need to be careful of any strategies used to replace the WG and real effective implementation of decisions that affect us.
- Clear proposals needed for ethical code of conduct- refer back to UNPFII recommendations.

1.4. Meeting with the Secretariat

Overview of COP 9 Agenda by Mr. John Scott - CBD Secretariat Programme Officer for Article 8j and related provisions, Focal point for ILCs

He observed that there were many items on the COP agenda and that selection of items to follow by IP's during COP is important. The annotated agenda (organizational work) gives the calendar of activities and when items are going to be discussed. The best way for IP's to follow proceedings is for them to break into groups to follow issues and report back to the group.

Article 8j and related provisions

Mr. Scott reported that the WG8J had its last meeting in October 2007 in Montreal (meeting). The politics of ABS spilled over into the agenda of 8j. The PoW was adopted at COP5 and the repatriation of TK has not yet been addressed. He mentioned the importance of using the UNDRIP as a standard in 8j work.

The decisions to be made at the COP, he said will be based on the following;

- The unstarted tasks in PoW- Tasks 7, 10, 12,15 are important for IPs and IPs need to make their wishes clear on what needs to be done to contribute to the protection of TK.
- Climate change: This issue is controversial because some parties feel it should not be under CBD. It has bracketed text and possible threats that can arise from climate change are to be discussed.
- Sui generis protection of TK and draft code of ethics
- Indicators for TK

The Executive Secretary to the CBD

Dr. Ahmed Djoghlaif

The Executive Secretary to the CBD started his presentation by commenting that procedures have been adjusted in the process to include indigenous and local communities who are living in symbiotic relationships with nature. The CBD Secretariat is the sole organ that has a full staff working for Indigenous Peoples and that in the CBD Article 8j is in line with UNDRIP. He asserted that loss of biodiversity is as strong as climate change which is compounding biodiversity loss hence impacting on Indigenous People's livelihoods and trade systems. The UN has decided to declare 2010 the International Year of Biodiversity (IYB) and are looking forward to working with IP's on International Year of Biodiversity and on an ABS regime which will be adopted at COP10.

By 2010 the CBD Secretariat intends to have infrastructure in place to measure targets. The need for IPs participation in the ABS process is crucial, including the contact groups, and ILCs should also send comments to the SCBD to be compiled for next meetings. Finally, he said that the recognition of CCA's is relevant in the issue of protected areas.



Mr. Ahmed Djoghlaif addressing IIFB Prep. meeting while Mr. JOHN SOTT looks on

IIFB questions and comments

- A participant raised a question on climate change and biodiversity whether there is a report on the same. The participant explained that there is a Saami consultant that looked at how climate change has

impacted on the Arctic, small islands and High altitudes and realized that IPs have been noticing these effects of climate change for 40 years. The consultants report suggested need for more research and focus on other areas like Asal's, lowlands, rainforests since they will impact on IPs first.

- Another comment was on Article 8j where an IP participant noticed that the draft decision in para.4.2b did not suggest further work in the area. The Executive Secretary in response mentioned that IPs should identify key areas to focus on.
- Under indicators, UNESCO reports on language was commented. UNESCO data are not comparable hence no solid statistics can be developed even though the report shows a decline in indigenous languages.
- ILO 169 programme is considering holding a technical workshop to collect statistics on traditional occupations.
- Article 10c can become a very powerful tool and useful if IPs support decision 4 Para 2. It should fall under officer for Article 8j and its PoW.
- International regime must include the protection of traditional knowledge.
- Concern about the winding up of article 8j, given the strong relationship that exists between ABS and Article 8j. Article 8j work is broadest than ABS and it is important to remind Parties of its importance.. Need to remind parties that ABS is just a small area of the work on TK.
- Most countries have not given due importance to CBD-not keeping to their commitment as state parties. Parties have been secretive about their position on ABS regime and they have been changing their commitment.

1.5. IIFB meeting with the Co-chairs of the Ad Hoc Open-ended Working Group on Access and Benefit-Sharing (WGABS),

*Mr. Fernando Casas of Colombia
and Mr. Timothy Hodges of Canada*

The Co-chairs thanked IIFB for the invitation to the meeting and were pleased with the opportunity to listen to IIFB's concerns regarding the process with ABS. The main work during the coming two weeks of COP will be to ensure a roadmap on the elaboration of the regime towards 2010. The process will be extremely important and sufficient resources are needed. There is not only a need to get beyond the discussion on a regime not, rather complete a clear route on how to get a regime. The report from WGABS 6 holds many brackets. What is needed is a step based approach. IIFB members pointed to that over time there has been a lot of focus on the part of the



*ABS Co-Chairs, Fernando Casas of
Colombia and Timothy Hodges of Canada*

objective of the Convention on Biological Diversity, concerning the fair and equitable sharing of benefits arising out of the utilization of genetic resources. It has focused least on the aspects concerning the sustainable use and conservation of the components of biological diversity. The representative said that they are keen on ABS issues because it concerns IP's resources and are ready for open discussion on it.

The Co-chairs emphasized that by establishing an international regime, rules for ABS will be set for years to come. Therefore it's necessary to ensure participation of different interest groups and indigenous and local communities (ILC) are central to the work of CBD. They also pointed out that a lot of work has been done already- the work is not beginning now. The indigenous peoples are holding great expertise on the regions. They further emphasized that this COP is the last before 2010, creating a political moment where clear decisions are needed in order for the WGABS to have draft decisions allowing for an international regime to be ready for COP 10. This intersessional period will be difficult. Good and concrete and to the point/ agenda proposals from the indigenous peoples are highly appreciated. The Geneva annex from the 6th WGABS will be basis for the negotiations at COP 9. The Co-chairs announced that they will be available for meetings with the IIFB, maybe not with the whole group, but with a smaller group, at any time the coming weeks and also for the next two years.

1. 6. Meeting with the Head of Directorate General, Nature Conservation and Sustainable Use of Natural resources; Federal Ministry for the Environment, Nature Conservation and Nuclear safety (BMU), representing the German COP Presidency

Mr. Jochem Flasbarth

Mr Flasbarth welcomed the IIFB participants to Germany and COP 9. He expressed that the German presidency is grateful and happy for the indigenous peoples participation. The German Presidency will do their utmost to ensure that indigenous peoples input are received. He emphasized several times that transparency is important for the



Mr. Jochem Flasbarth addressing Indigenous Peoples

German CBD presidency and that they are open to inputs and advice. Mr Flasbarth noted that ABS will be a key issue at COP 9. Germany sees the relationship between genetic resources and indigenous peoples property. Another issue is the Protected Areas discussion. Germany believes that the protected areas can meet both the needs of biodiversity protection and indigenous peoples.

After his presentation, there was an exchange with the IIFB and the following issues were raised, among others:

- Distinction between Access and Benefit sharing. The UNDRIP (Articles 23,31,32) recognizes IP's as Peoples as opposed to indigenous peoples and local communities as it's the case in the CBD.
- Decisions about TK were made in ABS which is the skull of the WG8J.
- With respect to the international regime on ABS, what are the governments' positions? Indigenous organizations feel that some governments are not going to respect the rights of indigenous peoples. What is their position on the IR nature? TK being treated as mere commodity to economic transaction. Substantial work being done on Article 8j should be taken into account (it is a holistic approach.)
- Given that there are international norms on rights of IP's should it not be used as a minimum standard tool for ensuring IP's rights and their participation are being respected in ABS negotiations?

1.7. The International Indigenous Forum on Biodiversity meeting

After meeting all the guests, the IIFB then decided to continue with the meeting focusing on their work structure, contributions and presentations during COP 9. Based on the agenda items that were to be focused on during the COP 9, Indigenous Peoples formed thematic working groups on the different areas (see below) and each participated based on their work experience and knowledge in that particular thematic area.

Thematic working groups were created on the following issues and coordinated by the following indigenous representatives:

1. Women and Youth (Florina Lopez).
2. Indicators, 2010 Biodiversity: Target, strategic plan, Ecosystem approach (Joji Carino).
3. Climate change and forest Biodiversity (Marcial Arias).
4. Inland waters/ Invasive species (Olga T.).
5. Article 8j/Tk (Gam Shimray).
6. Protected Areas (Janie Lasimbang).
7. ABS- (Jeniffer Corpuz).
8. CEPA (Malia Nobrega).
9. Agriculture Biodiversity (Estabancio Castro Diaz).
10. Marine and Coastal Biodiversity/ Island biodiversity (Jorge Andreve)
11. Dry and Sub-humid dry-lands (Elizabeth Leitoto and Lucy Mulenkei).

Specific strategies for influencing agenda items were discussed, such us:

- Regional focal points to address issues in respective caucuses before joint caucuses
- Election of focal points for high level segment
- Speakers for different issues
- Media liaison group selected from all the regions
- Working group representatives
- Drafting committees

- How people can work in a fast way in the working group on the different in-depth and other areas/items to be discussed at Cop 9.

The participants were given documents to aid in discussions. These were case studies and materials prepared by the Asia and Africa regions. Other materials relevant to COP thematic areas to be discussed in the two working groups were also distributed to participants.

2. Participation in the COP9

2.1. Work of IIFB during the COP

Along the two weeks of the COP, the IIFB was able to make several general and specific text interventions in its two working groups, and in the different contact groups established for the negotiations, particularly on dealing with



Jannie Lasimbang from Malaysia contributing during the Indigenous Peoples preparatory meeting

ABS. However, in both working groups the IIFB was repeatedly relegated to comment last after all State parties and Inter-Governmental agencies had spoken and this meant that in some critical cases text was closed by the chairpersons before the IIFB was given the floor on claims of time constraints.

Several strong objections by the IIFB on some matters in the agenda items were not received well, especially on protected areas and biofuels where IIFB stuck to their stance that they do not want more protected areas to be created in their lands and territories and that production of biofuels should be stopped.

Apart from statements, interventions and text proposals submitted during the official meeting, the IIFB organized several side events to explain in more detail its position on key issues. For instance, indigenous speakers in a side event entitled “REDD vs People” opposed the REDD program which they felt offers ways for some governments to reduce emissions cheaply and thus discourage real solutions to climate change and has been developed without their participation or FPIC. Their cries fell into deaf ears.

Despite the obstacles that were faced by the IIFB, effective lobbying to government delegates during the meetings did enable some (but not all) IIFB text to be included in the final drafts, for instance in the case of the CEPA initiative.. The EU (though Germany) and the African Group were particularly receptive to IIFB suggestions. IIFB was able to hold a reception on Wednesday during the first week as its their

tradition and it was well attended by several governments and NGOs, including BMZ Germany, several African countries, among others. On the other hand, to follow up negotiations, discuss progress and strategize, the IIFB met daily before and after the COP sessions.

Due to lack of acceptance of respect for Indigenous Peoples' rights in the consideration on vital issues such as protected areas, biofuels, climate change and others, the closing statement of the IIFB expressed bitter disappointment that there is a multiple global crisis due to impacts of climate change yet those responsible are not taking measures to reduce their greenhouse gases emission. Another frustration was on the issue of parties not considering the importance of the UN Declaration on the Rights of Indigenous Peoples. Gender work plan implementation was also not seen as a priority in the CBD and only put under cooperation yet indigenous women and youth make up more than 50% of the indigenous population worldwide and are food producers, providers and guardians of the genetic resources of the food crops for future generations. Those rights of indigenous peoples have continued to be violated with creation of protected areas and still implementation of COP decisions at local level affirming the respect to indigenous peoples rights and biodiversity.

Planned side events during COP9

1389	20 May	13:15 - 14:45	Salon Haydn, Maritim	TEBTEBBA	Indigenous Peoples, Biodiversity and Climate Change
1390	21 May	18:15 - 19:45	Room S34 / S 35 Stresemann (GSI)	TEBTEBBA	Traditional Knowledge and the International Regime on Access and Benefit Sharing Panel Discussion
1246	23 May	13:15 - 14:45	Salon Arndt, Maritim	INTERNATIONAL ALLIANCE	Enhancing the Participation of Indigenous Peoples in the CBD process
1392	27 May	13:15 - 14:45	Room S34 / S 35 Stresemann (GSI)	NCIV with IIFB and TEBTEBBA	Indigenous Women and the Convention on Biological Diversity
1391	28 May	18:15 - 19:45	Room S25, Stresemann (GSI)	TEBTEBBA and the IIFB Working Group on Indicators	Indicators Relevant for Indigenous Peoples, the CBD Strategic Plan and the 2010 Biodiversity target

What are the major thematic areas and cross-cutting issues under the convention of Biological Diversity?

Thematic areas of discussions leading to COP9 - COP10	
Agricultural biodiversity	Island biodiversity
Dry and sub-humid lands biodiversity	Marine and coastal biodiversity
Forest biodiversity	Mountain biodiversity
Inland waters biodiversity	
Cross-cutting issues	
Access to genetic resources and benefit sharing	Impact assessments
Invasive alien species	Indicators
Biological diversity and tourism	Liability and redress -Article 14(2)
Climate change and biological diversity	Protected areas
Economics, trade and incentive measures	Public education and awareness
Ecosystem approach	Sustainable use of biodiversity
Global Strategy for Plant Conservation	Technology transfer and cooperation
2010 Biodiversity Target	Traditional knowledge, innovations and practices
Global Taxonomy Initiative	

Indigenous Peoples Presentation to BMZ key issues

During COP, IIFB prepared some points to distribute through BMZ to help in advancing for some critical issues.

Indigenous knowledge holds an intrinsic relation between Indigenous Peoples and the Environment. This knowledge is governed by customary laws that indigenous communities observe as a balanced way of life to maintain both biodiversity and their own survival. Traditional knowledge, innovations and practices are designed to enable the long-term sustainable use of resources, their respect, protection and understanding would help preserve biodiversity. We are guided by our work with the understanding of what Mother Earth wants us to do and how to do it. It is for this that we focus our participation in COP9 with a hope that:-

1. It is imperative that Parties recognize Indigenous Peoples rights and ensure their full and effective participation at all levels of the Convention
2. Indigenous Peoples must be fully engaged in, and aware of all the potential impacts of development projects occurring on their territories and lands. Even before any project begins, environmental impact assessments which

should be done. The assessment should include social and cultural impact of Indigenous Peoples. For example, mitigation measures for climate change should take into account Free Prior Informed Consent and precautionary principle.

3. There is a need to enhance the participation and involvement of Indigenous Peoples in protected areas discussion and implementation at all levels. The establishment of Protected Areas should take into account the rights of Indigenous Peoples, the Programme of Work of Protected Areas and the full and effective participation of Indigenous Peoples.
4. Many Indigenous Peoples are disadvantaged because of lack of information and awareness on Communication, Education and Public Awareness. There is need to fully involve them in CEPA.
5. There is need to promote the rights of Indigenous Peoples with the Governments and private sector in order to find ways of managing forests and protecting biodiversity, forest and natural resources in a sustainable way.
6. Capacity building and access to information should be established for the IP's at all levels to monitor all forms of development and investment of international financial institutions, so as to recognize the free prior and informed(FPIC)
7. Indigenous Peoples should have access to their traditional lands and territories including the use of genetic resources authorized by them and receive benefit that is derived from the use of their land, resources, indigenous knowledge and genetic resources. Mechanism to protect those resources and their traditional use should be put in place.
8. Support for indigenous women's full and effective participation – Indigenous women should be supported in their efforts to participate more in environmental forums, such as the CBD-related meetings. Many indigenous women are in need of both financial support and capacity building in order to fully and effectively participate.
9. Agricultural biodiversity is not a mono-crop culture but involves diversity of crops, plants, animals and other living things. There is need to rethink and create awareness at all levels on the long term impact of modern technologies that are encouraged to produce large to benefit the rich and kill the poor and denying the fundamental rights of food sovereignty.

2.2. Outcomes and achievements of CBD COP 9 and remaining challenges

Despite problems to achieve meaningful participation on the discussions on certain items, several notable achievements were made during the week. ABS, biofuels and other issues related to climate change received the lion's share of attention and the controversy they stirred overshadowed noteworthy outcomes on other issues.

Marine Protected Areas

First among these was the adoption of scientific criteria for the identification of marine protected areas, including in open-ocean waters and deep-sea habitats and the guidance for the establishment of a representative network of such areas. This was hailed as a great success. Held up for a long time in disputes over the CBD's mandate to address biodiversity-related concerns in areas outside national jurisdiction, the decision not only provides a sound scientific basis for MPA identification, but also clearly acknowledges the division of responsibilities between the CBD and the UN General Assembly, which has been addressing MPAs and related issues of marine biodiversity under its Working Group on Marine Biodiversity Beyond National Jurisdiction. The criteria will now inform the next round of negotiations under this body and many hoped that it will lead the way towards adopting an urgently needed framework for the protection of marine biodiversity. In addition, the decision may contribute to the 2012 target of building a global representative network of marine protected areas.

Article 8j and related Provisions;

The decision on Article 8(j) contained sections that were favorable to Indigenous Peoples since it achieved the objectives for the COP 9 negotiations which was first to secure the future work of 8j so that AHWG continues, secondly to secure the tasks of the PoW on 8j to be discussed at the next WG with a clear objective and finally to revitalize and bring back the foundation role that 8j plays in the participation of IPs at CBD and its crucial role in other thematic areas especially on TK related negotiation within the International Regime. In the decision:

- The COP takes note of the adoption of UNDRIP.
- Delegates agreed to references to indigenous prior informed consent throughout the decision and to a provision on considerations for guidelines for documenting TK. References to PIC of indigenous and local communities and climate change and mitigation activities were unbracketed throughout the text
- There was included further work on the composite report on status and trends regarding traditional knowledge, considerations for guidelines for documenting traditional knowledge the plan of action for retention of traditional knowledge and the development of elements of sui generis systems for the protection of traditional knowledge
- Participatory mechanisms for indigenous and local communities in the Convention were further developed.
- Recommendations of the UN Permanent Forum on Indigenous Issues (UNPFII) were considered.

The decision made in preambular references took note of UNDRIP and the International Expert Meeting on responses to climate change for indigenous and local communities in the Arctic Region.

Access and benefit sharing ABS

- One of the achievements was the adoption of a roadmap for the negotiation of an international ABS regime, ensuring that three ABS Working Group and three expert group meetings will take place before the 2010 deadline for completion of negotiations. The COP recognized the importance of the participation of indigenous and local communities in the elaboration and negotiation of the regime; and takes note of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
- Proposals of the IIFB on indigenous rights, particularly FPIC, remained in the negotiation text and further contributions by ILCs will be taken into account.

Marine and coastal biodiversity

- The adoption of scientific criteria and guidance for marine areas in need of protection, and of the first-ever Resource Mobilization Strategy for the Convention were also hailed as major achievements and tools towards reaching the 2010 biodiversity target.
- The COP in its final decision recognized that the principles of the Rio Declaration play an important role in the conservation and sustainable use of marine biodiversity
- The COP invites parties to promote full and effective participation of indigenous and local communities when establishing new marine PAs, also noting UNDRIP; and calls on parties to integrate the knowledge of indigenous and local communities, consistent with Article 8(j), and to ensure the integration of social and cultural criteria and other aspects for the identification, establishment and management of marine PAs

Climate change

- A considerable amount of attention focused on issues related to climate change, including reference to mitigation and adaptation activities. Parties were invited to carry out studies on climate change impacts and climate change adaptation and mitigation activities.
- The COP decided to integrate climate change considerations in each programme of work, considering the assessment of potential impacts of climate change and both the positive and negative impacts of climate change mitigation and adaptation activities on relevant ecosystems. It urged parties to enhance integration of climate change considerations related to biodiversity in the implementation of the Convention, with the full and effective involvement of relevant stakeholders.

Protected areas

- Delegates agreed to take into account Indigenous and local communities' own management systems and customary use in the management of protected areas.

Forest and agricultural biodiversity

- On genetically modified (GM) trees, an issue which attracted a great deal of public interest, the COP reaffirmed the need for a precautionary approach and called on parties to authorize the release of GM trees only after completion of studies in containment as well as science-based and transparent risk assessments, a decision that was criticized as insufficient by several parties and observers.
- The CBD called for parties to address obstacles to sustainable forest management and seek to resolve land tenure and resource rights and responsibilities; strengthen efforts on forest PA networks and ecological connectivity, and on sustainable financing; promote scientific research to better understand the impacts of climate change, including mitigation and adaptation activities, and environmental degradation on forest biodiversity and on the livelihoods of indigenous and local communities; promote and implement sustainable forest management and the ecosystem approach in all types of forests and strengthen forest law and governance at all levels.

Dry and sub humid lands

- During the COP the IIFB and some governments stressed the need for enhanced co-operation among the Rio conventions, and for developing proposals for incorporating climate change considerations into the work programme, for consideration prior to COP 10. Role of UNCCD was also recognized.
- The COP invited relevant organizations and donors to provide technical and financial support to developing countries, to identify and conduct land-use options for dry and sub-humid lands that promote the conservation and sustainable use of biodiversity and generate income for indigenous and local communities, including through involving private sector and public partnerships and through the establishment of a special fund to support such activities.

CEPA

- It called for creation of partnerships to transmit CEPA products to regions without internet access and considered participation of ILCs in CEPA activities;

Invasive Alien Species (IAS)

- Parties and others were invited by the CBD to study the impact of other drivers of biodiversity loss on the introduction, establishment and spread of IAS, and their related socioeconomic, health and environmental impacts.

2.3. Challenges, lessons learn and way forward

COP 9 has showed much more than any previous COP that the CBD encompasses a plethora of sub-processes, many of which are running on their own schedule.

The CBD's main challenge on the way to and past 2010 will be to bring all these sub-processes together and draw a coherent picture of the state of implementation, on the basis of eventually identified priorities and needs in the field.

There is increasing awareness that the challenge for 2010 goes far beyond an assessment of progress in reducing the rate of biodiversity loss. Ever since the findings of the Millennium Ecosystem Assessment were published in 2005, there has been an unspoken recognition that the 2010 target cannot be achieved across the board. This milestone creates two significant challenges for the CBD. On the one hand, the CBD needs to develop a clear message that conveys its current successes, such as meeting the target in certain ecosystems, regions or sectors, and making progress on many fronts such as marine biodiversity and inland waters. On the other, it needs to address the fact that much more needs to be done in the future to reduce biodiversity loss beyond 2010.

Challenges for the IIFB would be to maintain a follow up of the implementation of COP decisions and continue consolidating its work as indigenous caucus in the CBD process.

This would imply enhancing communications during the preparatory process so as to advance work in the intersessional periods, find support for capacity building activities at the national and regional levels and develop strategies for contributing with written submissions, particularly in the ABS negotiations.

The IIFB plays an important role in the discussions to implement the CBD, as recognized by the CBD Secretariat and most of the Parties. In spite of difficulties to fully participate in some issues, the proactive and valuable contributions of the IIFB have made that, along the years, Indigenous representatives are more fully included even in contact group negotiations. This is a success but also a challenge as IIFB has to be able to play up to this important role through better preparation and capacity.

ANNEX 1: IIFB Preparatory Meeting Agenda

Arrival Started from 14th, 15th and 16th May 2008.

Schedule

Friday 16th and
Saturday 17th from 9.00-18.00
Sunday 18th from 9.00-19.00

Venue

Federal Ministry of Economic
Cooperation and Development (BMZ)
Gustav Stresemann Institute (GSI)

TIME	ITEM
Day ONE	16 th May 2008
9.00 am	Opening prayers Ceremony - Pacific region
9.15 am	Welcoming remarks: INFOE by Aaron Werner and IIFB by Lucy Mullenkei Briefing on Procedure during Preparatory meeting and beyond
9.45 am	Issue paper discussion and strategy on discussion with the EU, German government (BMZ)
10:30 am	Short Break
10.45am	Brief address by German, EU, CND and ABS representatives
11.00 am	German CBD Focal Point: Federal Ministry for the Environment; Ms Nicola Breier
12.00pm	Director General, Cooperation with countries and regions; peace building; United Nations at the Federal Ministry for Economic Cooperation and Development; Ms Ingrid Hoven
	European Union (EU) Focal Point for Article 8j; Ms Cosima Huffer
	Open Forum
1.00 pm	Lunch Break (Hosted By Germany/BMZ)
	Executive secretary of the Secretariat of the Convention on Biological Diversity; Mr Ahmed Djoghlaif
	CBD Secretariat: Article 8j Focal Point Mr John Scott
	Open Forum
4.00 pm	WG-ABS Co chairs; Mr Fernando Casas and Mr. Timothy Hodges
4.30 pm	Nature Conservation and Sustainable use of Natural resources, Federal Ministry for the Environment, nature Conservation and Nuclear Safety (BMU) representing the German presidency; Mr. Jochem Flasbarth
5.00 pm	IIFB regional Meetings (Asia, Africa, Latin America, Pacific, Russia, Arctic)
Day 2 & 3	17- 18 May 2008 (The IIFB broke into thematic areas groups for in-depth discussions)
	Election of co-chairs
	Selection of Regional Coordinators
	Selection of drafting committees
	Selection of the media and press team
	Selection of thematic areas chairs

COP prep meeting- meeting with different key players ministers and representatives from BMZ

1-Agenda IIF Prep meeting

Preliminary Programme for COP9 IIFB Preparatory Meeting 15th – 18 May 2008

Objectives:

- To orient participants to the COP9 process
- To share experiences in the regions
- To prepare, strategize and divide tasks for intervention at COP9
- To discuss about IIFB organization matters

Day 2 - Friday 16th May 2008 Prep meeting Opening at The BMZ	
08.30 – 09:30	Registration and welcome Prayer Briefing by members of the COP9 Ad Hoc Co-ordinating Committee Preparatory Process by the Coordinating Committee COP9 Process and Agenda Prep meeting agenda
09:30 – 10:30	Briefs from thematic areas writers of briefing papers.
10:30 – 11:00	Coffee Break
11:00 - 1.pm	<ul style="list-style-type: none"> - Welcome to Germany By the CBD German Focal Point - Welcome by BMZ - Address by German President of COP - EU - Africa - Mega diverse - Gurulac - ABS Co-chairs - Focus will be on the topics of COP - ABS 8j, Protected areas, forest and agriculture biodiversity climate change, discussions and reaction from the floor.
13:00 – 14:00	Lunch
14:00 -15:30	Address by CBD secretariat- Executive secretary, John Scot- COP9 agenda Marie Aminata Khan- CBD Gender Focal Point Kalamani Mulongoy – Protected areas Discussions and reactions.
15:30	Strategies for Intervention Formation of Working Groups for the Opening Statement and other Agenda Items/Issues
15:30 – 16:00	Coffee Break
16:00 – 18:00	Strategies for intervention and further discussion of the thematic areas of the COP - in working groups Selection of drafting team for interventions(especially opening statement)
18:00 – 20:00	Dinner and Rest
20:00 – 22:00	Regional Caucuses

DAY 3 – 17th of May 2008	
09:00 – 10:30	Recap Presentation of the previous day work in Working Groups
10:30 – 11:00	Coffee Break
11:00 – 12:30	Continuation of discussions on the themes if possible in Working Groups and/or Plenary with inputs from those selected to do the briefing papers.
12:30 – 14:00	Lunch
14:00 - 16:00	IIFB Matters Regional representation during the COP Strengths and weaknesses Past and present
16:00 – 16:30	Coffee Break
16:30 – 18:30	Continuation of Discussion and Decisions on IIFB Matters Evaluation and agenda for caucuses and plans during COP
18:30 – 20:00	Dinner
20:00 – 21:30	Continuation of Working Groups, Regional Caucuses, IIFB discussion
DAY 3 – 18th of May 2008	
09:00 – 10:30	Report by Working Groups
10:30 – 11:00	Coffee Break
11:00 – 12:30	Plenary Discussion by Member of the COP9 Coordinating Committee Task Division Strategies at COP9
12:30 – 14:00	Lunch
14:00 - 15:30	Continuation of Strategy discussions Revision and adoption of opening statement/s
15:30 – 16:00	Coffee Break
16:00 – 18:30	Continue Discussion and Finalize strategy and opening statement/s
19:00	Dinner and Closing Ceremony Cultural Evening

Annex 2: Case Studies

2:1 Indigenous Peoples and Climate Change



By: Marcial Arias - International Alliance of Indigenous and Tribal Peoples of the tropical forests

From the beginning of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, it was accepted that it could be a platform to take more energetic measures in the future. And in 1995, in Berlin, the Parties decided that the agreement to have the developed countries try stabilize their gas emissions at the 1990 levels by the year 2000, was not sufficient to reach the long-term goal of the Convention to prevent “dangerous anthropogenic (ascribed to human activities) interference with the Earth’s

climate system”. This situation compelled the parties to have a new round of talks to enforce the commitments of the developed countries. And thus was established the Ad Hoc Group on the Berlin Mandate which, following 8 meetings, remitted a text to the CP-3 for final negotiation.

The States assembled in Kyoto, Japan, in December 1997, agreed on the decision (1/CP.3) to approve a protocol by virtue of which the industrialized nations commit themselves to reduce the total of their greenhouse gas emissions for the period 2008-2012 by at least 5% as compared to the levels of 1990. In 1997, the governments agreed to incorporate an amendment to the treaty, known as the Kyoto Protocol, which provides for more energetic (and legally binding) measures. And, since 1988, the Intergovernmental Panel on Climate Change has been examining scientific investigations and offering governments summaries and advice on climate related problems. On March 16, 1998, the Kyoto Protocol opened for signature and took effect 90 days after ratification by at least 55 parties of the Conventions.

Only three industrialized nations have not ratified the Kyoto Protocol: the United States (responsible for 36,1% of the emissions among the industrialized states in 1990), Liechtenstein (0,001%) and Monaco (0,001%). Despite there being some important advancements, indigenous peoples will probably keep suffering more from this process than benefiting from it, if they are not recognized as holders of rights and given the opportunity to participate fully and effectively in the whole implementation process. We have worked in workshops, seminars and in preparatory meetings as well as in the conferences of the parties of the UNFCCC, but have up to this date not reached official recognition in this process neither as observers nor with concrete contributions to the debates in the conferences.

The indigenous peoples have striven to have a voice in the proceedings of the UNFCCC, but have unfortunately been ignored by the Parties. To this date, the indigenous peoples have without success tried to become an official and

recognized part of the process, not only because they are particularly vulnerable, but also because they are affected by the decisions of the suggested resolutions taken in the course of this process and by the actions undertaken subsequently. The Kyoto Protocol has established measures to mitigate the effects of climate change which – understood as solutions to the problems induced by climate change – in many cases unfortunately run counter to the health, the survival and the existence of our peoples. In particular, the mechanism of clean development stipulated under the protocol promotes actions and projects such as the development of carbon-sinks which not only threaten the traditional life-styles of the indigenous peoples, but also have little potential for actually mitigating the effects of climate change.

One of the principal reasons for the lack of recognition of the indigenous peoples is the lack of research and information documenting the impact this problem is having in many ways on these peoples. Despite the fact that there are several articles and documents which have been written about related matters – in particular by the World Rainforest Movement, the Global Forest Coalition, and the International Alliance of Indigenous and Tribal Peoples of Tropical Forests – there is still no concrete report with respect to the specific sectors of concern and action of indigenous peoples. Such a study is necessary to create public awareness and demonstrate it to the relevant parties in the process of the UNFCCC as well as the necessity to include indigenous peoples in such processes. In this writing, I would like to stress the different characteristics of the impacts of climate change interconnected and related to indigenous peoples, above all, to demonstrate the important role indigenous peoples should and must play in the global efforts to confront climate change.

Definitions

Before dealing in length with the effects of the climate change impacts which are related to and concern indigenous peoples, I would like to refer to the definitions used by the Conference of the Parties on Climate Change as regards climate change and Forests.

The United Nations Framework Convention on Climate Change uses the term *climate change* only referring to human induced changes:

“Climate change” is understood as a change of climate directly or indirectly attributed to human activities altering the composition of the world’s atmosphere and which adds to natural variability of the climate observed over comparable time periods. (Article 1, paragraph 2).

Being constantly produced for natural reasons it is called natural variability of the climate. In some paragraphs, to refer to human induced change, also the expressions anthropogenic climate change is used.

Apart from the global warming, climate change implies changes in other variables such as global rainfall and its pattern, the cloud cover and all the other elements of the atmospheric system.

- a) “Forests”: “Forest” is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 meters at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 meters are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest.
- b) “Afforestation” is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.
- c) “Reforestation”: direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities were limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.
- d) “Deforestation”: conversion, through direct human activities, of forest lands into non-forest lands.
- e) “Re-establishment of vegetation”: direct human-induced activities with the aim to increase the stocked carbon in determined areas by means of establishment of vegetation in a surface area of at least 0.05 ha and which is not included by the definitions of forestation and reforestation referred to in this article. In the present annex “article” is understood as an article of the Kyoto Protocol if not otherwise specified.
- f) “Forest Management”: system of practices for the administration and the use of forest lands aimed to allow that the forest fulfills ecologic, economic and social functions (including biodiversity) in a sustainable way.
- g) “Agricultural Land Management”: system of practices for lands designed for agricultural cultivation and lands held as a reserve, or temporarily not used for agricultural production.
- g) “Agricultural Land Management”: system of practices for lands designed for agricultural cultivation and lands held as a reserve, or temporarily not used for agricultural production.
- h) “Pastoral Land Management”: system of practices for lands designed for stock breeding to manipulate the quantity and the type of vegetation and livestock produced.

Indigenous Peoples and Climate Change

In this section I would like to point out some aspects which I consider important for the understanding of the convention and the Kyoto Protocol. This is one of the conventions of the Earth (Rio) Summit which does not include any article which refers directly to indigenous and local communities, including the Kyoto Protocol. Nonetheless, there are countless aspects and themes directly related of which I highlight some under this section as:

Land use change, and silviculture

Here we can clearly see that the Parties have to take into account the entire information related to the lands and the specific activities with respect to the absorption by sinks of gases with greenhouse-effect, as provided for in the paragraphs 3 and 4 of article 3 of the Kyoto Protocol. And this information is part of the national communication where indigenous peoples and local communities are totally ignored. Nor is traditional knowledge concerning land use of indigenous and local communities considered.

Clean Development Mechanism

The Kyoto Protocol defines the mechanism for a clean development as follows:

“The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under article 3”.

“Within the frame of the clean development mechanism:

- a) the Parties not included in Annex 1 shall benefit from the activities of projects which shall result in certified reductions of the emissions; and
- b) the Parties included in Annex 1 shall be able to utilize the certified reductions of emissions resulting from such project activities to contribute to the fulfillment of a part of their commitments, limitation and emission reducing quantities on the basis of article 3.

Afforestation and reforestation projects, irrespective of their size, enter the mechanism for a clean development, e.g.: Which belong to the following categories of small-scale activities of reforestation projects?

Just to mention four categories and their impact on indigenous and local communities:-

- a) from pastures to forest lands;
- b) from agricultural lands to forest lands;
- c) from wetlands to forest lands;
- d) from settlements to forest lands.

The International Indigenous Forum on Climate Change energetically rejects the inclusion of sink projects for being detrimental to indigenous and local communities.

The socio-economic impact of climate change is important and crucial for indigenous and local communities, as they force the states to redesign the actions necessary in short-term with respect to the next season of rains and natural disasters resulting in proposals implying the transformation and redesign of the development pattern of the communities and the region which also partially affect other neighbor states. This new approach of sustainable development is already illustrated by local experts as combination of new strategies, alternatives for the activities and productive vocation, the improvement of living conditions and social cohesion, as well as a sustainable environmental management which includes the analysis of risks the region faces with respect to climate variability and change.

The socio-economic impact establishes strategic transversal axes which include an indigenous and gender approach which demonstrates both the impact on, as well as the potential of, organized groups and women, recognizes the distinctive cultural perspectives, revalues indigenous values and takes account of the diverse environmental characteristics effected to date and their potential to contribute to the reduction of the risks.

Therefore, one cannot only focus on the economic level as intends the World Bank. One needs to be careful as with that approach we only more promote extreme poverty. Thus, the economic has to be accompanied by a holistic vision including cultural aspects which the climate change provokes.

Vulnerability and Adaptation.

Indigenous Peoples face some of the most severe dangers of climate change since they often live in the most fragile ecosystems of the world, including forests, islands, costal regions and wetlands. As the consequences of climate change are felt more and more in all parts of the world, those depending on land and sea not only for subsistence, but also with their spiritual roots, are confronted with ever growing threats to their existence. From the Arctic to Australia, Indigenous Peoples are experiencing low harvests, spoilt hunting conditions, changing ice conditions and loss of costal areas.

Indigenous and local communities are more vulnerable and exposed to dangerous climate changes and their capacity for adaptation is limited. Moreover, countries with limited economic resources, low technology level, insufficient information and technical capability, deficient infrastructure, unstable or weak institutions, as well as unequal qualification and access to resources have little capacity to adapt themselves and are highly vulnerable. Groups and regions with limited adaptation capacity in any one of these dimensions are more vulnerable to the damages of climate change, just as they are more vulnerable to other types of pressure factors.

Mitigation and Reducing Emissions from Deforestation and Degradation (REDD)

These two aspects, mitigation and reducing emissions of gases in areas of deforestation and degradation are directly related to indigenous and local communities. To reduce gases from deforestation and degradation in developing

countries (REDD), the participation of indigenous peoples and local communities has not been taken into account.

With respect to participation and the implications of REDD projects, the Global Forest Coalition (GFC), an NGO composed of indigenous organizations, has voiced its opinions before the Secretariat of the UNFCCC in March 2007 that “the unsustainability is the principal reason of the degradation of forests, while the conversion of forests to agricultural lands is by far the principal reason of deforestation. The large-scale expansion of agro-industrial monocultures for food fiber and increasingly for the production of energy is both an important direct cause of deforestation as an important underlying cause for the loss of forests; the expansion of monocultures over existing cultivable land is the reason for stock-farming and other forms of agriculture resorting to forest areas and other natural ecosystems”.

In Bali, Indigenous Peoples repeated that the members of the Parties have to recognize and take effective action to reduce the adverse impacts of climate change on Indigenous Peoples, in particular taking into account their adaptation, mitigation, vulnerability, and the cultural impacts. The current proposals for REDD as a solution for climate change, in particular where they favor the inclusion of REDD initiatives in the international carbon market, will destroy the lands and the territories of indigenous peoples and cause additional violations of human rights. The mechanisms based on the market such as the carbon commerce, agrofuel and the carbon compensation projects especially designed to impede deforestation, often infringe on the fundamental human rights of the indigenous peoples.

I would also like to point out that other elements which affect us in the negotiation process are the definitions. For example, the UN definition of forests includes plantations. This allows for the substitution of forests by plantations for climate change reasons. This is to the extreme detriment of Indigenous Peoples, not only because of the loss of forests in itself, but also because of the impact of pesticides used in the monoculture tree plantations on the health of the people and the biodiversity on which they depend.

If REDD uses the carbon commerce and other similar financial mechanisms to compensate those who fight deforestation, this might also exclude Indigenous Peoples (in absence of land reforms), who are not engaged in this practice and thus do not qualify for compensation. Moreover, they further marginalize Indigenous Peoples, and in particular the women, who shall not be able to pay for environmental services on which they depend.

Why blame the poor for the climate change?

In the past few years, there has been a lot of talk about “climate change and the poor” arguing that the poor and poverty are to blame for global warming. And it’s even more, they claim that climate change represents a serious risk in the fight against poverty and threatens to undo the efforts for a good development. Even though climate change is a global phenomenon, its negative impact is felt more

intensely by poor people and countries. There is no doubt about that, as poor countries and indigenous and local communities depend on the natural resources and are subject to severe limitations in facing climate variability and extreme climate phenomena.

The atmospheric warming is a “modern” problem: it is complicated, affects the whole world and intermingles with difficult questions such as poverty, economic development and demographic growth. It will not be easy to resolve. To ignore it, would be even worse.

“A few month ago, scientists have found out that the Arctic ice warms at double speed compared to the rest of the planet, all this due to the climatic change initiated on the planet mainly due to the uncontrolled emission of carbon dioxides and other greenhouse-effect gases resulting in greater electromagnetic activity of the sun. This is nothing new for the scientific community, but this group of scientists adds a new, at least particular aspect, which is that dust particles shall also have a significant impact on the Arctic. Dust particles heat the air and darken the Arctic ice surface, which results in better absorption of sun with its logic consequences for the planet: more warming.” says Luis Tuninetti, executive director of Eco-Sitio.

The incredible thing is that the NASA, in a report made, has discovered that this problem is not caused by the first world, but that a percentage of more than 60 % is due to the combustion of vegetation all over the world and of firewood in the south of Asia. The report asserts that India is responsible for the majority of the dust particles getting to Greenland.

The reference shows that “Despite the fact that the south of Asia with its industrial chimneys is the biggest polluter as compared to any other place in the world, this is small compared to the fume of millions of household fires... The conclusion of this investigation is that the effect of dust particles on climate change is 10 times bigger than that of the greenhouse-effect gases....”

The projections made by the scientists indicate that the most affected regions shall be the poor and developing countries, even though latest events happening in the USA, such as “Katrina” give an idea of what is going to be experienced in all parts of the world. The United States, the world’s richest country is the one with the highest emissions of gases contributing to the greenhouse-effect – and that in a wide region. When the Kyoto Protocol was signed in 1997, the Northern power committed itself to reduce its emissions by 6 %, later it dropped out and today emissions not only have not decreased, but increased by 15 % as compared to the levels of 1990.

Marsh gas is another of the gases with greenhouse-effect with the difference that it has an intensity of 20 times more compared to carbon dioxide.

“We will experience more flooding and droughts in different parts of the world, apart from the continued warming of the earth in general, the biodiversity shall be reduced as many animals and plants cannot adapt themselves to the new

temperatures. Returning to what was mentioned in the beginning of the present article, the report established by the USA through the NASA seems pathetic: blame the poor and the third world countries for all the environmental cataclysms, this seems to be a constant of the Bush government, not to mention the espionage of environmentalist groups of its own and other countries of the world.

The relationship between biodiversity and climate change

The climate change is one of the most important reasons for the loss of biodiversity and it is believed to negatively affect the role of biodiversity as source of goods and performances. The impacts of climate change on biodiversity have been of great concern for the Convention on Biological Diversity since 2002 when, as a response to the petition of the Conference of the Parties and the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), a special Technical Expert Group to conduct an evaluation of the interconnectedness of biodiversity and climate change. The report 21 was concluded in 2003 and primarily concentrated on opportunities to mitigate the impacts of climatic change on biodiversity, as well as on the connections between both in the context of the Kyoto Protocol. In its seventh meeting in 2004, the Conference of the Parties in its Convention on Biodiversity benevolently accepted the report and asked for its widespread distribution. In the course of the same meeting, in its decision VII/IS, the Conference of the Parties also asked SBSTTA, as next step in its work on interconnections between biological diversity and climate change, to develop advice and orientation to promote synergies between activities dealing with climate change on the national, regional, and international levels, if adequate, including activities fighting desertification and soil degradation, as well as activities aimed at the conservation and sustainable use of the biodiversity.

As predicted, the present tendency towards global warming causes the some extinction. Numerous plant and animal species already weakened by contamination and loss of habitat shall not survive the next 100 years. The human being, though not threatened in this way, will probably face ever growing difficulties. The recent severe episodes of torments, flooding and drought, for example, seem to demonstrate that computer models predicting more frequent “extreme climate periods” prove right.

The sea level rose at an average of 10 to 20 cm in the course of the 20th century and for the year 2100 an additional rise of 9 cm to 88cm is forecast (the temperature rise lets the volume of the ocean expand and the melting of the glaciers and the ice caps increases the water volume). If the ultimate limits of this scale are reached, the sea might flood the densely inhabited coastal areas of countries such as Bangladesh, provoke the total disappearance of some nations (like the island state of the Maldives), contaminate sweet water reservoirs of thousands of millions of persons and lead to mass migration.

According to the forecasts, agricultural production will diminish in the major part of the tropic and subtropical regions, but also in the temperate zones, if the

temperature rise exceeds more than a few degrees. Predicted is also a desertification process in the inner continental zones, for example central Asia, the African Sahel and the Great Plains of the United States. These changes may at least lead to disturbances in land exploitation and food supply. Regional ranges of diseases such as malaria might expand.

On the other hand, the climate change has to date already caused people to flee from communities. The settlement of Lateu, situated in the pacific archipelago of Vanuatu and the village of Shismaref on a small island in Alaska, have experienced recent resettlements. The first, to escape the rise of the sea level and the last because of the degradation of the permafrost.

Recommendations for the CBD:

1. Recommend to the Conference of the Parties of the CBD and the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) that the CBD establishes an additional point of the Working Group on Art. 8j and related provisions and Climate Change to carry out an evaluation of the interconnections between the programme of work on Article 8(j) and climate change, including vulnerability and adaptation.
2. Request the UNFCCC to establish a Group of Experts on Climate Change and Indigenous Peoples, including the subjects of mitigation, vulnerability, and adaptation with the full and effective participation of Indigenous Peoples.
3. That the UNFCCC establishes a Voluntary Fund for the participation of representatives of the indigenous organizations in the meetings of the UNFCCC.
4. Recommend the UNFCCC not to include carbon sinks in the mechanism of clean development.
5. Recommend that the Parties of the UNFCCC immediately stop all forms of support to large-scale production of agro-fuels, monoculture tree plantations and other suggested mitigation strategies which destroy indigenous lands and territories and violate the human rights of peoples depending on forests.
6. Recommend that the UNFCCC revises the definition of the term “forests” and takes into account the points of view of Indigenous Peoples.
7. Recommend that the UNFCCC recognizes the free, prior and informed consent of the Indigenous Peoples. Upon recognition of such consent, the Indigenous Peoples shall be able to exercise their free self-determination and their constant responsibility to protect their lands, territories, and resources.
8. Recommend that the historic, cultural, social, and economic approaches of the Indigenous Peoples are important and that they have to be taken into account with respect to initiatives, plans and the implementation of

programs, policies and projects on the national, regional and international level.

9. Recommend that the Parties adopt precautionary measures for handling the question of genetically modified trees and other projects on indigenous lands and territories.

2:2 Climate Change; Biodiversity and Indigenous Peoples in Africa. *By Edna Kaptoyo, Indigenous Information Network*

Climate change is about the growth of greenhouse gas emissions due to the burning of fossil fuels, resulting mainly from industrial activities. In the normal sense, the build up of the carbon dioxide levels in the atmosphere. This is then made worse by the increasing loss of forests, which act as “carbon sinks” that absorb gases and prevent release into the atmosphere. During this process there is increase of carbon dioxide in the atmosphere which enhances the “Greenhouse Effect” thus leading to temperatures rising. According to reports by the UN’s Intergovernmental Panel on Climate Change, it is estimated that the mean global surface temperature has increased by about 0.3 to 0.6 degree Celsius since the late 19th century to the present, and an increase of 0.2 to 0.3 degree over the last 40 years. This increase is very dangerous to both human and the biodiversity in our planet. The significant rise in temperature can cause many problems such as the lose of many species both in land and in seas and all waters.



According to the Millennium Ecosystem Assessment (MEA), climate change now poses one of the principal threats to the biological diversity of the planet, and is projected to become an increasingly important driver of change in the coming decades. The MEA also showed that the rural people who are mainly Indigenous and local communities are especially vulnerable to the loss of essential services when an ecosystem becomes degraded since they have no other options at their disposal.

Africa

According to the IPCC report, between 75 and 250 million people in Africa are expected to be affected by increasing water scarcity. In addition, climate variability and change is predicted to adversely affect agricultural production which is likely to exacerbate malnutrition. For instance, yield from rain-fed agriculture is projected to decrease by up to 50% by 2010 (IPCC 2007a). In addition, food security will be negatively impacted by decreasing fish resources in the large lakes due to rising water temperatures. Water borne diseases are likely to increase due to the increasing risks of floods as well as the unsustainable consumption of ground

water aquifers. As regards malaria, it is expected that in some cases it will increase whereas in others it will decrease. Overall, Africa is expected to be one of the most vulnerable continents to climate change, among others because of its low adaptive capacity. Some of the major areas to be affected in Africa are mainly the dry areas of arid and semi arid and more so those in the deserts of Sahara and the Kalahari. However with the rise in temperatures, wind speeds, this will result to the expansion of dunes along with increased wind speeds resulting in the region losing most of its vegetation cover and hence, becoming less feasible for indigenous peoples living in the region. As their traditional resource base diminishes, the traditional practices of cattle and goat farming will no longer survive. There are already areas where indigenous peoples are forced to live around government drilled bores for water and depend on government support for their survival. Food security is a major issue for indigenous peoples residing in the deserts and they are on the frontline of global climate change.

Climate change and its impact on biodiversity and indigenous peoples livelihoods

Climate change occurs as a result of the over consumption of certain fuels, which release greenhouse gases into the atmosphere and contribute to the shift in global weather patterns precipitated by human activity. The overwhelming majority of climate change-related emissions come from developed, industrialized countries, yet it is the developing countries which are most drastically affected. Indigenous peoples' lifestyles are intertwined with the land, and indigenous peoples have lived sustainably on their territories for generations. Yet these same lands are those that are the first to be affected by the phenomenon of climate change. The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report published in early 2007 confirmed that global climate change is already happening. The report found that communities who live in marginal lands and whose livelihoods are highly dependent on natural resources are among the most vulnerable to climate change. Many indigenous and traditional peoples who have been pushed to the least fertile and most fragile lands as a consequence of historical, social, political and economic exclusion are among those who are at greatest risk.

Disrupted weather patterns are first found in deserts, arid and semi-arid areas, and mountainous regions. The result of this disruption is the more frequent occurrence of extreme weather events and natural disasters, such as more frequent volcanic eruptions, hurricanes, floods, drought, and the melting of glaciers such as those found on Mount Kilimanjaro and Mount Kenya. Floods result in the destruction of catchment areas, as what has occurred in the Aberdares. This leads to the reduction of water for the use of both humans and livestock. Drought reduces the scope of grazing pastures available for livestock, which therefore leads to a loss of income. As such, the sustainability of cultural livelihoods is threatened due to increased pressure on the land and resources. The cohesiveness of cultural groups is threatened due to the increased necessity for mobility among indigenous populations. This means that groups are splintering off once they leave their homelands in search of food, water and pasture. These is also true

because pastoralists are found in drylands/semi arid lands that are particularly vulnerable to climate change because small changes in rainfall patterns has had serious impact on the drylands biodiversity and secondly, drylands are already under stress from various activities including, conversion of grazing lands to agriculture, the introduction of invasive species and pollution among others.

Climate change is a threat to biodiversity at present and will continue to do so but proper management of biodiversity can reduce the impacts of climate change through the adoption of biodiversity based adaptive and mitigative strategies. Mitigation in this case can be human intervention to reduce greenhouse gas source or enhance carbon sequestration, while adaptation to climate change refers to adjustments in natural or human systems in response to climatic effects which moderates harm or exploits beneficial opportunities. Adaptation activities can make use of local and indigenous knowledge and participation.

Agriculture also contributes to climate change through land use changes, burning of crop residues and use of nitrogen fertilizers release greenhouse gases into the atmosphere. E.g. conversion of pastoralists' grasslands into wheat farms and flower farms has not only deprived them of grazing lands but also resulted into changing conditions in the area. With the rapid population growths came with it the need for and change from traditional to intensive agricultural systems. Many traits have been incorporated into modern crop varieties which were introduced from wild relatives, improving their productivity and tolerance to pests, diseases, changing conditions etc. Unfortunately, many wild plants of staple food crops are endangered.

Climatic changes especially in temperature and precipitation can have significant effects on forest growth and could become increasingly threatened by pests and fires making them more vulnerable to invasive species. Forest ecosystems provide a wide array of services and goods and most of it have been cleared during the past century. Reducing the vulnerabilities to forests can help build resilience against climate change impacts.

Wetlands are the world's primary carbon sequestration mechanism and its now facing the brunt of climate change which has negatively affected inland water ecosystems. More than 20% of freshwater fish species have become extinct and are being threatened or endangered.

Indigenous knowledge is the basis for local level decision-making in many rural communities of Africa. Its value is not only for the culture in which it evolves, but also for scientists and planners striving to improve conditions in rural localities. Incorporating indigenous knowledge into climate change policies can lead to the development of effective adaptation strategies that are cost-effective, participatory and sustainable.

African communities and farmers have always coped with changing environments. They have the knowledge and practices to cope with adverse environments. The enhancement of indigenous peoples' capacity is a key to the empowerment of local communities and their effective participation in development processes. Local farmers in several parts of Africa have been known to conserve carbon in soils through the use of zero-tilling practices in cultivation, mulching, and other soil-management techniques. Natural mulches, moderate soil temperatures do suppress diseases and harmful pests and conserve soil moisture. The widespread use of indigenous plant materials such as agrochemicals to combat pests that normally attack food crops, has also been reported among small-scale farmers. It is likely that climate change will alter the ecology of disease vectors, and indigenous practices of pest management would be useful adaptation strategies. Other indigenous strategies that are adopted by local farmers include controlled bush clearing; using tall grasses for fixing soil surface nutrients which have been washed away by runoff; erosion-control to reduce the effects of runoff; restoring lands by using green manure; constructing stone dykes; managing low-lying lands and protecting river banks.

Adaptation strategies that are applied by pastoralists in times of drought include the use of emergency fodder, culling of weak livestock for food, and multi-species composition of herds to survive climate extremes. During drought periods, pastoralists change from cattle to sheep and goat husbandry, as their feed requirements are lower. The pastoralists' nomadic mobility reduces the pressure on low-capacity grazing areas through their cyclic movements from the dry northern areas to the wetter southern areas of the Sahel. African women are particularly known to possess indigenous knowledge which helps to maintain household food security, particularly in times of drought and famine. They often rely on indigenous plants that are tolerant to droughts and pests, providing a reserve for extended periods of economic hardships. For example, in southern Sudan, women are directly responsible for the selection of all sorghum seeds saved for planting each year. They preserve a variety of seeds that will ensure resistance to the range of conditions that may arise in any given growing season.

Declaration on Human Rights establishes that "everyone has a right to life, liberty and personal security." Inaction in the face of the threat posed by climate change would represent a very immediate violation of that universal right.

Climate change is the defining human development challenge of the 21st Century. Failure to respond to that challenge will stall and then reverse international efforts to reduce poverty. The poorest countries and most vulnerable citizens will suffer the earliest and most damaging setbacks, even though they have contributed least to the problem. Looking to the future, no country—however wealthy or powerful—will be immune to the impact of global warming.

The Human Development Report 2007/2008 – Fighting Climate Change- human solidarity in a divided world: shows that climate change is not just a future scenario. Increased exposure to droughts, floods and storms is already destroying

opportunity and reinforcing inequality. Meanwhile, there is now overwhelming scientific evidence that the world is moving towards the point at which irreversible ecological catastrophe becomes unavoidable. Business-as-usual climate change points in a clear direction: unprecedented reversal in human development in our lifetime, and acute risks for our children and their grandchildren.

There is a window of opportunity for avoiding the most damaging climate change impacts, but that window is closing: the world has less than a decade to change course. Actions taken—or not taken—in the years ahead will have a profound bearing on the future course of human development. The world lacks neither the financial resources nor the technological capabilities to act. What is missing is a sense of urgency, human solidarity and collective interest.

As the Human Development Report 2007/2008 argues, climate change poses challenges at many levels. In a divided but ecologically interdependent world, it challenges all people to reflect upon how we manage the environment of the one thing that we share in common: planet Earth. It challenges us to reflect on social justice and human rights across countries and generations. It challenges political leaders and people in rich nations to acknowledge their historic responsibility for the problem, and to initiate deep and early cuts in greenhouse gas emissions. Above all, it challenges the entire human community to undertake prompt and strong collective action based on shared values and a shared vision.

Climate change is likely to further aggravate the situation of indigenous and traditional peoples, especially those living in places that are susceptible to natural disasters, and will consequently further limit their ability to cope with or recover from shocks (DFID, 2004). Furthermore, climate change is expected to have negative impacts on efforts for poverty eradication and to challenge the attempts made to reach the Millennium Development Goals (MDGs). It is unfolding today, slowing progress towards the Millennium Development Goals (MDGs) and deepening inequalities within and across countries. Left unattended, it will lead to human development reversals throughout the 21st Century.

Climate Change and Impacts on Biodiversity

Since climate change affects everything and everyone in the world, the group divided the challenges into sub-categories to more effectively deal with the impacts on biodiversity.

Forest

1. Protected areas – As climate change worsens and the environment is degraded, governments often resort to the creation of protected areas to conserve the biodiversity in a certain area and mitigate the impacts of human use. However, protected areas are often created without any consultation or involvement of indigenous peoples at any level, and they are marginalized by the loss of access to land.

2. Droughts and erosion – Climate change results in a disruption of regular weather patterns, including rainfall. This means that many areas of the world, particularly

sub-Saharan Africa, receive less rain than usual. Droughts will occur more frequently as a result, as well as increased erosion in areas where there is not enough rain to provide adequate tree cover. Biodiversity will suffer as a result.

3. Species extinction – When forest biodiversity suffers as a result of changing weather patterns, species extinctions will occur as habitats are lost. Species will also be threatened by increased human demands for food and for natural resources when there are fewer resources available to them.

Agriculture

1. Agricultural disease – As the climate changes, plants are less healthy and less able to cope with the diseases that attack them. This means that fewer agricultural crops will survive.

2. Lack of arable and fertile soil – As the climate becomes more hot and dry, less land will be suitable for agriculture. This is particularly the case for indigenous peoples who live in delicate ecosystems.

Humans

1. Eviction – As indigenous peoples of Central Africa have traditionally lived sustainably in forests, their eviction from traditional lands will result in their living an unsustainable “modern” lifestyle elsewhere. It will also likely result in the unsustainable use of forest resources, all of which will worsen the phenomena of climate change.

2. Loss of medicinal plants – As biodiversity is lost as a result of climate change, plant species which are used for medicinal purposes will likely die out, leaving those who use traditional medicines no other option than to turn to Western-style medicine.

3. Loss of drinking water – As global rainfall decreases, potable water sources will become scarce. This will result in increased environmental pressure, as people will migrate to areas where drinking water is available, putting extra stress on selected areas.

4. Health and nutrition – Communities which are already suffering from bad health conditions and malnutrition are suggested to be more vulnerable to climate change impacts and to have a lower adaptive capacity compared to healthy communities. Many indigenous peoples live within natural ecosystems and are therefore exposed to numerous health hazards mostly as a consequence of their difficult environment. Furthermore, as a result of their prevalent poverty and marginalisation, they often have very limited access to mainstream health services, health prevention and promotion programmes and, in case they do have access to such services, they are often culturally inappropriate (Montenegro, Stephens,

2006). In many cases, indigenous and traditional communities still maintain their isolation and their traditional indigenous health systems, which largely depend on the health of the environment. If environmental destruction takes place, e.g. as a consequence of climate change induced hazards, the communities' ability to obtain medicinal plants and food may collapse, which consequently again increases their vulnerability.

The IPCC report (2007b) predicts that climate change will further weaken the health status of millions of people particularly those with low adaptive capacity. The expected health risks related to climate change are significant including increased exposure to Ultra Violet Radiation (UVR) causing chronic sun damage of skin and eyes; malnutrition in response to increased competition for crop and water resources; deaths caused by heat waves, droughts, floods and storms; spatial distribution of infectious vector-borne diseases causing for example malaria and dengue fever, and of water-borne diseases as a result of reduced water quality causing increased incidences of diarrhoea and respiratory diseases (DFID, 2004). The World Health Organization (WHO, 2003) estimated that in the year 2000 climate change was responsible for approximately 2.4 per cent of worldwide diarrhoea, and six per cent of malaria in some middle-income countries.

WHO (2003) further suggests that of the vector borne diseases, malaria is the one which is most sensitive to long-term climate change. Today, an estimated 790 million people suffer from nutritional deficiency (DFID, 2004). This situation is expected to aggravate with climate change, especially in low-latitude countries where the overall crop productivity is expected to decrease (IPCC, 2007). Food insecurity and malnutrition will affect the overall health status of millions of people, with implications for infant mortality and child growth and development. Groups which are most at risk from malnutrition or even famines include rural dwellers especially those living in marginalised areas, pastoralists, urban poor people, refugees and displaced people (DFID, 2004). Indigenous and traditional peoples who often live in remote places are expected to be particularly at risk.

5. Social networks

Indigenous and traditional peoples highly rely on social networks. They often maintain social and economic ties between different groups of peoples and in many places they still support systems of food and labour sharing including exchange, reciprocity, barter or local markets. Such exchange practices have a role to play as adaptation strategies to environmental variability and stress. In the future, these practices could gain importance when these peoples, as a result of adverse impacts of climate change, might become increasingly dependent on non-locally available resources. However, in the future some of these reciprocal systems may also disappear, as certain groups may become more disadvantaged than others (Salick, Byg eds., 2007).

In addition to the rather local or regional exchange practices described above, indigenous and traditional peoples might also become more reliant on aid provided

by the state, NGOs or international organisations, especially in times of crisis. Moreover, extension of their social network across the country they live in or even beyond could become more common in the future as an additional adaptation strategy to reduce socioeconomic vulnerability. For example, families that can count on members who seasonally migrate or temporarily or permanently work abroad may be more resilient to adverse climatic impacts than families whose members are exclusively dwelling within the community itself.

6. Access to safe water and fuelwood

The IPCC report (2007a) projects that it is likely that areas affected by droughts will increase during the 21st century and that it is very likely that the frequency of heavy rainfalls will increase over most areas during the 21st century. Floods and droughts can lead to serious health impacts especially in vulnerable regions. Floods facilitate the proliferation and spread of infectious diseases as well as respiratory and diarrhoeal diseases. Droughts can boost concentration of pathogens in water sources as pathogens multiply at increased rates in less available water (DFID, 2004). In many places, because of a lack of alternatives, people are forced to use contaminated water for drinking and household as well as for livestock and agriculture putting not only themselves but also their agricultural production at risk.

Persistent droughts may also lead to an increase in forest fires and desertification and as a consequence contribute to a lack of fuelwood which plays an important role in indigenous and traditional peoples livelihoods. A lack of fuel for cooking may force communities to reduce their intake of warm meals. This again may have implications on their health since especially in warm climates, germs proliferate at high rates. What is more, a decrease in the availability of water and fuelwood may have particularly serious implications on women and children. In many traditional communities, women, apart from being involved in the care of children and the elderly, are also in charge of household food production and water and firewood gathering. Climate change may further increase the time necessary for completing these errands as the availability of water, vegetation and fuelwood may decrease. A lack of firewood and safe water could prompt these communities to take their children, especially girls, out of school, in order to help their mothers to complete these tasks.

7. Availability of biological diversity

Traditional and indigenous communities mostly depend on subsistence farming and derive a substantial part of their diet from wild plants and animals. These communities also play an important role in the conservation and management of species and ecosystems and avail on the plants and animal medical and pharmaceutical products provided by nature. Biodiversity loss as a result of potential adverse impacts of climate change will affect indigenous peoples in many different ways, such as depriving them of important food sources, and reducing their ability to cope with pests and diseases with the help of medicinal plants (Salick & Byg eds., 2007)

Land use and land cover change

Finally, changes in land use and land cover are additional factors which have implications on the vulnerability of indigenous and traditional peoples. Land cover is defined as;

The observed physical cover including the vegetation (natural or planted) and human constructions which cover the earth's surface. Water, ice, bare rock or sand surfaces count as land cover (GTOS, 2007).

Changes in land cover and land use on the one hand drive climate change and on the other hand are directly or indirectly affected by climate change.

Conversion of forest into agricultural land, for example, drives climate change. It leads to alteration of surface properties of an ecosystem (e.g. albedo, roughness length) and changes the efficiency of ecosystem exchange of water, energy and CO₂ with the atmosphere. It is expected that the land use shift from forest to agricultural land will continue in the future, especially arable regions in Africa (IPCC, 2007a). Urbanisation too, is another alternation in land cover that drives climate change. Urban areas form heat islands which contribute to global warming. However, as stated above, land cover change not only drives climate change but is also driven by climate change. Global warming may lead to dramatic changes in land cover. In the Arctic, for example, ice sheets are melting which seriously affects the Earth's surface properties. Satellite data have demonstrated that since 1978 the annual average arctic sea ice extent has decreased by 2.7%, importantly contributing to sea level rise (IPCC, 2007).

Indigenous and traditional peoples' degree of vulnerability is expected to be seriously influenced by land use and land cover change. Land cover change caused by climate change could force them to adapt to new circumstances and alter their traditional ecosystem management systems. Sadly, in some places climate change impacts may overstrain indigenous and traditional peoples' capacity to adapt and eventually lead to a loss of their traditional habitats and along with it their cultural heritage.

Strategies Adopted by Indigenous Peoples

As environmental change has already affected their livelihoods in the past, in many cases indigenous peoples have developed specific coping strategies to extreme variations of weather.

Some examples of such adaptation strategies include:-

- Crop diversification in order to minimize the risk of harvest failure (many varieties of crops with differing susceptibilities to droughts, floods, pest etc. are grown). Some of these varieties are adapted to different environment/field locations (near rivers, high on mountains, close to a primary forest etc).
- Changes of living area and a variety of movement patterns are used to deal with climatic variability.

- Change of hunting and gathering periods to adapt to changing animal migration and fruiting periods.
- Change of varieties and species. Livestock varieties may be changed to take account of new disease challenges.
- Changes in food storage methods, such as drying or smoking foods according to climate variability and corresponding availability of food
- Changes in food habits, for example when the crops or cultivated plants are not producing good harvests, people will revert to gathering food in the forests. Or people who are close to a town might trade or barter with neighboring villages or traders/markets. Some may even become dependent on international agencies (the World Food Programme, UN agencies etc).
- Forests as source of famine food in case of emergency.

Implication for Policy

Policy formulation

- Promote land tenure and access rights as well as access rights to natural resources of indigenous and traditional peoples, including in the context of mitigation and adaptation measures such as biofuels plantations or carbon offset projects
- Promote entitlement to power and self determination: Include indigenous peoples within negotiations on climate change of governments and international organisations
- Facilitate access to (scientific) information and technology
- Recognize indigenous and traditional peoples' own coping strategies to adapt
- Incorporate indigenous knowledge and perceptions into the climate change policy
- Enable indigenous peoples to participate and actively take part in decision-making within climate change policy making at regional, national and local level in terms of mitigation and adaptation
- Support the protection of natural resources including habitats, species and culturally important resources
- Support countries in the process of developing National Adaptation Programmes of Action (NAPAs) and ensure the integration of indigenous and traditional knowledge
- Address specific risk management strategies in areas where traditional and indigenous peoples live and where projected hazards will have the most serious impacts
- Take into account the implications of emission reduction initiatives

under international mechanisms, such as the Clean Development Mechanism, on indigenous and traditional peoples cultures and livelihoods

- Promote the inclusion of indigenous knowledge systems in climate impact and vulnerability assessments
- Explore carbon offset strategies that indigenous peoples practice and for which they should be rewarded through payments and other means.

Policy implementation

- Promote innovative, culturally appropriate technology transfer
- Improve the overall situation of indigenous peoples: poverty alleviation, health care services and food security
- Improve social and physical infrastructure
- Maintain or enhance livelihood diversification
- Conservation of biodiversity (including agro-biodiversity) in order to increase resilience of traditional and indigenous peoples and to enhance their capacity to adapt
- Support a network of indigenous peoples enabling them to share their knowledge and lessons learned
- Develop and implement risk management strategies including early warning systems or evacuation strategies
- Make full use of the agenda of the World Conservation Congress in 2008 to advance the discussion of the topic of ‘Indigenous and Traditional Peoples and climate change’, with specific attention to issues including disparities and vulnerability of impact, mitigation, adaptation, poverty, social and cultural impact, and other climate change related issues and invite indigenous peoples to the WCC
- Implement recommendations from climate impact and vulnerability assessments which take into account indigenous knowledge systems, culture, social values, spirituality and ecosystems; as well as the full and equal participation of indigenous peoples in all aspects and stages of the assessment
- Capacity building and empowerment of indigenous peoples to deal with climate change
- Promote indigenous practices including sustainable water use system, traditional coastal management or erosion control etc. for adaptation and mitigation
- Create awareness on traditional adaptation and mitigation strategies and expand knowledge on these practices.

Recommendations

- Expiry of the current commitment period of the Kyoto Protocol in 2012 creates an opportunity for early progress in climate change mitigation.
- Awareness creation is very important here, as it helps people realize the impacts of climate change and how small lifestyle changes can help mitigate the damage that has already been done, and prevent further environmental degradation. As indigenous peoples’ lifestyles are incredibly low-impact when it comes to the

environment, indigenous peoples should be considered as partners in sustainable development and in the mitigation of issues of climate change. It should be acknowledged that indigenous peoples have valuable knowledge to add to the climate change debate, and their sustainable ways of life should be taken as a positive example of environmental management.

- On all levels, there is a dire need to put into place environmental policies, laws and standards of compliance which will be strictly enforced. An example of this was Rwanda's solution to the pollution of the environment by plastic bags. Rwandans saw that plastic bags were everywhere, that they were taking up room in landfills, being eaten by animals, clogging up rivers and spoiling the landscape. As a result, the Rwandan government completely banned the use of plastic bags. Other such policies, particularly in relation to emissions standards and climate change reduction, should be developed and implemented globally.

- Carbon trading programs are another suggestion for the mitigation of climate change, but this is one method of climate change mitigation that must be examined very carefully before being agreed upon by both parties. The idea behind carbon trading programs is that companies or agencies from developed countries will pay developing countries in order to plant forests on their land. These forests are meant to act as 'carbon sinks' – that is, areas which absorb carbon emissions. The companies from developed countries would then receive carbon credits, which would allow them a certain amount of emissions. The problem is that these carbon sink forests have caused problems in some regions, including Uganda, due to poor implementation and the exclusion of indigenous and local communities in the project. One of the negative impacts that carbon trading programs have had includes the cutting down of indigenous trees in order to plant mono-cultural foreign species. Before engaging themselves in any such activity, communities must be fully involved and aware of the potential impact that such a project may have on the environment and on their cultural well-being. An environmental impact assessment should be done to examine the possible effects of mono-culture plantations and chemicals, and consider questions such as food security and local involvement.

- Historical background on how communities used to cope with climate change. Like where communities used to separate grazers from browsers during the dry periods. Many local people have detailed knowledge of environmental changes such as changes in rainfall frequency, bird migration, fish availability and flowering of local plants may be useful in determining the way they mitigate and adapt to their local environments. Nomadic pastoralist provides a livelihood for people in the arid in Kenya and other Sahelian region of Africa; shifting cultivation has sustained hundreds of distinct cultures in the fragile ecosystem. The key to this success is sustainability.

- As for coping with changes in the weather, traditional indigenous knowledge of storm routes and wind patterns enables people to design their disaster management long in advance by constructing types of shelter, wind break structures, walls, and homestead fences appropriately. A hydrological disaster is obviously

unmanageable when it starts. Similarly, knowledge of local rain corridors enables them to prepare for storms. Knowing the colour of clouds that may carry hailstones enables people to run for cover. Knowing that prolonged drought is followed by storm, thunder and lightening during the first few rains enables people to prepare or expect a disaster. A change in birds' cries or the onset of their mating period indicates a change of season.

- Similar application and use of indigenous knowledge for disaster management is also prevalent in Kenya. Floods can be predicted from the height of birds' nests near rivers. Moth numbers can predict drought. The position of the sun and the cry of a specific bird on trees near rivers may predict onset of the rainy season for farming. The presence of certain plant species (for example, *Ascolepis capensis*) indicates a low water table.

These examples underscore the importance of harnessing indigenous knowledge not only as a precious national resource but also as a vital element in environmental conservation and natural disaster prevention, preparedness and response.

Kenyan communities have a long record of adapting to the impacts of weather and climate changes through a range of practices for example, crop diversification, irrigation, water management etc. However current climate change trends poses novel risks which are outside the range of experience, nevertheless there is evidence that adaptation measures that also consider climate change are being implemented on limited basis.

- Indigenous Peoples inclusion – Indigenous peoples should be included as partners in sustainable development, and in dealing with issues of climate change. Balancing of human and wildlife needs for fresh water is essential to drylands adaptation to climate change which can be achieved through sustainable and efficient management of water resources and restoring degraded lands.

There is need for better management of agricultural soils, improved efficiency in fertilizer use, restoration of degraded agricultural lands. Use of crop residues is also a good management practice.

Specific wetland management measures to help avoid degradation and potential release of greenhouse gases can help reduce are beneficial mitigation options.

Community involvement in development projects: Communities must be fully engaged in and aware of all the potential impacts of development projects occurring on their lands. Even before any project begins, environmental impact assessments should be done in order to take stock of any potential impact. Questions of food security, chemicals, land use and sustainability should all be examined.

Reforestation: Areas that have suffered from deforestation should be renewed through the planting of fresh trees.

Agro-forestry: This is the practice of engaging in agricultural cultivation in the same region as forests. It can help diversify the area and prevent total biodiversity loss.

Irrigation: If done sustainably, irrigation can help prevent erosion due to lack of plant cover.

2:3 Agricultural Biodiversity and Indigenous Peoples

By Estebancio Castro Diazr - International Alliance of Indigenous and Tribal Peoples of the tropical forests

Introduction

One of the main challenges that Indigenous Peoples have faced and continue to face has been the right to land and natural resources including the protection of their agricultural practices. In many countries Indigenous Peoples live in regions that are semi arid, arid or, in mountainous areas where it is often difficult to practice agricultural systems and hone such knowledge. Some Indigenous Peoples have maintained their traditional knowledge, innovations and practices.



However, they face industrial agricultural practices, GMO-terminator seeds, monoculture agriculture and plantations.

It is essential that Indigenous Peoples participate in current discussions within the Convention on Biological Diversity (CBD) in relation to agricultural biodiversity. The CBD in its preamble recognizes “the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components”. The CBD also states “the importance of, and the need to promote, international, regional and global cooperation among States and intergovernmental organizations and the non-governmental sector for the conservation of biological diversity and the sustainable use of its components”.

Agricultural biodiversity plays a very important role in traditional food systems especially in food security and food sovereignty of Indigenous Peoples. Indigenous Peoples have built up a large knowledge base of agricultural genetic diversity and have developed their traditional knowledge, innovation and practices according to their unique relationship to their lands, territories and environment. Their traditional knowledge of maintaining the ecosystem and their sustainable use of biodiversity and providing goods and services must be recognized in the mission and vision of the programme of work on agricultural biodiversity of the CBD and must be implemented in an holistic way.

Importance of Indigenous Agriculture and Traditional Knowledge

The agricultural biodiversity of Indigenous Peoples has a unique relationship with the land, territories, culture, traditional food systems and spiritual expressions of Indigenous Peoples. The discussion on agriculture cannot be limited to the conservation of seeds and cultivations. The debate must include an holistic approach that includes Indigenous Peoples’ traditional knowledge, their food security, food sovereignty and their right to life as peoples.

The importance of indigenous traditional knowledge, innovation and practices is clearly evident in light of the current climate crisis. Indigenous knowledge of traditional seed exchange and developing new crops is an example of how Indigenous Peoples sustainably use their seeds according to the weather and the environment. This indigenous technology must be taken into account and recognized by States.

The traditional seed exchange systems like all indigenous knowledge has a unique and special relationship with the land and territories of Indigenous Peoples including their social and ecological systems. The maintenance of Indigenous Peoples traditional agriculture, innovation and practices for future generations and its sustainable use must be protected and promoted. All new initiatives relating to the adaptation and mitigation of climate change must recognize bio-cultural systems of Indigenous Peoples. However, Indigenous Peoples now face new policies of adaptation and mitigation of climate change in their lands and territories. The clean development mechanisms, Reducing Emissions from Deforestation and Degradation in developing countries (REDD), monoculture agriculture and bio-piracy are impacting negatively on indigenous peoples' lands and territories resulting in deaths, displacement, loss of biodiversity, land degradation and division of communities.

For example, in April the Seven United Nations Permanent Forum on Indigenous Issues received information from Indigenous representatives of Colombia that in San Andres de Sotavento on the Indigenous Zenu Reservation, 500 hectares of grasslands have been replaced with monoculture rubber plantations. This project has been implemented with funding from the World Bank. Indigenous communities did not give their free, prior, and informed consent to this project and were not privy to the policy development which brought about a number of human rights violations and environmental degradation within their lands.

Conference of Parties VIII (COP8)

Agricultural biodiversity was examined along with other substantive issues in COP8. The document under discussion in the Working Group I (WG-I) was UNEP/CBD/COP/8/26/Add.2. After two weeks of discussion in COP8, recommendations were recorded and approved by the WG-I. States considered draft recommendations on the cross-cutting initiative of biodiversity for food and nutrition; the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity; genetic use restriction technologies (GURTs); and the in-depth review of the work programme on agricultural biodiversity.

New Zealand, Australia and Switzerland agreed with the recommendation of the Subsidiary Body on Scientific, Technical and Technological Advice 10 (SBSTTA 10). The recommendation was that risk assessment should be carried out on a case by case basis and that such assessment must include genetic restriction use technologies. New Zealand, Australia and Switzerland also agreed that this was a positive recommendation that the COP8 should adopt. The Indigenous International Forum on Biodiversity and civil society organizations strongly disagreed with that recommendation although the industrial sector and the

Foundation for Public Research and Regulation supported the recommendation stating that this could provide multiple benefits of gene-switching technologies. However, the recommendation from SBSTTA 10 referring to the case by case risk assessment was a substitute of the original reference to respect the mandate of Decision V/5 (agricultural biodiversity) with regard to future research on the impacts of GURTs. COP 8 in its document (UNEP/CBD/COP/8/L.6) reaffirmed its Decision V/5, and encouraged parties and others to respect traditional knowledge and farmers' rights to seed preservation, continue to undertake further research within the mandate of Decision V/5 on the impacts of GURTs, including their impacts particularly on indigenous and local communities and, continue to disseminate the results of these studies.

The initiative presented by Food and Agriculture Organization (FAO) and the International Plant Genetics Resources Institute (IPGRI) on biodiversity food and nutrition was welcomed by States. States then introduced new language broadening the genetic base of cultivated crops; conducting research on under utilized species and use of indigenous crops and calling for case studies on biodiversity and nutrition. States took time considering how to advance the promotion of crop diversification and how to create markets for biodiverse food crops. They also substituted the paragraph "the list of ways to promote crop diversification and create markets for biodiverse food crops" with "identifying and promoting crop diversification for biodiverse food crops to be used for food and nutrition." It is important for Indigenous Peoples to analyze whether the use of indigenous crops is part of the promotion of crop diversification and creation of markets or not.

The COP8 report (UNEP/CBD/COP/8/L.6) enclosed sections on the cross-cutting initiative on biodiversity for food and nutrition and decided to integrate the framework elements into the work programme on agricultural biodiversity at its in-depth review at COP-9. The document also included elements such as developing and documenting knowledge, integration of biodiversity, food and nutrition issues into research and policy instruments, conserving and promoting the wider use of biodiversity for food and nutrition, and public awareness.

States proposed new language on the soil biodiversity initiative. Delegates emphasized the importance of a database on soil biodiversity for food and agriculture, soil erosion in land management and rehabilitation programmes, reference to household agriculture, promoting entrepreneurship and marketing strategies for agro-production, and a new goal on the traditional application of local practices. There is no mention of the protection of the environment, Indigenous Peoples nor maintaining ecosystems. The new language is a more market based approach. The COP 8 report also decided to integrate the framework for action into the agricultural biodiversity work programme at COP-9 and invites governments and relevant civil society organizations to support and implement the initiative and supply further case studies on soil biodiversity.

The Subsidiary Body on Scientific, Technical and Technological Advice 13 (SBSTTA 13)

The SBSTTA 13 was held in Rome, Italy between February 18 – 22, 2008. One of its main tasks was to examine in-depth the review of the programme of work of agricultural biodiversity (UNEP/CBD/SBSTTA/13/2). States called for enhanced co-operation with FAO and other organizations. The main discussion was on the impact of agriculture on biodiversity and related research needs, indicators for monitoring implementation, on-farm conservation, information gathering and dissemination and policy mainstreaming. The main debate of all discussions was developed around agro-fuels, climate change adaptation and mitigation initiatives. The agro-fuels issue showed the existing discrepancy of views between the European Union, agro-fuel producers and developing countries. The European Community called for guidelines to minimize the negative impacts of agro-fuel production and consumption and policy frameworks to ensure the sustainable production and consumption of agro-energy. Civil society and indigenous peoples expressed their concerns with agro-fuels and requested parties to strengthen efforts to develop frameworks, norms and verification schemes for sustainable agro-fuels and to adopt a precautionary approach.

The final document of SBSTTA 13 in relation to agriculture biodiversity (UNEP/CBD/SBSTTA/13/L.2) dealt specifically with the adaptation and mitigation of climate change. It encouraged parties and other governments, in collaboration with FAO and Indigenous and local communities to gather information on lessons learned about agricultural biodiversity conservation and use and integrate these into climate change adaptation and planning as well as making this information available through the Clean House Mechanism. SBSTTA 13 also requested the Executive Secretary, governments, FAO, indigenous and local communities and other partners to gather and disseminate information on the links between climate change agriculture and biodiversity, the ways and means to build resilience into agricultural livelihood systems as part of strategies for climate change adaptation, adaptation strategies of vulnerable communities, and the impact of climate change on agricultural ecosystems for maintaining wildlife and habitats. It is imperative that Indigenous Peoples provide information and case studies of the impacts that they have suffered with these new policies and projects.

Farm conservation was also discussed specifically in relation to participation in decision-making processes and adequate references to traditional farmers and indigenous and local communities. They also discussed the importance of the components of biodiversity and associated ecosystem functions. Indigenous Peoples stated that the protection of indigenous peoples' crop varieties and their importance for developing their traditional knowledge and sustaining their food security and food sovereignty was paramount.

Indigenous Peoples must prepare and strategize about the bracketed section on agricultural biodiversity and biofuels within the SBSTTA 13 document. The recommendation contains two options. Option one refers to “the development of sound policy frameworks that ensure the sustainable production and consumption

of biofuels, and to the development of biodiversity-related guidelines to inform criteria standards and certification schemes for sustainable biofuels”. Option two refers to “the development of policy frameworks and guidelines to strengthen efforts to develop criteria, standards and verification schemes for sustainable biofuels; the development of a tool to assess the indirect conversion or degradation of ecosystems due to policy measures that increase the demand for biofuels; adopting the precautionary approach by suspending the introduction of supportive measures for the consumption of biofuels; and integration of the issue into the programme of work on agricultural biodiversity”. Indigenous Peoples experience and knowledge in relation to agro-fuels is imperative in order to highlight to the COP9 the negative impacts of agro-fuels on indigenous peoples’ lands, territories, society and culture.

UN Declaration on the Rights of Indigenous Peoples

The main goal for Indigenous Peoples must be to advocate for Indigenous Peoples rights. Indigenous Peoples rights must be established, recognized, protected and promoted at the international, regional and national levels. In this context, it is essential that Indigenous Peoples advocate the promotion and implementation of the significant articles related to agricultural biodiversity, traditional knowledge and lands and territories contained within the newly adopted UN Declaration on the Rights of Indigenous Peoples.

States may disagree with the UN Declaration on the Rights of Indigenous Peoples. They may say that the Declaration is a non-legally binding document. However, it is the responsibility of Indigenous Peoples to remind them that the UN Declaration is the most complete and significant human rights standard setting instrument for Indigenous Peoples to date and, it is also the reaffirmation of rights that are found in relevant international human rights instruments such as the UN Charter and the two UN Covenants.

2:4 Indigenous Peoples and Forest Diversity

By: Marcial Arias - International Alliance of Indigenous and Tribal Peoples of the tropical forests

“The forest is our life and existence. In the forest is our food, our medicine, our housing and our knowledge. How can you think that Indigenous Peoples could destroy our life, destroying the forests? We have incorporated the forests in a truly sustainable development” said the Kuna chief Gilberto Arias.

*“After the last tree has been cut,
After the last river has been poisoned,
After the last fish has been fished,
Only then they will discover that you cannot eat money”.*
Words of a Cree leader.

Background

As a result of public pressure in 1992, the governments organized the “Earth Summit” in Rio de Janeiro. The summit at which thousands of NGOs and indigenous organizations participated had three positive results for Indigenous Peoples: the first is the Declaration of Rio, the second is chapter 26 of Agenda 21 which recognized the vital role that Indigenous Peoples play in sustainable development and the third is chapter 11 of Agenda 21 on combating deforestation (Agenda 21 is a ten-year programme for sustainable development which was later affirmed and strengthened by the Johannesburg summit).

We might remember also that at the Earth Summit 1992 (or United Nations Conference on Environment and Development) two events were held: the official conference and parallel the one by non-governmental organizations and indigenous peoples.

In this regard I wish to highlight the Kari-Oca Declaration and Earth Charter of Indigenous Peoples of 30 May, 1992, which stated, with the participation of indigenous representatives in the world, as follows: “We Indigenous Peoples walk towards the future in the footprints of our ancestors. From largest to the smallest living being, from the four cardinal points, from air, land and the mountains, the creator has put us, Indigenous Peoples, on mother earth. We continue to maintain our rights as Peoples despite of centuries of deprivation, assimilation and genocide. We maintain our inalienable right to our lands and territories, all resources, and our soil and subsoil and our waters. We affirm our continuing responsibility to hand over these things to our future generations ...”

Not all legal instruments that emerged as a result of the Rio Summit have taken into account the principles mentioned earlier, although we are aware, as Peoples, that those declarations were not the panacea of the problems of Indigenous Peoples. Therefore, at present there are many national standards and laws and international instruments which have severe limitations regarding the protection and recognition of the rights of Indigenous Peoples.

For example, as regards forests, the governments were unable to reach an agreement and ended by adopting a “Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all kinds of Forests”, known in abbreviated form as “Forest Principles”. Where they did come to an agreement was in Chapter 11 of Agenda 21 on “Combating deforestation.”

The results of the Rio Summit, officially known as the United Nations Conference on Environment and Development (UNCED), were endorsed by the General Assembly of the United Nations in December 1992. At the same meeting, the General Assembly endorsed a proposal to establish a Commission on Sustainable Development (CSD) to continue with the initiative of UNCED. The body was established under the Economic and Social Council of the UN (ECOOSOC) with a

very limited budget and a secretariat in New York and with the task of analyzing the process and evaluating the implementation of the UNCED agreements. It was granted a period of less than five years to carry out its work and submit its report and conclusions in a Special Session of the UN General Assembly in June 1997.

Forests constituted an important part of the area of interest of the CSD. Chapter 11 of Agenda 21, “Combating deforestation” included four programmatic areas:

1. Maintaining all types of forests;
2. Increasing the protection, conservation and sustainable management of forests, including the recovery of degraded areas;
3. Promoting the valuation and use of forests; and
4. Strengthening the capacity of planning, research and commercial activities in forests.

The objective of this Chapter is to maintain a balance between forest conservation and the use of its resources, in accordance with the principle of sustainable development.

Then the Intergovernmental Panel on Forests (IPF) was created between the years 1995 and 1997, followed by the Intergovernmental Forum on Forests (IFF), 1997 to 2000, in which Expert Groups had identified 270 proposals for action necessary to achieve SFM (Sustainable Forest Management) in all kinds of forest. It is the outcome of this global compromise - a temporary forum in charge of the global debate on forests. The panel was formally created by the 3rd Session of the Commission on Sustainable Development (April 1995), when it analyzed the achievements in the implementation of the Forest Principles and Chapter 11 of Agenda 21.

In October 2000, the United Nations Forum on Forests (UNFF) was established as a “Subsidiary Body of the Economic and Social Council (ECOSOC)”, and the Collaborative Partnership for Forests (CPF) was created. The latter consists of 14 agencies and organizations that are convened to support and cooperate with the work of the Forum (FAO, UNDP; Secretariats of the Convention on Biological Diversity, Climate Change, Combating Desertification and Drought; CIFOR; ITTO; UNEP; World Bank; IUCN).

The purpose of this Forum was to establish within five years the parameters of a mandate for developing a legal framework for all types of forests, to establish the steps to create a system of appropriate funding and technology transfer required to implement the Sustainable Forest Management worldwide.

In accordance with the ECOSOC Resolution, the Forum will meet annually for two weeks and have a high-level ministerial segment for two or three days. It would create ad hoc scientific and technical expert groups as need be; adopt a Multi Year Work Plan and develop an Action Plan for implementing the proposals for action of IPF/IFF.

Current status of forests in Indigenous Communities

The reality of the world's Indigenous Peoples, who, as other peoples, are under pressure from many factors (economic, commercial, education, demographic and others) that adversely affect their forests and their environment and therefore their natural resources in general. Indigenous and local communities face problems of deforestation and forest degradation due to lack of land use planning, population increase and others, which affect their ecosystem. The rapid population growth and development of the community itself have changed the way of life of its inhabitants, which has led to an increase in the generation of non-biodegradable waste and most of this waste is given to the sea, the coasts of the islands, rivers, lakes, ponds, etc.

The basic causes of forest loss are unsustainable patterns of consumption, trade agreements and the lack of recognition of non-economic values of forests, as well as the lack of participation of indigenous peoples and local communities in policies and institutions related to forests. The policy makers gradually recognized the need to address the underlying causes of forest degradation in the 1990s. In 1997, the Intergovernmental Panel on Forests (IPF) recommended to organize a global workshop on the basic causes of deforestation and forest degradation. A unique coalition of Non-Governmental Organizations (NGOs), Indigenous Organizations (IPOs) and governments convened this global workshop in January 1999. More than 60 case studies and analytical papers on the underlying causes of deforestation and degradation of forests throughout the world were prepared, with an elaborated version of the diagnostic framework adopted by the Intergovernmental Panel on Forests (GDP). In addition, seven regional workshops and a workshop of indigenous peoples were held in Quito, Ecuador from 7 to 11 January 1999. This paper highlights some of the main findings of this process. It should be noted that the basic causes of deforestation and forest degradation are not only relevant to develop an accurate assessment of the status and trends of forest.

Meanwhile, those of us who grew up in the forest have learned to adapt to nature. Indigenous peoples and other populations who depend on forests around the world have shown that they can respect and live with the many values of forests. Around the world, indigenous peoples and other local communities have shown they are capable of developing and implementing sustainable models. Their functions and responsibilities should be respected; lack of involvement of local communities in decisions on forest management was highlighted as a basic cause for forest loss in many case studies, such as those of Thailand (Trakansuphakon, 1998), Chile (Huilcaman, 1999) and India (Sekhsaria, 1998).

The basis for action has been and continues to be the appreciation of indigenous peoples and other communities living in the forests, of the many values of forests, and not the global thinking. However, if the underlying causes of deforestation and degradation of forests are not dealt with, the thousands of flowers that have been allowed to bloom by these communities will be trampled upon by excessive consumption, trade liberalization, globalization led by companies and other cross-

sectoral policies and trends. The causes of the deterioration of forests in indigenous and local communities yield to various political, social, cultural and ecological factors. The identification of ecosystems, where traditional knowledge, practices and systems of innovation are lost, as well as the identification of the components of knowledge responsible for the diversification of natural resources can be used effectively to identify critical areas of degradation and loss of biodiversity and to design appropriate strategies for the in situ conservation of biodiversity, its management and use.

At present indigenous and local communities are facing an accelerated destruction and loss of biodiversity and traditional knowledge. Because of external pressures on indigenous and local communities such as the forced integration of native cultures in the dominant national culture through economic, social, educational and cultural policies, are tearing apart the social and traditional structure of Indigenous Peoples, affecting the survival of indigenous cultures and the maintenance and reproduction of their traditional knowledge and practices. These policies impose foreign values that attack and destroy the traditional values of the local culture triggering rapid changes with socio-cultural and environmental impacts difficult to handle. The loss of such knowledge also indicates a rapid erosion of the genetic diversity of biodiversity in the region. This trend puts at risk one of the most important strategic centres of biological diversity vital for food sovereignty in our communities.

These pressures have also led to changes in eating habits, driving to consume canned goods and thus increase the generation of non-biodegradable waste. This type of waste foreign to the indigenous culture and the lack of plans for special handling of these pollutants lead to the spread of diseases, depreciation of the soil and pollution of the sea, rivers, coasts, lakes and gaps etc., causing a decline in marine and water resources, affecting the quality of life of Indigenous Peoples. According to a study by the World Bank on poverty and extreme poverty, the highest incidence of poverty and malnutrition is located in indigenous and local communities; the average annual income of local and indigenous communities is very low, which means four times lower than the average annual income of other sectors of society. Indigenous peoples are aware that only by uniting efforts and with the solidarity of governmental, non-governmental, national and international institutions at all levels of support will it be possible to achieve alternatives that improve the quality of life.

Traditional forest related knowledge

As an introduction to this subject, I would like to draw attention to the specific needs of indigenous peoples living in forests. All peoples who live in forests have rights. Indigenous peoples have a set of clearly defined rights which has been under discussion in international forums for over twenty years. In particular, I would like to draw attention to two important documents drafted by the Special Rapporteur Dr. Erica-Irene Daes which are directly related to our knowledge as

peoples of the forests. The first is a study on the protection of the cultural and intellectual property of indigenous peoples (E/CNA/Sub.2/1994/31) outlining in a comprehensive and succinct way our main concerns. The principles and guidelines that emerged from this study have been revised and updated in the final report (E/CNA/Sub.2/1995/26).

We believe that any discussion of our knowledge, its use and benefits, must be placed within the structure based on these principles and guidelines. In particular, our right to self-determination; our identity as a people; the inalienable, collective and continuing property and custody of our legacy; our territorial rights; and our control; and our consent on the transfer, research, use or commercial application. Just as the forest is composed of a variety of species with different needs acting together within a range of ecosystems, we believe that the needs and wishes of the peoples who depend on forests should be shaped and supported in a complementary way according to their respective circumstances. Thus, the protection of forest can be enhanced and used in a sustainable manner. For this reason, we can not ignore the rights of indigenous peoples who have their rightful homes in the woods.

From an indigenous perspective, we would begin an examination of traditional knowledge recognizing foremost the distinct indigenous peoples who are the holders of such knowledge, cultures and customs. As indigenous peoples, we are also holders of rights, and without the recognition of these, we can not survive; our knowledge will disappear and forests will become looted places because of greedy economic interests. In that regard, Michael Dodson, Torres Strait Islanders Commissioner of Social Justice and indigenous expert at the UN Permanent Forum on Indigenous Issues, said: “Our values have been filtered through those of the others. What has been considered worthy of protection has been generally based on their scientific, historical, aesthetic value, or pure curiosity. The current laws and policies are still shaped to a large extent by their cultural distortion and fail to extend protection in terms that are defined by our perspective. “

When our knowledge is discussed by people foreign to our communities or peoples it invariably becomes incorporated into a foreign classification system that denies our diversity and it is hence treated in a derogatory way. For example, our sustainable systems of shifting cultivation have worked in harmony with the forest for millennia. Still, now that the settlers use these complicated techniques in the wrong way, we are accused of destroying our own forests by “slash-and-burn agriculture.”

Our knowledge is not fossilized “traditions” that can not change. For us, “traditional” means a knowledge that is related to our own cultural identity and it is adapted to our self definition as peoples. We continue to be peoples with our own territories, political institutions, customary law and distinct cultures, our traditions remain strong. However, when you ignore our rights, we lose our traditions. The debate on traditional forest related knowledge should pay attention

to the idea of respect for our own indigenous educational principles that are rooted in social activities and practical experience handed down from our ancestors to their descendants. This temporary transfer of collective experience is not institutionalized as in the methods of national education, but is rooted in the activities, languages and oral heritage. Complementary to this is the importance of exchanging information with other peoples, both indigenous and non-indigenous. These relationships are internal and external; furthermore they are not only with humans. It must be recognized that a large part of our knowledge arises from revelations from the spirit world. However, this should not be considered in the document as a “new technique”. These are practices that we have used for thousands of years and that lead to personal and collective relations with the world of spirituality. They provide a perfect example of how the methods of indigenous knowledge are quite different from those of Western scientific methodology.

For indigenous peoples this refers to something more than the source of knowledge. This relationship is about the shared knowledge that binds us together as communities. Our shared knowledge is part of the identity as indigenous peoples, constituting our different and unique cultures. For this reason, our insistence on being identified as peoples and not as individuals or communities is essential to understanding our knowledge.

We indigenous peoples are not isolated and we have a long history of communication and trade with other neighbouring peoples, including non-indigenous peoples. Trade and technology do not have to break tradition, but when they are placed under our control, can be transformed into a culturally appropriate change. This is like the process of transforming in creative manner information and its use in the new circumstances (both environmental and social). This should happen within a structure that we accept and recognize as reflecting our cultural identity. If we are not allowed to define what is traditional, foreign experts invade our lives, to inform us whether we are “real” or not. Trade and new technology can be a threat, but we have to decide when this is the case.

Therefore a holistic view is important when it comes to the universal structure of knowledge, both practical and conceptual, which constitutes different visions of the world. An important aspect of this is the contextual and systemic nature of our approach to the world. We reject abstract classifying non-indigenous ideas of knowledge used by those who wish to take our knowledge out of context for marketing, merchandising and exploitation. The knowledge, such as the recognition of species, understanding of forest resources or practical use, is based on an understanding of how the various aspects of knowledge interrelate. However, when we talk about making decisions, we believe that this can not be separated from the universal idea of indigenous rights: self-determination. This means that we have the right to take control of our own destiny in all aspects mentioned above. Knowledge is united with the idea of territoriality; knowledge is practical and flexible and should not be defined rigidly as motionless tradition; knowledge

is collective and it is a shared aspect of our cultural identity as distinct peoples; knowledge and tradition have to be defined by ourselves, indigenous peoples; and knowledge in our vision of the world in the long term and holistic is an important aspect of our fundamental right to self-determination.

New and emerging topics in forest diversity: Genetically modified trees, Agro fuels, Terminator seeds and the Programme of Work on Protected Areas

The main threat to the world's forests is not the fact that all of them will be cut in the coming decades. There is an even greater threat, which is the replacement of primary and secondary forests of great wealth and beauty, vibrant biodiversity by planting trees and monoculture.

Parties to the Convention on Biological Diversity (CBD) met in Curitiba, Brazil, and discussed the issue of genetically modified trees (GM). Some delegates demanded a moratorium on GM trees, while others asked that the CBD would produce a report on "the potential environmental, cultural and socio-economic impacts of genetically modified trees." The CBD completed its report in early December 2007. The report was discussed during the 13th Session of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the CBD which took place in February 2008 in Rome.

This report summarizes the arguments for and against GM trees, primarily based on articles published in scientific journals. "There is a great uncertainty about the use of genetically modified trees," and "there is currently no scientific data available needed to evaluate their potential impacts." The reason is that the only way to obtain the information needed to determine the impacts of GM trees is planting them in vast stretches and to monitor them for several decades. Such experiments would show that GM trees have significant impacts on ecosystems and indigenous peoples and local communities. Some GM trees become weeds and others disseminate their genes by exogamic crossing. Once this happens it will be too late to demand their return to the lab. Such an experiment would clearly be dangerous and irresponsible.

The meeting in Curitiba agreed to a resolution that "invites Parties (...) to apply the precautionary approach to the use of genetically modified trees." The report of the CBD states that many scientists echo this resolution, "emphasizing that the principle of precaution must be applied when considering the use of genetically modified trees." But this is not enough. There is a need to ban GM trees.

While it points out some of the problems of GM trees, the report of the CBD says little about the fact that these trees will exacerbate the problems of industrial tree plantations. The impacts on biodiversity, the impact on the livelihood of the communities living near the plantations, impacts on Indigenous Peoples and gender problems associated with the impacts of industrial tree plantations are treated superficially or are ignored.

Perhaps the biggest mistake of the report of the CBD is that the propaganda of the paper industry, affirms that "more efficient plantations will decrease the need for logging old growth", "thus allowing the conservation of biodiversity in these

areas”. This may seem logical, but the reality is that so far the possibility of planting the same amount of fibre in a smaller amount of land that has not made any Pulp and Paper Company halt the expansion of their plantations. Aracruz, the Brazilian pulp and paper giant, investigated for decades in plantations of faster growth. The Aracruz eucalyptus trees are among the fastest growing in the world. But the surface of their plantations has been growing steadily, as the company continues to increase its production of cellulose.

The report of the CBD argues that GM trees of reduced lignin or rapid growth “would require fewer trees to meet the consumption needs.” It is worth considering in more detail what these “consumption needs” might be. World production of paper and paperboard has increased dramatically since 1961, when annual production reached 77 million tons. For 1978 the production had doubled. In 2005, around the world 354 million tons of paper were produced. The use of recycled paper has increased by an average of 12% annually, reaching nearly 46% of the global production of paper in 2005. Not counting the recycled paper, paper production has increased at a steady pace of about three million tons per year. Meanwhile, paper consumption per person also increased. In 1961 the average global paper consumption per head was 25 kilograms. In 2005 the figure stood at 54 kilograms. However, these numbers hide a great inequality. In Finland (the largest consumer of paper per capita in the world) consumption increased from about 100 kilograms per person in 1961 to 429 kg in 2000 (after which it fell to reach 325 kilograms in 2005). In China, consumption per head was about four kilograms in 1960. Since 1970 this figure is doubling every ten years. In 2005, paper consumption in China was about 44 kilos per person. These numbers also hide another inequality, since much of the paper produced in China is used as packaging for products that are exported to the rest of the world, especially Europe, Japan and North America.

For the 1,300 million people living in China to be able to consume as much paper as in Finland further 422 million tons of paper per year would need to be produced, more than the current total world production. Of course, the low consumption of paper is not limited to China and we have to include the rest of the world. The world’s population currently stands at 6,600 million. If the rest of the world would consume the same amount of paper as Finland we would have to produce 2,300 million tons per year, or more than six times the current global production. Clearly, this is ridiculous. But if it is ridiculous that everyone consume so much paper, obviously it is also ridiculous that Finland does.

The journalist Eric Sevareid once said that “The main causes of the problems are the solutions.” Promoting GM trees as a solution to the “consumption needs” will create a number of new problems without even having begun to address the issue of excessive consumption of the North.

The Global Forest Coalition has defined the solutions that governments currently give us through international forums as “false solutions”. Instead of mitigating, the land is damaged and the situation of peoples who depend on forests worsens.

The CBD and the need to preserve the real and not the false forests

One of the main conclusions that can be drawn from the latest report on the “Situation of the world’s forests”, published by FAO in 2007 is that the trend towards replacing biologically diverse forests by monocultures of trees is continuing and even accelerating. Every day thousands of hectares of forests with biologically diverse are replaced with monocultures of oil palms, eucalyptus, pine trees and even genetically modified trees. Part of this substitution is direct but indirect substitution is the more dangerous one: large areas of primary forest in continents such as South America and Africa continue to be lost, while especially China has embarked on the environmentally disastrous exercise of planting thousands of hectares of monoculture trees. The fact that China is the only country that is planting trees of genetic engineering at a large scale makes this replacement is even more devastating from the ecological point of view (see bulletin No. 88 of the WRM).

Other global initiatives, such as projects called “reforestation and afforestation” funded by the carbon market and the campaign of the United Nations Environment Programme to plant one billion trees, are equally ill advised. By including in these efforts large-scale monocultures of exotic and often invasive species, these initiatives do not only have a negative impact on biodiversity and people. They also represent an enormous missed opportunity in terms of not guaranteeing what the term pretends: the reinstatement and restoration of true forests as a home for people and a spectacular biodiversity.

The real forests are home to millions of people and the source of livelihood for other thousands of millions, while the monoculture tree plantations are a form of extremely extensive land use from the point of view of the workforce used, which causes rural unemployment, depopulation and poverty, especially among women. True forests are home to about 60% of terrestrial biodiversity, while tree plantations devastate biologically diverse ecosystems, pollute waterways with pesticides and often contribute to carbon emissions by destroying soil.

If there is an institution that should be really concerned with the violation of the global word “forests” that is taking place since FAO and the Parties to the Convention on Climate Change adopted a definition of forest that includes any combination of trees, it is the Convention on Biological Diversity. With the definition of FAO, “reforestation” can have tremendous negative impacts on biodiversity, while “deforestation” could actually benefit biodiversity. For example, cutting large tracts of exotic pine plantations in the Netherlands greatly benefits the restoration of native biodiversity. Fortunately, as part of the review of the extended programme of work on the diversity of forests, the Convention on Biological Diversity now has the opportunity to restore harmony between biodiversity and forests. The Ad Hoc Technical Expert Group on Forest Biological Diversity suggested that the COP adopts a comprehensive and harmonized definition of “forests”. The 13th Session of the Subsidiary Body for Scientific and

Technological Advice of the CBD, which was held in Rome in February, supposedly should have developed this recommendation. A comprehensive harmonized definition is more urgent than ever now that the Parties to the Climate Change Convention actively discussed the role of forests in mitigating climate change as part of the “road map” agreed in Bali (known as “Bali Roadmap”). It must be ensured that all policies and incentives to conserve forests benefit the real forests, not the socially and environmentally devastating monocultures of trees. Therefore the need for a comprehensive legal definition of forests that matches the sense [given by] the general public in terms of a beautiful, inestimable and biologically diverse ecosystem is not a mere matter of semantics. It is about educating our sons and daughters, the public and policy makers about what forests really are and what we lose if we substitute them with for trees of any kind.

Meeting in Rome to assess the implementation of the Programme of Work on Protected Areas of the CBD (c)

Parties to the Convention on Biological Diversity (CBD), intergovernmental agencies, conservation NGOs, indigenous peoples and local communities, as well as civil society organizations, met in Rome from 11 to 15 February 2008 in order to assess the implementation of the Programme of Work on Protected Areas of the CBD. The programme of work adopted by the Seventh Conference of Parties (COP7) held in 2004 in Malaysia, includes different activities requiring the Parties to increase the coverage of protected areas, while at the same time respecting the rights of indigenous and local communities and ensuring their full and effective participation. It also calls on the Parties to enhance and diversify the governance of protected areas to include co-administration of protected areas, recognition and support of community conserved areas and the right to free, prior and informed consent for indigenous peoples in cases of potential resettlement.

The COP7 also established the Ad Hoc open-ended Working Group on Protected Areas, whose task is to advise the Parties on the implementation of the Programme of Work and assess its implementation. In Rome, the second session of the Ad Hoc Working Group on Protected Areas was held with the task of reviewing the implementation of the Programme of Work and seeking adequate and timely financial resources for its implementation. These matters are of great importance to indigenous peoples and for those using local resources, as they profoundly affect their relationship with the protected areas both in terms of the elaboration of international policies and practice in the lands and territories inhabited or used by indigenous and local communities. Many organizations of indigenous peoples and local communities and NGOs who support them participated in the meeting, in order to ensure that the perspectives and contributions of indigenous peoples are taken into consideration in the review of implementation of the Work Program, the recommendations to improve its implementation and the options for mobilizing financial resources for its implementation. Indigenous peoples and local coastal communities are preparing reports and case studies of national situations and the implementation of the Work Programme.

Although the information on the implementation of the Work Programme was discussed and analyzed in detail at the meeting in Rome, and also as the independent monitoring conducted by the Global Forest Coalition provide us some preliminary data from indigenous organizations indicating that not enough attention has been given to the recognition of the rights of indigenous and local communities, their participation and governance in general. This also seems to be confirmed by the information gathered by the Secretariat of the CBD in preparation for this meeting. One of the official documents prepared for the meeting states that while there has been remarkable progress in achieving the objectives related to the expansion of the coverage of protected areas (since 2004, 2,300 new terrestrial protected areas have been established and 50 new marine protected areas covering about 50 million hectares), not much progress has been made with respect to, inter alia, the objectives of the work programme more relevant to indigenous peoples and local communities, such as the targets 2.1 (Equity and benefit-sharing), 2.2 (participation of indigenous and local communities), 3.4 (financial sustainability), 3.5 (Public Awareness and Participation), 4.1 (Minimum Standards) and 4.2 (Effectiveness of the management of protected areas).

With these data it can be inferred that the so-called 'change in the paradigm of conservation', which involves moving from conventional conservation (which violates human rights and insufficiently addresses the social aspects of nature conservation) to participatory conservation (which respects the rights and emphasizes the participation of indigenous peoples and local communities), which was welcomed as a step forward for the conservation of biodiversity since the World Park Congress held in 2003 and COP7 of the CBD held in 2004, it is still far from becoming a reality.

Finally, let me emphasize that neither the extended programme of work on forest diversity nor the one on protected areas have been able to take into account our fundamental principles which are:

1. Self-determination
2. Free, prior and informed consent
3. Recognition of territories and lands
4. Control of natural resources
5. Recognition as Peoples.

This is despite the fact that these principles are enshrined in the Universal Declaration on the Rights of Indigenous Peoples of the United Nations recently adopted by the United Nations.

2:5 Traditional Knowledge and the Conservation of Biological resources-the case in Africa

By *Lucy Mulenkei* - Indigenous Information Network

"Human progress is neither automatic nor inevitable. We are faced now with the fact that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history there is such a thing as being too late... We may cry out desperately for time to pause in her passage, but time is deaf to every plea and rushes on. Over the bleached bones and jumbled residues of numerous civilizations are written, the pathetic words: Too late." Martin Luther King Jr. "where do we go from here: chaos or community"

Africa's present biological wealth is based on innovations of successive generations of local communities, which have consistently developed and conserved their biological resources. In so doing they have accumulated knowledge, innovations and practices. The livelihood of the local communities of Nomadic Pastoralists, farmers, hunters and fisherfolk depends almost exclusively on these resources, innovations, technologies and practices. In the traditional African worldview, environmental resources (land, water, animals and plants) are not just production factors with economic significance, but also have their place within the sanctity of nature. Certain places have a special spiritual significance and are used as locations for rituals and sacrifices, for example, sacred grooves, shrines, mountains and rivers. These locations are quite often patches of high biodiversity, which are well conserved and protected by the community. As we look at the traditional knowledge and the Indigenous and local communities we will also be focusing on the objectives of the convention as quoted in Article 1 of the convention. This will help us see how far are we in terms of archiving the 2010 targets of reducing the loss of biodiversity. Traditional knowledge for indigenous peoples is one of the best ways to reduce the loss of natural resources.



Article 1:

'to be pursued in accordance with its relevant provisions, which are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.'

Indigenous local people in Africa, had their own ways of using resources available without depleting them. They use their intimate knowledge of plants, soils, animals, climate, and seasons, not to exploit nature but to co-exist alongside it. This involves careful management, control of population, the use of small quantities but a wide diversity of plants and animals, small surpluses, and minimum wastage. In Traditional Africa, plants provide food, medicines, pesticides, poisons, building

materials; animals provide meat, clothes, string, implements and oil. Indigenous knowledge of nature has ensured the survival of many people in fragile habitats. Subsistence farmers produce to meet their family needs without attempting to dominate nature or exploit it excessively. They developed technologies, which act in harmony with nature unlike science; indigenous knowledge is full of beliefs, which have not been explained, in rational terms but it is a knowledge centered not on exploitation but on the harmony of the natural world. All flora and fauna have a place in an ordered universe made up of humankind, nature, and spirits. Indigenous cultures and traditions have helped to protect the natural world from destruction through religion and rituals. Cultural diversity and biodiversity are not only related, but often inseparable. Of the estimated 6,000 cultures in the world, between 4,000 and 5,000 are indigenous, which means that indigenous peoples make up between 70 and 80 per cent of the world's cultural diversity. The interaction between biodiversity, human languages and cultures may be best observed at the local level. As we look at traditional knowledge we must think of the culture and ways of life for the traditional people who still hold those cultures and traditions close to their heart and life.

Africa is a continent of historical landscapes. These landscapes are not only shaped and modified by human activity but also symbolically brought into the sphere of human communication by words, stories, songs, proverbs and legends that encode and carry human relationships with the environment. Indigenous peoples have identified themselves with these landscapes which they believe carry their lives their language and at most their spirits. It is to them a gift from Mother Earth. Indigenous peoples believe that People who do not speak in their mother tongue do not have access to traditional knowledge and are bound to be excluded from vital information about subsistence, health and sustainable use of natural resources.

In the two centuries, Indigenous Peoples of the continent and many ethnic groups around the world have been faced with many challenges that threaten their extinction. The unfortunate and worrying situation is that, the threat is not only them as a people but also the biological and other natural resources. The causes and consequences of this loss lie in the increasingly unsustainable exploitation of the earth's natural resources and the growing marginalization and dispossession of indigenous and minority groups. Africa is economically the least developed continent, and yet is one of the best endowed in biological resource, the continent is rich in crop and medicinal plants diversity, the economic value of which has not been valued. The knowledge and innovation that its people have developed to use and conserve these biological resources is based on indigenous practices developed and tested over generations. However, the prevailing trend of biodiversity loss is a major concern since the continent's economies, cultures and political systems are heavily dependent, albeit precariously, on the conservation, management, and sustainable use of biological resources (Nnadozie *et al.*, 2003).

Tanzania has a population of over 30 million people and an area of 939,400 square kilometers. It is endowed with rich biodiversity comprising over 10,000 species of

flora and fauna and marine resources. Traditional medicine plays a role in primary health care and has great future potential. For over 60% of the population seeking advice on health, the first point of contact is traditional healers, the majority of whom in rural areas. Currently there are over 75,000 traditional health practitioners in the whole of Tanzania of these about 2,000 live in towns. The traditional healers in towns earn their living solely from selling traditional remedies. With growing recognition of the role of traditional medicine in health care the selling of traditional medicines within and outside is a growing area of endeavor. This has helped change prevailing attitude towards the sale and use of Indigenous remedies.(P.P.Mhame 2004)

Globally, there is increasing acknowledgement of the relevance of indigenous knowledge as an invaluable and underused knowledge reservoir, which presents developing countries, particularly Africa, with a powerful asset in environmental conservation and natural disaster management. Specifically, from time immemorial, natural disaster management in Africa has been deeply rooted in local communities, which apply and use indigenous knowledge to master and monitor climate and other natural systems and establish early warning indicators for their own benefit and future generations. Indigenous knowledge is therefore an essential element in the development process and the livelihoods of many local communities. In terms of biodiversity, traditional knowledge can be seen as the “knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity”. It should at the same time be recognized that the value of African Indigenous Knowledge systems is not simply with regard to the maintenance of biodiversity and how to manage ecosystems sustainably, but also and more importantly with its significant contribution over the centuries to the world’s reserve of clinically useful plants, food crops, animal genetic resources, and increasingly, also industrially useful resources such as enzymes (Nnadozie *et al.*, 2003, Ekpere, 2004; Shikongo, 2000) .

It should be noted however that a major challenge faces some countries in the linking the traditional and indigenous knowledge with modern science. In Kenya for example, the main challenge the country continues to face is how to reconcile indigenous knowledge and modern science without substituting each other, respecting the two sets of values, and building on their respective strengths. Recent studies in Kenya on the application and use of traditional knowledge in environmental conservation and natural disaster management cited examples of areas where such knowledge is still prevalent and harnessed. Current intellectual property rights system in Kenya do not recognize or protect the rights of indigenous and local communities to their Traditional Knowledge. Consequently, bioprospecting has continued without Indigenous and local communities benefiting fairly from the commercialization of their knowledge and innovation (Mbeva2004). However, despite the prevalent application and use of indigenous knowledge by local communities, it has not been harnessed to fit into the current scientific framework for environmental conservation and natural disaster management in Kenya. As a result, there is a general lack of information and

understanding of the need to integrate or mainstream indigenous knowledge into scientific knowledge systems for sustainable development in the country. To achieve this integration would require a blend of approaches and methods from science and technology and from indigenous knowledge.

In some countries like Sudan, like in Kenya, recognition of indigenous and traditional knowledge has not been put as priority, a fear that the resources have and continue to be lost each day. This has caused many of the elders wish for the days when traditional knowledge was used reflectively. One interesting examples of that traditional conservation values was of the sedentary community at the confluence of two rivers. This community was fish-eating, and had rules designed to control how fishing was done. For example, nets were designed in such a way that they did not catch very small fish. This meant that the fish supply was sustained. There were also rules regarding the killing of certain species of animals, such as giraffes. If you killed such an animal, the punishment was to give 10 cows to the king. If a community member had suffered as a result of animal actions, for example if one's crops were destroyed by an elephant, it was necessary to go to the king to consult with him to determine the action that should be taken. Simply killing the animal was not permitted. This is how the cultural system sustained the environment. However, during the civil war, the army killed anything that crossed their path without any regard for environmental sustainability.

Looking at the two cases from Kenya and Sudan, it is important then to ensure that these are carefully discussed by all, together closely with the knowledge holders to ensure positive linkages between traditional knowledge and sustainable management of natural resources. This is very important as traditional knowledge is the communal knowledge held by Indigenous Peoples, which is passed on from generation to generation. Some examples of this are religious traditions and sacred sites; the use of traditional herbs, trees and plants by medical practitioners, traditional birth attendants, healers; arts and music; and the use of these is what modern science is going for. This kind of knowledge is gradually being lost through the lack of commitment by Governments in the implementation of the convention, globalization and lack of recognition of the importance of the knowledge and holders of that knowledge.

Recently United Nations Environment Programme (UNEP) initiated a project in Kenya, Tanzania, South Africa and Swaziland to harness and promote the use of indigenous knowledge in environmental conservation and natural disaster management through training and access to and exchange of information. The information collected and analyzed through the project is expected to enhance understanding of the need to integrate indigenous knowledge in development processes for poverty and disaster risk reduction as well as in fostering involvement of all constituents including the local communities. The project should be seen as part of a new interest in traditional African knowledge systems, which are still prevalent despite the numerous interruptions, by development interventionists. It is hoped that the project will be replicated in more countries in Africa and other regions of the world. UNEP agrees that Africa's biodiversity is under threat from six main sources (UNEP, 2002):-

1. Loss of species or subspecies
2. Invasion by alien (non-native) species
3. Natural habitat destruction, degradation and loss

4. Erosion and loss of traditional knowledge innovations and practices relevant to biodiversity conservation
5. Human population growth, pollution and economic expansion (Unsustainable development; and
6. Lack of recognition of indigenous knowledge and indigenous property rights;

It is essential and imperative to recognize the importance of traditional knowledge across the globe. In order to do this, the Convention on Biological Diversity therefore provides that we:

1. Respect, preserve and maintain the traditional knowledge of the Worlds indigenous and local communities who are often the most marginalized and disadvantaged of groups even in their native lands;
2. Recognize that the use of such knowledge should be promoted for wider application with the approval, involvement and prior informed consent of the holders of such knowledge;
3. Recognize that the creators, owners and holders of such bodies of knowledge should equitably share in all the benefits, which arise from the use of their knowledge.

10c on sustainable use – ‘protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirement’.

Traditional knowledge and access and benefit-sharing are complementary. Indigenous peoples should be able to access the resources which allow them to put traditional knowledge into practice. This means, for example, that traditional healers should be able to access the herbs and other plant material necessary for their work. In terms of benefit-sharing, this refers to the equitable sharing of any benefits that may arise from the use of such resources. If, for example, a foreign company decides to exploit traditional indigenous resources and knowledge by patenting a plant that has been prepared and used in the curing of a certain disease, for example, those who have been practicing that preparation and use for centuries should benefit from that. All too frequently, indigenous peoples are excluded from decision-making processes when it comes to access and benefit-sharing; often, they are not even aware of the fact that their resources are being removed or exploited elsewhere. Sometimes the government can take advantage of this ignorance by coming in the guise of visitors or researchers, and asking for indigenous peoples to sign away their rights without fully explaining the implications of the rights being signed away.

It is now increasingly recognized that traditional teachings and practices have played and continue to play an important role in decision-making, and serve as a foundation for the survival of indigenous and local communities not only in Africa but also elsewhere. Their ancient relationship with the land has given indigenous peoples a profound knowledge of the living Earth. From an indigenous world view, all parts of the universe are interconnected. Every living creature, whether bird, animal, tree or plant, lives according to the instructions it was given by the creator (Posey, 1999). The conservation of biological diversity is an integral part of indigenous teachings (Blanchet-Cohen, 1996). It has to be noted though that this is not true in all cases as there are strong evidence for human induced extinctions of large mammal faunas in North America, Australia and New Zealand by indigenous people (Cunningham, 2005, pers. comm).

Another important aspect to consider is that African traditional knowledge was and remains of fundamental socio-cultural importance to African society. During knowledge transmission to and the socialization of children over several generations African social institutions are gradually crystallized (routine or habitual ways of doing things gradually become the customary way that things are done) and social roles become defined. These processes therefore result in Africa's diverse and unique cultures, traditions and societies. According to Ruddle (2001) referring to the Pacific region, just as local knowledge and its transmission shape society and culture, so too, does culture and society shape knowledge this is equally true for African society. It is then important to consider the characteristic and other aspects of traditional knowledge to understand the barriers to the use and application of traditional knowledge, innovations and practices of local and indigenous communities in Africa. According to Ekpere (2004) any attempt to understand traditional knowledge must recognize its:-

- Holistic nature;
- Mode of transmission;
- Communal ownership and collective intellectual property construct (it is important to note that communal ownership does not always apply e.g. to some traditional medicines;
- Responsibility and custodianship to ensure true conservation and effective transfer from one generation to another; and
- Non-fixation in time frame.

The above recommendations remind us clearly on the great concern of the great loss of Traditional knowledge in Africa, and what we need is action. The Convention on Biological Diversity in 8j and related provision say “ *subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles for the conservation and sustainable use of biological diversity and promote their wider application with the appropriate and involvement of the*

holders of such knowledge, innovation practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovation and practices.

Policies in Place

There are some requirements and constraints involving the use of traditional medicines and the even sometimes the use of indigenous and traditional knowledge in Africa in the case of Tanzania, for example according to Paulo P. Mhame on his conference paper on the role of traditional knowledge in the National economy: Traditional medicine in Tanzania, there is need to develop adequate facilities for research into and development of products using such resources, and an effective system of marketing the products that are available or become available in due course. Suitable control mechanisms are also needed to ensure that the underlying nature resources are used sustainably.

Some of the challenges on developing health care uses of these traditional medicines at the local and national level are:-

- Inadequate awareness
- Insufficient investment in research and development
- Inappropriate distribution chains.
- Lack of data of comprehensive information on medicinal plants is a big obstacle

Regulations governing the exploration, export and conservation of Fauna and marine resources issued by relevant departments of different ministries. Various regulation from different ministries exist, but there is no single regulation that spell out how to control and regulate the exploration, export and conservation of medicinal resources derived from animal n marine life.



Traditional knowledge is passed from generation to generation and sharing of skills and experiences is part of traditional womens work as seen here in the photo of Karamojong young women from Moroto - Uganda

Recommendations

- Traditional knowledge is concerned with values, attitudes and behaviours from one generation to another. Some of the methods for preservation of traditional knowledge include documentation, archiving and communication and information sharing. This would ensure that traditional knowledge and knowledge of daily life is not only passed on to future generations, but its use could also be exploited fully by indigenous peoples living today
- Information on traditional knowledge and on access and benefit-sharing should be disseminated in ways that are more easily accessible by indigenous peoples on the ground. This includes translating information into local languages, and getting rid of the technical jargon. Processes such as access and benefit-sharing should be explained in simple terms that can easily be understood.
- Information should also be disseminated through the use of various types of media. One example that has been put into practice is the use of radio talk shows. Such shows could be used to discuss the proceedings at a recent COP which had been attended by an indigenous person from the region, for example. Other means, such as television shows, presentations and dramas, could also be used for information dissemination and the explanation of concepts such as access and benefit-sharing.
- Databases and registers could also be created for use in the preservation of traditional knowledge and kept at the hands of those who have that knowledge for protection and preservation from exploitation or misuse in the public domain.
- In terms of access and benefit-sharing, more advocacy is needed specially with the government and other partners to ensure that ABS mechanisms are being implemented on the ground
- Policy makers ought to formulate methods for equitable access to traditional knowledge held by indigenous societies and for compensating its owners.
- It is not enough to recognize indigenous knowledge, practices and innovations in writing; these practices must be recognized at local, national and regional levels and allowed to continue through access to land and resources
- Indigenous peoples must be vigilant of researchers, companies and other prospectors entering their territories, and question the motives of anyone attempting to cut a business deal.
- Indigenous peoples have too often gained little to nothing from the foreign use or occupation of their lands, use of their resources and of their knowledge, it is therefore important to have awareness-raising and capacity building, for these communities to be better able to protect these resources and gain compensation for their use and exploitation by outsiders.

- Building a regional, national and international registry of traditional knowledge and innovation based on biological diversity may help in reducing transaction cost of the potential entrepreneurs, investors, fellow learning communities and even traders.
- Compliance with prior informed consent of the communities to respect their knowledge rights for eventual benefits sharing, keeping in mind the share of not only individual knowledge holder, but also their communities, nature conservation and the ones who add value and innovation augmentation fund
- It is important to create open source technologies pool to support livelihoods options for disadvantaged communities.

Respect for biological diversity

Implies respect for human diversity. Both elements are fundamental to stability and durable peace on earth. The key to creating forms of development that are sustainable and in harmony with the needs and aspirations of each culture implies that to abandon patterns that undermine the lives and perspectives of those cultures. Tolerance and reciprocal respect for cultural distinctiveness are indispensable conditions for increased mutual understanding among the world's peoples and recognition of our common humanity. At the dawn of the new millennium, humankind has a historic opportunity, not to say responsibility, to make a case that is stronger than ever for cultural diversity and biodiversity are both values of and for the very long term. By focusing on "sustainable diversity", we assume that human beings belong to the biological universe while, at the same time, they are the only species on earth that has the privilege of creating diverse forms of culture in time and space. Accordingly, they determine the earth's whole future. This places a special obligation on them to ensure a proper balance between environmental health (especially biodiversity) and equitable development. Thus, cultural diversity should be regarded as a powerful guarantee of biodiversity. Development models produced since in the 1970s have clearly failed, despite constant revision, to live up to the expectations they raised. The concept of sustainable development, based on a clear understanding of the role of biological and cultural diversity in maintaining ecological systems, cannot be viewed exclusively through an economic prism that puts technological progress to the fore. Globalization tends to create a context conducive to interdependence, often to the detriment of the least developed countries and without consideration for the diversity of cultures. The new challenges arising from globalization are making it increasingly important to redefine the relationship between culture and development or, to be more precise, between cultural diversity, biological diversity and development.

