

# Climate Change and Indigenous Peoples

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Traditional houses are constructed with materials from forests and are designed to cope with the natural environment. Photo by: Colin Nicolas

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## Executive Summary

The universal concern for biodiversity loss and the more evident effects of climate change have pressured governments to tackle and address these problems. In 1992 they initiated new processes including the Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC).

Indigenous Peoples have increasingly become more involved in these processes, mostly motivated by the concern that their rights may be affected by decisions made by the Parties to these Conventions. Within the CBD the inclusion of Article 8(j) on Traditional Knowledge and the subsequent creation of a working group, with the active participation of Indigenous Peoples, has allowed progress in the defence of the rights over lands, resources, traditional knowledge and its innovations.

But within the Climate Change Convention, the rights of Indigenous Peoples are not discussed or addressed at all. For instance, in the creation of carbon sinks, the UNFCCC does not incorporate consultation procedures with indigenous communities in planning and implementing such programs. But since 2000 Indigenous Peoples have actively taken part in this process and demanded the recognition and respect for their rights in accordance with national and international laws.

In the last few years traditional knowledge and consequently Indigenous Peoples have become of interest to both Conventions. But the interest is centred in linking indigenous communities to trade issues, either on carbon emissions or traditional knowledge. It is therefore of paramount importance that more Indigenous Peoples participate and strengthen their advocacy efforts in these processes.

The recognition and respect for Indigenous Peoples' lands, territories and resources is the starting point for the debate.



*Indigenous man from the Amazon. Photo by: Jocelyn Therese*

## *UN Framework Convention on Climate Change*

### **What is Climate Change?**

It is the global variation of the Earth's climate due to natural causes and in the last few centuries to human activities. The UN Framework Convention on Climate Change uses the term to refer to only the human impact on climate.

### **When did the UNFCCC start?**

The Convention on Climate Change was opened for signature on 9 May 1992 in New York and entered into force on 21 March 1994. In 1997 the governments agreed to incorporate one amendment to the treaty, the Kyoto Protocol, which includes legally binding<sup>2</sup> measures.

### **What is the Kyoto Protocol?**

The Kyoto Protocol is an international agreement aimed at reducing emissions of the six gases responsible for global warming by approximately 5 percent of actual emissions in 1990. These gases are carbon dioxide, methane, nitrous oxide and the three main fluorinated industrial gases, i.e., hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

The period set for reduction is from 2008 to 2012. In other words, if the total emission of these gases was 100 percent in 1990, by the end of 2012 it should be down to 95 percent. It is important to note that this does not mean that each country must reduce its emissions by 5 percent; rather this is a global percentage and each country has its own quota regulated by the Kyoto Protocol.

### **How does the UNFCCC operate?**

The UNFCCC has convention and constituted bodies.

### **Convention Bodies**

- *Conference of the Parties*

The Conference of the Parties (COP) is the supreme body of the Convention and the highest authority in the decision making process. Formed by all the signatory countries, the COP holds yearly meetings, unless otherwise agreed on by the Parties. It meets in Bonn, the Secretariat head office, unless one of the Parties offers to host the meeting. Similar to the COP presidency, its venue alternates between Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe, Western Europe and other States.

- *Subsidiary Bodies*

The convention established two permanent subsidiary bodies: the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI). Both give advice to the COP in their specific areas of expertise. They are open to all the Parties, which often send delegates/specialists on their respective concerns.

## Constituted Bodies <sup>29</sup>

- ***Executive Board of the Clean Development Mechanism***  
This body supervises the Clean Development Mechanism (CDM) according to the Kyoto Protocol and prepares COP decisions. It is constituted by 10 members: one from each of the regional groups, one from the small island developing states, two from Annex I Parties and two from Non-Annex I Parties.
- ***Consultative Group of Experts***  
The Consultative Group of Experts on National Communications from non-Annex I Parties (CGE) was set up at COP5 in 1999 to help improve the process of preparing national communications from non-Annex I Parties under the Convention.
- ***Expert Group on Technology Transfer***  
The central task of the Expert Group on Technology Transfer (EGTT), established by the Marrakesh Accords, is to provide scientific and technical advice to advance the development and transfer of environment- friendly technologies under the Convention.

### ***Least Developed Countries Expert Group***

The Least Developed Country Expert Group (LEG), also established under the Marrakesh Accords, is to provide advice to Least Developed Countries on the preparation and implementation of national adaptation programmes of action. It is composed of 12 experts.



Crops destroyed by hailstorms, in an indigenous village in Thailand.  
Photo by: Jane Cosher

## **How does the Convention on Climate Change affect Indigenous Peoples?**

In all their interventions Indigenous Peoples have pointed out that they live in the planet's most fragile ecosystems where the greatest biodiversity exists. They have been guardians of these resources for thousands of years, but the effects of climate change are increasingly destroying them. Unfortunately, the policies of the Convention on Climate Changes do not consider Indigenous Peoples' rights at all.

The disregard for indigenous rights is evident not just on paper and in bureaucratic procedures during official meetings but more importantly in mechanisms and policies that the Convention has so far approved. The main mechanism adopted by the UN for dealing with climate change is carbon trading, which by its very nature goes against practices and principles that Indigenous Peoples value. These include principles related to indigenous solidarity and the intrinsic relationship between peoples and land.

Carbon trade is simply the commercialization of life. Carbon emitting countries are permitted to continue doing so as long as they compensate smaller countries to emit less. This does not address the cause of climate change at all but rather encourages the same lifestyle that has caused it in the first place. In short the discussion is limited to putting a commercial value on the very air that we breathe.

## **Since when have Indigenous Peoples participated in the UNFCCC and what proposals have they made?**

The first formal meeting of indigenous leaders on climate change, at the international level, took place in the city of Quito in May 2000. That gathering agreed to send a delegation of Indigenous Peoples to the SBBSTA meetings held in Bonn, Germany in the same year. In November 2000 the First Forum of Indigenous Peoples and Local Communities on Climate Change<sup>30</sup> was convened in Lyon, France just before the 13<sup>th</sup> Session of the Subsidiary Bodies to the UNFCCC.

Among the more important proposals, made by Indigenous Peoples, are those on indigenous participation. These are:

- 6) Accredite Indigenous Peoples with special status in the Conference, meetings of the Subsidiary Bodies of the Convention and in all activities carried out within the Convention;
- 2) Create an ad-hoc open-ended working group on Indigenous Peoples and Climate Change, with broad participation of indigenous representatives;
- 3) Establish a permanent Division on Indigenous Peoples within the Convention Secretariat; and,
- 7) Include Indigenous Peoples in the IPCC, Executive Board of the CDM, Expert Review Teams and Compliance Committee.

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[http://www.amazonalliance.org/espanol/update/2000/upd\\_sep00\\_sp.htm](http://www.amazonalliance.org/espanol/update/2000/upd_sep00_sp.htm)

## Main Concerns

The above comprise the demands of Indigenous Peoples in terms of organizational issues. The more substantial concerns are:

- **Effects of Climate Change**

Indigenous Peoples live in the most fragile ecosystems of the planet and are impacted by forest fires, floods, drought, melting of glaciers and rising of sea waters. All these contribute to the loss of traditional knowledge, increased health problems in indigenous communities and food insecurity. The traditional mechanisms to deal with climate change are proving unequal to the rapid and constant environmental changes. Additionally, owing to their particular vulnerability, governments' adaptive and mitigating systems sometimes bring more threats to their existence rather than address the problems.

- **Land Use Change**

Land use, land use change and forestry (LULUCF) in the Kyoto Protocol has profound consequences for indigenous lands and territories since it does not consider the customary land rights of Indigenous Peoples. Afforestation, reforestation and deforestation contribute to the destruction of forests, lands and territories and to the violation of collective and individual rights.

- **Sinks**

Our intrinsic relation with Mother Earth obliges us to oppose the inclusion of sinks under Clean Development Mechanisms because it means that our lands and territories are undervalued and dedicated just to greenhouse gas absorption and emission, which is contrary to our cosmovision and way of life. Carbon sinks will constitute a new strategy for expropriating our lands and territories and violating our fundamental rights that would culminate in a new form of colonialism. The inclusion of sinks will not help to reduce GHG emissions but rather provide industrialized countries with a ploy to avoid cutting down their emissions.

- **Reducing Emissions from Deforestation and Degradation (REDD)** This is the latest pilot project approved in COP13 in Bali. REDD is proposed by countries seeking funding to protect forests. For Indigenous Peoples it is a new concern since most forests are in their territories and related collective property rights conflicts remain. Additionally, REDD is being peddled by the World Bank and big NGOs as a win-win situation without taking into account the reality that most Indigenous Peoples do not have legal rights over their territories. The WB has created a special facility for pilot projects on REDD and is pushing this as a good solution to both climate change and poverty. But given the Bank's long record of violations of indigenous peoples' rights, REDD remains a source of great concern for Indigenous Peoples.

- **Clean Development Mechanism**

The Clean Development Mechanism, established by the Kyoto Protocol, poses great threats to Indigenous Peoples and does not realistically address the issue of reduced emissions. We believe it engenders, among others, invasion and loss of our lands and territories by establishing new regimes for protected areas and privatization.

We emphatically oppose the development of alternative energy sources, if these are included in the context of CDM, as they only serve to remove the focus from reducing emissions by developed countries. The CDM is flawed in that it provides the “Northern” countries the license to continue with their unsustainable lifestyles while putting the burden on the “South” to cut their emissions. The development of renewable alternative energies must be part of a just social system that truly addresses the needs of communities.

**The CDM must be exposed for what it truly is, a tool for broadening the scope of globalization, under the guise of mitigating climate change. Indigenous Peoples must be at the forefront of the opposition to such a mechanism that punishes those who contribute less to global pollution.**

Each of the meetings of the Subsidiary Bodies, as well as of COP, have not offered a direct answer to the above demands of Indigenous Peoples.

### **What have Indigenous Peoples achieved?**

To date, Indigenous Peoples have attained the following, which pertain more to organizational mechanisms rather than substantive elements of UNFCCC meetings:

- Inclusion in meetings of the Convention as Indigenous Peoples, even though regarded as NGOs. This inclusion allows access to documents, participation in plenary sessions as well as opening and closing ceremonies. This has provided Indigenous Peoples the opportunity to make their general demands known to the COP.



Indigenous peoples attending the Conference of Parties of the UNFCCC.  
Photo by: ITS-Alliance

- Formation of the International Indigenous Peoples Forum on Climate Change (IIPFCC). The IIPFCC is an informal body, open to all Indigenous Peoples, to discuss common strategies, build solidarity and open new possibilities for partnerships. It has conducted training and meetings prior to official COP meetings to prepare indigenous representatives for the negotiations. The IIPFCC has been convened through the efforts of Indigenous Peoples following the climate change debate, specifically the International Alliance of the Indigenous and Tribal Peoples of the Tropical Forests.
- Inclusion of indigenous representatives in governmental delegations. This has created some controversies as a number of governments refuse to incorporate indigenous views in final reports.
- At COP12 in Nairobi, in September 2007, indigenous participation was considered for inclusion in the Working Plan on Traditional and Indigenous Knowledge

Again, it should be noted that these achievements are more cosmetic than substantive in nature. Indigenous Peoples should be more strategic in their participation in UNFCCC processes to ensure that their views are truly addressed.

### ***Convention on Biological Diversity***

The objectives of the Convention on Biological Diversity are the conservation of biodiversity, sustainable use of its components, and fair and equitable sharing of the benefits arising from the use of genetic resources.<sup>31</sup> The Convention entered into force on 29 December 1993.

#### **What is Traditional Knowledge?**

The International Community has recognised the important contribution of Indigenous Peoples' traditional knowledge to the conservation and sustainable use of biodiversity.

Within the CBD framework, traditional knowledge "refers to the knowledge, innovations and practices of indigenous and local communities around the world. Originated from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is basically practical, particularly in agriculture, fisheries, health, horticulture, forestry and general environmental management."

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<sup>31</sup> Convenio sobre Diversidad Biológica - Textos y Anexos. UNEP.CBD/94/1 junio 2001



Traditionally, different crops are planted side by side as a means of pest control. Photo by: IMPECT-MAPPING Project

## Interrelation between CBD and UNFCCC

The main concerns of CBD and UNFCCC are obviously interrelated. Climate change impacts on biodiversity, and biodiversity affects climate change. But while closely connected, the Conventions at the time of drafting failed to incorporate the interlinkages. Hence, climate change mitigation measures are sometimes detrimental to biodiversity conservation, as can be seen in the following:

### 1) Clean Development Mechanisms

As discussed earlier, the CDM has not proven to be an effective mechanism to reduce emissions.

#### *Carbon Sinks*<sup>32</sup>

Climate change prevention requires that CO<sub>2</sub> in the atmosphere be maintained below a certain level, which may already have been exceeded. To comply with that level or at least keep it constant, it is theorized that it is possible to absorb CO<sub>2</sub> from the atmosphere. One way is through the use of carbon sinks. A carbon sink is an ecosystem capable of absorbing more CO<sub>2</sub> than emitted, acting as a carbon trap. Among important natural carbon sinks are the sea and (in specific years) vegetation. There is still a huge gap in actual evidence whether carbon sinks are valid mechanisms for reducing emissions. However, projects are already being implemented that are aimed at increasing the number of carbon sinks, among these:

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<sup>32</sup> [http://www.ecoloxistesasturies.org/Temas/Cambioclimatico/Sumidero\\_C.htm](http://www.ecoloxistesasturies.org/Temas/Cambioclimatico/Sumidero_C.htm)

### *Reforestation*<sup>33</sup>

It is the process of restocking zones which in the past were covered with forests but have been depleted due to various factors. Unfortunately, such a process has tended to disregard traditional knowledge, particularly in identifying suitable species. There have been instances where the species planted proved to be more damaging to the environment due to its great water need. In most cases, reforestation is used as an excuse to create plantations where Indigenous Peoples are limited to being mere workers.

### *Afforestation*

This is the process of converting open lands, containing no trees, into forests, either through planting tree seedlings or seeds. Afforestation can lead to major changes in the indigenous communities' way of life because forests are created in natural ecosystems, with no previous forest, as for instance in the Andean Moors. Additionally, under the guise of afforestation, plantations, notably of palm oil or other similar alternative sources of energy, are being established which also impact negatively on the environment.

### *Emission Reduction Projects*

Some of these include hydroelectric dams, nuclear plants, geothermal plants and other similar energy projects. Such projects have caused massive dislocation of indigenous peoples and loss of biodiversity, especially in instances where no consultation was conducted with affected communities.

### *Avoided Deforestation*<sup>34</sup>

How to "avoid deforestation" to achieve UNFCCC objectives is a hot topic currently under discussion. Tropical deforestation represents the second largest greenhouse gas source after fossil fuel combustion. It is responsible for about a fifth of the global CO<sub>2</sub> emissions and nearly a fourth of the enhanced greenhouse effect, attributed to anthropogenic causes. Until late 2005, the UNFCCC and Kyoto Protocol did not include any measure or positive incentive for reducing deforestation in non-Annex I countries. However a proposal from Papua New Guinea and Costa Rica at the 11<sup>th</sup> Conference of the Parties (Montreal, 28 November-9 December 2006) invited the opening of an international discussion on this issue.

## **2) International Emissions Trade**

The international emissions trade is the trade of carbon credits between countries with reduction commitments (developed countries or transitional economies) and/or their companies (as long as they have received authorisation from their countries) to comply, with economical efficiency, with Kyoto Protocol targets. Those reducing their emissions beyond their obligations can sell their emission credits to those finding meeting their targets more burdensome.

## **3) Joint Implementation Mechanisms**

Joint implementation mechanisms involve establishing projects in developed countries or transitional economies which generate a saving in emissions additional to the one obtained if conventional technology had been used or forest absorption capability had not been stimulated. This emission saving must be verified by either the project host country or by an independent body accredited by the Joint Implementation Supervisory Committee. However there is really no way to verify such emission savings.

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<sup>33</sup> <http://es.wikipedia.org/wiki/Reforestaci%C3%B3n>

<sup>34</sup> <http://www.glad-cc.net/page.php?ref=deforestacion&lg=es>

Emission Reduction Units obtained can be acquired by public and private entities from developed countries or transitional economies for the fulfilment of their Kyoto Protocol targets.



Coconut plantation in Samoa. Photo by: Minnie Degawan

## Climate Change Policies affecting Indigenous Peoples

The following enumerates climate change strategies that adversely affect Indigenous Peoples and ways to address these.

Mechanisms	Effects on Indigenous Peoples	Recommendations
Carbon sinks	Access and use by Indigenous Peoples to their traditional lands will be restricted.	Promote reduction of emissions by developed countries through lifestyle change.
Reforestation	Traditional varieties are not promoted for use in reforestation projects thereby altering the environment and ways of life. Non-consultation also leads to conflicts.	Reforestation should be done in consultation with Indigenous Peoples so they can advise on species and other aspects.
Afforestation	Land use is changed, and the environment is degraded when no consultation occurs. Land classification does not involve indigenous communities so sometimes even their sacred grounds are considered as “vacant” lands.	Free prior informed consent of Indigenous Peoples is a necessary requisite for such projects.
Avoided Deforestation	Traditional systems of forest management and use are undermined.	Create a program to implement a pilot project with Indigenous Peoples’ point of view.
Nairobi Working Plan	It is recognised that <u>Traditional and Indigenous Knowledge</u> contributes to mitigation and adaptation to climate change.	Article 8(j) of the CBD ensures that knowledge, innovations and practices of Indigenous Peoples and local communities are respected,

		preserved and maintained.
ALL CDM PROJECTS	ACCELERATE GLOBAL WARMING WHICH WILL AFFECT INDIGENOUS PEOPLES WORLDWIDE; DIVIDE INDIGENOUS GROUPS FROM EACH OTHER AND FROM POLLUTION VICTIMS IN THE NORTH. (e.g., THE CDM WILL DIVIDE AN INDIGENOUS COMMUNITY TRYING TO STOP OIL DRILLING FROM ANOTHER INDIGENOUS COMMUNITY THAT APPROVES THE SELLING OF CARBON CREDITS TO AN OIL COMPANY DOING THE DRILLING.)	
ALL EMISSIONS TRADING	SLOWS DOWN THE TRANSITION TO NON-FOSSIL FORMS OF ENERGY, EXACERBATING GLOBAL WARMING AND PROLONGING THE SUFFERING OF INDIGENOUS GROUPS FACED WITH FOSSIL FUEL EXTRACTION IN THEIR TERRITORIES.	



Indigenous man from South America. Photo by: Jocelyn Therese

## **Recommendations**

### **1) On Traditional Knowledge**

Indigenous Peoples seek legal mechanisms to protect their traditional knowledge and its use for economic exploitation of biological and genetic resources.

Both Conventions on Biodiversity and on Climate Change have started to acknowledge the importance of traditional knowledge. Article 8(j) of the CBD calls for a discussion on traditional knowledge, and among CBD activities is the development, by Indigenous Peoples and the Secretariat, of indicators of traditional knowledge in diverse areas.

In the UNFCCC, the 5-year program, agreed on in Nairobi in 2006, expresses the necessity of including traditional and indigenous knowledge as valid information in mitigating and adapting to climate change. A specific period has been set for the acceptance, by the Secretariat, of contributions towards this end.

In both Conventions, Indigenous Peoples have proposed essential elements that must be considered in discussions on traditional knowledge. Foremost are Indigenous Peoples' collective rights such as to land, resources, free and prior informed consent and traditional knowledge. The adoption of the UN Declaration on the Rights of Indigenous Peoples, which provides for these rights, should thus be incorporated in the debate on traditional knowledge.

It is imperative that Indigenous Peoples educate governments and other entities on these salient elements.

### **2) On Protected Areas**

For several years now, Indigenous Peoples have pointed out that protected areas overlap their territories, affecting their ancestral land rights and limiting their use of the resources found therein. Of grave concern is the easy access to these areas by oil, mining, timber and tourism companies, none of which have benefited Indigenous Peoples. Instead, as recent history shows, these have adversely affected indigenous communities culturally, economically and socially. Thus in some countries restitution of these ancestral rights is under discussion.

However, even while problems surrounding protected areas and Indigenous Peoples have yet to be sorted out, some international bodies are urging the creation of more protected areas for biodiversity protection. Some Indigenous Peoples have acquired legal rights over some portions of their territories but some claims are still being negotiated, which they cannot risk being taken over by protected areas. In addition, Indigenous Peoples across several regions have demonstrated that they maintain their own protected areas through traditional resource use and management practices. Aerial maps indicate that the majority of forests and the greatest biodiversity are located in indigenous territories, including marine areas.

It is thus essential to have case studies conducted to identify the specific experiences of Indigenous Peoples and communities who have created their own protected areas within their territories. But it must be understood that these protected areas and territories have their own indigenous systems of governance.

Further, Indigenous Peoples should be provided appropriate resources by governments to participate in discussions on the proposal on Avoided Deforestation, organised under the Convention on Climate Change. Two workshops have been set up to deliberate on the proposal and the mechanisms to implement this. Avoided Deforestation projects could set rules limiting traditional management by Indigenous Peoples over their territories and consequently affect traditional knowledge on resources.

### **3) On Carbon Sinks**

The experiences of Indigenous Peoples with regard reforestation and afforestation projects have mostly been negative. They have become cash dependent, due to incentives given by timber companies. Another problem is the establishment of monocultures, which has led to biodiversity loss.

These indicate that some Indigenous Peoples' rights, such as to free and prior informed consent, have not been duly respected. The experience of some countries shows that there has been a lack in the participation of Indigenous Peoples in establishing bodies to implement Clean Development Mechanisms.

Indigenous Peoples acknowledge that a reforestation scheme can be set up to restore lost forests but it should be one that employs the use of native species. Reforestation has been going on in many indigenous communities for generations. What is needed is to revitalize indigenous systems in order to foster forest biodiversity.

It is urgent therefore that indigenous peoples build stronger solidarity among themselves to share experiences and concerns. Only through understanding one another can they craft a unified strategy to deal with the challenges they face on climate change.

## **REFERENCES**

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## ANNEXES

### Annex I

#### CLIMATE CHANGE PREDICTED IMPACT ON REGIONS, SUBREGIONS AND VULNERABLE ECOSYSTEMS' BIOLOGICAL DIVERSITY<sup>35</sup>

<i>Climate change impact</i>	<i>Consequences</i>	<i>Effect on biodiversity in regions, sub-regions and vulnerable ecosystems</i>
Higher air temperature	Increased number of hot days	<ul style="list-style-type: none"> <li>• Increased heat stress on biodiversity</li> <li>• Increased exposure to pests and diseases</li> <li>• Increased drying of wetlands and waterways</li> </ul>
	Melting permafrost	<ul style="list-style-type: none"> <li>• Changes in nutrient cycling and soil biodiversity</li> <li>• Reduced access to nutrients as consequence of frost and de-frost cycles</li> <li>• Cryosphere-based ecosystems and species lost</li> <li>• Artic low-lands tundra drainage</li> <li>• Increased sea level and, as a consequence particularly in islands, the intrusion of salted water in coastal wetlands and other inland waters, increased mortality and disturbance of critical habitats and increased erosion (beaches and cliffs)</li> </ul>
	Decreased ice cover (later freezing and sooner melting)	<ul style="list-style-type: none"> <li>• Reduced frosts</li> <li>• Less sedimentation in flooded lands</li> <li>• Increased sea level and, as a consequence particularly in the islands, the intrusion of salted water in coastal wetlands and other inland waters, increased mortality and disturbance of critical habitats and increased erosion (beaches and cliffs)</li> </ul>
	Increased water temperature	<ul style="list-style-type: none"> <li>• Lower oxygen solubility</li> <li>• Increased vulnerability to invasive alien species</li> <li>• Coral die-offs (coral bleaching)</li> <li>• Increase in instances of disease among fish</li> <li>• Loss of habitat for cold- and cool-water fish</li> <li>• Reduced productivity of marine systems (coral reefs and sea grass beds)</li> </ul>

<sup>35</sup> <http://www.biodiv.org/doc/meeting.aspx?mtg=SBSTTA-12>

<i>Climate change impact</i>	<i>Consequences</i>	<i>Effect on biodiversity in regions, sub-regions and vulnerable ecosystems</i>
	Glacial retreat and decreased snow cover	<ul style="list-style-type: none"> <li>• Changing hydrological regimes</li> <li>• Changes in seasonal cues for mountain biodiversity</li> <li>• Increased predation</li> <li>• Disruption in hibernation patterns</li> <li>• Reduced insulating protection from snow</li> <li>• Loss of ecosystems and species of the ice layer</li> </ul>
Changes in precipitation regimes	Increased instances of drought during dry season	<ul style="list-style-type: none"> <li>• Loss of ground cover leading to desertification and loss of soil biodiversity</li> <li>• Increased water stress on biodiversity</li> <li>• Reduced availability of food and fodder</li> <li>• Salinization in irrigated areas</li> <li>• Increased risk of fire</li> <li>• Changes in natural flow regimes of rivers and streams</li> <li>• Changes from meadows to steppes.</li> </ul>
	Increased flooding during the wet season	<ul style="list-style-type: none"> <li>• Increased erosion of soil biodiversity</li> <li>• Increased land degradation</li> <li>• Increased threats from water-borne disease</li> <li>• Increased habitat destruction from flooding</li> <li>• Changes in natural flow regimes of rivers and streams</li> <li>• Increased winter snowfalls originating ice layers</li> </ul>
Increased frequency of extreme climatic events	Disruption in growth and reproduction	<ul style="list-style-type: none"> <li>• Decreased overall productivity</li> <li>• Increased mortality</li> </ul>
	Heightened storm surges	<ul style="list-style-type: none"> <li>• Increased mortality and disturbance of critical habitat</li> <li>• Habitat loss (especially mangroves, reefs, sandbars and beaches)</li> </ul>
Sea level increase	Increased mortality and disturbance of critical habitat	<ul style="list-style-type: none"> <li>• Increased mortality and disturbance of critical habitat</li> <li>• Salt water intrusion (coastal wetlands)</li> <li>• Increased erosion (beaches/coastal cliffs)</li> </ul>



Mt. Pulag National Park, Philippines.  
Photo by: Inglay Omengan

## Annex II

### DECISIONS CONTAINING ACTIVITIES DIRECTLY RELATED TO CLIMATE CHANGE

<i>Work Program</i>	<i>Decisions</i>	
Agricultural Biological Diversity	V/5	<i>Agricultural biological diversity: review of phase I of the program of work and adoption of a multi-year work program.</i>
BIOLOGICAL DIVERSITY OF DRY AND SUB-HUMID LANDS	V/23, VIII/2	<i>Consideration of options for conservation and sustainable use of biological diversity in dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems.</i>
Mountain biological diversity	VII/27	<i>In collaboration with relevant conventions and organizations, collect, review, evaluate and share, through the facilitation mechanisms and other means, existing information about the role of mountain ecosystems.</i>
Forest Biodiversity	V/4, VI/22	<i>Requests the Subsidiary Body on Scientific, Technical and Technological Advice to consider, before the sixth meeting of the Conference of the Parties, where appropriate and feasible, in collaboration with the appropriate bodies of the United Nations Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change, the impact of climate change on forest biological diversity</i>
Biological diversity of inland water ecosystems	VII/4, VII/15	<i>7. The working programme should pay particular attention to the climate change impacts. In this process, the working programme should consider the support and collaboration with new and current initiatives in those areas particularly related to the conservation.</i>
Island biodiversity	VIII/1	<i>Invites the United Nations Framework Convention on Climate Change, the Intergovernmental Panel on Climate Change, and the Earth System Science Partnership to collaborate in activities relevant to island biodiversity and climate change.</i>
Marine and coastal biological diversity	IV/5, V/3	<i>Invites the United Nations Framework Convention on Climate Change to urgently address this issue in its deliberations.</i>
Article 8 (j) and related provisions	VIII/5	<i>Notes with concern the specific vulnerabilities of indigenous and local communities, inter alia, of the Arctic, small island States and high altitudes, concerning the impacts of</i>

		<i>climate change and accelerated threats, such as pollution, drought and desertification, to traditional knowledge, innovations and practices, and requests further research be conducted, subject to the availability of resources, into highly vulnerable indigenous and local communities, with a focus on causes and solutions, with the outcomes of the research to be made available to the Working Group on Article 8(j) and Related Provisions for attention at its fifth meeting.</i>
Incentive measures	V/15, VI/15	<i>Urges Parties and other Governments to explore possible ways and means by which incentive measures, promoted through the Kyoto Protocol, under the United Nations Framework Convention on Climate Change, can support the objectives of the Convention on Biological Diversity</i>
Global Taxonomy Initiative	VIII/3	<i>In the light of the threatens from climate change to protected areas and exotic species it is important to identify the last species and population reserves and how these would determine the distribution under changing conditions.</i>
Protected Areas	VII/28	<i>1.4.5 Integrate climate change adaptation measures in protected area planning, management strategies, and in the design of protected area systems.</i>
Communication, Education and Public Awareness	VI/19, VIII/6	<i>Link the website to other networks and webs on communication and education, for instance the Convention on the Humedales and the Convention on Climate Change, etc.;</i>
Technology transfer and technological and scientific co-operation	None	



Community protected mangroves in Samoa. Photo by R.R. Thaman

## Annex III

### **REDD: to engage or not to engage? A brief report on Asian consultation on WB Forest Carbon Partnership Facility** *By Kittisak Rattanakrajangsri*

REDD or Reduced Emissions from Deforestation and Forest Degradation was one of the crucial issues discussed at the recent 13<sup>th</sup> meeting of the Conference of the Parties (COP13) of the United Nations Framework Convention on Climate Change (UNFCCC). Held in Bali, Indonesia on 3-14 December 2007, it received mixed reactions from different groups that attended the event. Indigenous Peoples were in a similar position; some were opposed to it while others felt it should be considered. Those who favor REDD argue that it may bring some benefits. On the other hand, those who are against it are concerned over the adverse impacts to their land and territories including their livelihoods.

As proposed, REDD projects will be financed through the World Bank Forest Carbon Partnership Facility (FCPF) which was launched in the Climate Change conference in Bali. Considering that REDD is a new initiative, many Indigenous Peoples are not fully aware of its implications. The International Indigenous Peoples' Forum on Climate Change (IIPFCC) declared in Bali:

*REDD will result in more violations of Indigenous Peoples' Rights. It will increase the violation of our Human Rights, our rights to our lands, territories and resources, steal our land, cause forced evictions, prevent access and threaten indigenous agricultural practices, destroy biodiversity and cultural diversity and cause social conflicts. Under REDD, States and Carbon Traders will take more control over our forests...*

There was thus a strong demand at the launching of the FCPF for the World Bank to hold consultations with Indigenous Peoples to ensure that their concerns are properly taken into account and addressed when REDD projects are implemented in their land and territories. A statement by UN Permanent Forum on Indigenous Issues (UNPFII) chair Victoria Tauli Corpuz made at the FCPF launching ceremony highlighted this concern:

*... Consultations should be undertaken with indigenous peoples who are directly affected and pertinent documents should be translated in major languages understood by them and these should be disseminated before the consultations take place.*

#### **Regional Consultations**

As a result of earlier lobbying and criticism of REDD and the Forest Carbon Partnership Facility, the World Bank held a series of regional consultations with Indigenous Peoples. These were:

- Asian consultation on 28-29 February in Katmandu, Nepal
- Central America consultation on 5-6 March in Mexico City and
- Africa consultation on 13-14 March in Bujumbura.

The Asian consultation took place at the Yek and Yeti hotel. Initially to be held in Bangkok, Thailand, the venue was later changed to Katmandu, Nepal where it took place back to back with the Asian preparatory meeting on UNPFII from 24-26 February. The main objectives of the consultation were to learn and exchange information on REDD and FCPF to enable Indigenous Peoples' organizations to make informed decisions on future participation and involvement in REDD projects.

The meeting was attended by indigenous representatives from India, Nepal, Indonesia, Bangladesh, Philippines, Bhutan, Thailand and Vietnam. It was facilitated by Victoria Tauli Corpuz, also the Executive Director of Tebtebba Foundation.

The meeting began with presentations from World Bank staff and discussions followed on different issues, such as global warming, REDD, FCPF, WB Biocarbon Funds, and WB safeguard policies. These took one and a half days, after which the indigenous participants requested a closed meeting among themselves to discuss their views and position in relation to REDD and FCPF. These views were presented to the WB at the last joint session.

After lengthy discussions, it was suggested by some that Indigenous Peoples should engage in REDD projects. The argument was that REDD has already been set into motion and it would mean double exclusion for Indigenous Peoples if they did not engage in it – first from participation in the UNFCCC process, and second from participation in REDD projects. It was further argued that through engagement, Indigenous Peoples could bring in international gains to help assert their rights and prevent them from being marginalized/victimized when projects are implemented. These international gains include but are not limited to the UN Declaration on the Rights of Indigenous Peoples, Human Rights-based Approach, and other related international laws.

The next hurdle is how to engage effectively in the process. A number of issues were proposed such as identification of possible risks and opportunities. Some identified risks are: State views on swidden cultivation, state sovereignty over natural resources and displacement of indigenous communities.

In addition, some issues need to be further discussed such as dispute and complaint procedures, capacity building for Indigenous Peoples (including a separate mechanism and special/independent fund for Indigenous Peoples to participate in national stakeholder process) and governance structure of FCPF.

### *Major Concerns*

However, although REDD appears sound and may bring benefits to Indigenous Peoples in some countries, it remains a major source of concern for many. Many questions remain unanswered for Indigenous Peoples – such as land and resource rights. While the World Bank may make assurances for obtaining the “free, prior, informed consent” of Indigenous Peoples, recent history of IP engagement with the WB is not a source of inspiration. Indigenous Peoples must remain vigilant and study all the options before committing to full support to REDD.

As the Asia meeting has shown, Indigenous Peoples are still grappling with the technical aspects of climate change. Many issues still need to be clarified, and thus it would be difficult at this point to get Indigenous Peoples Organizations to agree on a common position. Before we should even ask whether we should engage in REDD or not, we should have a basic understanding of it, such as origin of the concept of REDD, who are pushing it and why, and intended objectives, among others. Without these questions being answered fully and satisfactorily, Indigenous Peoples may only be further victimized if they are forced to make a decision on REDD now.

The challenge then is to make information readily available and understandable to Indigenous Peoples Organizations. The dissemination of information should not be selective so as to promote one position over another. Additionally, consultations on REDD and other similar projects should be done in a truly transparent and democratic process, allowing for the participation of as broad a number of indigenous organizations as possible. The World Bank should be challenged to provide for capacity building of Indigenous Peoples Organizations on climate change as a whole and not just to one or two projects.#