Christina Nilsson

# CLIMATE CHANGE FROM AN INDIGENOUS PERSPECTIVE KEY ISSUES AND CHALLENGES



 ${f I}$ n February 2008, the International Work Group for Indigenous Affairs (IWGIA) organised and held a two-day conference on "Indigenous Peoples and Climate Change", in Copenhagen, Denmark. The conference was considered as part of the preparations for IWGIA's input to the 7<sup>th</sup> session of the UN Permanent Forum on Indigenous Issues<sup>1</sup> as well as the UN Climate Change Conference (COP 15) in Copenhagen in 2009.

Sixty people - indigenous peoples' representatives, Danish Foreign Ministry staff, Greenland Home Rule representatives, development practitioners and members of IWGIA – participated in the conference. The event focused on the key issues facing indigenous peoples in the context of climate change, including the human rights aspects. The discussions went beyond the observations and impacts of climate change and looked at how global mitigation policies, political processes and regulations facilitate or prevent indigenous peoples in their efforts to respond and adapt to climate change. This article summarises the discussions held during the conference and the key issues identified.

### Indigenous peoples and climate change

Regional and global assessments confirm that the Earth's climate is changing. Current and projected levels of exposure to climate-related sensitivities, as well as limits and restrictions to adaptive capacity, mean that some environments and peoples are more exposed to climate change and are significantly more vulnerable to its impacts and long-term consequences than others.

Indigenous peoples depend on natural resources for their livelihood and they often inhabit diverse but fragile ecosystems. At the same time, indigenous peoples are among the world's most marginalized, impoverished and vulnerable peoples. Hence, while indigenous peoples bear the brunt of the catastrophe of climate change, they have minimal access to resources to cope with the changes.

For indigenous peoples around the world, climate change brings different kinds of risks and opportunities, threatens cultural survival and undermines indigenous human rights. The consequences of ecosystem changes have implications for the use, protection and management of wildlife, fisheries and forests, affecting the customary uses of culturally and economically important species and resources.

Despite the impact of climate change on indigenous peoples and their traditional knowledge, international experts most often overlook the rights of indigenous peoples as well as the potentially invaluable contributions that indigenous peoples' traditional knowledge, innovations and practices can bring to the global search for climate change solutions. As the global discourse on climate change focuses on understanding how we can scientifically and technologically adapt to, as well as mitigate climate change, indigenous peoples are faced with the prospect of climate change further challenging their abilities to adapt to and cope with environmental and social changes.

Increasingly, international and national climate change mitigation strategies pose an additional threat to indigenous peoples' territories and coping strategies. When the development of hydro-electricity is suggested as part of a government's mitigation strategy, it often involves removing indigenous peoples from their traditional lands and territories. Monocrop plantations for agro-fuels affect the ecosystem, the water supply and the whole anatomy of the landscape on which indigenous peoples depend.

Additionally, a number of national and international mitigation institutions have been created - institutions which do not necessarily take into consideration the views and interests of indigenous peoples but which indigenous peoples, nevertheless, have to relate to and negotiate with.

### Climate change in the global context

Despite having contributed the least to greenhouse gas emissions, indigenous peoples are the ones most at risk from its consequences due to their dependence upon and close relationship with the environment and its resources. Their livelihood systems are often vulnerable to environmental degradation and climate change, especially as many indigenous peoples inhabit economically and politically marginal areas of fragile ecosystems in the countries likely to be worst affected by climate change. Massive changes in ecosystems are occurring and have in many cases been accompanied by opportunistic resource exploitation. To indigenous peoples, this means that climate change is not something that comes in isolation; it magnifies already existing problems of poverty, marginalization and non-inclusion in national and international policy making processes and discourses.

In some cases, climate change also has the potential to bring opportunities for indigenous peoples for industrial development, resource extraction and



IWGIA conference on "Indigenous Peoples and Climate Change" - Photo: Espen Wæhle

transport. The opening of the Arctic Ocean and the North West Passage due to the melting of sea ice are cases in point where some indigenous peoples see the reduction of ice cover as providing economic opportunities, e.g. as minerals become accessible, and thus as a way for Greenland to gain greater autonomy and even possible independence from Denmark. However, such developments intensify the question of indigenous peoples' rights to land and sea and to be involved as partners in the design of new activities affecting their territories.

Some indigenous groups have expressed optimism in adapting to climate change because the increased demand for renewable energy from wind and solar energy could make indigenous lands an important resource for such energy, replacing fossil fuel-derived energy and limiting greenhouse gas emissions. The focus on initiatives to combat climate change could also prove to be an opportunity if part of the substantial amount of funding is made available for indigenous peoples to, for example, participate in the development of adaptation initiatives and forest and biodiversity conservation. It is important that indigenous peoples start engaging in these initiatives and try to influence their design and implementation to ensure that their interests are taken into account

### Climate change: a human rights issue

To indigenous peoples, climate change is not simply a matter of physical changes to the environments in which they live. Many consider climate change a threat to their livelihoods and they fear that their economy and resource use will be threatened, followed by an erosion of social life, traditional knowledge and cultures. Climate change brings additional vulnerabilities to indigenous peoples, which add to existing challenges, including political and economic marginalization, land and resource encroachments, human rights violations and discrimination. The potential threat of climate change to their very existence, combined with various legal and institutional barriers that affect their ability to cope with and adapt to climate change, makes climate change an issue of human rights and inequality to indigenous peoples - not merely an environmental issue.

### Legal and institutional barriers

Indigenous peoples are experiencing local manifestations of climate change and find their livelihoods and cultures threatened because various legal and institutional barriers reduce their ability to respond. These legal and institutional barriers include the following:

- Indigenous peoples have been marginalized, isolated and excluded from key international decisions and processes, although their right to participate in decision-making is confirmed in the UN Declaration on the Rights of Indigenous Peoples and Agenda 21.
- Indigenous peoples' rights are not recognized when national and international climate change policies and initiatives are designed and implemented. In some cases, these policies and initiatives lead to, for example, the eviction of indigenous peoples from their traditional lands.
- Inappropriate policies mean that, for example, pastoralists are provided with maize when what they really need is restocking of their livestock.
- The recognition of indigenous peoples' rights is, in some cases, linked to past livelihood practices and these rights are not being adjusted to climate changes. Climate change has affected certain animals' migration and breeding patterns in the Arctic, which means that Inuit hunters are no longer able to hunt these species

- because the hunting seasons are not being changed by the authorities.
- Territorial limitations prevent mobility, for example as experienced by East African pastoralists and Saami reindeer herders.
- Indigenous peoples lack access to information as well as technology and resources to tackle the causes of climate change and adapt to its impacts. Long-term adaptation to climate change requires anticipatory actions, which would require considerable investment of capital, labor and time and, in many indigenous regions of the world, there are already constraints on resources and a lack of access to technology.

Participation in international climate change processes Indigenous peoples recognise the importance and urgency of developing policies and schemes to address climate change. Most of the concerns and protests raised by indigenous peoples relate to the violation of their internationally-recognised rights to involvement





Burning bush in Central Kalahari Game Reserve, Botswana – Photo: Christian Erni

and the consequences for decision-making and implementation.

Despite the fact that climate change is impacting intensely on indigenous peoples, they are very rarely considered in public discourse on climate change. In the national, regional and international processes, such as the UN Framework Convention on Climate Change (UNFCCC), where climate change mitigation policies are discussed, negotiated and designed, indigenous peoples have found it very difficult to get their voices heard and their concerns taken into consideration. Unlike the Convention on Biological Diversity (CBD), where the International Indigenous Forum on Biodiversity (IIFB) is an advisory body to the Convention, the UNFCCC is not providing similar space for indigenous peoples. In addition to the obstacles to their participation and influence, most indigenous peoples find the UNFCCC too scientific and difficult to understand and are not aware of the various processes in the UNFCCC such as the Clean Development Mechanisms (CDM), carbon emissions trading and Reduced Emissions from Deforestation and Degradation (REDD).

The many climate change mitigation and adaptation policies and schemes currently being developed are likely to have impacts on indigenous peoples' tenure security, livelihoods and economies because their rights are not sufficiently taken into account. Despite the danger of further undermining their livelihoods, indigenous peoples are not sufficiently involved, which means that the legal and institutional framework guiding climate change initiatives potentially reinforces inequalities. Hence an important element in mitigation schemes relates to power structures and revolves around questions about who will control the processes and who will benefit from them.

## Livelihood and climate change

In many regions, the negative effects of climate change on indigenous peoples' traditional livelihoods are becoming increasingly evident. Indigenous peoples are affected by climate change in multiple ways, with the effects varying according to the different locations and ecosystems in which they live: from diminishing sea ice and shifting animal migration routes in the Arctic, to increased fires in tropical rainforests and reductions in rainfall in temperate ecosystems, to intensified threats to water and food security, increased coastal erosion and forced evictions of communities from their traditional territories. In many instances, indigenous peoples are also affected by the solutions proposed to reverse the negative impacts of climate change, such as the appropriation of indigenous lands to establish oil palm plantations to produce agro-fuels.



Deforestation and forest degradation accounts for up to 25% of global greenhouse gas emissions - Photo: Fernandez/IWGIA

### Migration and displacement

In the Pacific, indigenous peoples are being displaced from their traditional lands and territories due to coastal and land erosion caused by large storm-driven waves. However, indigenous peoples are not only being displaced or forced to migrate due to the effects of climate change but also as a result of initiatives and policies to address climate change and the loss of biodiversity. There is a high correlation between the location of indigenous territories and the areas with the highest biodiversity. The focus on biodiversity protection and renewable energy has led to a dramatic increase in the establishment of protected areas on indigenous peoples' traditional lands and territories, resulting in restrictions on resource use and, in some cases, resettlement. A case in point is Tanzania, where indigenous pastoralists have been forcibly evicted from their traditional land in the Usangu plains due to the creation of a national park to protect a water catchment area that will provide water for a hydropower plant. The affected families were neither compensated nor provided with essential amenities.

## Food and water security

As a result of climate change, some regions experience frequent and prolonged droughts while other areas are affected by increased and unpredictable precipitation leading to flooding. In both cases food security is undermined and vulnerability is increased.

Fresh water supply is threatened by the increase in the frequency of droughts and the incursion of seawater into flood prone and coastal areas. In Kenya and Tanzania, these extreme weather conditions lead to crop failure, scarcity of pasture, livestock deaths and conflicts over scarce resources, which destroy traditional livelihoods, cause economic losses and make indigenous peoples dependent on emergency food relief and water. In the Himalayan region and in the high Andes, glaciers are melting due to an increase in temperature, which affects agriculture and the natural resources on which indigenous peoples depend. In the Amazon region, climate changes due to deforestation, forest fragmentation and the transformation of tropical rainforest into dry grassland savannah leads to critical loss of biodiversity and severe droughts and has put indigenous livelihood strategies under increased stress.

### Traditional knowledge and culture

Climate change has a harmful effect on biological diversity and the related knowledge, innovations and practices of indigenous peoples. Traditional knowledge is an inseparable part of indigenous culture, social structures, economy, livelihoods, beliefs, traditions, customs, customary law, health and their relationship to the local environment. With unprecedented climate changes, cultural institutions, authorities and livelihood strategies come under increased stress

as knowledge based on known indicators and patterns becomes inadequate to cope with the changes. In the Himalayan region, many glacial lakes are on the verge of bursting due to the increase in water from the melting glaciers. Glacial lakes have cultural, religious and spiritual value for indigenous peoples but the danger these lakes now pose in terms of flash floods and landslides means that indigenous peoples in the region have lost important sites for worship.

### Adaptation and mitigation

Indigenous peoples must not be seen as passive and helpless victims of climate change. They are active in maintaining the ecosystems in which they live and can play an important role in enhancing ecosystem resilience. Being dependent on a natural resource base that has always to a certain extent been unstable and unpredictable means that indigenous peoples have always adapted to changing environments. Indigenous peoples observe, interpret and react to climate change impacts in creative ways, drawing on traditional knowledge and other technologies to find solutions. Since climate change affects indigenous peoples differently depending on the environments in which they live, the adaptation strategies are just as diversified. The adaptation strategies include selecting animal breeds and combining animals suitable for the environment, diversifying economic activities, changing crop varieties and farming in higher altitudes.

In spite of a long history of adapting to changing environmental conditions, indigenous peoples today realise that their traditional and other tried and tested coping strategies alone are no longer sufficient to cope with the intensity and frequency of current climate changes. They also see their adaptation possibilities and abilities hampered by limited resources, lack of technology and various legal and institutional barriers. Climate change must therefore be seen in the wider context of indigenous peoples being among the world's most marginalized, impoverished and vulnerable peoples. Climate change magnifies already existing problems because the unprecedented changes in the environment and natural resource base and policies to address these changes erode indigenous peoples' adaptive capacity and community resil-

An important programme to learn from in terms of involving indigenous peoples and their traditional knowledge in climate change adaptation initiatives is the Ealát Network Study, which aims to prepare reindeer herders and national authorities in the Arctic for

climate change and find adaptation strategies that integrate indigenous traditional knowledge and scientific knowledge.<sup>2</sup>

### Recommendations

In order to overcome the above-mentioned challenges facing indigenous peoples' ability to respond to climate change adequately and effectively, the participants in IWGIA's conference adopted the following recommendations directed at the relevant stakeholders. These recommendations are based on the principles of Agenda 21 and the UN Declaration on the Rights of Indigenous Peoples and stress in particular the indigenous peoples' right to participate and to make decisions based on their free and prior informed consent.

# a) To the Danish Government and Greenland Home Rule

- Take a lead in ensuring indigenous peoples' meaningful participation in COP 15 in Copenhagen in 2009, including in the meetings and negotiation processes leading up to COP 15 in Copenhagen and in other climate change meetings and negotiation processes leading up to the 2012 agreement;
- Ensure that the official *Strategy for Danish support to Indigenous Peoples* is implemented in the government's commitment and initiatives to address climate change; and
- Support indigenous peoples' own initiatives to develop mechanisms on how to cope with, adapt to or mitigate the effects of climate change on their livelihoods and environments.

# b) To governments and inter-governmental institutions (UN agencies, the World Bank Group and regional development banks)

- Ensure full and effective participation of indigenous peoples in the conception, design and implementation of sustainable solutions to combat climate change. Indigenous peoples' right to participate has been confirmed by Agenda 21 and, most recently, in Article 18 of the UN Declaration on the Rights of Indigenous Peoples;
- Ensure the full and effective participation of indigenous peoples in the UN Framework Convention on Climate Change, including in the meetings and negotiation processes leading up to COP 15 in Copenhagen;

- Make binding commitments to ensure that climate change policies and programmes potentially affecting indigenous peoples are in full conformity with and promote the implementation of international human rights standards, including the UN Declaration on the Rights of Indigenous Peoples and the principles of Free, Prior and Informed Consent. This commitment must encompass all multi- and bilateral agreements and initiatives on climate change;
- Make binding commitments specifically to ensure that all agreements made under the UN Framework Convention on Climate Change are in full conformity with and promote the implementation of international human rights standards, including the UN Declaration on the Rights of Indigenous Peoples and the principles of Free, Prior and Informed Consent;
- Develop mechanisms to avoid ill-conceived climate change mitigation policies and schemes that risk violating the rights of indigenous peoples;
- Respect and take into account indigenous traditional knowledge when identifying and designing climate change mitigation policies and programmes;
- Refrain from supporting policies and programmes that lead to forced eviction of indigenous peoples from their lands and forests in the name of combating climate change;
- Address legal and institutional barriers that prevent indigenous peoples from coping with climate change impacts;
- Develop mechanisms to ensure that information on planned and current mitigation and adaptation schemes is made available to indigenous peoples;
- Support initiatives to conduct participatory and multi-disciplinary research with and among indigenous peoples in the context of climate change; and
- Engage in constructive dialogue with civil society partners, especially with indigenous peoples' organizations.

### c) To universities and research institutes

- Allow indigenous traditional knowledge to become an integral part of climate change research while ensuring the full and effective participation of indigenous peoples in the research process;
- Identify and promote best practices and lessons that can influence climate change interventions

- to have positive impacts on indigenous peoples;
- Conduct participatory and multi-disciplinary research with and among indigenous peoples in the context of climate change; and
- Ensure that relevant research is made available to indigenous peoples and to national, regional and international policy makers.

### d) To civil society partners (international and national)

- Support indigenous peoples' meaningful participation in international and national climate change fora;
- Support indigenous peoples' participation in the search for sustainable solutions to combat climate change;
- Support indigenous peoples' capacities to manoeuvre and negotiate with private companies and governments both in national contexts and in international meetings on climate change issues:
- Support indigenous peoples' networking on climate change issues;
- Use the mechanisms of the UN Expert Mechanism on the Rights of Indigenous Peoples under the Human Rights Council and the UN Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people to further research and advocate on indigenous peoples' rights in relation to climate change and climate change policies;
- Facilitate dissemination of relevant research, information and documentation to indigenous peoples and partners;
- Engage in constructive dialogue with sectors involved in climate change e.g. the energy sector and automotive industry; and
- Conduct advocacy and lobbying work with governments, institutions and the private sector to accept and adhere to these recommendations.

### **Notes**

- The special theme of this year's session is "Climate change, bio-cultural diversity and livelihoods: the stewardship role of indigenous peoples and new challenges".
- 2 http://arcticportal.org/en/icr/ealat

Christina Nilsson holds a Master's degree in international development studies and geography and is IWGIA's focal person on climate change.