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on Biodiversity and Climate Change**

**HUMAN RIGHTS
AND
CLIMATE CHANGE**

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I. INTRODUCTION

Climate change is among the key topics that dominate the international political agenda nowadays. The complexity and gravity of global warming, as well as the consequences of the failure to tackle it as soon as possible, have begun to attract increasing public and scientific attention. Furthermore, it is becoming apparent that climate change will have implications for the enjoyment of human rights. It is consequently more and more suggested that, in order to strengthen mitigation and adaptation policies, a rights-based approach of climate change is needed.

The impacts of climate change have important implications for the human rights recognised in international human rights instruments, including the Universal Declaration of Human rights (UDHR), as codified in the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Political Rights (ICESCR), as well as the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW). Under these Treaties, the State has the primary duty not only to respect the covered rights, but to protect and fulfil these rights through positive action. All Parties to the international human rights conventions are obligated to take measures to prevent the violation of climate change-affected rights.

Outline

- In 2006, the well-known Stern Review¹, a respected study on the economics of climate change, rightly pointed out that climate change will affect the basic elements of life for people around the world and could seriously hinder growth and development. Global warming could result in hundreds of millions of people suffering from hunger, malnutrition, water shortages, floods, droughts, heat stress, diseases triggered by extreme weather events, loss of livelihood and permanent displacement. Indeed, climate change poses a direct threat to a wide range of universally recognised fundamental rights, such as the rights to life, food, adequate housing, health, and water.
- The IPCC Fourth Assessment Report (IPCC AR4)², issued in 2007, presents the current scientific consensus on climate change. According to these scientific findings, an increase in global average temperatures of approximately 2°C will have major and predominantly negative effects on ecosystems across the globe, on the goods and services they provide. Moreover, global warming will exacerbate the harmful effects of environmental pollution. It is more than obvious that, in view of such effects, implications for a wide range of human rights is unavoidable.
- At the Bali Climate Change Conference (COP-13) in December 2007, the Deputy High Commissioner for Human Rights, Ms. Kyung-wha Kang, stressed for the first time the need to bring in the human dimension in mitigation and adaptation strategies to address climate change. She stated that “*a human rights perspective shifts the focus more directly to individuals and to the effect of climate change on their lives*”. Moreover, looking at the human impact of global warming raises important challenges related to equality, non-discrimination, access to information, access to justice and other core principles of human rights. These considerations should be integrated in the vision leading up to and in the post-Kyoto era after 2012, according to Ms. Kang³.
- Ms. Kang also referred to the liaison between human rights and climate change at the Conference on Climate Change and Migration, which was held in Geneva in February 2008⁴. As environmental degradation and natural disasters are among the leading causes for large population displacements, looking at the human impact of global warming also raises important challenges that involve principles of equality, non-discrimination, access to information, access to justice and other core human rights.
- Moreover, the UNDP Human Development Report of 2007/2008 (Fighting Climate Change: Human Solidarity in a Divided World) examined the human impact of climate change from the perspective of

¹ http://www.hm-treasury.gov.uk/d/Executive_Summary.pdf

² http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

³ <http://www.unhcr.ch/hurricane/hurricane.nsf/view01/013DC0FAA475EC87C12573B10074796A?opendocument>

⁴ <http://www.unhcr.ch/hurricane/hurricane.nsf/view01/BA5B630BFFAD7FC1C12573F600386398?opendocument>

human development, risk and vulnerability in an unequal world and mitigation and adaptation plans and strategies⁵.

- Also, the August 2007 report to the General Assembly (A/62/214) of the Special Rapporteur on the “right of everyone to the enjoyment of the highest attainable standard of physical and mental health” included a call for the Human Rights Council to study the impact of climate change on human rights⁶.
- As a result of this debate on the subject, the United Nations Human Rights Council adopted Resolution 7/23 “human rights and climate change”⁷ in March 2008, expressing concern that climate change “poses an immediate and far-reaching threat to people and communities around the world” and requesting the Office of the United Nations High Commissioner for Human Rights (OHCHR) to prepare a detailed analytical study on the relationship between climate change and human rights, to be submitted to the Council prior to its tenth session (Geneva, 2 – 27 March 2009). A number of states, UN organisations, international organisations, national human rights institutions and NGOs contributed to this report by submitting assessments and studies carried out at the national level regarding the impact of climate change on the lives of peoples, the most affected and vulnerable populations, as well as ideas and views, projects and measures at the national level in order to mitigate and adapt to climate change and assess its impact on human rights⁸. As the Deputy CEO/Director of the Global Humanitarian Forum stated “the OHCHR study could be a powerful instrument to give climate change a human face and add urgency to the need for a strong outcome at the Conference of Parties to the UNFCCC in Copenhagen in 2009”⁹.
- The great majority of the stakeholders who contributed to the OHCHR study agreed that the international community should continue studying the inter-linkages between human rights and climate change, including the eventual legal, political and economical impacts that this link may have at the international as well as the national level. However, most of the States that responded to the call of Resolution 7/23 have not yet carried out any specific studies to assess the impact of climate change to the enjoyment of human rights. There are countries that consider that direct links between climate change and human rights are not necessary, because the effective enjoyment of human rights should be ensured under all circumstances and with full legal protection through existing constitutional, legal and policy frameworks (Canada). On the other hand, there are States that have undertaken national studies that are more or less relevant to the issue, as for example Australia, which carried out a multi-disciplinary study on the risks of climate change to the indigenous communities in the tropical North of Australia. Or in the case of Finland, where an indirect link to human rights can be found in their National Strategy for Adaptation to Climate Change concerning the future of the reindeer husbandry, which is very important for the local economy and an important source of livelihood in northern Finland. It is also expected that countries that are more vulnerable to the effects of climate change, such as the Small Island Developing States (e.g. Maldives, Marshall Islands, Mauritius) are most interested in integrating the human rights approach in their mitigation and adaptation strategies, in order to address the impacts of climate change on the fundamental rights of their peoples.
- The issue of human rights and the environment is also under consideration in the context of the Draft Fourth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme IV)¹⁰.
- The OHCHR organised a one-day open-ended consultation on the relationship between climate change and human rights, held in Geneva on 22 October 2008¹¹. The discussions of this meeting focused on the human rights implications of climate change and on the international dimension of the

⁵ http://hdr.undp.org/en/media/hdr_20072008_en_complete.pdf

⁶ Report A/62/214, Conclusions and recommendations, “(j) Climate change. The Special Rapporteur calls on the Human Rights Council to urgently study the impact of climate change on human rights generally and the right to the highest attainable standard of health in particular”.

⁷ http://www2.ohchr.org/english/issues/climatechange/docs/Resolution_7_23.pdf

⁸ For the complete list of submissions see: <http://www2.ohchr.org/english/issues/climatechange/submissions.htm>

⁹ Summary of discussions of the open-ended consultation on the relationship between climate change and human rights, 22 October 2008, Geneva, p. 5: <http://www2.ohchr.org/english/issues/climatechange/docs/SummaryofDiscussions.doc>

¹⁰ Draft Fourth Programme for the Development and Periodic Review of Environmental Law, III.A., points (c) and (f),

UNEP/Env.Law/MTV4/IG/2/2: http://www.unep.org/law/PDF/MontevideoIV/Meeting_Report_MontevideoIV.pdf

¹¹ <http://www2.ohchr.org/english/issues/climatechange/consultation.htm>

climate change challenge, as well as on a vulnerability assessment concerning human rights in the context of climate change, and on the value that the human rights perspective could bring to a new international framework on climate change under the United Nations Framework Convention on Climate Change (UNFCCC)¹².

- Finally, the Human Rights Council adopted a Resolution on human rights and climate change (ref. A/HRC/10/L.30)¹³ at its 10th session (2-27 March 2009). The Human Rights Council decided to hold a panel discussion on the relationship between climate change and human rights at its 11th session, in June 2009, in order to contribute to the realisation of the goals set out in the Bali Action Plan and to invite all relevant stakeholders to participate therein. Furthermore, it requested the Office of the United Nations High Commissioner for Human Rights to prepare a summary of the panel discussion, which will be available to the 15th session of the Conference of Parties (COP-15) of the UNFCCC for its consideration. It also welcomed the decision of the Special Rapporteur on adequate housing, as a component of the right to an adequate standard of living, to prepare and present a thematic report on the potential impact of climate change on the right to adequate housing. The Human Rights Council encouraged other relevant special procedure mandate-holders to give consideration to the issue of climate change within their respective mandates. Moreover, it encouraged the Office of the High Commissioner to participate in the High-level Meeting on Climate Change, to be held ahead of the General Assembly's 64th session (2009), and at UNFCCC COP-15 (Copenhagen, 2009).

II. HUMAN RIGHTS AND CLIMATE CHANGE

The first principle of the first major international commitment linking human rights and environmental protection highlighted the connections between international human rights and environmental law: *“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears solemn responsibility to protect and improve the environment, for present and future generations...”*¹⁴.

Why there has been, to date, so little uptake on the human rights implications of climate change? International environmental law and international human rights law are at the same time similar in their purpose and different in their nature. It could be argued that they have the same purpose: to put human beings at the centre of concerns of the international community. But at the same time, their nature is fundamentally different. While the purpose of international environmental law is to regulate relations between States, international human rights law sets limits and guarantees entitlements in the relations between individuals and States. Environmental law can also be described as a law of co-operation, in which States undertake commitments to support each others to address global concerns, while human rights law aims to empower people and make States accountable in a more directly answerable manner. Moreover, the complex and transnational basis of climate change poses a significant challenge to international human right law's dominant structures.

A second possible obstacle to action might be the fact that, much as the effects are increasingly being experienced today, climate change harms are generally located in the future; they remain a matter of prediction and probability and they are, by their nature, unprecedented. Human rights, on the other hand, are generally viewed in a factual light, as either fulfilled or violated, protected or unprotected, in the present. As a matter of priority then, human rights groups must seek a credible language to express expected and unprecedented rights infringements and to address them through policy measures rather than with legal tools alone¹⁵.

It has become widely accepted nowadays that the international community must take into account international human rights obligations in the course of negotiations addressing climate change. The outcome of the UNFCCC negotiation process should ensure that fundamental human rights will not be

¹² For the Summary of discussions at this meeting see:

<http://www2.ohchr.org/english/issues/climatechange/docs/SummaryofDiscussions.doc>

¹³ Press release, <http://www.unhcr.ch/hurricane/hurricane.nsf/view01/3F57EC8C7677E4B3C125758400633DF4?opendocument> . The text of the resolution is not currently online (31/3/2009) but it will be posted here:

http://ap.ohchr.org/documents/sdpage_e.aspx?b=10&se=83&t=4

¹⁴ Principle 1 of the Stockholm Declaration, UN Conference on the Human Environment (1972).

¹⁵ International Council on Human Rights Policy:

<http://www2.ohchr.org/english/issues/climatechange/docs/submissions/ICHRSubmission.pdf>

violated by climate change impacts. It would seem valuable to recognise and reference human rights principles within the post-Kyoto regime. Agreements under the UNFCCC umbrella could usefully note that actions taken in the context of mitigation and adaptation should respect human rights¹⁶. In response to climate change, the human rights approach would require a triple task to be performed by the governments: (1) to avoid harmful emissions nationally in order to respect the right to live in freedom from human-induced climate perturbations; (2) to protect human rights against third-party emissions of countries or corporations through international co-operation; and (3) to fulfil human rights obligations by upgrading people's capability to cope with climate change through adaptation measures¹⁷. Further, States must give due attention to threatened economic, social and cultural rights in the course of the negotiations of international climate change agreements. This attention is not only a moral obligation, but a legal duty resulting from the ICESCR and other human rights treaties.

In the climate change context, mitigation and adaptation measures are considered as policies that can help slowing down or even stopping the negative effects of climate degradation. Mitigation measures seek to reduce the anthropogenic causes of dangerous climate change, especially by reducing greenhouse gas emissions. On the other hand, adaptation measures include policies and actions that seek to adjust to new environmental conditions and reduce the harmful impacts caused by climate change. However, while many mitigation and adaptation measures can ensure human rights, such measures can also have the opposite effect, undermining the rights of individuals. Most recently, the effects of biofuel policies in the EU and the USA have raised questions about the impacts of these policies on food security, particularly in vulnerable food-importing countries. Similarly, adaptation policies to move populations from areas threatened by climate change may have the intention of protecting the life, security and health of individuals. However, if these policies are implemented in ways that unfairly discriminate, or are carried out without ensuring procedural protections (access to information, community participation, etc.), the result can be that human rights are undermined. Likewise for cases of poorly planned migration of threatened populations to new areas lacking adequate infrastructure and facilities.

Rights affected by climate change

Clearly, climate change has had and will continue to have adverse impacts on fundamental human rights:

- *The right to life:* The quality of the environment affects the ability of people to enjoy the universally held right to life. Direct impacts include the increased incidents of natural disasters, while indirect impacts include poorer standards of health, nutrition, access to clean drinking water and susceptibility to disease. The immediacy of these threats indicates that positive action must be taken to ensure the full enjoyment of the right to life. Given the fact that mitigation remains the only known means to fully prevent the catastrophic impacts of climate change and that the critical decisions do not lie within the control of each state itself, the full protection of the right to life from climate change mostly depends upon the actions of the international community.
- *The right to development:* The attainment of the right to development by developing countries will be severely impaired by impacts on food and water security, decreases in the earth's landmass, drastic weather patterns and the destruction of ecosystems.
- *The right to property:* Climate change may result in the deprivation of property without compensation, particularly in coastal areas, and may also have an effect on land uses as a result of changing weather patterns.
- *The right to self-determination:* The right of all peoples to self-determination is recognized in Article 1 of both the ICCPR and the ICESCR, as well as in Articles 1 and 55 of the UN Charter. If climate change continues unmitigated, sea-level rise is expected to result in the total inundation of small island states. It may thus destroy one of the hallmarks of statehood: the country's territory. Additionally, the combination of sea-level rise, rising temperatures and extreme weather events threatens to render the islands inhabitable. Therefore, climate change impacts constitute a threat to the enjoyment of the right of certain people to self-determination. The loss of land and State renders all other rights, political and

¹⁶ *Idem*.

¹⁷ Friends of the Earth – Australia, Climate Action Network Australia (CANA), Australian Climate Justice Program (ACJP): http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Friends_of_the_Earth_Australia_CANA_ACJP.pdf

civil as well as economic, cultural and social rights unattainable. Without international cooperation, small island developing states, which as a whole emit however less than 1% of global GHG emissions, have little capacity to reverse the impacts of climate change in extinguishing their territory.

- *The right to health:* The right to health includes a range of factors necessary to lead a healthy life, such as food, nutrition, housing, access to safe water and a healthy environment. Climate change is likely to increase deaths from malnutrition, heat stress and infectious diseases worldwide. It will also alter traditional sources of, and access to, clean water.
- *The right to food:* The right to food is addressed in several international human rights conventions and has been further recognised in subsequent declarations made by the international community. Climate change will have an impact on food security by reducing the availability of food, changing access to food, worsening the stability of food supply and affecting the utilisation of food. People of outer islands in particular are in danger of suffering from hunger and chronic malnutrition. Moreover, the effects on agricultural production will be visible at the global level. Diverting agricultural lands and food crops toward the production of biofuels may indirectly result in rising food prices, food shortage affecting especially the poor, and a threat to the basic right to food in affected populations.
- *The right to water:* Climate change will result in changes to components of the hydrological cycle and hydrological systems such as changing rainfall patterns, intensity and extremes. Recently, the 2007 OHCHR Report, issued pursuant to Decision 2/204 of the Human Rights Council, addressed the scope and content of human rights obligations related to safe drinking water and sanitation. Under ICCPR and ICESCR, the right to water provides for “*equal and non-discriminatory access to a sufficient amount of safe drinking water for personal and domestic issues...to sustain life and health*”. State Parties have a duty to take measures to fulfil the right to water, including the obligations to facilitate and promote universal access to water, as well as to provide water for individuals who lack access for reasons beyond their control.
- *The rights of the Indigenous Peoples:* According to the IPCC AR4, the communities who live in marginal lands and whose livelihoods are highly dependent on natural resources are among the most vulnerable to climate change. Biodiversity loss as a result of 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 plants¹⁸. Indigenous peoples still have limited or in many cases no participation in the decision-making processes of the UNFCCC (the REDD - Reduced Emissions from Deforestation in Developing countries- mechanism for instance), despite the fact that their rights and their experience in sustainable forest management make their participation in these fora imperative¹⁹. Moreover, the implementation of the three flexible mechanisms of the Kyoto Protocol²⁰, often without their prior and informed consent, also causes human rights violations, like forced relocations or introduction of environmental contaminants, etc.

Climate change will also have impacts on emergency response and disaster recovery, particularly for vulnerable developing countries. It also threatens to drive millions of people around the globe to migrate within and across State borders. Finally, international and national decision-makers need to be open and welcome a thought-provoking debate on climate change issues in order to make better informed decisions on how to tackle this global phenomenon.

¹⁸IUCN, Indigenous and Traditional Peoples and Climate Change:

<http://www2.ohchr.org/english/issues/climatechange/docs/IUCN.pdf>

¹⁹ Global Forest Coalition, International Expert Group Meeting on Indigenous Peoples and Climate Change

Darwin, Australia 2 – 4 April 2008, “*Climate Change, Forest Conservation and Indigenous Peoples Rights*”:
http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Global_Forest_Coalition_Indigenous_Peoples_ClimateChange.pdf

²⁰ Emissions Trading, Joint Implementation and Clean Development Mechanism.

III ENVIRONMENTALLY INDUCED MIGRATION²¹

The First IPCC Assessment Report (1990) noted that the greatest simple impact of climate change might be on human migration. According to more recent studies it is estimated that, by 2050, 200 million people could be displaced by climate change-related phenomena, such as desertification, sea-level rise, droughts and extreme weather events. It is also estimated that climate change-related displacement will primarily occur within countries and that those in greatest danger are vulnerable groups (women, children, the elderly, indigenous peoples) in least developed countries, whose capacity to adapt to the effects of climate change is extremely limited.

Despite the huge number of people already affected by environment-related displacement, there is no international consensus about how to define this phenomenon. There is no single organisation focusing explicitly on the problems of people compelled to leave their natural habitat because of environmental degradation, nor any agreed policy. The legal and normative frameworks are deficient, leaving several categories of people seeking safe and sustainable existence without protection. However, the existing protection framework for the rights of people forcibly displaced by other reasons (conflict, persecution, natural disasters) can be applied in the case of migration for environmental reasons.

In order to ensure the best possible protection for persons affected by displacement, it is of great importance to distinguish between voluntary and forced population movements. This issue remains challenging, as persons who voluntarily or forcibly move across an international border due to environmental factors would often not have a right of entry into that State. The Office of the UN High Commissioner for Refugees and other UN agencies, however, advises against using the terms “climate refugee” or “environmental refugee” to describe cross-border population movements in order not to undermine the international legal regime for the protection of refugees (the 1951 Refugee Convention)²². In cases where such displacement would be considered forced, affected persons would fall under the scope of the Guiding Principles on Internal Displacement (IDP).

Victims of the effects of climate change, including displaced persons, are entitled to enjoy the full range of human rights guarantees. The question arises as to the precise meaning and relevance of these rights for this vulnerable group of persons. Insofar as the affected persons are displaced within their own country, the Guiding Principles on Internal Displacement - which reflect and are based upon existing human rights conventions and which remain fully applicable in such situations - provide detailed guidance. The Guiding Principles have become a practical tool to identify the rights and guarantees relevant to the protection and assistance of IDPs in all phases of displacement regardless of the cause²³. Thus, a human rights approach in national strategies for disaster preparedness, mitigation and adaptation to negative effects of natural hazards is highly recommended to better protect the rights of affected persons, including those displaced²⁴. Further guidance is provided by the Inter-Agency Standing Committee Operational Guidelines on Protecting Persons Affected by Natural Disasters. In this field, the contribution of the Representative of the Secretary General on the Human Rights of Internally Displaced Persons is more than important. A pilot Field Manual to the IASC Operational Guidelines was developed and released in March 2008 and is currently in the process of being revised. The Manual’s main goal is to introduce the human rights dimension into the operational response in a disaster context by providing the human rights framework, practical examples and operational steps²⁵.

In February 2009, the Parliamentary Assembly of the Council of Europe adopted Resolution 1655 on “Environmentally induced migration and displacement: a 21st century challenge”, recognising that Europe is not immune to the consequences of climate change and therefore needs to take a pioneer role in this

²¹ The use of the term “Environmentally Induced Migration”, as proposed by the PACE Rapporteur Mrs. Tina Acketoft in the Resolution 1655, reflects best the Council of Europe’s human rights approach to this issue and this is why it is used in this paper. This term refers to migration of all persons for whom the environmental factor is the major drive for migration.

²² <http://www.humanitarianinfo.org/IASC/downloaddoc.aspx?docId=4552>

²³ <http://www.unhcr.ch/html/menu2/7/b/principles.htm>

²⁴ Report of the Representative of the Secretary-General on the human rights of internally displaced persons, Walter Kälin, A/HRC/10/13, p. 25: <http://daccessdds.un.org/doc/UNDOC/GEN/G09/107/46/PDF/G0910746.pdf?OpenElement>

²⁵ Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, Background paper: “Displacement Caused by the Effects of Climate Change: Who will be affected and what are the gaps in the normative framework for their protection?”: http://www2.ohchr.org/english/issues/climatechange/docs/submissions/DisplacementandCC_10102008.pdf

area²⁶. Moreover, the Resolution called upon Council of Europe's member states to “*contribute through active participation in the work of the international organisations dealing with this issue, to the investigation of the existing gaps in law and protection mechanisms with a view to an eventual elaboration of a new international convention providing internationally assured protection to people displaced because of environmental degradation and natural and man-made disasters when return is impossible*”.

IV. TOWARDS A RIGHT TO ENVIRONMENT

Most of the main international human rights instruments were drafted before environmental issues were given significant attention on the international development agenda. Likewise, these instruments were developed before climate change was understood to be a serious threat to human security. It is therefore not surprising that early international human rights instruments, such as the Universal Declaration of Human rights (1948), make no explicit reference to the environment²⁷. More recently drafted international and regional human rights instruments do specifically mention environmental issues in their texts:

- Convention on the Rights of the Child (1989)
- African Charter on Human and People's Rights (1981)
- Additional Protocol to the Inter-American Convention on Human Rights in the area of economic, social and cultural rights (1988)

Later, the Rio Declaration on Environment and Development clearly formulated the link between sustainable development, human rights and environmental protection, recognising the rights of future generations to a healthy environment, the right to information, participation, and to a remedy in respect to environmental conditions. Principle 1 of the Declaration²⁸ sets out the linkages between a healthy environment and the achievement of human rights and could form the basis for considering human rights issues with the international climate framework. The World Commission on Environment and Development has even proposed that as a fundamental legal principle: “*all human beings have the fundamental right to an environment adequate to their health and well being*”²⁹. Moreover, in the Preamble of the Aarhus Convention (1998) on “Access to information, public participation in decision-making, and access to justice in environmental matters” it is clearly mentioned that “*adequate protection of the environment is essential to human well-being and the enjoyment of basic human rights, including the right to life itself*” and that “*every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations*”³⁰.

However, the precise connection between climate change and the international human rights law system is as yet undeveloped³¹. The human rights and social consequences of climate change policies are not considered in the international climate framework, which instead focuses on technical issues relating to the reduction of GHG emissions.

There have been discussions about the existence of an internationally recognised human right to a healthy environment (or else to an environment of a particular quality). Environmental quality is necessary for the full realisation of a range of civil, political, economic, social and cultural rights. This linkage may facilitate the use of human rights to address environmental concerns, such as climate change. According to the Advisors Council of Jurists of the Asia-Pacific Forum of National Human Rights Institutions (ACJ) though, the current legal instruments and trends in relation to environmental law are insufficient to support the existence of a clear and specific right to environment in international law. Even without the articulation of a specific right to the environment, States have the responsibility to act in order to remedy the direct and

²⁶ <http://assembly.coe.int/Mainf.asp?link=/Documents/AdoptedText/ta09/ERES1655.htm>

²⁷ UNCCD, Human Rights and Desertification – Exploring the Complementarity of International Human Rights Law and the UNCCD: <http://www2.ohchr.org/english/issues/climatechange/docs/submissions/UNCCD.pdf>

²⁸ “*Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears solemn responsibility to protect and improve the environment, for present and future generations...*”

²⁹ Report of World Commission on Environment and Development, *Our future*, 1987.

³⁰ Aarhus Convention: <http://www.unece.org/env/pp/documents/cep43e.pdf>

³¹ Human Rights and Equal Opportunities Commission, Background Paper Human Rights and Climate Change: http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Australia_HR_Equal_Opportunity_Commission_HR_ClimateChange_4.pdf

indirect threats to human rights. This responsibility results from the UDHR, the ICCPR and the ICESCR, as well as the Convention Against Torture, and the Convention on the Rights of the Child. In the context of those instruments, there are many broad rights recognised which are relevant to the situation of those whose way of life is under threat from climate change (right to life, right to adequate food, right to health, etc.). However, the value of elaborating a human right to environment (or to an environment of a particular quality) would be to ensure that the impact of the environment on the enjoyment of fundamental human rights is better recognised, and that an opportunity for proactive engagement prior to the violation of that defined human right would be provided³².

On 4 June 2008, on the eve of World Environment Day, Mr. Lluís Maria de Puig, President of the Parliamentary Assembly of the Council of Europe (PACE), repeated his call for a "*right to environment under the European Convention*"³³. In March 2008, he stated that protection of the natural environment had to be regarded as a fundamental human right. And that one of the objectives that he had set himself during his term of office was the integration of the right to a healthy environment into the European Convention on Human Rights, through an additional protocol³⁴. Mr. de Puig repeated this position in March 2009, on the occasion of World Water Day, when he added that access to water should be recognised as a fundamental human right³⁵.

Such a specific right would obviously have important consequences on environmental matters, thus creating a more strict level of environmental protection by giving individuals a clear right. This would also have an impact on climate change issues. Attention should be drawn to the fact that in the absence of a specific provision related to the environment, the European Court of Human Rights has created somewhat limited but clear rules on the quality of the environment, based on several Articles of the European Convention on Human Rights, most particularly under Article 8 (right to respect for private and family life), rules and restrictions for States towards individuals that would also apply to climate change issues³⁶.

To summarise, and according to the views of the ACJ and the Human Rights and Equal Opportunities Commission, any attempt to define a human right to environment must address the following issues:

- *The right of all persons to a safe, healthy and ecologically sound environment that is protected, preserved and improved both for the benefit of present and future generation, and in recognition of the inherent value of ecosystems and biodiversity.*
- *The States' responsibility to protect, preserve, remediate and improve the environment, noting the principle of common but differentiated responsibility.*
- *The responsibility of all individuals and other non-state actors to respect, protect and preserve the environment and remedy any degradations of the environment for which they have been responsible.*
- *The right of all individuals and other non-state actors to full information about environmental issues, the right to participate in decision-making processes on environmental issues and the right to access remedies.*
- *The potential conflict between environmental protection and the right to culture.*
- *The needs of groups that are disproportionately affected by environmental harms, and groups, including indigenous peoples, that have a special cultural and spiritual connection with the environment.*
- *Specific protection for the environmentally displaced and affected.*
- *The principle of international solidarity, shared responsibility and the provision of aid, including capacity-building and technical assistance, in respect of environmental harm and disasters.*

³² Asia Pacific Forum, Human rights and the Environment, Final Report and Recommendations:

http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Asia_Pacific_Forum_of_NHRIs_1_HR_and_Environment_ACJ_Report_Recommendations.pdf

³³ <http://assembly.coe.int/ASP/Press/StopPressView.asp?ID=2055>

³⁴ <http://assembly.coe.int/ASP/Press/StopPressView.asp?ID=2025>

³⁵ <https://wcd.coe.int/ViewDoc.jsp?id=1422333&Site=DC&BackColorInternet=F5CA75&BackColorIntranet=F5CA75&BackColorLogged=A9BACE>

³⁶ See next section of this paper.

- *The balance between the right to sustainable development and environmental protection.*

V. THE EUROPEAN COURT OF HUMAN RIGHTS

The Council of Europe has been at the forefront in recognising and protecting human rights. It has also endeavoured to promote environmental protection by drawing up legal instruments, such as the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979); the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (Lugano, 1993); the Convention on the Protection of the Environment through Criminal Law (Strasbourg, 1998); and the European Landscape Convention (Florence, 2000). Likewise, the Council of Europe should take the lead in the field of human rights and the environment, considering ways in which the human rights protection system can contribute to the protection of the environment, and vice versa.

Many would assume that the European Convention on Human Rights would contain a provision relating to the environment. However, this is not the case. The European Convention on Human Rights has no explicit provision on the right to a healthy and clean environment. The reason for that is that environmental concerns were not placed high on the agenda when the European Convention was adopted back in 1950. Even though the Parliamentary Assembly has tried twice to have such a right acknowledged and codified through an additional protocol to the Convention, no such right has yet been recognised or codified.

In their Recommendation 1614 (2003), on “Environment and human rights”, the Parliamentary Assembly drew special attention to its Recommendation 1431 (1999), where it had already proposed linking this issue to the European Convention on Human Rights by supplementing it with an environmental component. The Assembly referred to the case law of the European Court and recommended that the Committee of Ministers draw up an additional Protocol to the European Convention on Human Rights, concerning the recognition of individual procedural rights intended to enhance environmental protection. Moreover, special attention should be drawn to the Opinion issued by PACE’s Committee on Legal Affairs and Human Rights³⁷, where it is stated that *“the existing articles of the Convention, especially Article 2 (right to life) and Article 8 (respect for family and private life, including physical and moral integrity), have been interpreted by the Court in such a way that, in specific and appropriate cases, unhealthy environmental conditions (e.g. fumes from a waste disposal plant, or intense aircraft noise) can be construed as a violation of the Convention. In these cases it was clear what measures could be taken to end the violation for the individual concerned (...) Recognising a general “right to a healthy environment” could well topple this carefully constructed edifice”*.

The Committee of Ministers requested the Steering Committee for Human Rights (CDDH) to give an opinion on the Recommendation 1614(2003). In its Opinion, the CDDH acknowledged that neither the Convention nor its additional protocols expressly recognise a right to the protection of the environment. It further noted that several member States have already included in their Constitutions provisions on the protection of the environment, formulated as a right or as a State objective. The Steering Committee considered that the existing case-law of the European Court of Human Rights demonstrates that the Convention already offers a certain degree of protection in relation to environmental issues through existing Convention rights and their interpretation in the case-law of the Court. The CDDH was of the opinion that it would not be advisable to draft an additional protocol to the Convention along the lines set out in the Assembly’s Recommendation³⁸.

Following the CDDH’s opinion, the Committee of Ministers replied to PACE that it recognised the importance of a healthy, viable and decent environment and considered that, accordingly, human rights relevant to the protection of the environment need to be effectively protected. However, the Committee of Ministers refused to codify such a right, stressing the indirect - but important - contribution of the Convention system to the protection of the environment, which guarantees a certain degree of protection via the existing Convention rights. Moreover, the Committee of Ministers shared the view that

³⁷ Doc. 9833 (2003):

http://assembly.coe.int/Main.asp?link=http://assembly.coe.int/Documents/WorkingDocs/doc03/EDOC9833.htm#P15_65

³⁸ CDDH(2003)026, Appendix VI:

http://www.coe.int/t/e/human_rights/cddh/3_committees/01.%20steering%20committee%20for%20human%20rights%20%28cddh%29/05.%20meeting%20reports/56th_en.asp#TopOfPage

new legal ways should be sought in which the human rights protection system can contribute to the protection of the environment. In order to promote greater awareness in member states, the Committee of Ministers gave terms of reference to the CDDH to draft a manual recapitulating the rights as interpreted in the Court's case-law.

Elements on the protection of human rights and the environment were drafted by the Committee of Experts for the Development of Human Rights (DH-DEV)³⁹. Once again it was mentioned that even though there are no provisions designed to provide general protection of the environment as such, the Convention indirectly provides a certain degree of protection with regard to environmental matters, as demonstrated by the evolving case-law of the European Court of Human Rights in this area.

The Court's case-law has already demonstrated the relevance of issues related to the environment under Articles 2, 3, 6, 8 and 13 of the Convention, and Article 1 of Protocol No. 1 to the Convention. Likewise, concerning the lack of a specific right to the environment, the Court has found ways to fill this environmental human rights gap by allowing compensation for damage to the environment in the context of other rights, such as the right to life (Article 2), privacy and family life (Article 8), the right to a fair trial (Article 6), and freedom of expression (Article 10). By having done so over the years, the Court has shown and confirmed that protection of the environment is a general interest and that environmental disruption affects all aspects of daily life due to the interconnected characteristics of the environment.

The Court has made it possible to hold states liable for negligence in cases of environmental disruption by both the private sector and individuals. The Court has dealt with several sorts of environmental damage, such as air pollution, dangerous chemicals, noise pollution, conservation and procedural issues. However, the Court has not dealt with specific climate change issues yet.

The European Court on Human Rights has clearly used or extended human rights of the ECHR in environmental cases. However, the Court – as some judges have concluded in their opinions – is limited in this practice of stretching ECHR rights, because the Convention does not include a right to environment. More importantly, as mentioned above, in 2003 the Committee of Ministers chose not to have such a specific human right added to the ECHR.

However, the importance of the work of the European Court of Human Rights concerning the linkages between environmental harm and the violation of human rights is incontestable. The Court has already identified in its case-law issues related to the environment which could affect the right to life (Article 2), the right to respect for private and family life as well as the home (Article 8), the right to a fair trial and to have access to a court (Article 6), the right to receive and impart information and ideas (Article 10), the right to an effective remedy (Article 13) and the right to the peaceful enjoyment of one's possessions (Article 1 of Protocol No. 1)⁴⁰.

Principles resulting from the Court's case-law:

- ***Right to life and the environment (Article 2 of the ECHR):*** This article does not only concern deaths resulting directly from the actions of the agents of the State, but also lays down a positive obligation on States to take appropriate steps to safeguard the lives of those within their jurisdiction. Public authorities may be required to take measures to prevent infringements of the right to life as a result of dangerous activities. This involves putting in place a legislative and administrative framework. Secondly, where loss of life may be the result of an infringement of the right to life, the relevant public authorities must provide an adequate response, judicial or otherwise. They must ensure that the legislative and administrative framework is properly implemented and that breaches of the right to life are repressed and punished as appropriate.

- ***Respect for private and family life as well as the home and the environment (Article 8 of the ECHR):*** This right implies respect for the quality of private life as well as the enjoyment of the amenities

³⁹DH-DEV(2005)001:

http://www.coe.int/t/e/human_rights/cddh/3_committees/04.%20development%20of%20human%20Rights%20%28dh-dev%29/03.%20working%20documents/2005/2005_001_en.asp#TopOfPage

⁴⁰ *Manual on human rights and the environment: Principles emerging from the case-law of the European Court of Human Rights*, Council of Europe Publishing, 2006, p.6

http://www.coe.int/t/e/human_rights/cddh/1_publications/EnvironmentManual_en.pdf

of one's home. While the objective of Article 8 is essentially that of protecting the individual against arbitrary interference by public authorities, it may also imply in some cases an obligation on public authorities to adopt positive measures designed to secure the rights enshrined in this Article. This obligation does not only apply in cases where environmental harm is directly caused by State activities, but also when it results from private sector activities. Public authorities must ensure that such measures are implemented so as to guarantee rights protected under Article 8.

- ***Protection of property and the environment (Article 1 of Protocol no. 1 to the ECHR):*** Individuals are entitled to the peaceful enjoyment of their possessions, including protection from unlawful deprivation of property. The general interest in the protection of the environment can justify certain restrictions by public authorities on the individual right to the peaceful enjoyment of one's possessions. Such restrictions should be lawful and proportionate to the legitimate aim pursued. On the other hand, protection of the individual right to the peaceful enjoyment of one's possessions may require public authorities to ensure certain environmental standards. The effective exercise of this right does not depend merely on the public authorities' duty not to interfere, but may require them to take positive measures to protect this right.

- ***Information and communication on environmental matters and the right to receive and impart information and ideas on environmental matters (Article 10 of the ECHR):*** There is strong public interest in enabling individuals and groups to contribute to public debate through the dissemination of information and ideas. Restrictions by public authorities on the right to receive and distribute information and ideas, including on environmental matters, must be prescribed by law and follow a legitimate aim.

- ***Access to information on environmental matters (Articles 2 and 8 of the ECHR):*** Public authorities may be under a specific obligation to secure a right of access to information in relation to environmental issues in certain circumstances. When public authorities engage in dangerous activities which they know involve adverse risks to health, they must establish an effective and accessible procedure to enable individuals to seek all relevant and appropriate information.

- ***Decision-making processes in environmental matters and public participation in them:*** In the process of making decisions related to the environment, public authorities must take into account the interests of individuals who may be affected. In this context, it is important that the public be able to make representations to the public authorities. Where public authorities consider complex issues of environmental and economic policy, the decision-making process must involve appropriate research and studies in order to predict and evaluate the effects on the environment and to enable them to strike a fair balance between the various interests at stake.

- ***Access to justice and other remedies in environmental matters (Article 13 of the ECHR):*** Several provisions of the Convention guarantee that individuals should be able to commence judicial or administrative proceedings in order to protect their rights. The right of access to a court under Article 6 will, as a rule, come into play when a "civil right or obligation", within the meaning of the Convention, is the subject of a "dispute". This right includes the right to see final and enforceable court decisions executed and implies that all parties, including public authorities, must respect court decisions. The right of access to a court, guaranteed by Article 6, applies if there is a sufficiently direct link between the environmental problem at issue and the civil right invoked. In case of a serious, specific and imminent environmental risk, Article 6 may be invoked if the danger reaches a degree of probability which makes the outcome of the proceedings directly decisive for the rights of those individuals concerned. In addition to the right of access to a court as described above, Article 13 guarantees that individuals claiming that their rights and freedoms as set forth in the Convention have been violated, must have an effective remedy before a national authority. However, the protection afforded by Article 13 does not go so far as to require any particular form of remedy. The State has a margin of appreciation in determining how it gives effect to its obligations under this provision..

Indicatively, the cases in the table below show that where a state is aware of a threat to human rights, regardless of the cause, it has a positive obligation to act because state inaction would exacerbate the situation. This is particularly significant in the climate change context where it is often difficult to establish the causal connection between the activities (or omissions) of the state or of private actors who have emitted greenhouse gas and the human rights impact.

Lopez Ostra v. Spain (1994): In this case, the complainant lived near a waste water treatment plant, which caused serious health problems and nuisance to residents in the town. The Court held that severe environmental pollution may affect a person's well-being and prevent them from enjoying their homes in such a way as to affect their private and family life (Article 8). The Court rules that the State had a positive duty to protect that right (e.g. by regulating the plant) and that it had failed to do so.

Balmer - Schafroth v. Switzerland (1997): The Court examined whether the applicants could successfully invoke the right of access to a court in proceedings concerning the granting of operating license for a nuclear power plant. The Court recognised that there had been a genuine and serious dispute between the applicants and the decision-making authorities about the extension of operating licences for the nuclear power plants. The applicants had a "right" recognised under Swiss law to have their life, physical integrity and property adequately protected from the risks entailed by the use of nuclear energy. The Court found that the decisions were of a judicial character. It had to determine whether the outcome of the proceedings in question had been directly decisive for the rights asserted by the applicants, i.e. whether the link between the public authorities' decisions and the applicants' rights to life, physical integrity and protection of property was sufficiently close to bring Article 6 into play. The Court found that the applicants had not established a direct link between the operating conditions of the power station and the right to protection of their physical integrity, as they had failed to show that the operation of the power station had exposed them personally to a danger that was not only serious but also specific and, above all, imminent. The Court ruled therefore that Article 6 was not applicable.

Guerra and Others v. Italy (1998): In this case, a chemical factory situated near the applicants' home, was classified as high-risk. The applicants did not complain about the action, but rather about the inaction of the public authorities. The Court concluded that the public authorities had not fulfilled their obligation to secure the applicants' right to respect for their private and family life, on the grounds that the applicants had not received essential information from the public authorities that would have enabled them to assess the risks which they and their families might run if they continued to live in the area. The Court ruled that there had been a violation of Article 8.

Kyrtatos v. Greece (2003): The applicants brought a complaint under Article 8 arguing that urban development had led to the destruction of a swamp adjacent to their property, and that the area around their home had lost its scenic beauty. The Court emphasised that domestic legislation and certain other international instruments rather than the Convention are more appropriate to deal with the general protection of the environment. The purpose of the Convention is to protect individual human rights, such as the right to respect for the home, rather than the general aspirations or needs of the community taken as a whole. In this case, the Court found no violation of Article 8. However, the Court found that by failing for more than seven years to take the necessary measures to comply with two final court decisions quashing building permits on the ground of their detrimental consequences on the environment, the Greek authorities had deprived the provisions of Article 6, paragraph 1, of any useful effect.

Hatton and Others v. UK (2003): This case concerned aircraft noise generated by an international airport and the regulatory regime governing it. The Court considered whether the applicants had had a remedy at the national level to enforce their Convention rights under Article 8. The applicants argued that the scope of the judicial review provided by the English courts had been too limited. At the time, the courts were only competent to examine whether the authorities had acted irrationally, unlawfully or manifestly unreasonably. The English courts had not been able to consider whether the claimed increase in night flights represented a justifiable limitation on the right to respect for private and family lives, or for the homes of those who lived near Heathrow Airport. The Court accordingly held that there had been a violation of Article 13.

Oneryildiz v. Turkey (2004): In this case, the Grand Chamber of the ECHR observed that the positive obligation to take all appropriate steps to safeguard life “*entails above all a primary duty on the State to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life*”. 39 people who were living in a slum below a rubbish tip in Istanbul died when a methane gas explosion occurred. The tip had been poorly managed by the Istanbul City Council, which had failed to respond to an expert report warning of the dangers of an explosion. The Court held that there had been a violation of the right to life (Article 2), because even though the state is not obliged to take action in relation to every presumed threat to life, where a state knows or ought to have known of a real and immediate risk to life, it has a positive obligation to act. The state had failed to communicate essential information to residents about the risks of where they lived.

Gorraiz-Lizarraga and Others v. Spain (2004): One of the applicants in this case was an association which had brought proceedings against plans to build a dam in a village, which would result in three nature reserves and a number of small villages being flooded. Relying on Article 6, paragraph 1, the applicants submitted that they had not had a fair hearing as they had been prevented from taking part in the proceedings concerning the referral to the Constitutional Court of the preliminary question, whereas the State and State Counsel’s Office had been able to submit observations to the Constitutional Court. The Government contested the applicability of Article 6 arguing that the dispute did not concern pecuniary or subjective rights of the association, but only the general question of legality and collective rights. The Court rejected this view. Although the dispute was partly about the defence of the general interest, the association also complained about a concrete and direct threat to the personal possessions and the way of life of its members. Since the action was, at least partly, “pecuniary” and “civil” in nature, the association was entitled to rely on Article 6 paragraph 1 which was therefore applicable. The Court stressed that the judicial review provided by the Constitutional Court had been the only means for the applicants to challenge, albeit indirectly, the interference with their property and way of life. However, the Court found that there had been no violation of Article 6 paragraph 1.

Budayeva v. Russia (2007): In this case, the homes of many residents in the town of Tyrnauz were destroyed by a mudslide. The complainant argued that the Russian government knew about the risk of the mudslide and failed to take preventive action by reinforcing a dam wall and failed to warn the residents of the imminent risk. The Court has recently accepted the complaint as admissible.

VI. CONCLUDING REMARKS

The effects of climate change are already being felt by communities and individuals worldwide. Particularly vulnerable are those living in places where even small climatic changes can have catastrophic consequences for lives and livelihoods. Often the effects of climate change on human rights are determined by non-climatic factors, including discrimination and unequal power relationships. This underlines the importance of addressing human rights threats posed by climate change through adequate policies and measures which are coherent with overall human rights objectives. Human rights standards and principles should inform and strengthen policy measures in the area of climate change.

The report of the OHCHR on the relationship between climate change and human rights and the Resolution adopted in March 2009 by the Human Rights Councils are very important steps towards taking into account and integrating the principles of human rights law into the policies and measures adopted to combat climate change. The broadening of the debate on the subject will increase the attention given to the human and social dimensions of climate change and it will raise awareness on this issue. However, there is a need for more detailed studies at country and international level (including contribution from international organisations such as the Council of Europe), in order to assess the human rights impact of climate change-related phenomena. Global warming can only be dealt with through co-operation by all members of the international community. It is now widely acceptable that international human rights law should complement the UNFCCC and that human rights principles should be recognised within the post-Kyoto regime.

ANNEXES

*Annex 1: How climate change undermines human rights*⁴¹

Human-rights norms in international law	Current and projected impacts of climate change upon human rights
<p>The Right to Life and Security</p> <p>‘Everyone has the right to life, liberty and security of person.’ (UDHR, Article 3)</p>	<ul style="list-style-type: none"> • There will be more deaths, disease, and injury due to the increasing frequency and intensity of heat waves, floods, storms, fires, and droughts. • Rising sea levels will increase the risk of death and injury by drowning. Up to 20 per cent of the world’s population live in river basins that are likely to be affected by increased flood hazard by the 2080s. • Heat waves are likely to increase deaths among elderly or chronically sick people, young children, and the socially isolated. Europe’s 2003 heat wave – induced by climate change – resulted in 27,000 extra deaths.*
<p>The Right to Food</p> <p>‘The State Parties to the present Covenant, recognise the fundamental right of everyone to be free from hunger...’ (ICESCR, Article 11)</p>	<ul style="list-style-type: none"> • Future climate change is expected to put close to 50 million more people at risk of hunger by 2020, and an additional 132 million people by 2050. • In Africa, shrinking arable land, shorter growing seasons, and lower crop yields will exacerbate malnutrition. In some countries, yields from rain-fed agriculture could fall by 50 per cent as soon as 2020. • In parts of Asia, food security will be threatened due to water shortages and rising temperatures. Crop yields could fall by up to 30 per cent in Central and South Asia by 2050.
<p>The Right to Subsistence</p> <p>‘Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing...’. (UDHR, Article 25)</p> <p>‘In no case may a people be deprived of its own means of subsistence.’ (ICCPR, Article 1.2 and ICESCR, Article 1.2)</p>	<ul style="list-style-type: none"> • Water: By 2020, between 75 million and 250 million people in Africa are likely to face greater water stress due to climate change. Reduced water flow from mountain glaciers could affect up to one billion people in Asia by the 2050s. • Natural resources: Approximately 20–30 per cent of plant and animal species assessed so far are likely to be at increased risk of extinction if average global temperatures rise more than 1.5–2.5°C. Coral bleaching and coastal erosion will affect fish stocks – currently the primary source of animal protein for one billion people. • Property and shelter: Millions more people risk facing annual floods due to sea-level rise by the 2080s, mostly in the mega-deltas of Asia and Africa. On small islands, too, sea-level rise is expected to exacerbate inundation, storm surge, and erosion, threatening vital infrastructure, settlements, and facilities that support the livelihoods of island communities.
<p>The Right to Health</p> <p>‘The State Parties to the present Covenant recognise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.’ (ICESCR, Article 12)</p>	<ul style="list-style-type: none"> • Child malnutrition will increase, damaging growth and development prospects for millions of children. • Increasing floods and droughts will lead to more cases of diarrhoea and cholera. Over 150,000 people are currently estimated to die each year from diarrhoea, malaria, and malnutrition caused by climate change.* • Changing temperatures will cause some infectious diseases to spread into new areas. It is estimated that 220–400 million more people will be at risk of malaria. The risk of dengue fever is estimated to reach 3.5 billion people by 2085 due to climate change.

Sources: Universal Declaration of Human Rights (UDHR); International Covenant on Civil and Political Rights (ICCPR); International Covenant on Economic, Social and Cultural Rights (ICESCR); the Intergovernmental Panel on Climate Change (IPCC) 2007, Working Group II; *World Health Organisation.

⁴¹ Oxfam International Briefing Paper, “Climate Wrongs and Human Rights: Putting people at the heart of climate-change policy”, p. 6, http://www2.ohchr.org/english/issues/climatechange/docs/Oxfam_International.pdf

Annex 2: Chart of Human Impacts of Climate Change⁴²

Climate Impact	Human Impact	Rights Implicated
<p>Sea Level Rise</p> <ul style="list-style-type: none"> • Flooding • Sea Surges • Erosion • Salination of land and water 	<ul style="list-style-type: none"> • Loss of land • Drowning, injury • Lack of clean water, disease • Damage to coastal infrastructure, homes, and property • Loss of agricultural lands • Threat to tourism, lost beaches 	<ul style="list-style-type: none"> • Self-determination [ICCPR;ICESCR,1] • Life [ICCPR, 6] • Health [ICESCR, 12] • Water [CEDAW,14; ICRC 24] • Means of subsistence [ICESCR,1] • Standard of living [ICESCR, 12] • Adequate housing [ICESCR,12] • Culture [ICCPR, 27] • Property [UDHR,17]
<p>Temperature Increase</p> <ul style="list-style-type: none"> • Change in disease vectors • Coral bleaching • Impact on Fisheries 	<ul style="list-style-type: none"> • Spread of disease • Changes in traditional fishing livelihood and commercial fishing • Threat to tourism, lost coral and fish diversity 	<ul style="list-style-type: none"> • Life [ICCPR, 6] • Health [ICESCR, 12] • Means of subsistence [ICESCR, 1] • Adequate standard of living [ICESCR, 12]
<p>Extreme Weather Events</p> <ul style="list-style-type: none"> • Higher intensity storms • Sea Surges 	<ul style="list-style-type: none"> • Dislocation of populations • Contamination of water supply • Damage to infrastructure: delays in medical treatment, food crisis • Psychological distress • Increased transmission of disease • Damage to agricultural lands • Disruption of educational services • Damage to tourism sector • Massive property damage 	<ul style="list-style-type: none"> • Life [ICCPR,6] • Health [ICESCR,12] • Water [CEDAW,14; ICRC 24] • Means of subsistence [ICESCR,1] • Adequate standard of living [ICESCR, 12] • Adequate and secure housing [ICESCR,12] • Education [ICESCR,13] • Property [UDHR,17]
<p>Changes in Precipitation</p> <ul style="list-style-type: none"> • Change in disease vectors • Erosion 	<ul style="list-style-type: none"> • Outbreak of disease • Depletion of agricultural soils 	<ul style="list-style-type: none"> • Life [ICCPR,6] • Health [ICESCR,12] • Means of subsistence [ICESCR,1]

⁴² Taken from the Maldives' submission for the OHCHR study:

http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Maldives_Chart_of_human_impacts_of_climate_change.pdf