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Human Rights in a Warmer World: The Case of Climate Change Displacement

By Carl Söderbergh[1]

> *Sila* – n. Inuit for "weather", "the elements", "intelligence/consciousness" and "mind".
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> It is an all-pervading, life-giving force – the natural order, a universal consciousness… *Sila* connects a person with the rhythms of the universe, integrating the self with the natural world. [2]

I. Introduction

The aim of this study is to place the recent debate concerning global warming in a human rights context. As ever more alarming prognoses have been presented by climatologists and environmental experts, the author has been struck by the fact that the debate on the human rights consequences of climate change has only recently commenced.

While the considerable work being done on climate change is welcome, what would a rights-based analysis add to the debate? It is the author's belief that, if the on-going climate change negotiations were supplemented by a human rights framework, the impact of climate change on individuals and groups who are at risk could be described in such a way as to oblige states to meet the needs of populations at risk. Moreover, human rights can provide added content and greater specificity when discussing states' responsibilities, even towards those outside their own boundaries. Given the social justice aspects of climate change, broadly speaking

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[2] Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States submitted by Sheila Watt-Cloutier with the support of the Inuit Circumpolar Conference 18 (2005)(hereinafter Inuit Petition), *available at* http://earthjustice.org/sites/default/files/library/legal_docs/petition-to-the-inter-american-commission-on-human-rights-on-behalf-of-the-inuit-circumpolar-conference.pdf, *accessed on 6 Jan. 2011*. Quote taken from the ARCTIC CLIMATE IMPACT ASSESSMENT: IMPACTS OF A WARMER CLIMATE: FINAL OVERVIEW REPORT (2004).

that the poorest inhabitants of our planet will suffer most the consequences of the wealth of the richest, this feels particularly urgent.

Consideration of states' extra-territorial obligations to populations other than their own feels even more pressing given the mixed results of the recent UN Climate Change Conferences in Copenhagen and Cancun. While the Copenhagen Accord includes language affirming the need to keep any increase in temperature to below 2 degrees Celsius and establishes a 30 billion US Dollar fund,[3] many observers felt that the Conference was a disappointment.[4] Indeed, that Accord does not mention the human rights consequences of climate change.

The silence on human rights and climate change has had its parallels in a prolonged debate concerning environmental displacement. Ever since the term "environmental refugee" was coined in the 1980's, migration experts, environmental scientists and international refugee lawyers have discussed whether the phenomenon exists, how it should be described, and whether the term has any legal implications.[5] This debate has largely focussed on the phenomenon itself as well as on international refugee law, with only passing reference being made to international human rights law. Most of the actors in the debate have concluded that the concept of "environmental refugee" should fall outside the scope of the 1951 Convention relating to the status of refugees (hereinafter the 1951 Convention).[6]

The author has reacted to this immediate bypassing of the 1951 Convention, even before a body of specific cases has ever been adjudicated by the relevant national or international bodies. Moreover, most of the studies and reports published so far have omitted to apply other relevant human rights standards. The main purpose of this study is therefore to rectify these omissions. The author urges all concerned to be more open-minded with regard to possible application of the 1951 Convention to at least certain groups of climate change displaced and to consider the possibilities for this against a backdrop of other human rights standards. For the sake of this study on human rights and climate change, then, the 1951 Convention represents a paradigmatic example and focus will be placed specifically on the issue of climate change displacement.

The silence with regard to the human rights dimension of climate change is now easing. In April 2008, the UN Human Rights Council passed Resolution 7/23, introduced by the Government of the Maldives, instructing the UN Office of the High Commissioner for Human

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[3] United Nations Framework Convention on Climate Change, Conference of Parties No. 15 (Copenhagen), Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, Addendum, Part Two: Action taken by the Conference of the Parties at its fifteenth session, paras. 1 & 8, U.N. Doc. FCCC/CP/2009/11/Add.1 (hereinafter Copenhagen Accord). United Nations Framework Convention on Climate Change, May 9, 1982, 1771 U.N.T.S. 107, 165; S. Treaty Doc No. 102-38 (1992); U.N. Doc. A/AC.237/18 (Part II)/Add.1; 31 I.L.M. 849 (1992)(hereinafter the UNFCCC).

[4] For example, Greenpeace spoke of the "post-Copenhagen blues" in a comment, *available at* http://www.greenpeace.org.uk/tags/copenhagen, *accessed on 6 Jan. 2011*.

[5] The author chooses to use the terms "climate change displacement" and "environmental displacement" as descriptive terms, without legal implications.

[6] Convention relating to the Status of Refugees, *adopted on* 28 July 1951, 189 U.N.T.S. 150 (*entered into force* 22 April 1954); Protocol Relating to the Status of Refugees, 31 Jan. 1967, 606 U.N.T.S. 267; 19 U.S.T. 6223.

Rights (OHCHR) to conduct a study on human rights and climate change. This study led to a report, which was then presented at the tenth session of the Human Rights Council, held during the spring of 2009.[7] In its subsequent Resolution 10/4, the Human Rights Council decided to hold a plenary panel discussion on climate change and human rights at its eleventh session in June 2009.[8]

The 2010 UN Climate Change Conference in Cancun mainly appeared to focus on keeping the negotiations of a successor agreement to the Kyoto Protocol alive. It had some practical outcomes, such as a suggested 100 billion US Dollar "green climate fund" to assist developing countries defend themselves against the consequences of climate change. With regard to looking at the issue of climate change and human rights, it nevertheless marked a slight improvement. One of the outcome documents actually cites Human Rights Council Resolution 10/4 in a preambular paragraph and recognises that: "[T]he adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights and that the effects of climate change will be felt most acutely by those segments of the population that are already vulnerable owing to geography, gender, age, indigenous or minority status and disability."[9]

Moreover, certain government commissions and international human rights organisations have issued briefings and reports concerning human rights and climate change, in some cases in direct response to the UN Human Rights Council process. And the very first claim has been presented to an international treaty body. This study will therefore attempt to summarise the current state of the climate change and human rights discourse particularly relating to displacement, and point out directions for future research and analysis.

II. Executive Summary

The study begins with a review of current climate change forecasts, focussing in particular on those effects that will raise human rights issues. It summarises research in two particular fields, namely how climate change can cause armed conflict and also how it will lead to large-scale displacement.

The study goes on to consider the linkages between climate change and human rights, beginning with an overview of those principles that will most likely be at stake. While listing human rights standards that will become relevant, the study considers whether these indeed can be thought to be violated in a climate change context. This raises issues not only

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[7] *See generally* Report of the Office of the UN High Commissioner for Human Rights on the relationship between climate change and human rights, U.N. Doc. A/HRC/10/61 (2009)(hereinafter OHCHR Report) *available at* http://www2.ohchr.org/english/issues/climatechange/index.htm, *accessed on 6 Jan. 2011.*

[8] The resolutions and record of the plenary panel discussion are available on the OHCHR website. *Id.*

[9] Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention, Draft Decision CP. 16 preamble (2010) (U.N. Doc. No. not yet available) *available at* http://unfccc.int/files/meetings/cop_16/application/pdf/cop16_lca.pdf, *accessed on 5 Jan. 2011*.

concerning the state's obligations to protect the individual from harm, but also the wider social justice issue of whether such obligations can be considered to exist across borders.

Human rights law has traditionally focussed on an individual-state relationship. While this relationship will remain relevant for most persons in the future, climate change risks de-coupling populations from territories, most particularly in the case of disappearing island-states. Climate change also disconnects victim from perpetrator, as the agents of harm are to varying degrees much of the world's human population. The study discusses the implications of these shifts, not least the need for states to assume responsibility for the protection of human rights across national boundaries, something which they have clearly been hesitant to do. Can, then, the government of a major greenhouse gas-emitting country be considered to have obligations towards citizens of disappearing small island-states?

In order to provide a climate change-relevant content to states' obligations to their own populations, the study proposes that climate change should be analysed using the "due diligence" approach being applied to human rights instruments by treaty bodies and states. Concerning states' obligations towards the populations of countries other than their own, one potential way forward can be the principle of "Responsibility to Protect", as expressed at the UN World Summit of 2005. The study also outlines certain principles of international environmental law that may have bearing on the question. And to end this section on human rights, the study will look at some of the most recent international litigation.

The study turns thereafter to the debate concerning the term "environmental refugee". The issue of climate change displacement has emerged against a backdrop of a debate concerning this wider phenomenon. In brief, since the 1980's, leading environmental experts have warned of the large numbers of people displaced on account of environmental disasters and degradation.[10] Migration experts have discussed patterns and the underlying causes of such movements, usually concluding that the environmental impact cannot be separated from other political and social causes. Finally, a number of refugee lawyers participating in the debate have warned against use of the term "environmental refugee," as this would risk undermining the current refugee protection regime. Indeed, the current UN High Commissioner for Refugees, Mr. Antonio Guterres has repeatedly stated that environmentally displaced in general cannot be considered refugees.[11]

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[10] In the middle of the 1990's, for example, the environmental scientist Professor Norman Myers published several works in which he concluded that 25 million were already environmentally displaced. Norman Myers, *Environmental Refugees: A Growing Phenomenon of the 21st Century*, PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY 3 (2001)(hereinafter Myers 2001). The figure has often been repeated, for example in the 2001 World Disasters Report of the International Federation of Red Cross and Red Crescent Societies.

[11] *See e.g.* UNHCR, Climate change, natural disasters and human displacement: a UNHCR perspective (2008) which was prepared for the OHCHR Report *supra* note 7 (hereinafter UNHCR 2008). This has since been augmented by UNHCR, Forced Displacement in the Context of Climate Change: Challenges for States under International Law, Submission to the 6th Session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA 6)(i.e. the UNFCCC), 1-12 June 2009 (2009)(hereinafter UNHCR 2009), *available at* http://www.unhcr.org/cgi-bin/texis/vtx/search?page=search&docid=4a1e4d8c2&query=climate%20refugees, *accessed on 6 Jan. 2011*.

The author's position is that this scepticism is premature. The author believes that displacement caused by climate change may well meet the criteria contained in Article 1.A.2 of the 1951 Convention. The study considers ways in which the 1951 Convention can be applied to certain categories of climate change displacement. In addition, it looks at other migration-related legal standards that can be relevant.

This provides the basis for drawing some conclusions and suggesting ways forward. As regards environmental displacement, the study recommends that application of the 1951 Convention along with other international asylum and migration law instruments should not be dismissed out of hand. It recommends, for example, that application of the *non-refoulement* principle[12] under human rights instruments other the 1951 Convention can be an important direction for meeting the protection needs of the environmentally displaced. In particular, the author recommends moving away from attempts to categorise different forms of climate change-induced movements and instead suggests considering the affected populations in light of possibilities that already exist for protection based upon the risk of serious violations of economic, social and cultural rights.

The author has pondered whether an additional protocol to the UN Framework Convention on Climate Change (UNFCCC) should be sought.[13] While the author feels that some insertion of human rights language into the forthcoming successor agreement to the Kyoto Protocol would be beneficial, there are certain dangers in creating a parallel protection structure, specifically directed towards climate change displacement. In enumerating categories requiring international protection, there is always a risk of omitting to mention others who are also in need. Thus, the study proposes the application of existing instruments and doctrines to address the needs of climate change displaced.

The author wishes to be clear about the limited scope of this study, which is intended to summarise the state of current research into climate change, human rights and displacement and suggest ways forward. The study will include discussion on under-lying theoretical and philosophical issues such as the notion of persecution in international law and the role of the state in human rights. These analyses can unfortunately not be considered conclusive but should be seen as way-markers for reflection and future research. Moreover, the study touches briefly on international environmental law principles. This should be read as a human rights and asylum lawyer's interested reflection that this other body of law may have progressed further with respect to extra-territorial responsibilities.

III. Climate Change

a. General Overview

[12] The concept is contained in Article 33, para. 1 of the 1951 Convention, which states: "No Contracting State shall expel or return (*refouler*) a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened, on account of his race, religion, nationality, membership of a particular social group or political opinion."

[13] As indeed is suggested by Frank Biermann & Ingrid Boas, *Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees*, 33 GLOBAL GOVERNANCE WORKING PAPER 26 (2007).

The average global temperature is 0.7 degrees C higher today than pre-industrial levels. Eleven of the twelve years 1995-2006 rank among the twelve warmest years since 1850. And 2009 tied with 2006 as the fifth warmest year on record. Global average sea-level rose at an average rate of 1.8 mm per year during the period 1961-2003 and 3.1 mm per year during 1993-2003. Nearly half of the latter figure has been caused by thermal expansion of the world's oceans and approximately 28 per cent due to losses in glaciers, ice-caps and the polar ice-sheets. Extreme weather events have increased in both frequency and intensity over the last 50 years.[14] The year 2010 sadly looks as if it will set new records, both in terms of temperature and with regard to the number and intensity of extreme weather events.

The link between the rise in temperature and human activity has now been irrefutably established. In the 2007 report produced by the International Panel on Climate Change (IPCC), greenhouse gas emissions levels were estimated at 455 parts per million (ppm) of carbon dioxide-equivalent emissions, nearly double pre-industrial levels and still rising. The amount of carbon dioxide atmospheric concentration was estimated at 379 ppm.[15] The rate of greenhouse gas emissions during the 10-year period 1995-2004 was more than double that of the previous 25 years.[16]

During the period 1970-2004, the largest growth in emissions of greenhouse gases has come from energy supply, transport and industry, while emissions of residential and commercial buildings, forestry (including deforestation) and agriculture have grown at a smaller rate.[17]

The question then is at what level emissions can be stabilised and what kind of temperature increase such a level can mean. If greenhouse gas emissions can be stabilised at 445-490 ppm CO_2e, there remains a 50 per cent chance that the average global temperature rise will exceed 2-2.4 degrees C.[18] At 550 ppm CO_2e, the probability is almost 80 per cent of a temperature increase over 2 degrees C. It is doubtful however that governments will be able to achieve keeping emissions levels at 450 ppm CO_2e, not least on account of parallel processes such as population growth,[19] and this means that a temperature rise of at least 2 degrees C seems very likely. Even a target of around 490-535 ppm CO_2e would, according to the IPCC, mean that global emissions must peak by 2020 and then have fallen by 50-85 per cent by 2050.[20]

The Stern Review warns that the level of 550 CO_2e could be reached as early as 2035.[21] There is at least a 50 per cent risk that the stock of greenhouse gases is trebled by the end of the

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[14] INTERNATIONAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT 30 (2007)(hereinafter IPCC Synthesis Report).

[15] The pre-industrial level of carbon dioxide atmospheric concentration was 280 ppm. *Id.* at 37. *See also* at 36 for an explanation of measuring greenhouse gases in the form of carbon dioxide-equivalent emissions.

[16] *Id*. at 37.

[17] *Id*.

[18] IPCC, AR4, WG III TECHNICAL SUMMARY 39 (2007).

[19] All the prognoses point to the global population increasing from 6.54 billion in 2005 to 9.075 billion by the middle of the century. INTERNATIONAL ORGANIZATION FOR MIGRATION, MIGRATION AND CLIMATE CHANGE, MIGRATION RESEARCH SERIES NO. 31, 24 (2008)(hereinafter IOM Report).

[20] IPCC Synthesis Report *supra* note 14 at 90.

[21] LORD STERN OF BRENTFORD ET AL., THE STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE iii (2006)(hereinafter Stern Review).

century, leading to a 5 degree C increase in global average temperature. In order to point out the gravity of such an increase, the Stern Review notes that we live today in a world that is only 5 degrees C warmer than the last Ice Age.[22] It concludes that average global temperatures will rise by 2-3 degrees C within the next five decades.[23]

What then does this mean for the world's population? Just as the causation is unevenly distributed, the impact of climate change will most directly be felt by the poorest countries and peoples.[24] With regard to access to water, a temperature rise of 2 degrees C will result in 1 to 4 billion people experiencing growing water shortages, especially in Africa, the Middle East, southern Europe and parts of South and Central America.[25] The study cited does not consider the potential for adaptation and so highlights potential water stress. Land in constant drought will increase from 2 per cent to 10 per cent by 2050; land in extreme drought will increase from 1 per cent to 30 per cent by the end of the century.[26]

Concerning agriculture, higher latitude countries may in fact benefit from a moderate 2-3 degree C warming but tropical regions will definitely see declines in yield, given that many farmers are already operating close to critical temperature thresholds.[27] Around 800 million people are already at risk of hunger, and malnutrition currently causes around 4 million deaths annually. A moderate 2-3 degree C warming would add a further 30-200 million people to those at risk of hunger.[28]

Climate change will also exacerbate the spread of diseases. The World Health Organisation estimates that since the 1970's climate change is already responsible for more than 150,000 deaths annually, through the increased incidence of diarrhoea, malaria and malnutrition. Again, these increases occur primarily in Africa and other developing regions. A mere 1 degree C increase in global temperature[29] could double this figure to 300,000 deaths annually.[30]

Indeed, there is already precedence for the connection between disease and extreme weather events. Following Hurricane Mitch striking Honduras in 1998, the country recorded an additional 30,000 cases of malaria and 1,000 cases of dengue fever. The population remaining in New Orleans suffered health problems following Hurricane Katrina, which left toxic moulds causing respiratory problems.[31]

b. Regional Impacts

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[22] *Id*. at iv.
[23] *Id*.
[24] *Id*. at vii.
[25] *Id*. at 63.
[26] IOM Report *supra* note 19 at 16.
[27] Stern Review *supra* note 21 at 68.
[28] *Id*. at 72.
[29] It should be noted that all the temperature increases mentioned in these studies are in relation to pre-industrial global average temperatures.
[30] Stern Review *supra* note 21 at 75. These figures do not take into account any alleviation of cold-related deaths.
[31] *Id*. at 76.

Looking at climate change regionally,[32] in Africa between 75 and 250 million people risk suffering increased water shortages by 2020. In some countries, agricultural yields risk being reduced by 50 per cent by that year. Malaria risks spreading to previously unaffected areas in such countries as Zimbabwe and South Africa. Projected sea-level rise risks severely damaging many major coastal cities as well as affecting important mangroves and coral reefs. Adaptation to sea-level rise is estimated to cost at least 5-10 per cent of the affected countries' GDP.

In the monsoon regions of Asia, the warmer wetter weather will bring an increase in water availability. One study projects 20 per cent more rain in the South Asian monsoon by 2050.[33] However the expected increase in weather intensity will bring with it an increased flood risk. Melt water from glaciers in the Himalayan and Hindu Kush mountain ranges currently supply water to 500 million people. Approximately a quarter of China's population gets most of its fresh water from glacial melt water.[34] Glacial melt at current warming levels will mean that the Himalayan glaciers will shrink considerably, and this will add to the risk of flooding and gravely affect access to water.[35] Per capita availability of freshwater in India, for example, risks being cut by nearly half by 2025. A one-meter rise in sea-level would flood 5,000 km^2 of the Red River delta and 15,000 to 20,000 km^2 of the Mekong River delta, affecting 4 million and 3.5-5 million inhabitants respectively. Approximately 15 million people live within 1 meter of the current average sea-level in Bangladesh and therefore risk being displaced.

In Central and Latin America, the frequency and intensity of hurricanes are likely to increase. Shifts in temperature and water availability will mean that savannah will replace rain forest in the eastern Amazon and that farmland in other areas will shift to desert. The Amazon is home to 1 million people of 400 different indigenous groups, and they will be particularly at risk if the rain forest dies back. Sea-level rise in the region will increase the risk of flooding in low-lying areas. And by the 2020's poor access to water will affect between 7 and 77 million people. In the tropical Andes, glaciers have already shrunk by a quarter in the last 30 years.[36]

In the Middle East and North Africa, populations are already affected by limited access to fresh water. The Stern Review warns that an additional 155-600 million people may suffer increased water stress. Added competition for water risks exacerbating regional tensions. The Nile delta and the Gulf coast will be at risk of flooding due to sea-level rise. Desertification is a risk throughout much of the region.

Water stress is projected to worsen by 2030 in parts of Australia and New Zealand. With a 4 degree C rise in global average temperature, agriculture in large regions of Australia will

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[32] See INTERNATIONAL COUNCIL ON HUMAN RIGHTS POLICY, CLIMATE CHANGE AND HUMAN RIGHTS: A ROUGH GUIDE 91 onwards (2008)(hereinafter ICHRP Report) for a helpful summary drawing on both the IPCC reports and the Stern Review. Unless other references are given, the following is drawn from this summary.

[33] IOM Report *supra* note 19 at 16.

[34] Stern Review *supra* note 21 at 63.

[35] Note that forecasts of the Himalayan glaciers largely disappearing by the mid-2030's, as contained in the IPCC 2007 report, were withdrawn following controversy during 2009-2010 regarding their accuracy. Nevertheless, the Himalayan glaciers are retreating, albeit not at that rate.

[36] Stern Review *supra* note 21 at 63.

simply not be possible.[37] By 2050, sea-level rise and extreme weather events will badly affect coastal areas of Australia and New Zealand; these risks will be worsened by continued coastal development and population growth. [38]

Small island-states will be especially vulnerable to climate change. The highest point on Kiribatu is 4.6 meters above sea-level, but most of the island is lower than one meter high. Thus, a one-meter rise risks causing most of the country to disappear. Indeed, even before a one-meter rise, sea-level rise will incrementally cause inundation, exacerbate damage from extreme weather events, cause erosion, reduce available agricultural land, and worsen access to fresh water on Kiribatu and other small island-states. Beach erosion and destruction of coral reefs will affect such industries as fisheries and tourism.

Southern Europe may see serious droughts occur every 10 years as opposed to every 100 years, which has traditionally been the norm.[39] Major coastal cities in Europe and North America will be at risk of flooding; other population centres will be at risk of flash floods. In Europe, more than 13 million people across five countries could be affected by flooding due to sea-level rise.[40] On both continents, warming in mountainous areas will continue to cause glacial retreat and reduce snow cover, causing more winter flooding and reduced water access. Climate change will increase the frequency of heat waves, adding to health risks.[41] The western United States will also be vulnerable to damaging temperature thresholds being reached more often, leading to worsening water shortages.[42]

Average temperature in the Arctic appears to be rising at twice the speed of other regions, due to the aggravated impact of climate change at the poles. The past thirty years have witnessed an 8 per cent decrease in the annual average amount of sea-ice; in the region closest to the Atlantic, the sea-ice cover has dropped by as much as 20 per cent. The thickness has also been affected, with a 10-15 per cent drop in the thickness of the sea-ice in some areas.[43] Indigenous peoples in the Arctic regions of northern Europe and North America are at risk of being displaced and having traditional patterns disrupted by shifting weather patterns, coastal erosion, and ice-cap and permafrost melt.[44]

Before going on to discuss the above from a human rights perspective, some explanation may be called for. Much of the above information is given in the form of ranges of figures. The reason is partly on account of the fact that the IPCC report and the Stern Review are summaries of various research results. Another reason is that they differentiate between different scenarios, depending in particular on the extent of political consensus achieved and resulting international action to reduce greenhouse gas emissions and to support affected populations in their adaptation efforts. For good or ill, the future will presumably become a

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[37] *Id*.
[38] IPCC Synthesis Report *supra* note 14 at 50.
[39] Stern Review *supra* note 21 at 62.
[40] Angela Williams, *Turning the Tide: Recognizing Climate Change Refugees* in 30 INTERNATIONAL LAW, LAW & POLICY 4, 505 (2008), citing the European Environmental Agency.
[41] IPCC Synthesis Report *supra* note 14 at 50-51.
[42] Stern Review *supra* note 21 at 67.
[43] Inuit Petition *supra* note 2 at 23 (citing the ARCTIC CLIMATE IMPACT ASSESSMENT 668 onwards).
[44] See *id*. at 39 onwards for a more detailed description.

little clearer during the course of 2011, when country delegations follow up on the Copenhagen and Cancun Accords and continue working towards the successor agreement to the Kyoto Protocol.

c. Climate Change and Armed Conflict

There are already examples where environmental degradation is considered to have led to increased competition over dwindling natural resources and moreover to conflict.[45] The conflict in Darfur is perhaps the most well known, where the drought in the 1970's strained the coping mechanisms of the settled and nomadic populations of the region. Recurring drought since then has reduced the land available for both farmers and herders.[46] The drought in Mali in the 1970's and 1980's forced Tuaregs to camps for the displaced or into urban areas. Those who returned faced unemployment, lack of social networks and increased competition between those who were nomads and those who were settled. All this set the stage for the Tuareg revolt of 1990. Similar linkages between environmental degradation and conflict have been identified elsewhere in Africa. Competition over water has led to clashes between Ugandan and Kenyan pastoralists as well as to a dispute between Senegal and Mauretania in 1989-1992, which led to killings and large-scale forcible returns.[47] Studies in West Africa have found a correlation between climate variability, lack of employment opportunities and recruitment into armed rebel groups.[48] Further afield, extreme weather conditions in Bangladesh in 2000 affected approximately 3 million people and led to large-scale migration to India, where the migrants clashed with indigenous populations.[49]

Inadequate political response to environmental disasters can also lead to instability and armed conflict. Examples include the western Pakistani elite's passive response to the 1970 cyclone in eastern Pakistan, which added to previous grievances and led to an uprising, a very bloody conflict and ultimately Bangladesh's independence. The collapse of the Somoza regime in Nicaragua was at least partly caused by that government's embezzlement of international emergency relief funds following the 1972 earthquake in that country. The resulting protests gave support to the Sandinista uprising.

The possibility also exists that environmental catastrophe can lead to an easing of tensions and increased cooperation. One case is the Pakistan earthquake of 2005, after which the

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[45] Then there are cases where abundant natural resources can be destabilizing and lead to and fund armed conflict. Liberia, Sierra Leone and the Democratic Republic of Congo are very clear cases. See VIKRAM ODEDRA KOLMANNSKOG, FUTURE FLOODS OF REFUGEES: A COMMENT ON CLIMATE CHANGE, CONFLICT AND FORCED MIGRATION, NORWEGIAN REFUGEE COUNCIL 18 (2008)(hereinafter NRC Report) for an interesting discussion concerning the difference between two schools of thought, namely the neo-Malthusians and the cornucopians: the former point mainly to diminished resources as a conflict driver; the latter look to abundant resources as the main force leading to instability.

[46] Many have in fact stated that climate change has contributed to the conflict in Darfur, not least UN Secretary-General Ban Ki-Moon, quoted in *A Climate Culprit in Darfur*, The Washington Post (16 June 2007). See NRC Report *supra* note 45 at 21 for a succinct explanation.

[47] Stern Review s*upra* note 21 at 113.

[48] *Id*. at 112.

[49] *Id*.

Indian government opened check-points along the border, in order to allow aid to get through to affected areas of Pakistan-administered Kashmir.

While environmental factors can certainly be relevant in understanding armed conflict, there is a risk that they obscure other causes. There are those who would explain the genocide in Rwanda as caused by overpopulation and a competition over resources. Others would of course answer by pointing to the underlying political competition between the Hutu and Tutsi populations, as well as the divisions wrought by the colonial legacy.[50] Again, just as with environmental displacement, environmental harm often acts as one of several inter-connected causes, where the strength of state and other social structures becomes crucial in overcoming tensions (or not) due to resource competition.

Such underlying structural analyses are of course illuminating. However, not least given the human rights perspective of this study, the author warns that too much weight given to environmental causes, whether of the Rwanda genocide or of the conflict in Darfur, risk removing from perpetrators their individual agency and responsibility for the atrocities which they have caused.[51]

In any event, a relatively recent study highlighted the fact that very many countries risk political instability and violent conflict as a result of climate change. The study, by International Alert and the Swedish International Development Cooperation Agency (SIDA), estimates that 56 countries (with populations totalling 1.2 billion people) risk political instability, given already existing tensions, threat of serious climate change repercussions as well as possibly weak state and social structures. The study goes on to estimate that 46 additional countries (home to 2.7 billion people) are under a high risk of armed conflict on account of climate change. [52]

d. Climate Change Displacement

The number of recorded natural disasters has doubled from approximately 200 to over 400 per year over the last two decades, and nine out of ten natural disasters are today climate-related.[53]

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[50] Stephen Castles, *Environmental Change and Forced Migration: Making Sense of the Debate*, UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES WORKING PAPER NO. 70, 4 (2002).

[51] And risk excluding groups of people fleeing persecution from the refugee protection regime.

[52] DAN SMITH, JANANI VIVEKANANDA, A CLIMATE OF CONFLICT, Swedish International Development Agency and International Alert 7-8 (2008)(earlier version published by International Alert in 2007) (hereinafter SIDA & IA Report).

[53] Opening Remarks by Sir John Holmes, UN Under-Secretary General for Humanitarian Affairs and Emergency Relief Coordinator, DIHAD 2008 Conference in Dubai, *available at* *http://www.google.co.uk/search?q=Opening+Remarks+by+Sir+John+Holmes%2C+UN+Under-Secretary+General+for+Humanitarian+Affairs+and+Emergency+Relief+Coordinator%2C+DIHAD+2008+Conference+in+Dubai+&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-GB:official&client=firefox-a*, *accessed on 6 Jan. 2011*. Similar figures are mentioned in the World Disasters Report 2006 of the International Federation of Red Cross and Red Crescent Societies.

In financial terms, direct losses from environmental disasters have increased from 3.9 billion US Dollars annually in the 1950's to 40 billion Dollars per year in the 1990's. There are three main categories of natural disasters contributing to these figures: earthquakes, floods and extreme weather events (particularly tropical cyclones/hurricanes). The first category has remained relatively stable in frequency, whereas the latter two have increased dramatically in number and effect.[54] Of course, the increased financial and human costs have also been due to the greatly increased concentrations of people in hazard-prone areas, including in informal settlements in and around very large cities. It is important to recall that we already live in a world of large-scale environmental displacement[55] and that this phenomenon is not limited to future climate change scenarios.

Already in 1995, Professor Norman Myers of Oxford University suggested that 25 million "environmental refugees" were displaced.[56] He explained his reasoning at the time as follows: 5 million people remained displaced following movements of 10 million caused by droughts in the Sahel (of whom half had returned home); 4 million people were displaced in the Horn of Africa, including Sudan; in other areas of sub-Saharan Africa, 7 million people had migrated in search of relief assistance; in China, 6 million people had moved on account of agricultural land shortages; in Mexico, 2 million people were displaced on account of water shortages and desertification; and the rest of the figure was made up by 1 million remaining displaced following large-scale public works projects.[57]

In the 1999 World Disasters Report of the International Federation of Red Cross and Red Crescent Societies, it was noted that natural disasters accounted for more displacement than armed conflicts for the first time since records had been kept. It was estimated in 1998 that 144 million people per year were affected by natural disasters.

We can look at some recent examples of large-scale environmental displacement to discern patterns in the movements of people. Hurricane Katrina caused the largest displacement in the history of the United States with over 1 million people temporarily displaced, of whom

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[54] Fabrice Renaud, *et al., Control, Adapt or Flee: How to Face Environmental Migration?* UNU-EHS, 5 INTERSECTIONS 26 (2007).

[55] The next section will focus on the linkages between natural disasters and displacement. Nevertheless, it is worth recalling that there are other forms of environment-linked displacement. The industrial catastrophe in Bhopal, India in 1984 killed over 1,000 and displaced approximately 200,000 people. The nuclear disasters at Three Mile Island and Chernobyl displaced 10,000 and 100,000 people respectively. Deliberate destruction of the environment through the use of herbicides and defoliants by US forces in the Vietnam War caused large-scale population movements into the cities. David Keane, *The Environmental Causes and Consequences of Migration: A Search for the Meaning of "Environmental Refugees"*, 16 GEORGETOWN INTERNATIONAL ENVIRONMENTAL LAW REVIEW 2, 212 (2004).

[56] Myers has written several works using this term and the figure. See for example Myers 2001 *supra* note 10 at 3.

[57] *Id*. at 1. It should be noted that Myers does not necessarily differentiate between those displaced in-country and those who have moved across borders.

300,000 are not expected to return to their places of origin.[58] The 2004 Tsunami displaced over 1.8 million people throughout South-East Asia. According to a survey in one locality, household migration tendencies were clearly linked to the extent of damage to their homes: "Having relatives at a potential new place, having received financial and/or material support such as tents were additional factors that influenced the household's decision to leave."[59] Factors causing less inclination to migrate included higher education, access to information and a higher degree of property ownership.

Property ownership was also an issue during the Dust Bowl years of the 1930's in the United States. Approximately 300,000 so-called "Okies" migrated to California; most were tenant farmers without strong ties to the land.[60] In contrast with the Tsunami findings, the Dust Bowl example points to a "brain drain" problem: it was the younger, more skilled with some money and strong social networks who left.[61] From this comparison, it seems that property ownership will be a strong factor in keeping people from moving in the face of environmental harm.

Many researchers warn of the complex nature of migration and how many so-called "push" and "pull" factors can be at play, also in the case of environmental displacement. Not all environmentally induced migration is forced. Migration is also an age-old coping strategy for dealing with temporary or more long-term environmental shifts. Nomadic pastoralism and long-distance trade in the Sahel are examples.[62] Movements of environmentally displaced in Mexico are also induced by other factors, such as the high wage differential attracting those seeking to cross the border into the United States.[63] Some scepticism is noted from certain quarters, noting that people also continue to move towards areas of great pollution, such as Mexico City or urban centres in China. "Why, in many cases does severe environmental degradation not generate large out-migration?" these voices ask.[64]

Of course, migration is induced by a complex inter-play of factors, including economic (e.g. poverty and unemployment), social (poor access to welfare, education, family links) and security concerns (risk of persecution, general instability), as well as environmental degradation and disasters.[65] The development level of the country or region affected also plays a role, not least in terms of how well-equipped the population is to deal with disaster.[66] Moreover, human rights can play a role in preparing populations to deal with environmental change, including their ability to recognise the threats posed by climate change. These include the degree of public participation in government, free speech, freedom of association, inclusion of women and minorities in local decision-making, as well as education.[67]

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[58] Tracey King, *Environmental Displacement: Coordinating Efforts to find Solutions*, 18 GEORGETOWN INTERNATIONAL ENVIRONMENTAL LAW REVIEW 3, 544 (2006), citing World Health Organisation figures. *See also* Renaud *supra* note 54 at 21.
[59] Renaud *supra* note 54 at 22.
[60] IOM Report *supra* note 19 at 22-23.
[61] *Id*. at 33.
[62] NRC Report *supra* note 45 at 11.
[63] Renaud *supra* note 54 at 19.
[64] AVISO, ENVIRONMENTAL DEGRADATION AND POPULATION DISPLACEMENT 2, 4 (1999).
[65] Renaud *supra* note 54 at 10.
[66] IOM Report *supra* note 19 at 18.
[67] ICHRP Report *supra* note 32 at 26.

There are some who worry that the spectre of millions of climate change displaced on the move may add strength to those voices who would advocate more restrictive asylum regimes. It is worth noting, given such doomsday pronouncements, that studies of persons seeking asylum in Europe have so far shown little correlation between asylum applications and natural disasters in regions or countries of origin. Rather, such studies routinely point to political instability as the underlying cause of such movements. [68]

What then will be the primary causes of climate change-induced movement? The IPCC has identified the following "drivers" leading to population movements: 1) an increase in the strength and frequency of extreme weather events; 2) a growth in the number of droughts, associated with losses in agricultural production and subsequent food shortages; and 3) a rise in sea-levels due to thermal expansion and melting glaciers and ice-caps.[69]

There are various prognostications regarding the number of people who risk being displaced by climate change, ranging from 50 million to 1 billion. However, most analysts are gathering around the figure of 200 million people by the year 2050.[70] One research report provides a useful summary of these prognostications.[71] Given that the current estimated total of migrants worldwide is approximately 192 million,[72] these are needless to say very alarming forecasts. Another study divides up the prognoses into best, bad and worst (or "business as usual") scenarios. The first would lead to a 5-10 per cent increase in migration, whereas the last would mean that the 200 million figure often cited "might easily be exceeded."[73]

Known cases of previous drought-induced movements include those in the Sahel, Ethiopia, Argentina, Brazil, Syria and Iran. One million persons were displaced during a drought in Niger in 1985. Generally, however, drought-induced migration has tended to remain in-country, with researchers concluding that emigration has been a very last resort.[74] The 7 million sub-Saharan African "environmental refugees" mentioned by Myers were, as he himself notes, drawn to migrate by the availability of famine relief and comprised a fraction of the 80 million then considered at risk of starvation in the region.[75] While the Ethiopian famine of the mid-1980's led to large-scale movements across the border into Sudan, the general conclusion makes sense. Emigration requires resources; droughts may put such pressure on families that they use up all their resources in order to survive as well as in repeated drought-induced smaller-scale movements.[76]

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[68] Etienne Piguet, *Climate Change and Forced Migration*, United Nations High Commissioner for Refugees, NEW ISSUES IN REFUGEE RESEARCH, RESEARCH PAPER NO. 153, 5 (2008).
[69] Cited in *id.* at 4.
[70] The Stern Review uses the figures 150-200 million. Stern Review *supra* note 21 at 77.
[71] Biermann *supra* note 13 at 10 & 13.
[72] IOM Report *supra* note 19 at 11.
[73] *Id.* at 27 onwards.
[74] Piguet *supra* note 68 at 6. "During the 1994 drought in Bangladesh, only 0.4 per cent of households had to resort to emigration." *Id.*
[75] Myers 2001 *supra* note 10. Also cited by Stern Review *supra* note 21 at 111.
[76] Black points to the case of the drought in the mid-1980's in the Senegal River Valley in Mali. Migration actually declined as families had fewer resources to send persons away, but "circulation" of a few months increased. Richard Black, *Environmental Refugees: Myth or*

Looking then at patterns of environmentally-induced population movements so far, at least one author concludes that it is the rise in sea-levels which poses the greatest risk of large-scale climate change movements across borders.[77] According to one IPCC scenario,[78] the thermal expansion of the oceans plus glacial and ice-cap melt could risk causing a sea-level rise of between 0.3 and 0.8 meters by the end of the century. This would risk displacing those populations living at an altitude of less than a meter, namely approximately 146 million people. Populations particularly at risk include those of small island-states and those living in the deltas and estuaries of South Asia (by the Indus, Ganges and Brahmaputra rivers) and East Asia (by the Mekong and Yangtze rivers).[79]

Reports warn that this process is already happening. The Sundarbans of Bangladesh have lost 72 square miles of land in the past decades, and journalists have begun reporting from internally displaced camps in the area.[80] Increased salinity in the soil is contributing to this population movement. Also, as the area of land available for livestock decreases the amount of dung available for fuel has diminished, leading in turn to an increase in the chopping down of firewood – exacerbating the problems of erosion and land loss. While one can counter that flooding and erosion have occurred in the Ganga and Brahmaputra delta since time immemorial, for the populations there the link between climate change and the frequency and severity of cyclones is clear.[81] In response, India is building a security barrier along its border with Bangladesh. Plans are for a 2,050-mile barrier, of which 1,600 miles had been built by spring 2009.[82]

IV. Climate Change and Human Rights

a. Overview

It is clear from the above summary that numerous key human rights principles will be at stake.[83] For example, the right to self-determination is linked to access to both territory and to

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Reality? UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES WORKING PAPER NO. 34, 7 (2001).

[77] Piquet *supra* note 68 at 7.

[78] Scenario A1B foresees continued world economic growth but with a moderation in fossil fuel use. Cited in *id.*

[79] Note that the Stern Review uses a figure of nearly 200 million at risk. Stern Review *supra* note 21 at 111. IOM's projections are different; their mid-range projection is of between 10 and 25 million people affected by global average sea-level rise. IOM Report *supra* note 19 at 17.

[80] See for example Dan McDougall, *Time Runs out for Islanders on Global Warming's Front Line*, The Observer 46 (30 Mar. 2008). The camp on Sagar Island was said to house 20,000 displaced in spring 2008.

[81] *Id.*

[82] Lisa Friedman, *How will climate refugees impact national security?*, Scientific American (23 Mar. 2009), *available at* http://www.scientificamerican.com/article.cfm?id=climage-refugees-national-security, accessed on 23 Aug. 2010.

[83] The following draws in part on the OHCHR Report *supra* note 7 and on the AUSTRALIAN HUMAN RIGHTS AND EQUAL OPPORTUNITY COMMISSION, BACKGROUND PAPER: HUMAN RIGHTS AND CLIMATE CHANGE 3 onwards (2008)(hereinafter Australian Commission Report), as they both provide useful summaries of the human rights principles linked to climate change. Please note that the Australian

natural resources: both of which may be at risk in small island-states for example. This right has a particular standing in the UN treaties. It is expressed in Article 1 of the UN Charter[84] and in common article 1 (1) of the International Convention on Civil and Political Rights (hereinafter ICCPR)[85] and the International Covenant on Economic, Social and Cultural Rights (hereinafter ICESCR),[86] namely: "[A]ll peoples have the right of self-determination… [so that] they freely determine their political status and freely pursue their economic, social and cultural development." The OHCHR Report emphasizes that the right to self-determination includes the right not to be deprived of one's means of subsistence. [87]

A warning note should initially be sounded, namely that climate change intervention may lead to states interfering domestically to a greater extent in the sphere of private individuals. Another danger is that climate change may be used by states as an excuse for not meeting their international obligations concerning economic, social and cultural rights – given that these are usually couched in gradual terms with states promising to take "appropriate" or "possible" measures. Moreover, at least one study points out that a human rights approach to climate change may make human rights less relevant as a legal tool, as states could potentially turn around and declare states of emergency, thus abrogating from their obligations. This author concludes, however, that there is still added value in a human rights-based approach.[88]

Climate change can potentially affect the right to life of large numbers of people.[89] The right to life is affirmed in Article 3 of the Universal Declaration of Human Rights (hereinafter UDHR)[90] and protected by Article 6 (1) of the ICCPR. In its General Comment on the right to life, the UN Human Rights Committee underscored both the need to interpret the right to life broadly as well as the fact that the right gives states a positive obligation to act: "[I]t would be desirable for state parties to take all possible measures to reduce infant mortality and to increase life expectancy…"[91]

The right to health risks being undermined. Article 25 of the UDHR states, "[E]veryone has the right to a standard adequate for the health and well-being of himself and his family." Article 12(a) of the ICESCR affirms the right of all persons to "the enjoyment of the highest standard of physical and mental health." Furthermore, Article 24 of the Convention on the

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Commission for Human Rights and Equal Opportunities has since been renamed the Australian Human Rights Commission.

[84] Charter of the United Nations, 59 Stat. 1031; T.S. No. 993; 3 Bevans 1153.

[85] International Covenant on Civil and Political Rights, *adopted* 16 Dec. 1966, G.A. Res. 2200 (XXI), UN GAOR, 21st Sess., Supp. No. 16, UN Doc. A/6316 (1966) 999 U.N.T.S. 171 (*entered into force* 23 Mar. 1976).

[86] International Covenant on Economic, Social and Cultural Rights, *adopted* 16 Dec. 1966, G.A. Res. 2200 (XXI), UN GAOR, 21st Sess., Supp. No. 16, UN Doc. A/6316 (1966) 993 U.N.T.S. 3 (*entered into force* 3 Jan. 1976).

[87] OHCHR Report *supra* note 7 at para. 39.

[88] As does ICHRP REPORT *supra* note 32 at 5.

[89] Statement by Kyung-wha Kang, the UN Deputy High Commissioner for Human Rights, in Laura MacInnis, *Climate change threatens human rights of millions: UN*, Reuters (19 Feb. 2008).

[90] Universal Declaration of Human Rights, *adopted* 10 Dec. 1948, G.A. Res. 217A (III), U.N. GAOR, 3d Sess. (Resolutions, pt. 1) at 71, U.N. Doc. A/810 (1948).

[91] *General Comment no. 6, The Right to Life*, UN Human Rights Committee, UN Doc HRI/Gen/1/Rev. 7, para. 128 (1982).

Rights of the Child (hereinafter CRC)[92] upholds every child's right to the "highest attainable standard of health." And Article 12(1) of the Convention on the Elimination of all forms of Discrimination against Women (hereinafter CEDAW)[93] requires states to "take all appropriate measures to eliminate discrimination against women in the field of health care in order to ensure, on a basis of equality of men and women, access to health care services, including those related to family planning." Article 12(2) goes on to emphasize every woman's right to "adequate nutrition during pregnancy and lactation."

A gendered approach to the consequences of climate change is necessary. Based on the experience of disaster relief-efforts, women generally suffer disproportionately from the consequences of environmental damage as well as extreme weather events. Women in traditional societies will often not be fully included in local decision-making mechanisms and therefore may not have the information they will need to survive. Girls in traditional societies will be adversely affected, as their tasks, such as collecting firewood or water, become more difficult. Women will generally stay behind to look after children, may find it difficult to escape because of clothing that inhibits movement and are less likely to know how to swim. They will be exposed to gender-based violence during and following natural disasters, as well as during displacement. And rural women will be adversely affected by any downturn in agricultural production.[94] One study of lessons learned in Sri Lanka after the Tsunami highlighted the particular harm caused by discriminatory land tenure legislation, which left widows without any right to restitution or compensation. [95]

Children are also known to bear the brunt of extreme weather events, as water stress and malnutrition increases – causing similar increases in infant and child mortality. [96]

The right to food can be severely affected by climate change. The right to food is recognised in Article 11(1) of the ICESCR which states: "[T]he right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions." Article 11(2) goes on to uphold "the fundamental right to freedom from hunger and malnutrition."

Needless to say, the right to adequate housing also mentioned in Article 11(1) risks being detrimentally affected. Minorities and indigenous peoples risk being particularly badly affected, when it comes to the right to adequate housing. Minorities tend to live in more marginal and exposed areas, potentially at greater risk from the effects of erosion, flooding, desertification and the effects of extreme weather events. For example, Dalits, Adivasis and Muslims were especially vulnerable to harm during the unusually severe monsoon floods in India of 2007. Their homes were more prone to damage, and these communities were often the last to receive assistance as aid workers were unaware of their marginal locations or because majority population representatives took charge of the distribution of relief. Thus, in

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[92] Convention on the Rights of the Child, *adopted* 20 Nov. 1989, G.A. Res. 44/25, U.N. GAOR, 44th Sess., Supp. No. 49, U.N. Doc. A/44/49 (1989)(*entered into force* 2 Sept. 1990).
[93] Convention on the Elimination of All Forms of Discrimination Against Women, *adopted* 18 Dec. 1979, G.A. Res. 34/180, U.N. GAOR, 34th Sess., Supp. No. 46, at 193, U.N. Doc. A/34/46 (1980)(*entered into force* 3 Sept. 1981).
[94] Stern Review *supra* note 21 at 114; OHCHR Report *supra* note 7 at paras. 46 & 48; and IOM Report *supra* note 19 at 34.
[95] Australian Commission Report *supra* note 83 at 19.
[96] *Id.*

surveys following the floods, Dalits represented the overwhelming majority of fatalities.[97] African-American residents of New Orleans were disproportionately affected by the floods and damage caused by Hurricane Katrina in 2005.[98]

According to Article 27 of the ICCPR, states have an obligation to protect the identity of minorities and to do nothing to hinder their cultural or religion expression or the use of minority languages.[99]

A defining characteristic of indigenous peoples is their special connection to their natural environment. This makes them particularly vulnerable to the effects of climate change, which risks disrupting traditional patterns of life and religious beliefs. The fact that many indigenous peoples live close to nature also means that they are noticing the detrimental impact of climate change earlier than majority populations. For example, in the European Arctic, higher temperatures and increased rainfall mean that the lichen which is vital for Sami reindeer herds can be covered by ice in the winter, causing reindeer to starve and disrupting ancient patterns of herding.[100]

Indigenous peoples and other minorities are particularly at risk of being adversely affected by so-called REDD (reduced emissions from deforestation and degradation) programmes that propose to compensate states for protecting forests. While one might think that this could lead to funds flowing to forest-dwelling communities, indigenous peoples' organisations have warned that such initiatives can increase pressures to expropriate land. The large-scale planting of bio-fuel crops has already caused displacement and affected food security for vulnerable populations,[101] with a follow-on risk of political instability as affected groups' protests become ever more vociferous. These impacts highlight the need for substantive consultation with and meaningful participation by potentially affected populations in any decision-making. A further cause for concern is that any future capping of emissions may lead to a freeze in economic activity, with a risk that already existing wealth disparities are made permanent.[102]

Indigenous people's rights have recently been affirmed in the UN Declaration on the Rights of Indigenous Peoples,[103] which contains a number of articles that are relevant to climate change.[104] While this Declaration takes the form of a UN General Assembly Resolution and

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[97] Rachel Baird, *The Impact of Climate Change on Minorities and Indigenous Peoples*, MINORITY RIGHTS GROUP INTERNATIONAL BRIEFING 2-3 (April 2008).
[98] *Id.* at 3.
[99] Here again, the UN Human Rights Committee has interpreted the Article as meaning that states have a positive obligation: "Accordingly, positive measures by States may also be necessary to protect the identity of a minority and the rights of its members to enjoy and develop their culture and language and to (practise) their religion in community with other members of the group." *General Comment no. 23, The Rights of Minorities (art. 27)*, UN Human Rights Committee, UN Doc. CCPR/C/21/Rev.1/Add.5, para. 6.2 (1994).
[100] Baird *supra* note 97 at 4.
[101] *Id.* at 6.
[102] ICHRP REPORT *supra* note 32 at 56.
[103] Declaration on the Rights of Indigenous Peoples, *adopted* 13 Sept. 2007, UN G.A. Res. 61/295 U.N. GAOR, 61st Sess., U.N. Doc. A/61/L.67 (2007).
[104] Apart from rights enumerated in other instruments such as freedom from discrimination and the rights to self-determination, life and health, the Declaration contains *inter alia* the

does not have the binding force of a treaty, the fact that 143 countries voted for, while only 4 countries voted against (with 11 abstentions) gives the Declaration considerable weight.

Economic, social and cultural rights are generally couched in terms of states' obligations towards their progressive realization. However, as the OHCHR Report makes clear, this does not prevent states from having immediate demands placed on them. As the Report describes, states "must take deliberate, concrete and targeted measures, making the most efficient use of available resources, to move as expeditiously and effectively as possible towards the full realization of rights." States must "as a matter of priority, seek to satisfy core obligations and protect groups in society who are in a particularly vulnerable situation."[105]

The UN Declaration on the Rights of Indigenous Peoples specifically mentions "the right to the conservation and the protection of the environment."[106] It follows on the 1989 ILO Convention no. 169 on Indigenous Peoples. Article 13 of that Convention affirms "the special importance for the cultures and spiritual values of the peoples concerned of their relationship with the lands or territories, or both as applicable, which they occupy or otherwise use." The article then goes on to note that the concept of lands (and their protection) encompasses the total environment.[107] A human right to a satisfactory environment also exists in the African Charter on Human and Peoples' Rights.[108] Similar language can be found in Article 11 of the San Salvador Protocol to the American Convention on Human Rights.[109] The Organisation of American States has come relatively far in looking at the connection between the environment and human rights. See for example OAS Resolution 2429, which "calls on the hemisphere's various development and human rights agencies to help States understand the adverse effects of climate change on the most vulnerable populations of the region."[110]

Representatives of the Small Island Developing States noted the human dimensions of climate change and proclaimed in the Malé Declaration on the Human Dimension of Global Climate

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following articles emphasizing the bond between indigenous peoples and their lands: Article 11 (the right to practise cultural traditions and customs), Article 12 (the right to manifest spiritual and religious traditions), Article 24 (the right to traditional medicine and the conservation of vital medicinal plants, animals and minerals), Article 25 (the right to maintain the distinctive spiritual relationship to the land), and Article 29 (the right to conservation of the environment). *Id.*

[105] OHCHR Report *supra* note 7 at paras. 76 & 77.

[106] Declaration on the Rights of Indigenous Peoples *supra* note 103 at Article 29.

[107] Article 13, paras. 1 & 2, Convention concerning Indigenous and Tribal Peoples in Independent Countries, *adopted* 27 June 1989, Convention C169, International Labour Organisation 76th Sess.(*entered into force* 5 Sept. 1991).

[108] Article 24, African Charter on Human and Peoples' Rights, *adopted* 27 June 1981, 1520 U.N.T.S. 217, 245; 21 I.L.M. 58, 59 (1982)(*entered into force* 21 Oct. 1986). "All peoples shall have the right to a general satisfactory environment favourable to their development." *Id.*

[109] In this case, "the right to a healthy environment…" Article 11, Additional Protocol to The American Convention on Human Rights in The Area of Economic, Social and Cultural Rights "Protocol of San Salvador", *adopted* 17 Nov. 1988, O.A.S. G.A. 18th Sess., Treaty Series, Nº 69 (*entered into force* 16 Nov. 1999).

[110] Resolution AG/Res 2429 on Human Rights and Climate Change in the Americas, *adopted* 3 June 2008, O.A.S. G.A. 38th Sess., AG/RES. 2429 (XXXVIII-O/08).

Change of 2007[111] that there is a fundamental right to an environment capable of supporting a society. The Malé Declaration is non-binding and is in any event limited to those states present. Nevertheless, it is interesting to see how states potentially affected by climate change are trying to use the legal mechanisms available to them, in order to push for the development of legal standards.

There is an overlap with international environmental law at this point, namely with the admittedly non-binding Stockholm Declaration which also mentions a right to an adequate environment.[112] Moreover, a right to an adequate or satisfactory environment has gained considerable ground within states. More than 115 constitutions guarantee either a right to a clean and healthy environment, impose a duty on the state to prevent harm or mention the protection of the environment or natural resources. Over half of the world's constitutions, including nearly all adopted since 1992, recognise the right, and several supreme courts have deemed the right to be justiciable.[113]

Nevertheless, it remains unclear whether a right to a healthy environment actually exists in international law, not least as it has so far been largely limited to non-binding declarations and regional instruments. [114]

The UN system is generally preferring to find links between a healthy environment and the fulfilment of rights, rather than seeking to put in place a right to a healthy environment as such. For example, article 24 paragraph 2 (c) of the CRC comes relatively close to an environmental right by placing responsibility on states parties to take appropriate measures to combat disease and malnutrition "through the provision of adequate nutritious foods and clean

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[111] Malé Declaration on the Human Dimension of Global Climate Change, *adopted* 14 Nov. 2007, a*vailable at* http://www.ciel.org/Publications/Male_Declaration_Nov07.pdf *accessed 6 Jan. 2011.*

[112] Declaration of the UN Conference on the Human Environment (1972)(hereinafter Stockholm Declaration), *available at http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503 accessed on 6 Jan. 2011.* Principle 1 states, "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." *Id.*

[113] Thomas Greiber, *et al., Conservation with Justice, A Rights-based approach*, IUCN ENVIRONMENTAL LAW AND POLICY PAPER NO. 71, 7 (2008).

[114] *See e.g.* the US submission to the OHCHR study: "However, the United States does not consider that a right to a 'safe environment'… exists in international law. Further, the United States takes the view that 'a human rights approach' to addressing climate change is unlikely to be effective." Reasons given include the fact that those who have caused climate change would have been unaware of the potentially negative impact of their actions, as well as the fact that greenhouse gas emissions are caused by too broad a variety of activities, including those that are necessary for the fulfilling of human rights standards. Observations by the United States of America on the relationship between climate change and human rights (2008). Text *available at* http://www2.ohchr.org/english/issues/climatechange/docs/submissions/USA.pdf, *accessed on* 6 Jan. 2011. An Australian report cites the Advisory Council of Jurists of the Asia-Pacific Forum as concluding that current instruments are "insufficient to support the existence of a clear and specific right to an environment of a particular quality in international law. Australian Commission Report *supra* note 83 at 3-4.

drinking water, taking into consideration the dangers and risks of environmental pollution." The Committee on the Rights of the Child in its General Comment no. 7 states that the right to survival should be implemented "through the enforcement of all the provisions of the Convention, including rights to health, adequate nutrition, social security, an adequate standard of living, [and] a healthy and safe environment…"[115] The OHCHR Report concludes, "[T]he UN human rights treaty bodies all recognise the intrinsic link between the environment and the realisation of a range of human rights, such as the right to life, to healthy food, to water and to housing."[116] Thus, whereas the existence of a right can be debated, linkages between the environment and human rights are generally accepted.

b. The Role of the State

These rights plus others become relevant with climate change, but the question is whether one can speak of violations. A link needs to be found between the right at stake and the state obligation that it triggers. In other words, there needs to be found a causal connection between violator and victim through violations that have occurred. In the case of climate change, this is not so immediately apparent when, to varying degrees, the "perpetrator" is at least all those benefitting from the greenhouse gas-emitting technologies of industrialised countries.

Some states that have contributed to the OHCHR consultation process have expressed critique at the attempt to link human rights to climate change. To some extent, this is a question of timeframe. They have pointed to the fact that when earlier generations were emitting greenhouse gases, they did not know of the harm that they were causing.[117] A parallel can be drawn to the tobacco litigation in the United States, where proof of the tobacco companies' knowledge of the harm their products cause proved critical to these cases' outcome. This would mean that state responsibility regarding the human rights-related impact of climate change would rather more specifically have been triggered in the early 1990's, when the first warnings were issued by climatologists.

A critical point is that the current human rights structure is focussed on the individual-state relationship. In this section, we will be looking at the background to this and, in the next section, whether there are ways of establishing state responsibility to populations other than their own. As an aside, there is an added complexity, namely that affected populations may contribute to the damage being caused. There will not always be clear victims. One author points out that the negative effects of sea-level rise on small island-states may be exacerbated by beach mining, damage to coral reefs and shoreline construction.[118]

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[115] *General Comment No. 7, Implementing child rights in early childhood*, Committee on the Rights of the Child, U.N. Doc. CRC/C/GC/7/Rev.1, para. 10 (2006).

[116] OHCHR Report *supra* note 7 at para. 18. The report summarises the following steps which have been taken regarding the connection between human rights and the environment. In 1990, the Sub-Commission on the Prevention of Discrimination and Protection of Minorities appointed a Special Rapporteur on Human Rights and the Environment, who submitted a final report in 1994 (U.N. Doc. E/CN. 4/Sub. 2/1994/9). In 1995, the Commission on Human Rights appointed a Special Rapporteur to study the human rights impact of illicit toxic waste trafficking and dumping (U.N. Doc. E/CN. 4/2001/55). And then there was the Human Rights Council resolution 7/23 of 2008 that led to the report quoted in the text.

[117] *See e.g.* the US submission to OHCHR *supra* note 114.

[118] Renaud *supra* note 54 at 20.

When the modern concept of human rights was first developed in Europe and North America during the 17th and 18th centuries, the focus was on the relationship between an individual and the state to which she or he belonged, often symbolized by the sovereign head of that state.[119] The legitimacy of the ruler could be questioned if she or he violated the rights of her or his citizens. This line of reasoning is typified by the American Declaration of Independence, which concluded that the tyranny of King George III was proper justification for the American colonies to declare their independence.

The modern international human rights legal construct brought the inheritance from the 17th and 18th centuries forward by echoing those centuries' affirmation of certain underlying legal principles (which such thinkers as Hugo Grotius and John Locke referred to as "natural law" and "natural rights"). During the 20th century, a legal positivist overlay of treaties and oversight mechanisms has been constructed on top of the basic principles espoused so long ago. Thus, the current UN system is a compromise between those who would espouse certain rights as being universal and those who would supplement such declarations with agreements between states and some attempt at enforcement.

Over the course of these centuries, a question has continued to be: for whom do human rights apply? The emphasis placed in the 18th century on the right to property was no historical accident, but rather reflected the emergence of wealthy new elites on both sides of the Atlantic. Needless to say, the rights of man as espoused by the Founding Fathers of the United States of America did not extend to the slaves that many of them owned.[120] Over time, the circle of inclusion has gradually expanded, via the anti-slavery movement of the 19th century (which many would say was the first modern human rights movement) right through to the 2006 UN Convention on the Rights of Persons with Disabilities.

Throughout this history, the central relationship has remained between the individual and the state, more recently with oversight by the United Nations and other international and regional actors. In climate change terms, the first human rights-related question to be asked by an individual is therefore: what can my state do for me? In brief, states have the primary obligation to respect, protect and fulfil the human rights of the populations living within their respective borders or over whom they have effective control. Indeed, the traditional view is that only states can violate human rights, as only states are parties to the international conventions.

This has changed, however, as that circle of inclusion has expanded to include victims of non-state violence, such as those populations who have been harmed by armed opposition forces or individual women victims of domestic abuse. Rather than seeing human rights as a contract between the state and the individual, Clapham draws on the traditional idea of human dignity: "Once one accepts the proposition that human rights are ultimately concerned with the protection of human dignity and that assaults on that dignity have to be prevented, remedied

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[119] *See generally* the first chapter of GEOFFREY ROBERTSON, CRIMES AGAINST HUMANITY: THE STRUGGLE FOR GLOBAL JUSTICE (1999) for a concise summary of the history of human rights thought.

[120] As Agamben states, the conception of "citizen" at that time excluded "children, the insane, minors, women, the criminally punished…" GIORGIO AGAMBEN, HOMO SACER: SOVEREIGN POWER AND BARE LIFE 130 (1995).

and punished, there is little room left for arguments about the state or non-state character of the assailant."[121]

State responsibility then becomes a wider question than that of being held accountable as perpetrator. States parties to UN conventions, most pertinently those dealing with economic, social and cultural rights, have pledged themselves to the gradual fulfilment of the rights enumerated in those texts. While states are allowed to abrogate certain obligations to specific rights under extreme circumstances, such as states of emergency, their obligation to their respective populations remains. In a sense, this means that we can leave aside the question of causality. Irrespective of finding causal linkages between violator and victim, states remain bound by international treaty obligations to meet the challenges that climate change poses. Indeed, given the difficulty in tracing a causal connection between a single state and a harmed population, the OHCHR concludes, "[I]t is doubtful… that an individual would be able to hold a particular state responsible for harm caused by climate change. Human rights law provides a more effective protection with regard to measures taken by States to address climate change and their impact on human rights."[122]

During the past decade or so, UN human rights oversight mechanisms have adopted the common law notion of "due diligence" in order to create a more detailed content to many human rights, including to protect individuals from non-state harm. This can include ensuring the right to effective remedies, assessing the human rights impact of a course of action, and then monitoring and revising those actions if necessary. Through due diligence, treaty bodies and other monitoring mechanisms, such as the thematic Special Rapporteurs, have been able to specify and recommend those actions that a state should undertake in order to meet its obligations. A further project, then, is to do the same from a climate change perspective.

Climate specialists speak of "adaptation" and "mitigation". The former means those initiatives that can help populations adapt themselves to climate change (learning how to grow new crops, for example). The latter are those initiatives that would lessen or at least stabilise greenhouse gas emissions (e.g. planting forests or developing alternative energy sources). Under the UNFCCC, several adaptation funds have been established,[123] whereby states should get financial support for their adaptation initiatives. One possibility is to wed the discussion on adaptation and mitigation with the human rights application of the concept of due diligence, thus creating a catalogue of actions that states should take in order to meet their international human rights obligations. As an example, the right to life could in the future include such positive obligations on state authorities as the construction of hurricane shelters, and the creation of early-warning systems and evacuation plans.

c. Social Justice and Responsibility across Borders

There is a broader social justice argument that does not stop at the individual-state relationship. There is a clear correlation between GDP per head and greenhouse gas

[121] ANDREW CLAPHAM, HUMAN RIGHTS OBLIGATIONS OF NON-STATE ACTORS 534 (2006). *See also* p. 19 onwards for an analysis of the "drivers" for including non-state actors, including "globalization, privatization, fragmentation and feminization." *See further* p. 535 for a discussion of Kant's notion of dignity.

[122] OHCHR Report *supra* note 7 at para. 72.

[123] *See* M.J. Mace, *Funding for Adaptation to Climate Change: UNFCCC and GEF Developments Since COP-7*, RECIEL 14, 3(2005) for a useful summary.

emissions, thus causing significant differences in the rates of emissions between countries and regions. In 2004, the broadly speaking industrialized countries[124] accounted for 20 per cent of the world's population and 46 per cent of global greenhouse gas emissions.[125] The disparities are even clearer looking back in time. Since 1850, North America and Europe have produced 70 per cent of all CO_2 emissions caused by energy production, while developing countries have accounted for less than 25 per cent.[126] In terms of temperature change, the United States can be said to have caused 30 per cent of the observed temperature increase between 1850 and 2000. For other countries and regions, the figures are as follows: EU, 23 per cent; Russia, 9 per cent; China, 7 per cent; and India, 2 per cent.[127]

China has now overtaken the United States as the world's largest greenhouse gas emitter, nevertheless the US CO_2 emissions level remains the highest per capita.[128]

The fact that North America and Europe have produced 70 per cent of all energy-related CO_2 emissions since 1850 would make one wish to break out of the individual-state relationship and hold other states accountable, beyond solely those of the populations at immediate risk of harm.

Some critics of modern consumerist society could consider climate change the ultimate result and the logical conclusion of the Western human rights tradition. The basic principles espoused by the 17th and 18th century philosophers shared one basic aim, namely to secure a private sphere against the collectivistic impulses of the earlier feudal order and in which the individual should be free to express him- or (later) herself. The question we face today is to what extent this securing of our private spheres depended on a world of ever-new peripheries to explore, annex and exploit. Along with fears of "peak oil" soon being reached, climate change risks demonstrating the costs and limitations of allowing this freedom of personal expression through consumption to run its course. The famous phrase "the tragedy of the commons" risks being writ large, on a truly global scale.[129]

This should lead those of us who live in industrialised countries to reconsider our own lifestyles. There is however a further problem with the notion of perpetrator, even here with regard to those who live in Europe and North America. Patterns of consumption vary, of course. There are serious human rights concerns within most societies in those regions. One could hardly place the same level of blame on persons excluded from material benefit because of social background, ethnicity or migration status, as one might, say, a multiple-SUV owner

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[124] The countries listed in Annex 1 of the UNFCCC.
[125] IPPC Synthesis Report *supra* note 14 at 37.
[126] Stern Review *supra* note 21 at xi.
[127] Inuit Petition *supra* note 2 at 68-69, citing Kevin Baumert & Jonathan Pershing, *Climate Data: Insights and Observations*, 27, 13 & 40, Pew Centre for Climate Change (2004).
[128] Elisabeth Rosenthal, *China Increases Lead as Biggest Carbon Dioxide Emitter*, New York Times, 14 June 2008. US per capita CO_2 emissions were 19.4 tons while the equivalent figures for Russia was 11.8 tons, EU 8.6 tons, China 5.1 tons and India 1.8 tons. The figures are for 2007 and are taken from a Netherlands Environmental Assessment Agency report.
[129] "The tragedy of the commons" was coined by Garrett Hardin in his article *The Tragedy of the Commons*, 162 Science 3859 (1968). He described how individual herders, sharing a commons, would maximise their own interests by increasing their own number of livestock. If every herder did this, then the common resource – the commons – would be harmed, as would finally the herders themselves.

whose many cars are less a question of necessity and more a sign of excess. Moreover, there are many who feel forced to use cars or otherwise contribute to greenhouse gas emissions because the structures in their societies have been constructed in a certain way.

Turning to societies in the developing world, it would hardly seem possible to grant the populations of India and China the same freedoms as those assumed by populations in developed countries, most especially those of mobility and expression through consumption. While getting to own a car cannot be considered a fundamental human right, the distinction that that those of us living in industrialised countries may feel forced to make between our own freedom to consume and others demonstrates a limit to otherwise accepted notions of universality. That ever-expanding circle of inclusion described earlier stops somewhere between those living in industrialised countries and other populations, at least with regards to consumption. This hardly feels right, but it is the logical consequence of populations in developed countries assuming that climate change need not lead to any great change in their lifestyles. Ultimately, we would not want to see climate change used as an argument for a stronger state, with powers to intervene more drastically in our private spheres. The question is how much we would care about that when it comes to populations elsewhere.

Karl Marx criticized the underlying egotism in mainstream human rights thinking. He wrote, "The human right of freedom does not base itself upon the tie of man to man, but rather the separation of man from man."[130] To this can be replied that the 20th century has undoubtedly shown that there is very good reason indeed for creating legal structures that protect individual freedoms. Moreover, human rights are not solely a matter of defending the individual from the state; the state can also act as a guarantor of individual freedoms.[131] Nevertheless, Marx's line of thinking continues to be pursued today. Hamacher develops it, for example: "Democracies indeed invoke universalist principles valid for all humans, but the principles of those of universal human egotism, of the human who is split from his own universality and who defines himself – structurally psychotic – as human-against-human…"[132] And that sense of the egotistical in modern consumer societies instinctively rings true, not least when we are confronted with climate change.

In her *The Origins of Totalitarianism* of 1958, Hannah Arendt recognised the centrality of the individual-state relationship. She pointed out the contradiction inherent in speaking of human rights as inalienable and independent, while they are in fact dependent on the power of the state. Concretely, during the middle of the 20th century, governments whose constitutions affirmed basic rights principles implemented denaturalization laws as a first step towards mass persecution. Arendt sought to move beyond human rights by proclaiming a right of every individual to belong to humanity, namely "the right to have rights."[133]

Arendt's chapter title *The Decline of the Nation-State and the End of the Rights of Man* implies a link between the two conditions. Indeed, she identifies refugees as evidence of a radical crisis in human rights: "The conception of human rights, based upon the assumed

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[130] From his ON THE JEWISH QUESTION (1844); cited in Werner Hamacher, *The Right to Have Rights (Four-and-a-Half Remarks)*, THE SOUTH ATLANTIC QUARTERLY 103, 2/3 at 347 (2004).

[131] *See e.g.* WILLY STRZELEWICZ, DE MÄNSKLIGA RÄTTIGHETERNAS HISTORIA 176 (2001) onwards for a critique of Marx's views in ON THE JEWISH QUESTION.

[132] Hamacher *supra* note 130 at 348. The emphases are the author's own.

[133] Arendt is cited and analysed in *id.* at 354.

existence of a human being as such, broke down at the very moment when those who professed to believe in it were for the first time confronted with people who had indeed lost all other qualities and specific relationships, except that they were still human."[134]

While Arendt was writing with a view to understanding the horrors of the previous decades, it does not feel as too great a leap (nor a disservice to her) to refer at this juncture to those populations who risk displacement and most especially statelessness on account of climate change. In no way would one want to belittle the memory of those persecuted in the middle of the last century by attempting to draw any comparisons. However, Arendt is relevant to the issue at hand in having identified the centrality of citizenship as a trigger for benefitting from human rights, and denaturalization as a subsequent critical step. The populations of small island-states face being disconnected from the traditional individual-state relationship, as underpinned by the right to self-determination, which in turn is normally supported by access to a territory. No territory, no self-determination. No state, what then of rights? For these populations, "the right to have rights" becomes very acute indeed.

In summary, climate change highlights two distinct yet interconnected dilemmas regarding the relationship between the individual and the state in human rights thought. The first is that it may well prove to mark the very real practical limit to the emphasis placed by the 18th century philosophers on an inviolate private sphere – at least, in so far as how this is expressed in modern consumer societies. The second is that climate change raises the tension inherent in human rights between the need for protection from the state on the one hand, versus the need for protection by a state on the other.

If the consumption patterns of those of us living in industrialised countries will cause other populations to lose the protection of their states, we should then be moved by social justice considerations to ask what we, acting through our states, should do to protect their rights. This question becomes particularly pressing when considering the plight of those who are nationals of island-states that risk disappearing. While it would be appealing to propose something wholly new,[135] the dilemma is that human rights loosened from the current state-based order lacks both a historical basis and the necessary legitimacy for concrete action.

Traditionally, there were very few legitimate grounds for states to assume responsibility for or more directly intervene in other states' affairs. These were mostly limited to situations where an internal situation risked harming another state or more generally undermining the international order. Beyond that, extra-territorial responsibility in human rights law has been more or less restricted to the prevention of genocide, as expressed in the Convention on the Prevention and Punishment of the Crime of Genocide of 1948. Even this has unfortunately had very limited effect, evident in macabre discussions among states during both the Rwandan genocide and the conflict in Darfur, when the grave patterns of abuse were termed "genocide-like" in order to evade international responsibility.

One potential way forward is the emergence since the 1990's of the concept of "Responsibility to Protect", initially the result of independent reflection on lessons learned

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[134] Quote taken from Agamben *supra* note 120 at 126, reflecting on Arendt's analysis of the state of being a refugee.

[135] *See e.g.* Paul G. Harris, *Climate Change & Global Citizenship*, 30 LAW & POLICY 4 at 482, 490 (2008) on the responsibilities of the affluent. He advocates an individual global citizenship/individual responsibility approach.

following the Rwandan genocide and the wars in the Balkans. The concept was first proposed in a 2001 report by the International Commission on Intervention and State Sovereignity (ICISS), established by the government of Canada. According to "Responsibility to Protect", states have an affirmative responsibility to intervene in another state if that state's population is at risk of grave human rights abuses. The ICISS paints the responsibility in broad terms: "Where a population is suffering serious harm, as a result of internal war, insurgency, repression or state failure, and the state in question is unwilling or unable to halt or avert it, the principle of non-intervention yields to the international responsibility to protect". Furthermore, among the elements leading to such demands for an intervention is included armed conflict of course, but also "other man-made crises putting populations at risk".[136] Indeed, a number of leading figures, including the former High Commissioner for Human Rights, Louise Arbour, have sought to include prevention within the scope of "Responsibility to Protect". To be fair, however, most of the original report does focus on military intervention on behalf of populations at risk of harm on account of internal armed conflict.

While "Reponsibility to Protect" has yet to lead to any international legal instrument, it was affirmed by states at the UN World Summit of 2005. It should be noted that, in the Outcome Document, the circumstances that can (and should) give rise to interventions have been described in a more restrictive way than in the original report. In the operative paragraph of the Outcome Document, the following circumstances giving rise to "Responsibility to Protect" are listed: "…to help protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity…"[137]

Nevertheless, the concept lives on. In 2007, the UN Secretary-General Ban Ki Moon established the post of Special Adviser on the Responsibility to Protect. There has been some willingness to extend "Responsibility to Protect" beyond the circumstances listed in the Outcome Document of 2005. French Foreign Minister Bernard Kouchner ignited a debate when he suggested "Responsibility to Protect" as a basis for responding to the Burmese military regime's passivity in the face of the devastation wrought by Cyclone Nargis in 2008. He said, "We are seeing at the United Nations whether we can implement the 'Responsibility to Protect', given that food, boats and relief teams are there, and obtain a UN resolution which authorizes the delivery [of aid] and imposes this on the Burmese government."[138] Implicit in his statement is a critical distinction, namely that any assumption of responsibility by the international community was at least in part motivated by the Burmese military regime's passivity. At any rate, the debate did not lead to any widespread support for Kouchner's suggested new direction for "Responsibility to Protect".

Of course, the difficulties in getting effective action on Darfur off the ground may mean that the concept never really becomes operational. Moreover, one need only remind oneself of the US-led intervention in Iraq in 2004 to see that there are legitimate reasons why governments have been so hesitant to agree to any widening of the grounds for breaching state

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[136] ICISS, RESPONSIBILITY TO PROTECT, REPORT OF THE INTERNATIONAL COMMISSION ON INTERVENTION AND STATE SOVEREIGNITY xi (2001) *available at* http://www.iciss.ca/pdf/Commission-Report.pdf, *accessed on 6 Jan. 2011*.

[137] Outcome Document of the High-level Plenary Meeting of the UN General Assembly contained in G.A. Res. 60/1, U.N.G.A. 60th Sess., U.N. Doc. A/Res/60/1, para. 139 (2005).

[138] The statement was made on 7 May 2008, *available at* http://www.responsibilitytoprotect.org/, *accessed on 12 Feb. 2009.*

sovereignity. For many, the whole notion of humanitarian interventions has since been tarnished.

Still, the UN World Summit of 2005 was an important step in considering state responsibility for populations beyond borders. Regarding a possible extra-territorial responsibility for the effects of climate change, "Responsibility to Protect" could gain ground if it were seen as not being limited to physical or indeed hostile interventions but rather as also extending to other measures taken on behalf of affected populations. In the future, we may look back and see that Kouchner was simply ahead of his time when suggesting application of the concept to natural disasters.

The ICISS was attempting to look at international law in light of the needs of the day, so a further revisiting of the concept with regard to at least the most extreme effects of climate change, such as disappearing small island-states should not be too far-fetched. And maybe the list of circumstances could be considered a benchmark of harm, against which climate change-induced effects could be measured in the future.

Nevertheless, the conclusion of most observers following the French foreign minister's statement was that "Responsibility to Protect" does not yet apply to cases of government inaction and negligence and that this would be an unwelcome widening of the concept.[139] Indeed, a subsequent UN report expressly excluded climate change from "Responsibility to Protect": "...To try to extend it to cover other calamities such as HIV/AIDS, climate change or the response to natural disasters, would undermine the 2005 consensus and stretch the concept beyond recognition or operational utility."[140] Thus, any revisiting of the concept in order to apply it to climate change will have to wait, at least for now.

The above description of the historical individual-state focus in human rights is most relevant to civil and political rights. Indeed, in the ICCPR, the operative paragraph Article 2(1) obliges the state party to act "within its territory and subject to its jurisdiction". Still, the *non-refoulement* obligation has developed in human rights law, for example through application of both Article 3 of the European Convention of Human Rights (ECHR) and Article 7 of the ICCPR, in such a way as to make clear that states have an obligation to prevent future violations of human rights elsewhere, most particularly by not returning an individual to a territory where she or he would be at real risk of torture.

A further discussion on transnational responsibility has taken place concerning economic, social and cultural rights. In Articles 55 and 56 of the UN Charter, for example, states are called on to cooperate to achieve the purposes of the organisation, including universal respect for human rights. In comparison with the ICCPR, the operative paragraph Article 2 (1) in the ICESCR affirms that states should work for the progressive realisation of the rights contained therein, "through international assistance and cooperation". In its General Comment no. 3, the UN Committee on Economic, Social and Cultural Rights concluded that, "[I]nternational cooperation… for the realisation of economic, social and cultural rights is an obligation on all

[139] The UN Special Adviser on Responsibility to Protect, Edward Luck, replied that this would be "a misapplication of the doctrine". *Id.*

[140] Report of the Secretary-General, Implementing the responsibility to protect, UN. Doc. A/63/677 at 8 (2009).

states."[141] However, after a decade-long discussion, perhaps it comes as little surprise that developing countries have supported an affirmative legal obligation to assist across borders, whereas the industrialised countries have not.

Still, it may also be in states' own interest to assume responsibility for the protection of populations outside their own borders. In a recent report written for the Australian Human Rights Commission, the following argument was put forward: "[I]f the countries that carry primary responsibility for the problem are perceived to turn a blind-eye to the consequences, the resentment and anger that will follow could foster conditions for political extremism… Therefore, even though from a strict legal standpoint it is difficult to invoke international human rights law as a reason for providing assistance overseas, it is Australia's security interests to be responding to climate change impacts overseas."[142]

d. Environmental Law Responses

State responsibility across national boundaries garners some support from international environmental law. Principle 21 of the Stockholm Declaration states: "States have… the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." Although not binding, Principle 21 of the Stockholm Declaration is generally considered to draw on the widely cited *Trail Smelter* case between Canada and the United States.[143] *Trail Smelter* applied the "no-harm" rule: "Under [this] principle of international law… no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another state or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence."[144] The no-harm rule is similar to the due diligence approach of international human rights law, in that both draw on doctrines applied in domestic torts law, not least by common law jurisdictions.[145]

Beyond the no-harm rule, Article 3 of the UNFCCC affirms the equity principle, namely highlighting the unequal burden of the effects of climate change. According to Article 3, states parties should protect the climate system, "on the basis of equity and in accordance with

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[141] *General Comment No. 3: The nature of States Parties obligations (art. 2(1))*, UN Committee on Economic, Social and Cultural Rights, UN doc. E/1991/23, para. 14 (1990).
[142] Australian Commission Report *supra* note 83 at 17.
[143] Trail Smelter (U.S. v. Can.), III RIAA 1911, 1965 (1941).
[144] Cited in Christina Voigt, *State Responsibility for Climate Change*, 77 NORDIC JOURNAL OF INTERNATIONAL LAW 7 (2008). Voigt goes on to point out how the International Court of Justice has applied the "no-harm" rule in its *Nuclear Weapons* advisory opinion (Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, I.C.J. Reports 1996, p. 226) and in the *Gabcikovo-Nagymaros* case (Gabcikovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997, p. 7). The *Trail Smelter* case dealt with the damage caused in the United States by sulphur dioxide fumes emitted by a smelter in Canada. There is a concise summary available in COMPENDIUM OF JUDICIAL DECISIONS ON MATTERS RELATED TO THE ENVIRONMENT: INTERNATIONAL DECISIONS 1 (1998), *available at* http://www.unep.org/padelia/publications/Jud.dec.%20pre%28Int%20.pdf, *accessed on 6 Jan. 2011*.
[145] Voigt *supra* note 144 at 9.

their common but differentiated responsibilities and respective capabilities." Developed countries, "should take the lead in combating climate change and the adverse effects thereof," with full consideration being given to the needs of "particularly vulnerable" developing countries, "that would have to bear a disproportionate or abnormal burden under the Convention." The UNFCCC goes on to speak of, "common but differentiated responsibilities," in Article 4.

It may be useful to recall that there are many equity principles. These can vary, depending on whether they are allocation- or outcome-based. The former designate emission rights to countries, whereas the latter refer to the economic consequences of various regimes.[146] As an example of an allocation-based rule, the egalitarian rule states that a country comprising x per cent of the world's population should get x per cent of the global greenhouse gas emissions entitlements. The "polluter-pays" rule is an example of an outcome-based rule; according to it, there should be an equal ratio between emissions and resulting abatement costs for reducing those emissions. The "poor losers" rule is also an example of an outcome-based rule, exempting developing countries from obligations to reduce greenhouse gas emissions until a certain GDP per capita level is achieved. Irrespective of their bases, most rules currently being applied in climate change negotiations shift the abatement burden towards industrialized countries.[147]

A further environmental law concept should be mentioned, namely the precautionary principle as expressed in the Rio Declaration and other international environmental instruments: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. When there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used a reason for postponing cost-effective measures to prevent environmental degradation."[148]

During the course of the OHCHR study, an interesting contrast was drawn between international environmental law and international human rights law. The former expresses concern for future generations and is motivated by inter-generational equity, whereas the latter is more wholly focussed on the present.[149] The precautionary principle is considered to be one way that the concepts of intra- and intergenerational equity have entered into international environmental law. This inter-generational quality to international environmental law can be considered a response to those who would argue that populations in the industrialised countries should not have to pay for what their ancestors happened to have done. In essence, our responsibility towards future generations remains, even if we would baulk at having to pay the price for what has come before.

Recently, scholars and non-governmental organisations have suggested linking human rights principles to the UNFCCC process. They have variously suggested inserting human rights language into the interpretative text of the Convention or into the guidelines for adaptation

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[146] Andreas Lange, Carsten Vogt, Andreas Ziegler, *On the Importance of Equity in International Climate Policy*, 29 ENERGY ECONOMICS 547 (2007).
[147] *Id.* at 548-549.
[148] Principle 15 of the Rio Declaration on the Environment and Development, United Nations Conference on Environment and Development, U.N. Doc. A/CONF.151/26 (1992).
[149] Although the *non-refoulement* principle prevents states from sending individuals back to countries where they risk future harm, this is still to do with the present generation as opposed to creating obligations *vis à vis* future ones.

funds established in accordance with it. More radically, some have argued for an additional protocol to the UNFCCC on human rights and climate change or more specifically on the protection of climate change displaced.[150] States' behaviour in the negotiations leading up to the successor agreement to the Kyoto Protocol will show whether these suggestions have any hope of leading to concrete initiatives.

e. International Litigation

While the study has so far focussed on international instruments, the fact remains that legal developments can also be driven by domestic and international case law. Affected populations may simply not wait for the world community to achieve consensus around either a new treaty or new interpretations of the existing framework. There are at least two decisions by the European Court of Human Rights concerning the obligations of states to protect populations at risk from environmental harm. In both, the Court found that the states had violated their obligations under the ECHR, by omitting to protect their citizens.[151]

In *Öneryildiz*, the Court found that the Turkish authorities had violated the right to life as contained Article 2 of the Convention, which "does not solely concern deaths resulting from the use of force by 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."[152] The case dealt with deaths caused by a methane explosion at a rubbish dump in an area of Istanbul.

In *Budayeva*, the Court found that Russia had also violated the right to life by failing to implement land use-planning and emergency relief plans, despite being aware of the risk of a major landslide like the one that occurred in Tyrnauz in 2007. These cases are significant both in their linking human rights to environmental protection and in extending the notion of harm to omissions of positive obligations. In essence, these cases support the application of the concept of due diligence to both human rights and to situations where environmental harm threatens.

A further important case deals more directly with climate change, namely the Inuit Circumpolar Council's 2005 submission to the Inter-American Commission on Human Rights. The Inuit Petition identified the United States as the offending party. Interestingly, it alleged in part that the Inuits' property rights are violated.[153] While as stated above, a right to a healthy environment has not been firmly established under international law, the Petition concluded that it is, nevertheless, "a right of customary law outside the context of indigenous peoples."[154] The Inuit Petition highlighted the divergence between rhetoric and action on the

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[150] *See e.g.* Biermann *supra* note 12 at 26. Human rights language in one of the outcome documents of the 2010 Cancun Climate Change Conference shows that that may be a more realistic goal. *See* text at *supra* note 9.

[151] Budayeva and others v. Russia, Eur.Ct.H.R. 15339/02 (2008); Öneryildiz v. Turkey, Eur.Ct.H.R. 48939/99 (2004).

[152] Öneryildiz *supra* note 151 at para. 71.

[153] Inuit Petition *supra* note 2 at 70, focussing on indigenous peoples' connection to the land and citing the Inter-American Court in Caso de la Communidad Mayagna (Sumo) Awas Tigni (Awas Tigni), INTER-AM. C.H.R., Ser. C, No. 79, para. 39 (2001).

[154] *Id.* at 82.

part of the Bush administration.[155] In particular, the complainants accused the Bush administration of violating the precautionary principle.

In December 2006, the Inter-American Commission concluded that it would not hear the case. However, in March 2007, it held a thematic hearing on the Inuit Petition. During the course of the hearing, the commissioners asked how one state could be held responsible for the actions of many. Martin Wagner, one of the petitioners' counsels, replied, "[L]ike saying if two people stab a knife into someone together, we have to figure out how much each one is responsible." He argued that each state should be held separately as well as jointly liable.[156]

While the Inter-American Commission hearing cannot be considered precedent-setting, it was widely perceived to be a critical step in the evolution of human rights and climate change thinking. The Inuit Petition described in detail the harm facing Inuit communities at the time it was written. Since then, in 2008, at least four Alaskan indigenous communities reported that they must relocate immediately and dozens of others were at risk on account of erosion and subsidence due to melting permafrost.[157]

V. Legal Responses to Climate Change Displacement

a. Background

The human rights-related concerns regarding climate change come after approximately two decades' intensive scholarly debate concerning environmental displacement.

The concept of "environmental refugee" has long been in circulation. During the 1980's, an intense discussion commenced concerning its possible definition and applicability. In 1985, Essam El-Hinnawi proposed the term "environmental refugee" and suggested the following definition: "[T]hose people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life."[158]

There is no room in this brief study to recap the debate that ensued. What follows will be a brief summary of some of the key questions raised. Already in El-Hinnawi's proposed definition, some issues can be identified, for example: "forced to leave" and whether the migration was voluntary or not; "temporarily or permanently" and the issue of the duration of displacement; "natural and/or triggered by people" and the question of human causality (and possible intent as well as resulting responsibility); and "jeopardized their existence", i.e. the

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[155] *Id.* at 97 onwards.
[156] ICHRP REPORT *supra* note 32 at 42.
[157] Robin Bronen, *Alaskan Communities' rights and resilience*, FORCED MIGRATION REVIEW NO. 31, 30 at 32 (2008).
[158] Essam El-Hinnawi, UN Environmental Programme, ENVIRONMENTAL REFUGEES 4 (1985). Quoted in Keane *supra* note 55 at 1. Gaim Kibreab pointed out that the term had already been proposed in a document issued by the International Institute for the Environment and Development (IIED) the year before. Gaim Kibreab, *Environmental Causes and the Impact of Refugee Movements: A Critique of the Current Debate*, 21 DISASTERS 1 at 21(1977).

intensity of the harm caused. These factors and others will crop up in various subsequent commentaries.

The debate concerning "environmental refugee" has firstly focussed on whether it adequately reflects reality. As this has bearing on the question of the term's legal content, it is useful to dwell briefly on this part of the debate. One issue that is recurring is that of voluntariness. Noting that the distinction between voluntary migrants and (involuntary) refugees may have some theoretical force, Bates, for example, wrote: "Conceptually sandwiched between voluntary migrants and refugees are those compelled by deficiencies in the local social, economic, or environmental context. For example, refugee flows usually contain anticipatory refugees. These people recognize that their local situation will eventually deteriorate and have the ability to relocate before they are forced to do so."[159] Bates suggested a continuum, comprising involuntary-compelled-voluntary in order to distinguish between "environmental refugees", "environmental migrants" and "migrants".[160] While the questioning of the voluntary/involuntary distinction and the suggestion of a continuum is welcome, the attempted differentiation between involuntary "environmental refugees" and compelled "environmental migrants" appears forced, as though Bates ultimately got caught in the same dilemma he identified to begin with. Nevertheless, Bates provided a welcome nuance to the debate. For example, her article identified one coping pattern during environmental stress, namely "dispatch" migration, where a family member is sent off to earn an income without the whole family necessarily being relocated.[161]

Another attempt at tackling the voluntary/involuntary issue is by distinguishing between types of natural phenomena, as well as the reactions to them. King, for example, distinguished between slow onset/gradual deterioration and acute onset/immediate environmental damage. She suggested that migratory behaviour can be divided between that which is temporary and that which is permanent, i.e. without a possibility of return.[162] She created a model using both spectra, e.g. deforestation would be an example of slow onset with return still possible, whereas desertification would be a type of slow onset where no return could be possible.[163] Natural disasters would be an example of acute onset with possible return, whereas industrial disasters, e.g. Chernobyl, would fall under the acute onset/without return category.[164] Adding to the analytical framework, King distinguished between "proactive" and "reactive"

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[159] Diane C. Bates, *Environmental Refugees? Classifying Human Migrations Caused by Environmental Change*, 23 POPULATION AND ENVIRONMENT 5, 467 (2002). Her emphasis. Several others have written on the voluntary/involuntary question. See for example: Astri Suhrke & A. Visentin, *The Environmental Refugee: A New Approach*, ECODECISION 73-74 (1991). Also, Renaud *supra* note 54 at 29; Anthony Oliver-Smith, *Disasters and Forced Migration in the 21st Century*, Social Science Research Council 4 (2006); and Stravopolou, *Drowned in definitions?* FORCED MIGRATION REVIEW NO. 31, 11 (2008). Stavropolou wrote of victims of natural disasters and other arbitrarily displaced that, "Defining them… as 'environmental refugees' or 'climate change refugees' appears not to serve any purpose other than raising the profile of the issue." Stravopolou at 12. She went on to conclude that a case-by-case analysis, for example regarding the voluntary/forced distinction becomes unavoidable. *Id.*

[160] Bates *supra* note 159 at 468.

[161] *Id.* at 473.

[162] King *supra* note 58 at 546.

[163] *Id.* at 547.

[164] *Id.* at 549.

migration, given that there may be "pull" as well as "push" factors at work.[165] In conclusion, she stated that environmental migrants are generally motivated by slow onset problems, whereas environmentally displaced are induced by both slow and acute onset damage. The former category "implies control over a certain amount of resources," whereas the latter resemble refugees, who are "relatively powerless and vulnerable."[166]

The traditional view of refugee status as falling within some form of political sphere has been examined in a paper by Piquet, written for UNHCR's research series. Piquet characterized the study of migration as dominated by two paradigms, namely an economic one and a political one. Environmentally induced migrations tend to be internal and more often in the global South. This together with the dominance of the other two paradigms is the cause, according to Piquet, for so little having been done on environmental migration.[167]

Piquet noted that the 1951 Convention was written after the post-World War II euphoria surrounding the drafting of the UDHR had died down. It became very much of a tool of the Cold War, during which western countries focussed their refugee policies on those fleeing the Soviet bloc. Thus developed the notion that refugee status (and with it, the concept of persecution) exists in a political sphere, whereas, say, environmental concerns do not.

Piquet criticised the concept of "environmental refugee" as simplistic; he felt that it risks "evacuating political responsibility by overplaying the hand of nature."[168] Restrictive government immigration policies could be reinforced by the high estimates of those at risk of being displaced. He went on, "Because environmental can imply a sphere outside politics, use of the term environmental refugee may encourage receiving states to treat the term in the same way as economic migrants to reduce their responsibility to protect and assist."[169] Kibreab went one step further, fearing that the use of the term "environmental refugee" was deliberately being used to justify increasingly restrictive asylum regimes.[170] However, most of those recommending the term are advocates of a more liberal application of the 1951 Convention.

The idea that environmental damage is non-political should well and truly be buried. Already over two decades ago, Amartya Sen pointed out the link between famines and political structures.[171] Sen demonstrated that most famines occur not only on account of lack of food but also from inequalities in the mechanisms for its distribution. Some would, however, use the interweaving of environmental and political factors as a reason to argue against the term environmental refugee. Castles, also writing for UNHCR's research series, referred to Sen and concluded, "[T]he notion 'environmental refugee' is misleading and does little to help us

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[165] *Id.* at 555.
[166] *Id.* at 556-557.
[167] Piquet *supra* note 68 at 2. Note that Piquet described the dominance of the economic and political paradigms, without necessarily approving of it.
[168] *Id.* at 4.
[169] *Id.*
[170] "The term "environmental refugee" was, therefore, invented at least in part to depoliticise the causes of displacement, so enabling states to derogate their obligation to provide asylum," Kibreab *supra* note 158 at 20.
[171] *See generally* AMARTYA SEN, POVERTY AND FAMINES: AN ESSAY ON ENTITLEMENT AND DEPRIVATION (1981).

understand the complex processes at work in specific situations of impoverishment, conflict and displacement."[172]

The Burmese government's passivity in the face of the suffering caused by Cyclone Nargis in May 2008 has already been mentioned and should be a very clear example of the linkages between environmental harm and politics. Over 84,500 people died and nearly 54,000 people went missing, presumed dead. The cyclone destroyed 450,000 homes and led to food shortages affecting 1.5 million people living in the Irrawaddy delta. An immediate offer by the United States government of support in the form of ships and helicopters was rejected and it took several weeks for the UN finally to get the go-ahead to launch an international relief effort. The events of 2008 came shortly after the Burmese authorities' violent quelling in August and September 2007 of protests sparked by rising fuel prices. While the two events were separate, their cumulative political effect in terms of the widespread feelings of frustration and anger at the regime is clear.[173]

The interweaving of the environmental and the political is also in line with the general thrust of environmental migration analysis, namely that environmental causality cannot be separated from a multitude of other factors, including, say, how social structures are functioning in the area or country of origin.

A slightly different dichotomy from that between the environment and politics is that of environmental versus human causation, i.e. natural disasters occur in a realm other than that of human activity. One reply to that is that searching for a single cause in the environment again blinds one to the fact that the effects of natural disasters are channelled through and occasionally magnified by social, economic and political factors. Moreover, as Oliver-Smith pointed out, disasters include processes before and after, namely those "of adaptation and adjustment in recovery and reconstruction."[174] Indeed, this dichotomy feels equally anachronistic, not least given the wide-reaching effects of climate change. Scientists warn that even phenomena such as earthquakes, which at first sight appear to be divorced from climate change, may well be caused by the increased weight of the earth's oceans, due to thermal expansion.

b. Possible Application of the 1951 Convention

The second aspect of the debate concerning the term "environmental refugee" has focussed on whether it can have a legal content.[175] While this discussion was sparked by El-Hinnawi's paper, it was given added fuel by the climate change prognoses of the IPCC and the Stern

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[172] Castles *supra* note 50 at 5.

[173] Information gathered from several articles in The Guardian *available at* http://www.guardian.co.uk/world/cyclonenargis, *accessed on 23 Jan. 2009.*

[174] Oliver-Smith *supra* note 159 at 5. Similar reasoning caused Wood to suggest the term "ecomigrant" instead of environmental refugee. William B. Wood, *Ecomigration: Linkages between Environmental Change and Migration*, in A. ZOLBERG & P.M. BENDA, EDS. GLOBAL MIGRANTS, GLOBAL REFUGEES: PROBLEMS AND SOLUTIONS 46-47 (2001). Wood pointed out that one form of ecomigration is that of retired persons in the developed world migrating from northerly climates to the Sun Belt. *Id.* at 52.

[175] A suggested "climate refugee" category can more easily be dismissed, as it risks excluding groups who have been displaced on account of environmental harm which may be not so easily connected to climate change. *See e.g.* NRC Report *supra* note 45 at 39 for a discussion.

Review.[176] This aspect of the debate has primarily been about whether environmentally displaced can fall within the refugee definition as contained in Article 1.A.2 of the 1951 Convention namely:

> [O]wing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his (or her) nationality and is unable or, owing to such fear, is unwilling to avail himself (or herself) of the protection of that country.

An overarching argument often heard against such application or indeed the use at all of the word "refugee" is that this would risk undermining the legitimacy of the traditional refugee concept. This is a fair point, however the author would suggest that we are not now nor have we ever really experienced some ideal world where the world community has truly respected the obligations triggered by the 1951 Convention. We have already today a multitude of refugee statuses, granted under international instruments. Palestinian refugees fall under the mandate of the UN Works and Relief Agency, and displaced fleeing armed conflict in Africa or Latin America are recognised according to regional instruments. Furthermore, UNHCR applies its own statute in order to recognise refugees under its mandate – especially in circumstances where states have not signed the 1951 Convention or limited its application. And the *non-refoulement* application of human rights provisions, such as Article 3 of ECHR, has created further protection categories.

Moreover, there is a risk that an "original intent" view[177] of the 1951 Convention hinders a discussion of the refugee protection regime that is needed to meet the challenges of the 21st century. If the 1951 Convention were instead to be set in aspic and supplemented by other instruments or *ad hoc* arrangements, there is a real risk that it would thereby be undermined. Indeed, this would bring us back to the situation as it looked prior to the 1951 Convention and exactly what its authors were reacting to when trying to formulate a more universal definition. Rather, surely, it should be interpreted in light of contemporary forms of serious human rights abuse, as well as evolving standards and interpretations of international human rights law.

This is nothing new. The interpretation of the 1951 Convention has repeatedly been adapted in order to address new (or newly understood) circumstances: gender-related persecution and the protection of victims of trafficking are two recent examples. The following is an attempt to do just that.

What follows is a step-by-step analysis of the components of this definition and how it could be applied to environmental displacement.

i. "…well-founded fear…"

With regard to the "well-founded fear" aspect of the definition, King pointed out that neither environmental migrants nor environmentally displaced fear persecution. According to her, they remain able to seek protection from their own state.[178] She did however list a few exceptions, for example the 350,000 Iraqi Marsh Arabs who were displaced following Saddam Hussein's deliberate destruction of their environment. In any case, King did not

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[176] *See e.g.* Biermann *supra* note 13 at 19 for a discussion.

[177] Referring to the US Constitution and those who insist on interpreting it as the Founding Fathers would have done.

[178] King *supra* note 58 at 551-552.

question that environmental displacement exists, or that such populations must be assisted. She gave various reasons for this, including the social justice argument mentioned earlier.[179]

King was of course correct. Most environmentally displaced will not necessarily feel averse to contacting their national authorities. However, she did not necessarily look at this issue from the perspective of the individual environmentally displaced. The displaced person may indeed still be willing to seek support from the own government, but the question remains whether the state will be able or willing to provide that protection.

ii. "…of persecution…"

The ability and willingness (or lack thereof) of the state to provide protection raises an issue concerning action versus inaction. Human rights law, especially in the area of civil and political rights, has traditionally focussed on prohibiting commission, i.e. the intentional harm inflicted by governments on individuals and populations (hence the notion of "negative rights"). Thus, our typical view of the word "persecution" is that it encompasses acts of commission, indeed with a systematic deliberateness that warrants a fear of future harm. However, the fact that the word "persecution" is not defined in the 1951 Convention also opens up the possibility that it can encompass omission, i.e. harm caused by government lack of action.[180] While not interpreting refugee law as such, the fact that the European Court of Human Rights has found that states have violated their obligations under the ECHR through their omitting to act to protect their populations from environmental harm would support such a reading.

This possible omission-based interpretation of the word "persecution" is then underscored by the words "unable" and "unwilling" towards the end of the definition. We will be turning to these momentarily. However, the fact that the definition mentions the individual's inability or unwillingness to seek his or her government's protection supports an interpretation of the word "persecution" as encompassing government inaction. Indeed, UNHCR's Handbook, considered a leading authority for the interpretation of the 1951 Convention, states as much: "Protection by the country of nationality may also have been denied to the applicant. Such denial of protection may confirm or strengthen the applicant's fear of persecution, and may indeed be an element of persecution."[181] In essence, fear of persecution leading to flight would be a two-step process. First comes the harm, and then comes the impossibility (whether due to government inability or its unwillingness) for the affected person to receive the assistance necessary to survive. Indeed, the paragraph from the Handbook makes it clear that it is the sum total effect that should be judged.

Many typically think of the word "persecution" as primarily being focussed on violations of civil and political rights. However, even well-founded fear of violations of economic, social

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[179] *Id.* at 557.

[180] This is clearly the case in for example many gender-related claims where the authorities of the country of origin did not take the action necessary to protect the woman from abuse. Numerous jurisdictions now find this to be a basis to grant refugee status.

[181] UNHCR, HANDBOOK ON PROCEDURES AND CRITERIA FOR DETERMINING REFUGEE STATUS UNDER THE 1951 CONVENTION AND THE 1967 PROTOCOL RELATING TO THE STATUS OF REFUGEES, U.N. Doc. HCR/IP/4/Eng/REV. 1, para. 98 (1979, reedited 1992).

and cultural rights can lead to a granting of refugee status.[182] Measures that in themselves do not amount to persecution can, according to the current reading of the 1951 Convention, be considered as such if their cumulative effect reaches a certain level of intensity.[183]

UNHCR underlines the importance of taking a holistic approach to the situation facing the individual and doing so from the individual's perspective. For example, in its recent guidelines concerning victims of trafficking, it states: "What amounts to a well-founded fear of persecution will depend on the particular circumstances of each individual case. Persecution can be considered to involve serious human rights violations, including a threat to life or freedom, as well as other kinds of serious harm or intolerable predicament, as assessed in the light of the opinions, feelings and psychological make-up of the asylum applicant."[184]

In climate change terms, one would look for violations of, say, the individual's right to health, food, and adequate housing that singly or in total are of such intensity as to make it virtually impossible for her or him to return. Moreover, one needs to recall that the violations of economic, social and cultural rights threatened (and already being caused) by climate change are of a scale that civil and political rights – such as the right to life – are at risk.

In seeking to apply the 1951 Convention to persons fleeing serious violations of economic, social cultural rights, Foster turned to the Vienna Convention on the Law of Treaties, despite the fact that it does not formally apply to the 1951 Convention as the latter predates it. However, as she pointed out, the Vienna Convention is generally accepted as the leading guide to the interpretation of international treaties, even those that were written before it entered into force. According to its Article 31, treaties should be interpreted, "in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context in the light of its object and purpose." Courts have interpreted this to mean that treaties should be interpreted in a "holistic manner". Given that the Preamble of the 1951 Convention refers to the UDHR, Foster argued that a holistic approach to the word "persecution" should encompass all serious violations of rights contained in the latter instrument, including economic, social and cultural rights.[185] Foster went on to measure the seriousness of these violations by seeking a "core" and a "periphery" of rights, whereby violations of certain core rights would always amount to persecution.[186] In line with the UNHCR Handbook's reasoning concerning cumulative grounds, Foster added that a number of "non-core violations" could together be considered to amount to persecution.[187]

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[182] Discrimination can amount to persecution "if measures of discrimination lead to consequences of a substantially prejudicial nature for the person concerned, e.g. serious restrictions on his right to earn his livelihood, his right to practise his religion, or his access to normally available educational facilities…. If they produce…. a feeling of apprehension and insecurity as regards his future existence…" *Id.* at paras. 54 & 55.

[183] *Id.* at para. 53.

[184] UNHCR, Guidelines on International Protection: The application of Article 1A(2) of the 1951 Convention ...to the victims of trafficking and persons at risk of being trafficked U.N.Doc. HCR/GIP/06/07, para. 14 (2006).

[185] MICHELLE FOSTER, INTERNATIONAL REFUGEE LAW & SOCIO-ECONOMIC RIGHTS: REFUGE FROM DEPRIVATION 41 (2007). *See also* James Hathaway, *Reconceiving refugee law as human rights protection*, 4 REFUGEE STUDIES 2, 122 (1991) for further support for this analysis.

[186] Foster *supra* note 185 at 197.

[187] *Id.* at 199.

The author would urge some caution in applying Foster's reasoning. Although this is clearly not her intention, Foster's "core" and "periphery" rights analysis could potentially be applied restrictively against whole groups of asylum-seekers (by applying some form of gradation or scale to the human rights catalogue). The author would rather see an individualized approach, depending on the circumstances and particular vulnerabilities of each asylum-seeker.

iii. "…for reasons of…"

A difficult issue linked to the concept of persecution is that of intent, namely that the harm should be "for reasons of" one of the enumerated grounds (often called the "nexus" requirement). The references in UNHCR's Handbook to economic and social rights clearly link violations of these to underlying discrimination. Several commentators have reached thus far and no further in their analysis of the 1951 Convention's applicability to climate change. As the report by the Australian Human Rights Commission noted, the "for reasons of" requirement "is counterintuitive to the indiscriminate nature of climate change disasters."[188] Williams considered the possible use of "membership of a particular social group", especially in cases of government-induced environmental degradation. However, she was sceptical that such an interpretation could gain acceptance among asylum authorities: "While this argument may have some academic merit, it is unlikely to be accorded any significant credibility even if one adopts the most liberal approach to treaty interpretation, given the object and purpose of the agreement and the narrow applicability of the [1951] Convention by the parties."[189]

There are however grounds for believing that the "for reasons of" language is not restricted to identifying the persecutor's intent. For example, UNHCR does not consider that proof of such intent is required.[190]

Foster provided an interesting analysis of various jurisdictions' approaches to the nexus requirement. While she listed three different interpretations, for the sake of brevity these can in essence be boiled down to two: the first focuses on the perpetrator's intention to do harm; and the second adopts an objective observer's understanding of the threat posed to the victim. According to the second alternative, the enumerated grounds contained in the 1951 Convention can be seen as reasons to explain why the asylum-seeker is facing the predicament she or he is in.[191] Indeed, Foster then drew on case-law from a number of leading jurisdictions for support of the latter approach to the nexus requirement.

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[188] Australian Commission Report *supra* note 83 at 22. *See also* Renaud *supra* note 54 at 14.
[189] Williams *supra* note 40 at 508.
[190] *See* UNHCR, Refugee Status Determination: Identifying who is a Refugee, Self-study module 2, para 2.2.3.5 (2005): "...It is satisfied if the Convention ground is a relevant factor contributing to the persecution – it does not need to be its sole or even dominant cause. Neither is it necessary to establish the motives of the persecutor: whether or not there is intent to persecute is irrelevant, if the effect of the measures taken amounts to persecution for the particular individual concerned and if there is a link to a Convention ground."
[191] Foster *supra* note 185 at 270 onwards. Foster's three categories are: 1) with a focus on the intention of the persecutor; 2) with the same focus but also with regard to the intention of the state in failing to provide protection; and 3) the approach which she termed the "predicament" interpretation.

Thus, according to Foster, the enumerated grounds do not necessarily need to be what motivates the persecutor. Rather, they can be markers of vulnerability,[192] an explanation why the individual or group of asylum-seekers are facing harm in the country of origin.

iv. "...outside the country of (her or) his nationality..."

One obvious obstacle for applying the refugee definition in Article 1 of the 1951 Convention is the phrase, "outside the country of nationality", which serves as the trigger for refugee status determination in asylum countries. Some scenarios will indeed fall outside the scope of the refugee definition on this score (e.g. those populations who become internally displaced), whereas others may still qualify (e.g. those populations who may move across borders, in particular those leaving disappearing island-states).

v. "…unable or unwilling…"

Continuing on our step-by-step pursuit of the definition contained in the 1951 Convention, we return to the issue of the asylum-seeker's inability or unwillingness to receive the protection of the country of origin. The Convention's notion of the protection granted by the country of nationality was at least originally quite traditional, including such sovereign acts as the issuance of passports.

It is actually not so difficult to envision how climate change-induced harm could affect these forms of protection. Further to the recent SIDA & IA Report,[193] climate change risks causing collapse in societal structures or leading to armed conflict. Moreover, one can well imagine that a badly affected state would act in a discriminatory fashion towards certain minorities, although we would then presumably apply refugee status on account of the gravity of the discrimination – a more traditional approach. As already noted, disappearing small island-states would risk having state authorities that no longer have the wherewithal to extend such legal protection. This goes to the very meaning of what a state is, needs to have in order to function properly, and needs to do towards its citizens. For example, the Montevideo Convention sets out four criteria for statehood, one of which is having a defined territory.[194]

Walter Kälin, the Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, identified disappearing small island-states as a particular case that needs addressing. In his analysis, Kälin referred to the international legal standards concerning statelessness, but concluded: "The rights of these affected populations need to be identified, and clarification is need about whether they require a unique legal status..."[195] He pointed out

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[192] The author's own term, not Foster's; Foster uses the word "predicament". *Id.*

[193] *See* SIDA & IA Report *supra* note 52 and the list of references.

[194] Article 1, the Montevideo Convention on the Rights and Duties of States *signed* at Montevideo, *adopted* 26 Dec. 1933 (*entered into force* 26 Dec. 1934); cited in the Submission of the Maldives to the Office of the UN High Commissioner for Human Rights at 41, fn. 144 *available at http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Maldives_Submission.pdf, accessed on 6 Jan. 2011*.

[195] Walter Kälin, The Climate Change - Displacement Nexus, ECOSOC Panel on Disaster Risk Reduction and Preparedness: Addressing the Humanitarian Consequences of Natural Disasters (2008)(hereinafter as Kälin Presentation) *available at*

that, according to the Guiding Principles on Internal Displacement, states do have the primary responsibility to protect and assist those affected by natural disasters, including by cooperating with international agencies.[196] Thus, there is a human rights content to disaster relief, and the possibility that human rights could be violated if states do not fulfil these obligations. This would mean that states' obligations to protect their populations should encompass more than the legal protection afforded to citizens, such as the issuance of passports and diplomatic protection.

During the autumn of 2008, the government of the Maldives proposed setting aside income from the tourist industry in a fund to be used to buy territory for the eventual future evacuation of the country's population. Although writing before this initiative was publicly announced, Kälin can be considered to be responding, when he wrote: "Even where the states continued to exist in legal terms and their governments attempted to function from the territory of other states, it is unclear that they would be able to ensure the rights which flow from citizenship. If they are unable to ensure such basic rights as the right to return to one's own country or to obtain a passport, statelessness considerations would … arise."[197] Indeed, the question is whether such a proposal has any long-term merit. It may be that a state may be willing to sell territory to another government, but what happens several generations later? There is a real risk that the settled population could end up in a "Bantustan,"[198] sealed off from the surrounding country.

One of the underlying motivations for the 1951 Convention, its definition and its focus on legal protection is an assumption that, once political conditions have changed, most refugees benefiting from it will return home.[199] For many refugees, of course, the long duration of the situations they fled from as well as the ties they have made in their host communities have meant that this premise has become something of a fiction. At any rate, there is a real risk that the detrimental effects of climate change will underscore the fiction that, for many, is the supposed temporary nature of being a refugee.

vi. a hypothetical case

Having gone through the refugee definition, the author can suggest at least one very possible form of climate change displacement that could fall within the scope of the 1951 Convention. The author chooses to illustrate this via a hypothetical case. The Inuit, for example, are seeing their traditional way of life, including food and income sources, building material and with them the knowledge of building igloos, plus locations important for their story-based belief systems, rapidly disappearing.[200] For the sake of our hypothetical, let us suppose that groups

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http://www.brookings.edu/speeches/2008/0716_climate_change_kalin.aspx, *accessed on 6 Jan. 2011*.

[196] *Id.*

[197] Walter Kälin, Displacement Caused by the Effects of Climate Change: Who will be Affected and What are the Gaps in the Normative Frameworks for their Protection?(2008)(hereinafter Kälin Submission) at 3 *available at* http://www2.ohchr.org/english/issues/climatechange/docs/submissions/WKsubmissiontoOHCHR_15112008.pdf, *accessed on 6 Jan. 2011*.

[198] Referring to the "homelands" established by the apartheid regime in South Africa.

[199] Roger Zetter, *Legal and Normative Frameworks*, FORCED MIGRATION REVIEW ISSUE NO. 31, 62 (2008).

[200] *See generally* the Inuit Petition *supra* note 2.

of Yupik, an indigenous people of Siberia, are forced to leave their region of origin on account of the permafrost melting from under their homes and the thinning ice-sheet, and attempt to move to the United States, in order to find someplace where they can retain something of their traditional culture.[201] There are already Siberian Yupik living on St. Lawrence Island, which is part of Alaska.

According to the 1951 Convention, they could be considered refugees if they could show that a) the harm faced is sufficiently intense, and b) the Russian authorities were being discriminatory in failing to assist them. This would meet both the traditional notion of persecution as comprising active harm, as well as the intent requirement. However, one could respond by saying that the discrimination and resulting harm had more to do with their membership of a particularly disadvantaged or targeted group and less to do with the environmental damage as such.

However, let us say that there is no discrimination demonstrated by the Russian authorities. Rather, Siberian Yupik are leaving not because of state action but because of state inaction, in other words on account of omission. Again, this would seem to be thoroughly plausible, given the challenges states, including Russia, will face. They may simply not be able to meet the needs of all vulnerable populations. Moreover, Russia is one of the countries that risk climate change-induced political instability, as listed in the SIDA & IA Report.[202] Yupik would then be able to show that they were unable to turn to their authorities for protection.

Pursuing the reasoning in sub-section iii above, the "for reasons of" grounds is not so much a reason for the state's deliberate persecution of the targeted group (i.e. persecutory intent) but rather a marker of their vulnerability or an explanation of their predicament, to use Foster's term.

One dilemma quickly emerges, however. Saying that Siberian Yupik are not being discriminated against is a necessary presumption in order for us to conclude that there is a case for protecting persons fleeing solely on account of the adverse effects of climate change. However, what are we to say to all the millions of other Russians who do not belong to Yupik indigenous people?

One way forward (apart from, say, granting *de facto* refugee status to the population of Siberia – probably not a realistic expectation) is to establish the particular intensity of the harm facing Siberian Yupik on account of their close traditional links to the environment and how dependent they are on it for their survival. In the case of Siberian Yupik, the intensity of the harm and their vulnerability to that harm can then be said to be "for reasons of" their belonging to that particular group. They could also possibly fall under the race and/or religion grounds as enumerated in the 1951 Convention.

Williams mentioned in her article the possible application of the ground of "membership in a particular social group" to cases of climate change displacement. Indeed, in the Norwegian Refugee Council report, a social group more generally comprising those "lacking political

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[201] Please note that this scenario is hypothetical. The choice of example is due to a combined reading of the Inuit Petition *supra* note 2 and the SIDA & IA Report *supra* note 52 (which lists Russia as at risk of political instability on account of climate change).
[202] *See* map in SIDA & IA Report *supra* note 52 at 28-29.

power to protect their own environment" was proposed.[203] This would not be necessary in the case of the hypothetical Siberian Yupik, given the applicability of both the race and religion grounds. Nevertheless, they could be able to assert their particular vulnerability to harm on account of the widely prevailing interpretations of the term "particular social group", namely 1) that the group shares "protected characteristics", e.g. their traditional practices; and 2) that they are considered a group because of "social perceptions", i.e. how they are perceived by others.

There is one remaining obstacle for our hypothetical Yupik asylum-seekers, namely the US authorities' interpretation of the 1951 Convention. The immigration official in charge of their case could conclude that the group should have moved elsewhere within the Russian Federation, rather than seek protection in another state. This would entail application of a generally accepted doctrine, namely that of "internal relocation alternative". However, internal relocation alternative should be applied with due regard to the needs, circumstances and possibilities available to the individual asylum-seeker.[204] It is difficult to foresee how strictly the internal relocation alternative doctrine would be applied in our hypothetical case, however the immigration official would hopefully show due regard to the inhumanity that forcing an indigenous people to relinquish their culture would entail. Certainly, the doctrine allows for such consideration of individual circumstances. And this may differentiate the group further from the broader population of Russians in Siberia, who are more likely to be able to move elsewhere inside the country.

The main point of the hypothetical case is that application of the 1951 Convention to situations of climate change displacement cannot be ruled out. The critical steps would be: a) to consider more broadly violations of economic, social and cultural rights as forms of persecution and to recognise that the right to life is threatened by climate change; and b) to view the nexus requirement not as demanding proof of intent but rather as a more general marker of vulnerability.[205]

Both steps find backing in materials produced by UNHCR. It is striking then to note that this is not what UNHCR has said. In its comments to the OHCHR consultation process, UNHCR concluded:

> UNHCR has serious reservations with respect to the terminology and notion of environmental refugees or climate refugees. These terms have no basis in international refugee law. Furthermore, the majority of those who are commonly described as environmental refugees have not crossed an international border. Use of this terminology could potentially undermine the international legal regime for the protection of refugees and create confusion regarding the link between climate change, environmental degradation and migration. While environmental factors can

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[203] NRC Report *supra* note 45 at 27.

[204] UNHCR, Internal Flight or Relocation Alternative, Guidelines on International Protection No. 4, U.N. Doc. HCR/GIP/03/04 (2003). *See especially* para. 7 on the relevance of the alternative to the individual concerned.

[205] Foster *supra* note 185 at 270 onwards. Indeed, as Foster pointed out, neither step is far-fetched, as they are based on a human rights-oriented reading of the 1951 Convention and on case-law from leading jurisdictions. Moreover, UNHCR also shares the viewpoint expressed regarding the nexus requirement. *See supra* quote at note 183 above.

> contribute to prompting cross-border movements, they are not grounds… for the grant of refugee status under international law.[206]

In practice, of course, UNHCR has extended its good offices to assist victims of natural catastrophes before. However, this has occurred on a case-by-case basis and with no corresponding broadening of its mandate nor of states' legal obligations.

More recently, UNHCR appears to have shifted from its previously more dogmatic stance. In a more nuanced recent submission to the Ad Hoc Working Group on Long-Term Cooperative Action under the UNFCCC, UNHCR states,

> Climate-induced displacement was not considered by the drafters when formulating the above definition. Nonetheless, some cross-border environmentally displaced could qualify for refugee status and protection. The Convention as well as UNHCR's mandate would, for example, be applicable in situations where the victims of natural disasters flee because their government has consciously withheld or obstructed assistance in order to punish or marginalize them on one of the five grounds, although such cases are likely to be few.[207]

The paper goes on to discuss possible application of the regional instruments (which this study will look at momentarily). A further direction is provided by this UNHCR paper:

> [T]he large majority of persons leaving their countries in the context of disasters are unlikely to qualify as refugees under extant international law. Such persons would be protected by the *non-refoulement* principle... and additional human rights law provisions which are applicable to aliens. Still they do not provide for a right to enter or stay. Such persons in principle could also rely on the protection of their own States. In extreme disaster scenarios, the State of origin may, however, be unable to advocate with other States on behalf of its citizens in distress.[208]

The paper concludes this particular line of reasoning by noting, "A normative gap could thus be considered to exist if both the country of origin and the host country obstruct or deny or are unable to ensure basic human rights."[209] Later in the text, UNHCR suggests that "some form of protected status", possibly temporary, based on the *non-refoulement* principle would be called for in order to address the right to stay issue.[210]

This opening towards considering climate change displacement in light of international refugee law is welcome. However, UNHCR does not appear to foresee (or advocate) any dramatically new interpretation of the 1951 Convention.

Meanwhile, other international organisations strike a note of urgency. The International Organisation of Migration (IOM) has pointed out that the lack of an accepted definition and resulting state obligations would mean that, "[U]nless they're relocated by extreme weather events, their displacement does not trigger any access to financial grants, food aid, tools,

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[206] UNHCR 2008 *supra* note 11 at 7.
[207] UNHCR 2009 *supra* note 11 at 9-10.
[208] *Id.* at 10.
[209] *Id.*
[210] *Id.* at 11.

shelter, schools or clinics."[211] What remains is a vision of *ad hoc* responses with little structural preparedness. IOM suggests both different terminology and another definition. They have used both "environmental migrant" and "forced climate migrant". For the former, they suggest: "Environmental migrants are persons or groups of persons, who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad."[212]

We should consider what may happen if the 1951 Convention is not or only restrictively applied. There is a grave risk that only *ad hoc* and possibly temporary solutions are offered to those who are displaced. This would take us back to the situation prevailing in international refugee law prior to World War II, exactly what the authors of the 1951 Convention were trying to amend. Moreover, any attempts at creating additional new standards are likely to fail, since states seem so unwilling in the current climate to accept new international obligations.

Still, given the broader social justice issues previously mentioned, the governments of Maldives and other affected states will undoubtedly not let the issue rest. Indeed, a few years ago, the government of Maldives went so far as to present a draft additional protocol to the 1951 Convention, suggesting changes to the refugee definition. That initiative was put aside, while the OHCHR study was being conducted. Indeed, this may not be a rewarding way to go. Previous moves to draft additional protocols to the 1951 Convention (e.g. with regard to providing protection for those fleeing gender-related persecution) were halted, when advocates came to realise the real risk that states could take the opportunity to narrow the scope of the 1951 Convention itself. Rather, the author would argue for more openness regarding possible application of the convention, supplemented by suitable interpretations of other human rights instruments.

Now, there are academics who have argued for a broadening of the refugee definition. Biermann used a social justice argument: "[W]e see no *a priori* reason to reserve the stronger term 'refugee' for a category of people that stood at the centre of attention after 1945, and to invent less appropriate terms, such as 'climate-related environmentally displaced persons' for new categories of people who are forced to leave their homes now, with similar grim consequences. Why should inhabitants of the Maldives who require resettlement for reasons of a well-founded fear of being inundated by 2050 receive less protection than others who fear political persecution?"[213] He went on to suggest a "climate refugee" definition, namely: "[P]eople who have to leave their habitats, immediately or in the near future, because of sudden or gradual alterations in their natural environment, related to at least one of three impacts of climate change: sea-level rise, extreme weather events, and drought and water scarcity."[214] Biermann felt that "environmental refugee" is too broad a category and misses the link to the issues of liability and compensation raised by international climate change regimes.[215] Biermann deliberately excluded refugees on

[211] IOM Report *supra* note 19 at 36.
[212] *Id.* at 15.
[213] Biermann *supra* note 13 at 8.
[214] *Id.*
[215] *Id.* at 4.

account of climate change-induced conflict, for example, on account of the need to link the definition and the movements so defined to a specific legal regime.[216]

The author must admit to being sceptical about excluding other persons fleeing environmental harm. There is already plenty of scope for drawing on the extensive inclusion of economic, social and cultural rights in the conceptualisation of persecution in the refugee definition. Moreover, as has been explained, fundamental human rights, such as the right to life, are at stake. It is the intensity of the harm leading to flight which should instinctively be the key factor. Ultimately, persecution for the sake of the refugee definition consists of serious human rights violations or some other intolerable predicament. One benefit, however, of the Biermann definition is that it specifically does away with the voluntary/non-voluntary distinction. As Biermann wrote, "Who decides?"[217]

c. Application of Other International Standards

This section summarises possible supplementary approaches in international law to the question of climate change displacement. One such approach is clearly available and not so controversial,[218] namely the application of regional refugee instruments, at least to cover those movements of environmentally displaced in Africa or Latin America. The 1969 OAU Convention regarding the specific aspects of refugee problems in Africa (hereinafter the OAU Convention)[219] uses the 1951 Convention refugee definition and then adds a supplemental paragraph, namely Article 1 (2), which includes those fleeing "events seriously disturbing public order".

This convention is limited to states parties in Africa. Nevertheless, its influence has been far-reaching. For example, in its instructions to the relevant ministries and authorities, the government of Pakistan recognised the millions of Afghans who fled the Soviet invasion of 1979 "in the spirit of the OAU Convention."

Turning to the Americas, the 1984 Cartagena Declaration on Refugees[220] is a non-binding instrument, but has had considerable influence on the legislation in many Latin American countries. It too has a supplement to the 1951 Convention refugee definition in which it includes persons fleeing "other circumstances which have seriously disturbed public order." It does not require too much imagination to envision that the more dramatic effects of climate change can be considered to disturb the public order, paving the way for climate change-induced movements across national borders falling within the scope of these expanded definitions.

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[216] *Id.*

[217] *Id.* at 5. More controversially and probably unrealistically, he also rejected the internally and externally displaced distinction, arguing that this would create a false dichotomy between larger states and smaller states where the displaced have nowhere to go. *Id.* at 6.

[218] UNHCR also suggests it. UNHCR 2009 *supra* note 11 at 7.

[219] OAU Convention regarding the specific aspects of refugee problems in Africa, *adopted on* 10 September 1969, 6th Sess. CAB/LEG/24.3(*entered into force* 20 June 1974).

[220] Cartagena Declaration on Refugees, *adopted at* a colloquium entitled "Coloquio Sobre la Proteccíon Internacional
de los Refugiados en Américan Central, México y Panamá: Problemas Jurídicos y Humanitarios" held at Cartagena, Colombia (22 November 1984), *available at* *http://www.asylumlaw.org/docs/international/CentralAmerica.PDF* *accessed on 7 Jan. 2011.*

A further area that can be developed with regard to climate change-induced displacement, as noted by UNHCR, is *non-refoulement*. The principle is most clearly espoused in Article 33, paragraph 1 of the 1951 Convention,[221] where states parties pledge that no person should be forcibly sent back to a country where his or her life or freedom would be jeopardized. Article 33 is widely connected to the words "enjoy" asylum contained in Article 14[222] of the UDHR and is generally regarded to be part of customary international law, binding on all states.

Over the years, other international instruments have been interpreted with a *non-refoulement* effect. In its decision in *Soering v. United Kingdom*,[223] the European Court of Human Rights concluded that the prohibition against torture and inhuman or degrading treatment or punishment as contained in Article 3 of the ECHR extended to prohibiting states parties from sending persons to situations where they seriously risk being exposed to such violations.

While this is limited to states parties in Europe, the UN Human Rights Committee has done the same with the similar Article 7 of the ICCPR. There is a similar prohibition explicitly expressed in the UN Convention against Torture,[224] however it may not be relevant to the issue of climate change displacement, as its definition of the prohibited harm is more specifically limited to physical and psychological abuse and to actions taken by state representatives.

While the *non-refoulement* principle classically encompasses the risk of physical violence, the European Court of Human Rights has been willing to consider that returns to a situation where access to health care is seriously inadequate can amount to inhuman treatment. This line of thinking was most clearly stated in a case regarding a person dying of AIDS, who risked being sent back to St. Kitts, at a time when there was no or limited supplies of the necessary medicines.[225]

The Committee on the Rights of the Child has stated in its General Comment no. 6 that, "States shall not return a child to a country where there are substantial grounds for believing that there is a real risk of irreparable harm to the child… The assessment of the risk of such violations… should… take into account the particularly serious consequences for children of the insufficient provision of food or health services."[226]

The evolution in *non-refoulement* has in large part occured through individual complaints filed in accordance with specific conventions or their additional protocols. Interestingly, the

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[221] *See supra* note 12 for the text.
[222] Although not to the exclusion of other rights that refugees should enjoy.
[223] Soering v. United Kingdom, 11 Eur.Ct.H.R. (ser. A), 14038/88(1989).
[224] Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, *adopted* 10 Dec. 1984, 1465 U.N.T.S. 85, 113; S. Treaty Doc. No. 100-20(*entered into force* 26 June 1988).
[225] Case of D. v. the United Kingdom, Eur.Ct.H.R. 146/1996/767/964 (1997). However, a series of cases thereafter have been rejected by the European Court of Human Rights. *See e.g.* Case of N. v. the United Kingdom, Eur.Ct.H.R. 26565/05 (2008), in which the Court makes clear that the circumstances in *Case of D.* were exceptional.
[226] *General Comment No. 6, Treatment Of Unaccompanied And Separated Children Outside Their Country Of Origin*, Committee on the Rights of the Child, U.N. Doc. CRC/GC/2005/6, para. 27 (2005).

ICESCR has recently been supplemented by an additional protocol allowing for an individual complaints mechanism. There is then a strong possibility that cases will be presented, asking the UN Committee on Economic, Social and Cultural Rights to apply the *non-refoulement* principle to cases relating to persons risking return to a situation where their economic, social and cultural rights are seriously at risk. It should then be possible for individual complainants to apply for prohibition against return to countries seriously affected by climate change.

Thus, one could envision an economic, social and cultural rights-based interpretation of *non-refoulement* which would not be constrained by the issues mentioned in the previous section concerning intent or the nexus requirement of falling within one of the enumerated grounds of the 1951 Convention. Of course, this would still require that the individual applicant is able to demonstrate the severity of the risk of harm.

As noted by UNHCR in its 2009 paper, *non-refoulement* still poses a dilemma, namely how to translate it into a right to stay. The interpretation of conventions beyond the 1951 Convention to encompass a *non-refoulement* principle has entered into state practice via complementary forms of protection in domestic legislation. Many asylum countries borrow for their respective aliens' legislation the refugee definition contained in the 1951 Convention as the standard to be applied when granting refugee status. Beyond that, many states allow for the granting of protection when for example a foreign national is at serious risk of torture if returned, including for reasons unrelated to a 1951 Convention ground.

With regard to environmental disasters, the US, Finland, Sweden and Denmark are among those states that have established legal grounds for granting some form of permission to stay.[227] In its amendments to the Aliens' Act of 1995 (implemented in 1996), the Swedish government introduced environmental disasters as a ground for granting complementary protection. At the time, those supporting the change were thinking of large-scale industrial catastrophes, such as the nuclear disaster at Chernobyl in 1984. To the knowledge of the author, the pertinent paragraph has only been considered once by Swedish asylum decision-makers, namely with regard to a group of Polish asylum-seekers following wide-scale floods in that country. They were rejected as the Swedish Migration Board felt that the harm was only temporary and would pass. Nevertheless, the way is clearly open for further applications to be made on the basis of long-term climate change-induced harm.

It should be noted that many have pointed to New Zealand as having one of the first climate change-related aliens' legislation. This appears not to be the case. The government of New Zealand has indeed agreed to accept 75 Tuvaluan nationals per year. However, this does not appear to be a form of resettlement, but is rather a labour-related so-called "Pacific Access Category", with various requirements including an age-limit.[228]

Regarding movements within national borders, it is important first of all to recall that internally displaced still retain the protection accorded to them by international human rights instruments generally. Beyond this, they fall under the 1998 Guiding Principles on Internal Displacement.[229] Paragraph 2 of the Introduction contains the definition of those who can be

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[227] *See* UNHCR 2009 *supra* note 11 at 11-13, for a useful summary.
[228] Australian Commission Report *supra* note 83 at 23.
[229] Report of the Representative of the Secretary-General, Mr. Francis M. Deng, submitted pursuant to Commission resolution 1997/39. Addendum: Guiding Principles on Internal Displacement, U.N. Doc. E/CN.4/1998/53/Add (1998).

considered internally displaced and includes the following: "… particular as a result of or in order to avoid the effects of… violations of human rights or natural or human-made disasters." Principle 9 affirms the particular obligation of states to protect groups such as indigenous peoples, pastoralists and other minorities with a special dependence and attachment to their lands. The Guiding Principles are non-binding; however, they are believed to be very influential in that they summarize the current state of international law.

In his submission to the OHCHR study during autumn 2008, Walter Kälin, the Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, expressed the need to clarify and develop norms concerning: 1) persons who move across borders after sudden-onset disasters; 2) persons inside and outside their countries on account of slow-onset degradation; 3) persons forced to leave disappearing island-state; and persons crossing borders after their areas of origin have been designated "high risk zone, too dangerous for human habitation."[230] As he summarised, "If the answer to one of the following questions is: Is return permissible? Is return possible? Can return reasonably be required? is 'no', then individuals concerned should be regarded as victims of forced displacement in need of specific protection and assistance either within their own country… or in another State…"[231] Walter Kälin based his submission on the Guiding Principles, outlined gaps and then suggested a way forward. He recommended at least temporary protection, until such time as return is reasonable. Indeed, he looked back to the temporary stay accorded by the US authorities to Hondurans affected by Hurricane Mitch in 1998 as a possible precedent.[232]

There is an argument to be made that building on "soft law" in this way may be the way to go. One author suggested that any post-Kyoto Protocol legal regime should open the way for regional agreements, which could fall under an over-arching international plan of action.[233] This would both attempt to fill an obvious need while at same work around limitations in current refugee law.[234]

The case of disappearing small island-states raises a vision of large-scale statelessness. Article 15 of the UDHR affirms the right to a nationality, and the right is included among those enumerated in ICCPR, CEDAW, CRC and the Convention on the Elimination of Racial Discrimination.[235] In addition, there are two international instruments specifically on statelessness. The first, the 1954 Convention relating to the Status of Stateless Persons,[236] provides a definition and then underscores the need to protect stateless people. The 1954 Convention affirms for example in Article 7 the principle of non-discrimination, in comparison with the treatment accorded by states to foreign nationals generally. The second, the 1961 Convention on the Reduction of Statelessness,[237] provides mechanisms for reducing

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[230] Kälin Submission *supra* note 197 at 6.
[231] *Id.*
[232] *Id.* at 4n.
[233] Williams *supra* note 40 at 514.
[234] *Id.* at 520.
[235] International Convention on the Elimination of All Forms of Racial Discrimination, *adopted* 21 Dec. 1965, S. Exec. Doc. C, 95-2 (1978); S. Treaty Doc. 95-18; 660 U.N.T.S. 195, 212 (*entered into force* 4 Jan. 1969).
[236] Convention relating to the Status of Stateless Persons *adopted* 28 Sept. 1954, U.N. Doc. E/CONF.17/5/Rev.1; U.N.T.S. 360, 117 (*entered into force* 6 June 1960).
[237] Convention on the Reduction of Statelessness, *adopted* 30 Aug. 1961, U.N.T.S. 989, 175 (*entered into force* on 13 Dec. 1975).

the number of stateless, including detailed grounds for the granting of nationality to stateless persons and for ensuring that individuals do not lose a nationality without gaining another.

Unfortunately, very few states are signatories to either convention.[238] Neither convention (nor any other instrument) compels a state to grant nationality to stateless persons who are outside that state's borders. Still, both the Human Rights Committee and the Committee on the Rights of the Child have reprimanded states on the issue, further to their enforcing the relevant provisions in the ICCPR and CRC respectively.[239] Moreover, through a series of resolutions beginning in 1994, the UN General Assembly has given UNHCR the formal mandate to work with governments to prevent statelessness from occurring, to resolve those cases that do occur and to protect the rights of stateless persons. Also, states that are members of the UNHCR Executive Committee have affirmed the need to work towards a general reduction in the phenomenon of statelessness, as expressed in for example Executive Committee Conclusion no. 106 (LVII)(2006).

Given the critical nature of citizenship as the threshold towards benefitting from other rights,[240] it is clear that the international community will have to consider the protection regime for stateless persons, identify any gaps and attempt to address them. These would include getting more states to become signatories of those instruments on statelessness that already exist, as well as consider what responsibilities states are willing to assume towards stateless persons outside their own borders.

VI. Notes of Caution

During the course of this study, the author has repeatedly reflected on the fairly minimal inter-disciplinary contact between international environmental law on the one hand, human rights and refugee law on the other. This is now changing, due in part to the initiatives of populations already or potentially affected by climate change. Lobbying by the government of the Maldives and others have, for example, led the UN Human Rights Council to take up the question of human rights and climate change. The recent report by OHCHR[241] is a direct result of this.

Now, there is a warning note to be sounded when drawing on the three bodies of international law. Previously, it was suggested that a useful project would be the application of climate change expertise to the human rights concept of due diligence in order to provide the latter with a more detailed catalogue of state obligations. However, at least one author has warned that when due diligence has been extended to refugee law, at least as it is applied by courts in domestic jurisdictions, it can have an overly limiting effect. Courts have looked at whether governments in the countries of origin have mechanisms in place that can potentially protect persons at risk of persecution, without necessarily taking a further step to see whether the

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[238] As of 15 October 2009, there were 65 states parties to the 1954 Convention and 37 to the 1961 Convention.

[239] David Weissbrodt & Clay Collins, *The Human Rights of Stateless Persons*, 28 HUMAN RIGHTS QUARTERLY 245-276, 273 (2006).

[240] *See id.* at 248 for a discussion on citizenship as the "right to have rights" versus the broader state of being human as the "right to have rights", echoing Hannah Arendt. *See* text at *supra* note 133.

[241] OHCHR Report *supra* note 7.

affected individuals or communities have actually benefitted from them. As one study has noted, "Courts appear reluctant to cast aspersions on systems of protection in other states by making a finding of inability."[242] It is, however, clear in refugee law that it is not sufficient for legislation or other government initiatives to be in place, one must also look at their implementation.

Another dilemma could emerge. A leading study proposes a "thresholds"-based approach to economic, social and cultural rights, "[L]evels of protection for individual rights which can be regarded as the minimum acceptable outcome under a given policy scenario."[243] These thresholds would allow for eventual risks to populations to be identified and measured. While this approach seems tempting as a way of quantifying when states may be violating human rights because of their inaction on climate change, a risk lies therein with regard to individual refugee status determination. Such broad-brush minimum standards of treatment risk excluding populations who are nevertheless forced to leave their countries of origin. A refugee law perspective would insist on some form of individualised approach, regardless of whether governments in a country of origin meet such threshold standards.

Voices have been heard advocating an additional protocol to the UNFCCC on climate displacement that would exist parallel to the 1951 Convention.[244] Given some of the strengths already identified in international environmental law, this could be a potential way forward. One readily identifiable weakness, however, is that such a parallel regime risks keeping populations thus protected outside the scope of the UN human rights treaty structure and their various monitoring mechanisms. Indeed, the fate of Palestinians accorded refugee status under the mandate of UN Relief and Works Agency does not bode well for other parallel refugee constructs. Nevertheless, some form of human rights language in the successor agreement to the Kyoto Protocol would be welcome, as a signal that the international community takes seriously the concerns of the government of the Maldives and representatives of other potentially affected communities.

Thus, some care should be exercised in crossing between disciplines, although this should clearly not stop future scholars and practitioners from doing so.

VII. Ways Forward & Conclusions

The author does not call for a specific "environmental refugee" or "climate change refugee" regime, as there is always a risk when creating specific new categories that other groups are left out. A climate change displacement protocol would for example risk excluding other forms of environmental displacement.

Looking to the future, the author would rather advocate the following. Potential application of the 1951 Convention should not be immediately ruled out. Rather, as the hypothetical case

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[242] Penelope Mathew, *et al.*, *The Role of State Protection in Refugee Analysis*, Discussion Paper No. 2, International Association of Refugee Judges, Advanced Refugee Law Workshop, Auckland, New Zealand (October 2002) published in 15 INTERNATIONAL JOURNAL of REFUGEE LAW 3, 444-460 at 453 (2003) citing for example the House of Lords' case, Horvath v. SSHD, 3 All E.R. 577 (U.K.H.L. 1999).
[243] ICHRP Report *supra* note 32 at 18.
[244] *See e.g.* Biermann *supra* note 13 at 26.

has illustrated, states and international organisations such as UNHCR should be prepared to apply the 1951 Convention to certain categories of climate change displacement, as there may well be groups or individuals who will meet the criteria contained therein. As outlined in this study, steps critical to its application would include: interpretation of the notion of persecution so that it encompasses serious violations of economic, social and cultural rights, as well as the omission or inability by country of origin governments to respect, protect and fulfil human rights; and application of the nexus requirement in such a way as to consider the enumerated grounds as markers of vulnerability, signalling why the individual asylum-seeker cannot return. As discussed above, these steps are not so far from how the 1951 Convention is already being applied by leading jurisdictions. One great strength with such an evolutionary approach is that it avoids the pit-falls of *ad hoc* solutions, namely that of including some groups while excluding others, equally in need of protection. Moreover, this helps keep the 1951 Convention a living document, relevant to meeting emerging patterns of forced displacement across borders while still upholding fundamental principles that are already well-established.

Other avenues should also be considered, such a further exploration of the interpretation of the *non-refoulement* principle so that it applies to those at serious risk of violations of their economic, social and cultural rights, making their return intolerable. This would be in order to protect persons who would not necessarily fall within the scope of the enumerated grounds of the 1951 Convention. This should be implemented via complementary protection status in the asylum legislation of individual countries.

States and regional organisations in Africa and Latin America should look to their own refugee protection instruments and consider applying the “events seriously disturbing public order” language contained in their respective refugee definitions, in order to grant protection to climate change displaced. Beyond this, the author would also recommend a strengthening of the mechanisms concerning statelessness, not least the general principle that states should take steps for its reduction.

States and international organisations, including treaty bodies and other oversight mechanisms, should apply a human rights perspective when both dealing with the affects of climate change and attempting to reduce any future rise in temperature. A very concrete way forward would be to take the concept of due diligence, study relevant human rights principles and stipulate what concrete actions should be expected from states in order to protect their populations while meeting those standards. These actions would include adaptation and mitigation initiatives relating to climate change.

Finally, states and international bodies must take the issue of climate change and human rights seriously. The prognoses presented by the IPCC and others clearly show the massive scale of the threat posed to the human population. There is a risk that large numbers of people will be forced to move, and *ad hoc* responses are unlikely to be sufficient. Ultimately, there is no choice. The international community can be sure that threatened populations and their representatives will make their voices heard if nothing is done to secure their future. Moreover, the underlying social justice issue cannot be ignored, namely that the poorest and most vulnerable now risk paying the price for the consumption by the richest on this earth.

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