



2011

Problems in Climate Change and Human Rights

Dinah L. Shelton

George Washington University Law School, dshelton@law.gwu.edu

Follow this and additional works at: http://scholarship.law.gwu.edu/faculty_publications

 Part of the [Law Commons](#)

Recommended Citation

Shelton, Dinah L., "Problems in Climate Change and Human Rights" (2011). *GW Law Faculty Publications & Other Works*. Paper 1047.
http://scholarship.law.gwu.edu/faculty_publications/1047

This Book Part is brought to you for free and open access by the Faculty Scholarship at Scholarly Commons. It has been accepted for inclusion in GW Law Faculty Publications & Other Works by an authorized administrator of Scholarly Commons. For more information, please contact spagel@law.gwu.edu.

**DONALD K. ANTON & DINAH SHELTON,
ENVIRONMENTAL PROTECTION AND HUMAN RIGHTS
(Cambridge Univ. Press, 2011)**

Climate Change and Human Rights Case Study

I. International Claims and Linkages

The link between adverse impacts of climate change and human rights has been pushed to the fore recently by a 2005 petition by Sheila Watt-Cloutier on behalf of the Inuit people of the Arctic regions to the Inter-American Commission on Human Rights. Although the Commission ultimately rejected the Petition without prejudice on November 16, 2006, it did conduct a hearing in its 127th regular period of sessions to investigate the relationship between global warming and human rights. See generally Jessica Gordon, *Inter-American Commission on Human Rights to Hold Hearing After Rejecting Inuit Climate Change Petition*, 7 SUSTAINABLE DEV. L. & POL'Y 55 (2007). We begin this section by considering the Watt-Cloutier Petition.

**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 (December 7, 2005), available at**
<http://www.earthjustice.org/library/legal-docs/petition-to-the-inter-american-commission-on-human-rights-on-behalf-of-the-inuit-circumpolar-conference.pdf>

. . .

IV. FACTS: GLOBAL WARMING IS HARMING EVERY ASPECT OF INUIT LIFE
AND CULTURE . . .

C. GLOBAL WARMING HARMS INUIT LIFE AND CULTURE

1. GLOBAL WARMING IS DESTROYING THE ARCTIC ENVIRONMENT

a. Global Warming has already altered the Arctic

. . . To understand the impacts of climate change on the Inuit . . . it is necessary to understand how climate change has altered the arctic environment. . . .

Global warming has already visibly transformed the Arctic. Inuit observations and scientific studies are consistent in documenting substantial and lasting alterations in the physical environment of the Arctic due to global climate change. Although the effects of climate change on weather patterns, temperatures, and the environment vary somewhat throughout the Arctic, all regions are experiencing disturbing changes, and many of the effects are constant throughout the region. Because the Arctic is especially vulnerable to the effects of global climate change, the “[a]nnual average arctic temperature has increased at almost twice the rate as that of the rest of the world over the past few decades.” The rising temperature has set in motion an ever-escalating series of changes in the arctic climate and environment. Some of the more observable changes include deteriorating ice conditions,

decreasing quantity and quality of snow, unpredictable and unfamiliar weather, and a transfigured landscape.

Commonly observed ice changes include thinner ice, later freezes, and earlier, more sudden thaws. In the past, sea ice and lake ice froze hard enough for safe travel earlier in the year. Now the freeze comes later, and once the ice freezes it is generally thinner than in the past. . . .

. . . “Over the past 30 years, the annual average sea-ice extent has decreased by about 8%, or nearly one million square kilometers, an area larger than all of Norway, Sweden and Denmark combined, and the melting trend is accelerating.”

The quality, quantity and timing of snowfall have changed dramatically due to global warming. For example, snow falls later in the year, and the overall quantity has diminished in most areas. Average snow cover over the region has decreased ten percent over the last three decades, and climate-modeling projections predict a further loss of another ten to twenty percent in coming decades. . . .

Global warming is also altering land conditions. Permafrost, which holds together unstable underground gravel, is melting at an alarming rate, causing slumping and landslides. Severe erosion is also increasing dramatically. The loss of sea ice that used to prevent the creation of large waves has resulted in increasingly violent sea storms, resulting in coastal erosion. The erosion exposes more coastal permafrost to the warmer air, resulting in faster permafrost melt. The accelerating loss of ice can only be expected to aggravate this problem in the future.

The weather of the Arctic has become increasingly unpredictable. Inuit elders, who have long experience in reading the weather, report various changes in weather patterns in different areas of the Arctic. . . . Shifts in the prevailing wind direction and intensity have added to the unpredictability of the weather. Sudden changes in wind direction and speed have rendered traditional weather forecasting methods useless.

The combination of these changes further alters the arctic environment. Lack of snowfall, early thaws, increased erosion, melting permafrost, melting ice caps and changing wind conditions have combined to decrease water levels in lakes and rivers. In addition, the sudden spring thaw fills rivers with more water at one time than in the past, which erodes the banks and straightens the river paths. Because the water flows more intensely during a shorter period of time, the water level is unusually low once the spring flood is over. Water levels are further reduced by the longer warm season and increased temperatures, which evaporate more water than in the past.

Observers have also noted changes in the location, characteristics and health of plant and animal species caused by changes in climate conditions. The harder snow pack, lower water levels, unusual vegetation, changing seasons and deteriorating ice conditions have altered the quantity, quality, behavior and location of the Inuit’s sources of harvested game. . . .

b. Global Warming will continue to damage the arctic environment in the future

Using conservative projections based on current conditions and likely continued emissions, scientists have determined that climate change in the Arctic will continue, with devastating consequences. Arctic temperatures will probably rise at least another 2.5 degrees Celsius by the middle of this century. By the end of this century, arctic temperatures will have risen five to seven degrees Celsius.

In addition to temperature increases, precipitation is likely to increase, perhaps by as much as thirty five percent over current levels by the end of this century. Snow and sea-ice cover over the most of the Arctic will decrease dramatically as well. Some models show that the polar ice cap will be virtually nonexistent by 2100. In particular, fall and winter in the Arctic will become warmer and wetter. Moreover, the changes that have already occurred will continue to accelerate, along with their impacts on the environment, landscape, and people of the region. . . .

V. VIOLATIONS: THE EFFECTS OF GLOBAL WARMING CONSTITUTE VIOLATIONS OF INUIT HUMAN RIGHTS, FOR WHICH THE UNITED STATES IS RESPONSIBLE . . .

B. THE EFFECTS OF GLOBAL WARMING VIOLATE INUIT HUMAN RIGHTS

1. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT'S RIGHT TO ENJOY THE BENEFITS OF THEIR CULTURE

a. The American Declaration guarantees the Inuit's right to the benefits of culture.

The American Declaration guarantees the Inuit's right to the benefits of culture. The Charter of the Organization of American States places cultural development and respect for culture in a position of supreme importance. . . . Cultural rights are also protected in other major human rights instruments including the Universal Declaration of Human Rights the ICCPR, and the International Covenant on Economic, Social and Cultural Rights (ICESCR).

The Court and the Commission have long recognized that environmental degradation caused by a State's action or inaction can violate the human right to the benefits of culture, especially in the context of indigenous cultures. In the *Awás Tingni* case, the Inter-American Court, in discussing the right to property, acknowledged the link between cultural integrity and indigenous communities' lands.

In the *Belize Maya* case, the Commission acknowledged that interference with indigenous lands necessarily implicates the right to culture. The Commission acknowledged that international human rights law recognized that "the use and enjoyment of the land and its resources are integral components of the physical and cultural survival of the indigenous communities." In its *Yanomami* decision, the Commission noted that the State had an obligation under the OAS Charter to give priority to "preserving and strengthening . . . the cultural heritage" of indigenous peoples, and determined that the granting of concessions to subsoil resources on indigenous land. . . .

The Inuit's human right to enjoy the benefits of their unique culture is thus guaranteed under the American Declaration and affirmed by other sources of international law. In the global and Inter-American human rights systems, indigenous peoples' right to culture is inseparable from the condition of the lands they have traditionally occupied. The United States thus has a clear duty not to degrade the arctic environment to an extent that infringes upon the Inuit's human right to enjoy the benefits of their culture.

b. The effects of global warming violate the Inuit's right to enjoy the benefits of their culture

. . . The subsistence way of life central to Inuit cultural identity has been damaged by, and may cease to exist because of, climate change. Traditional Inuit knowledge, passed from the Inuit elders in their role as keepers of the Inuit culture, is becoming less useful because of the

rapidly changing environment. Given the widely acknowledged and extensive connection between the natural environment and Inuit culture, the changes in arctic ice, snow, weather patterns and land caused by climate change is resulting in the destruction of Inuit culture.

The United States government itself has recognized the importance of the subsistence way of life to the continued survival of the Inuit culture. In granting preference to subsistence uses of fish and wildlife in Alaska, the United States Congress noted that “the continuation of the opportunity for subsistence uses . . . is essential to Native physical, economic, traditional, and cultural existence.” . . .

The loss of this form of traditional knowledge further undermines Inuit culture. Predicting the weather, a crucial part of planning safe and convenient travel and harvest, as well as an important role for the Inuit elders, has become much more difficult because of changes in weather patterns. As a result, the elders can no longer fulfill one of their important roles, nor can they pass the science of weather forecasting to the next generation. . . .

The elders’ roles as educators have been compromised because the changing conditions have rendered inaccurate much of their traditional knowledge about weather, ice, snow, navigation and land conditions. The Inuit educational system, passing on and building upon knowledge from one generation to the next, is critical to Inuit cultural survival. . . .

The cumulative effects of these injuries are permanently undermining the Inuit’s ability to engage in their unique culture. Arctic climate change, caused by the United States’ regulatory action and inaction, is depriving the Inuit of their cultural identity and their continued existence as a distinct people, violating their human right to enjoy the benefits of their culture.

2. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT’S RIGHT TO USE AND ENJOY THE LANDS THEY HAVE TRADITIONALLY USED AND OCCUPIED

- a. The American Declaration guarantees the Inuit’s right to use and enjoy the lands they have traditionally occupied

The American Declaration includes the human right to “own such private property as meets the essential needs of decent living and helps to maintain the dignity of the individual and of the home.” The Commission acknowledged the fundamental nature of this right when it stated, “[v]arious international human rights instruments, both universal and regional in nature, have recognized the right to property as featuring among the fundamental rights of man.” Similarly, the American Convention declares that “[e]veryone has the right to the use and enjoyment of his property. . . . No one shall be deprived of his property except upon payment of just compensation, for reasons of public utility or social interest, and in the cases and according to the forms established by law.” The Inter-American Court and this Commission have long recognized that indigenous peoples have a fundamental international human right to use and enjoy the lands they have traditionally occupied, independent of domestic title. The Inter-American Court affirmed the independent existence of indigenous peoples’ collective rights to their land, resources, and environment in the *Awas Tingni* case. The Court held that the government of Nicaragua had violated the *Awas Tingni*’s rights to property and judicial protection when it granted concessions to a foreign company to log on their traditional lands without consulting them or getting their consent.

In its recent *Belize Maya* decision, the Commission found that Belize violated the Maya people's right to use and enjoy their property by granting concessions to third parties to exploit resources that degraded the environment within lands traditionally used and occupied by the Maya people. Indigenous people's international human right to property, the Commission noted, is based in international law, and does not depend on domestic recognition of property interests. . . .

The Inuit's human right to protection of their land is thus guaranteed by the American Declaration and general international law. The United States government has an obligation not to interfere with the Inuit's use and enjoyment of their land through its acts and omissions regarding climate change.

- b. The effects of global warming violate the Inuit's right to use and enjoy the lands they have traditionally occupied

The "land" that the Inuit have traditionally occupied and used are the landfast winter sea ice, pack ice, and multi-year ice. The Inuit have traditionally spent much of the winter traveling, camping and hunting on the landfast ice. They have used the summer pack ice and multi-year ice to hunt seals, one of their primary sources of protein. Because the international human right to property is interpreted in the context of indigenous culture and history, the Inuit have a human right to use and enjoyment of land and ice that they have traditionally used and occupied in the arctic and sub-arctic regions of the United States, Canada, Russia, and Greenland. Inuit have also secured domestic property rights through the conclusion of four agreements with the Government of Canada and in Alaska by the legislated 1971 Alaska Native Claims Settlement Act. . . .

Global warming violates the Inuit's human right to use and enjoy their land. . . . Climate change has made the Inuit's traditional lands less accessible, more dangerous, unfamiliar, and less valuable to the Inuit. The disappearance of sea ice, pack ice, and multi-year ice is affecting the very existence of Inuit land. In the last thirty years, about eight percent of the total yearly sea ice has ceased to exist, with more dramatic losses more recently, and further acceleration of the trend expected in the future. Summer sea ice has decreased fifteen to twenty percent, and is projected to disappear completely by the end of this century. The ice that remains is less valuable to the Inuit because the later freezes, earlier, more sudden thaws, and striking loss of thickness have made use of the ice more dangerous and less productive. Sea ice, a large and critical part of coastal Inuit's property, is literally melting away. . . .

The loss of sea ice has another effect on the Inuit's use and enjoyment of their property . . . contributed to alarming coastal erosion because sea storms and wave movement are so much greater without the breakwater effect of the ice. The erosion threatens the Inuit's homes and villages, forcing them to move their homes, which are expensive, arduous, and inconvenient, or lose them. Coastal campsites, a traditional use of land while traveling and harvesting, have been washed away. The erosion in turn exposes coastal permafrost to the warmer air and water, causing it to melt as well. . . .

The United States' acts and omissions regarding climate change have violated their right to use and enjoy their ancestral lands and their rights of property in those lands.

4. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT'S RIGHT TO THE PRESERVATION OF HEALTH

a. The American Declaration guarantees the Inuit the right to the preservation of health

The American Declaration provides that “[e]very person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources.” This guarantee is interpreted in the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (“Protocol of San Salvador”) as ensuring “the enjoyment of the highest level of physical, mental and social well-being.” Other major international human rights instruments also safeguard the right to health, including the Universal Declaration of Human Rights, the International Convention on Economic, Social, and Cultural Rights (ICESCR), and the African Charter on Human and Peoples’ Rights. The universal and fundamental nature of this right is further supported by the fact that at least seventy national constitutions recognize the state’s obligation to promote health, many of them directly proclaiming a right to health.

This Commission has acknowledged the close relationship between environmental degradation and the right to health, especially in the context of indigenous peoples. In the *Yanomami* case, the Commission recognized that harm to people resulting from environmental degradation violated the right to health in Article XI of the American Declaration. . . . The Inter-American Commission found that “by reason of the failure of the Government of Brazil to take timely and effective measures [on] behalf of the Yanomami Indians, a situation has been produced that has resulted in the violation, injury to them, of the . . . right to the preservation of health and to well-being.” Additionally, in the *Belize Maya* case, the Commission noted that the right to health and wellbeing in the context of indigenous people’s rights was so dependent on the integrity and condition of indigenous land that “broad violations” of indigenous property rights necessarily impacted the health and well-being of the Maya.

b. The effects of global warming violate the Inuit’s right to the preservation of health

Climate change caused by the U.S. government’s regulatory actions and inactions is harmful to the Inuit’s health and well-being. Disappearing sea-ice and changing environmental conditions have diminished populations, accessibility, and quality of fish and game upon which the Inuit rely for nutrition. The Inuit’s health is also adversely affected by changes in insect and pest populations and the movement of new diseases northward. The quality and quantity of natural sources of drinking water has decreased, exacerbating the already damaging effects on Inuit health. In addition to physical health issues, the Inuit’s mental health has been damaged by the transformation of the once familiar landscape, and the resultant cultural destruction. These increases in health risks, caused by the United States’ acts and omissions, violate the Inuit’s right to the preservation of health. . . .

Climate change has subjected the Inuit to a higher risk of diet-related diseases. The Inuit’s diet is rapidly changing because of the scarcity, inaccessibility, and decrease in quality of traditional food sources due to climate change. Loss of game habitat and food sources, and the inaccessibility of game due to travel difficulties hinder the Inuit’s ability to rely on the subsistence harvest for sustenance. The less healthy and more expensive store-bought food

the Inuit must use to supplement the subsistence harvest increases dietary health risks such as “cancer, obesity, diabetes, and cardiovascular diseases. . . .”

Climate change is also profoundly affecting the Inuit’s mental health. Transformation of the once familiar landscape causes psychological stress, anxiety, and uncertainty. The United States’ acts and omissions with respect to climate change have degraded the arctic environment to the point that those acts and omissions violate the Inuit’s fundamental human right to the preservation of their health.

5. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT’S RIGHT TO LIFE, PHYSICAL INTEGRITY AND SECURITY

a. The American Declaration protects the Inuit’s right to life, physical protection and security

Under the American Declaration, “[e]very human being has the right to life, liberty and the security of his person.” The right to life is the most fundamental of rights, and is contained in all major international human rights conventions. The United States has repeatedly bound itself to protect this fundamental right by ratifying the OAS Charter and the ICCPR, adopting the American Declaration, and signing the American Convention on Human Rights. The right to life is also a general principle of law that is contained in the constitutions of many nations, including that of the United States.

This Commission has made clear that environmental degradation can violate the right to life. In the *Yanomami* case, the Commission established a link between environmental quality and the right to life. The Commission found that, among other things, the government’s failure to protect the integrity of Yanomami lands had violated the Yanomami’s rights to life, liberty and personal security guaranteed by Article 1 of the American Declaration.

In its Report on the Situation of Human Rights in Ecuador, the Commission stated that “[t]he right to have one’s life respected is not . . . limited to protection against arbitrary killing.”

The realization of the right to life, and to physical security and integrity is necessarily related to and in some ways dependent upon one’s physical environment. Accordingly, where environmental contamination and degradation pose a persistent threat to human life and health, the foregoing rights are implicated.

The United States has an obligation to protect the Inuit’s human rights to life and personal security. This obligation includes the duty not to degrade the arctic environment to such an extent that the degradation threatens the life and personal security of Inuit people.

b. The effects of global warming violate the Inuit’s right to life, physical protection and security

. . . Changes in ice and snow jeopardize individual Inuit lives, critical food sources are threatened, and unpredictable weather makes travel more dangerous at all times of the year.

. . . The thinner ice and new, unpredictable areas of open water cause hunters and other travelers to fall through the ice and be injured or drowned.

. . . The U.S. Congress has acknowledged that, for many Inuit, “no practical alternative means are available to replace the food supplies and other items gathered from fish and

wildlife which supply rural residents dependent on subsistence uses.” Damage to the Inuit’s subsistence harvest violates their right to life.

The inability of elders to predict the weather accurately increases the risk that hunters and travelers will be caught unprepared, with life-threatening consequences in the harsh arctic climate. Stranded travelers can no longer rely on the abundance of snow from which to construct emergency shelters. This lack of shelter has contributed to deaths and injuries among hunters stranded by sudden storms. In addition, the decrease in summer ice has caused rougher seas and more dangerous storms, increasing hazards to boaters. Formerly familiar and common activities are now laden with unavoidable and unpredictable threats to human life because of the unpredictable weather.

Climate change has damaged the arctic environment to such an extent that the damage threatens human life. The United States has breached its duty under the American Declaration to protect the Inuit’s right to life and personal security.

6. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT’S RIGHT TO THEIR OWN MEANS OF SUBSISTENCE

- a. The American Declaration protects the Inuit’s right to their own means of subsistence

A people’s right to their own means of subsistence is inherent in and a necessary component of the American Declaration’s rights to property, health, life, and culture in the context of indigenous peoples. The ICESCR and ICCPR both provide that all peoples “may freely dispose of their natural wealth and resources,” but that “[i]n no case may a people be deprived of its own means of subsistence.” In the context of indigenous peoples, the rights to self-determination and one’s own means of subsistence have become recognized principles of international human rights law.

Included within a people’s right to their own means of subsistence is the right to control over natural resources and the physical environment. Deprivation of control over natural resources and the environment necessarily deprives indigenous peoples of their own means of subsistence.

Other human rights bodies have acknowledged the right of a people to control over their own means of subsistence. . . . [I]n response to Canada’s failure to implement recommendations for aboriginal land and resource allocation, the Human Rights Committee emphasized Canada’s obligations under Article 1 of the ICCPR and the ICESCR, stating, “peoples . . . may not be deprived of their own means of subsistence.”

The Inuit’s right to their own means of subsistence is protected under international law and is in intrinsic part of the rights established in the American Declaration. The United States has an international obligation not to deprive the Inuit of their own means of subsistence.

- b. The effects of global warming violate the Inuit’s right to their own means of subsistence

Arctic climate change is making the Inuit’s subsistence harvest more dangerous, more difficult and less reliable. In fact, climate change is gradually and steadily destroying the Inuit’s means of subsistence. Changes in ice, snow, weather, seasons and land have combined to deprive the Inuit of their ability to rely exclusively on the subsistence harvest, violating

their right to their own means of subsistence. Continuing changes in the arctic climate will further interfere with the Inuit's right to their own means of subsistence. . . .

The harvest of ice-dependent animals has also become less fruitful because the animals' habitat, food sources, and living space are disappearing. The animals are suffering a loss in numbers and decline in overall health that is expected to accelerate in the coming years. The remaining animals are changing location and habits, making them less accessible, harder to find and, because of impacts on the ability to travel, sometimes impossible to hunt.

As a result of the problems with travel and food sources due to climate change, the Inuit are no longer able to rely exclusively on the subsistence harvest for their survival. Climate change has therefore deprived the Inuit of their means of subsistence. The United States' acts and omissions with regard to climate change, done without consultation or consent of the Inuit, violate the Inuit's human rights to self-determination and to their own means of subsistence.

7. THE EFFECTS OF GLOBAL WARMING VIOLATE THE INUIT'S RIGHTS TO RESIDENCE AND MOVEMENT AND INVIOABILITY OF THE HOME

a. The American Declaration guarantees the Inuit's right to residence and movement and inviolability of the home

The American Declaration guarantees every person "the right to fix his residence within the territory of the state of which he is a national, to move about freely within such territory, and not to leave it except by his own will." The American Declaration also guarantees every person "the right to the inviolability of his home." Like the right to life, the rights to residence and movement and inviolability of the home are established in all major human rights instruments, including the Universal Declaration of Human Rights, the ICCPR, the American Convention on Human Rights, the European Convention on Human Rights and the African Charter on Human and Peoples' Rights. Many constitutions also guarantee the right to movement and residence.

In the *Yanomami* case, this Commission found a violation of the right to residence and movement where some Yanomami people had to leave their traditional lands because of a series of adverse changes caused by government development projects. The Commission noted that the construction of a highway through the territory of the Yanomami Indians, "compelled them to abandon their habitat and seek refuge in other places."

. . . Other human rights tribunals have recognized the significant link between environmental quality and the right to the inviolability of the home. In *Lopez Ostra v. Spain*, the European Court of Human Rights held that Spain's failure to prevent a waste treatment plant from polluting nearby homes violated this right. Similarly, in *Guerra and Others v. Italy*, the Court held that severe environmental pollution may affect individuals' well-being and adversely affect private and family life, and as a result held Italy liable for its failure to secure these rights. The European Court recently reaffirmed this concept in *Fadeyeva v. Russia*, in which the failure of the State to relocate the applicant away from a highly toxic area constituted violation of the right to respect for the home and private life . . . The connection between the home, private life and the environment is thus well established in international law. . . .

- b. The effects of global warming violate the Inuit's right to residence and movement, and inviolability of the home

The United States' acts and omissions that contribute to global warming violate the Inuit's right to residence and movement because climate change threatens the Inuit's ability to maintain residence in their communities. Furthermore, the Inuit's right to inviolability of the home is violated because the effects of climate change adversely affect private and family life. In particular, climate change harms the physical integrity and habitability of individual homes and entire villages. Coastal erosion caused by increasingly severe storms threatens entire coastal communities. Melting permafrost causes building foundations to shift, damaging Inuit homes and community structures. The destruction is forcing the coastal Inuit to relocate their communities and homes farther inland, at great expense and distress.

This forced relocation goes to the heart of the rights to residence and movement and inviolability of the home. The destruction of Inuit homes due to climate change "compel[s] the Inuit] to abandon their habitat and seek refuge in other places," affecting their family and private lives. . . .

. . .

C. THE AMERICAN DECLARATION SHOULD BE APPLIED IN THE CONTEXT OF RELEVANT INTERNATIONAL NORMS AND PRINCIPLES . . .

3. INTERNATIONAL ENVIRONMENTAL NORMS AND PRINCIPLES ARE RELEVANT TO THE INTERPRETATION AND APPLICATION OF THE AMERICAN DECLARATION

- a. The United States is violating its obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

The United States ratified the U.N. Framework Convention on Climate Change (FCCC) on October 15, 1992. . . . The objective of the Framework Convention is to "achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." To further this objective, Article 4.1(b) of the Convention requires Parties to formulate and implement national programs for mitigating anthropogenic greenhouse gas emissions.

Article 4.2(b) is more specific: each Annex I Party (developed country) must communicate information on its policies and measures to limit emissions and enhance removals of greenhouse gases, and on the resulting projected emissions and removals through 2000, "with the aim of returning individually or jointly to [its] 1990 levels these anthropogenic emissions of [GHGs]."

Although the year 2000 has passed, this obligation is not moot. In light of the Framework Convention's objective of avoiding dangerous atmospheric concentrations of greenhouse gases, mooting the obligation would make no sense. Indeed, were Article 4.2(b) to be read as applying only during the period before 2000, the objective would have been unachievable from the start. It is clear that U.S. climate policy must aim at returning U.S. emissions to 1990 levels as quickly as possible.

Judging by its most recent report to the Framework Convention secretariat, which forecasts U.S. GHG emissions increasing markedly for the foreseeable future, as well as statements by President Bush and numerous other government officials, the United States has abandoned the aim of returning its emissions to 1990 levels, in violation of its obligation to implement the Framework Convention in good faith and in light of the Convention's objective. Although the U.S. government has acknowledged its obligation to reduce

emissions, it has not taken mandatory steps to remedy the defects identified by the secretariat in its first review of U.S. climate policy, in 1999.

. . . [T]he U.S. Government predicts that U.S. emissions will increase 42.7% by 2020, from 1562 MMTC in 2000 to 2088 MMTC in 2020. As if to confirm its complete rejection of Article 4.2, the United States' latest report to the secretariat makes no mention of ever returning to 1990 emissions levels, instead identifying the U.S. goal as the 18% carbon intensity reduction proposed by President Bush in 2001. The U.S. plan to reduce greenhouse gas intensity by 18% in ten years exceeds by only 4% the 14% reduction in greenhouse gas intensity expected in the absence of the President's additional proposed policies and measures. This goal, which is to be met in 2012, will allow *actual* emissions to *increase* by 12% over the same period, a rate of growth that is nearly the same as at present.

4. THE UNITED STATES HAS A DUTY TO REMEDY BREACHES OF ITS INTERNATIONAL OBLIGATIONS . . .

The United States has failed thus far to take responsibility for the breaches of international law and their consequences that stem from its acts and omissions with respect to climate change. The United States has acknowledged its duty to reduce its greenhouse gas emissions, but its current policies result in continued emissions increases. The ever-growing U.S. contribution to global climate change serves to accelerate the pace of the environmental impacts in the Arctic and the resultant violations of the Inuit's human rights. . . .

D. BY ITS ACTS AND OMISSIONS, THE UNITED STATES VIOLATES THE HUMAN RIGHTS OF THE INUIT . . .

1. THE UNITED STATES IS THE WORLD'S LARGEST CONTRIBUTOR TO GLOBAL WARMING AND ITS DAMAGING EFFECTS ON THE INUIT

. . . [T]he United States has contributed more than any other nation to the rise in global temperature. U.S. emissions of energy-related CO₂ are also vastly out of proportion to its population size. On a per-person basis, U.S. emissions in 2000 were more than five times the global average, nearly two-and-a-half times the per capita emissions in Europe, and nine times those in Asia and South America. Among the countries with significant emissions, the United States had the highest level of per capita emissions. . . .

4. THE UNITED STATES HAS FAILED TO COOPERATE WITH INTERNATIONAL EFFORTS TO REDUCE GREENHOUSE GAS EMISSIONS

. . . Beginning with its rejection of the Kyoto Protocol in 2001, the United States has hindered attempts by other nations even to agree on the need for coordinated action to deal with global warming. . . .

The United States also has obstructed the formulation of additional international measures. At the 10th Conference of the Parties to the UNFCCC, in Buenos Aires, the United States delegation blocked discussion of any steps beyond the expiration in 2012 of Kyoto's first commitment period, preventing anything beyond a weak promise of limited, informal, future talks. . . .

Although the United States concedes the fact that climate change is occurring and is caused in large part by anthropogenic greenhouse gases, it refuses to take meaningful action

to tackle global warming. The result is that temperatures in the Arctic continue to rise unabated, with dire consequences for the Inuit.

VI. EXCEPTION TO EXHAUSTION OF DOMESTIC REMEDIES

Article 31.1 of the Commission's rules of procedure specifies: "In order to decide on the admissibility of a matter, the Commission shall verify whether the remedies of the domestic legal system have been pursued and exhausted in accordance with the generally recognized principles of international law." These general principles of international law are further elaborated in article 31.2(a), which establishes that the exhaustion requirement "shall not apply when . . . the domestic legislation of the State concerned does not afford due process of law for protection of the right or rights that have allegedly been violated."

Because there are no remedies "suitable to address [the] infringement" of the rights Petitioner alleges to have been violated in this case, the requirement that domestic remedies be exhausted does not apply in this case. Thus, the petition is admissible under the rules of procedure of the Commission. . . .

B. U.S. LAW DOES NOT PROVIDE ADEQUATE OR EFFECTIVE REMEDIES FOR THE HARMS THAT HAVE CAUSED THE VIOLATIONS SUFFERED BY THE INUIT

In sum . . . the U.S. legal system does not provide an effective remedy for the human rights violations suffered by the Inuit as a result of U.S. actions and omissions relating to climate change. The lack of an effective remedy constitutes an exception to the exhaustion of remedies rule, according to general principles of international law and article 31.2(a) of the Commission's rules of procedure. The petition is therefore admissible. . . .

IX. REQUEST FOR RELIEF

For the reasons stated above, Petitioner respectfully requests that the Commission:

1. Make an onsite visit to investigate and confirm the harms suffered by the named individuals whose rights have been violated and other affected Inuit;
2. Hold a hearing to investigate the claims raised in this Petition;
3. Prepare a report setting forth all the facts and applicable law, declaring that the United States of America is internationally responsible for violations of rights affirmed in the American Declaration of the Rights and Duties of Man and in other instruments of international law, and recommending that the United States:
 - a. Adopt mandatory measures to limit its emissions of greenhouse gases and cooperate in efforts of the community of nations—as expressed, for example, in activities relating to the United Nations Framework Convention on Climate Change—to limit such emissions at the global level;
 - b. Take into account the impacts of U.S. greenhouse gas emissions on the Arctic and affected Inuit in evaluating and before approving all major government actions;

- c. Establish and implement, in coordination with Petitioner and the affected Inuit, a plan to protect Inuit culture and resources, including, inter alia, the land, water, snow, ice, and plant and animal species used or occupied by the named individuals whose rights have been violated and other affected Inuit; and mitigate any harm to these resources caused by U.S. greenhouse gas emissions;
- d. Establish and implement, in coordination with Petitioner and the affected Inuit communities, a plan to provide assistance necessary for Inuit to adapt to the impacts of climate change that cannot be avoided;
- e. Provide any other relief that the Commission considers appropriate and just.

Questions & Discussion

1. Why do you think the Commission rejected the Petition without prejudice? What more do you think needs be alleged for the Petition to be deemed admissible?
2. Attributing the cause of global warming to any single entity or any single state raises difficult problems. Could attribution problems be surmounted by bringing claims against a group of states or entities responsible for significant greenhouse gas emissions?
3. In 2007, United States Supreme Court rejected the Environmental Protection Authority's (EPA) claim that it lacked power to regulate greenhouse gas emissions. See *Massachusetts v. EPA*, 549 U.S. 497, 127 S. Ct. 1438, 167 L.Ed.2d 248 (2007). How might this impact the exhaustion of remedies requirement in the Commission?
4. A debate about the appropriateness of the legal deployment of human rights to challenge climate related activities has developed following the Inuit case. Compare Eric A. Posner, *Climate Change and International Human Rights Litigation: A Critical Appraisal*, 155 U. PA. L. REV. 1925 (2007), with Sara C. Aminzadeh, A Moral Imperative: The Human Rights Implications of Climate Change, 30 *Hastings Int'l & Comp. L. Rev.* 231 (2007). See generally Amy Sinden, *Climate Change and Human Rights*, 27 *J. Land Resources & Env'tl. L.* 255 (2007); Stephen L. Kass, *Integrated Justice: Human Rights, Climate Change & Poverty*, 18 *Transnat'l L. & Contemp. Probs.* 115 (2009); Marc Limon, *Human Rights and Climate Change: Constructing a Case for Political Action*, 33 *Harv. Env'tl. L. Rev.* 439 (2009).

On 28 March 2008, the Human Rights Council adopted its first resolution on "human rights and climate change." ([res. 7/23](#)). The resolution recognised the threat that climate change poses to human rights and requested the Office of the United Nations High Commissioner for Human Rights (OHCHR) conduct a detailed study on human rights and climate change. The views of States and other stakeholders are to be taken into account. The study was prepared and submitted to the tenth session of the Council held in March 2009. Portions of the Report are excerpted below.

On 25 March 2009, the Council adopted [resolution 10/4](#) "Human rights and climate change" in which it, inter alia, notes that "climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights ..."; recognizes that the effects of climate change "will be felt most acutely by those segments of the population who are already in a vulnerable situation ...", recognizes that "effective

international cooperation to enable the full, effective and sustained implementation of the United Nations Framework Convention on Climate Change ... is important in order to support national efforts for the realization of human rights implicated by climate change-related impacts”, and affirms that “human rights obligations and commitments have the potential to inform and strengthen international and national policy-making in the area of climate change”.

Report of the Office of the High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights

U.N. Doc. A/HRC/10/61 (15 January 2009)

I. CLIMATE CHANGE: AN OVERVIEW

Global warming and its causes

5. The United Nations Framework Convention on Climate Change, which has near universal membership, provides the common international framework to address the causes and consequences of climate change, also referred to as “global warming”. The Convention defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”.

6. The Intergovernmental Panel on Climate Change (IPCC) has greatly contributed to improving understanding about and raising awareness of climate change risks. Since the publication of its First Assessment Report (IPCC AR1) in 1990, climate science has rapidly evolved, enabling the IPCC to make increasingly definitive statements about the reality, causes and consequences of climate change. Its Fourth Assessment Report (IPCC AR4), issued in 2007, presents a clear scientific consensus that global warming “is unequivocal” and that, with more than 90 per cent certainty, most of the warming observed over the past 50 years is caused by man-made greenhouse gas emissions. Current levels of greenhouse gas concentrations far exceed pre-industrial levels as recorded in polar ice cores dating back 650,000 years, and the predominant source of this increase is the combustion of fossil fuels.

7. The IPCC AR4 presents the current scientific consensus on climate change. It is based on the contributions of three working groups focusing on: the physical science basis (Working Group I); impacts, adaptation and vulnerability (Working Group II); and mitigation of climate change (Working Group III). The Synthesis Report and Summaries for Policymakers have been adopted and approved by member States at an IPCC plenary session. The findings provide the main scientific resource for this study in exploring the relationship between climate change and human rights.

Observed and projected impacts

8. Amongst the main observed and projected changes in weather patterns related to global warming are:

- Contraction of snow-covered areas and shrinking of sea ice;
- Sea-level rise and higher water temperatures;
- Increased frequency of hot extremes and heatwaves;
- Heavy precipitation events and increase in areas affected by drought;
- Increased intensity of tropical cyclones (typhoons and hurricanes).

9. The IPCC assessments and a growing volume of studies provide an increasingly detailed picture of how these changes in the physical climate will impact on human lives. IPCC AR4 outlines impacts in six main areas: ecosystems; food; water; health; coasts; and industry, settlement and society, some of which are described further below in relation to their implications for specific human rights.

Unequal burden and the equity principle

10. Industrialized countries, defined as Annex I countries under the United Nations Framework Convention on Climate Change, have historically contributed most to man-made greenhouse gas emissions. At the same time, the impacts of climate change are distributed very unevenly, disproportionately affecting poorer regions and countries, that is, those who have generally contributed the least to human-induced climate change.

11. The unequal burden of the effects of climate change is reflected in article 3 of the Convention (referred to as “the equity article”). It stipulates that Parties should protect the climate system “on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities”; that developed countries “should take the lead in combating climate change and the adverse effects thereof” and that full consideration should be given to the needs of developing countries, especially “those that are particularly vulnerable to the adverse effects of climate change” and “that would have to bear a disproportionate or abnormal burden under the Convention”. Giving operational meaning to the “equity principle” is a key challenge in ongoing climate change negotiations.

Response measures: mitigation and adaptation

12. Mitigation and adaptation are the two main strategies to address climate change. Mitigation aims to minimize the extent of global warming by reducing emission levels and stabilizing greenhouse gas concentrations in the atmosphere. Adaptation aims to strengthen the capacity of societies and ecosystems to cope with and adapt to climate change risks and impacts.

13. Reaching an agreement on required global mitigation measures lies at the heart of international climate change negotiations. Article 2 defines the “ultimate objective” of the Convention and associated instruments as “the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”. A key question is to operationally define the term “dangerous”.

14. Over the past decades, scientific studies and policy considerations have converged towards a threshold for dangerous climate change of a maximum rise in global average temperature of 2° C above the pre-industrial level. Staying below this threshold will significantly reduce the adverse impacts on ecosystems and human lives. It will require that global greenhouse gas emissions peak within the next decade and be reduced to less than 50 per cent of the current level by 2050. Yet, even this stabilization scenario would lead to a “best estimate” global average temperature increase of 2° C – 2.4° C above pre-industrial levels. Moreover, the possibility of containing the temperature rise to around 2°C becomes increasingly unlikely if emission reductions are postponed beyond the next 15 years.

15. Adaptation and the financing of adaptation measures are also central in international climate change negotiations. Irrespective of the scale of mitigation measures taken today and over the next decades, global warming will continue due to the inertia of the climate system and the long-term effects of previous greenhouse gas emissions. Consequently, adaptation measures are required to enable societies to cope with the effects of

now unavoidable global warming. Climate change adaptation covers a wide range of actions and strategies, such as building sea defences, relocating populations from flood-prone areas, improved water management, and early warning systems. Equally, adaptation requires strengthening the capacities and coping mechanisms of individuals and communities.

II. IMPLICATIONS FOR THE ENJOYMENT OF HUMAN RIGHTS

A. Climate change, environmental harm and human rights

16. An increase in global average temperatures of approximately 2° C will have major, and predominantly negative, effects on ecosystems across the globe, on the goods and services they provide. Already today, climate change is among the most important drivers of ecosystem changes, along with overexploitation of resources and pollution. Moreover, global warming will exacerbate the harmful effects of environmental pollution, including higher levels of ground-level ozone in urban areas. In view of such effects, which have implications for a wide range of human rights, it is relevant to discuss the relationship between human rights and the environment.

17. Principle 1 of the 1972 Declaration of the United Nations Conference on the Human Environment (the Stockholm Declaration), states that there is “a 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”. The Stockholm Declaration reflects a general recognition of the interdependence and interrelatedness of human rights and the environment.

18. While the universal human rights treaties do not refer to a specific right to a safe and healthy environment, the United Nations human rights treaty bodies all recognize the intrinsic link between the environment and the realization of a range of human rights, such as the right to life, to health, to food, to water, and to housing. The Convention on the Rights of the Child provides that States parties shall take appropriate measures to combat disease and malnutrition “through the provision of adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution”.

19. Equally, the Committee on Economic, Social and Cultural Rights (CESCR) has clarified that the right to adequate food requires the adoption of “appropriate economic, environmental and social policies” and that the right to health extends to its underlying determinants, including a healthy environment.

B. Effects on specific rights

20. Whereas global warming will potentially have implications for the full range of human rights, the following subsections provide examples of rights which seem to relate most directly to climate change-related impacts identified by IPCC.

The right to life

21. The right to life is explicitly protected under the International Covenant on Civil and Political Rights and the Convention on the Rights of the Child. The Human Rights Committee has described the right to life as the “supreme right”, “basic to all human rights”, and it is a right from which no derogation is permitted even in time of public emergency.²¹ Moreover, the Committee has clarified that the right to life imposes an obligation on States to take positive measures for its protection, including taking measures to reduce infant mortality, malnutrition and epidemics.²² The Convention on the Rights of the Child

explicitly links the right to life to the obligation of States “to ensure to the maximum extent possible the survival and development of the child”.²³ According to the Committee on the Rights of the Child, the right to survival and development must be implemented in a holistic manner, “through the enforcement of all the other provisions of the Convention, including rights to health, adequate nutrition, social security, an adequate standard of living, a healthy and safe environment ...”.

22. A number of observed and projected effects of climate change will pose direct and indirect threats to human lives. IPCC AR4 projects with high confidence an increase in people suffering from death, disease and injury from heatwaves, floods, storms, fires and droughts. Equally, climate change will affect the right to life through an increase in hunger and malnutrition and related disorders impacting on child growth and development; cardio-respiratory morbidity and mortality related to ground-level ozone.

23. Climate change will exacerbate weather-related disasters which already have devastating effects on people and their enjoyment of the right to life, particularly in the developing world. For example, an estimated 262 million people were affected by climate disasters annually from 2000 to 2004, of whom over 98 per cent live in developing countries. Tropical cyclone hazards, affecting approximately 120 million people annually, killed an estimated 250,000 people from 1980 to 2000.

24. Protection of the right to life, generally and in the context of climate change, is closely related to measures for the fulfilment of other rights, such as those related to food, water, health and housing. With regard to weather-related natural disasters, this close interconnectedness of rights is reflected in the Inter-Agency Standing Committee (IASC) operational guidelines on human rights and natural disasters.

The right to adequate food

25. The right to food is explicitly mentioned under the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities and implied in general provisions on an adequate standard of living of the Convention on the Elimination of All Forms of Discrimination against Women and the International Convention on the Elimination of all Forms of Racial Discrimination. In addition to a right to adequate food, the International Covenant on Economic, Social and Cultural Rights also enshrines “the fundamental right of everyone to be free from hunger”. Elements of the right to food include the availability of adequate food (including through the possibility of feeding oneself from natural resources) and accessible to all individuals under the jurisdiction of a State. Equally, States must ensure freedom from hunger and take necessary action to alleviate hunger, even in times of natural or other disasters.

26. As a consequence of climate change, the potential for food production is projected initially to increase at mid- to high latitudes with an increase in global average temperature in the range of 1-3°C. However, at lower latitudes crop productivity is projected to decrease, increasing the risk of hunger and food insecurity in the poorer regions of the world. According to one estimate, an additional 600 million people will face malnutrition due to climate change, with a particularly negative effect on Sub-Saharan Africa. Poor people living in developing countries are particularly vulnerable given their disproportionate dependency on climate-sensitive resources for their food and livelihoods.

27. The Special Rapporteur on the right to food has documented how extreme climate events are increasingly threatening livelihoods and food security. In responding to this threat, the realization of the right to adequate food requires that special attention be given to

vulnerable and disadvantaged groups, including people living in disaster prone areas and indigenous peoples whose livelihood may be threatened.

The right to water

28. CESCR has defined the right to water as the right of everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses, such as drinking, food preparation and personal and household hygiene. The Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of Persons with Disabilities explicitly refer to access to water services in provisions on an adequate standard of living, while the Convention on the Rights of the Child refers to the provision of “clean drinking water” as part of the measures States shall take to combat disease and malnutrition.

29. Loss of glaciers and reductions in snow cover are projected to increase and to negatively affect water availability for more than one-sixth of the world’s population supplied by melt water from mountain ranges. Weather extremes, such as drought and flooding, will also impact on water supplies. Climate change will thus exacerbate existing stresses on water resources and compound the problem of access to safe drinking water, currently denied to an estimated 1.1 billion people globally and a major cause of morbidity and disease.⁴¹ In this regard, climate change interacts with a range of other causes of water stress, such as population growth, environmental degradation, poor water management, poverty and inequality.

30. As various studies document, the negative effects of climate change on water supply and on the effective enjoyment of the right to water can be mitigated through the adoption of appropriate measures and policies.

The right to health

31. The right to the highest attainable standard of physical and mental health (the right to health) is most comprehensively addressed in article 12 of the International Covenant on Economic, Social and Cultural Rights and referred to in five other core international human rights treaties. This right implies the enjoyment of, and equal access to, appropriate health care and, more broadly, to goods, services and conditions which enable a person to live a healthy life. Underlying determinants of health include adequate food and nutrition, housing, safe drinking water and adequate sanitation, and a healthy environment. Other key elements are the availability, accessibility (both physically and economically), and quality of health and health-care facilities, goods and services.

32. Climate change is projected to affect the health status of millions of people, including through increases in malnutrition, increased diseases and injury due to extreme weather events, and an increased burden of diarrhoeal, cardio-respiratory and infectious diseases. Global warming may also affect the spread of malaria and other vector borne diseases in some parts of the world. Overall, the negative health effects will disproportionately be felt in Sub-Saharan Africa, South Asia and the Middle East. Poor health and malnutrition increases vulnerability and reduces the capacity of individuals and groups to adapt to climate change.

33. Climate change constitutes a severe additional stress to health systems worldwide, prompting the Special Rapporteur on the right to health to warn that a failure of the international community to confront the health threats posed by global warming will endanger the lives of millions of people. Most at risk are those individuals and communities

with a low adaptive capacity. Conversely, addressing poor health is one central aspect of reducing vulnerability to the effects of climate change.

34. Non-climate related factors, such as education, health care, public health initiatives, are critical in determining how global warming will affect the health of populations. Protecting the right to health in the face of climate change will require comprehensive measures, including mitigating the adverse impacts of global warming on underlying determinants of health and giving priority to protecting vulnerable individuals and communities.

The right to adequate housing

35. The right to adequate housing is enshrined in several core international human rights instruments and most comprehensively under the International Covenant on Economic, Social and Cultural Rights as an element of the right to an adequate standard of living. The right to adequate housing has been defined as “the right to live somewhere in security, peace and dignity”. Core elements of this right include security of tenure, protection against forced evictions, availability of services, materials, facilities and infrastructure, affordability, habitability, accessibility, location and cultural adequacy.

36. Observed and projected climate change will affect the right to adequate housing in several ways. Sea level rise and storm surges will have a direct impact on many coastal settlements. In the Arctic region and in low-lying island States such impacts have already led to the relocation of peoples and communities. Settlements in low-lying mega-deltas are also particularly at risk, as evidenced by the millions of people and homes affected by flooding in recent years.

37. The erosion of livelihoods, partly caused by climate change, is a main ‘push’ factor for increasing rural to urban migration. Many will move to urban slums and informal settlements where they are often forced to build shelters in hazardous areas. Already today, an estimated one billion people live in urban slums on fragile hillsides or flood-prone river banks and face acute vulnerability to extreme climate events.

38. Human rights guarantees in the context of climate change include: (a) adequate protection of housing from weather hazards (habitability of housing); (b) access to housing away from hazardous zones; (c) access to shelter and disaster preparedness in cases of displacement caused by extreme weather events; (d) protection of communities that are relocated away from hazardous zones, including protection against forced evictions without appropriate forms of legal or other protection, including adequate consultation with affected persons.

The right to self-determination

39. The right to self-determination is a fundamental principle of international law. Common article 1, paragraph 1, of the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights establishes that “all peoples have the right of self-determination”, by virtue of which “they freely determine their political status and freely pursue their economic, social and cultural development”. Important aspects of the right to self-determination include the right of a people not to be deprived of its own means of subsistence and the obligation of a State party to promote the realization of the right to self-determination, including for people living outside its territory. While the right to self-determination is a collective right held by peoples rather than

individuals, its realization is an essential condition for the effective enjoyment of individual human rights.

40. Sea-level rise and extreme weather events related to climate change are threatening the habitability and, in the longer term, the territorial existence of a number of low-lying island States. Equally, changes in the climate threaten to deprive indigenous peoples of their traditional territories and sources of livelihood. Either of these impacts would have implications for the right to self-determination.

41. The inundation and disappearance of small island States would have implications for the right to self-determination, as well as for the full range of human rights for which individuals depend on the State for their protection. The disappearance of a State for climate change-related reasons would give rise to a range of legal questions, including concerning the status of people inhabiting such disappearing territories and the protection afforded to them under international law (discussed further below). While there is no clear precedence to follow, it is clear that insofar as climate change poses a threat to the right of peoples to self-determination, States have a duty to take positive action, individually and jointly, to address and avert this threat. Equally, States have an obligation to take action to avert climate change impacts which threaten the cultural and social identity of indigenous peoples.

C. Effects on specific groups

42. The effects of climate change will be felt most acutely by those segments of the population who are already in vulnerable situations due to factors such as poverty, gender, age, minority status, and disability. Under international human rights law, States are legally bound to address such vulnerabilities in accordance with the principle of equality and non-discrimination.

43. Vulnerability and impact assessments in the context of climate change largely focus on impacts on economic sectors, such as health and water, rather than on the vulnerabilities of specific segments of the population. Submissions to this report and other studies indicate awareness of the need for more detailed assessments at the country level and point to some of the factors which affect individuals and communities.

44. The present section focuses on factors determining vulnerability to climate change for women, children and indigenous peoples.

Women

45. Women are especially exposed to climate change-related risks due to existing gender discrimination, inequality and inhibiting gender roles. It is established that women, particularly elderly women and girls, are affected more severely and are more at risk during all phases of weather-related disasters: risk preparedness, warning communication and response, social and economic impacts, recovery and reconstruction. The death rate of women is markedly higher than that of men during natural disasters (often linked to reasons such as: women are more likely to be looking after children, to be wearing clothes which inhibit movement and are less likely to be able to swim). This is particularly the case in disaster-affected societies in which the socio-economic status of women is low. Women are susceptible to gender-based violence during natural disasters and during migration, and girls are more likely to drop out of school when households come under additional stress. Rural women are particularly affected by effects on agriculture and deteriorating living conditions in rural areas. Vulnerability is exacerbated by factors such as unequal rights to property,

exclusion from decision-making and difficulties in accessing information and financial services.

46. Studies document how crucial for successful climate change adaptation the knowledge and capacities of women are. For example, there are numerous examples of how measures to empower women and to address discriminatory practices have increased the capacity of communities to cope with extreme weather events.

47. International human rights standards and principles underline the need to adequately assess and address the gender-differentiated impacts of climate change. In the context of negotiations on the United Nations Framework Convention on Climate Change, States have highlighted gender-specific vulnerability assessments as important elements in determining adaptation options. Yet, there is a general lack of accurate data disaggregated by gender data in this area.

Children

48. Studies show that climate change will exacerbate existing health risks and undermine support structures that protect children from harm. Overall, the health burden of climate change will primarily be borne by children in the developing world. For example, extreme weather events and increased water stress already constitute leading causes of malnutrition and infant and child mortality and morbidity. Likewise, increased stress on livelihoods will make it more difficult for children to attend school. Girls will be particularly affected as traditional household chores, such as collecting firewood and water, require more time and energy when supplies are scarce. Moreover, like women, children have a higher mortality rate as a result of weather-related disasters.

49. As today's children and young persons will shape the world of tomorrow, children are central actors in promoting behaviour change required to mitigate the effects of global warming. Children's knowledge and awareness of climate change also influence wider households and community actions. Education on environmental matters among children is crucial and various initiatives at national and international levels seek to engage children and young people as actors in the climate change agenda.

50. The Convention on the Rights of the Child, which enjoys near universal ratification, obliges States to take action to ensure the realization of all rights in the Convention for all children in their jurisdiction, including measures to safeguard children's right to life, survival and development through, inter alia, addressing problems of environmental pollution and degradation. Importantly, children must be recognized as active participants and stewards of natural resources in the promotion and protection of a safe and healthy environment.

Indigenous peoples

51. Climate change, together with pollution and environmental degradation, poses a serious threat to indigenous peoples, who often live in marginal lands and fragile ecosystems which are particularly sensitive to alterations in the physical environment. Climate change-related impacts have already led to the relocation of Inuit communities in polar regions and affected their traditional livelihoods. Indigenous peoples inhabiting low-lying island States face similar pressures, threatening their cultural identity which is closely linked to their traditional lands and livelihoods.

52. Indigenous peoples have been voicing their concern about the impacts of climate change on their collective human rights and their rights as distinct peoples. In particular,

indigenous peoples have stressed the importance of giving them a voice in policy-making on climate change at both national and international levels and of taking into account and building upon their traditional knowledge. As a study cited by the IPCC in its Fourth Assessment Report observes, “Incorporating indigenous knowledge into climate change policies can lead to the development of effective adaptation strategies that are cost-effective, participatory and sustainable”.

53. The United Nations Declaration on the Rights of Indigenous Peoples sets out several rights and principles of relevance to threats posed by climate change. Core international human rights treaties also provide for protection of indigenous peoples, in particular with regard to the right to self-determination and rights related to culture. The rights of indigenous peoples are also enshrined in ILO Convention No. 169 (1989) concerning Indigenous and Tribal Peoples in Independent Countries.

54. Indigenous peoples have brought several cases before national courts and regional and international human rights bodies claiming violations of human rights related to environmental issues. In 2005, a group of Inuit in the Canadian and Alaskan Arctic presented a case before the Inter-American Commission on Human Rights seeking compensation for alleged violations of their human rights resulting from climate change caused by greenhouse gas emissions from the United States of America. While the Inter-American Commission deemed the case inadmissible, it drew international attention to the threats posed by climate change to indigenous peoples.

D. Displacement

55. The First Assessment Report of the IPCC (1990) noted that the greatest single impact of climate change might be on human migration. The report estimated that by 2050, 150 million people could be displaced by climate change-related phenomena, such as desertification, increasing water scarcity, and floods and storms. It is estimated that climate change-related displacement will primarily occur within countries and that it will affect primarily poorer regions and countries.

56. It is possible to distinguish between four main climate change-related displacement scenarios, where displacement is caused by:

- Weather-related disasters, such as hurricanes and flooding;
- Gradual environmental deterioration and slow onset disasters, such as desertification, sinking of coastal zones and possible total submersion of low-lying island States;
- Increased disaster risks resulting in relocation of people from high-risk zones.
- Social upheaval and violence attributable to climate change-related factors.

57. Persons affected by displacement within national borders are entitled to the full range of human rights guarantees by a given State, including protection against arbitrary or forced displacement and rights related to housing and property restitution for displaced persons. To the extent that movement has been forced, persons would also qualify for increased assistance and protection as a vulnerable group in accordance with the Guiding Principles on Internal Displacement. However, with regard to slow-onset disasters and environmental degradation it remains challenging to distinguish between voluntary and forced population movements.

58. Persons moving voluntarily or forcibly across an international border due to environmental factors would be entitled to general human rights guarantees in a receiving State, but would often not have a right of entry to that State. Persons forcibly displaced across borders for environmental reasons have been referred to as “climate refugees” or

“environmental refugees”. The Office of the United Nations High Commissioner for Refugees, the International Organization for Migration and other humanitarian organizations have advised that these terms have no legal basis in international refugee law and should be avoided in order not to undermine the international legal regime for the protection of refugees.

59. The Representative of the Secretary-General on human rights of internally displaced persons has suggested that a person who cannot be reasonably expected to return (e.g. if assistance and protection provided by the country of origin is far below international standards) should be considered a victim of forced displacement and be granted at least a temporary stay.

60. One possible scenario of forcible displacement across national borders is the eventual total submergence of small island States. Two working papers of the Sub-Commission on the Promotion and Protection of Human Rights, point to some of the human rights issues such situations would raise, such as the rights of affected populations vis-à-vis receiving States and possible entitlement to live in community. Human rights law does not provide clear answers as to the status of populations who have been displaced from sinking island States. Arguably, dealing with such possible disasters and protecting the human rights of the people affected will first and foremost require adequate long-term political solutions, rather than new legal instruments.

E. Conflict and security risks

61. Recent reports and studies identify climate change as a key challenge to global peace and stability. This was also recognized by the Norwegian Nobel Committee when, in 2007, it awarded the Nobel Peace Prize jointly to the IPCC and Al Gore for raising awareness of man-made climate change. Equally, in 2007, the Security Council held a day-long debate on the impact of climate change on peace and security.

62. According to one study, the effects of climate change interacting with economic, social and political problems will create a high risk of violent conflict in 46 countries – home to 2.7 billion people. These countries, mainly in sub-Saharan Africa, Asia and Latin America, are also the countries which are particularly exposed to projected negative impacts of climate change.

63. Climate change-related conflicts could be one driver of forced displacement. In such cases, in addition to the general human rights protection framework, other international standards would be applicable, including the Guiding Principles on Internal Displacement, international humanitarian law, international refugee law and subsidiary and temporary protection regimes for persons fleeing from armed conflict. Violent conflict, irrespective of its causes, has direct implications for the protection and enjoyment of human rights.

64. It should be noted, however, that knowledge remains limited as to the causal linkages between environmental factors and conflict and there is little empirical evidence to substantiate the projected impacts of environmental factors on armed conflict.

F. Human rights implications of response measures

65. The United Nations Framework Convention on Climate Change and its Kyoto Protocol commit States parties to minimize adverse economic, social and environmental impacts resulting from the implementation of measures taken to mitigate or adapt to climate change impacts (‘response measures’). With regard to measures to reduce the concentration of greenhouse gases in the atmosphere (mitigation), agro-fuel production is one example of

how mitigation measures may have adverse secondary effects on human rights, especially the right to food.

66. Whereas agro-fuel production could bring positive benefits for climate change and for farmers in developing countries, agro-fuels have also contributed to increasing the price of food commodities “because of the competition between, food, feed and fuel for scarce arable land”. CESCR has urged States to implement strategies to combat global climate change that do not negatively affect the right to adequate food and freedom from hunger, but rather promote sustainable agriculture, as required by article 2 of the United Nations Framework Convention on Climate Change.

67. Apart from the impact on the right to food, concerns have also been raised that demand for bio-fuels could encroach on the rights of indigenous peoples to their traditional lands and culture.

68. Concerns have also been raised about possible adverse effects of reduced emissions from deforestation and degradation (REDD) programmes. These programmes provide compensation for retaining forest cover and could potentially benefit indigenous peoples who depend on those forest resources. However, indigenous communities fear expropriation of their lands and displacement and have concerns about the current framework for REDD. The Permanent Forum on Indigenous Issues stated that new proposals for reduced emissions from deforestation “must address the need for global and national policy reforms ... respecting rights to land, territories and resources, and the rights of self-determination and the free, prior and informed consent of the indigenous peoples concerned”.

III. RELEVANT HUMAN RIGHTS OBLIGATIONS

69. There exists broad agreement that climate change has generally negative effects on the realization of human rights. This section seeks to outline how the empirical reality and projections of the adverse effects of climate change on the effective enjoyment of human rights relate to obligations assumed by States under the international human rights treaties.

70. While climate change has obvious implications for the enjoyment of human rights, it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense. Qualifying the effects of climate change as human rights violations poses a series of difficulties. First, it is virtually impossible to disentangle the complex causal relationships linking historical greenhouse gas emissions of a particular country with a specific climate change-related effect, let alone with the range of direct and indirect implications for human rights. Second, global warming is often one of several contributing factors to climate change-related effects, such as hurricanes, environmental degradation and water stress. Accordingly, it is often impossible to establish the extent to which a concrete climate change-related event with implications for human rights is attributable to global warming. Third, adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred.

71. Irrespective of whether or not climate change effects can be construed as human rights violations, human rights obligations provide important protection to the individuals whose rights are affected by climate change or by measures taken to respond to climate change.

A. National level obligations

72. Under international human rights law, individuals rely first and foremost on their own States for the protection of their human rights. In the face of climate change, however, it is doubtful, for the reasons mentioned above, that an individual would be able to hold a particular State responsible for harm caused by climate change. Human rights law provides more effective protection with regard to measures taken by States to address climate change and their impact on human rights.

73. For example, if individuals have to move away from a high-risk zone, the State must ensure adequate safeguards and take measures to avoid forced evictions. Equally, several claims about environmental harm have been considered by national, regional and international judicial and quasi-judicial bodies, including the Human Rights Committee, regarding the impact on human rights, such as the right to life, to health, to privacy and family life and to information. Similar cases in which an environmental harm is linked to climate change could also be considered by courts and quasi-judicial human rights treaty bodies. In such cases, it would appear that the matter of the case would rest on whether the State through its acts or omissions had failed to protect an individual against a harm affecting the enjoyment of human rights.

74. In some cases, States may have an obligation to protect individuals against foreseeable threats to human rights related to climate change, such as an increased risk of flooding in certain areas. In that regard, the jurisprudence of the European Court of Human Rights gives some indication of how a failure to take measures against foreseeable risks could possibly amount to a violation of human rights. The Court found a violation of the right to life in a case where State authorities had failed to implement land-planning and emergency relief policies while they were aware of an increasing risk of a large-scale mudslide. The Court also noted that the population had not been adequately informed about the risk.

Progressive realization of economic, social and cultural rights

75. As discussed in chapter II, climate change will have implications for a number of economic, social and cultural rights. As specified in the relevant treaty provisions, States are obliged to take measures towards the full realization of economic, social and cultural rights to the maximum extent of their available resources. As climate change will place an additional burden on the resources available to States, economic and social rights are likely to suffer.

76. While international human rights treaties recognize that some aspects of economic, social and cultural rights may only be realized progressively over time, they also impose obligations which require immediate implementation. First, States parties 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. Second, irrespective of resource limitations, States must guarantee non-discrimination in access to economic, social and cultural rights. Third, States have a core obligation to ensure, at the very least, minimum essential levels of each right enshrined in the Covenant. For example, a State party in which “any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education” would be failing to meet its minimum core obligations and, *prima facie*, be in violation of the Covenant.

77. In sum, irrespective of the additional strain climate change-related events may place on available resources, States remain under an obligation to ensure the widest possible enjoyment of economic, social and cultural rights under any given circumstances.

Importantly, States must, as a matter of priority, seek to satisfy core obligations and protect groups in society who are in a particularly vulnerable situation.

Access to information and participation in decision-making

78. Awareness-raising and access to information are critical to efforts to address climate change. For example, it is critically important that early-warning information be provided in a manner accessible to all sectors of society. Under the United Nations Framework Convention on Climate Change, the Parties commit to promote and facilitate public access to information on climate change. Under international human rights law, access to information is implied in the rights to freedom of opinion and expression. Jurisprudence of regional human rights courts has also underlined the importance of access to information in relation to environmental risks.

79. Participation in decision-making is of key importance in efforts to tackle climate change. For example, adequate and meaningful consultation with affected persons should precede decisions to relocate people away from hazardous zones. Under the Convention, States parties shall promote and facilitate “public participation in addressing climate change and its effects and developing adequate responses”. The right to participation in decision-making is implied in article 25 of the International Covenant on Civil and Political Rights which guarantees the right to “take part in the conduct of public affairs”. Equally, the United Nations Declaration on the Rights of Indigenous Peoples states that States shall consult and cooperate with indigenous peoples “to obtain their free, prior and informed consent” before adopting measures that may affect them. The Convention on the Rights of the Child in article 12 enshrines the right of children to express their views freely in all matters affecting them.

Guiding principles for policy-making

80. Human rights standards and principles should inform and strengthen policy-making in the area of climate change, promoting policy coherence and sustainable outcomes. The human rights framework draws attention to the importance of aligning climate change policies and measures with overall human rights objectives, including through assessing possible effects of such policies and measures on human rights.

81. Moreover, looking at climate change vulnerability and adaptive capacity in human rights terms highlights the importance of analysing power relationships, addressing underlying causes of inequality and discrimination, and gives particular attention to marginalized and vulnerable members of society. The human rights framework seeks to empower individuals and underlines the critical importance of effective participation of individuals and communities in decision-making processes affecting their lives.

82. Equally, human rights standards underline the need to prioritize access of all persons to at least basic levels of economic, social and cultural rights, such as access to basic medical care, essential drugs and to compulsory primary education free of charge.

83. The human rights framework also stresses the importance of accountability mechanisms in the implementation of measures and policies in the area of climate change and requires access to administrative and judicial remedies in cases of human rights violations.

B. Obligations of international cooperation

84. Climate change can only be effectively addressed through cooperation of all members of the international community. Moreover, international cooperation is important

because the effects and risk of climate change are significantly higher in low-income countries.

85. International cooperation to promote and protect human rights lies at the heart of the Charter of the United Nations. The importance of such cooperation is explicitly stated in provisions of the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, the Convention on the Rights of People with Disabilities and in the Declaration on the Right to Development. According to CESCR and the Committee on the Rights of the Child, the obligation to take steps to the maximum of available resources to implement economic, social and cultural rights includes an obligation of States, where necessary, to seek international cooperation. States have also committed themselves not only to implement the treaties within their jurisdiction, but also to contribute, through international cooperation, to global implementation. Developed States have a particular responsibility and interest to assist the poorer developing States.

86. The Committee on Economic, Social and Cultural Rights identifies four types of extraterritorial obligations to promote and protect economic, social and cultural rights. Accordingly, States have legal obligations to:

- refrain from interfering with the enjoyment of human rights in other countries;
- take measures to prevent third parties (e.g. private companies) over which they hold influence from interfering with the enjoyment of human rights in other countries;
- take steps through international assistance and cooperation, depending on the availability of resources, to facilitate fulfilment of human rights in other countries, including disaster relief, emergency assistance, and assistance to refugees and displaced persons;
- ensure that human rights are given due attention in international agreements and that such agreements do not adversely impact upon human rights.

87. Human rights standards and principles are consistent with and further emphasize “the principle of common but differentiated responsibilities” contained in the United Nations Framework Convention on Climate Change. According to this principle, developed country Parties (Annex I) commit to assisting developing country Parties (Non-Annex I) in meeting the costs of adaptation to the adverse effects of climate change and to take full account of the specific needs of least developed countries in funding and transfer of technology. The human rights framework complements the Convention by underlining that “the human person is the central subject of development”, and that international cooperation is not merely a matter of the obligations of a State towards other States, but also of the obligations towards individuals.

88. Human rights standards and principles, underpinned by universally recognized moral values, can usefully inform debates on equity and fair distribution of mitigation and adaptation burdens. Above all, human rights principles and standards focus attention on how a given distribution of burden affects the enjoyment of human rights.

Intergenerational equity and the precautionary principle

89. The United Nations Framework Convention on Climate Change stresses principles of particular importance in the context of climate change which are less well developed in human rights law. Notably, these include the notion of “intergenerational equity and justice” and “the precautionary principle”, both of which are well-established in international environmental law.

90. Human rights treaty bodies have alluded to the notion of intergenerational equity. However, the human rights principles of equality and non-discrimination generally focus on situations in the present, even if it is understood that the value of these core human rights principles would not diminish over time and be equally applicable to future generations.

91. The precautionary principle reflected in article 3 of the United Nations Framework Convention on Climate Change, states that lack of full scientific certainty should not be used as a reason for postponing precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. As discussed above, human rights litigation is not well-suited to promote precautionary measures based on risk assessments, unless such risks pose an imminent threat to the human rights of specific individuals. Yet, by drawing attention to the broader human rights implications of climate change risks, the human rights perspective, in line with the precautionary principle, emphasizes the need to avoid unnecessary delay in taking action to contain the threat of global warming.

Linking Human Rights and Climate Change at the United Nations

John H. Knox

33 Harv. Envtl. L. Rev. 477, 477-479, 484-495 (2009)

In January 2009, the Office of the U.N High Commissioner for Human Rights (“OHCHR”) became the first international human rights body to examine the relationship between climate change and human rights. The OHCHR report reaches several important conclusions: (1) climate change threatens the enjoyment of a broad array of human rights; (2) climate change does not, however, necessarily violate human rights; (3) human rights law nevertheless places duties on states concerning climate change; and (4) those duties include an obligation of international cooperation.

[T]his article examines the report . . . , focusing on its answers to two key questions: (1) whether climate change violates human rights law; and (2) whether states have obligations under human rights law to address climate change. Drawing on the most recent report of the Intergovernmental Panel on Climate Change (“IPCC”), the OHCHR report describes ways that climate change threatens the enjoyment of a wide variety of human rights, including rights to life, health, and self-determination. Nevertheless, it declines to conclude that climate change violates human rights. While the distinction between an adverse effect on the enjoyment of human rights and a violation of human rights may seem arcane, it is well-grounded in human rights law. A violation of human rights is commonly understood to imply a breach of a legal duty under human rights law. Not all adverse effects on human rights necessarily imply such a breach. A mud-slide that results from heavy rains, for example, may well interfere with, or even destroy, the right to life of those harmed by it, but [if] it is not caused by a state acting in violation of its legal obligations . . . , [it] is not a violation of human rights.

Although the report’s conclusion that climate change does not violate human rights may be challenged, it is understandable that the OHCHR sought to avoid the technical as well as political obstacles to concluding that countries violate human rights law merely by emitting greenhouse gases. More importantly, the report explains that whether or not climate change violates human rights law, human rights law places duties on states that are relevant to climate change. This result may initially seem counterintuitive -- how can states have legal duties to address a problem for which they are not legally responsible? -- but the OHCHR is again on firm legal ground. A mudslide not caused by a state may not be a violation of human rights law, but that law may still require the state to take steps to protect those in its path.

The greatest shortcoming of the OHCHR report is that it says very little about the content of states’ duties concerning climate change. However, the report does take a position on one key issue: it makes clear that those duties are not limited territorially. In particular, it

emphasizes that states have an international duty to cooperate in order to realize human rights, and that this duty is especially important with respect to climate change, an inherently global threat to human rights. Although this conclusion may seem innocuous, it is likely to be the most controversial in the report, because many developed states have long resisted the proposition that they have human rights obligations to those not within their territory or direct control. . . .

. . .

A. The Effect of Climate Change on Human Rights

The OHCHR report describes at some length the direct and indirect effects of climate change on the enjoyment of human rights, but it concludes with much less analysis that it does not violate human rights law. In both cases, its conclusions reflect the views of the states that expressed their views to the OHCHR on the connections between climate change and human rights.

Resolution 7/23 asked the OHCHR to prepare the report “in consultation with and taking into account the views of States, international organizations . . . and other stakeholders,” and encouraged states to contribute to the report. The OHCHR’s ensuing request for information did not ask the recipients to take positions on whether climate change violates human rights, but it did ask, *inter alia*, for assessments of the impact of climate change, including on human rights. The OHCHR received thirty responses from states. Many of the submissions were very brief and did not express any views on the connections between climate change and human rights. Japan, for example, provided only a one-page description of its support for developing countries’ efforts to mitigate and adapt to climate change. Those states that did express their views on the relationship between climate change and human rights agreed that climate change threatens the enjoyment of human rights. Even the United States, still under the Bush Administration at the time, acknowledged that climate change has implications for the full enjoyment of human rights, although it said that the implications could be positive as well as negative.

The longest submission by far was from the Maldives . . . Like the submission of the Marshall Islands, whose sixty thousand people live on twenty-nine coral atolls and five single islands in the North Pacific, the Maldives’ submission described how rising sea levels and other effects of climate change threaten the human rights of the residents of small islands. These residents’ right to life, for example, would be harmed by increased frequency and severity of flooding; their right to property would be affected by the loss of homes and other possessions because of inundation; enjoyment of their rights to health, food, water, and housing would be infringed by rising waters and temperatures; and their collective right to self-determination would be destroyed by the loss of the country itself.

Building on this consensus among states that climate change threatens human rights, the OHCHR report elaborates on the rights most affected by climate change. It begins by noting that although universal human rights treaties do not recognize a specific right to a safe and healthy environment, the bodies charged with overseeing compliance with those treaties have recognized “the intrinsic link between the environment and the realization of a range of human rights.” Most of the jurisprudence on the connections between the environment and human rights has been developed by regional tribunals, although treaty bodies have contributed as well. Together, they have established that environmental degradation may interfere with many rights, including rights to life, health, privacy, and property, as well as components of the right to an adequate standard of living, such as water and food.

In line with these precedents, the OHCHR report describes the effects of climate change on particular rights, drawing largely on the 2007 assessment report of the IPCC [Intergovernmental Panel on Climate Change] on climate change impacts. The OHCHR report states, for example, that “observed and projected effects of climate change will pose direct and indirect threats to human lives” as a result of events such as floods, storms, and droughts, as well as an increase in hunger and malnutrition. It cites an estimate that an additional six hundred million people will face malnutrition as climate change causes crop productivity in many regions to decrease, impairing the right to food as well as the right to life. The loss of glaciers and reductions in snow cover will reduce the availability of water, and thus affect the right to water, for the more than one billion people who receive melt water from mountains. The right to the highest attainable standard of health will be infringed by not only malnutrition and extreme weather events, but also malaria and other diseases that thrive in warmer weather. Rising temperatures have already affected the right to adequate housing in the Arctic and low-lying island states by forcing the relocation of communities. Additionally, “[t]he inundation and disappearance of small island States would have implications for the right to self-determination, as well as for the full range of rights for which individuals depend on the State for their protection.”

The report also states that climate change will particularly affect segments of the population that are already vulnerable as a result of their status. It describes factors affecting the vulnerability to climate change of women, children, and indigenous peoples, each of whose rights are protected by specific human rights treaties. The report also draws attention to the large number of persons who will become migrants as a result of climate change, either within their own state or across international borders, and again notes the possible disappearance of small island states. With respect to the populations forced to leave a sinking state and flee to other countries, the OHCHR notes that “[h]uman rights law does not provide clear answers as to the [ir] status.” Finally, the report observes that measures taken in response to climate change may themselves have implications for human rights. For example, agro-fuel production may contribute to increases in food prices.

After reading the report’s description of the many ways that climate change threatens the enjoyment of human rights, one might expect the OHCHR to conclude that climate change threatens to violate human rights, and indeed that it already violates human rights when, for example, it forces residents of the Arctic to abandon their homes and communities. But the OHCHR report does not draw that conclusion. Instead, it states: “While climate change has obvious implications for the enjoyment of human rights, it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense.” It describes three obstacles to treating the effects of climate change as human rights violations: (1) “it is virtually impossible to disentangle the complex causal relationships” linking emissions of a particular country to a specific effect; (2) “global warming is often one of several contributing factors to climate change-related effects such as hurricanes [and environmental degradation],” which makes it “often impossible” to establish how such an event is attributable to global warming; and (3) “adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred”

Although this language is not completely clear, the OHCHR seems to be concerned with two links in the chain of causation between states’ emissions of greenhouse gases and the effects of climate change on human rights. The second and third of their three concerns have to do with the difficulty of concluding that a particular effect on human rights results from global warming rather than other possible causes, especially before the effect has occurred. The first of the concerns seems to refer to the difficulty inherent in allocating responsibility for

contributions to global warming among two hundred states. These are not trivial problems, but the OHCHR may overstate the degree to which they prevent a conclusion that at least some effects of climate change violate human rights.

While it is true that global warming cannot and should not be blamed for every hurricane or drought, some of its effects are clearer and, indeed, are already being felt. There is little doubt that the Inuit, for example, are already experiencing adverse effects of climate change. The IPCC 2007 assessment states with “very high confidence” that in the polar regions there is already “strong evidence of the ongoing impacts of climate change on . . . communities,” and that “[w]arming and thawing of permafrost will bring detrimental impacts on community infrastructure.” It states with “high confidence” that “[t]he resilience shown historically by Arctic indigenous peoples is now being severely tested,” and that “[s]ubstantial investments will be necessary to adapt or relocate physical structures and communities.” And there is a great deal of scientific agreement on the foreseeable effects of climate change on other vulnerable communities, including in particular small island states such as the Maldives. As the OHCHR report acknowledges, an effect on a human right does not have to have occurred in order to indicate a violation; the effect may be “imminent.” One could argue that many of the effects of climate change are already imminent, even though they may not happen for years, because their causes are occurring now and they will soon be difficult or impossible to forestall.

Assigning responsibility to specific states for climate change is a real problem, but the primary difficulty is not causation. It is not necessary to link the emissions of a particular state to a particular harm in order to assign responsibility for the harm; since all greenhouse gases contribute to climate change, wherever they are released, responsibility could be allocated according to states’ shares of global emissions of greenhouse gases. While precise allocations of responsibility would be controversial, it is clear that most states contribute well under one percent of total emissions, and that relatively few are responsible for the lion’s share. The United States and China together contribute more than one-third of current emissions, and together with the European Union are responsible for more than half. Adding just four more states — Russia, India, Japan, and Brazil — brings the share of the largest emitters to more than two-thirds of the total. On this basis, it would be possible, at least in principle, to conclude that even if all states contribute to climate change and are therefore joint violators of the human rights affected by it, some states are far more culpable than others, and to allocate responsibility accordingly.

One difficult issue would be determining whether and how to take into account past emissions, which would greatly increase the relative shares of the EU and the United States. But the more fundamental objection to allocating states’ responsibility based on their shares of global emissions is that it ignores their widely varying per capita emissions. It may well seem unjust, for example, to treat China as if it were as responsible for the effects of climate change as the United States based on their (current) total emissions, when China’s per capita emissions are far less. This is a real problem, but it is a problem of fairness rather than causation.

In addition to these obstacles to calling climate change a violation of human rights, there are political difficulties. The largest emitters of greenhouse gases are, not coincidentally, the most powerful states in the world. Accusing them of violating human rights would distract from the need to win their consent to an effective climate agreement, as well as ensure their opposition to further consideration of the effects of climate change on human rights. Unsurprisingly, while the responses of states to the OHCHR request for information generally agreed that the effects of climate change threaten the enjoyment of human rights, they

provided no support for the conclusion that climate change is itself a violation of human rights law.

The United States argued generally that “moving toward a human rights-based approach to climate change would be impractical and unwise.” Its objections were based on its understanding of human rights as primarily designed to require governments to provide remedies to victims of human rights violations within their jurisdiction. It said that, in this light, the complex, global, long-term nature of climate change makes it ill-suited for consideration as a human rights problem: “[i]t will be difficult and problematic to identify any particular party as being uniquely responsible for any particular impairment of the enjoyment of human rights caused by climate change or even any particular harm as being proximately caused by any particular act or omission by any particular government or governmental actor.” Other countries that did not share the United States’ limited view of human rights nevertheless declined to argue that climate change is a violation of human rights law. Although the United Kingdom seemed to support a role for human rights in considering climate change, it made clear that it did not regard climate change as a human rights violation,⁸⁰ and even the Maldives and the Marshall Islands did not press for that conclusion.

Whether climate change violates human rights may be less important than it first appears. The question would be of the greatest consequence if it determined whether states have any duties regarding climate change. As the next section explains, however, the OHCHR report correctly concludes that climate change need not violate human rights for states to have legal obligations under human rights law concerning it.

B. States’ Human Rights Obligations Concerning Climate Change

Immediately after declining to find that climate change is a violation of human rights law, the OHCHR report states, “Irrespective of whether or not climate change effects can be construed as human rights violations, human rights obligations provide important protection to the individuals whose rights are affected by climate change.” This may be the most important statement in the report. It indicates that states have duties to protect their people from threats to human rights even when the states are not directly responsible for those threats. Although the report is much less clear on exactly what states’ duties are concerning climate change, it does emphasize that states’ obligations extend to those beyond their territory, not just to those within it.

Although the OHCHR’s conclusion that states have legal duties concerning climate change even though climate change itself is not a human rights violation may seem counterintuitive, it is firmly grounded in human rights law. States are generally responsible not only for ensuring that their own conduct does not violate human rights, but also for protecting against interference with human rights from other sources, including private actors. Human rights bodies have made clear that this duty to protect applies to environmental degradation that harms human rights. Although most of these cases involve the duty to protect against private actions that infringe a human right, states also have duties with respect to other threats beyond their control, such as natural disasters. In *Budayeva v. Russia*, for example, the European Court of Human Rights found that Russia had not implemented policies to protect the inhabitants of a region prone to deadly mudslides. (It had not maintained dams, for example, and observation posts to provide timely warnings.) The court concluded that Russia had failed to “discharge the positive obligation to establish a legislative and administrative framework designed to provide effective deterrence against threats to the right to life as required by Article 2” of the European Convention on Human Rights, and had thereby violated the Convention.

As a result, whether a state causes climate change is a separate question from whether it has a duty to address the effects of climate change on human rights. Of course, the causal question may still be relevant to the content of a state's duty: if climate change does not cause the infringement in question, reducing emissions would not protect against that infringement. Even if climate change does cause or contribute to an adverse effect on human rights, a state's contribution to worldwide greenhouse gases may be so minimal that reducing its emissions would have no appreciable effect. In that case, however, the state could well have other duties, such as helping its people to adapt to climate change. The existence of such duties would not depend on whether the state could be shown to have caused the harm itself through, for example, its contribution of greenhouse gases.

By making clear that states have duties concerning climate change regardless of whether they can be shown to be legally responsible for climate change itself, the OHCHR report usefully moves the discussion of climate change and human rights forward. It provides a basis for applying human rights norms to climate change even in the absence of clear answers to issues of causation, answers that are unlikely to emerge from a political debate over relative degrees of responsibility for past behavior.

Unfortunately, the report is less successful at identifying exactly what duties states have. Although it says that states should comply with human rights law both in the measures they take to address climate change and in fulfilling their obligation to protect individuals against foreseeable threats to their human rights caused by climate change, it provides little guidance on how states should do so. Drawing on the jurisprudence of human rights tribunals with respect to other environmental threats to human rights, the OHCHR report emphasizes the importance of access to information and participation in decision-making. But it leaves much work to be done in explaining how human rights norms apply to states' duties to mitigate and adapt to climate change.

The report does take a firm stand on one particularly important issue concerning state duties. It states unequivocally that human rights law imposes extraterritorial duties. Such duties are obviously of critical importance with respect to the effects of climate change, an inherently global phenomenon. Indeed, human rights law would be of very limited value in addressing climate change if it imposed duties on states only with respect to those persons within their own borders. After stressing that "[c]limate change can only be effectively addressed through cooperation of all members of the international community," the OHCHR identifies several "obligations of international cooperation." It bases the general obligation to cooperate on several treaties, including the U.N. Charter, but it derives more specific extraterritorial duties primarily from interpretations of the International Covenant on Economic, Social and Cultural Rights ("ICESCR"). The Committee on Economic, Social and Cultural Rights, the body of independent experts charged with overseeing compliance with the treaty, has identified four types of extraterritorial duties: (1) to "refrain from interfering with the enjoyment of human rights in other countries"; (2) to take measures to prevent private actors from engaging in such interference; (3) to take steps through aid and cooperation "to facilitate fulfillment of human rights" abroad; and (4) to ensure that international agreements do not adversely affect human rights.

Even though the OHCHR does not elaborate on these duties, its restatement of them is likely to prove the most controversial section of the report. Extraterritorial application of duties under human rights treaties is a difficult issue politically as well as legally. Some treaties, such as the International Covenant on Civil and Political Rights ("ICCPR"), have jurisdictional limits. The ICESCR does contain language that provides support for extraterritorial obligations, including duties of assistance and cooperation, but its Committee's interpretations are not legally binding, nor have its pronouncements on extraterritoriality been

met with universal acceptance. In particular, developed states have resisted extraterritorial obligations, seeing them as a potential basis for developing countries to argue that they are entitled to financial assistance as a matter of right.

States' submissions to the OHCHR largely avoided taking any position on the content of state duties under human rights law, particularly with respect to extraterritorial duties. The OHCHR request for information asked for "[v]iews on the relationship between obligations arising out of international climate conventions and international human rights treaties, including on international assistance and cooperation," but even states that methodically responded to all of its other questions often did not include a substantive response to this one. Finland may have spoken for many when it stated, "Defining the concrete implications of the responsibility of states based on international human rights treaties in matters of climate change is such a complex issue that it makes further examination on the national level necessary."

The Maldives' submission provided the most detail on the legal duties of states to respond to the threats climate change poses to human rights, providing a legal brief for the position that states have duties under human rights treaties and customary international law to take steps to protect the human rights of those outside their territory as well as within it. Its submission and that of the Marshall Islands described the measures each state has taken to try to protect its own people from the effects of climate change. For example, the Maldives built a three-meter sea wall around Male in 2002 to protect it from sea surges, has participated in regional efforts to institute a disaster warning system, and has developed its own capacity to respond to disasters, all of which help to protect the right to life. But both island states emphasized that by themselves they cannot protect the human rights of their people from climate change, and stressed the responsibility of the international community as a whole to take the actions necessary to protect those people most vulnerable to its effects. In particular, the Maldives' submission argued that the right to self-determination, by its nature, imposes duties on states outside their own territory, that the text and authoritative interpretations of the ICESCR establish that its parties have extraterritorial duties of international assistance and cooperation to promote its rights, and that even the ICCPR, which has been interpreted to impose duties on states only to respect the rights of those within their "effective control," applies with respect to effects of climate change so drastic as to place the residents of small island states under the effective control of the states causing the harm.

The emphasis by the OHCHR on cooperation rather than assistance may be an effort to avoid the stale debate over whether development assistance is a legal obligation. The report echoes in this respect not only the Maldives' submission, which stressed that climate change particularly implicates the responsibility of all states to cooperate with one another to address common challenges to human rights, but also the submission of the United Kingdom, which suggested an international accord to address the human rights implications of climate change). In contrast to the United States, which seemed to see human rights law only as a potential basis for adversarial claims against governments, the United Kingdom said that it welcomed "a stronger focus on climate justice and equity issues both between industrialised and developing countries" and at the sub-national level, "where it is often the poorest and most vulnerable whose rights are threatened by climate change" and who benefit the least from efforts to address it. The United Kingdom advocated a "compact" between the international community and developing countries, which would recognize the role of the international community in addressing the serious threat climate change poses to human rights and define the respective duties of the international community and the developing countries receiving support.

Alternatively, the emphasis on the duty of international cooperation in the OHCHR report may simply reflect the critical importance of that duty in facing a threat to human rights that cannot otherwise be effectively addressed. The weight the OHCHR places on the duty is shown by the fact that the final sentence of the report re-emphasizes it: “International human rights law complements the United Nations Framework Convention on Climate Change by underlining that international cooperation is not only expedient but also a human rights obligation and that its central objective is the realization of human rights.”

If taken seriously, the OHCHR suggestion that international cooperation is a human rights obligation could provide a framework for a more sustained definition of the duties of states under human rights law to address climate change. Specifically, the duty of international cooperation provides a basis for applying the environmental human rights jurisprudence established by human rights bodies to climate change. Because this jurisprudence was developed in the context of environmental harm that does not cross an international boundary, it assumes a single polity whose decisions as to how to balance the benefits and costs of environmental policies are entitled to deference, as long as they result from an informed, inclusive process. There are legal and practical obstacles to extending this jurisprudence to transboundary environmental harm, the benefits and costs of which are not felt by just one country. The duty to cooperate provides a way to overcome these obstacles, by requiring the international community to establish a global polity for the purpose of addressing climate change.

...

II. Climate Change Challenges in Municipal Courts

Human Rights challenges to harmful climate change activities and impacts have also been launched in a number of national courts. While human rights has not formed the gravamen of a complaint in the United States, in Nigeria and Australia substantive and procedural rights have been put forward to challenge greenhouse gas emitting activities and development.

Jonah Gbemre v. Shell Petroleum, et al.

In The Federal High Court of Nigeria

Benin Judicial Division

14th Day Of November, 2005

Suit No: Fhc/B/Cs/53/05

[C.V. NWOKORIE, J.]

On the 21st of July 2005 this Court granted leave to the Applicants to apply for an order enforcing or securing the enforcement of their fundamental rights to life and dignity of human person as provided by Sections 33(1) and 34(1) of the Constitution of Federal Republic of Nigeria, 1999, and Arts 4, 16, and 24 of the African Charter on Human and Peoples Rights. . . .

The Reliefs claimed by the Applicants in their subsequent Motion on Notice filed on 29th July, 2005 include:

1. A declaration that the Constitutionally guaranteed fundamental rights to life and dignity of human person provided in Sections 33(1) and 34(1) of the Constitution of Federal Republic of Nigeria, 1999 and reinforced by Arts 4, 16

and 24 of the African Charter on Human Procedure Rules (Procedure and Enforcement) Act, Cap A9, Vol. Laws of the Federation of Nigeria, 2004 inevitably includes the right to clean poison-free, pollution-free and healthy environment.

2. A declaration that the actions of the 1st and 2d Respondents in continuing to flare gas in the course of their oil exploration and production activities in Applicant's Community is a violation of their fundamental rights to life (including healthy environment) and dignity of human person guaranteed by Sections 33(1) and 34(1) of the Constitution of Federal Republic of Nigeria, 1999 and reinforced by Arts 4, 16 and 24 of the African Charter on Human Procedure Rules. . . .
5. An order of Perpetual Injunction restraining the 1st and 2d Respondents by themselves or by their agents, servants, contractors or workers or otherwise howsoever from further flaring of gas in the Applicants said Community.

It is the case of the Applicants (as shown in the itemized grounds upon which time above-mentioned Reliefs are sought that:

- a. By virtue of the provisions of Sections 33(1) and 34 (I) of the Constitution of Federal Republic of Nigeria, 1999 they have a fundamental right to life and dignity of human person.
- b. Also by virtue of Arts 4, 16 and 24 of the African Charter on Human and Peoples Procedure Rules (Ratification and Enforcement) Act Cal) A9, Vol.1 Laws of Federation of Nigeria, 2004, they have the right to respect for their lives and dignity of their persons and to enjoy the best attainable state of physical and mental health as well as right to a general satisfactory environment favourable to their development.
- c. That the gas flaring activities in their Community in Delta State of Nigeria by the 1st and 2d Respondents are a violation of their said fundamental rights to life and dignity of human person and to a healthy life in a healthy environment. . . .

It is also, in the ease of time Applicants (as summarized in their Affidavit in verification of all the above-stated facts) that they are bonafide citizens of the Federal Republic of Nigeria. . . .

7. That burning of gas by flaring same in their community gives rise to the following:—
 - a. Poisons and pollutes the environment as it leads to the emission of carbon dioxide, the main green house gas; the flares contain a cocktail of toxins that affect their health, lives and livelihood.
 - b. Exposes them to an increased risk of premature death, respiratory illness, asthma and cancer.
 - c. Contributes to adverse climate change as it emits carbon dioxide and methane which causes warming of the environment, pollutes their food and water.
 - d. Causes painful breathing chronic bronchitis, decreased lung function and death.

- e. Reduces crop production and adversely impacts on their food security.
- f. Causes acid rain. . . .

9. That no Environmental Impact Assessment (E.I.A) whatsoever was undertaken by any of the 1st and 2d Respondents its to ascertain the harmful consequences of their gas flaring activities iii time area to time environment, health, food, water, development, lives, infrastructure, etc. . . .

- 14. That the constitutional guarantee of right to life and dignity of human person available to them as citizens of Nigeria includes the right to a clean, healthy, poison-free and pollution-free air and healthy environment conducive for human beings to reside in for our development and full enjoyment of life, and that these rights to life amid dignity of human person have been and are being wantonly violated and are continuously threatened with persistent violation by these gas flaring activities.
- 15. That unless this Court promptly intervenes their said fundamental rights being breached by the 1st and 2d Respondents will continue unabated and with impunity while its members will continue to suffer various sicknesses, deterioration of health and premature death.
- 16. And that the 1st and 2d Respondents have no might to continue to engage in gas-flaring in violation of their right to life and to a clean, healthy, pollution-free environment and dignity of human person . . .

Now, before I consider the Counter-Affidavit and other processes of the 1st and 2d Respondents, it is necessary for me to reproduce some of the statutory provisions mentioned so far and other relevant enactments for the Court's case of reference.

Section 46(1) of the Constitution states that

Any person who alleges that any of the provisions of this Chapter has been, is being or likely to be contravened in any state in relation to him, may apply to a high Court in that State for redress.

Section 33(1) state that:

Every person has a right to life, and no one shall be deprived intentionally of his life save in execution of the sentence of a court in respect of a criminal offence of which he has been found guilty in Nigeria.

Section 34(1) of the Constitution of Federal Republic of Nigeria, 1999 states:

Every individual is entitled to respect for the dignity of his person and accordingly. . . .

Article 4 of the African Charter on Human Procedure Rules states:

Human beings are inviolable. Every human shall be entitled to respect for his life and the integrity of his person. No one may be arbitrarily deprived of this right. . . .

Article 24 of the Charter:

All peoples shall have the right to a general satisfactory environment favorably to their development. . . .

On the 30th of August, 2005 and 16th of September, 2005 the 1st and the 2d Respondents filed two separate Counter-affidavits in opposition to the depositions of the Applicants' Affidavit in support of their claims in this suit and I wish to summarize the case of the Respondents contained there as follows:- (as both contain essentially the same facts). . . .

4. That the activities of the Respondents in relation to gas exploitation and processing has not caused any pollution of the air, or any respiratory disease, endanger or impaired the health of anybody including the Applicant or those whom he purports to represent.
5. That the Respondents' gas operation is carried out in accordance with the Laws, Regulations and Policy of the Federal Government and in conformity with international Standards and Practices and these standards have no ruinous or adverse consequences to either health or lives as alleged or at all. . . .
7. That the incidents of death, respiratory illness, asthma, cancer, adverse climate change corroded corrugated house roofs, painful breathing chronic bronchitis, decreased lung functions, pollutions of food and water, are not the result of any of the Respondents oil and gas exploration activities and their gas and oil exploration activities have no causal connection with any of the alleged incidents, . . .
11. That their operations have in no way affected the fundamental rights of the Applicant as alleged and that these oil and gas exploration activities are carried out in compliance with good oil field practice and as permitted by the Laws of the Federal Republic of Nigeria.
12. That their operations have not in any way affected the health, air or environment, life or dignity of the Applicants to entitle them to bring this action under the 1999 Constitution or any International Convention. . . .

It his submission, the Learned SAN [Senior Advocate of Nigeria] for the Applicants stated that his application was brought under Order 2 Rule (1) of the Fundamental Right Enforcement Procedure Rules 1979 pursuant to the Leave granted by this Honourable Court on the 21st of July, 2005. He restated the 5 Reliefs as contained in the Motion paper, and said that there is a Verifying Affidavit in support of the motion and the statement filed along with the application for leave and relies on all those processes.

He submitted further that Section 33(h) of the Constitution guaranteed the right to life and proceeded to the Black's Law Dictionary for a definition of life since there is nowhere in the Constitution the word "Life" is defined. Neither did the interpretation Act define Life in any of its provisions. That therefore the definition of Life in the 6th Edition of Blacks Law Dictionary at pages 923-924 stress that life means: -

- a. the sum of all the forces by which death is resisted;
- b. the state of the humans in which its organs are capable of performing their functions;

- c. all personal rights and their enjoyment of the faculties.

He submits that this definition shows the wide scope of the right to life as it does not just portray a narrow meaning of the right — that is not just to have one's head cut or guillotined, but also more significantly, included the right of a human being to have his organs function properly and to the enjoyment of all his faculties, and refers to the relevant evidence before the Court. . . .

In clarifying this submission, the Learned SAN said that the inconsistency lies in the Fact that the Constitution, having guaranteed rights to life (which includes right to a healthy environment), same cannot be wittled down by an Act of National Assembly, which allows for a continuation of gas flaring which pollutes the air, water and food. And that both statutes cannot stand side by side. . . .

Mr. B.E.I. Nwofor, SAN finally submitted that the Applicants prayer for an injunction is a consequential relief which flows logically from the other prayers and also urged me to hold that Gas Flaring has contributed to global warming of the Environment and depletion of the OZONE Layer. That I should grant all the Applicants reliefs and consequently dismiss objections of the 1st and 2d Respondents. . . .

In his response the Learned Lead Counsel for the 1st and 2d Respondents, Chief T.J. Okpoko, SAN submitted that this action is for the enforcement of the fundamental rights of one person (representing a community) and that Fundamental Rights Enforcement Proceedings are applicable to an injured individual, and not to a person that is well and healthy. . . .

Upon a thorough evaluation of all the processes, submissions, judicial and statutory authorities as well as the nature of the subject matter, together with the urgency which both parties through their Counsel have observably treated the weighty issues raised in the substantive claim, I find, myself able to hold as follows: (after a thoroughly painstaking consideration)

1. That the Applicants were properly granted leave to institute these proceedings in a representative capacity for himself and for each and every member of the Iweherekan Community in Delta State of Nigeria.
2. That this Court has the inherent jurisdiction to grant leave to the Applicants who are bonafide citizens and residents of the Federal Republic of Nigeria, to apply for the enforcement of their fundamental rights to life and dignity of the human person as guaranteed by Sections 33 and 34 of the Constitution of the Federal Republic of Nigeria, 1999.
3. That these constitutionally guaranteed rights inevitable includes the rights to clean, poison-free, pollution-free healthy environment.
4. The actions of the 1st and 2d Respondents in continuing to flare gas in the court of their oil exploration amid production activities in the Applicant's Community is a gross violation of their fundamental right to life (including healthy environment) and dignity of human person as enshrined in the Constitution.

5. Failure of the 1st and 2d Respondents to carry out Environmental impact Assessment in the Applicants Community concerning the effects of their gas flaring activities is a clear violation of Section 2(2) of the Environmental Impact Assessment Act, Cap. E12 Vol. 6, Laws of the Federation of Nigeria 2004 and has contributed to a further violation of the said fundamental rights.
6. That Section 3(2) (a) and (b) of the Associated Gas Re-Injection Act and Section 1 of the Associated Gas Re-Injection (Continued Flaring of Gas) Regulations. Section 1.43 of 1984, under which gas flaring in Nigeria may be allowed are inconsistent with the Applicant's rights to life and/or dignity of human person enshrined in Sections 33(1) and 34(1) of the Constitution of the Federal Republic of Nigeria, 1999 and Articles 4, 16 and 24 of the African Charter on Human and Peoples Rights (Ratification and Enforcement) Act, Cap. A9, Vol.1, Laws of the Federation of Nigeria, 2004 and are therefore unconstitutional, null and void by virtue of Section 1(3) of the same Constitution.

Based on the above findings, the Reliefs claimed by the Applicants as stated in their motion paper as 1, 2, 3, 4 are hereby granted as I make and repeat the specific declarations contained there as the Final Orders of this Court.

1. DECLARATION that the Constitutionally guaranteed fundamental rights to life and dignity of human person provided in Sections 33(1) and 34(1) of the Constitution of Federal Republic of Nigeria, 1999 and reinforced by Arts 4, 16 and 24 of the African Charter on Human and Peoples Rights (Ratification and Enforcement) Act, Cap. A9, Vol. 1, Laws of the Federation of Nigeria, 2004 inevitably includes the right to clean poison-free, pollution-free and healthy environment.
2. DECLARATION that the actions of the 1st and 2d Respondents in continuing to flare gas in the course of their oil exploration and production activities in the Applicant's Community is a violation of their fundamental rights to life (including healthy environment) and dignity of human person guaranteed by Sections 33(h) and 34(I) of the Constitution of Federal Republic of Nigeria, 1999 and reinforced by Arts 4, 16 and 24 of the, African Charter on human and Peoples Rights (Ratification and Enforcement) Act, Cap. A9, Vol.1, Laws of the Federation of Nigeria, 2004.
3. DECLARATION that the failure of the 1st and 2d Respondents to carry out environmental impact assessment in the Applicant's Community concerning the effects of their gas flaring activities is a violation of Section 2(2) of the Environment Impact Assessment Act, Cap. E12 Vol. 6 Laws of The Federation of Nigeria, 2004 and contributed to the violation of tile Applicant's said fundamental rights to life and dignity of the human person.
4. DECLARATION that the provisions of Section 3(2)(a), (b) of the Associated Gas Re-injection Act Cap. A25 Vol. 1 Laws of the Federation of Nigeria, 2004 and Section I of the Associated Gas Re-Injection (continued flaring of gas) Regulations Section I. 43 of 1984, under which the continued flaring of gas in Nigeria may be allowed are inconsistent with the Applicant's Right to life and/or dignity of human person enshrined in Sections 33(1) and 34(1) of the Constitution of Federal Republic of Nigeria, 1999 and Arts. 4, 16, and 24 of tile African Charter on Human and Peoples Right (Ratification and

Enforcement) Act, Cap., A9 Vol. 1 Laws of the Federation of Nigeria, 2004 and are therefore unconstitutional, null and void by virtue of Section 1(3) of the same Constitution.

5. I HEREBY ORDER that the 1st and 2d Respondents are accordingly restrained whether by themselves, their servants or workers or otherwise from further flaring of gas in Applicant's Community and are to take immediate steps to stop the further flaring of gas in the Applicant's Community.
6. The Honourable Attorney-General of the Federation and Ministry of Justice, 3rd Respondent in these proceedings who, regrettably, did not put up any appearance, and/or defend these proceedings is HEREBY ORDERED to immediately set into motion, after due consultation with the Federal Executive Council, necessary processes for the Enactment of a Bill for an Act of the National Assembly for the speedy amendment of the relevant Sections of the Associated Gas Re-Injection Act and the Regulations made thereunder to quickly bring them in line with time provisions of Chapter 4 of the Constitution, especially in view of time fact that the Associated Gas Re-injection Act even by itself also makes the said continuous gas flaring a crime having prescribed penalties in respect thereof. Accordingly, the ease as put forward by the 1st and 2d Respondents as well as their various preliminary objections are hereby dismissed as lacking merit.
7. This is the final Judgment of the Court and I make no award of Damages, costs or compensations whatsoever.

Gray v Minister for Planning and Others
New South Wales Land and Environment Court
[2006] NSWLEC 720

27 November 2006

PAIN J.

The applicant is challenging decisions made under Pt 3A of the *Environmental Planning and Assessment Act 1979* (NSW) (the EP&A Act) by the Director-General of the Department of Planning in relation to the proposal to build a large coal mine known as the Anvil Hill Project by Centennial Hunter Pty Ltd (Centennial), the third respondent. The Minister (the first respondent) has filed a submitting appearance.

The applicant is seeking a declaration that the Director-General's view that an environmental assessment prepared by Centennial adequately addressed the Director-General's environmental assessment requirements was void and without effect. He seeks an order that the decision to place the environmental assessment on public exhibition be set aside.

The applicant brings this action in his own name. The Points of Claim state that he is:

- (i) an officer of the Hunter community Environment Centre Inc; and

(ii) a member of “Rising Tide Newcastle.” an unincorporated climate change action group.

The area of land which constitutes Anvil Hill has a deposit of approximately 150 million tonnes of thermal coal. The proposed open cut mine will produce up to 10.5 million tonnes of coal per annum. The mine is intended to operate for 21 years. The intended use of this coal is for burning as fuel in power stations in New South Wales and overseas. There is an existing contract for sale of coal to Macquarie Generation, which operates the Bayswater and Liddell power stations. About half the coal is intended for export for use as fuel in power stations to produce electricity generally in Japan. There is no dispute that burning of coal will release substantial quantities of greenhouse gases into the atmosphere.

On 16 January 2006 Centennial applied to the Minister for major projects approval under Pt 3A of the EP&A Act in respect of the Anvil Hill Project in the Hunter Valley. Application under Pt 3A was necessary because of cl 6(1)(a) of *State Environmental Planning Policy (Major Projects) 2005* (NSW) and cl 5(1)(a) of Sch 1.

Part 3A is headed “Major Infrastructure and Other Projects” and provides a process for the consideration and approval of projects described in s 75B(2) as major infrastructure or other development that in the opinion of the Minister is of State or regional significance.

Division 2 of Pt 3A deals with environmental assessment and approval of projects.

Section 75F is headed “Environmental assessment requirements for approval” and provides:

(1) The Minister may, after consultation with the Minister for the Environment, publish guidelines in the Gazette with respect to environmental assessment requirements for the purpose of the Minister approving projects under this Part (including levels of assessment and the public authorities and others to be consulted). . . .

Section 75H is headed “Environmental assessment and public consultation” and provides:

(1) The proponent is to submit to the Director-General the environmental assessment required under this Division for approval to carry out the project.

(2) If the Director-General considers that the environmental assessment does not adequately address the environmental assessment requirements, the Director-General may require the proponent to submit a revised environmental assessment to address the matters notified to the proponent.

(3) After the environmental assessment has been accepted by the Director-General, the Director-General must, in accordance with any guidelines published by the Minister in the Gazette, make the environmental assessment publicly available for at least 30 days.

(4) During that period, any person (including a public authority) may make a written submission to the Director-General concerning the matter.

(5) The Director-General is to provide copies of submissions received by the Director-General or a report of the issues raised in those submissions to:

- (a) the proponent, and
 - (b) if the project will require an environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997*—the Department of Environment and Conservation, and
 - (c) any other public authority the Director-General considers appropriate.
- (6) The Director-General may require the proponent to submit to the Director-General:
- (a) a response to the issues raised in those submissions, and
 - (b) a preferred project report that outlines any proposed changes to the project to minimise its environmental impact, and
 - (c) any revised statement of commitments. . . .

Public availability of documents

Section 75X is headed “Miscellaneous provisions relating to approvals under this Part” and provides:

- (2) The following documents under this Part in relation to a project are to be made publicly available by the Director-General:
- (a) applications to carry out projects,
 - (b) environmental assessment requirements for a project determined by the Director-General or the Minister,
 - (c) environmental assessment reports of the Director-General to the Minister,
 - (d) approvals to carry out projects given by the Minister,
 - (e) concept plans submitted for the Minister’s approval (and approvals of concept plans),
 - (f) requests for modifications of approvals given by the Minister and any modifications made by the Minister. . . .

8B Matters for environmental assessment and Ministerial consideration

The Director-General’s report under section 75I of the Act in relation to a project is to include the following matters (to the extent that those matters are not otherwise included in that report in accordance with the requirements of that section):

- (a) an assessment of the environmental impact of the project,

(b) any aspect of the public interest that the Director-General considers relevant to the project,

(c) the suitability of the site for the project,

(d) copies of submissions received by the Director-General in connection with public consultation under section 75H or a summary of the issues raised in those submissions. . . .

The Environmental Assessment must take into account relevant State government technical and policy guidelines. While not exhaustive, guidelines which may be relevant to the project are included in the attached list. The attached list refers under Air Quality to “Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC).”

The parties agreed that greenhouse gases are not one of the pollutants to which this document refers. In other words no relevant State government technical or policy guidelines in relation to the assessment of greenhouse gases was referred to in the EAR. The EAR were advised to Centennial as provided by s 75F(3).

On 26 August 2006 Centennial lodged the assessment with the Director-General as required under s 75H(1). The assessment is a very large and detailed document. It contains, at Appendix 11, a section headed “Energy and Greenhouse Assessment.” Although the assessment refers to greenhouse issues in ss 5.5.8, 6.6, 6.12 and 8.0, these summarise of the contents of Appendix 11. The introduction in Appendix 11 states in part:

The Greenhouse Gas and Energy Assessment report for the project has three main sections:

1. An assessment of the energy and greenhouse gas emissions from the proposed Anvil Hill Project in accordance with recognised assessment guidelines;
2. Calculation of energy consumption and greenhouse gas emissions for the proposed Anvil Hill Project for various operational scenarios including maximum annual production, average annual production and the total project;
3. Assessment and identification of where relevant management controls can be utilised to minimise energy use and greenhouse gas emissions and nomination of specific mitigation strategies to achieve this objective.

The greenhouse assessment is based upon the methodologies outlined in:

- NSW Energy and Greenhouse Guidelines (Guidelines) for Environmental Impact Assessment, Sustainable Energy Development Authority and Planning NSW, 2002
- the World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) *Greenhouse Gas Protocol 2004* (GHG Protocol) and
- the Australian Greenhouse Office (AGO) *Factors and Methods Workbook December 2005* (Workbook). . . .

[t]he assessment of scope 1, 2 and 3 emissions. These are defined as follows.

Scope 1: Direct GHG emissions

Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.

Direct CO₂ emissions from the combustion of biomass shall not be included in scope 1 but reported separately. . . .

GHG emissions not covered by the Kyoto Protocol, eg, CFCs, NO_x etc. shall not be included in scope 1 but may be reported separately. . . .

Scope 2: Electricity indirect GHG emissions

Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3: Other indirect GHG emissions

Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company.

Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services. Scope 1 and 2 emissions were assessed and included in the environmental assessment but not scope 3 emissions which could include an analysis of the potential greenhouse gas emissions from the burning of coal by third parties outside the control of the proponent. . . .

In regard to greenhouse emissions, the EA includes an assessment of the direct greenhouse gas emissions likely to be generated by the mine itself (e.g methane escaping from the coal seams and diesel emissions from the mining fleet), but does not include an assessment of the indirect emissions associated with the use of the resource either in Australia or overseas. This approach is based on sound greenhouse accounting procedures, and is consistent with the current guidelines for calculating greenhouse emissions from coal mines published by the Australian Greenhouse office.

Consequently, while it is recognised that the burning of coal extracted from coal mines produces significant amounts of greenhouse gases, and that increasing greenhouse gas levels in the atmosphere have implications for global warming and climate change, the Department does not believe it is either necessary or appropriate for the Panel of Experts to examine the implications of the project on climate change. . . .

The process of assessment under s 75H has continued since proceedings were commenced. Section 75H(6)(a) provides that the Director-General may require the proponent to submit to him a response to the issues raised in submissions, and this was done by letter to Centennial dated 16 October 2006. A partial response to submissions received during the

public exhibition of the assessment dated 30 October 2006 was provided by Centennial to the Director-General.

That response included an assessment of greenhouse gas emissions resulting from the burning of the coal intended to be recovered from the Anvil Hill mine (scope 3 emissions). This is available on the Department of Planning website as required by cl 8G(4)(d) of the Regulation.

The applicant conceded that if this material had been part of the assessment and placed on public exhibition pursuant to s 75H(3) he would not be before the Court. He argued his case still has utility because the failure to publicly exhibit the environmental assessment with this information is a failure to comply with an important part of the Pt 3A process so that members of the public can be properly informed in order to determine if they wish to make submissions.

It is also clear from documents tendered that a large number of submissions raising concerns about the greenhouse implications of burning coal from the Anvil Hill project were received before and during the exhibition period for the environmental assessment.

Scope 3 emissions

The WBCSD GHG protocol relied on by Centennial's consultants is directed to identifying GHG in the context of businesses wishing to develop a GHG inventory to serve goals such as managing GHG risks and identifying reduction opportunities, public reporting and participation in voluntary GHG programs, participating in mandatory reporting programs, participating in GHG markets and recognition for early voluntary action. As the applicant submitted the protocol is not directed at the assessment of GHG emissions in a development assessment process but rather at the calculation of GHG in the context of carbon trading schemes where a carbon "inventory" is required. . . .

APPLICANT'S CASE

Issue 1: Assessment did not comply with EAR

Section 75F(1) empowers the Minister to issue guidelines for the purpose of approving projects under Pt 3A including guidelines as to "levels of assessment." No such guidelines have been issued.

The EAR issued by the Director-General included a requirement that Centennial's environmental assessment include an assessment of as a "key" issue "Air quality—including a detailed greenhouse gas assessment."

The EAR necessitated "a detailed greenhouse gas assessment" as an aspect of Centennial's environmental assessment. It follows that whatever else the "detailed greenhouse gas assessment" was to be, it was to be an "environmental assessment." This follows from s 75H(1) which required Centennial to submit an "environmental assessment" and the EAR.

Issue 2: Failure to take into account ESD principles

The EP&A Act includes in its objects at s 5(a)(vii) the encouragement of ecologically sustainable development ("ESD"). Under s 4 of the EP&A Act, ESD has the same meaning as in s 6(2) of the *Protection of the Environment Administration Act 1991* (NSW). . . .

The two ESD principles most relevant are the precautionary principle and intergenerational equity. There is no reference to either of these in the Director-General's documents at all, including at the stage of deciding whether the assessment "adequately addressed" EAR. . . .

Issue 2: Failure to take into account ESD principles

The Director-General did have regard to ESD principles. The fact that an assessment of GHG emissions alone was required demonstrates that regard was intended to be had to the future impacts of GHG. The problem of climate change/global warming is an increasing problem which is recognised by the Director-General in taking into account the environmental concern about GHG emissions by requiring an analysis of these and that must include the effect on future generations. . . .

CENTENNIAL'S SUBMISSIONS

. . . Issue 2: Failure to take into account ESD principles

ESD principles are not mandatory relevant considerations as determined in *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 for any decision under Pt 3A and certainly not the intermediate decision under review. . . . The applicant has not established that they were not taken into account. . . .

FINDING

Issue 1: Assessment did not comply with EAR

. . . Firstly, the Director-General argued that Pt 3A does not have the effect of requiring that an environmental assessment be produced by a proponent for development under that part. Environmental assessment by the proponent is required under Pt 3A, contrary to the arguments of the Director-General. That is clear from the nature of the projects which are likely to come under Pt 3A. . . .

Thirdly, according to the Director-General's submissions, an environmental assessment may be accepted for public exhibition by the Director-General even if it does not adequately address the EAR. The provisions of Pt 3A do not bear out this interpretation. . . .

This is further confirmed by the second reading speech for the Reform Bill which states:

Prior to exhibiting the environmental assessment the director-general must be satisfied that the assessment meets the specified requirements. . . .

I have already decided that the environmental assessment must be held to have complied with the EAR before it can be publicly exhibited it is difficult to accept that submission. Further, the decision to allow the environmental assessment to be publicly exhibited cannot act as an implied modification of the EAR because that is not a process contemplated in the division. . . .

. . . As the environmental assessment provided did not contain a detailed analysis of GHG in conformity with the EAR it was clear that the Director-General did not ask himself the first question and he therefore fell into legal error. This submission was made on the basis that a detailed GHG assessment could only comply with the EAR if the conduct of the mine did not have the effect of causing carbon dioxide emissions when the coal is burnt because that

caused an environmental impact, meaning an impact on all aspects of the surrounding of humans “whether affecting any human as an individual or in his or her social groupings.” . . .

Causation of environmental impact

. . . The applicant proposed, relying on *March* that a common sense test applies to causation of environmental impact. That meant that it was common sense to determine that there would be greenhouse impacts resulting from the burning of the coal from the Anvil Hill Project which would contribute to global warming/climate change and that therefore this impact should be considered in the environmental assessment for the project. . . .

. . . These cases strongly suggest that the question whether there is likely to be significant effects upon the environment requires a wide consideration of the consequences which will follow if a proposed activity proceeds. . . .

That decision may be contrasted with the decision of Dowsett J in *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc v Minister for the Environment and Heritage* (2006) 232 ALR 510. That decision concerned a challenge to the Minister’s decision that a referred proposal for a new coal mine was not a controlled action. The respondents relied on his finding at [72] to suggest that a finding of causation in relation to the impacts of climate change/global warming could not be made:

I have proceeded upon the basis that greenhouse gas emissions consequent upon the burning of coal mined in one of these projects might arguably cause an impact upon a protected matter, which impact could be said to be an impact of the proposed action . . . However I am far from satisfied that the burning of coal at some unidentified place in the world, the production of greenhouse gases from such combustion, its contribution towards global warming and the impact of global warming upon a protected matter, can be so described. The applicant’s concern is the possibility that at some unspecified future time, protected matters in Australia will be adversely and significantly affected by climate change of an unidentified magnitude, such climate change having been caused by levels of greenhouse gases (derived from all sources) in the atmosphere. There has been no suggestion that the mining, transportation or burning of coal from either proposed mine would directly affect any such protected matter, nor was there any attempt to identify the extent (if any) to which emissions from such mining, transportation and burning might aggravate the greenhouse gas problem. . . . This case is far removed from the factual situation in *Minister for Environment and Heritage v Queensland Conservation Council Inc* (2004) 139 FCR 24.

That case was reviewing a decision of the relevant Commonwealth Minister of the Environment not to declare a particular action to be a controlled action. I do not find it persuasive if it is relied on by the respondents as suggesting that the impacts of GHG emissions produced from coal mined in NSW are beyond the scope of environmental impact assessment procedures in NSW. . . . This case concerns different circumstances, namely what is required by a detailed GHG assessment in the context of an environmental assessment of a large coal mine under the EP&A Act.

The applicant argued that GHG emissions from the burning of the coal should be considered in the environmental assessment because of the contribution to global warming/climate change. Scope 3 emissions are intended to measure that impact. It is clear that scope 3 emission calculations can be undertaken, as they have been in the response document prepared by Centennial.

Given the quite appropriate recognition by the Director-General that burning the thermal coal from the Anvil Hill Project will cause the release of substantial GHG in the environment which will contribute to climate change/global warming which, I surmise, is having and/or will have impacts on the Australian and consequently NSW environment it would appear that Bignold J's test of causation based on a real and sufficient link is met. While the Director-General argued that the use of the coal as fuel occurred only through voluntary, independent human action, that alone does not break the necessary link to impacts arising from this activity given that the impact is climate change/global warming to which this contributes. . . .

The Director-General's test that the effect is significant, is not unlikely to occur and is proximate also raises issues of judgment. Climate change/global warming is widely recognised as a significant environmental impact to which there are many contributors worldwide but the extent of the change is not yet certain and is a matter of dispute. The fact there are many contributors globally does not mean the contribution from a single large source such as the Anvil Hill Project in the context of NSW should be ignored in the environmental assessment process. The coal intended to be mined is clearly a potential major single contributor to GHG emissions deriving from NSW given the large size of the proposed mine. That the impact from burning the coal will be experienced globally as well as in NSW, but in a way that is currently not able to be accurately measured, does not suggest that the link to causation of an environmental impact is insufficient. The "not likely to occur" test is clearly met as is the proximate test for the reasons already stated. . . .

I consider there is a sufficiently proximate link between the mining of a very substantial reserve of thermal coal in NSW, the only purpose of which is for use as fuel in power stations, and the emission of GHG which contribute to climate change/global warming, which is impacting now and likely to continue to do so on the Australian and consequently NSW environment, to require assessment of that GHG contribution of the coal when burnt in an environmental assessment under Pt 3A. . . .

Issue 2: Did the Director-General fail to take ESD principles into account?

The applicant's Points of Claim challenge the Director-General's opinion that the environmental assessment prepared by Centennial was adequate because he failed to take into account ESD principles, particularly the precautionary principle and the principle of intergenerational equity. . . .

. . . As I have indicated the precautionary principle is now given statutory recognition not only in the *Water Management Act* but in numerous NSW Statutes . . . it is a central element in the decision making process and cannot be confined. It is not merely a political aspiration but must be applied when decisions are being made under the *Water Management Act* and any other Act which adopts the principles. . . .

Prior environmental impact assessment and approval are important components in a precautionary approach. The precautionary principle is intended to promote actions that avoid serious or irreversible damage in advance of scientific certainty of such damage. Environmental impact assessment can help implement the precautionary principle in a number of ways including:

- (a) enabling an assessment of whether there are threats of damage to threatened species, populations or ecological communities; . . .

(d) shifting the burden of proof (evidentiary presumption) to persons responsible for potentially harmful activity to demonstrate that their actions will not cause environmental harm. . . .

The requirement for prior environmental impact assessment and approval enables the present generation to meet its obligation of intergenerational equity by ensuring the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations. . . .

Intergenerational equity

The key purpose of environmental assessment is to provide information about the impact of a particular activity on the environment to a decision maker to enable him or her to make an informed decision based on adequate information about the environmental consequences of a particular development. This is important in the context of enabling decisions about environmental impact to take into account the various principles of ESD including the principle of intergenerational equity. Intergenerational equity has received relatively little judicial consideration in this Court in the context of the requirements for environmental assessment under the EP&A Act. . . .

Preston J refers in his article to several decisions in other national courts which have taken intergenerational equity into account, including the landmark decision of the Supreme Court of the Philippines in *Minors Oposa v Secretary of the Department of Environment and Natural Resources* 33 International Legal Materials 173 (1993). This and other cases referred to at pp 180-182 clearly occur in a different legal context to that before me but do underscore the importance of this principle. . . .

There is no failure to consider the issue of GHG. It is clear from the documents that downstream emissions were not included in the inventory calculations of the Anvil Hill Project in the environmental assessment. Those submissions overlook the role the environmental impact assessment process plays in Pt 3A in relation to the implementation of intergenerational equity, particularly the need to assess cumulative impacts. If an important downstream impact is omitted from that assessment it is more difficult for the final decision maker, the Minister, to be informed about all relevant matters. . . . While the Court has a limited role in judicial review proceedings in that it is not to intrude on the merits of the administrative decision under challenge (see [102]-[104] of these reasons) it is apparent that there is a failure to take the principle of intergenerational equity into account by a requirement for a detailed GHG assessment in the EAR if the major component of GHG which results from the use of the coal, namely scope 3 emissions, is not required to be assessed. That is a failure of a legal requirement to take into account the principle of intergenerational equity.

Precautionary principle

As identified in *Telstra v Hornsby* at [150], if the two conditions precedent or thresholds are satisfied so that there is a threat of serious or irreversible environmental damage and there is the requisite degree of scientific uncertainty the principle will apply so that the shift in an evidentiary burden will occur meaning that the proponent for the development has to demonstrate that the threat does not exist or is negligible. . . .

That principle requires that if there are “threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.” No aspect of the acceptance by the DG of the EA involved any element of refusing to take into account the GHG issue by reference to a “lack of full scientific certainty.” . . .

The precautionary principle is part of the bundle of ESD principles identified in s 6(2) of the PEA Act such as intergenerational equity and the conservation of biological diversity and ecological integrity. While not all of these were relied on by the applicant I observe that there is a clear connection between climate change/global warming resulting in possibly permanent climatic change and the conservation of biological diversity and ecological integrity which are likely to be impacted upon. I have referred earlier to the principle of intergenerational equity (at [122] of these reasons) and observe that the approach to environmental assessment required by the application of the precautionary principle requires knowledge of impacts which are cumulative, on going and long term. In the context of climate change/global warming there is considerable overlap between the environmental assessment requirements to enable these two aspects of ESD to be adequately dealt with.

I also conclude that the Director-General failed to take into account the precautionary principle when he decided that the environmental assessment of Centennial was adequate, as already found in relation to intergenerational equity at [126] of these reasons. This was a failure to comply with a legal requirement. . . .

The submission was made by the Director-General that raising climate change/global warming as an issue is enough to satisfy any requirement that intergenerational equity was taken into account, because climate change/global warming was inherently concerned with impacts on future generations. Simply raising an issue such as climate change/global warming is unlikely to satisfy a requirement that intergenerational equity or the precautionary principle has been considered in the absence of any analysis of the impact of activities which potentially contribute in the NSW context in a substantial way to climate change/global warming. . . .

As identified at [136], Preston J in *Telstra v Hornsby* at 154 stated that if the precautionary principle did apply so that there was a shifting of the evidentiary burden of proof to a proponent in relation to environmental damage this is but one of the factors a decision maker under the EP&A Act must consider and is not determinative of the outcome of that decision making process. The Minister in this case will decide if the coal mine should be approved at all and if approved, subject to what conditions. For example, if approving the project he could limit the time period for the operation of the mine to a different time period to that sought by the applicant.

Exercise of discretion whether to grant relief

I have held that the applicant is successful on the second ground he has raised, namely that the Director-General failed to take into account ESD principles, in particular the principle of intergenerational equity and the precautionary principle, when he formed the view that Centennial’s environmental assessment was adequate. It is necessary that I consider whether I should exercise the broad discretion I have under s 124(1) of the EP&A Act to grant the relief sought by the applicant. . . .

I also need to consider if I should set aside the decision of the Director-General to place the environmental assessment, lodged by Centennial, on public exhibition under s 75H(3) . . .

The effective result of making such a declaration is that, I surmise, the environmental assessment and the response document with scope 3 emissions now provided by Centennial to the Director-General will be placed on further public exhibition. It is clear that the information the applicant argued should have been exhibited, being an analysis of scope 3 emissions, has been provided in response to submissions received in the public exhibition process and is part of the environmental assessment process. . . .

ORDERS

The Court makes the following declaration:

1. That the view formed by the Director-General on 23 August 2006 that the environmental assessment lodged by Centennial Hunter Pty Ltd in respect of the Anvil Hill Project adequately addressed the Director- General's requirements is void and without effect. . . .