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HUMAN RIGHTS, ENVIRONMENTAL DUTIES:

People, Planet and State

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Abstract

All elements of human well-being are ultimately dependent upon a natural environment which provides access to sufficient food and water, promotes both mental and physical health, and ultimately, permits life itself. In seeking the universal achievement of these goods, international human rights law must begin to require States to take strong action to meet the challenges posed by escalating environmental disintegrity.

This thesis examines the extent to which the existing international human rights regime provides a means to achieve this. The role of population management as one means of meeting environmental obligations will be discussed, with the goal of demonstrating that the existing law provides a powerful tool both for the advancement of individual rights and for environmental protection. The latter half will consider how the current law incorporates explicit environmental duties, as well as the potential scope for development of these in the future. The debate surrounding the introduction of an ‘environmental human right’ will be outlined, with the ultimate conclusion that the law as it already exists is more than capable of adequately addressing environmental degradation – all that is required is that it be interpreted and realised in an environmentally cognisant way.

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List of Abbreviations

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CERD	Convention on Elimination of Racial Discrimination
CESCR	Committee on Economic Social, and Cultural Rights
CRC	Convention on the Rights of the Child
ECHR	European Court of Human Rights
FAO	Food and Agriculture Organisation of the United Nations
GA	General Assembly (of the United Nations)
HRC	Human Rights Council
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
WHO	World Health Organisation

**“This we know: the earth does not belong to man: man belongs to the earth...
Man did not weave the web of life: he is merely a strand in it. Whatever he
does to the web he does to himself.”**

- *Chief Seattle*¹

INTRODUCTION

It is a simple truth that the international human rights regime was founded for the purpose of alleviating human suffering. The foundation instruments and principles embodied therein were formulated following a period of great international turmoil, during which millions of lives were unnecessarily lost as a result of imprudent and sometimes senseless human action. While we are now able to regard the events of World War II as a sad chapter of human history, the international community is currently facing a new threat that has the potential to be even more devastating in terms of its human impact. Whether the international human rights regime is able to adapt to remain relevant in the face of this new menace is a matter of the greatest concern for all those who continue to believe in the inherent dignity of the human person.

Environmental degradation has been a fringe concern for much of human history, and it is only in the last 40 years that it has come to be widely recognised that humanity is unique in our relationship with the environment - we hold the tools for not only our own destruction but that of the larger biosphere as a whole. The link between the natural world and humanity is fundamental, and just like any other organism we operate as part of a larger web of ecological systems and require favourable environmental conditions to survive. Unlike other organisms however, we have not only the will but also the power to shape those systems. The ways in which we choose to do so directly determine not only our quality of life, but our hold upon life itself and thus go to the heart of human rights concerns.

¹ Quoted in Caduto, M. & Bruchac, J. *Keepers of the Earth: Native American Stories & Environmental Activities for Children* (Fulcrum Publishing: Colorado, 1997) p4.

Many, if not most of the present day human rights issues are essentially environmental issues – whether a person is a victim of famine, chronic thirst, disease or absolute poverty is directly linked to the quality and quantity of the natural resources to which they have access.² Even seemingly unrelated human rights concerns such as the prevalence of armed conflict are now recognised as being deeply affected by environmental conditions.³ The international frameworks through which these problems have traditionally been addressed have (with some small exceptions) failed to eliminate or even significantly reduce the prevalence of these ills in the global community.⁴ In part this may be attributed to a failure to recognise that concepts such as economic development, too often touted as the panacea to all problems, are impossible to achieve in practice without proper regard to the environmental context in which these programmes are to take place. Financial aid and infrastructure development will only ever be a band aid for human rights issues unless the underlying causes of absolute poverty, hunger, chronic thirst, and disease – including environmental degradation – are addressed. In this sense environmental programmes are not merely desirable but nonessential supplements to the ‘real business’ of international law. Rather, they are vital tools in the fight for the protection of human rights; in the words of one commentator, “all protection accorded to the non-human environment, is essentially *ipso facto* protective of humans”.⁵ It is therefore crucial that the international community moves toward a much stronger recognition of the link between the environment and human wellbeing; yet while the emerging rhetoric increasingly acknowledges

² While there is an argument that these are economic or political issues, poverty in absolute terms is framed around a lack of sufficient means of self-support; in a healthy, resource abundant environment, the means of both physical and economic subsistence would be within the reach of all. Politics can help or hinder the achievement of this, but it cannot remove or create the resulting problems on its own.

³ See the report by the Centre for Security Studies & swisspeace, *Linking Environment and Conflict Prevention: The Role of the United Nations* (Centre for Security Studies: Zurich, 2008).

⁴ Improvements in access to sanitation is an example of a limited success in the human rights realm; trends in reducing hunger, poverty, access to clean water and so on are not nearly so promising, for example “the problem of hunger constitutes one of the most daunting human rights challenges facing the global community. Its dimensions are staggering and the problem is getting worse despite continued efforts by the international community to address it.” Goulet, R. “Food Sovereignty: A Step Forward in the Realisation of the Right to Food” (2009) in *Law, Social Justice and Global Development Journal* 1:13, p1; “Per capita availability of water is declining” Blanco, E. & Razzaque, J. “Ecosystem Services and Human Well-Being in a Globalized World: Assessing the Role of Law” (2009) in *Human Rights Quarterly* 31 692, p696.

⁵ Westra, L. “Ecological Integrity and Biological Integrity: The Right to Life and the Right to Health in Law” (2009) in *Transnational Law & Contemporary Problems* 18:3, p20.

the foundational importance of environmental integrity as a precondition of human rights achievement, formal legal recognition has been somewhat slower to emerge.

The purpose of this thesis is to explore the relationship between human rights and the environment, and to determine whether and how international human rights law might offer us the tools to address the environmental degradation that so threatens its own realisation. It is my contention that many of the goals of international human rights law are being undermined and will ultimately be unachievable unless proper regard is given to the environmental preconditions of these universal standards of human wellbeing.

Though initially developed with the narrow intention of protecting citizens from their own states, it is now time for international human rights law to adapt to incorporate the protection of individuals from the modern threat posed by environmental harm. All human beings ought to be protected at the highest level from the actions of individuals, communities, corporations, and other nations where those actions have the potential to cause environmental damage on a level that directly affects human rights – at minimum, where it affects access to the basic necessities of life: food, water, and health. The international community must explicitly recognise the importance of environmental protection as a primary means of achieving human rights goals, and it is the ways in which this recognition might best be achieved that is the primary concern of this thesis.

In the following thesis I advocate for the adoption of a dual approach to the human rights problem of environmental degradation. This strategy consists firstly of the targeted direction of resources towards the achievement of certain, specific rights, the consequences of which will have a positive flow-on effect for all other rights. The second, complementary strategy consists of gaining legal recognition of an expanded interpretation of existing rights to include their environmental preconditions. The common thread tying these two approaches together is the idea that the existing legal regime holds the answers to the problems posed by escalating environmental degradation. I argue that the legal tools with which

recent history has endowed us are more than adequate to meet this new challenge, and what is required is no revolution of the international human rights regime, but simply the intelligent deployment and adaption of the existing rules.

In establishing this argument, it is first necessary to demonstrate the link between environmental degradation and the inability of states to meet basic human needs – in other words, to show why environmental concerns ought to be of interest to human rights practitioners. Chapter One will thus focus on demonstrating that environmental problems are essentially human problems, in the sense that environmental degradation can be ignored only so far before it begins to affect human wellbeing. Essentially, this chapter will establish the context in which this research has been undertaken: with a clear understanding that achieving universal realisation of basic human rights will be an impossibility in a situation of extreme environmental disintegrity. The focus is not only on the immediate problem of providing human rights goods in the here and now, but the inability of these resources to withstand on-going depletion at the same rate, let alone to the vastly increased degree required to keep pace with the ever increasing global population.

Having established the problem under consideration, this paper will then turn to the proposed solutions suggested by my research. In Chapter Two, I outline an approach which has in the past two decades earned a reputation as being somewhat radical, and show that what it offers is in fact a legally conservative approach to the problems posed by the environmental dependence of human rights. Population growth has a long history of being discussed in the context of environmental degradation, not always with ethically acceptable results. In this Chapter, I advocate for the adoption of a human rights approach to limiting population growth, addressing the root causes of high fertility through the focused direction of resources towards a select few human rights as a means of easing environmental stress. The approach essentially provides an opportunity for states to better their environmental position and in turn their ability to meet human rights obligations more broadly, while at the same time strengthening their position in specific areas of the human rights lexicon such as reproductive rights, gender equality, healthcare, and education. By focusing in a positive way on the

human rights standards which will most influence population growth, this approach seeks to achieve a better outcome not only for the individual recipients of the specific rights goods, but for the broader environment, and in turn, the global community.

Following the above discussion of population management as a human rights tool, this paper will then turn to the second of the two strategies reliant upon the existing law. In Chapters Three and Four, I argue that the efforts of the international community to address environmental threats to human well-being must go beyond what is explicitly stated in the current law to include the implicit obligations of the various rights which are directly affected by environmental disintegrity. In Chapter Two I examine aspects of the existing law to identify the extent to which these inherent environmental duties are already recognised at national, regional, and international levels. This section seeks to describe the extent to which States are currently required to have regard to environmental protection as a consequence of existing human rights law. While it is arguably possible to investigate *all* human rights norms through an environmental paradigm,⁶ a more restricted approach has been adopted for this research. As such, I focus only on those basic rights which, when achieved, provide the foundation from which to begin any discussion of a higher level of human dignity: the minimum standards of food, water, and health required to support human life.

Chapter Four builds upon the work in the previous section, examining the options for the future development of the environmental human rights duties discussed in Chapter Three. As a starting point, the debate surrounding the introduction of a specific ‘human right to the environment’ will be discussed, with reference both to the existence of such a right at the present time and the desirability of its establishment in the future. Ultimately however, this Chapter will conclude that as with the population problem, the best solution lies in the existing law. As such, an alternative path of expanding the jurisprudence of the existing law to include a

⁶ The argument for this approach is contained in Chapter One, but essentially holds that since the human rights framework is dependent upon humanity’s existence, and humanity’s existence is dependent upon environmental health, all human rights are therefore contingent upon environmental conditions.

formal recognition of inherent environmental duties provides is advocated as being the soundest way forward.

It is to be hoped that the concept of environmental integrity might become an increasingly common feature of the on-going conversation about the best means of achieving human rights goals. As will be shown, the literature in this field abounds with those who see environmental degradation as the single biggest threat to human rights. This paper seeks to build on this scholarship by arguing that we already possess the legal tools necessary to address this threat – what is lacking is political will, a stronger base of judicial support and a more targeted direction of resources towards achieving those key human rights which act as determinants for the success of the broader scheme. While addressing environmental problems may at first glance seem a departure from the direct goals of human rights law, it is abundantly clear that this is a tactic that is a necessary precondition for the achievement of such goals, without which attempts to remedy such problems as the chronic shortage of food, clean water, and health resources can only ever address the symptoms of these ills, rather than the underlying causes. This thesis aims to demonstrate the reality of environmental disintegrity as a key barrier to the realisation of human rights, as well as to propose the means by which it may be rectified. It is with this goal in mind that the paper now turns to a consideration of the relationship between environmental integrity and human rights goals.

“The earth is not only the common heritage of all humankind but also the ultimate source of life. By over-exploiting its resources we are undermining the very basis of our own life... [thus] the protection and conservation of the earth is not a question of morality or ethics but a question of our survival.”

- *the Dalai Lama*⁷

CHAPTER ONE:
THE ENVIRONMENT AND HUMAN RIGHTS – WHY IS
ENVIRONMENTAL DEGRADATION A HUMAN RIGHTS
PROBLEM?

Environmental degradation is no longer news. With strong academic, political, and social support behind it, the environmental movement has steadily gathered strength since the 1960's, and we are now at a point where public awareness of environmental issues is almost universal in the developed world.⁸ Most of us are aware that our environment is changing, that our actions have consequences for the natural world, and that these consequences are not always beneficial. Concern about the ways in which human activity affects the environment is now a mainstream issue, raised everywhere from boardrooms and parliamentary chambers to online forums and living rooms. Whether such concern is well-founded is the focus of this chapter.

1.1 Anthropocentrism defended: a human rights approach to environmental degradation

Traditionally, much of the alarm caused by environmental degradation has centred on preserving the integrity of the environment for its own sake, with an emphasis on emotionally charged campaigns seeking to protect endangered species or

⁷ “Caring for the Earth” (1991) The Office of His Holiness the Dalai Lama [http://www.dalailama.com/messages/environment/caring-for-the-earth].

⁸ “In this closing decade of the Twentieth Century, protection of the natural environment has become the primary concern of society”; Shrivastava, P. "Castrated environment: greening organizational studies" (1994) in *Organization Studies* 15:5 705, p722.

unique habitats purely because they are intrinsically good things – this idea of the environment having an inherent worth separate from the utility it offers to humanity is common throughout environmentalist writing, and is also echoed in much of the supporting scientific literature.⁹ While there is no doubt that the argument for a healthy environment as a valuable entity in its own right has merit, in practice it seems neither possible nor desirable to separate our treatment of the environment from the effect that it has on our wellbeing. Environmental problems which receive widespread attention do so because of the impact that they have, or may potentially have, upon human happiness. In some cases the loss may be felt in aesthetic, emotional or spiritual terms only (such as upon the threatened extinction of an exotic species), but increasingly what is at risk is human life itself. As the public become more educated about the potential consequences of threats such as climate change, pesticide risk, food chain disruption and water scarcity, the motivation for action on these environmental issues becomes less about doing environmental good for its own sake, and more about doing environmental good for the good that it brings to people. This can be at least partly explained by the realities of democratic politics, now the dominant force in global political discourse. The only way that the environment, typically perceived as a non-human interest, is going to receive the political attention it requires is when its condition begins to impact upon the citizens (and voters) of a country. Having reached the point where we are now able to say with confidence that environmental degradation *is* negatively impacting upon people's well-being, we can expect the issue to move up in priority on the political agenda. As a consequence, it is vital that we are able to make strong links between environmental damage and negative consequences for humankind, in order to fully exploit the rising tide of interest in environmental disintegrity.

While adherents to 'Deep Ecology'¹⁰ may balk at the anthropocentrism of such reasoning, if the ultimate outcome of highlighting the human advantages to

⁹ Jensen, Eric T. "The international law of environmental warfare: active and passive damage during armed conflict" (2005) in *Vanderbilt Journal of Transnational Law* 38.1, p151.

¹⁰'Deep Ecology' is a concept that originated with Aldo Leopold's 1948 *Land Ethic* and gained significant strength in the 1970's; essentially, it is the argument that protection of the biosphere is a moral good in itself regardless of any benefit in human terms. It often invokes an element of spiritual connection with nature, and has been termed by its critics 'eco-fascism', in that it

environmental conservation is that greater urgency is given to these issues, the growing link between ecological and humanitarian concerns can only be a thing to be encouraged. This paper, written as it is from the perspective of human rights law, will therefore adopt the admittedly anthropocentric approach that environmental degradation – while a deplorable process in its own right – deserves a far greater proportion of both resources and political attention by virtue of the human consequences if such activity continues unchecked.

To summarise the environment/human rights relationship, the nature of contemporary environmental issues (interrelated, transboundary, and increasingly linked to patterns of resource consumption) more and more forces us to reconceptualise environmental problems as being ultimately *human* problems, in that the environmental changes we face today have direct and imminent consequences for all inhabitants of this planet, and humans in particular. Many of the major causes of contemporary human suffering have their roots in environmental changes that we are not equipped biologically, technologically, or philosophically to adequately address – basic human rights concerns such as hunger, poverty, sickness, armed conflict and even domestic violence can all be traced back to environmental factors at some level.¹¹ To employ a simple example, most people are aware of the existence of a right to life. While the actual substance of this right in *law* will be the focus of a later chapter, a logical extrapolation of what is required environmentally to sustain life will provide a useful illustration of the necessity of addressing the environmental prerequisites to human well-being.

1.2 Linking Human Rights to the Environment – how ecology influences our lives

There have been numerous attempts to quantify the basic necessities of life, all of them varying slightly. Nevertheless, it is possible to distil from the research some

sometimes advocates environmental goods as being not just equal to, but *more important than* human rights goods.

¹¹See for example the discussion on the rights to life and health (including mental health) in Chapter Three.

core human needs, the fulfilment of which is essential to a person's very existence. At the most basic level, a right to life, when taken at face value, would seem to presuppose the availability of the things necessary to sustain life; namely, a certain amount of air, water, food and shelter.¹² All of the above preconditions to life require a natural resource base of sufficient integrity to provide a minimum level and standard of each to every human. For example, it is estimated that the average adult male should not consume less than 1500 calories per day,¹³ as dipping below this level can severely and permanently compromise physiological wellbeing – put shortly, he is likely to die of malnutrition. Achieving this level of food production is heavily reliant on environmental factors. On a superficial level alone it presupposes sufficient arable land for sustainable production and crop rotation, sufficient water for irrigation, sufficient diversity of species both to combat crop disease and assist in pest control, a stable or at least predictable climate, and a sufficient supply of fuel to permit food distribution from production sites to urban areas. All of these factors are directly dependent upon environmental resources such as land, water, biodiversity, and fossil fuels. It is therefore self-evident that if the right to life can be said to presuppose access to food, such a right must also presuppose the necessary environmental conditions to permit production and distribution of that food.

As will be discussed in the following chapters, the international human rights community has made strong commitments to eliminate environmental threats to human dignity – a number of key international instruments, regional agreements and national constitutions have explicitly recognised that there is an obligation upon states to prevent starvation, dehydration, treatable disease and pollution.

¹²A discussion over whether the right to life as it is found in law does in fact inherently imply a right to these things (i.e. not to die of starvation), or whether it merely refers to the active deprivation of life by the State (i.e. a right not to be killed) is contained within Chapter Three of this paper; while the legal situation currently provides a tentative basis for the idea that the right to life may be deprived through permitting the deterioration of environmental conditions, for example, in cases of toxic waste, there is as yet no precedent which allows the pursuit of such a case on the basis of starvation or dehydration. However, as will be discussed, this does not preclude such a case from being brought in the future, and there is clearly no logical impediment for such an expansion.

¹³ “A normal adult uses 4-5 kJ (1-1.2 Cals)/minute to maintain basal energy needs or 6-6.5MJ (1500-1800 Cals)/day.” Cahill, G. “Famine Symposium: Physiology of Acute Starvation in Man” (1978) in *Ecology of Food and Nutrition* 6, p221. Note that this does not include the extra requirements that a physically active lifestyle would demand.

Because of the intimate way in which these problems are linked to the environment, it would be senseless to discuss their elimination without attempting to address their environmental causes. As such, it is possible to argue that human rights protection requires, as a matter of common sense, environmental protection: a human rights duty will often create an environmental duty. This is the approach that this paper will adopt, and determining the nature and scope of these duties is the overall goal of the chapters which follow.

1.3 The Context of the Research: A Modern Environmental Problem

Despite the seemingly obvious nature of this human dependence upon the environment, there are nevertheless some who would argue that it is possible to overcome human rights problems not through the preservation of environmental integrity as we know it, but through the technological manipulation of that environment to achieve human rights goals *separate* from environmental goals.¹⁴ Addressing this argument, which posits technological skill as a tool to overcome any environmental barrier to a well-fed, fully hydrated, and healthy human population, will be the focus of the following section. In doing so, an illustration of some of the ways in which the ability to provide for human needs is inextricably linked to environmental limits will be provided.

There has been some argument that technological advances are largely able to overcome ‘natural’ limits to food production, and it is true that the so-called ‘Green Revolution’ of the 20th century enabled a 250% increase in food yields over a period of 35 years, with the introduction and dissemination of plant hybridisation, as well as modern developments in irrigation, pest control and

¹⁴ “There is a view...that argues that human intelligence and creativity are sufficient to resolve any problems that face us. This is known as the *technological fix*, or economic solution. Proponents, known as *resource optimists*, argue that it was technology that permitted population to reach its present level. They argue this is a crowning achievement because never before have so many people lived so well. They point out that the availability of goods and services has never been as high as it is today; they are optimistic that there is no problem on the horizon.” Brown, B. “Earth as a Natural/Physical Environmental System” (2006) National Geographic Society [<http://www.nationalgeographic.com/xpeditions/guides/geogsummary.pdf>; p11].

fertilisation techniques.¹⁵ These technological advances have allowed us to produce enough food to meet the demands of our ever-growing population – currently, we have the production capacity to feed every person alive today and it is only the distribution of these nutritional resources that is the cause of existing hunger.¹⁶ However, increased yields have not been the only consequence of adopting these methods. Even the founders of the movement behind industrialised farming recognised that these gains could not be sustained in the long term, and food production has now largely levelled off.¹⁷ It is becoming increasingly obvious that the unintended side-effects of this type of production are not only environmentally devastating but may ultimately undercut the ability of these methods to continue to provide in the future – worldwide food production will actually decline if environmental degradation is allowed to continue apace.

1.3.1 Land Degradation

The environmental effects of the spread of industrialised agriculture have been manifold, and among the most serious is the emerging trend of exhaustion and ultimately loss of formerly productive land. Modern farming techniques degrade land in a number of ways. Irrigation, said to account for at least one half of the Green Revolution, provides crop yields 3.3 times higher than land watered by rain alone.¹⁸ Now heavily relied on as a means of boosting productivity (accounting for fully half of the food grown in India and China), the use of irrigation has tripled in the last fifty years, allowing naturally unproductive land to become a key source of the world's food supply.¹⁹ However, irrigation also leads to the

¹⁵Astyk, S. "How Much Did the Green Revolution Matter? Or: Can We Feed the World Without Industrial Agriculture?" (2007) Post Carbon Institute [<http://www.energybulletin.net/node/25315>].

¹⁶In fact, not only can we nutritionally support the existing population of 6.8 billion, but "the estimated cereal production in the 2007-2008 crop year of over 2.1 billion metric tons of cereal grains was enough to feed more than 10 billion people a vegetarian diet." Cohen, J. "Human Population Grows Up" in Mazur, L (Ed.) *A Pivotal Moment* (Island Press: USA, 2010), pp27-37, p33. Whether we could persuade people to adopt a vegetarian diet, and trickier still, to accept a decline in their living standards to ensure the survival of those on the other side of the planet, is another question altogether.

¹⁷"Norman Borlaug, the scientist who is often called "the father of the Green Revolution," notes the importance of fertilizer for feeding the world's people: "Without chemical fertilizer, forget it," he said. "The game is over." Brown, L. "Food: Will There Be Enough?" in Mazur, *ibid*, p169.

¹⁸Schade, C. & Pimentel, D. "Population Crash: prospects for famine in the twenty-first century" in *Environment Development Sustainability* (2010) 12:245-262; p249.

¹⁹Brown, *supra* n 17 at 167.

gradual accumulation of salts in the soil, either through changing the level or composition of the water table or adding salts to soils that are not then adequately ‘rinsed out’ through natural rainfall.²⁰ The result is salinisation, which inhibits and eventually totally excludes plant growth – not only of food crops, but of nearly all types of vegetation. The consequential exposure of the delicate topsoil layer leads to erosion, and in turn desertification. It is estimated that 1.5 million hectares of irrigated land are effectively rendered useless by this process each year.²¹

Irrigation is not alone in intensive farming as a cause of land loss: excessive use of pesticides and nitrogen-based fertilisers contribute to mineral imbalances and a loss of soil ecology, resulting in a similar pattern of land degradation.²² The homogenisation of crop species leads to a loss of diversity in the foundation species which maintain soil health – earthworms, bacteria, and fungi which sustain soil structure and fertility. Overall, it is estimated that “within the last 1,000 years agriculture has degraded and destroyed a combined two billion ha of once productive land”²³ – more than the total land under use today. As the population grows, farmers are thus coming under pressure to produce more and more food from a land base that is actually shrinking. This is causing the expansion of cultivation into lands previously thought unsuited for food production, leading to deforestation, habitat loss, and species extinction as well as threatening the vital ecosystem services that these lands (largely comprised of forests, wetlands and grasslands) provide in the larger planetary system.²⁴ The need to apply the same destructive agricultural techniques to wring as many

²⁰ Podmore, C. *Irrigation Salinity – Causes and Impacts* (October 2009) State of New South Wales Department of Industry and Investment

[http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0018/310365/Irrigation-salinity-causes-and-impacts.pdf]; European Commission DG ENV *Soil Biodiversity: Functions, Threats, and Tools for Policy Makers* (February 2010) [<http://ec.europa.eu/environment/soil/pdf/6%20Ch%204.pdf>]

²¹ Schade, C. & Pimentel, D. “Population crash: Prospects for famine in the twenty-first century” in *Environment, Development & Sustainability* (2010) 12:245-262, p249.

²² Indira Gandhi National Open University “Effects of Agriculture on Human Environment” (2011) [<http://www.egyankosh.ac.in/bitstream/123456789/36533/1/Unit-8.pdf>].

²³ Schade & Pimentel, supra n 21 at 248.

²⁴ Such as carbon capture and storage, watershed filtering cycles, and even absorbing meteorological impacts. Mertz, T. “Nature’s Services: Ecosystems are more than Wildlife Habitat” in *Our Future* (2007) RAND

[<http://www.rand.org/scitech/stpi/ourfuture/NaturesServices/section1.html>].

calories as possible from this newly appropriated land will in turn lead to the same degradation that forced its acquisition in the first place.

1.3.2 Water Depletion and Degradation

Water has already been mentioned in the context of the damage it can inflict when irrigation is employed inappropriately. Of further concern is how the need to feed, hydrate, and provide production and hygiene services for so many people is impacting upon the earth's water systems themselves. It is estimated that 18% of the world population currently lacks access to safe drinking water - this does not take into account the additional water needs for basic sanitation and health.²⁵ Agriculture is again the biggest culprit, appropriating around 70% of global freshwater supplies.²⁶ The impact of only one extra person upon water supply becomes apparent when considering that producing one kilogram of wheat requires between 1,000 and 2,000 litres of water. As less developed countries advance economically, their populations inevitably begin to consume more meat products, which require an additional 13,000 to 15,000 litres of water for the production of each kilogram.²⁷ Rainfall alone is not enough to provide for the world's existing water needs, and most large food producers (including India, China, and the United States) are relying heavily on groundwater supplies. For example, much of the production capacity of the American 'Great Plains' can be directly attributed to the Ogallala aquifer which provides a significant amount of the water needed for irrigation in this naturally arid region.²⁸ However, use of this resource is rapidly outstripping replenishment, and "water levels have dropped by more than 100 feet in some areas".²⁹ In most cases, these ancient water stores have accumulated in geological timeframes – so slowly that their replenishment

²⁵United Nations, "Meeting Global Targets for Water and Sanitation" in *Water for Life* [<http://www.un.org/waterforlifedecade/factsheet.html>].

²⁶Sterling, E. & Vintinner, E. "How Much Is Left? An Overview of the Water Crisis" in Mazur, L (Ed.) *A Pivotal Moment* (Island Press: USA, 2010) p196.

²⁷"In every society where incomes rise, people move up the food chain, eating more animal protein as beef, pork, poultry, milk, eggs, and seafood... the shift to more livestock products as purchasing power increases appears to be universal." Brown, L. "Food: Will There Be Enough?" in Mazur, *ibid* at 172.

²⁸Thier, D. "Time, Water Running Out for America's Biggest Aquifer" *AOL news* (Online, 21 April 2010) [<http://www.aolnews.com/earth-day/article/time-water-running-out-for-americas-biggest-aquifer/19446923>].

²⁹Brown, *supra* n 17 at 168.

rates can be measured in terms of centuries.³⁰ The rapid depletion of these underground water resources can lead to a lowering of the water table, contamination of the remaining supplies, loss of flow in streams, lakes, and wetlands, and as well as land subsidence.³¹ The agricultural methods required to feed our growing population are causing us to consume far more water than is sustainable, either for the on-going health of the planet as a whole or for humans needs alone.

What water remains is increasingly polluted. Human pollution, in terms of industrial as well as household waste directly threatens aquatic biodiversity. This loss is felt not only in terms of ecosystem maintenance or aesthetic and cultural value, but also in terms of food supply. Aquatic birds, fish, shellfish and other species are often important food resources in themselves, yet pesticide and fertiliser run-off from intensive land-based production threaten the habitats on which they depend. Chemical loading from such human activity can eventually lead to eutrophication, a process whereby algal blooms starve a waterway of oxygen and create toxic hydrogen sulphide, essentially eliminating all forms of recognisable life.³² In the mid-20th century, 49 sites were identified as having suffered this fate – the figure today is 405.³³

1.3.3 Unknown Environmental Costs

The exact effects of modern agriculture on the environment are thus far reaching and often indirect – some of the consequences of the frantic scramble for food are only now becoming clear. While it is easy to see the environmental consequences of clearing a wood to create a maize field in its place, other, less obvious impacts can have equally disastrous results in environmental and ultimately human terms. One such example that has recently emerged as a threat to food security is the decline in population of pollinating insects. The United Nations Food and

³⁰ U.S. Department of the Interior *The Water Cycle: Infiltration* (31 March 2010) [<http://ga.water.usgs.gov/edu/watercycleinfiltration.html>]

³¹ Ibid.

³² “Heavy Eutrophication Eliminates Species” (2006) Oasis Environmental Ltd [<http://www.oasisenviro.co.uk/eutrophication.htm>].

³³ Brown, *supra* n 17 at 170.

Agriculture Organisation (FAO) has recently confirmed that of the 100 plant species that provide 90% of the world food supplies, 71 of those species must be pollinated by bees in order to produce food crops.³⁴ However, pollinator insects - both farmed and wild- are declining rapidly on a global scale and recent studies have raised concerns about the effect this will have for countries such as India, where the yields from pollinator dependent crops are falling despite increased acreage being turned over to farming.³⁵ While exact causes of the phenomenon are unknown, scientists now link the decline in pollinator species to a collection of modern agricultural methods.³⁶ The short-term gains in productivity created by pesticide use and other industrialised farming techniques may thus have serious long-term negative effects in terms of environment and in turn, food security, which we are only now beginning to understand.

Ultimately, the need to produce the sheer quantities of food required by the existing population –let alone the additional 80 million people we must provide for each year- is causing us to rely on farming methods which damage the environment to the point where not only are our ecosystems changing fundamentally, but they are changing in ways that threaten our ability to maintain what food security we have fought to achieve. Population growth would require that we extend this damage even further. The environmental stress caused by the 7 billion people alive today is unsustainable – we have already overextended what the earth can supply in terms of fresh water, fertile land, and absorption capacity for the waste we create:

“In order to support a far smaller 20th century population – with a mean of about four billion people between 1950 and 2000 – humanity overwhelmed a majority of the planet’s ecosystem services, destroyed much of its life, both in number and diversity, and have taken control of a significant proportion of the Earth’s biological, geological, and chemical cycles... Some time between 1970

³⁴Kinver, M. “‘Pollination Crisis’ Hitting India’s Vegetable Farmers” *BBC News* (28 September 2010) [<http://www.bbc.co.uk/news/science-environment-11418033>].

³⁵ Ibid.

³⁶ “Pollinator Services for Sustainable Agriculture” FAO, Global Action on Pollination Services for Sustainable Agriculture [http://www.fao.org/fileadmin/templates/agphome/documents/Biodiversity-pollination/Pollination-FolderFlyer_web.pdf].

and 1980, the human footprint exceeded Earth's capability to sustainably provide for humanity's combined wants and needs."³⁷

Thus, the idea that we might be able to develop and disseminate entirely new technologies which not only rectify the existing damage, but also prevent further degradation in the face of continued population growth seems naive given current progress. The technological 'breakthroughs' in food production of the past are now proving themselves to be unsustainable in the long-term, while emergent technologies such as genetic engineering have been plagued with uncertainty as to their own potential side-effects.³⁸ At the very least, the precautionary principle should require drastic changes in the way in which resources are managed.³⁹ Despite this, many commentators continue to persist in the belief that the power of technology is greater than the forces of nature, holding fast to the belief that "Earth and its resources are infinite, that human mastery over Nature through science is limitless, and that 'there is no persuasive evidence that any meaningful limits to growth are in sight'."⁴⁰

1.4 Conclusions

Technology can thus take us only so far in terms of producing enough calories per person to sustain life. The human rights problem of chronic, widespread hunger remains unsolved despite our best technological efforts. Basic environmental factors such as soil fertility, rainfall, sunlight, and complementary species diversity still remain central determinants of how much food is produced, and

³⁷ Schade, C. & Pimentel, D. "Population crash: Prospects for famine in the twenty-first century" (2010) in *Environment, Development & Sustainability* 12, 245-262, p246. See also Clive Hamilton's book *Requiem for a Species* (Earthscan Publications Ltd: UK, 2010).

³⁸ For a discussion of the concerns which continue to undermine the use of genetically modified food crops, see Weasel, L. *Food Fray: Inside the Controversy over Genetically Modified Food* (AMACOM: USA, 2008).

³⁹ Principle 15 of the Rio Declaration on Environment and Development sets out the precautionary approach as follows: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

⁴⁰ Gillespie, A. *The Illusion of Progress* (Earthscan Publications Ltd: UK, 2001); p16. It should be noted that Gillespie himself is opposed to such a view, arguing strongly in favour of the existence of limits to growth.

therefore how well we are able to sustain human life. As such, environmental problems remain inextricably linked to problems of human well-being, and addressing these is central to achieving the legal standards of the international human rights regime.

In the following Chapter, I outline one approach to addressing these problems, with the aim of showing that the existing law provides us with some valuable tools for fighting environmental degradation as a means of advancing the cause of human rights. In doing so, I will argue that the perceived ‘population problem’ need not be a cause for despair, but rather an opportunity for the international community to take steps towards a healthier human rights position, *and* a healthier planet.

“The true danger posed by our exploding population is not our absolute numbers but the inability of our environment to cope with so many of us doing what we do.”

- Paul Chefurka⁴¹

“I’ve never seen a problem that wouldn’t be easier to solve with fewer people, or harder, and ultimately impossible to solve with more.”

- Sir David Attenborough⁴²

CHAPTER TWO: THE CASE OF POPULATION

Chapter One of this paper sought to describe one of the most important problems facing humanity today: the patterns of environmental resource use upon which we rely for survival are not sustainable in the long-term, neither for the numbers of people alive today nor for the additional billions which we may expect to join us on this earth.⁴³ Recent media attention has focused upon the figure of 7 billion; with varying estimates as to the precise date on which our population surpassed this figure, it is nevertheless widely agreed that 2011 marked a significant milestone in demographic terms.⁴⁴ Ensuring the full realisation of human rights in such an increasingly crowded world will therefore require a significant change in the way States approach both resource and population policies. In this Chapter, I attempt to demonstrate how existing human rights law is capable of addressing these challenges, by using a targeted approach to bolster some key human rights whose flow-on effects will be to significantly improve the prospects for our environment -and thus human rights more broadly- moving forwards. In attempting to describe the nature of the changes required, this Chapter will firstly weigh the two main approaches to reducing environmental harm on a global level:

⁴¹ Chefurka, P. *Population – The Elephant in the Room* (2007) [<http://www.paulchefurka.ca/Population.html>].

⁴² “Attenborough Warns on Population” BBC News (13 April 2009) [http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/7996230.stm].

⁴³ See Chapter One for a more detailed exposition of the problems inherent to the current system.

⁴⁴ The UN Population Fund has dedicated a website to this phenomenon: [<http://7billionactions.org/>].

through the reduction of per capita consumption, and through the reduction of population growth rates. While the importance of changing consumption patterns cannot be denied, it is here argued that the difficulties associated with achieving the necessary level of change, in the prompt and widespread manner required, indicates a need to focus more strongly on the issue of population growth. As such, the second and core focus of this Chapter is the development of a human rights approach to population management, which proceeds from the basis that an expanded interpretation and targeted enforcement of existing human rights law will enable States to ease the resource pressure caused by high population growth, thereby putting them in a better position to meet their human rights obligations around food, water, health, and so forth. The discussion commences below with an argument for the necessity of tackling population growth as a global policy issue.

2.1 Ecological footprints: too large, or too many?

In examining the state of the Earth's resources it is immediately apparent that the natural environment cannot currently provide our world population with all that it needs – absolute poverty continues to exist, people continue to die from the deprivation of their rights to food, water and health, and the environment continues its downward spiral towards the point of no recovery.⁴⁵ It is often argued that this situation is largely a result of skewed distribution of resources – that there *are* enough resources to secure these human rights for all, and it is merely a matter of regulating consumption patterns in order to meet the needs of those who currently go without.⁴⁶ While the principle of this is largely undeniable

⁴⁵ Current estimates hold that 900 million people “would still be mired in extreme poverty in 2015, even if the first Millennium Development Goal was reached in that target year”(UN Commission for Social Development, Feb 10, 2011 *Anti-Poverty Experts in Commission for Social Development Offer Ways to Keep Ranks of People without Adequate Food, Clothing, Shelter from Swelling*), while meeting even that goal seems unlikely as a 2010 draft GA resolution (A/64/L.72) on the Millennium Goals reports that progress “falls far short of what is needed” to eliminate these ills;for example, the FAO estimates that 925 million people were undernourished in 2010 (FAO, *The State of Food Insecurity in the World*, 2010, p4); on the health front, “diarrhea and pneumonia still kill almost 3 million children under 5 years old each year” while “half a million women – most of them in developing countries – die each year of complications during pregnancy or childbirth.”(WHO, *World Health Statistics 2010*, 2010, p14).

⁴⁶ “If the world is facing environmental disaster, it is not the fault of the poor, who use few resources. The fault must lie with the world's wealthy countries, where people consume the great

– currently, 20% of the world’s population consumes 80% of its resources⁴⁷ – such a theory fails to take into account the realities of both human nature and the economic status quo. It is highly unlikely that a democratic society would accept a significant reduction in its standard of living in order to improve living conditions elsewhere. This is regrettable, but to pretend otherwise is to deny the strength of the capitalist drive for acquisition as a value that has been internalised to a huge extent across global society. To change the mentality of consumption as an indicator of personal worth would require the adoption of an entirely new economic regime – for the *person as consumer* is an idea that is central to the existing economic model. To achieve this would require a revolution of extraordinary dimensions, a process that is unlikely in the absence of some equally extraordinary precipitous event.⁴⁸ Part of the strength of capitalism as an economic norm is that it echoes the biological drive to accumulate resources as a mechanism of both basic survival and elevated social status. That the model is flawed is obvious when one considers the inequalities that have resulted from and indeed, continue to be exacerbated by, this focus on individual wealth.

It may well be that the drive to accumulate and consume resources beyond what is needed to sustain a comfortable standard of living is yet another element of human nature that must be overcome in order to create a truly civilised society – just as it is no longer acceptable to give in to the arguably ‘natural’ urges to wage war, commit rape, or steal, perhaps the next stage of development of man as a social animal will be the subordination of personal greed to the greater needs of

bulk of the world’s natural resources and energy and cause the great bulk of environmental degradation.” Stern, P., Dietz, T., Ruttan, V., Socolow, R. & Sweeney, J. (eds.) *Environmentally Significant Consumption: Research Direction* (National Academy Press: USA, 1997) p1; see also the work of Barry Commoner, esp. *The Closing Circle* (Bantam Books: USA, 1980), and more recently, Fred Pearce writing in *Peoplequake* (Eden Project Books: UK, 2010).

⁴⁷ “Between 1960 and 1989, the countries with the richest 20% of world population increased their share of global GNP from 70.2% to 82.7%.” United Nations Development Programme (UNDP), *Human Development Report - Global Dimensions of Human Development* (1992) p34.

⁴⁸ “The bottom line is that a successful sustainability policy requires a national and international reordering of priorities which may be perceived as inconsistent with the free-market economies prevalent in many parts of the world. Consumption is the cornerstone of most national and international economic policy and adjusting consumption patterns presents a daunting task where these patterns are firmly ingrained.” Abrams, P. “Population control and sustainability: it’s the same old song but with a different meaning” (1997) in *Environmental Law* 27:4, pp1111-1135; p1118.

the community.⁴⁹ Unless and until the majority have achieved this level of enlightenment however, it is not possible to rely on a reduction in consumption and thus a more equitable distribution of resources as a practical means of achieving human rights standards globally. However desirable this might be in theory, its implementation would be nearly impossible to enforce in the current political, economic, and social climate. As an example of how deeply confused priorities have become, it is commonplace to find principles of free trade trumping human rights considerations; indeed, economic advancement is often trotted out in defence of human rights abuses.⁵⁰ While small movements have been made toward recognising the consequences of irresponsible consumption by the few at the expense of the many, by and large the capitalist ethic remains the central force in play – and one that is only growing in strength as those in developing countries begin to demand the kind of lifestyle that their Western neighbours have enjoyed for centuries.

It is vital that serious political weight be thrown behind the attempt to reduce per capita consumption of energy, water, mineral wealth, and biomass, in order to free up these resources for those who are struggling to achieve even survival levels of these resources – but this course alone will not be sufficient to address the barriers to universal achievement of human rights. Even if resources were able to be allocated entirely equally across the globe, the standard of living guaranteed in the ICESCR would not be able to be maintained in the long term. As discussed in Chapter One of this paper, current resource consumption is unsustainable – we are operating on an environmental deficit and current levels of ‘production’ cannot continue indefinitely.⁵¹ Put simply, we will soon be in a position of having decreasing yields of vital survival resources (food, water, ecosystem regulators

⁴⁹ Babor, D. “Population – Environment Linkages in International Law” (1999) *Denver Journal of International Law and Policy* 27:2, p205; “Ultimately, the core values which have allowed humanity to survive over the millennia must be re-evaluated in the current context”, p216.

⁵⁰ Witness the countless abuses that continue to occur as a consequence of infrastructure development – hydroelectric dams figure largely in tales of human rights and environmental abuse, yet the consequences of such ‘developments’ continue to receive little international condemnation, rather being seen as collateral necessary for the advancement of standards of living. See for example the Interamerican Association for Environmental Defense (AIDA) testimony to the Inter-American Commission on Human Rights, summarized in the report *Large Dams in the Americas: Is the Cure Worse than the Disease?* (November 2009) AIDA [http://www.aida-americas.org/sites/default/files/DAMSREPORTExecsum_0_0.pdf].

⁵¹ See discussion beginning on p9 of this document.

such as forests or marine systems) with which to provide for an increasing number of human beings. It is not an equation that can end happily in terms of the minimum resources necessary to secure human rights. To further exacerbate the problem, recent estimates suggest that on current trends, the global population is set to increase to around 9 billion before 2050 – a level of growth which will require “70 percent more food production globally, and up to 100 percent more in developing countries” in order to feed these additional people.⁵² Thus, while efforts to reduce resource consumption form one part of a solution to this impending crisis, it is obvious that a second approach is needed that has the potential to be widely implemented *right now*, and which does not rely on a future economic revolution to achieve global subscription.

2.2 A focus on Population

If we cannot limit (or can only limit to a certain extent) the resource consumption of each person, the obvious next step is to examine ways in which we can limit the numbers of people requiring those resources, in order to ensure that everybody is able to have what they need in order to live a life that meets human rights standards. This goes back to the ‘IPAT’ equation which received significant attention in the 1970’s as a predictive tool in which population, affluence and technology are seen as the key variables influencing the environmental impact of any given society:⁵³ if changes in affluence (or consumption) can be achieved only slowly, and technological changes are a speculative matter which cannot be relied upon, this leaves population as the significant variable. This is one instance in which numbers alone can have a huge impact – in terms of efficacy and cost, population management can deliver greater environmental ‘returns’ than almost any other environmental management strategy;⁵⁴ it is thus a vital tool in any attempt to foster the level of environmental integrity necessary for the

⁵² FAO *The State of the World’s Land and Water Resources for Food and Agriculture: Managing Systems at Risk* (FAO, 2011) p9.

⁵³ Chertow, M. “The IPAT Equation and its Variants” (2003) in *Journal of Industrial Economy* 4:4, pp13-29.

⁵⁴ For example, amount of buy-in to recycling or energy efficient lighting programmes compared to lifetime resource use of one person.

achievement of human rights. In sum, there is a figure, a certain number of people beyond which the Earth (even in combination with human technology) cannot sustainably provide food, water, and health resources for. The debate over whether or not we have reached that number at present does not obviate the fact that this ‘magic number’ does exist.⁵⁵ It is thus imperative that strategies are developed which will enable the global community to step back from this threshold and achieve a population size that will permit all human beings to have access to the food, water, and health opportunities which human rights law seeks to guarantee. It is equally imperative that these strategies to achieve human rights norms do not violate the self-same principles that they seek to uphold. This paper will advocate a strategy which not only respects other human rights along the way to achieving the rights to life, food, water and health, but which actually relies on them as a means to reaching that achievement. Firstly however, it is pertinent to examine the strategies that have been adopted to date, and evaluate their effectiveness in light of the on-going ecological degradation of today.

2.3 Population and the International Community

⁵⁵ That there is a limit to how large our population can grow is evident from the simplest of thought experiments: for example, if one considers only the space necessary to accommodate the human physical structure – our bodily ‘space requirements’ alone. If we imagine that we can fit four standing adults on one square meter of ground, and the total amount of land available on earth is 150,000,000 square kilometres, it becomes a simple matter of calculation to figure out that we can literally ‘fit’ only 600,000,000,000,000 people on this planet. The idea that there is *no* limit to population growth is simply not true – we take up space, and there is only so much space to go around. In reality of course, we do not take up only the space in which we are standing at any present moment. We require food and water, clothing, shelter, a social life, an occupation and a balanced psyche. Thus, we each take up a parcel of land used for crops and animal rearing, a portion of the flow of rivers and rainfall catchments, a percentage of the space required for fabric production and manufacture, and so on. With each of these additional requirements we can imagine the ‘bubble’ of space that each individual takes up expanding outwards. Some of these, such as the social, economic, and psychological spaces may be shared (though with arguable corresponding deterioration in quality of life) – an overlap of these ‘survival bubbles’, so to speak – but others (such as water) are non-negotiable. Appeals to technology rely on advances in our means of production allowing us to shrink the space bubble of each person – by becoming more efficient, we can use less space to generate the same end products, and thus fit more people onto the earth. It is sufficient for now to acknowledge that we can only shrink those spaces so much – ultimately, there are physical limits to how large the human population can grow. There is a large body of support for this idea of there being limits to growth; see for example Meadows, D., Meadows, D., Randers, J. & Behrens, W. *The Limits to Growth* (Washington D.C.: Potomac Associates, 1972). Figure for the total land mass of earth from *Science Desk Reference American Scientific*. New York: Wiley, 1999: 180.

The role of population in both environmental management and development is a subject that has traditionally been avoided or discussed largely obliquely at an international level.⁵⁶ This is because of a natural concern with avoiding the mistakes of the past – population management remains such a highly controversial topic in part because of the history of atrocities committed in its name: from eugenics to forced sterilisation, the record for State interference in reproductive choices is a grim one.⁵⁷ This reluctance to openly advocate for reduced population growth did not always represent the mainstream position however; indeed, the two decades from 1960 generally can be said to characterise a strong preoccupation with population growth and its effects on the environment. This took hold not only in international politics but throughout global society, precipitated in part by academic interest and works such as the seminal text *The Population Bomb*,⁵⁸ which helped to popularise support for population policies. International law responded to this support through the inclusion of population concerns as a topic for discussion at conferences, in declarations, and in broader debates on sustainable development. While the urgency of this concern has since waned population issues have persisted on the international agenda, albeit in less direct ways. The international community has convened on a number of occasions to discuss population and its surrounding issues, and brief overview of these events will demonstrate the evolution of international law regarding population rights and responsibilities.

One of the first formal expressions of a desire by the international community to engage in the field of population came from the 1968 International Conference on Human Rights in Tehran, where it was held that “Parents have a basic human right to decide freely and responsibly on the number and spacing of their children

⁵⁶ “[O]n the issue of reproductive rights per se, where emotions run high and political actors feel especially vulnerable – and where conscious avoidance is the safest route – discussion has been conspicuously limited.” Freedman, L. & Isaacs, S. “Human Rights and Reproductive Choice” in *Studies in Family Planning* Vol. 24, No. 1 (Jan.-Feb., 1993) pp 18-30, p20; more recently, population has been described as “the great taboo of environmentalism”; Feeney, J. *Population: The Elephant in the Room* (2 February 2009), BBC News [<http://news.bbc.co.uk/2/hi/science/nature/7865332.stm>].

⁵⁷ For a thorough history of the movement see Connelly, M. *Fatal Misconception: the struggle to control world population* (Harvard University Press: USA, 2008), or Hartmann, B. *Reproductive Rights and Wrongs: The global politics of population control* (South End Press: USA, 1999).

⁵⁸ (Buccaneer Books: New York, 1995).

and a right to adequate education and information in this respect.”⁵⁹ The key words in this proclamation obviously being the idea of exercising choice about family size that is both *free* and *responsible*. What these two words mean in the context of reproduction, and whether the two can be reconciled, has remained the focus of what limited discussion there has been among political actors within this field. An attempt to further define what a free and responsible reproductive choice looked like was made six years later in Bucharest, when the above right was affirmed with the addition of the following clarification: “the responsibility of couples and individuals in the exercise of this right takes into account the needs of their living and future children, and their responsibilities towards the community.”⁶⁰ The same document required that, when formulating a population policy, “consideration must be given... to the supplies and characteristics of natural resources and to the quality of the environment and particularly to all aspects of food supply including productivity of rural areas.”⁶¹ Thus we can see a clear link being made between responsible reproductive choice and environmental wellbeing.

A few years later, in 1972, the *Declaration of Principles for the Preservation and Enhancement of the Human Environment* (Stockholm Declaration)⁶² recommended that States implement population policies as a matter of environmental necessity: “[t]he natural growth of population continuously presents problems for the preservation of the environment, and adequate policies and measures should be adopted, as appropriate, to face these problems.”⁶³ The 1984 International Conference on Population in Mexico City built on the foundation laid out in Tehran and Bucharest, affirming the importance of responsibility in the exercise of reproductive choice,⁶⁴ and requiring that individuals consider “the implications of their decisions for the balanced

⁵⁹ Paragraph 16, Proclamation of Tehran (1968) A/CONF.32/41 at p4.

⁶⁰ The World Population Conference, Bucharest, 1974 “World Population Plan of Action”, in *Population & Development Review*, Vol. 1, No. 1, (Sep. 1975) pp163-181; p167.

⁶¹ Ibid.

⁶² A/CONF.48/14/Rev.1.

⁶³ Declaration of the United Nations Conference on the Environment, 1972; Para. 5,

⁶⁴ International Conference on Population, Mexico City, 1984.

development of their children and of the community and society in which they live.”⁶⁵

It is important to note the significance of the statements arising from these conferences in that they introduce an element of choice and responsibility not found in traditionally recognised reproductive rights. For example, Article 16 of the UDHR holds that men and women have a right to “found a family”, and that the family unit is deserving of the protection of the State. The provision was codified in Article 23 of the ICCPR almost verbatim. This arguably represents a much more pronatalist stance than that derived from the later population-focused discussions: there is no explicit right *not* to have a family if you so choose, which the introduction of the element of decision in the later documents achieves.

2.3.1 A Right to Contraception

This idea of a right *not* to reproduce was finally given firm legal footing with the introduction of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). This Convention includes a provision with serious consequences for any prospective population management programme:

“State parties shall take all appropriate measures to ... ensure on a basis of equality of men and women ... the same rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights.”⁶⁶

The convention thus effectively codified the idea of free and responsible reproductive choice which had been developed previously as a formal provision of international law. While contraception is not explicitly mentioned, it is clear that ‘the means to exercise’ a right to decide how many and how often one has

⁶⁵ Eriksson, M. “Family Planning as a Human Rights Issue” in *Parenthood in modern society: legal and social issues for the twenty-first century* (Martinus Nijhoff Publishers: Netherlands, 1993) p192.

⁶⁶Article 16(1)(e), CEDAW (1979).

children must include access to at least basic modern contraception technologies.⁶⁷

At an international level then, there is now not only a human right to found a family (as found in the ICCPR), but also the right to decide the nature of that family in terms of numbers and spacing of children, and further still under CEDAW, a right to *not* found a family at all. It is also clear that the decision by an individual(s) must be made freely - compulsion or coercion are never legally permissible in any effort by States to manage the rate at which their population grows – family size and spacing is a matter of individual choice, and not State policy.⁶⁸ At the same time, the requirement of responsibility provides States a window of influence in that decision, enabling them to offer their citizens as much information as they deem necessary to make an informed choice. While there may be some risk that States could attempt to use this provision in a coercive manner to hold that certain choices can never be responsible– for example, having more than a certain number of children - it is unlikely that any argued absence of the ‘responsible’ would justify the deprivation of the ‘free’ in matters of reproductive decisions, particularly given the much longer history of the right to have children when compared to the population control movement.⁶⁹

The 1994 Cairo Conference on Population and Development remains the most influential international gathering dedicated to the population issue. In developing a 20 year plan to address the population problem, the conference promoted what was called ‘reproductive health’, drawing focus away from the traditional talking points of contraception and the top-down enforcement of population policies, towards a greater focus on rights and a ‘bottom-up’ empowerment of women. Attention was directed “away from numbers of people, population growth and family planning and the coercion that those terms were seen to imply, to the more

⁶⁷ See Eriksson, *ibid*; especially p202.

⁶⁸ The CEDAW Committee has explicitly recognised this in its General Comment 19, declaring that “[s]tates parties should ensure that measures are taken to prevent coercion in regard to fertility and reproduction.”

⁶⁹ The right to family has been a cornerstone of the Human Rights movement from its inception, as seen by its inclusion in the UDHR. In contrast, population concerns have only emerged in more recent decades and do not have the same intuitive appeal.

comprehensive language of reproductive health.”⁷⁰ The resulting document defined reproductive health as:

“a state of complete physical, mental and social well-being and... not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.”⁷¹

This commitment to reproductive health, and women’s rights more broadly, was further affirmed in a follow-up session of the UN General Assembly five years later.⁷²

The effect of the Cairo conference was thus a change in emphasis, with a careful avoidance of framing reproduction in negative terms. While this is an approach more in line with human rights, there are those who argue that the policy shift away from direct references to population growth as an environmental problem has had a demotivating effect on States, as “the language of reproductive health did not spur enthusiasm in parliaments or in wider debate”.⁷³ While the substantive content of the conference documents does support initiatives which will have the effect of limiting population growth, it does so largely obliquely, and it is possible to lose sight of the fact that unchecked reproduction in itself –

⁷⁰ Report of Hearings by the All Party Parliamentary Group on Population, Development and Reproductive Health *Return of the Population Growth Factor: Its Impact Upon the Millennium Goals* (Print Management Systems: UK, 2007); p11.

⁷¹ 1994 International Conference on Population and Development in Cairo; paragraph 72.

⁷² It should be noted that the follow-up session to Cairo saw some contentious debate about reproductive rights; for example, “[a]t the Asian and Pacific Conference, the US delegation opposed the use of the terms “reproductive health services” and “reproductive rights”, alleging that such terms “promote abortion” and declaring that “the United States supports the sanctity of life from the moment of conception to the moment of natural death”. Insisting on a policy of “simple abstinence”, it also tried to eliminate all references to “condom use” as a viable way of preventing HIV infection”. From “Monitoring 10 years of ICPD in Asia” (2004) Choike, Third World Institute [<http://www.choike.org/2009/eng/informes/1869.html>]. Despite such efforts to derail reproductive rights, the right to contraception in its full sense remains: see the report by Special Assembly Rapporteur Gabriella Vukovich, *Key actions for the further implementation of the Programme of Action of the International Conference on Population and Development*, adopted in 1999 by GA Resolution; A/RES/S-21/2.

⁷³ British All Party Parliamentary Group on Population, Development and Reproductive Health, supra n 70 at 12; Cairo is seen as having “downplayed the demographic rationale”, Higer, A. “International Women’s Activism and the 1994 Cairo Population Conference” in Meyer, M. & Prügl, E. (eds) *Gender Politics in Global Governance* (Rowman & Littlefield Publishers: UK, 1999) p123.

separate from how it occurs – might be problematic; “[l]ost in the shuffle and acclaim for the Cairo agenda was the concern over population size and growth, issues which demographers and other population specialists still considered to be of great importance”.⁷⁴ While the resulting final documents do recognise that population issues have an environmental element,⁷⁵ the idea that overpopulation might be an issue is rarely mentioned, and then referenced only in passing. Indeed, the UNFPA has said regarding Cairo that “population is not about numbers, but about people.”⁷⁶ The conference outcomes are predominantly devoted to promoting the rights of individuals – specifically women – and from an environmental standpoint the conference “essentially limited itself to endorsing Agenda 21”⁷⁷, the agreement resulting from the Rio Conference two years earlier.⁷⁸ Because of the broad vision and general nature of some of the issues discussed, some have characterised Cairo as less of a blueprint for action and more as “an expression of ideals and a vision of a more just and equitable world”.⁷⁹

The outcomes of Cairo may thus in part be responsible for a corresponding fading of interest in population growth by both interest groups, governments, and the public at large. Funding for family planning dropped sharply, and foreign aid was provided under a more general structure, where direct funding for contraceptives was regularly either “not identified or monitored separately”.⁸⁰ While Cairo thus reinforced support for the need to prevent unwanted pregnancies, its effect in

⁷⁴ Finkle, J. “Impact of the 1994 Conference on Population and Development” (2002) in *Population Bulletin of the United Nations: Completing the Fertility Transition* 48/49, p92.

⁷⁵ “Around the world many of the basic resources on which future generations will depend for their survival and well-being are being depleted and environmental degradation is intensifying, driven by unsustainable patterns of production and consumption, unprecedented growth in population, widespread and persistent poverty, and social and economic inequality”. United Nations, *Report of the International Conference on Population and Development* (1994), A/CONF.171/13; Para. 1.2.

⁷⁶ UNFPA, “State of World Population 2009: Facing a Changing World: Women, Population and Climate” (press release, 18 November 2009) p3.

⁷⁷ McIntosh, C. & Finkle, L. “The Cairo Conference on Population and Development: A New Paradigm?” (1995) *Population and Development Review* 21:2; p227.

⁷⁸ Agenda 21 focused on environmental concerns in the context of sustainable development: thus, a healthy environment was still seen as a tool or resource much more than a precondition of existence. A copy of the document is available at [<http://www.un.org/esa/dsd/agenda21/>].

⁷⁹ Finkle, supra n 74 at 92.

⁸⁰ British All Party Parliamentary Group on Population, Development and Reproductive Health; supra n 70 at 13.

practice may have been to confuse State obligations around population control, leading to what some have called “the lost decade”⁸¹ in which rhetoric abounded but State action on the population issue stalled.⁸²

2.3.2 *From Cairo Onwards*

Subsequent developments have reinforced the rights-focused approach to population issues developed at Cairo. The Fourth World Conference on Women held in Beijing the following year affirmed the concept of a right to reproductive health, and resulted in what has been called “the most thorough document ever produced by a United Nations conference on the subject of women’s rights”.⁸³ The conference adopted the existing parameters of the right to reproductive health, and specified that this included a “right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents.”⁸⁴ With reproductive rights considered as part of a broader discussion of women’s health, the final Declaration committed participant States to “[t]he explicit recognition and reaffirmation of the right of all women to control all aspects of their health, in particular their own fertility, is basic to their empowerment”.⁸⁵ Beijing therefore represents if not a significant advance, at very least a consolidation of a position on population that can only benefit the environmental cause and in turn, the broader human rights scheme.

Subsequent reviews of this declaration have been held at five-yearly intervals, and by and large have further affirmed this right of women to self-determination regarding fertility,⁸⁶ as well as continuing to set goals for the realisation of these

⁸¹ Ibid, p10.

⁸² “[D]onor nations have not met the financial targets set at Cairo; developing countries have not embraced Cairo thoroughly; more rhetorical obeisance than programmatic support has been given to Cairo.” Finkle, supra n 70 at 93; See also, “global funding priorities have begun to shift in other directions even though much remains to be done toward meeting the goals of the Cairo conference” Cohen, S. “The Broad Benefits of Investing in Sexual and Reproductive Health” (2004) *The Guttmacher Report on Public Policy* 7:1; p3.

⁸³ Choike [<http://www.choike.org/2009/eng/informes/1665.html>]

⁸⁴ Beijing World Conference on Women *Programme of Action* 1995; Para. 95.

⁸⁵ Fourth World Conference on Women, *Beijing Declaration*, Para. 17.

⁸⁶ The focus of these reviews has been on progress made as well as areas requiring action in the pursuit of the goals established in Beijing, rather than on the establishment of any new rights; “Briefing Paper: Beijing+5 Assessing Reproductive Rights” (November 2000) Centre for

rights.⁸⁷ While the +5 review in particular was characterised by “endless hours of unproductive exchange”⁸⁸ over reproductive rights and in particular, the inclusion of abortion as an element of reproductive health, nothing in the provisions has changed materially. Some NGO’s are now pushing for the organisation of a fifth World Conference on Women to be held in 2015 which would no doubt revisit these issues, though given the historical momentum behind reproductive rights it is unlikely that the right to reproductive freedom would be retarded in any significant way.⁸⁹ Indeed, the report from the Beijing+15 summit released in 2010 shows continued strong commitment to these rights:

The right to bodily integrity, including sexual and reproductive health, is fundamental to gender equality and women’s human rights... Women must be able to determine for themselves the spacing and the number of their children.⁹⁰

In the same year as the initial conference in Beijing, the Copenhagen Declaration on Social Development drew attention back to population’s environmental impacts, though being characteristic of the times placed a very light emphasis on the link between the two: “[c]ontinued growth in the world’s population, its structure and distribution, and its relationship with poverty and social and gender inequality challenge the adaptive capacities of Governments, individuals, social institutions and the natural environment.”⁹¹

2.3.3 *Population & Reproductive Rights in the 21st Century*

Reproductive Rights

[http://reproductiverights.org/sites/default/files/documents/pub_bp_Beijing+5.pdf].

⁸⁷ For example, the +5 review describes the new goal of “[u]niversal access to high quality primary health care throughout the life cycle, including sexual and reproductive health care, not later than 2015.” Angela King, Assistant Secretary-General and Special Adviser on Gender Issues and Advancement of Women, “The Global Perspective: Outcomes of Beijing+5 - Gender Equality, Development and Peace” (Keynote speech, The Commonwealth Secretariat and the United Nations Information Center, London, 4 December 2000).

⁸⁸ Center for Women’s Global Leadership, *Fifth World Conference on Women and the 2005 CSW Review of the Beijing Platform for Action*, (March 2003) [<http://www.cwgl.rutgers.edu/globalcenter/policy/csw03/beijing10.pdf>].

⁸⁹ An appeal to this end has been submitted to the Economic and Social Council: E/CN.6/2011/NGO/10.

⁹⁰ Economic and Social Council *Commission on the Status of Women - 2010 Report on the Status of Women* (2010) E/CN.6/2010/11; p39.

⁹¹ 14 March 1995, A/CONF.166/9; Paragraph 16(e).

The establishment of the Millennium Development Goals (MDG's) in 2000 has gone some way towards re-establishing a more balanced relationship between reproductive rights and environmental responsibility, as it becomes increasingly apparent that meeting the eight development goals by the 2015 deadline will be “difficult or impossible to achieve with the current levels of population growth in the least developed countries and regions”⁹². While the goals themselves “made no reference to population growth and gave no recognition of its impact”,⁹³ MDG 7 created a specific obligation to ensure environmental sustainability, which given the strong relationship between the two concepts implies some level of responsibility on behalf of States in managing population issues.⁹⁴ Population must also be considered in respect of the other goals: for example, renewed commitments to “eradicate extreme poverty and hunger”,⁹⁵ will necessarily require States to address environmental degradation and population growth; “[The poor] are in poverty because of the lack of capacity to exercise their reproductive rights... That raises enormous challenges for poverty reduction”.⁹⁶ That the Millennium Goals imply that States must promote responsible reproductive choice is widely recognised, as “expanded access to sexual and reproductive health services and protection of reproductive rights are essential to the achievement of the MDGs”.⁹⁷ In the more specific context of this paper (ensuring environmental integrity as a means to achieve other human rights goals), if the requirement upon States is to “spare no effort” in the achievement of environmental sustainability, and if “[p]roviding sexual and reproductive health services, and avoiding

⁹² British All Party Parliamentary Group on Population, Development and Reproductive Health , supra n 70 at p4.

⁹³ Ibid, p3.

⁹⁴ The actual scope of the obligation is that States must “spare no effort to free all of humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities, and whose resources would no longer be sufficient for their needs.” United Nations Millennium Declaration (2000) A/RES/55/2. “Thus, while increasing family planning use is not one of the MDGs, a strategy to increase contraceptive use by reducing the unmet need for family planning can play a valuable complementary role and help countries to move closer to achieving their MDGs by freeing up resources to meet these goals while at the same time saving lives.” U.S. Agency for International Development (USAID) *Achieving the Millennium Development Goals: The contribution of fulfilling the unmet need for family planning* (May 2006) pvii.

⁹⁵ Millennium Development Goal 1.

⁹⁶ Dr Rogelio Castilla, Director, Country Support Team, United Nations Populations Fund, “Oral evidence to the British All Party Parliamentary Group on Population, Development and Reproductive Health” (19 June 2006), quoted as at supra n 70 at 21.

⁹⁷ United Nations Development Programme, *Population, Reproductive Health and the Millennium Development Goals* (2005), p iv.

unwanted births, can help stabilize population numbers... and balance natural resource use with the needs of the population” then it is obvious that States are obligated to do so.

A review of the MDGs was held in 2010, and further affirmed international commitment to these goals⁹⁸ – though again the Summit Outcome Document fails to explicitly recognize population growth as a MDG issue, a move described by some observers as a “major oversight”: “it is startling that global development structures do not take account of this increasing squeeze on resources.”⁹⁹ On a more positive note, the review has led to the introduction of the Global Strategy for Women’s and Children’s Health, which is essentially a campaign promoting the importance of and seeking increased funding for health in the achievement of the MDGs. So far, \$40 billion has been pledged towards the programme which includes contraceptive initiatives, though it is not yet known how those funds will be allocated.¹⁰⁰

Another promising future development is the prospect of population growth being addressed at the forthcoming Conference on Sustainable Development (referred to as Rio+20) to be held in 2012.¹⁰¹ While the subject is not yet identified as being a key theme, the Secretary-General of the conference has called for population growth to be explicitly included in the discussions, recognising that “population growth [is] a critical emerging challenge for sustainable development”, and further, “the discussion on fertility and population growth cannot be carried out in isolation. It is an issue at the root of sustainable development. It has everything to

⁹⁸ A/RES/65/1, 19 October 2010.

⁹⁹ UK House of Commons International Development Committee *The 2010 Millennium Development Goals Review Summit Second Report of Session 2010-2011* (14 December 2010) p26.

¹⁰⁰ UNFPA “Lao PDR announce new commitment to save women and children” (press release, 9 June, 2011) [http://countryoffice.unfpa.org/lao/2011/06/09/3412/lao_pdr_announce_new_commitment_to_save_women_and_children/].

¹⁰¹ The designation ‘+20’ refers to the fact that this conference is designed as the 20 year follow-up to the original Rio Summit of 1992, formally referred to as the United Nations Conference on Environment and Development. This event was a key milestone for the environmental agenda, covering such topics as sustainable production, climate change, biodiversity, water scarcity, and other topics perceived to be of high priority for the international community.

do with whether we are able to achieve socially equitable and environmentally sustainable economic progress.”¹⁰²

We can thus see from the above analysis that reproductive rights are well established in international law, centred on the concept of free and responsible choice, and inclusive of access to the contraceptive technologies that this implies. At the same time there is an on-going conflict between the desire to respect the personal autonomy of individuals in their reproductive choices, and the need to slow or reverse population growth to ease the strain on the planet’s resources. How then are States to reconcile these two objectives and manage population issues in a way that protects both the environment –necessary for the achievement of human rights to food, water, and health – and the reproductive rights set out above? This paper will now examine some past examples of population policy, with the goal of evaluating how successful previous strategies have been in walking this fine line.

2.4 Lessons Learned – A Brief Overview of some Human Rights/Population Policy tensions

The first and perhaps most important lesson to take from past examples of population policy is that coercion is not only contrary to the reproductive rights discussed above, but also an unsuccessful strategy for creating long term demographic change. Any population policy which tries to forcibly determine the number of children a person has runs the risk of violating some or all of the following rights: the right to security of the person,¹⁰³ the right not to be subjected to torture or to cruel, inhuman or degrading treatment or punishment,¹⁰⁴ the right

¹⁰² Statement by Mr. Sha Zukang, Under-Secretary-General for Economic and Social Affairs, Secretary-General of the 2012 UN Conference on Sustainable Development, “Agenda Item 5: General Debate on the Further implementation of the Programme of Action of the International Conference on Population and Development in light of its twentieth anniversary” (13 April 2011) [<http://www.un.org/en/development/desa/usg/statements/44-session-commission-population-development-agenda5.shtml>].

¹⁰³ Article 9, ICCPR.

¹⁰⁴ Article 7, ICCPR.

to found a family,¹⁰⁵ the right to be free from arbitrary or unlawful interference with the family,¹⁰⁶ the right to health,¹⁰⁷ and of course, the right to reproductive health.¹⁰⁸ Because those most likely to become victims of coercive population policies are likely to also belong to some particular group –such as an ethnic minority, the medically vulnerable,¹⁰⁹ or the very poor– such practices can also raise questions around violations of the rights relating to equality and non-discrimination,¹¹⁰ including gender,¹¹¹ disability,¹¹² and social class.¹¹³ As if any additional confirmation of illegitimacy were needed, a General Recommendation has also been issued under CEDAW stating that “[c]ompulsory sterilization or abortion adversely affects women's physical and mental health, and infringes the right of women to decide on the number and spacing of their children.”¹¹⁴ Despite the inevitability of violating at least some of these rights, both India and China have resorted to force in past population policies.

In India, the 1970's heralded the peak of the government-initiated frenzy surrounding population growth, which saw forced sterilisation peak at 8.1 million per year.¹¹⁵ While initial efforts focused on male slum dwellers, later sterilisation programmes focused on women: even today, sterilisation accounts for 75% of total contraception – and 95% of sterilisations are female.¹¹⁶ Besides the highly questionable nature of these actions both in terms of the procedure itself, and its discriminatory target audience, it has since been noted that this policy also failed

¹⁰⁵ Article 23, ICCPR, as well as Article 10, ICESCR.

¹⁰⁶ Article 17, ICCPR.

¹⁰⁷ Article 12, ICESCR.

¹⁰⁸ Article 16(e), CEDAW.

¹⁰⁹ Recent action has highlighted the problem of HIV-positive women being subjected to forced sterilisation in Namibia; see “Submission to Human Rights Council’s Universal Periodic Review (UPR) of Namibia” (July, 2010) Namibian Women’s Health Network [http://lib.ohchr.org/HRBodies/UPR/Documents/Session10/NA/NWHN_TheNamibianWomen%20%80%99sHealthNetwork-eng.pdf].

¹¹⁰ Article 2, UDHR; Articles 2, 27, & 27 of the ICCPR; Article 2, ICESCR; Article 1, CERD.

¹¹¹ All of the above, as well as numerous other provisions, including Article 2 of CEDAW.

¹¹² Article 23, Convention on the Rights of Persons with Disabilities

¹¹³ Article 2, ICESCR prohibits discrimination on many grounds, including “social origin”, “property”, or “other status”.

¹¹⁴ CEDAW General Recommendation 19, A/47/38; para. 22.

¹¹⁵ Van Hollen, C. “Moving Targets: Routine IUD Insertion in Maternity Wards in Tamil Nadu, India” (1998) *Reproductive Health Matters* 6, p98; Parker, M. “Two Sides of the Same Coin: Considering Human Rights When Designing Environmental Policy” (2009) *Journal of Land Use* 25:1, p123.

¹¹⁶ Menon-Sen, K. & Kumar, A. *Women in India – How free? How Equal?* Report commissioned by the Office of the Resident Coordinator in India (2001).

on the environmental front – it did not create widespread change in reproductive behaviours: “the dismantling of coercive family planning programs implemented in India under Indira Gandhi resulted in a substantial backlash against family planning”,¹¹⁷ with the experience creating “a population that mistrusts government efforts to deal with increasing population growth”¹¹⁸ thereby jeopardising future efforts in this regard.

China’s well-known One Child policy provides another example of the failure of coercion as a population policy tool. The policy applies a set of incentives for couples to have only one child,¹¹⁹ as well as disincentives for those who might consider more;

“Among the incentives offered by provincial governments to families limiting themselves to one child were monthly welfare or nutritional allowances; priorities in housing, education, and medical care; and expanded maternity benefits. Among the disincentives for offenders were fines for extra births; deduction of a percentage of salary; and withdrawal of maternity leave, health coverage, and allowances. The Chinese program is also characterized by intense peer pressure targeted at those who, by having more than one child, put their ‘selfish’ interests over those of their community.”¹²⁰

In the event that the above measures prove ineffective in discouraging couples from having more than one child, the threat of physical coercion from the State looms - though technically outlawed in 2002, the use of direct force as well as physical intimidation, damage to property, and psychological persecution

¹¹⁷Abrams, P. “Population Control and Sustainability: It’s the same old Song but with a Different Meaning” (1997) *Environmental Law* 27, p1129. See also Hartmann, B. *Reproductive Rights and Wrongs* (South End Press: Boston, 1995) p252; Also Faison, S. “Chinese Happily Break the One Child Rule” *The New York Times* (New York, 17 August 1997).

¹¹⁸Boland, R. “The Environment, population and women’s human rights” (1997) *Environmental Law* 27:4, p1140; “[T]he post-emergency backlash threw the program back by a crucial decade... family planning became a dirty word” Singh, K. *Autobiography* (Oxford University Press: Delhi, 1994) xvi.

¹¹⁹ The policy, contained in the Law of the People’s Republic of China on Population and Family Planning (particularly, Article 18), does permit couples to have more than one child under certain circumstances – for example if they live in a rural area or belong to an ethnic minority; Xiaofeng, G. “Most People Free to Have More Children” *China Daily* (11 July 2007) [http://www2.chinadaily.com.cn/china/2007-07/11/content_5432238.htm].

¹²⁰ Freedman, L. & Isaacs, S. “Human Rights and Reproductive Choice” (1993) *Studies in Family Planning* 24:1, p25.

continues to be documented.¹²¹ The implementation of the policy has therefore indisputably led to the violation of human rights. While no amount of progress in easing environmental pressure can compensate for these violations, it is exactly these societal benefits which the Chinese government uses to justify its deprivation of individual rights – so are these claims of population miracles valid? While the lifetime fertility rate fell from 2.75 in the year the policy was introduced, to just 1.54 today,¹²² it is important to note that the Chinese population growth rate was already on a path of rapid decline prior to the introduction of the policy.¹²³ It is estimated that a ‘natural’ change down to a total fertility rate of around 2.1 could have been expected in the absence of the policy. While it is estimated that this difference between the ‘natural’ value and that resulting from the policy “releases 24% more resources for the family and national investment”, there are questions as to whether these gains would last were the coercive elements of the policy lifted.

“[T]he less obvious point about coercive family planning practices is that *they are not necessarily any more effective than programs respecting individual choice*. Research comparing China’s fertility rates with fertility rates in the Indian state of Kerala, which is characterised by voluntary programs and advances in education, health and status of women, showed lower fertility rates in Kerala despite a higher fertility rate originally.”¹²⁴

The above examples show that any political strategy that truly aims to address the long-term environmental consequences of a population-resource imbalance cannot rely on force as a means to achieving a sustainable change in reproductive behaviour. Not only does such a track inevitably lead to violations of reproductive and other human rights, but it fails to address the motivations behind high fertility – any slackening of the coercive measures is likely to lead to a return to previous

¹²¹As recently as 2008 “instances of local birth-planning officials using physical coercion to meet government goals” have been documented, a process which may very well continue today; at the very least other forms of coercion including psychological pressure and forced detention continue to be widespread. U.S. Department of State *2008 Human Rights Report: China* (Feb 2009); U.S. Department of State *2010 Human Rights Report: China* (Apr 2011).

¹²² The policy was first introduced in 1979, though only properly codified in 2002; Estimate of 2011 total fertility rate drawn from the US Central Intelligence Agency *World Factbook 2011* “China” (Washington: DC, 2011).

¹²³Potts, M. “China’s One Child Policy” (2006) *British Medical Journal* 333, p361.

¹²⁴Abrams, P. *supra* n 117 at 1129. See also Sen, A. “Fertility and Coercion” (1996) *University of Chicago Law Review* 63, p1035.

levels of elevated birth rates. In other words, we cannot force people to have fewer children – it is not only wrong both legally and ethically, but ultimately also ineffective as a long-term strategy for reducing environmental pressure and thus improving global standards of living. In the absence of coercion, States are instead left with the strategy of motivating individuals to choose low fertility. Some proven strategies for achieving this in a way that aligns with human rights values are explored in the following section of this paper.

2.5 Setting out a Human Rights Approach to Population

Chapter One of this thesis sought to establish the need for States to recognise the imperative of environmental protection as a precondition for the achievement of human rights, as well as establishing the capacity for human rights protection to facilitate the protection of the environment. In the discussion above, this thesis has considered the case for population management (in conjunction with efforts to move towards lower per capita consumption) as a key tool to preventing environmental degradation and the negative impacts on the achievement of the legally guaranteed rights to life, food, water and health that accompany it. A brief examination of the human rights ‘risks’ of attempts to manage population growth rates has revealed the sometimes unsavoury aspects of such policies historically, at least partially explaining the shadow of human rights abuse that has so dogged discussions of this topic. The remainder of this paper will be dedicated to the task of demonstrating that far from being a questionable practice of State manipulation, population management can be the means to achieve a great many of the key determinants of a world in which human rights are truly a universal reality.

It is contended that not only is the realisation of human rights the goal of population management, but that it is also the means by which such a goal can be achieved. To frame the argument more simply, in order to achieve human rights, we must enforce human rights. This is not as self-evident as it may appear, since, as the discussion which follows will demonstrate, the type of human rights required to be enforced may not obviously correlate to the human right for which

such enforcement is needed: it is not immediately apparent to the uninformed observer what dividends the enforcement of the right to education may pay out in terms of the human right to adequate food. However, it is now widely recognised among human rights observers (and equally well established in law) that human rights generally are interrelated, depending on and feeding into one another to the point where the link is so strong as to be undeniable. In terms of the current example under discussion, it is greatly encouraging to find that in a field most often dominated by dire predictions and disheartening statistics, the positive tool of human rights law provides our best hope: “[t]he most effective solution to the population problem also happens to be the most ethical.”¹²⁵ This idea of existing human rights as the best means for States to manage population growth and thereby meet their environmental duties inherent to those human rights mechanisms will be focus of the following section.

2.5.1 Necessary Rights for a Sustainable Population

In absolute terms the need for population management is one that is set only to increase as the rise in human numbers leads to a corresponding rise in the demographic most affected by such policies: “the number of women of reproductive age will rise from 1.3 billion in 1990 to 2.1 billion by 2050.”¹²⁶ It is therefore vital that a strategy is promptly developed which will provide these women and their families with the tools and motivation to make reproductive decisions that are responsible in terms of the environment and thus human rights. This focus on women is not only consistent with the rights-based programme developed at Cairo, but also reflects the reality that the most effective way to reduce population growth in the long-term is to make improvements to the lives of women. Enforcing the human rights which are already the legal entitlement of women is therefore not only a step forward on that front alone, but is also (as will be shown) the best way to reduce population growth rates and thereby ease environmental pressure.

¹²⁵ Abrams, *supra* n 117 at 1134.

¹²⁶ UNFPA, *Healthy Expectations: Celebrating Achievements of the Cairo Consensus and Highlighting the Urgency for Action* (2009) p11.

This approach recognises the responsibility that women have in making reproductive choices, but equally recognises that “women have this kind of responsibility to society only when society fulfils its responsibility to them by treating them with dignity, respect, and equality, and by meeting basic social needs.”¹²⁷ Achieving these goods will require the fuller realisation of a number of existing human rights provisions, without which any population policy cannot succeed in providing a long-term, rights-compliant brake on population growth. There are essentially four key rights which, if fully realised, have the potential to dramatically change reproductive behaviour in favour of smaller families – access to contraception, education, health, and gender equality. These four rights are strongly interconnected, with advances in one often paying dividends in another.

2.6 Access to Contraception

The first element of this approach is also arguably the most important, and draws upon the right to reproductive health previously set out in this Chapter. It is important to recall that the right of access to contraception is not reliant on any generous interpretation of the right to health, but is instead a right that has been explicitly enumerated in Article 16 of CEDAW as the right of persons to “decide freely and responsibly on the number and spacing of their children and to have access to the information, education and *means to enable them to exercise these rights*”.¹²⁸ States are thus already legally obligated to meet the demand for contraception, and a recent United Nations Population Fund report has reiterated this fact in its clear statement that “[c]ontraceptive information and services are a human right”, based upon “the right to equality and non-discrimination; the right to privacy; the right to determine the number, spacing, and timing of one’s children; the right to life; the right to health; the right to information; the right to enjoy the benefits of scientific progress; and the right to be free from torture or cruel, inhuman, or degrading treatment.”¹²⁹

¹²⁷ Freedman & Isaacs, supra n 120 at 25.

¹²⁸ CEDAW, Article 16(e) [emphasis mine].

¹²⁹ UNFPA & the Centre for Reproductive Rights *Briefing Paper: The Right to Contraceptive Information and Services for Women and Adolescents* (2010) USA p6.

Despite the fact that most States are therefore already under this obligation,¹³⁰ and despite the centrality of the realisation of this right to population goals, the statistics for unmet contraceptive demand show that these obligations are not currently being met – United Nations estimates suggest that more than 215 million women worldwide are not having their contraceptive needs met – these women “want to postpone their next pregnancy but are not using modern contraceptives, either because they don’t have access to them or because their families object.”¹³¹ In developing countries, often singled out for their high growth rates, the problem is particularly severe as “one in four sexually active women who want to avoid becoming pregnant have an unmet need for modern contraception. These women account for 82% of unintended pregnancies in the developing world.”¹³² This figures are extremely telling as much of the discussion around population policies proceeds as though the difficulty lies in convincing people of the benefits of having fewer children, when the reality is that a huge proportion of the fertile demographic would choose to have a smaller family were the option available. This is evident from the experience of countries where increased access to contraceptives has had a downward effect upon fertility – which is nearly everywhere: “All societies with unconstrained access to fertility regulation, including abortion, experience a rapid decline to replacement levels of fertility, and often lower.”¹³³ As such, a large part of continued population growth can be attributed not –or at the very least, not solely- to a failure of States to motivate people toward lower fertility, but simply to an absence of ability for families to make the reproductive choices that they otherwise desire. As much as 38% of population growth¹³⁴ can be attributed to the fact that women who want to have

¹³⁰ While many State parties have entered reservations to CEDAW, Article 16 is not the most problematic clause and most have agreed to be bound by its terms. A list of the reservations can be found on the UN Division for the Advancement of Women’s website

[<http://www.un.org/womenwatch/daw/cedaw/reservations-country.htm>]

¹³¹ UNFPA Dispatch “New Report: Linking Contraceptives to Human Rights” (March 24, 2011) [<http://www.unfpa.org/public/home/news/pid/7427>]. Besides an inability to access contraception, there are a number of factors influencing contraceptive use: women may be concerned about the health risks of using contraception, they may object to using contraception on personal grounds, have a partner who objects, or simply be unaware of the existence of modern methods. Darroch, J. Sedgh, G. & Ball, H. *Contraceptive Technologies: Responding to Women’s Needs* (Guttmacher Institute, April 2011) p15.

¹³² *Ibid*, p1.

¹³³ Potts, M. “Sex and the Birth Rate” (1997) *Population and Development Review* 23:1.

¹³⁴ Speidel, J., Weiss, D., Ethelston, A. & Gilbert, S. “Family Planning and Reproductive Health: The Link to Environmental Preservation” (2007) *Population and Environment* 28; p250.

fewer babies are not able to do this, and simply meeting this basic need could have a tremendous effect on the success of population policies: “[i]n many countries, targeted demographic goals could be achieved simply by satisfying existing demand for contraception.”¹³⁵ Educating both men and women about contraception methods and side-effects, increasing a woman’s power in domestic situations, and most importantly, *actually providing access* to contraception in a way that truly makes it a realistic option would drop birth rates dramatically.

Improving access to contraception is perhaps the aspect of the proposed approach that most closely echoes traditional population policy tactics, in that it centres around increasing the use of contraceptive technologies. Unlike some of the policies adopted in the past however, the focus of this approach is not to impose the use of contraception from without, but to empower those who would *already choose* to adopt such practices with the means to do so. Women are thus seen not as victims of such a policy, but as the drivers of their own change. Access to contraception must mean exactly that: that methods are available for those who want to use them. There must be conscious acknowledgement that just as a failure of access amounts to a breach of human rights law, so to does unfair pressure or coercion. Providers must thus be very careful to provide accurate information and contraceptive care without pressuring people to make choices that do not reflect their personal wishes.

The interrelated nature of the four approaches to population control begins to be revealed when one considers the role of education in influencing access to contraception – the less educated a woman is, the more likely she is to lack the means to control her fertility.¹³⁶ While this undoubtedly reflects an inequity in knowledge about contraceptive technologies, it also indicates the advantages of education in providing both the confidence and often, independence and financial means to access and use these tools. Indeed, the key determinants of contraception

¹³⁵ Abrams, *supra* n 117 at 1128.

¹³⁶ “Education is closely linked to the use of contraception: more educated women are more likely to use family planning.” Robinson, K. *Education and Traditional Contraceptive Use: An Analysis of Nine Countries Using Demographic and Health Survey Data* (The University Center for International Studies, The University of North Carolina at Chapel Hill, 1996) p3. See also later discussion of education at page 46 of this document.

uptake are “women’s education and labour force participation, improvements in child survival, and changing social expectations”,¹³⁷ all of which are addressed under the rights discussed in this approach. As a result of advances in these rights, significant new demand for fertility control can be expected to emerge and providing the contraceptive resources required to allow them to do this will be a task that can only increase in scale and importance.

Another example of the feedback system that comes into play with this approach to population policy is that of contraception’s role in lowering the infant mortality rate. Women who can control their fertility are more likely to wait longer after the birth of a child before conceiving another one. Not only does this reduce lifetime fertility rates, but it also frees up the time, health and nutritional resources of the mother, giving babies a better chance of survival; “When a woman becomes pregnant less than six months after a previous birth, her baby is 2.5 times more likely to die than a child conceived three years after the previous birth.”¹³⁸

It is all too easy to imagine the cost of providing contraception being cited as a potential barrier to access. While ensuring that adequate contraception is available for those who wish to use it will require an outlay of resources that many States may claim is not possible for them to achieve, the return on such an investment is significant. For every dollar spent on avoiding an unwanted pregnancy, States make savings in the form of the costs of securing rights to food, health, education, and so forth.¹³⁹ Even besides the costs to society of women bearing children that they neither want nor feel that they can support, providing women with the means to control their fertility will lead to savings in other areas – for example in health and education.¹⁴⁰

¹³⁷ UNFPA *Healthy Expectations*, supra n 126.

¹³⁸ UNFPA, supra n 126 at 4.

¹³⁹ To take health costs as an example, “family planning expenditures are more cost effective in reducing infant deaths than general non hospital health expenditures. Even considering only the effect of family planning programs in reducing the risk of infant death and ignoring the effect of the programs in reducing deaths through the reduced number of births, the cost per death averted ... is less.” Barnum, H. World Bank Population & Human Resources Department Working Paper, *Interaction of Infant Mortality and Fertility and the Effectiveness of Health and Family Planning Programs* (1988) p27.

¹⁴⁰ USAid, “Family Planning and the MDGs: Saving Lives, Saving Resources” (June 2009), esp. p3.

For all the future dividends it provides, the immediate cost of meeting unmet demand for contraception is not so great as to be unachievable. It is estimated that the cost of meeting one year's worth of global contraceptive demand would be equivalent to only two week's worth of the total global military budget.¹⁴¹ Even in the mid-term, action on this front provides a solid return:

“In many countries, every dollar spent on family planning saves at least four dollars that would otherwise be spent treating complications arising from unplanned pregnancies”¹⁴²

Arguably, meeting the unmet demand for contraception is one of the key ways in which the kind of transboundary obligation that will be discussed in Chapter Three might be met. Since it is in the interests of all States to reduce population growth globally in order to secure a fully functioning environment, it is further arguable that should a State require international assistance in providing adequate contraception to meet the needs of its people then refusal would not only be short-sighted, but potentially illegal under existing human rights law.

The importance of this basic element of population policy – providing fertility control for those who do not currently have access to such – cannot be overstated. A comprehensive redirection of resources towards achieving this right is an essential part of an approach to reducing the environmental harm caused by excessive population growth, with a view to the eventual achievement of the rights to life, food, water and health. The more holistic ‘reproductive health’ position adopted at the Cairo conference has succeeded in raising awareness of other needs besides the pure provision of contraception, but it is argued that this has also led to a diversion of funds from what can be called the front line of any population policy.¹⁴³ While the introduction of the Millennium Goals has created new pressure to meet global needs, funding for family planning programmes has

¹⁴¹ Mitchell, J. “Before the Next Doubling” (1998) *Worldwatch* p26. “World military expenditure is estimated to have been \$1630 billion in 2010” *Recent Trends in Military Expenditure* Stockholm International Peace Research Institute [<http://www.sipri.org/research/armaments/milex/resultoutput/trends>].

¹⁴² United Nations Secretary-General (ed.), *Global Strategy for Women's and Children's health* (The Partnership for Maternal, Newborn and Child Health, 2010), Ch 3.

¹⁴³ Finkle, J. “Impact of the 1994 Conference on Population and Development” (2002) in *Population Bulletin of the United Nations: Completing the Fertility Transition* 48/49.

simultaneously declined.¹⁴⁴ The irony of this has not been lost on commentators, as “[t]he failure of the U.S. and other donor nations to make good on promises to expand voluntary family planning services, more than any other single policy failure, could impede progress on all the other MDG goals.”¹⁴⁵ It is thus vital that this trend be reversed, and a reconcentration of political energy and resources towards the universal provision of contraception be encouraged.

While the problem of unmet demand is an old one, this does not obviate the fact that the provision of contraception remains arguably the most important element of any population policy in terms of ensuring the effectiveness of the overall strategy. Advances in the availability of contraception would lead to immediate reductions in fertility; in addition, the success of the rights discussed below in further influencing reproductive choices depends upon such access. The rights to education, health, and gender equality will only be effective in changing reproductive behaviour if the increased demand for contraception that the realisation of these rights is likely to lead to can be met. This right is thus the cornerstone of a human rights approach to population policy.

2.7 The Right to Education

The second element of a human rights approach to population control is that of education, and more specifically, *women’s* education. The right to education has a long history in international law, particularly as part of the UDHR and in Article 13 of the ICESCR.¹⁴⁶ Article 10 of CEDAW goes further in explicitly recognising the right of women to education, requiring States to ensure that educational

¹⁴⁴“Global funding for family planning programmes has dropped from 55% to just 5% of total funding for population programmes.” Sardjunani, N. Delegation of the Republic of Indonesia, Submission to the Commission on Population and Development, Agenda Item 5: Programme Implementation and future program of work for the Secretariat in the field of Population (April 2009) [http://www.un.org/esa/population/cpd/cpd2009/Country_Statements/Indonesia_AgendaItem5.pdf]. Also, “donor assistance dedicated to family planning has decreased substantially in absolute dollar amounts in recent years” UNFPA, *Adding It Up* (2009) p7. Also see UN World Contraceptive Use 2011 graphic in Appendix.

¹⁴⁵Wetter, J. “Is Rapid Population Growth Impeding Progress on the MDGs?” (2009) *Population Matters* Population Institute [<http://blog.populationinstitute.org/2009/08/18/is-rapid-population-growth-impeding-progress-on-the-mdgs/>].

¹⁴⁶ UDHR, Art. 26.

opportunities are available equally to both men and women, and that particular emphasis is given to “access to specific educational information to help to ensure the health and well-being of families, including information and advice on family planning”.¹⁴⁷

That education is a key influence of reproductive behaviour is well established: “the health of women and their control over their reproductive lives are closely tied to their level of education.”¹⁴⁸ Education seems to influence fertility in three key ways: it raises the average age at which women get married, it increases the likelihood that they will use contraception, and it leads people to desire a smaller family size.¹⁴⁹ The relationship is particularly strong when girls receive secondary schooling.¹⁵⁰ It is immediately apparent why achieving universal education for women influences reproductive behaviour towards smaller families. In the first instance, it increases the likelihood of women having a basic understanding of hygiene and disease mechanisms – things like knowing the importance of basic nutrition, knowing basic germ warfare strategies like the washing of hands, and knowing when to seek medical assistance. These seemingly small advances in knowledge have a huge influence on overall health, in turn increasing the likelihood of the children of such women surviving.¹⁵¹ As will be discussed, a lower infant mortality rate leads to a reduction in lifetime fertility,¹⁵² so the advantages of education even in this small respect are already huge. “Educated

¹⁴⁷ CEDAW, Art. 10(h).

¹⁴⁸ “Girls who have been educated are likely to marry later and to have smaller and healthier families.” UNFPA “Empowering Women through Education” in *Promoting Gender Equality* (2008) [<http://www.unfpa.org/gender/empowerment2.htm>]; see also Sullivan, D. “Women’s Human Rights and the 1993 World Conference on Human Rights” (1994) *The American Journal of International Law* 88:1, p162.

¹⁴⁹ Commission on Behavioral and Social Sciences and Education *Critical Perspectives on Schooling and Fertility in the Developing World* (1999: The National Academies Press) p25

¹⁵⁰ Ibid.

¹⁵¹ “Better-educated mothers in developing countries experience lower infant and child mortality rates, presumably reflecting... their more knowledgeable response to disease and their more positive attitudes towards medical care.” Shapiro, D. & Tambashe, B. “The Impact of Women’s Employment and Education on contraceptive Use and Abortion in Kinshasa, Zaire” (1994) *Studies in Family Planning* 25:2, p98. “Mothers with more education generally have higher ‘health literacy’ - they know the importance of basic hygiene and nutrition for their families’ health. Educated mothers are far less likely to have undernourished children.” UNFPA report, *Healthy Expectations*, (2009) p15.

¹⁵² See the following discussion in this Chapter on reducing the IMF; Aarssen, L. “Why Is Fertility Lower in Wealthier Countries? The Role of Relaxed-Fertility Selection” (2005) *Population and Development Review* 31:1, p116.

women can recognize the importance of health care and know how to seek it for themselves and their children.”¹⁵³

Education of women has another disproportionately large pay-off in terms of fertility – it increases economic and social status. The likelihood of a woman taking up employment or assuming a public position is greatly enhanced as her level of education rises.¹⁵⁴ This in turn increases the chances of a heightened economic status. All of these factors help women to gain independence – if a woman is valued beyond the confines of the home, she is more likely to seek such opportunities rather than restricting herself to childbearing and homemaking as the only prospect of achieving ‘value’ in society. Likewise, if a woman can achieve some level of economic worth besides as a producer of child labour, the males in her life are less likely to encourage large families at the expense of liquid capital. On a more prosaic level, an educated woman is more likely to be aware of contraceptive options, and less fearful of the process of obtaining and using such. Thus we can see that “education can influence women’s reproduction in several ways: by increasing knowledge of fertility, increasing socioeconomic status, and changing attitudes about fertility control”.¹⁵⁵ The statistics strongly bear out this link between female education and fertility: “women with no education want more children than women with primary or higher education.”¹⁵⁶ One example of this truth in action can be found in Ethiopia, where “women with a high-school or higher education want just 1.5 children, while Ethiopian women with no education want an average of 4.6 children.”¹⁵⁷ The Indian state of Kerala provides another example, where the normal pattern of fertility decline has been defied, achieving a two-child family norm and a replacement level birth rate despite a consistently high level of poverty – a success often attributed to its 100% literacy

¹⁵³UNFPA, *Empowering Women through Education* (2008)
[<http://www.unfpa.org/gender/empowerment2.htm>].

¹⁵⁴ “Employment of women in the modern sector is largely restricted to those who have completed at least some secondary school, and the likelihood of such employment increases sharply as women’s schooling increases through the secondary level and to the university level”. Shapiro, *supra* n 151, p97.

¹⁵⁵Robinson, K. *Education and Traditional Contraceptive Use: An Analysis of Nine Countries Using Demographic and Health Survey Data* (The University Center for International Studies, The University of North Carolina at Chapel Hill, 1996) p3.

¹⁵⁶UNFPA, *supra* n 126 at 17. See also the graph at Figure 1 in the appendix to this paper.

¹⁵⁷*Ibid.*

rate.¹⁵⁸ Iran provides yet another national example, where the 1980's and '90's saw fertility plummet as women's access to education and literacy rates climbed.¹⁵⁹ In terms of overall gains, improving access to education for women should be an absolute priority of any population policy as it reduces fertility motivation on a number of fronts. When provided in conjunction with universal access to contraception, no other approach supplies the same 'value for money' as ensuring universal education, since the gains for the State lie not only with reduced fertility, but a flow-on reduction in health costs and a broadening of the economic resource base as the available workforce grows proportionate to the number of women taking up these new opportunities.

2.8 The Right to Health: Reducing the demand for high fertility

The third prong of this human rights approach to population management is to enforce the human right to health as contained in the ICESCR, CRC, and CEDAW, particularly as it relates to neonatal and early childhood health. The right to health guaranteed in the first of these instruments includes "[t]he provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child"¹⁶⁰, while Article 12(2) of CEDAW specifically obliges States to "ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation"¹⁶¹. To further emphasise the obligation of States in this regard, Millennium Development goals Four and Five require large reductions in both infant and maternal mortality. A greater concentration of resources towards the full realisation of these rights is one of the key steps that must be taken in any attempt to lower worldwide fertility and thus ensure the protection of all *other* rights. That lowering the infant mortality rate is an important goal in itself is not in question, as preventing

¹⁵⁸ McKibben, B. "The Enigma of Kerala: One State in India is proving Development Experts Wrong" *Double Take* (Colorado, 1995).

¹⁵⁹ Obviously, accompanying improvements in access to contraception permitted this huge decline in birthrates to occur. Hoodfar, H. & Assadpour, S. "The Politics of Population Policy in the Islamic Republic of Iran" (2000) *Studies in Family Planning* 31:1, pp19-34.

¹⁶⁰ ICESCR, Article 12(2)(a).

¹⁶¹ CEDAW.

needless death –particularly of a child- is naturally recognised as an essential duty of those who subscribe to the very idea of human rights.¹⁶² However, an added and often overlooked bonus is the flow-on change in reproductive behaviour that broadly corresponds to a reduction in childhood deaths. It is estimated that the universal provision of family planning together with health services would prevent as many as 44% of newborn deaths¹⁶³ - a drastic reduction by any measure.

The relationship between IMR and fertility is fairly self-evident, as “[l]ower infant and child mortality can lead to lower fertility rates through a reduced need for replacement births to achieve a given target family size”.¹⁶⁴ In other words, parents who appreciate that a child has no assurance of survival are much more likely to have multiple births, to ‘insure’ against the inevitability of one, if not more, of those children dying. Meeting the right to health and more specifically, the right to maternal and neonatal health should thus be a priority of those wishing to limit fertility, as doing so removes much of the underlying motivation for larger families.

States wishing to influence fertility in this way must take direct action in implementing the right to maternal and neonatal health through the provision of basic medical advantages such as vaccines, antibiotics, and midwifery care.¹⁶⁵ The importance of contraception as a further tool for lower infant mortality rates has already been discussed, as well as the impact of education for the same. Fewer children, born further apart, place less tax on a mother’s health and family resources, increasing the likelihood of a healthy baby. While women remain the primary caregivers of young children, their knowledge of nutrition and hygiene

¹⁶² This duty in its most basic form will be discussed regards the right to life on page 81 of this document.

¹⁶³ UNFPA & Guttmacher Institute, *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*; p5. It should be noted that this statistic includes the gains made from the provision of basic neonatal care as well as access to contraception.

¹⁶⁴ Barnum, H. World Bank Population & Human Resources Department Working Paper, *Interaction of Infant Mortality and Fertility and the Effectiveness of Health and Family Planning Programs* (1988) p3.

¹⁶⁵ Regarding the importance of midwives, “Up to two thirds of newborn deaths could be prevented if skilled health workers perform effective health measures at birth and during the first week of life” WHO Fact sheet N°333 *Newborns: Reducing Mortality* (August 2009).

has a direct influence on their ability to prevent life-threatening disease in their children. While a lowered IMR will not immediately create a lowered fertility rate,¹⁶⁶ and questions remain as to the nature of the relationship,¹⁶⁷ the link is nevertheless strong enough that it cannot be ignored. Full realisation of the right to health is thus an integral part of a human rights approach to population control. In this respect, we find that the rights to food and water will again emerge as examples of the interdependence of human rights – given their importance in terms of permitting the right to health to be achieved, it is imperative that nutrition and sanitation are addressed as part of the package of rights aimed at reducing population growth.¹⁶⁸

2.9 Gender Equality: Social, Legal, Economic & Cultural

The fourth and final way in which States can significantly influence reproductive behaviour is also the most difficult to achieve, as it relies on changing underlying attitudes and societal norms. On the other hand, advances in this area underpin the realisation of the rights discussed previously, meaning that it cannot be ignored in any practical discussion of changing fertility behaviour. Improving the equality of women in social, legal, economic and cultural terms is vital to the ability of women to exercise their other rights, and a responsibility that has long existed in international law. The right to gender equality has a strong history, dating back to Article 2 of the UDHR with its broad prohibition of discrimination on the grounds of sex.¹⁶⁹ The right is also contained in the Vienna Declaration, requiring “the full and equal participation of women in political, civil, economic, social and cultural life, at the national, regional and international levels, and the eradication of all forms of discrimination on grounds of sex”¹⁷⁰. However, in terms of legal weight the right is perhaps best set out in CEDAW, with Article 5 specifically addressing the problem of raising the social status of women by requiring that

¹⁶⁶ There will be a natural time-lag between lowered mortality and a shift towards lower fertility.

¹⁶⁷ For example, whether it is a directly causal relationship in which one factor influences the other, or whether some separate influence (such as poverty or education) operates on the two simultaneously. Chowdhury, A. “The Infant Mortality-Fertility Debate: Some International Evidence” (1988) *Southern Economic Journal* 54:3, pp. 666-674.

¹⁶⁸ The importance of nutrition and sanitation for the right to health is discussed in Chapter Three.

¹⁶⁹ UDHR.

¹⁷⁰ Vienna Declaration (1993) A/CONF.157/23; Para.18

“States Parties shall take all appropriate measures:

- (a) To modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women”

Articles 11, 13 and 15 of the same convention guarantee women employment, economic and legal rights equal to that of men, including the rights to form contracts, obtain credit, and administer property.

Enforcing these rights through calculated policy action to improve the social and legal status of women is not only a requirement of law, but a precondition to lowered fertility. This recognises the fact that reproduction patterns are “inextricably linked to the status and roles of women in their homes and societies”,¹⁷¹ and transformations in the former may well be impossible without addressing imbalances in the latter. While States are largely not able to impose social change from above, they can facilitate its evolution through legislative changes in a number of areas: improvements in contract, employment, divorce and family laws can allow women greater independence and domestic power – particularly important in societies where women make reproductive choices not to align with their own values, but rather to satisfy those on whom they rely for access to income or existing children.

The importance of achievements in women’s access to education has been discussed above, but it is important to note the positive influence that this can also exert on social status: “[e]ducation may also affect the distribution of authority within households, whereby women may increase their authority with husbands, and affect fertility and use of family planning.”¹⁷² Economic independence is another significant determinant of fertility,¹⁷³ so having control over finances can

¹⁷¹Freedman, *supra* n 120 at 18. Though it must be noted that the relationship between social status and fertility is not always an inverse one: “In some contexts, women who have many children and who do not have to engage in paid employment may have higher status than other women.” *Completing the Fertility Transition* (2002) p13.

¹⁷² Robinson, *supra* n 155 at 3.

¹⁷³ “Conventional economic theory predicts that increases in the wage rate of women lead to increases in women's labour force participation and decreases in fertility owing to increased

influence women towards having fewer children – States need to enable this through changes in contract and finance laws where necessary, so that women everywhere are able to operate on an equal legal and economic playing field as independent financial personalities.¹⁷⁴ The provision of microfinance to women has seen particular success in terms of influencing reproductive choice towards having fewer children.¹⁷⁵ Political equality is perhaps the ‘final frontier’ of gender equality, and a right which in practice has yet to be fully realised even in those States which pride themselves on their human rights records.¹⁷⁶ It is however part of the larger picture of social equality, and an area in which legislative change or even positive discrimination to achieve political representation of women could help to increase the perceived value of females outside of the traditional role of childbearing, further discouraging large families as a sign of social success.

A concerted effort is required on the behalf of States to ensure that these rights are not merely choices available in theory yet prohibited by social realities, but rather are genuinely available as a matter of everyday practice. A full realisation of the human right not to be discriminated against on the grounds of gender would see legal and social status become gender neutral, and States’ efforts to achieve this will advance not just the position of women but the interests of society as a whole as childbearing ceases to become the dominant means of value recognition,

opportunity costs of children in combination with a low income elasticity of the number of children”. Billari, F & Kohler, H. “Patterns of Low and Lowest-Low Fertility in Europe” (2004) *Population Studies* 58:2, p164.

¹⁷⁴ Economic empowerment has been identified as one of the key focus areas of UN Women, a United Nations programme dedicated to issues of gender equality.

[http://www.unwomen.org/focus-areas/?show=Economic_Empowerment].

¹⁷⁵ “It is well established in the literature of microfinance that participation of the rural women in the microcredit programs helps to reduce the fertility rate or birth per woman.” Basher, A. “Empowerment of Microcredit Participants and Its Spillover Effects: Evidence from the Grameen Bank of Bangladesh” (2007) *The Journal of Developing Areas* 40:2, p173. Also, “Microcredit and ROSCAs offer participants, women in particular, an opportunity to gain some economic autonomy, which theoretically is often linked to reproductive and political autonomy, mobility and decision-making.” Norwood, C. “Ghana Women, Microcredit and Family Planning Practices: A Case Study from Rural Ghana” (2011) *Journal of Asian and African Studies* 46, p171.

¹⁷⁶ “While women now have rights to vote and participate in civic life in most countries, their representation in elected bodies remains minimal.” Freeman, M. “Women’s Human Rights: Making the Theory a Reality” (1994) *Studies in Transnational Legal Policy* 26, p105. One example might be that of the United States, which prides itself on being one of the founding powers behind the modern human rights movement yet which to date has never elected a female president.

lowering lifetime fertility rates and in turn easing environmental resource pressure.

2.10 Summary: Human Rights as a Tool for achieving Human Rights

The above discussion has set out four key areas of concentration that, tackled together, will allow States to reliably and significantly reduce their population growth rates while at the same time not only respecting, but *improving* human rights. That meeting contraceptive need is the absolute priority is illustrated by the fact that while the other three areas of action (education, gender equality, and reduction of the infant mortality rate) are requirements of human rights instruments and certainly have an impact upon fertility, their impact alone cannot significantly alter fertility behaviour in the absence of reliable contraceptive methods.

Further, while the rights to education, health, and gender equality are unquestionably important to fertility change, their impact is comparatively minimal when measured against that of contraceptives alone. For example, “changing educational composition in India explains only about 20 per cent of fertility change” as “[m]ost of the change is due to fertility decline among illiterate women”, a pattern that has been made possible with greater access to contraceptives.¹⁷⁷ Even changes in gender equality are not sufficient on their own to create fertility change: “[i]n some countries in which gender inequity is increasing we nonetheless observe rapid fertility decline. This suggests that... we should perhaps be less insistent about the predictive value of gender variables.”¹⁷⁸ While this does not in any way mean that States are excused from meeting their obligations under these rights –after all, a great weight of research lies behind a strong link between them and fertility- it does indicate that the first ground of action ought to be to providing access to contraception. It is argued that a far

¹⁷⁷ Expert Group Meeting on Completing the Fertility Transition, at United Nations Headquarters in New York (11-14 March 2002) Report of the Expert Group Meeting on Completing the Fertility Transition, p13.

¹⁷⁸ *Completing the Fertility Transition* (2002) p13.

greater priority must be placed upon realising the right to contraception, in particular, that funding for this cause must more than double:

“The total cost of meeting current need and unmet need would amount to \$6.7 billion annually (in 2008 dollars)—\$3.1 billion for current services and \$3.6 billion for extending those services to all women with unmet need for effective contraceptives.”¹⁷⁹

While this may seem a heavy demand (particularly in light of the recent global financial instability) it has been the intention of this Chapter to show that such an investment is necessary in order to achieve not only the realisation of that right, but also potentially *all* human rights in its power to ease environmental degradation and thus free up resources to enable a well-fed, properly hydrated, healthy global citizenry.

All four of the strategies discussed above require no more than the realisation of existing human rights, yet together provide perhaps the most effective means of preventing what is the biggest threat not only to the concept of human rights, but to human life itself. Environmental degradation already threatens the rights to life, food, water and health. This degradation is caused not only by patterns of resource consumption, but the overall number of consumers. By slowing human population growth, we can slow the rate at which this degradation occurs. Slowing population growth in turn requires us to refocus energy and resources on those human rights which are most influential upon reproductive behaviour. Carried through to their fullest realisation, the rights to education, health, gender equality, and access to contraception will undeniably lead to a reduction in population growth rates, and may thus hold the key to improving access to resources and in turn the human condition, perhaps to the point where it will become possible to speak of the universal achievement of all human rights as a reality. Certainly, the continued neglect of these rights not only amounts to the violation of such in and of itself, but can effectively amount to the violation of other rights such as life, food, water and health, as such inaction can only encourage high fertility and in turn the kind of resource overload that is already preventing some States from meeting their

¹⁷⁹UNFPA *Adding It Up* (2009) p18.

obligations under these rights. “Meeting the basic human needs of growing populations is dependent on a healthy environment.”¹⁸⁰

While it may seem trite to essentially advocate for the realisation of human rights as a means of achieving, in turn, human rights, the argument’s merit lies in its ability to better direct the resources necessary to achieve this. While the violation of rights to food and water –and thus arguably, life itself – undeniably requires immediate action, the simple provision of international aid fails to address the causative factors of such violations: it amounts to the ambulance at the bottom of the cliff, and represents an ultimately unsustainable approach to a problem that is set only to worsen. By focusing on *other* rights, the rights which essentially act as preconditions to the achievement of the basic rights, both individual States and the international community can ensure a more efficient deployment of resources – and a better chance in of achieving long-term change to resolve the issues which lead to resource scarcity in the first place. International action must focus on enforcing the rights of women to education, to social and legal equality, to health care, and most critically, to contraception: This is the only effective and humane route to enabling people to make the reproductive choices necessary to alleviate the growing strain on global environmental resources, and thus give us a fighting chance of meeting our obligations under international human rights law.

The above case study of population growth as an environmental threat capable of being addressed through the targeted enforcement of existing human rights law is intended to demonstrate the possibilities that this approach could enable. The law as it exists in its present form provides us with a powerful tool to advance the cause of the environment and in doing so, human well-being. This approach makes no demands of the international community that it has not already pledged to meet – what is required is simply that greater resources and political will are directed to ensure the practical realisation of those rights which will have the most influence upon the success of the human rights regime as a whole. If this is achieved, a great burden will be lifted not only from the lives of those individual

¹⁸⁰*Report of the International Conference on Population and Development, Cairo 1994; Para.3.24.*

women whose rights have been realised, but from the ecological systems which we rely upon to sustain human life.

Although the focus of this approach -population management- has gained a reputation as being one of the more difficult and controversial topics to address in terms of human rights, when employed in the context described in this paper it actually represents a legally conservative and ethically upstanding opportunity for the international community to make progress towards meeting their future human rights obligations. However, as was noted in the earlier stages of this Chapter, population is only one element of a more pervasive problem surrounding humanity's interactions with the environment. While easing population pressure upon resources is of critical importance, it is unlikely that this alone will allow us to reach a balance in the patterns of consumption which will determine our ability to universally realise human rights standards. As such, this paper will now progress to a discussion of a second, parallel approach to addressing environmental threats to human rights – that of expanding the boundaries of the existing law to incorporate direct environmental responsibilities within human rights instruments.

“The environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.”

- *International Court of Justice* ¹⁸¹

“[M]an's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights--even the right to life itself.”

- *Declaration of the United Nations Conference on the Human Environment* ¹⁸²

CHAPTER THREE: HUMAN RIGHTS AND THE ENVIRONMENT

The Link between the Environment and Human Rights Law

The aim of this chapter is to describe the legal relationship between the environment and human rights, both as it has developed over time and as it currently stands. Of particular concern will be the question of how existing human rights law incorporates elements of environmental protection, with the ultimate objective of assessing whether the level of protection currently provided is adequate to meet human rights goals. The following analysis will show that while the existing law does contain a number of provisions that could be used to demand some level of environmental protection, as yet the scope and application of these is limited. This Chapter will set the stage for a consideration in Chapter Four of the means by which these provisions ought to be strengthened so as to provide the necessary protection.

¹⁸¹ *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 241–2.

¹⁸² Stockholm, 16 June 1972.

3.1 Historical development

Traditionally, the link between the environment and human rights has been largely neglected in both literature and practice, with experts from both spheres advocating for their causes in isolation from each other. Government as well as academic structures have historically reflected this, allowing limited scope for cross-disciplinary consideration of these issues.¹⁸³ This has been particularly true in legal terms, where “we treat the environment and human rights through separate frameworks and approaches, as if they were somehow unrelated, failing to address the natural, symbiotic relationship that exists between the two”.¹⁸⁴ However, with the growth in our understanding of the human consequences of environmental degradation, there has been a corresponding increase in awareness of the interdependence of the two subjects, particularly in academic circles. Many modern environmental problems not only span borders and affect territories and resources far beyond the locale from which they originate, but impact on human well-being in complex ways that are only now beginning to be understood.¹⁸⁵ These factors have made the involvement of the international human rights regime in hitherto solely ‘environmental’ problems a necessary development. A recent example of the depth of this relationship is that of the widely-publicised East African famine – attributed in large part to a severe drought that has been linked to climate change.¹⁸⁶ Although the situation has been exacerbated by human conflict and political factors, deteriorating environmental conditions have

¹⁸³ For example, human rights portfolios have traditionally been held separately to environmental ones in term of parliamentary structure; likewise the separation in universities of faculties of science and law have traditionally not encouraged cross-disciplinary research.

¹⁸⁴ Picolotti, R. & Taillant, J. (Eds) *Linking Human Rights and the Environment* (University of Arizona Press: USA, 2003), p xv.

¹⁸⁵ As discussed in Chapter One.

¹⁸⁶ “...[M]any attribute the lack of rain to climate change. A graph for rainfall in the horn of Africa over the past 20 years shows a clear and steady decline”; Loewenberg, S. “Global food crisis takes heavy toll on East Africa” *The Lancet* 378: 9785 (2 July 2011). “[T]he severe droughts that used to hit the Horn of Africa every decade or so are now far more common, and since 2000 they have struck virtually every other year, greatly affecting food security and forcing international aid agencies to launch a seemingly endless cycle of emergency appeals. There is no denying that rainfall patterns are changing. In Kenya, for example, the area of the country that receives between 500mm and 600mm of rain a year, the amount considered sufficient for sustainable production, is shrinking.” Rice, X. “Hunger Pains: Famine in the Horn of Africa” *The Guardian* (8 August 2011).

undeniably been a determining factor behind the chronic hunger of an estimated 8.8 million people¹⁸⁷ - a sobering reminder of the impossibility of ignoring the environmental elements of human rights crises.

The increase in our understanding of this relationship has led many scholars from the environmental sciences, law, and philosophy to become progressively more vocal regarding the need for an explicit recognition of this link; advocating for future collaboration in this area on the grounds that “[m]odern society requires an universal ethical and legal discourse that can correlate human dignity and ecological justice, human rights and the integrity of nature, and the rights of the present generations and future generations”¹⁸⁸. This kind of support has accumulated to the point where in academic terms at least, it is now well recognised that “[s]ustainable and utilisable natural resources are a prerequisite for a life of dignity.”¹⁸⁹ However, academic commentary alone is not sufficient to rectify the problems of environmental disintegrity, and it is the way that this link is recognised in *law* that is the greatest concern.

In the legal realm, the natural difference between human rights and environmental law and the symbiosis that exists between them despite these, is perhaps best summarised as follows:

“The primary objective of human rights law is to allow individual self-actualization by protecting each person from abuse of power by State agents, and by ensuring that basic needs can be fulfilled. States must also exercise due diligence to prevent human rights violations by nonstate actors. Environmental law, in turn, seeks to protect and preserve the basic living and nonliving resources and ecological processes on which all life depends. A human rights approach to environmental protection partly integrates the two subject areas by seeking to ensure that the natural world does not deteriorate to the point where internationally guaranteed rights such as the rights to

¹⁸⁷Loewenberg, *ibid.*

¹⁸⁸ Vorster, N. "An ethical critique of Milton Friedman's doctrine on economics and freedom." (2010) *Journal for the Study of Religions and Ideologies* 9:26.

¹⁸⁹ *Ibid.*

health, life, property, a family and private life, culture, and safe drinking water are seriously impaired.”¹⁹⁰

Thus, the idea that international environmental law and international human rights law will always operate as totally isolated (or even opposing) regimes begins to lose credence as it becomes clear that the two disciplines share some common goals – at the very least, environmental protection to the extent that is necessary to secure the basic needs of humankind.¹⁹¹ Put simply, “protection of ecosystem services is closely and intrinsically linked to the protection of human rights because people are integral parts of ecosystems”.¹⁹² How the law has recognised this link in practice is a central concern of this paper in the Chapters that follow.

3.2 The development of the relationship at international law

International institutions are increasingly recognising the rights-environment relationship and are now starting to adopt a more holistic approach to human rights. While a great number of international instruments from diverse areas of speciality now reference environmental concerns, in the following sections I focus solely upon the development of this link by agencies whose mandate lies directly within the human rights field.¹⁹³

¹⁹⁰ Shelton, D. “The Environmental Jurisprudence of International Human Rights Tribunals” in Picolotti & Taillant, supra n 184, p1.

¹⁹¹ Whether or not the environmental movement would see this protection taken further depends on both their motivation for involvement in the cause, and their conception of what ‘the basic needs of humankind’ includes; regardless, this relationship may be seen as a means to an end, (or at least, a means to a starting point) without compromising either movements’ ultimate goals. “In a way, concern for human rights protection underlies environmental law instruments to the extent that these latter aim at the protection of the environment, which will ultimately benefit human beings and mankind”; Weiss, E. (Ed.) *Environmental Change and International Law New Challenges & Dimensions* (United Nations University Press, 1992), VIII.

¹⁹² Blanco, E. & Razzaque, J. “Ecosystem Services and Human Well-being in a Globalized World: Assessing the Role of Law” (2009) in *Human Rights Quarterly* 31:3, p695.

¹⁹³ Some significant references linking human well-being and the environment have been made outside of those institutions strictly considered to be human rights focused – for example, the Stockholm Convention, the World Charter for Nature, and the Aarhus Convention; these and other non-human rights sources of this link are discussed in Chapter Four with reference to the development of a human right to the environment.

In 1990 the UN General Assembly approved a resolution concerning the “[n]eed to ensure a healthy environment for the well-being of individuals”¹⁹⁴. In its preamble, the resolution explicitly recognised that “a better and healthier environment can help contribute to the full enjoyment of human rights by all”, as well as “the fact that increasing environmental degradation could endanger the very basis of life”.¹⁹⁵ Two years later, the 1992 Rio Conference on Environment and Development resulted in a declaration stating that “human beings... are entitled to a healthy and productive life in harmony with nature”. The Aarhus Convention followed in 1998, which insisted that “adequate protection of the environment is essential to human well-being and the enjoyment of basic human rights, including the right to life itself.”¹⁹⁶

The Millennium Goals, while not strictly aligned with the human rights project, nevertheless closely parallel many of the goals of this movement. Adopted by General Assembly resolution in 2000, the goals focus on development and the alleviation of poverty, and are based on the principle of “a collective responsibility to uphold the principles of human dignity, equality and equity at the global level”.¹⁹⁷ Eight goals were articulated as being of primary importance within the scheme, and it is significant that while seven of these focused on issues traditionally thought of as falling under a human rights mandate (such as gender equality and access to education), environmental sustainability was also included in this list. Thus we can see yet another indication of a growing willingness among the international community to embrace the environmental aspects of human well-being.

In 2001 the Office of the High Commissioner for Human Rights (OHCHR) and the United Nations Environment Programme (UNEP) were invited to organise a joint review and assessment of “progress achieved ... in promoting and protecting

¹⁹⁴ A/RES/45/94 (14th December 1990).

¹⁹⁵ Ibid.

¹⁹⁶ Convention on Access to information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Aarhus, Denmark, (25 June, 1998), (preamble).

¹⁹⁷ A/Res/55/2 Paragraph 2. The link between the Millennium Development Goals and human rights is discussed in the UNDP publication, *Human Rights and the Millennium Development Goals: Making the Link* [<http://hurilink.org/Primer-HR-MDGs.pdf>] p10.

human rights in relation to environmental questions".¹⁹⁸ A seminar of various specialists was convened, and in their concluding assessment, "[t]he experts recognized that... environmental protection constitutes *a precondition for the effective enjoyment of human rights protection*, and that human rights and the environment are interdependent and interrelated."¹⁹⁹

This strong recognition of the relationship represents the position now adopted by most agencies, at least on a rhetorical level. While there seems to be a broad consensus among international actors that the state of the environment directly affects human rights, the practical weight which is given to this influence varies dramatically amongst these groups.

Regional human rights instruments represent perhaps the most advanced position in terms of the recognition of environmental conditions as determinants of human rights goals. In particular, the 1988 Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, the African Charter on Human and Peoples' Rights, and the European Social Charter have all incorporated environmental concerns within the scope of a traditional human rights instrument.²⁰⁰

Thus we can see that international recognition of the link between the environment and human rights has developed from broad statements concerning the general well-being of both to the much stronger and more direct linkages being made today between environmental degradation and internationally recognised human rights. Despite this increased recognition however, there appears to have been some reluctance to take the next step and link specific human rights with specific environmental concerns: having agreed generally that environmental conditions affect human rights, we must now decide *how* it does so

¹⁹⁸Commission on human Rights Decision 2001/111.

¹⁹⁹Conclusions of the Meeting of Experts on Human Rights and the Environment 16th January 2002 <<http://www2.ohchr.org/english/issues/environment/environ/conclusions.htm>>; emphasis mine.

²⁰⁰These regional instruments are notable for either explicitly acknowledging a right to environment, or for having been interpreted as doing so. These provisions are discussed in greater detail in Chapter Four of this paper in reference to the development of such a right at customary law.

– we must identify specific human rights which are particularly vulnerable to environmental disintegrity.

3.3 Which Human Rights are affected by Environmental Conditions?

In answering this question there are two possible approaches. One is simply to say that without a certain level of environmental integrity, no conception of human rights is possible. This approach takes the broad view of natural conditions as an absolute determinant of human life as a whole: *all* human rights are affected by *all* environmental problems. Under this approach, it is argued that without an enabling environment, all talk of human rights must necessarily be thrown by the wayside in pursuit of barest survival. As such, each and every human right can be said to be affected by environmental conditions.

Thus even those rights which may at first glance seem less vulnerable to environmental influence, such as education or freedom of association,²⁰¹ are ultimately dependent upon the maintenance of an environment of a certain quality. As such, environmental protection would be seen as a first priority with human rights able to be properly discussed only after an enabling environment has been established. The emphasis lies on establishing sound environmental conditions as a prerequisite to - rather than corequisite of - addressing questions of human rights.

Whilst perhaps broadly correct, it is my contention that this view is largely unhelpful in practical terms. In the first instance, it disregards humanity's ability to adapt to and address through technological advances at least some of the challenges posed by environmental degradation.²⁰² More troubling still, this approach fails to provide us with a roadmap for action. If we accept that all human rights are affected by all environmental damage, then it is difficult to narrow

²⁰¹In fact, procedural rights are one of the few areas where human rights have been directly called into play with regards to environmental concerns; The Aarhus Convention, UN General Assembly Resolution 37/7 (World Charter for Nature), the Brundtland Report, and the Rio Declaration all address rights of participation regarding environmental decisions.

²⁰²For an example, see the discussion of the Green Revolution in Chapter One.

down specific areas of concentration for action. Because the focus is thus too broad, the task ahead consequently seems overwhelming: there are fundamental questions that arise which might stand in the way of action – how do we define ‘good’ environmental conditions and at what point is the environmental standard ‘high enough’ to allow human rights concerns to begin to take precedence over remaining environmental issues? In contrast, by prioritising specific rights and the specific environmental concerns that most directly affect them, we can begin to make real progress toward rectifying those issues.

Consequently, this Chapter will concentrate upon a particular set of rights where a link between breach and environmental degradation can be more directly drawn. In particular, the right to food, the right to water and the right to health will be examined as they appear in the two core instruments of international human rights law – the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social, and Cultural Rights. Finally, the Chapter will culminate in a discussion of the implications of environmental degradation for the right to life.

3.4 The Right to Food

Nutrition’s key role in the scheme of human rights was first articulated in the Universal Declaration of Human Rights (UDHR), with Article 25 (1) stating that “everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services.” While the UDHR is not itself legally binding, the document is regarded “as an articulation of shared values bearing moral weight on UN Member states”, and may now be considered “a primary building block of customary international law”.²⁰³ Of the two key documents that emerged from the resultant negotiations to cement these obligations in international law, the International Covenant on Economic, Social and Cultural Rights (ICESCR)

²⁰³ UDHR Official Website; *Questions- Are governments legally required to respect the principles outlined in the UDHR?* [<http://www.udhr.org/history/question.htm>].

contains the formal embodiment of the right to food.²⁰⁴ While there is some debate as to the strength of this instrument as a practically compelling document,²⁰⁵ it nonetheless has legal force upon the 160 States that have ratified it and “can be seen as a treaty that reflects global consensus on the universal human rights standards that apply to the economic, social and cultural fields”.²⁰⁶ Thus, regardless of those who might question the efficacy of the instrument in practice, this paper will proceed on the basis that it is legally binding, and does create legal rights.

3.4.1 *The right under the ICESCR*

The text of the ICESCR recognises “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions”.²⁰⁷ The document goes on to specify that with regard to food, Parties to the Covenant,²⁰⁸

“[R]ecognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes, which are needed:

- (a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian

²⁰⁴While the right is perhaps most strongly articulated within the ICESCR, it is not confined solely to that text but rather is also recognised in a number of other international instruments, such as the Convention on the Rights of the Child, under which states must combat disease and malnutrition “through the provision of adequate nutritious foods”. The same text requires that states “shall in case of need provide material assistance and support programmes, particularly with regard to nutrition”. Linked provisions in a separate international agreement, the Convention on the Elimination of all forms of Discrimination against Women, require that states ensure “adequate nutrition during pregnancy and lactation”. These instruments thus establish a particular duty for states to take action to secure environmental conditions that promote access to food for children and pregnant women. However, because human rights are non-discriminatory by nature, and apply to every human being equally, it would be possible to argue that the above provisions are able to be extended to apply to everybody, regardless of age, gender, or gestational status.

²⁰⁵ At the extreme end of this debate are the arguments advanced by Ayn Rand in “Man’s Rights” in *Capitalism: The Unknown Ideal* (Penguin Group: USA, 1966); for a more balanced overview of the debate, see Wiles, E. “Aspirational Principles or Enforceable Rights? The Future for Socio-Economic Rights in National Law” (2006) *American University International Law Review* 22:35.

²⁰⁶ International Network for Economic, Social & Cultural Rights, “Background information on the ICESCR [http://www.escr-net.org/resources_more/resources_more_show.htm?doc_id=425251].

²⁰⁷ICESCR, Article 11(1).

²⁰⁸ Ibid.

systems in such a way as to achieve the most efficient development and utilization of natural resources”.

This provision suggests a number of environmental implications: if States are required to take measures to ensure the right of everyone to be free from hunger, logically such measures may sometimes include environmental protection – at the very least where a failure to do so would jeopardise food supplies. The focus upon food production and efficiency in the consumption of natural resources has further potential to require States to undertake environmental management; for example, through improvements in waste reduction and the promotion of sustainable agricultural methods.

Building upon the text of the Covenant, the Committee on Economic, Social and Cultural Rights (CESCR) has issued a General Comment on the right to food.²⁰⁹ This acts as the most authoritative interpretative aid available, elaborating on the specific nature of the right, its core contents, and the steps State parties should take to achieve it. The Comment provides further evidence that access to adequate food is envisaged as being at least partly environmentally dependent, stating that the right necessarily requires “the adoption of appropriate economic, *environmental* and social policies, at both the national and international levels”.²¹⁰

As a specific example of how such policies might look, the Committee stipulates that States must ensure “the availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals [and] free from adverse substances”.²¹¹ This statement clearly introduces an environmental requirement inherent to the right to food – that food must be free from adverse substances implies that strict regulations must be implemented to protect food supply chains from contamination from both indirect sources (for example, soil and water contamination from industrial or agricultural by-products, toxic wastes, or inadequate sanitation systems) and from the direct application of such ‘adverse substances’, potentially including pesticides, fertilisers, and other substances such

²⁰⁹Committee on Economic, Social and Cultural Rights, General Comment 12 The Right to Adequate Food (Art. 11): 05/12/1999 E/C.12/1999/5.

²¹⁰Ibid, para 4 [emphasis mine].

²¹¹Ibid, para 8.

as leachates from chemicals introduced during processing or those which prolong food product shelf-life. There is thus a duty upon States to regulate behaviours which may have an adverse effect upon food production in terms of damaging to the environment in which it is produced.

Elsewhere in the Comment, the CESCR introduces the requirement of *sustainability* in food production, explaining that the right to food denotes “the accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights”.²¹² This emphasis on a right not only to food, but to food grown in a sustainable manner is further elaborated upon in Paragraph 25 of the same Comment: “Care should be taken to ensure the most sustainable management and use of natural and other resources for food at the national, regional, local and household levels”. The Food and Agriculture Organisation of the United Nations (FAO), offering further authoritative clarification of the right to adequate food, has adopted this sustainability requirement wholesale; pointing out that the right to food is comprised not only of “a minimum daily nutritional intake and the survival of the person”²¹³, but also includes a requirement that “everyone must have physical and economic access to food that is adequate in quantity and quality to allow for a healthy and active life [and] its provision must not interfere with the enjoyment of other human rights and it must be environmentally sustainable.”²¹⁴ In 2004 the FAO went on to publish some guidelines for the achievement of this right, which continued to place a heavy emphasis on sustainability: “[s]tates should consider specific national policies, legal instruments and supporting mechanisms to protect ecological sustainability and the carrying capacity of ecosystems to ensure the possibility for increased, sustainable food production for present and future generations, prevent water pollution, protect the fertility of the soil, and promote

²¹²Supra n 209, para 8.

²¹³Cotula, L. (Ed.) FAO Publications, *The Right to Food and Access to Natural Resources: Using Human Rights Arguments and Mechanisms to Improve Resource Access for the Rural Poor* (Rome, 2008) p15.

²¹⁴FAO, Pamphlet on Universal Declaration of Human Rights – 50th Anniversary (10 December 1998) p4.

the sustainable management of fisheries and forestry.”²¹⁵ This statement represents perhaps the most environmentally literate articulation of the principle of sustainability, in that it emphasises that it is ecosystems as a whole which are the basis of food production, not simply food crops in isolation. Following this interpretation, we can see that the right to food could potentially impose quite a significant environmental duty upon States in terms of protecting the integrity of entire ecosystems, including (but not limited to) water service systems, soil ecology, and ocean and forest resources. There is in any event a clear line of authority requiring food production to be carried out in a way that does not damage the environment to the point that the capacity for future production is compromised – essentially, the system must not run at a resource deficit.

This requirement of sustainability in food production methods has important and perhaps revolutionary implications for the regulation of agriculture; as was discussed in the Chapter One, the current technologies being used in the production of food are not sustainable – they are causing environmental harm and eroding the long-term carrying capacity of the land.²¹⁶ In contrast, sustainability in the right to food “denotes the requirement that food be accessible for both present and future generations. It incorporates the notion of long-term availability and accessibility.”²¹⁷ As such, by continuing to rely on the environmentally damaging intensive industrial agricultural methods of the ‘Green revolution’, states are not currently fulfilling the requirement of sustainability in food production and a total reevaluation of the industrial agricultural model may be required. While there is arguably a tension between the need to produce food sustainably and the need to quickly produce large quantities of food, some scholars have argued that in fact this dilemma is purely theoretical because the shift away from the current methods is inevitable: “people make the nonsensical claim that sustainable agriculture

²¹⁵ FAO, “Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the context of National Food Security”, Guideline 8E, (November 2004) [<http://www.fao.org/docrep/meeting/009/y9825e/y9825e00.HTM>].

²¹⁶ As discussed in Chapter One, “[i]n too many places, however, achievements in productions have been associated with management practices that have degraded the land and water systems upon which the production depends.” FAO, *State of the World’s Land and Water Resources for Food and Agriculture* (Rome, 2011) p17.

²¹⁷ Kerstin Mechlem “Food Security and the Right to Food in the Discourse of the United Nations” (2004) *European Law Journal* 10:5, p639.

cannot feed the world. In fact, it is the *only* kind of agriculture that can feed the world, given current stressors”.²¹⁸ In other words, a failure to adopt sustainable practices in food production is likely to lead to escalating environmental destruction, which in turn will severely jeopardise long-term food security.²¹⁹ The requirement of sustainability laid out in the right to food thus shows how human rights law can impose some significant environmental obligations, requiring substantial positive action from the state.

3.4.2 *The right outside of the ICESCR*

Statements which link the right to food to the environment have also been made outside of the ICESCR and its direct governing body. The establishment in 2000 of a Special Rapporteur on the right to food has led to a further expansion of the interpretive material available on the right, including on environmental issues.²²⁰ This was followed in 2008 by a General Assembly resolution which noted that “environmental degradation, desertification and global climate change are exacerbating destitution and desperation, causing a negative impact on the realization of the right to food, in particular in developing countries”.²²¹ Furthermore, it expressed “deep concern at the number and scale of natural disasters, diseases and pests and their increasing impact in recent years, which have resulted in massive loss of life and livelihood and threatened agricultural production and food security, in particular in developing countries”.²²² The Special Rapporteur on Prevention of Discrimination and Protection of Minorities has also investigated the link between the right to food and the environment,

²¹⁸ Anderson, M. “Panel presentation for Interactive Thematic Dialog on the Global Food Crisis and Right to Food” UN General Assembly (New York, April 2009) [http://www.foodsystems-integrity.com/about_us] p4.

²¹⁹ The current Rapporteur on the right to food has recently endorsed this position, stating that agroecology (another term for sustainably focused food production methods) “outperforms large-scale industrial farming for global food security” and “is the best option we have today. We can’t afford not to use it”. Further, “[e]ven if it makes the task more complex, we have to find a way of addressing global hunger, climate change, and the depletion of natural resources, all at the same time. Anything short of this would be an exercise in futility.” Olivier De Schutter, Special Rapporteur on the Right to Food (press release, 22 June 2010) [http://www.srfood.org/images/stories/pdf/press_releases/20100622_press_release_agroecology_en.pdf]. Also see the report submitted by Mr De Schutter to the General Assembly, A/HRC/16/49.

²²⁰ See [<http://www.srfood.org/>].

²²¹ A/Res/62/164.

²²² Ibid.

concluding that “food security is inextricably linked to an environment free from degradation and it depends on environmentally sound and socially sustainable development”.²²³ These statements give further weight to the idea that States must undertake environmental management in order to meet their obligations under the right to food.

3.4.3 *The right in regional and national law*

On a regional level, the African Commission on Human and People’s Rights, the governing body of the African Charter on Human and People’s Rights, has determined in the case of *SERAC v Nigeria*²²⁴ that the right to food is “implicit” in the rights to life, health, and development. The case is considered a landmark decision in that it recognised that a joint venture between the Nigerian government and Shell Petroleum had, in causing environmental significant damage, actually violated a number of human rights – including the right to food: “the minimum core of the right to food requires the Nigerian government to not destroy or contaminate food sources”,²²⁵ which the Commission held that it had failed to do in allowing the environmental destruction to occur.

The right to food also forms part of the constitutional law of at least twenty nations, including Brazil, India, South Africa and Iran.²²⁶ Much of the work around creating and developing the constitutional provisions which set out a right to food has only been completed in recent years or is still on-going – as such, we can expect a growing body of case law to emerge from these countries and it will be a matter of great interest to see how the Courts deal with claims arising out of environmental threats to food security.

²²³ Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment* E/CN.4/Sub.2/1994/9, p48.

²²⁴ Communication 155/96, The Social and Economic Rights Action Centre and the Centre for Economic, and Social Rights / Nigeria. The text of the petition may be consulted at [<http://www.cesr.org/text%20files/nigeria.PDF>].

²²⁵ FAO Brief *The right to Food and Indigenous Peoples* (2008) p3.

²²⁶ FAO *The Right to Food in National Constitutions* (1998) [<http://www.fao.org/docrep/w9990e/w9990e12.htm>]

The right to food is thus well established in international law, both in terms of its legal embodiment and normative content. That this right implies an environmental duty can be inferred not just from a logical consideration of the links between food production and the environment, but from the interpretative commentary provided both by the governing body of the Covenant in which it is found and by supporting institutions such as the FAO. The theme of acknowledging sustainability as part of the substance of a right to food is a clear indication of an intent to require environmental action from States in the context of a human rights provision. The fact that current State practice does not always reflect this movement towards an environmentally literate human rights regime does not detract from the reality that these obligations do exist, and that they exist not just in theory but in law.

3.5 The Right to Water

The right to water has only recently been officially recognized in international law, though as will be discussed later in this Chapter it has featured in discussions around the right to life. It has been argued that the initial omission of an explicit right to water from the core human rights documents is a perfect illustration of the changing nature of human rights issues and the need to treat these instruments as living documents to retain relevancy – “water scarcity, as an independent, international issue, is quite simply new. The scale of the current emergency is historically unique.”²²⁷ That the original drafters of these documents saw no need to include a right to water at the time can be explained “by virtue of its fundamental nature, that ‘like air’ it was considered unnecessary to include it explicitly”.²²⁸ Clearly, times have changed; and although the right to water has not yet achieved the same level of recognition as other rights, its eventual adoption into the legal scheme now seems inevitable. As such, the right to water sets a

²²⁷McGraw, G. “Water for Life: The Challenge Posed by the Un-Codified Human Right to Water in International Law” (2010) *The University for Peace Law Review* 1:30; p40.

²²⁸ 6.Chapple, E. & Leitch, F. “The Right to Water: Does it Exist and is it Justiciable Content?” *Toward Rio+20: Contemporary Issues in International Environmental Law* symposium at the ANU College of Law, Environmental Law Student Society (28 May 2011), p

valuable precedent for the expansion of the international human rights regime to meet needs as they emerge – as will be seen in Chapter Four, this relative flexibility of human rights law is what may allow it to remain a powerful force in the face of the new threat of environmental degradation.²²⁹

3.5.1 *The right under the ICESCR*

Arguably, Article 25 (1) of the UDHR, which states that “everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services” is the historical antecedent of a stand alone right to water because of its recognition of the need to guarantee similar material preconditions of life, such as food. This would seem to be affirmed by the literature surrounding the ICESCR, which as a descendant instrument appears to have assumed jurisdiction for a right of this nature.²³⁰

Though not expressly mentioned in the Covenant text, the CESCR has seen fit to issue a General Comment specifically recognising a right to water as arising under Article 11. In part this move has been driven by an increased awareness of the problem of water scarcity and the negative impacts that it has on human well-being: “water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights²³¹.” It is also a response to what the Committee has called “widespread denial of the right to water in developing as well as developed countries”.²³² This Comment almost exactly mirrors the UDHR text in its affirmation of “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions”.²³³ The Committee justified the inclusion of water within this provision as follows: “the

²²⁹ The idea of a new, *environmental* human right will be discussed in the following chapter.

²³⁰ “Whilst the *ICCPR* would provide a more stable means of enforcement and customary international law would enable a greater scope of application, the *ICESCR* is the most likely and most recognized source of the right [to water]”. Chapple & Leitch, *supra* n 228 at 4.

²³¹ General Comment No. 15 (2002) The Right to Water E/C.12/2002/11; Paragraph 1.

²³² *Ibid.*

²³³ *Ibid.*

use of the word ‘including’ indicates that this catalogue of rights was not intended to be exhaustive. The right to water clearly falls within the category of guarantees essential for securing an adequate standard of living”.²³⁴

In a perfect example of the interdependence and indivisibility of human rights, the right to water is also recognised as a prerequisite for the right to food as discussed above – sensibly, the CESCR notes that “water is necessary to produce food” and that States ought to acknowledge “the importance of ensuring sustainable access to water resources for agriculture to realize the right to adequate food.”²³⁵ A further link is made to health, with particular regard to sanitation. Along with other, explicitly recognised ICESCR rights, the Committee has sought to define a minimum standard which is intended to be non-derogable except in exceptional circumstances. With regards to water, that core obligation is supposed to consist of “access of the minimum essential amount of water that is sufficient and safe for personal and domestic uses to prevent disease”.²³⁶ Again, achievement of these minimum standards, together with the requirement of some level of *sustainability* in the procurement of such, would seem to imply some level of environmental protection or at minimum, management.

3.5.2 *The right outside of the ICESCR*

A recent General Assembly resolution sought to complete the elevation of a right to water to an explicit, stand-alone right in declaring “the right to safe and clean drinking water and sanitation as a universal human right which is essential for the full enjoyment of the right to life and human dignity.”²³⁷ However, GA resolutions -despite their political weight- are not legally binding and the right to water remains subject to the work of an investigation by the United Nations Human Rights Council. Until such time as that process produces an affirmative outcome, a right to water cannot be said to exist in international human rights law,

²³⁴ General Comment No. 15 (2002) The Right to Water E/C.12/2002/11

²³⁵ Ibid, Paragraphs 6 and 7.

²³⁶ Ibid, Paragraph 37.

²³⁷ A/64/L.63/REV.1, (July 2010).

except possibly as a matter of customary law.²³⁸ The Convention on the Rights of the Child is a further example of an international human rights text outside of the ICCPR or ICESR that recognises the necessity of water, requiring that states provide “clean drinking-water” as part of their duty to combat disease and malnutrition.²³⁹

3.5.3 The right in regional and national law

Echoing the instrument above, the African Charter on the Rights and Welfare of the Child likewise requires States to make efforts to guarantee safe drinking water.²⁴⁰ The Council of Europe has also recently affirmed the principles of the 1968 European Water Charter, stating that “[e]veryone has the right to a sufficient quantity of water for his or her basic needs”.²⁴¹ The right can also be read as being implicit in many regional instruments as part of the provisions around the rights to health and life.

3.5.4 What duties does the right impose?

Whilst environmental duties relating to the right to water are not explicitly stated in many of the above texts, it may nevertheless be implied. Firstly, water as a natural resource is obviously linked to the status of the environmental systems from which it is sourced. It is therefore a matter of common sense that protecting water supplies requires protecting the environment that yields those supplies. Secondly, references to sustainability in the supporting literature can be taken to imply some level of environmental management in terms of ensuring long-term supply.²⁴²

²³⁸ A discussion of what constitutes customary law is contained within Chapter Four.

²³⁹ Article 24(2)9c).

²⁴⁰ African Charter on the Rights and Welfare of the Child (1990), Art. 14.

²⁴¹ Council of Europe “Recommendation of the Committee of Ministers to member states on the European Charter on Water Resources” (17 October 2001), [<https://wcd.coe.int/ViewDoc.jsp?id=231615&Site=COE>], para 5..

²⁴² For example, a Human Rights Council resolution of 28 September 2011 requires States to “ensure financing to the maximum of available resources in order to implement all the necessary measures to ensure that water and sanitation systems are sustainable”. A/HRC/RES/18/1, para 6(h).

As such, it is possible to argue that the right to water imposes a duty upon states to engage in some level of environmental management. In many cases, improving water quality will necessarily improve environmental health and vice versa; in fact, because the relationship between water and the environment is even more direct than that of food,²⁴³ any time that States seek to take action on water issues they will necessarily also be engaging with environmental issues. An environmentally informed approach to water management is therefore the best, and perhaps only, route to achieving the universal realisation of the right to water.

3.6 Right to Health

The Right to health is the third human right which this thesis takes as requiring action from states on an environmental front in order to meet their obligations under international law. The link between the environment and human health is obvious: “there is no doubt that environmental problems cause health problems which, depending on the nature and gravity, can threaten even the right to life.”²⁴⁴

3.6.1 The right to health under the ICESCR

Article 12 of the Covenant recognises “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”, and requires State Parties to take steps to ensure, among other things:

- “(b) The improvement of all aspects of environmental and industrial hygiene;
- (c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases.”²⁴⁵

In seeking to define this right further, the CESCR has clarified that while the right to health does not include a right to actually *be* a healthy individual, it does oblige States to provide their citizens with the best possible *opportunity* to be so, taking the form of “a variety of facilities, goods, services and conditions necessary for

²⁴³Whilst we no longer rely on hunter-gatherer techniques for obtaining food, we remain essentially captive to nature’s provision of fresh water.

²⁴⁴Atapattu, S. *The Right to A Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment under International Law* (2002-2003) Tulane Environmental Law Journal 16:65, p101.

²⁴⁵ICESCR, Article 12.

the realization of the highest attainable standard of health”.²⁴⁶ It is acknowledged that the right

“embraces a wide range to socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment.”²⁴⁷

Significantly for the current discussion, this focus on a *healthy environment* is echoed throughout discussion on the right to health: the right extends to an obligation to provide “healthy occupational and environmental conditions”, “healthy natural and working environments”, “environmental safety”, and “a healthy environment”.²⁴⁸ What is meant in the context of a requirement of a ‘healthy environment’ is probably a narrower focus than the term seems to imply; the General Comments place a strong emphasis on the minimisation of hazards rather than the promotion of specific goods. For example, the Committee requires “the prevention and reduction of the population’s exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health”.²⁴⁹ Elsewhere, the Covenant states that the right to environmental hygiene “encompasses taking steps... to prevent threats to health from unsafe and toxic water conditions”.²⁵⁰ The focus is thus more upon removing environmental impediments to health, rather than a guarantee of positive environmental conditions: “in the environmental context, the right to health essentially implies feasible protection from natural hazards and freedom from pollution, including the right to adequate sanitation.”²⁵¹ Despite the fact that such a limited conception of health does not guarantee a completely ‘healthy’ environment, duties of environmental management *do* exist

²⁴⁶ CESCR, General Comment 14 (2000) E/C.12/2000/4, para 9.

²⁴⁷ Ibid, para 4.

²⁴⁸ Ibid.

²⁴⁹ Supra n 246, para 15.

²⁵⁰ ICESCR, Art. 12, para 2(b); General Comment 15, E/C.12/2002/11, para 8.

²⁵¹ Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment* E/CN.4/Sub.2/1994/9 , p46.

under this right; at least to the point of removing or preventing barriers to health such as water or air pollution and environmental contamination.

Again, the indivisibility of human rights is illustrated by a frequent reference to safe, adequate food and water in the interpretative materials.²⁵² From this, we can infer that the right to health under Article 12 includes not only the Article 11 rights to food and water, but also the auxiliary rights to environmental protection that we have already established as existing under these. Freedom from harmful toxins in food production is expressly mentioned under the right to health, potentially providing an interesting link to the requirement of sustainability in the right to food.²⁵³ While the rights to food and health may seem to be in tension due to the modern use of pesticides to ensure high yields (often linked closely with health concerns and broader environmental contamination), the unsustainability of this method will ensure that the abandonment of chemical toxins on a large scale will benefit both rights in the long term.

In the above discussion it is relatively easy to see how the right to physical health can be endangered by the environment, however the Covenant also guarantees a right to the highest attainable standard of *mental* health. States therefore also have environmental obligations in this regard. There are now numerous studies show that environmental factors such as exposure to natural light,²⁵⁴ time spent in ‘green spaces’,²⁵⁵ and other factors such as population density and exposure to artificial noise can directly and seriously affect mental wellbeing, with particular influence upon depression and predilections to engage in anti-social behavior. In a more direct way, environmental contaminants such organophosphates, mercury or pesticides are able to be directly linked to not only physical but mental health

²⁵² General Comment 14, supra n 246, para 3: “[t]he right to health is closely related to and dependent upon the realization of other human rights, as contained in the International Bill of Rights, including the rights to food”; para 4: “food and nutrition...access to safe and potable water”; see also para 5 and para 15.

²⁵³ A violation of the obligation to protect the right to health will occur in “the failure to protect consumers and workers from practices detrimental to health, e.g. by employers and manufacturers of medicines or food” Ibid, para 51.

²⁵⁴ See for example, Faculty of Public Health *Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing* (Faculty of Public Health: London, 2010).

²⁵⁵ Thrift, J. “” (2005) *Journal of Public Mental Health* 6:4.

problems.²⁵⁶ Children are particularly vulnerable to suffering long-term mental health conditions because of environmental factors like these.²⁵⁷

The requirement for prevention, treatment and control of disease in Article 12(c) of this right is yet another duty requiring environment vigilance. Disease itself is a part of the natural world – in dealing with an organic problem, it makes logical sense to address the organic preconditions to that problem. Epidemics are influenced by many things, but some environmental conditions are more favorable to them than others: for example, a recent outbreak of the deadly mosquito-borne disease chikungunya in India has been largely attributed to a reduction in natural predators of the vector insect due to changes in agricultural methods and pesticide use.²⁵⁸ This was compounded by a massive build-up of waste and rubbish causing congestion and ultimately stagnation in many of the surrounding waterways, which in turn provided perfect conditions for the multiplication of both mosquitoes and the virus. This is just one example of many that illustrates the direct link between the duty to prevent and control disease, and a duty to prevent environmental degradation. There are also serious issues surrounding contamination of water supplies even where they are available – it is estimated that 90% of wastewater in developing countries is released completely untreated, directly into natural waterways.²⁵⁹ This in combination with industrial and agricultural pollution (often linked to the need to produce the higher food crop yields discussed above) has led to fully half of hospital beds worldwide being “filled with people who [have] fallen ill to water-related issues”.²⁶⁰ In order to address these health concerns, States will be forced to first address the environmental preconditions of such disease.

²⁵⁶ “Although symptoms related to brain dysfunction may present as emotional or behavioural in nature, the aetiology of some mental health afflictions is pathophysiological rather than pathopsychological.” Genuis, S quoted in “Toxic Exposure and Mental Health: Opportunities for Treatment” (2009) *Health & Environment* 20 [<http://healthandenvironmentonline.com/issue-archive/mental-health/>].

²⁵⁷ Chance, G. "Environmental Contaminants and Children's Health : Cause for Concern, time for Action" (2001) *Paediatrics and Child Health* 6:10.

²⁵⁸ Devraj, A. “Diseases Follow Environmental Degradation” (2006) (IPS/IFEJ) [<http://www.ipsnews.net/news.asp?idnews=35695>].

²⁵⁹ United Nations Panel on “Water and the Millennium Development Goals” GA/10925 [<http://www.un.org/News/Press/docs/2010/ga10925.doc.htm>].

²⁶⁰ Ibid.

3.6.2 *The Right to Health beyond the ICESCR*

On a regional level, there is an auspicious pattern of the right to health being interpreted as imposing environmental obligations upon States. The African Commission on Human and Peoples Rights has found an instance of state-sanctioned environmental pollution in Nigeria to be a violation of the right to health as it is found in Article 16 of the African Social Charter.²⁶¹ It was held that the regional instrument - almost identical in form to the ICESCR right -²⁶² “imposes clear obligations upon a government. It require the State to take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources.”²⁶³ In the European Court of Human Rights, the *Guerra* case found a violation of the right to health as encapsulated within the right to life protected by the European Convention.²⁶⁴ Judge Jambrek held that, “the protection on health and physical integrity is...closely associated with the right to life”, and the exposure of a group of Italian citizens to air pollution, in combination with the failure of the government to provide information on the risks of such exposure, amounted to a violation of these rights.²⁶⁵ While the wording of ‘physical integrity’ differs from that used at the more international level, the intent to protect a right to health from environmental threats is clear. These cases are promising in that they demonstrate a willingness to hold States accountable for health problems caused by environmental disintegrity – liability for which necessarily implies a corresponding duty to avoid such harm.

In academic circles, discussion continues over the exact degree to which States ought to be held responsible for environmental factors which detrimentally

²⁶¹ Communication 155/96 *The Social and Economic Rights Action Center and the Center for Economic, and Social Rights / Nigeria*.

²⁶² Compare the ASC “Every individual shall have the right to enjoy the best attainable state of physical and mental health”, with the ICESCR’s “right of everyone to the enjoyment of the highest attainable standard of physical and mental health”. These similarities contribute to the weight that the African decisions may carry in influencing any future expansion of the international law.

²⁶³ Communication 155/96, para52.

²⁶⁴ European Court of Human Rights, *Guerra and Others v. Italy* (116/1996/735/932) 19 February 1998; European Convention on Human Rights, Article 2.

²⁶⁵ ‘Concurring Opinion of Judge Jambrek’, reported in Robb, C. (ed) *International Environmental Law Reports: Human Rights and Environment* (Cambridge University Press: UK, 2001) p283.

influence the right to health under the ICESCR. Nevertheless, it is agreed that this responsibility *does exist*: “In the final analysis, ‘environmental conditions; or even a ‘healthy environment’ are to be taken into consideration”.²⁶⁶ Furthermore, this right is absolute and “cannot and should not be balanced against economic or trade considerations”,²⁶⁷ meaning that any environmental duties attached to the right will come to take precedence over commercial or industrial interests – a powerful position indeed.

The right to health under Article 12 of the ICESCR is thus a strong embodiment of the link between human rights and the environment. State duties under these obligations are varied and as yet somewhat imprecise. However, the interpretative tools provided by the General Comments make it very clear that they nevertheless *do* encompass duties towards environmental management and protection. We may therefore conclude that the right to health incorporates certain minimum environmental standards – at the very least, an environment which does not actively prevent the achievement of the highest attainable standard of physical and mental health.

3.7 The Right to Life

While it has been established that all human rights are legally equal and indivisible in their importance,²⁶⁸ in pragmatic terms it makes sense to think of the right to life as fundamental to the broader human rights scheme: “[t]he right to life is the most important among all human rights legally guaranteed and protected by contemporary international law... we cannot forget that this is an original right

²⁶⁶Westra, L. “Ecological Integrity and Biological Integrity: The Right to Life and the Right to Health in Law” (2009) *Transnational Law & Contemporary Problems* 18:3, p7.

²⁶⁷ *Ibid*, p13.

²⁶⁸ The 1993 Vienna Declaration confirmed that “All human rights are universal, indivisible and interdependent and interrelated. The international community must treat human rights globally in a fair and equal manner, on the same footing, and with the same emphasis” Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment*E/CN.4/Sub.2/1994/9; however, logic holds that in practice, without a human life from which to derive other rights, no such other rights can be had.

from which all other human rights derive.”²⁶⁹ We might thus expect that such a right would contain strong prohibitions against its deprivation by anthropogenic causes – including environmental disintegrity. The need for such protection arises because “the right to life is the [right] which is, most of all, connected to and dependent on proper protection of the human environment... this right, like no other, may be directly and dangerously threatened by detrimental environmental measures.”²⁷⁰

3.7.1 *The Right to Life under the ICCPR*

Originally set out in Article 3 of the UDHR, that document states simply and boldly that “[e]veryone has the right to life.”²⁷¹ This statement was given its full legal weight when it was expressed as Article 6 of the ICCPR, which similarly states that “[e]very human being has the inherent right to life”.²⁷² Primarily formulated with the intention of preventing a recurrence of the events of World War II, this provision was enacted to prohibit States from arbitrarily depriving citizens of their lives. As such, it was initially thought of as imposing only a *negative* obligation: all that was required for a State to comply was to abstain from acting in the way specified. However, it is now well recognised that the right to life imposes positive obligations on States.²⁷³ One example of this requirement to take positive action regarding the right to life is the obligation upon States to protect their citizens from being killed by third parties – if a State fails to take adequate steps to prevent this, at least partial responsibility for the violation of the right to life can be imposed.²⁷⁴ This is significant because one argument against

²⁶⁹Galicki, quoted in Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment*E/CN.4/Sub.2/1994/9.

²⁷⁰Galicki, quoted in Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment*E/CN.4/Sub.2/1994/9.

²⁷¹National Coordinating Committee for UDHR50, Franklin and Eleanor Roosevelt Institute *History of the UDHR* (2008) [<http://www.udhr.org/history/overview.htm>].

²⁷²International Covenant on Civil and Political Rights, Article 6.

²⁷³Carmona, M. *The Nature of the Obligations under the International Covenant on Economic, Social and Cultural Rights* (Intersentia: New York, 2003) p141.

²⁷⁴“In the case of *Osman v the United Kingdom*, the test that the European Court established to find a violation of the positive obligation to protect the right to life from criminal acts of another individual was that the authorities “knew or ought to have known at the time of the existence of a real risk to the life of an identified individual from the criminal acts of a third party and that they

extending the right to life to include its deprivation due to environmental deterioration has been that to do so would impose positive obligations on the State.²⁷⁵ However, it is clear that many of the so-called “first-generation rights”²⁷⁶ do in fact impose such obligations, and that the difference is only in the scale, rather than the actual nature of the obligation. Indeed, legal theory has since matured to include not only a requirement of positive action in the upholding of the right to life in obvious criminal circumstances, but positive action on fronts that were perhaps not even considered as threats at the time that the right was first formulated – including environmental issues.²⁷⁷ Given then that we are able to include situations requiring positive action from the State, we are free to consider the nature of the right to life in international law, and what would be required for a State to have fulfilled their obligations relating to environmental conditions insofar as they affect the right.

Simply in terms of human physiology, speaking of a ‘right to life’ presupposes the availability of a certain amount of air, water, food and shelter.²⁷⁸ As such, it is easy to see how environmental conditions would have a direct impact upon this most fundamental of rights - “the connection between the right to life and the environment is an obvious one”.²⁷⁹ All of the above preconditions to life require a natural resource base of sufficient integrity to provide a minimum level and standard of each to every human. Accordingly, it is possible to interpret the right to life as “including the traditional protection against intentional or arbitrary deprivation of life, *as well as* an obligation on the part of states to ensure that

failed to take measures within the scope of their powers.” Ibid. Case citation is *Osman v United Kingdom* [1998] EHRR 101.

²⁷⁵ “[I]t is not always clear under which circumstances the state is obliged to actively protect the rights enshrined in the Convention, let alone to know how far these obligations extend” and further, “positive obligations exist in doctrinal terms, but their effectuation is often hindered by a piecemeal application and inadequate sophistication in the numerous combinations of various principles and parameters (and sub-parameters) involved in judicial examination.” Xenos, D. “Asserting the Right to Life (Article 2, ECHR) in the Context of Industry” (2007) *German Law Journal* 8:3, p232.

²⁷⁶ Tomuschat, C. *Human Rights: Between Idealism and Realism* (Oxford University Press: USA, 2003), p26.

²⁷⁷ Eur. Court H.R., *Öneryildiz v. Turkey*, Judgment of 18 June 2002, App. No. 48939/99.

²⁷⁸ Collins-Chobanian, S. “Beyond Sax and Welfare Interests: A Case for Environmental Rights” (2000) *Environmental Ethics* 22.

²⁷⁹ Ramcharan, R. G. quoted in Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment*E/CN.4/Sub.2/1994/.

every individual within its boundaries has access to the means of survival. This expansive conception of the right to life would protect individuals from all possible threats, including environmental threats.”²⁸⁰ As such, in circumstances of environmental degradation, the ability of States to meet their obligations under the right to life would prima facie be directly dependent upon their ability to address the environmental threats to survival. In other words, environmental problems which directly affect the supply of these basic needs - desertification, salinization, depleted water tables, climate change in the form of drought or flooding and species extinction - could be seen as depriving people of their right to life, at the very least in a situation where a State Party was aware of the existence of such threats and failed to act.

This expectation that the right to life would include such basic environmental necessities as food, water, and an absence of toxins has since been echoed in many supporting documents. In a General Comment issued in 1982, the Human Rights Committee (HRC) explicitly states that the right to life “is a right which should not be interpreted narrowly”,²⁸¹ and, reiterating the fact that it is not solely negative in nature, “the expression ‘inherent right to life’ cannot properly be understood in a restrictive manner, and the protection of this right requires that States adopt positive measures.”²⁸² This indicates that the right to life may include an obligation upon States to take positive action on a broad range of factors. That these can include environmental factors is clear when the paragraph goes on to assert that “it would be desirable for State parties to take all possible measures to reduce infant mortality and to increase life expectancy, especially in adopting measures to eliminate malnutrition and epidemics”.²⁸³ Eliminating malnutrition and epidemics requires, as a matter of biology, fostering an environment that is capable of producing sufficient food at low cost, and that is healthy enough to prevent an escalation of disease. Of course, providing access to medical care and other economically dependent tools of sanitation are important additional

²⁸⁰ Claude, R. & Weston, B. *Human Rights in the World Community: Issues & Action* (University of Pennsylvania Press: USA, 2006), p265. Emphasis mine.

²⁸¹ Office of the High Commissioner for Human Rights, General Comment No. 6: The right to life (art. 6): 04/30/1982; Paragraph 1.

²⁸² Ibid, Paragraph 5.

²⁸³ Ibid.

considerations with regard to this requirement, but even these are tied to environmental factors, with regard to the influence that natural resource abundance or scarcity can have on poverty levels.²⁸⁴ In this sense, the right to life as articulated under the ICCPR could be interpreted to include an obligation upon States to take action on environmental matters – at minimum where they tend to increase infant mortality, shorten life expectancy or encourage malnutrition and epidemics. Such an obligation need not include an expectation that the State solves the problem in isolation – action could range from prohibiting specific industry activity in individual cases, to legislating for (and, significantly, *enforcing*) higher environmental standards, right through to appealing for – or even legally demanding – international cooperation on these issues.

3.7.2 The right to life outside of the ICCPR

International environmental agreements have also established a link between the rights that they contain and the right to life. For example, the Hague Declaration on the Environment, specifically focused on the issue of ozone depletion, nevertheless makes some broadly applicable comments about the right to life and the duty of States to protect this right from environmental threats: “[t]he right to live is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge to all States throughout the World”.²⁸⁵

Returning to the international bill of rights, the CESCR has stated that “the human right to adequate food is of crucial importance to the enjoyment of all rights”, and “the right to food is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfilment of other human rights”²⁸⁶ – a clear recognition that human life is inherently linked to its means of sustenance – and the environment which produces it. The FAO has also linked the material conditions for survival to the right to life, stating that “the right to freedom from hunger is fundamental, which means that the state has an obligation to ensure, as a

²⁸⁴ See USAid, *Issues in Poverty Reduction and Natural Resource Management* (United States Agency for Development: USA, 2006).

²⁸⁵ Hague Declaration on the Environment 28 I.L.M 1309 (1989).

²⁸⁶ CESCR, General Comment No. 12.

minimum, that people do not starve. This right is closely linked to the right to life itself”.²⁸⁷

The CESCR has also discussed access to water in the context of its importance for human survival, recognising that a right to water “should also be seen in conjunction with other rights enshrined in the international bill of human rights, foremost among them the right to life”.²⁸⁸ A recent General Assembly resolution echoes this in saying that the right to water “is essential for the full enjoyment of the right to life and human dignity”.²⁸⁹ Besides food and water, a third crucial component of the environmental preconditions of the right to life is to live in an environment that is free of toxins. This link was recognised in a resolution of the Human Rights Council, which stated that “the dumping of toxic and dangerous products and wastes may constitute a serious threat to human rights, including the right to life.”²⁹⁰

3.7.3 The right to life in regional and domestic law

On a regional level, a number of texts have explicitly recognised that the right to life is dependent upon environmental factors. For example, the Inter-American Commission on Human Rights has stated that the right to life is dependent upon the environment, protection of which can require States to take positive measures.²⁹¹ Prior to its disestablishment, the European Commission on Human Rights stated that there is an obligation upon states, “not only to refrain from taking life ‘intentionally’ but further, to take appropriate steps to safeguard life”.²⁹² Supplementing these instrumental statements is an emerging body of case

²⁸⁷ FAO, *Pamphlet on Universal Declaration of Human Rights – 50th Anniversary* (10 December 1998) p4.

²⁸⁸ CESCR, General Comment No. 15.

²⁸⁹ UN Resolution 64/292, The Right to Water and Sanitation.

²⁹⁰ Resolution 9/1. Mandate of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights; http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_9_1.pdf

²⁹¹ “The realization of the right to life... 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.” Inter-American Commission on Human Rights, *Report on the Situation of Human Rights in Ecuador* OEA/Ser.L/V/II.96, doc. 10 rev. 1 (1997), p88.

²⁹² Application 7154/75; Application 9348/81.

law which further supports the idea of environmental duties as being inherent within recognised human rights duties. The International Court of Justice has stated that “the protection of the environment is likewise a vital part of contemporary human rights doctrine, for it is a sine qua non for numerous human rights such as the right to health and the right to life itself.”²⁹³ The European Committee of Social Rights has also made strong statements in this regard, for example in the case of *Marangopoulos v Greece*.²⁹⁴ Here it was held that Greece had, by failing to fight air pollution, violated a right to health linked to the right to life under the European Convention on Human Rights. An even stronger recognition of an environmental duty was made in *Oneryildiz v Turkey*²⁹⁵ in which a methane explosion at a dump was deemed to have violated the right to life under Article 2 of the Convention. Here the right to life was found to impose an “obligation to take appropriate steps to safeguard the lives of those within their jurisdiction”, including from environmental threats.²⁹⁶ This was further supported by the case of *Budayeva and Others v Russia*, where it was found that the State had failed to meet its obligations under the right to life by failing to take action to prevent or lessen the harm caused by mudslides.²⁹⁷ While these judgments emanate from a regional rather than international body, they are nevertheless an indication of a growing body of opinion to the effect that states have a positive duty with regard to environmental factors that may deprive persons of their lives, and that a failure to act upon those duties may be considered a violation of the right to life.

On a national level, India provides perhaps the strongest example of positive development in this area – while it possesses no explicit constitutional or legislative grounds for action on environmental threats to human rights, the Supreme Court has interpreted the right to life as including a right to a healthy

²⁹³Gabčíkovo-Nagymaros Project (Hung. V Slov.), 1997 I.C.J. 7, 88 (Sept. 25).

²⁹⁴*Marangopoulos Foundation for Human Rights (MFHR) v. Greece*, Complaint No. 30/2005.

²⁹⁵European Court of Human Rights, Application No. 48939/99, Judgement of 18 July 2002.

²⁹⁶“The Court found, considering the evidence, that the authorities knew the risk and needed to take preventative measures... to protect the individuals, which they failed to do”, Orellan, M., Kothari, M. & Chaudry, S. *Climate Change in the Work of the Committee on Economic, Social & Cultural Rights* (FES: Geneva, 2010).

²⁹⁷*Budayeva and Others v Russia* (App no 15339/02) & Ors (20 March 2008). Centre for Minority Rights Development on behalf to Endorois Community v Kenya, Comm. 276/2003, May 2009/

environment: “[a]ny disturbance of the basic environment elements, namely air, water and soil which are necessary for life would be regarded as hazardous for life within the meaning of Article 21 of the Constitution”.²⁹⁸ [Double Check: any other constitutions recognise v. of life via env.?)

3.7.4 Academic developments

Scholarly theory also supports the inclusion of environmental duties within States’ obligations under Article 6. While it is noted that “the protection of the right to life in relation to the environment does not have a long or rich legal history”,²⁹⁹ this is not seen as a barrier to the future recognition of such legal obligations:

“Insofar as the duty to ensure the right to life is concerned, it requires the State to *guarantee access to the material conditions necessary for supporting life*; to take all possible measures to prevent violations of the right to life by others; to *take all possible measures to safeguard the environment*, to control harmful diseases and to pursue policies of peace within the world’s community.”³⁰⁰

Strong statements such as these support the argument for bringing environmental threats to the access to these basic building blocks of life within the concept of the right to life as embodied by Article 6 of the ICCPR.

A related, parallel debate that has now been underway for some time is that regarding climate change and human rights. While it is beyond the scope of this thesis to discuss the question of climate change in any great depth, the debate is nevertheless a useful indicator of the readiness of the international community to accept practical environmental challenges as affecting human rights.³⁰¹ Whether or not climate change is anthropogenic and thus able to be influenced by State

²⁹⁸*M.C. Mehta v Kamal Nath*

²⁹⁹Westra, L. “Ecological Integrity and Biological Integrity: The Right to Life and the Right to Health in Law” (2009) in *Transnational Law & Contemporary Problems* 18:3, p25.

³⁰⁰Ramcharan, B. G. “The Concept and Dimensions of the Right to Life” in Ramcharan, B. G. (Ed) *The Right to Life in International Law* (Martinus Nijhoff Publishers: Netherlands, 1985). [Emphasis mine].

³⁰¹ As far as possible, the author will attempt to avoid politicising this paper; for a more in-depth discussion of the definitions and possible causes of climate change I recommend the UNEP website [<http://www.unep.org/climatechange/>]; for a discussion of how this has become a political issue, please see Schmidt, Charles W. "A closer look at climate change scepticism" in *Environmental Health Perspectives* 118.12 (2010): A536.

Parties, the literature surrounding the issue shows a strong willingness from both international treaty bodies and the States themselves to recognise environmental threats to human rights as a State responsibility. The 2009 Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights³⁰² considered a wide range of available material (including State submissions) regarding the effect that climate change – and more relevantly, the component environmental challenges which collectively constitute the phenomenon – would have on human rights. The report concluded that “environmental degradation may interfere with many rights, including rights to life”,³⁰³ and more specifically, that

“the human rights to life and health are effected by the projected increase of death, disease, and injury from heat waves, floods, storms, extreme weather, fires, and droughts; hunger and malnutrition from food shortages; mortalities by ground-level ozone; and an expanded range and impact of illness and diseases. The human rights to food and water will be affected as climate change reduces the supply and security (and raises costs) of both – through, for example, reduced yields in tropical regions for food, and for water through droughts, flooding and decreased glacier and snow sources.”³⁰⁴

While these statements were made in the context of the climate change discourse, the type of environmentally driven deprivation discussed here is not unique to climate change scenarios, and it is not unreasonable to suppose that these conditions would still be seen to violate human rights even where they arose outside of the question of climate change. As such, these statements serve as further support for the idea that the right to life can be violated as a consequence of environmental degradation.

In reality however, given the strong demands that ICCPR rights make of State parties, it is unlikely that the right to life under Article 6 of this covenant would be recognised as entailing a justiciable right to environmental quality at the present

³⁰² A/HRC/10/61 (15 Jan 2009).

³⁰³ Knox, J. “Linking Human Rights and Climate Change and the United Nations” (2009) *Harvard International Law Review* 33, p485.

³⁰⁴ Orellana, M., Kothari, M. & Chaudry, S. *Climate Change in the Work of the Committee on Economic, Social and Cultural Rights* (Friedrich-Ebert-Stiftung: Geneva, 2010); p5.

time. In practical terms, because ICCPR rights have historically been treated as being more concrete, the recognition of a right to material commodities such as food and water as part of the right to life would be a difficult burden for States to accept - particularly where some parties simply may not have the resources available to make such guarantees to their citizens. As such, “[e]ven though environmental harms have been widely recognised as threats to human life and health, international tribunals have been cautious in finding that such harms violate the right to life.”³⁰⁵ While regional instruments and jurisprudence in particular have now begun to enforce the link between a right to life and the environment,³⁰⁶ no such link has been explicitly recognised in the jurisprudence of the ICCPR. From the preceding discussion, it is clear that the right to life under the ICCPR has evolved significantly from its initial conception as a narrow, negative duty upon the state to include positive duties that could arguably extend to environmental threats to life. However, this argument has yet to be made at the appropriate levels of international law, and as such, Article 6 of the ICCPR does not currently entail a right to environmental protection. Rather, it is likely that the scope of the right currently remains limited to situations of death due to political persecution or negligence.³⁰⁷

3.8 Other Rights Affected

Thus far this Chapter has discussed some key human rights concerns in terms of both their dependence and influence upon environmental issues in international law. The focus has been specifically upon survival - the right to life, and the various composite rights which, taken together, permit the achievement of the former. However, the environmental prerequisites for the realisation of human

³⁰⁵ Reference Paper to the Asia Pacific Forum, *Human Rights and The Environment* (2007) p62

³⁰⁶ Particularly under the European Convention of Human Rights; see *Marangopoulos Foundation for Human Rights (MFHR) v Greece*, Complaint No. 30/2005, European Committee of Social Rights (E.C.S.R) (2006); *Oneryildiz v Turkey*, 41 Eur. Ct. H. R. 325, 356 (2004); Indian case *Orissa*.

³⁰⁷ “[R]espected commentators have taken the view that ‘the human right to life ... ‘does not guarantee any person against death from famine or cold or lack of medical attention’ ... therefore ‘the mere toleration of malnutrition by a state will not be regarded as a violation the human right to life... There is thus a line of thought according to which Article 6 does not require the state to take affirmative actions to ensure that its citizens have access to adequate sustenance’” McCaffrey, S. “A Human Right to Water: Domestic and International Implications” (1992-1993) *Georgetown International Environmental Law Review* 5:8, p9.

rights are not limited merely to questions of biological need. True respect for the dignity of the person requires action on a number of other fronts that are also affected by environmental conditions.

3.8.1 Living Conditions

Article 11 of the ICESCR requires consideration of clothing, housing, and the somewhat broader concept of ‘improved living conditions’. The right to adequate clothing, housing, and improvement of living conditions can likewise be constructed as implying environmental management obligations – assuming that the common themes of the General Comments on Article 11 can be carried through to all aspects of the right it contains. Textile and construction material manufacture would not only be required to be undertaken in a manner which ensures not only the fair availability of these resources to all, but also produced in a safe and sustainable fashion. As such, States would have an obligation to concern themselves with environmental issues such as textile crop, forestry and extraction industry practices including efficiency of land use, pesticide and chemical limitations, and the ongoing sustainability of such. Article 11 of the ICESCR is thus a rich source of what essentially amount to minimum environmental rights, though the provision is not the only source of environmental obligations within the Covenant.

3.8.2 Development

Other rights under the ICESCR may also be said to imply environmental obligations upon State parties. Article 1 (1) which guarantees individuals the right to “freely pursue their economic, social and cultural development” is obviously contingent upon having a natural resource base sufficient to sustain such activity. In economic terms, production capacity –particularly for developing countries- largely depends upon the availability of raw materials with which to create commodities. Social and cultural development are also affected, particularly where cultural activities have traditionally involved interaction with the natural world – whether through hunting and gathering or through art and physical expression.

3.8.3 Cultural Life

Similar environmental limitations might be applicable under Article 15, concerning the right to take part in cultural life. The link between culture and the environment is not confined to indigenous practices alone. According to the Director-General of UNESCO:

“...The deterioration of the natural environment and, even more, the alienation from this environment of an increasingly large number of people in the industrialised countries are direct and potentially very serious blows to culture itself. What idea can man form of purity unless he initially receives a spontaneous impression of purity from the air he breathes, the river where he bathes, the sky on which he gazes or from all that goes to make up his life at its most instinctive?”³⁰⁸

It may thus be possible to construct an argument that all forms of serious or widespread environmental harm cause a correlative harm to the cultural rights of those affected.

3.8.4 Minority Rights

At a narrower level, Article 27 of the ICCPR discusses the rights of “ethnic, religious or linguistic minorities”, stating that “persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture”. The Human Rights Committee has declared that this is to be interpreted “in a broad manner, observing that culture manifests itself in many forms, including a particular way of life associated with the use of land resources, especially in the case of indigenous peoples. That right may include such traditional activities as fishing or hunting and the right to live in reserves protected by law.”³⁰⁹ The potential environmental limitations upon cultural participation are particularly obvious when considering an example such as the Maori tradition of hunting mutton-birds (or *maori name*). The ability to maintain this tradition was directly threatened by [find exact causes], and the

³⁰⁸ Report of the Secretary-General: “The Balance which should be struck between scientific and technological progress and the intellectual, spiritual, cultural and moral advancement of humanity” (E/CN.4/1199) thirty-second session of the Commission on Human Rights, 1976.

³⁰⁹ Shelton, D. *Human Rights & The Environment: Jurisprudence of Human Rights Bodies* Background Paper No. 2, Joint UNEP-OHCHR Expert Seminar on Human Rights and the Environment (Geneva, 14-16 January 2002); [<http://www2.ohchr.org/english/issues/environment/enviro/bp2.htm>], 1(a) General Comments.

preservation of this aspect of Maori identity has only been achieved through careful State intervention to conserve this species, and the on-going protection of the environment in which they live. In this sense, States could be under an obligation to protect the environment where its resources are essential to the continuation of a cultural practice.

While these rights are not the primary focus of this paper, it is helpful to note that the influence of the environment upon the achievement of human rights standards extends beyond its provision of our bodily needs alone. The recognition that the environment enables (or, in cases of degradation, prevents) the achievement of other human goods –sometimes with a nonmaterial or even spiritual dimension– may provide some comfort for those who despair of the somewhat exploitative anthropocentric approach adopted in this paper, going as it does some way towards recognising an inherent value in environmental protection.

3.9 Summary of current legal situation

This chapter discussed the legal status of the environment within international human rights law. The situation is complex, with both formal covenants and official interpretative materials reflecting the various historical influences of international politics, and not necessarily the pressing needs of the contemporary world. As such, the existing legal duties of States are likewise not always an accurate indication of the areas in which action is most needed.

The foremost example of this in the current context is the fact that the right to life as it stands does not contain any explicit duty to remedy environmental conditions that deprive persons of their life, either through direct harm such as contamination or pollution, or through the long-term deprivation of the natural resources needed to sustain life. Because the right to life is held to be of supreme importance in the human rights scheme, this failure to legally acknowledge the necessity of sound environmental management in the maintenance of human life amounts to a relegation of the issue to a secondary concern in the list of State priorities. This

omission has serious consequences for those whose national governments are failing to adequately regulate public, corporate and private activity in the environmental sphere: it deprives them of the opportunity for adequate recognition of the gravity of their situation, and thus the motivation for the State to change its policies to address the harm. Where a person or persons have lost their lives through foreseeable causes that can be directly attributed to environmental mismanagement, forcing claimants to pursue action through domestic environmental channels denies the fact that human rights have been violated. Moreover, because environmental damage disproportionately affects those already economically and socially disadvantaged, such violations may go uncontested altogether by those lacking the knowledge and resources to pursue action through the domestic courts. A criminal action would be equally unimaginable for victims of this type: proving direct harm from one discreet individual to another will often be impossible where the harm is environmental, particularly considering that many of these situations will be the result of actions at a community or even societal level, the cumulative effect of which was to cause the harm. The appropriate forum for dealing with the deprivation of life due to environmental disintegrity is thus the human rights arena: this both acknowledges the seriousness of the harm and demands action and accountability at the level appropriate to its cause - the State. As discussed above, strong statements are beginning to be made in support of this link, in both national and regional jurisprudence as well as in the supporting commentary surrounding the right to life. However, as yet the right does not legally impose *any* environmental duties upon State parties. Such duties may exist under other international instruments or domestic laws, but the failure to acknowledge the immediacy of the relationship between a right to life and the environmental preconditions to that life (and the absurdity of discussing one in the absence of the other) leaves a gaping hole in the blanket of protection that international human rights law is supposed to provide. This is thus an area which must undergo significant development if the human rights regime is to stay relevant and meet the needs of those it seeks to protect – humanity as a whole.

The rights to food, water, and health may themselves be considered as components of the right to life, however, the current lack of an environmental dimension to that right forces us to look elsewhere for the protection of these basic human needs. Though commonly perceived as being somehow inferior in force to the ICCPR,³¹⁰ the ICESCR provides a much stronger basis for the practical protection of the rights it contains, and in turn the ICCPR rights which are dependent upon them. This is because, unlike the oversights of the ICCPR, the rights to food, water and health succeed in imposing environmental duties upon States, thus opening the door for the effective protection of human well-being which acts as a foundation for achieving all other rights. The right to food incorporates a requirement of environmental sustainability, which, while as yet a marginal and underdeveloped aspect of the right, is nevertheless an imposition of some form of environmental duty upon States. The need for further development of this duty is obvious, as the responsibility remains indeterminate and thus possibly unenforceable – but the mere recognition of a need to address environmental aspects of the right to food is a significant step towards addressing the practical realities of human rights issues today. The right to water, “widely recognised but still not legally binding”,³¹¹ is so inextricably linked to the environment that the principle barely needs to be articulated – as a natural resource, the provision of a minimum quantity and quality of water to all people requires active conservation, protection and rehabilitation of said resource, which in itself amounts to environmental management. As such, the right clearly entails an environmental duty upon States, and if the debate around this right continues at its current intensity, it can be expected that this duty will become legally as well as ethically binding in the near future. The right to health contains perhaps the most explicit environmental duty, requiring the provision of a ‘healthy environment’, or one that does not preclude good mental and physical health. It

³¹⁰ “In practice, we have not yet achieved the universal, interdependent and interrelated protection and promotion of civil and political, economic, social and cultural rights. Whereas clear standards have been set as to the contents of civil and political rights, the precise meaning of economic, social and cultural rights remains vague. If all human rights are to be treated on an equal footing, more attention needs to be paid to clarifying the universal minimum core contents of economic, social and cultural rights.” Robinson, M. United Nations High Commissioner for Human Rights *The Right to Food in Theory and Practice* [<http://www.fao.org/Legal/rtf/bkl.htm>].

³¹¹ McGraw, G. “Water for Life: The Challenge Posed by the Un-Codified Human Right to Water in International Law” (2010) *University for Peace Law Review* 1:39, p42.

also requires States to take action to prevent disease and malnutrition, the oftentimes environmental origins of which will need to be addressed under the duty.

In summary, current international human rights law *does* impose duties on States with regards to the environment, but only in the context of the rights to food, water and health, and only in very broad, vague terms and without specific targets or standards of action. In addition, because the right to life does not impose any such duties, state obligations regarding the environment exist only under the ICESCR, except perhaps in circumstances of preventing third-party violation.³¹² Whether or not it is legally correct, the ICESCR is often perceived as imposing softer requirements than the ICCPR: “economic, social and cultural rights are subject to progressive implementation in light of resources. This may severely limit the usefulness of such rights in the environmental field.”³¹³ There are thus significant obstacles to be overcome before international law can be said to be adequate to the threat posed to human rights by environmental degradation. This chapter will now consider the best means of overcoming such obstacles, beginning with the current push for an ‘environmental human right’.

Conclusions

The analyses conducted above have sought to explore the extent to which certain human rights may be said to incorporate an obligation of environmental action upon states. Through an examination of formal international instruments, jurisprudence, regional agreements and scholarly commentary a number of boundaries with regard to this issue have been established. Firstly, whilst the right to life under the ICCPR would seem to logically require certain environmental standards, the legal status of the right does not at present support this. In contrast,

³¹²Though there is currently no case law supporting third-party violation of the right to life due to environmental contamination under the ICCPR.

³¹³ Glazebrook, S. “Human Rights and the Environment” (2009) *Victoria University of Wellington Law Review* 40, p315. This goes back to the discussion about the imposition of duties of positive action upon the state, rather than negative duties to refrain from action, as discussed previously with regards to the right to life. See also UHCHR Fact Sheet “[T]he justiciability of economic, social and cultural rights has traditionally been questioned for a number of reasons” p30.

the right to food under the ICESCR does seem to require the consideration of environmental issues, particularly with regard to the requirement of sustainability discussed in the interpretative comments to the right. The right to water, only recently articulated as a separate right, consequently lacks significant legal force - there is arguably no legal redress in international human rights law for a violation of this right. Nevertheless, it is only a matter of time before this right is fully embedded in law, and its attendant environmental components with it.

Development of this right is therefore of interest as an example of continued evolution of the law to encompass environmental threats to human well-being. Finally, the right to health has been discussed in the context of a requirement that states remove environmental barriers to health, such as harmful pollution, poor sanitation, and conditions which foster disease.

Having established the current legal status of the environment in existing human rights law, this paper will now turn to a normative analysis of the situation as it presently stands. Specifically, I am concerned with whether the obligations created by the existing law are proportionate to the challenges posed by environmental degradation, and if not, how the law might be further developed in order to permit the full realisation of international human rights.

“[A] right to an environment of quality can effectively be seen as one of the foundation stones on which all other rights depend”

- *Justice Glazebrook*³¹⁴

“The right to live is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge of all States throughout the world.”

– *Hague Declaration on the Environment*³¹⁵

CHAPTER FOUR: THE WAY FORWARD

The previous chapter sought to explore those areas of the human rights lexicon which are most obviously – and urgently – affected by environmental conditions. It was there demonstrated that while a certain standard of environmental integrity is a necessary precondition of the rights to food, water, health, and life itself, existing human rights law recognises this link only minimally. The ability of the human rights regime to address this deficiency of the law is vital to the on-going success or failure of efforts to protect the dignity of the human person in the face of accelerating environmental degradation. This chapter will aim to explore the options available for such development, with the goal of laying out a clear strategy for future action. One potential option which is gaining increasing popularity among academic and even judicial circles is that of introducing an explicit ‘human right to the environment’. The arguments for and against this possibility will be outlined, and the concept compared to alternative options for future development. Ultimately, this Chapter will conclude that while the concept of a right to the environment has intuitive appeal, the best way to achieve an adequate level of environmental protection is not through the formulation of any new law, but to adopt an expanded, ecologically informed interpretation of our existing law. Just as Chapter Two found that we already possess more than

³¹⁴Glazebrook, supra n 313 at 317.

³¹⁵11 March 1989.

adequate legal tools to bring about an ethical reduction in population growth; this Chapter will likewise rely on the existing law as a basis for action. The difference in this instance is simply that while the basic framework of the law is strong, the interpretative materials demonstrate only a shallow understanding of the ecological elements of human right law. How this understanding might be deepened so that the law more accurately reflects the reality of an environmentally compromised world will be the focus of the concluding sections of this paper.

4.1 A Human Right to the Environment

In recognition of the fact that our existing law is not adequately addressing the underlying causes of much human suffering, contemporary scholarship has been increasingly focused on establishing a basis for the introduction of a human right to the environment. This right is envisioned as a stand-alone right, explicitly and individually recognised, and equivalent in status to existing ICCPR and ICESCR rights such as the right to freedom from torture or the right to a private life. Under the envisaged right, “a victim [would] not have to prove that his or her right to life (or any other right) has been violated as a result of an environmental problem. A victim should be able to vindicate a violation of a right to a clean environment, assuming the parameters of this right can be laid down.”³¹⁶ The popularity of this proposed right should come as no surprise, as it seems to offer a tool that can be broadly applied to compel action without relying on the establishment of individual harm as it has traditionally been conceived. Such a right also seems to more accurately reflect the personal loss felt by some from environmental degradation – a feeling not only of having been deprived of a resource, but a sense of violation, or wrongness on a deeper level. In the following analysis, it will be shown that while an argument exists that such a right exists as a matter of customary law, the evidentiary burden necessary to establish this is lacking. Furthermore, it is proposed that legal recognition of this right is not necessarily the best option for the future development of international human rights law.

³¹⁶Atapattu, S. “The Right to A Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment under International Law” (2002-2003) *Tulane Environmental Law Journal* 16:65, p73.

4.1.1 Is there a legal basis for such a right?

There have been a number of attempts from some quite influential quarters to formalise a distinct human right to an environment of a certain quality. Perhaps the strongest such bid came in the form of *the Draft Declaration of Principles on Human Rights and the Environment*, an initiative led by the Special Rapporteur on Human Rights and the Environment and developed in collaboration with a panel of experts from both legal and scientific backgrounds.³¹⁷ These principles sought a declaration formalising a state duty to protect the environment, with the proposed document containing several strong affirmations of environmental rights: “[a]ll persons have the right to a secure, healthy and ecologically sound environment”; and elsewhere, “[a]ll persons have the right to freedom from pollution, environmental degradation and activities that adversely affect the environment, threaten life, health, livelihood, well-being or sustainable development within, across or outside national boundaries”.³¹⁸ Perhaps because of the sweeping language involved, the Draft Declaration was never adopted and to this day “the United Nations has not approved any general normative instrument on environmental rights”.³¹⁹ As such, in terms of a binding international Convention, a specific ‘human right to the environment’ has never emerged. However, formal instruments such as Conventions or treaties comprise only one part of the human rights regime, with customary law being the other of the two “primary forms of international law”.³²⁰ We must therefore examine customary law as a potential source of this new right before any declaration can be made as to its legal force.

³¹⁷ E/CN.4/Sub.2/1994/9, Annex I (1994). See also Project DIANA at Yale Law School, *Draft Declaration of Principles on Human Rights and the Environment, 1994* (2005) at [<http://www.yale.edu/lawweb/avalon/diana/undocs/33198-11.html>].

³¹⁸ Part I, Para 2 & Part II, Para 5.

³¹⁹ Shelton, D. “Human Rights and Environment: Past, Present and Future Linkages and the Value of a Declaration” (2009) Background Paper for High Level Expert Meeting of the New Future of Human Rights and Environment: Moving the Global Agenda Forward, (UNEP and OHCHR project) p4.

³²⁰ Goldsmith, J. & Posner, E. “A Theory of Customary International Law” (1999) *The University of Chicago Law Review* 66: 4, p1113. It has even been argued that customary law may be a more powerful source of obligation upon states, because “unlike treaties, which only bind a country once it has accepted the treaty obligations, all countries in the world are bound [by customary law], whatever their particular view may be”, Bailey, P. “The Creation of the Universal Declaration of Human Rights” [<http://www.universalrights.net/main/creation.htm>].

4.1.2 Customary law

Customary law arises, as the name suggests, as a collective norm evidenced by action: “[c]ustomary international law results from a general and consistent practice of states followed by them from a sense of legal obligation”.³²¹ From this, it is clear that if it could be shown that most States already recognise an environmental right *in practice*, and do so out of a sense of obligation, it may be possible to argue that this right does in fact exist at an international level—regardless of its absence from the indexes of international agreements. In considering what may be taken as evidence of customary law, the traditionally influential source has been the way that States actually *behave*,³²² while ‘soft law’ such as statements from international organisations, political leaders, national constitutions or legislation, and General Assembly resolutions, have traditionally been excluded:

“General statements by international bodies...are not without significance, but their weight as evidence of custom cannot be assessed without considering actual State practice. National constitutions and legislation similarly require a measure of confirmation in actual behaviour. [Statements] with human rights provisions that are little more than window-dressing can hardly be cited as significant evidence of practice or ‘general principles’ of law.”³²³

Those who advocate this narrower approach have held up the wording of the Rio Declaration - carefully couched in terms of ‘entitlements’ rather than ‘rights’ - as just one example of a deliberate choice by States to make promises while never intending to make themselves legally accountable. It is argued that such rhetoric cannot be used to compel States since it evinces no ambition to achieving legal

³²¹ American Law Institute, *Restatement (Third) of Foreign Relations Law* (1987) s102.

³²² “[I]n order to deduce the existence of customary rules, the court deems it sufficient that the conduct of States should, in general, be consistent with such rules”. ICJ Rep 14 p88.

³²³ Schachter, O. *International Law in Theory and Practice* (1991) ch XV. This reluctance to include such evidence may in part be attributed to the fact that States tend to be very careful about the types of agreements they enter into, and do so fully cognisant of any attending legal obligations – they make promises under soft law precisely *because* it is ‘soft’ law and they have no intention of being legally bound; to infer such an obligation where it hasn’t been consented to then raises the issue of an infringement of sovereignty.

status: “had the signatories to Rio intended to recognize a human *right* to environment, they would have been plain about it.”³²⁴

However, recent developments have seen a shift in thinking on this point, and it may now be argued that secondary sources such as non-binding international agreements, government statements of intent, or other “non-physical acts”³²⁵ can form evidence of customary law, and indeed, may actually be *required* to be taken into such consideration.³²⁶ This broader approach aligns with the rules governing the International Court of Justice which, as a key judicial body in international law, is permitted by its constitution to look not only at the traditionally accepted legally binding instruments and “general practice accepted as law”, but also “the general principles of law recognised by civilised nations”, as well as “judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law”.³²⁷ In other words, for the purposes of determining international customary law, “a better approach is to regard state practice as including statements by states in which arguments are made without examination as to whether claims have ever been enforced. Accordingly, state practice is taken to include any act or statement by a state.”³²⁸ Thus, while the strongest evidence of customary law remains how States act in practice, a sufficient weight of rhetorical acknowledgement of rights and duties can also be taken to indicate the existence of an international rule. This broadening of the type of evidence accepted as implying customary law greatly increases the chances of finding a legally binding human right to the environment.

³²⁴Collins, L. “Are We There Yet? The Right to Environment in International and European Law” (2007) *McGill International Journal of Sustainable Development Law & Policy* 7, p133.

³²⁵ Barker, J. “Mechanisms to Create and Support Conventions, Treaties, and Other Responses” (Eolss Publishers: UK, 2004) Section 6.

³²⁶ It is argued that the flexibility provided by soft law permits States the latitude to accept obligations in an agreed area without the need to reach complete uniformity of belief over the exact nature and extent of the obligations; in other words, they permit the evolution of international law that may otherwise be impossible in such politically and economically diverse company. Rodriguez-Rivera, L. “Is the Human Right to Environment Recognized Under International Law? It Depends on the Source” (2001) *Colorado Journal International Environmental Law & Policy* 12:1.

³²⁷Statute of the International Court of Justice, Art.38 [<http://www.icj-cij.org/documents/index.php?p1=4&p2=2&p3=0>].

³²⁸ Barker, supra n 325.

4.1.3 Does the right exist at customary law?

The first place that many proponents of a distinct ‘right to environment’ turn to is naturally the existing body of international instruments. As discussed in the previous Chapter, some existing rights already logically entail a *kind of* environmental right – a right to an environment that permits States to meet their obligations under those rights. Despite the fact that these duties have not been recognised in any consistent way at law, some argue that when taken in aggregate the environmental duties inherent to ICCPR and ICESCR rights can be seen as comprising a broader right to a healthy environment generally. The question essentially hinges on whether the unspoken environmental preconditions of these rights can themselves be construed as creating another, separate right.³²⁹

However, this seems unlikely: as Prudence Taylor points out, “there is no logical rationale for this argument”, and while

“[T]hese rights are obviously closely connected to the state of the environment... this connection alone does not justify recognition of a distinct right to a sound environment. Protection of the environment is a prerequisite to assuring all human rights. Thus, failure to provide environmental protection can amount to a violation of basic human rights. But this may not be sufficient to protect the environment adequately.”³³⁰

Of interest in this statement is that the implied criticism that environmental protections afforded by the key human rights instruments are narrower than what would be entailed in a fully-fledged ‘right to the environment’. This raises serious questions for the project, since to try to extend human rights protections to cover goals that may not directly influence the achievement of human goods such as the rights to life, food, water, and health, would go beyond the limits of what the human rights law allows. In seeking to create a brand new right out of existing rights, proponents of an environmental human right are presumably seeking to impose obligations in areas beyond those covered by the ICCPR and ICESCR – in other words, environmental protection beyond what is necessary for full

³²⁹ “Some writers have contended that the right to a healthy environment can be derived from existing human rights law”; Atapattu, *supra* n 316 at 103. This type of reasoning is particularly evident in, for example, Ksentini’s report on Human Rights and the Environment.

³³⁰ Taylor, P. *An Ecological Approach to International Law: Responding to the Challenges of Climate Change* (Routledge, London, 1998) p199.

implementation of universal human rights. However, these covenants represent a quite specific pledge to further the *human* condition, and attempts to hold states bound in an area totally separate to the original intent of these treaties – the promotion of human dignity and well-being – seems an unfeasible proposition. As will be discussed, it is much more desirable that such goals be pursued through environmental law. Because of these limitations, and the very nascent character of the environmental duties under the ICCPR and ICESCR, it is unlikely that a discrete human right to the environment can be constructed from existing covenant obligations alone. We are thus required to look to the ‘soft law’ for evidence of such a right at customary law.

The commentary of many primary institutions of international law provides a rich source of material suggesting that the maintenance of a good or healthy environment can be characterised as a human right. The Stockholm Declaration, one of the original links between the human rights regime and the environmental movement, pledges in its first Principle a “fundamental right” to “an environment of a quality that permits a life of dignity and well-being”.³³¹ This provision has been interpreted in strong rights language:

“The relationships established by the Stockholm Declaration between the environment, development, satisfactory living conditions, dignity, well-being and individual rights, including the right to life, constitute recognition of the right to a healthy and decent environment... which may be demanded as such by [human rights] beneficiaries, i.e. individuals alone or in association with others, communities, associations and other components of civil society, as well as peoples.”³³²

Similarly, the Brundtland Commission concluded in 1987 that “[a]ll human beings have the fundamental right to an environment adequate for their health and well-being.”³³³ More recently again, the Aarhus convention –though principally concerned with procedural rights surrounding the environment- saw fit to

³³¹Principle 1.

³³²Ksentini, p10-11.

³³³Experts Group on Environmental Law of the World Commission on Environment & Development, *Environmental Protection and Sustainable Development: Legal Principles and Recommendations* (London: Graham and Trotman Publishers, 1987) p25.

conclude that “every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations.”³³⁴

More recently, a 2009 international conference under the auspices of the UNEP and UNESCO resulted in the *Tehran Declaration on Human Rights and the Environment*, which declares in its opening statement that “the stewardship of the environment is a fundamental responsibility of all people and that individuals and communities have the right to live in a clean and healthy environment.”³³⁵ The Biskaia Declaration on the Right to the Environment echoes this, stating that “everyone has the right, individually or in association with others, to enjoy a healthy and ecologically balanced environment”.³³⁶ There are thus a number of strong statements from authoritative sources which could be taken as evidence of an environmental human rights existing at customary law.

This recognition extends to the regional level, where two of the three major international agreements formally recognise a broad right to the environment:³³⁷ the San Salvador Protocol of 1988, and the African Charter of 1981. Article 11 of the American Protocol states,³³⁸

1. Everyone shall have the right to live in a healthy environment and to have access to basic public services.
2. The State Parties shall promote the protection, preservation, and improvement of the environment.

Although open to all members of the Organisation of American States, only 14 countries have ratified this Protocol (most of them South American) and tellingly,

³³⁴ Aarhus Convention, supra n 196.

³³⁵ Supra n 59, Paragraph One.

³³⁶ 30 C/INF.11 (1999), Article 1.

³³⁷ The third being the *Convention for the Protection of Human Rights and Fundamental Freedoms* (or the European Convention).

³³⁸ 1988 Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (‘San Salvador Protocol’).

not including either America or Canada.³³⁹ Nevertheless, the agreement represents another strong statement of an international will to recognise “the overwhelming and sweeping transformation in the valuation of environmental concerns in all levels of society.”³⁴⁰ The 1981 African Charter seeks to impose a similar obligation upon its signatories; with Article 24 stating that “all peoples shall have the right to a general satisfactory environment favourable to their development”. However, it must be remembered that despite these superficially quite strong statements of rights, on-going serious environmental degradation in these regions suggests that state practice lags behind the formal standard espoused in these documents. Consequently, the lack of weight given to the implementation of these provisions *in practice* would seem to limit the value of these statements. Of course, as formal international agreements, it would be unwise to discount them as being free of any legal consequence whatsoever and they do thus add a more limited weight to the suggestion that these kinds of rights have become international norms.

Meanwhile in Europe, numerous attempts have been made to establish a similar provision within their regional human rights framework. The Parliament of the Council of Europe has repeatedly proposed the formulation of an Additional Protocol to the European Convention on Human Rights, specifically creating a “right to a healthy and viable environment.”³⁴¹ Despite on-going political and public pressure, such a right has been rejected, even as recently as June 2010.³⁴² This continued absence of a formal declaration in this area seems somewhat inconsistent with the human rights law on the ground in the European region –

³³⁹ Though this may have more to do with objections to other elements of the agreement than an unwillingness to acknowledge environmental rights; for example, the American concern regarding the death penalty and Canadian objections to abortion provisions. See the official website of the Organisation [<http://www.oas.org>].

³⁴⁰ Rodriguez-Rivera, *supra* n 326 at 45.

³⁴¹ Council of Europe, Report of the Parliamentary Assembly, “Drafting an additional protocol to the European Convention on Human Rights concerning the right to a healthy environment” (September 2009)

[<http://assembly.coe.int/Main.asp?link=/Documents/WorkingDocs/Doc09/EDOC12003.htm>].

³⁴² Stand Up For Your Rights “European Ministers ignore Parliament and UN bodies and refuse to codify the Human Right to a healthy and viable Environment into the European Convention on Human Rights.” (press release, 23 June 2010)

[<http://www.standupforyourrights.org/ip/uploads/downloads/PressRelease%2024%20juni%202010%20ENG.pdf>].

despite having the least in the way of a formal articulation of a human right to the environment, of the three regions discussed here it is Europe that comes the closest to recognising such a right in practice. In addition to a truly impressive body of environmental protection law,³⁴³ the human rights link has been made in numerous European cases, as was discussed with reference to specific existing rights such as the right to life.³⁴⁴ Advocates for formal recognition thus argue that “the European Court of Human Rights has itself indirectly upheld the right to a healthy environment through its case law”³⁴⁵, and that “[t]here has been clear and substantial recognition of the right to environment by European regional organisations, courts, and individual nations.”³⁴⁶ Indeed, in the case of *Marangopolous v Greece* the judgement of the European Committee of Social Rights even went so far as to explicitly recognise of a “right to a healthy environment”.³⁴⁷ Arguably then, the human right to the environment does exist at a regional level – in Africa and much of the Americas at a theoretical level, and on a more practical plane in Europe.

Coming down to a State-by-State level, national statements regarding a human right to environment are stronger still, and collectively provide the most robust evidence for the existence of such a norm as a global reality; “there is copious state practice in the environmental area (both in domestic legislation and in international environmental law) that seems to reflect *opinion juris* regarding state obligations to protect the right to environment.”³⁴⁸ Constitutions provide a key source of such rights, and “[o]f the approximately 193 countries of the world, there are now 117 whose national constitutions mention the protection of the environment or natural resources. Of these, 56 countries explicitly recognise the right to a clean and healthy environment, and 97 constitutions make it the duty of the national government to prevent harm to the environment.”³⁴⁹ These provisions

³⁴³ See the European Charter and the many decisions of the EU Courts and Committees.

³⁴⁴ See discussion in Chapter Three.

³⁴⁵ Council of Europe, *supra* n 341.

³⁴⁶ Collins, L. “Are We There Yet? The Right to Environment in International and European Law” (2007) *McGill International Journal of Sustainable Development Law & Policy* 3, p142.

³⁴⁷ *Supra* n 294.

³⁴⁸ Collins, *ibid*, p148.

³⁴⁹ Earthjustice, “Environmental Rights Report: Human Rights and the Environment: Materials the 61st Session of the UN Commission of Human Rights” (Geneva, 2005)

tend to be couched in strong terms, such as “everyone has the right to enjoy an environment suitable for the development of the person”,³⁵⁰ and recognised elsewhere, “the right to an environment that is conducive to health and to natural surroundings whose productivity and diversity are preserved.”³⁵¹ Even where a right to the environment is not so explicitly stated, states have found ways to incorporate it into existing law. One example of this judicial determination to address the human consequences of environmental degradation is that of India. In addition to the incorporation of environmental duties into the constitutionally guaranteed right to life, the Courts have also made more general statements establishing a general right to the environment, not connected to other human rights. For example, in *Shanti Star Builders vs Narayan Totame*, it was stated that “a civilised society” would guarantee “the right to decent environment”.³⁵²

All of this tends towards the establishment of a human right to the environment, in that “[n]ational constitutions may be evidence of general principles of law common to major legal systems... The prevalence of environmental rights in domestic constitutions is strong evidence of the emergence of the right to environment as a principle of customary law.”³⁵³

In contrast, scholarly opinion on this subject is fraught, with much disagreement as to the legal status of a broad ‘right to the environment’. While the majority of scholars in this area seem to be unopposed to such a right in theory, its legal status in practice is a subject of greater division. Some regard the body of evidence above as being sufficient to have already established the right: “the evidence that the right to environment has now emerged as a principle of customary international law is strong”³⁵⁴ and the right “has become a reality in international

[http://www.earthjustice.org/library/references/2005_ENVIRONMENTAL_RIGHTS_REPORTre v.pdf].

³⁵⁰Spanish Constitution.

³⁵¹Norwegian Constitution.

³⁵²1990 (1) SCC 520.

³⁵³Collins supra n 346 at 136.

³⁵⁴Ibid, p152.

and European law.”³⁵⁵ Elsewhere, it is recognised as a kind of ‘almost-law’, not yet enforceable but an almost inevitable addition to the human rights lexicon:

“The right to a safe, healthy and ecologically-balanced environment is regarded as a human right in itself. Although considered more an emerging concept, it has become a fundamental norm not just for environmental protection but equally for human rights since neither of the two can be safeguarded without the other.”³⁵⁶

However, despite this support there is a significant body of work that argues for the opposite conclusion – that a stand alone human right to the environment does *not* currently exist in international law. Ian Brownlie summarised this position, explaining that the reluctance to declare the existence of such a right does not stem from any disapproval of legal progression in itself:

“[i]t will be said that we have to start somewhere, and that pioneers are by definition isolated. But that is not what is happening here. The type of law invention about which I have reservations involves a tendency to cut out the real pioneering –the process of persuasion and diplomacy- and to put in its place the premature announcement that the new settlement is built.”³⁵⁷

This harks back to the idea that “international norms are required to evince state consent”³⁵⁸, and the danger of trying to ‘tack on’ additional rights (and their accompanying duties) that are too far outside the original scope of international instruments. There is a sense that declaring such a right in existence would bypass the necessary process of debate and careful negotiation of terms required before holding a State legally accountable. This coupled with a relative paucity of evidence that States wish to be so bound has cultivated a convincing argument within the academic community that “there is insufficient support for the existence of such a right, either in international human rights instruments or in customary law.”³⁵⁹ This ultimately comes down to the fact that, even where soft law statements have been made, they are not sufficient to overcome the fact that

³⁵⁵ *Ibid*, 153.

³⁵⁶ Blake, J. & Boer, B. “Human Rights, the Environment and the Tehran Declaration” (2009) *Environmental Policy & Law* 39:4-5, p3; also “it may indeed be possible to argue... that a specific right to environment is emerging in international law. At present, however, the evidence does not appear to support the argument that such a right already exists” APF Paper, *supra* n 305 at 34.

³⁵⁷ “The Rights of Peoples in Modern International Law” in *The Rights of Peoples* (1988) p15.

³⁵⁸ Rodriguez-Rivera *supra* n 326 at 2.

³⁵⁹ Glazebrook, *supra* n 313 at 311.

the sentiments expressed in these statements are consistently not implemented in practice, leading to the conclusion that “while there are a growing number of texts guaranteeing a right to the environment, at present the state practice and *opinion juris* necessary to call a right to environment customary international law is lacking.”³⁶⁰

On balance, it seems that despite wide recognition in rhetoric, the threshold of practical execution of a human right to the environment has not been reached, and as such, the right has no legal standing at present. Put simply, while plenty of people are willing to recognise such a right in theory, far fewer States are willing to ‘walk the talk’. This is not to say that future developments in this area might not bring the right onto stronger foundations, and it is for this reason that it is important to now consider whether this is something that should be encouraged, or whether resources might be better deployed elsewhere.

4.1.4 Is a human right to the environment to be desired?

As the above discussion makes clear, the idea of a stand alone right to the environment has come to be a popular one. The natural inclination for anyone concerned with both environmental and human well-being is to see the development of such a right as a positive thing, on the grounds that it could only further both causes while creating a draw for public attention to the gravity of these issues. However, it will here be argued that in fact the creation of a specific human right to the environment is at best unnecessary, and at worst would actually detract from the protection of both people and planet.

The central argument supporting the creation of a human right to the environment *separate* from any environmental obligations implied in the existing instruments seems to be that it will allow for an appropriate consideration of the intrinsic value of the environment. The current set of rights is frequently criticized as being anthropocentric: “[t]he question is whether these existing rights provide adequate

³⁶⁰ Shelton, D. “What Happened in Rio to Human Rights?” (1992) *Yearbook of International Environmental Law* 2:75, p81.

protection. The first point is that the focus is not specifically on the environment. This in itself is a limitation.”³⁶¹ However, it must be recalled that the very purpose of human rights is to recognise the “inherent dignity and of the equal and inalienable rights of all members of the human family”.³⁶² To put it bluntly, human rights are *by definition* anthropocentric – that they are at heart about people is not a limitation but a necessary fact of their constitution. While it is beyond question that the human rights community must ‘care’ about the environment, it is equally true that it must do so only to the extent that it will benefit humans. A purely environmental goal with *no* links to human well-being does not belong in a human rights discussion; “environmental protection cannot be wholly incorporated into the human rights agenda without deforming the concept of human rights and distorting its program.”³⁶³

It was the goal of Chapter Three of this thesis to demonstrate that the existing legal situation does not, at present, provide adequate protection for the environment. However, it is possible to argue that a truly comprehensive realisation of the human rights that are *already secured* in the international system would be sufficient to provide an extremely high level of environmental protection in order to maximise human well-being.³⁶⁴ If this is the case, the only additional benefit of introducing a new, stand alone ‘right to the environment’, would be that it permits environmental problems to be approached from a perspective not connected with humanity – from a non-anthropocentric, more ‘objective’, or purely environmental approach. Arguably however, this would then remove the basis for including such a right in the human rights category at all. Such a goal would instead be best dealt with under purely environmental law.³⁶⁵ It

³⁶¹ Glazebrook, *supra* n313 at p314.

³⁶² UDHR, preamble.

³⁶³ Shelton, D. “Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?” (2006-2007) *Denver Journal International Law & Policy* 35, p169.

³⁶⁴ It is possible to imagine human rights protection as entailing a great depth of environmental protection; for example, science now recognises the importance of entire ecologies to the continued functioning of the human food supply and the achievement of the right to food. Thus, a meaningful protection of human rights would require the protection of these same ecologies. In practice, this implies an extremely high level of environmental protection.

³⁶⁵ It is worth noting that international environmental law has proven to be very effective in the pursuit of its goals, with major advances such as the Convention on Migratory Species demonstrating the capacity of the movement for creating legal protection of environmental interests.

must be concluded that if existing rights are given their full, ecologically literate interpretation, then a ‘human right to the environment’ contributes nothing to improving human rights, instead seeking to improve environmental protection alone – an improper stretch of the boundaries of the law.

There are other reasons besides relevance to the human condition as to why a specific human right to environment may not be the solution the international community is looking for. The problem of definition is a considerable one, as evinced by the range of different adjectives used wherever the right is discussed by the various nations, courts, institutions, and scholars mentioned above – does the right refer to a ‘healthy’, ‘sound’, ‘clean’, ‘satisfactory’, ‘secure’, ‘ecologically sound’ or ‘flourishing’ environment, or is it all of these things? Again, because of the imprecise and varied nature of the terms used here, it would be difficult to impose a uniform interpretation of any description without incurring allegations of cultural relativism:

“A right to a substantive environment is too inherently relativistic to have a common universal core of meaning applicable to all societies. Many human rights do allow a significant ‘margin of appreciation’ to those who interpret and apply them nationally, subject to a measure of international ‘boundary control’, and it may be that this is the best that can be hoped for in this context.”³⁶⁶

The concept of a ‘good’ environment is thus so open to inconsistency as to render any right to such almost meaningless: those states who pose the greatest concern in terms of environmental degradation are unlikely to interpret the right strictly, while little if anything would be added to the behaviours of those states who are already in a strong position environmentally. The great difficulty seems to be that while the norms surrounding for example, the right to life seem to be relatively universal, no such consensus exists around the environment. The definition of a human right to the environment as it is currently conceived would in practice be so uncertain as to make compliance either impossible or pointless.³⁶⁷

³⁶⁶Glazebrook, supra n 313.

³⁶⁷Boyle, A. ‘The Role of International Human Rights Law in the Protection of the Environment’ in Boyle, A. & Anderson, M (eds) *Human Rights Approaches to Environmental Protection* (Clarendon Press: Oxford, 1996).

Another argument advanced for establishing a substantive right to the environment is that such a right could protect people from the loss of goods not covered by the existing human rights framework. Specifically, it could provide “protection for the aesthetic value of natural spaces, which is ‘a substantive area not protected under current human rights law or existing environmental rights’”³⁶⁸ This idea seems to be separate from the anthropocentric argument, in that it claims that humans might suffer some loss through environmental degradation that is not currently provided for in the more materially focused human rights provisions. However, even a cursory glance at the existing law seems to show ample room for an interpretation of existing rights which would protect against exactly such a loss as described above. The rights to cultural life, the rights to hold a religion of your choice, and the rights to mental health could all be interpreted so as to incorporate an element of environmental protection, in an instance where the loss caused from environmental degradation was psychological or spiritual in nature.

An additional concern is the need to avoid the proliferation of human rights, and the potential devaluing of the system as a whole that might result. It is argued that by continuing to impose more and more obligations upon an international community already struggling to meet more basic duties, a risk is created that non-compliance will begin to be viewed with complacency. The concern is that this might discourage States from pursuing human rights goals, if they are in any event likely to find themselves labelled as ‘noncompliant’ on some other aspect of the law. It could thus be argued that an attempt to formulate an entirely new ‘human right to the environment’ would not only fail to produce the results envisioned by its proponents but could actually divert both resources and political energy from more likely prospects for future development.

In summary, the case for a human right to the environment is ultimately unconvincing. That it does not exist at law is a fact, and that it ought not be the focus of our energies is demonstrated by a number of factors. There are concerns over definition and the proliferation of rights, as well as the immense difficulty

³⁶⁸Collins, *supra* n 346 at 150.

and expense that would be involved in formalising and regulating such a right. Moreover, the right seems fundamentally incompatible with the goals of the human rights regime, given that the law already possesses more than adequate tools for achieving comprehensive human well-being. The following section will discuss the means by which these tools can best be wielded; specifically, by creating an expanded interpretation of existing human rights law.

4.2 The Expansion of Existing Rights

Chapter Three discussed the potential of a number of established human rights which might be interpreted as imposing environmental obligations upon States. However, an analysis of these rights showed that the current legal situation does not accurately reflect the true scope of this potential, and practical recognition of the environmental prerequisites of these rights at an international level remains largely limited to vague, cursory mentions of ‘sustainability’ and ‘environmental hygiene’ under the rights to food and health. It is clear that a comprehensive attainment of human rights cannot be achieved under an international regime that fails to recognise the absurdity of treating the wellbeing of the human person as if it were separate from the environment in which it must function. Environmental quality is not an ‘optional extra’, nice to have but a secondary concern in the broader human rights scheme. It is instead a *prerequisite* for the achievement of those rights, the foundation from which rights talk has been allowed to develop, and without which attempts to uphold the moral standards of human dignity and the value of human life must necessarily fail.

One approach to this problem suggests that the most appropriate means of meeting the deficiencies of the current law is through a more explicit recognition of the environmental duties inherent to existing human rights law. This would in essence require both the ICCPR and the ICESCR to adapt to include the requirement of meeting the ecological prerequisites of the rights originally agreed - a type of expansion consistent with the idea that human rights instruments must

remain living documents.³⁶⁹ This tactic has many advantages, perhaps most significantly the fact that it would avoid the difficulties attendant to the drafting process of any new international agreement: “recognition of environmental deprivations of existing rights does not require the creation of any new doctrine, but merely an ecologically literate reading of existing human rights.”³⁷⁰ The approach has also found favour with a recent High Level Experts Meeting convened by the UN, which weighed the merits of both the creation of a stand alone human right to the environment and the expansion of existing rights as viable options for future development. The meeting concluded that the latter approach

“may provide a quicker and easier path than developing a new human right, particularly given the disputes over the justiciability and definition of a substantive right ... The experts [also] noted that, given how much international law has already developed in this area, any process forward should concentrate on obligations that governments have already agreed to and address gaps in a consistent manner, rather than attempt to develop entirely new obligations.”³⁷¹

Essentially, what is required is not the articulation of any new legal concept, but simply the further development of interpretative materials to explicitly recognise the obligations already inherent to the existing law. Lee sets out the process by which this might occur: “Claiming an environmental component to a recognised human right is to give a new component of a presently-recognised right the same legal footing as the recognised definition. For this recognition to be accepted, the new component must develop as a principle of customary international law, or else be accepted through a convention or binding multilateral treaty.”³⁷² It has already been discussed that introducing a new instrument could be a difficult political task, which may further have the result of not compelling the kind of change needed amongst those who may choose not to be bound by such an

³⁶⁹ Robinson, M. “Welcoming the downtrodden” (1998) *Refugees Magazine* 111.

³⁷⁰ Collins, supra n 346 at 127.

³⁷¹ Holmes, C. writing for the UNEP Division of Environmental Law and Conventions, “The New Future of Human Rights and Environment: Moving the Global Agenda Forward – High Level Experts Meeting” in *MEA Bulletin* (2010) p2-3.

³⁷² Lee, J. “The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary Law” (2000) *Columbia Journal Environmental Law* 25:283 at 291-92.

instrument. Our other alternative then is to encourage the development of these obligations under customary international law.

4.2.1 Cementing new interpretations as customary law

The path for achieving such development is two-fold: increase the availability of expert knowledge and opinion on the relationship between the environment and violations of human rights, and, most importantly, see cases of this kind brought to court. It is only once a sufficient body of case law has been amassed from a sufficient number of state parties, recognising the violation of convention-based rights by environmental mismanagement, that an attempt can be made to legally compel to action those state parties who have failed to act to protect their environment, and thus in turn their people.

The ultimate goal and the marker by which it could be said that this milestone had been achieved would be a decision from the International Court of Justice (ICJ) recognising the existence of environmental duties within the human rights regime. As the highest judicial authority of the United Nations, such a decision would cement the rule in international customary law – a position ultimately more powerful than enshrining the principle in a treaty alone, since customary law can compel even dissenting states. Any such judgment would likely take the form of an advisory opinion, the outcome of a special procedure whereby certain organisational structures within the UN are able to ask for clarification of a point of international law. Such opinions are generally (as the name suggests) merely advisory, despite the fact that they “carry great legal weight and moral authority”,³⁷³ however, under certain circumstances these judgments can be issued to have a legally binding effect.³⁷⁴ Whether it is realistic to expect that a judgment on the environmental elements of human rights duties would achieve such elevated status, even a theoretically ‘non-binding’ decision would effectively

³⁷³ ICJ Official website, “Advisory Jurisdiction” [<http://www.icj-cij.org/homepage/index.php>].

³⁷⁴ “Contrary to judgements, and except in rare cases where it is stipulated beforehand that they shall have binding effect (for example, as in the Convention on the Privileges and Immunities of the specialized agencies of the United Nations, and the Headquarters Agreement between the United Nations and the United States of America), the Court’s advisory opinions have no binding effect.” ICJ, *ibid*.

cement such a principle as customary law. As discussed above, achieving such a decision would require a finding of both strong State practice and ‘soft law’ support. Clearly, it is State practice which has the farthest distance to come before environmental cognisance can be said to be an international norm. However, there are a number of ways in which States can be compelled toward acting with greater environmental responsibility in respect of their human rights duties.

In the first instance, it would be highly desirable for the governing bodies of the two Covenants to issue over-arching declarations (in the nature of the 1990 CESCR Comment defining State parties obligations) establishing the duty of environmental management in relation to human rights. Such a document would need to acknowledge the centrality of the environment to the broader human rights scheme and at the same time set out the specific nature of the obligations under each right. It would need to define what the obligations consist of, from whom and to whom the obligation is owed, how such obligations can be said to have been met, and the procedures for both assistance and rebuke in cases of non-compliance. Because such a document would necessarily be quite wordy, it may be more expedient to split this into more wieldy pieces and instead issue a separate comment regarding the environmental obligations inherent to each right, additional to the existing interpretations.

As an example of how this might work in practice, it has already been mentioned that current state obligations under the right to food are inadequate with regard to the environmental determinants of that right. As such, a comment issued by the CESCR detailing the specific content of the obligations attendant to this right would be a significant step towards addressing this shortcoming. A logical expansion of those obligations would see a number of environmental management strategies adopted as being duties of the state: for example, a duty to provide education on sustainable farming techniques such as crop rotation, a duty to reduce reliance on fossil fuel based fertilisers, a duty to monitor soil ecology and pollinator health, a duty to monitor irrigation practices and enforce environmentally responsible pesticide use. Duties would also exist at a lower level, where individuals and corporations are seen as having a responsibility to

adopt sustainable practices, if not at an optimal level of maximising long-term food production, at least to the point where they may not act to the detriment of the land in terms of an ability to produce food in the future. These are simply environmental management tools which must become part of the repertoire of right to food, since without them the prospects for long-term food security are almost nil.

Other high-level institutions have important roles to play in establishing environmental management as a human rights norm. General Assembly resolutions, though not legally binding, are nevertheless strong statements of sentiment and international political will. The continued declaration by this body of the necessity of considering *and acting to prevent* environmental impediments to human rights goods would act as a further interpretive aid to any judge seeking to ascertain international opinion on these matters. The drafting process of any such resolution would itself assist in the progress of customary international law, by forcing States to engage with the science behind this movement and actively consider the issue with regard to their own level of compliance. It is tempting to think that this alone could act as a motivating factor in changing behaviour, once the advantages to their citizens of a sustainable, productive environment becomes apparent, but at the very least it would permit a more accurate assessment of states current positions on this issue. Even if the reception to such an idea is initially hostile, it would at least enable a dialogue to commence which might address the concerns of dissenting states.

The ICJ has already been mentioned with regard to gaining an advisory opinion on this subject. Besides issuing such opinions, the Court's main duty is to preside over contentious cases, the process by which a state brings a complaint against another state. A contentious case brought under international human rights law which dealt with transboundary environmental harm would be a valuable tool in building the case for a customary law linking human rights and the environment. While no such case exists at present, it is surely only a matter of time before a state alleges the violation of its citizens' human rights by another states action or inaction on environmental matters; the escalating debate surrounding the right to

water is just one example where one country's actions can literally dictate the ability of states 'downstream' to meet their human rights obligations. As such, there is a role for legal experts in building the case for an expanded concept of existing human rights: it is essential that states are aware of the ICJ as an avenue of redress for environmental harm which impacts upon the ability to meet human rights obligations, and assisted in bringing such claims before the Court.

Other international organisations may play a similarly vital role. Further statements and reports by high-level institutions such as the FAO, WHO, the UNEP, the OHCHR, the relevant Special Rapporteurs, as well as regional human rights bodies would help to build momentum for State behavioural change. It is therefore essential that the relevant reports are commissioned and sufficient resources devoted to enable practical guidelines to be developed regarding the specific content of the environmental obligations arising under each right. These organisations are best equipped with specialist knowledge and access to a wide source of ground-level information, and it is thus essential that these agencies are able to take the lead in clarifying the precise ways in which the environment can help or hinder human rights efforts.

A final burden rests upon academic and political commentators, who will necessarily function as a foundational information source for those seeking to make decisions at a higher level. By presenting strong arguments accompanied by legitimate quantitative data, which make the link between environmental degradation and violations of human rights, this community has the potential to influence international opinion on this issue from the bottom up. History has shown that where a sufficient weight of expert evidence is accumulated, States can find it hard to justify inaction even in the face of powerful interest groups: the Montreal Protocol on Substances that Deplete the Ozone Layer³⁷⁵ is one example of action at an international level that was precipitated by strong consensus among expert groups.

³⁷⁵No. 26369, United Nations Treaty Series (A protocol of the 1985 Vienna Convention for the Protection of the Ozone Layer).

4.2.3 *The advantages of this approach*

If all of the above institutions and groups could be mobilised to act in the ways discussed here, it would not be an exaggeration to say that the case for finding a justiciable, environmentally literate interpretation of existing human rights at customary international law would be greatly strengthened. A combined effort from international institutions, individual state governments, and the wider academic community may achieve what each alone could not:

“Where rights have been strengthened the cause is not so much individual factors acting independently – whether in law, politics, technology, economics, or consciousness – but a complex interweaving of mutually reinforcing processes. What pulls human rights forward is not a series of separate, parallel cords, but a ‘rope’ of multiple, interwoven strands.”³⁷⁶

While the path towards an expanded conception of existing rights may thus appear frustratingly rambling, the resultant law will ultimately be the stronger for having the weight of societal saturation behind it – something that may not likewise accompany the faster process of drafting a new instrument, bypassing as it does the need for obtaining acceptance at every level of the global community.

The advantages of taking this approach of expanding the obligations attendant to existing rights rather than attempting to formulate an entirely new right are several. In the first instance, it avoids the confusion of definition: while it is no doubt a matter of some complexity to say what immediate environmental preconditions must be satisfied in order to attain food security for a population, it is nevertheless a comparatively easy task in contrast to achieving a practical definition of what a ‘right to environment’ consists of.³⁷⁷ What is more, such an expansion avoids the charge of pushing the boundaries of interpretation beyond what the initial agreements can legitimately stand. To elucidate what was taken for granted 70 years ago is simply to recognise that the context within which these rights operate has changed: while politics, violent conflict and sheer lack of will

³⁷⁶ Cassel, D. “Does International Law Make A Difference?” (2001) *Chicago Journal of International Law* 2, p123.

³⁷⁷ Many of the proposed standards, such as that of a ‘good’ environment of a ‘healthy’ environment are so open to interpretation as to not count as standards at all.

remain key challenges to the achievement of human rights, it has been argued here that their biggest threat now comes not from direct human causes, but from the second-hand consequences of our inability to protect the environment, and thus the resource base upon which we rely. Expanding state duties to formally recognise the environmental antecedents of these rights is thus merely the logical elaboration of what has always been assumed, a necessity if the international community wishes to see out the intentions of the drafting parties and secure the rights they sought to uphold. A further advantage is that the existing system of issuing interpretive comments under the ICCPR and ICESCR avoids the need to create (and resource) any new supervisory body. The complaints procedures are likewise well developed, and empowered to provide both states and individuals with recourse for breach of the proposed duties.³⁷⁸

One objection to this approach has been that the existing human rights bodies do not provide sufficient deterrent value. However, it is difficult to see how any new supervisory body might fare better in its attempts to compel action. This is because international law by nature walks a difficult line in seeking to uphold global standards while respecting State sovereignty. If a State is particularly determined to violate international law, there is little that can be done to force them to do otherwise: “the [Human Rights] Committee cannot force a state to right a wrong, [however] its decisions can carry political and moral force and many states do comply with its decisions.”³⁷⁹ Similarly, the CESCR is by no means toothless:

“[though] the Committee's concluding observations, in particular suggestions and recommendations, may not carry legally binding status, they are indicative of the opinion of the only expert body entrusted with and capable of making such pronouncements. Consequently, for States parties to ignore or not act on such views would be to show bad faith in implementing their Covenant-based

³⁷⁸While it is undeniable that the HRC and CESCR are largely reliant on self-reporting procedures and the power of public scrutiny to promote compliance, it is unlikely that the introduction of any new supervisory body could significantly alter this state of affairs.

³⁷⁹Frontline Defenders, “Call upon a State to end a Human Rights Violation” *The United Nations Human Rights Committee*, para 3. [http://www.frontlinedefenders.org/manual/en/hrc_m.htm]. Although it should be noted that the recent development of a Duty to Protect suggests that physical force may in some cases be justified in the face of particularly outrageous human rights abuse.

obligations. In a number of instances, changes in policy, practice and law have been registered at least partly in response to the Committee's concluding observations.”³⁸⁰

Any attempt to set up a new regulatory body would face precisely the same difficulties, and it is unlikely that any attempt to take a ‘harder line’ with noncompliant States would be met with great resistance.

Another objection to the retention of the existing system is the argument that these bodies are not experts in environmental matters, and thus could not adjudicate on such issues. Justice Glazebrook of the New Zealand Court of Appeal makes the case for a new, more specifically qualified supervisory body for human rights/environmental concerns:

“[i]t may well be that current human rights bodies lack expertise relating to the environment. Equally, existing environmental bodies may lack human rights expertise. This may suggest the need for a combined body, which would provide a welcome opportunity to rationalise existing structures, both in the human rights and environmental fields.”³⁸¹

While it is true that the members of the HRC and the CESCR are not selected on the basis of scientific expertise, the vital role of advisory bodies such as the WHO, FAO and UNEP in clarifying what environmental human rights duties consist of would continue where it came to determining the human rights impact of discrete instances of environmental action or inaction. That this is eminently practical is illustrated by the fact that domestic judges are not called upon to be experts in all areas of law over which they preside, but instead likewise rely on expert testimony in determining causation.

In summary, the best path to ensuring human rights are not violated through environmental mismanagement is by explicitly acknowledging the environmental prerequisites to those rights and incorporating the duties this logically creates into the existing human rights framework.

³⁸⁰ The Committee on Economic, Social and Cultural Rights, Fact Sheet No.16 (Rev.1), [<http://www.ohchr.org/Documents/Publications/FactSheet16rev.1en.pdf>], p17.

³⁸¹ Glazebrook *supra* n 313 at 28.

4.2.4 *The nature of the duties*

Should such an expansion of rights be adopted, the nature of these obligations would not differ significantly from the pattern set out by the establishing instruments. As such, environmental duties necessary to protect the right to life under the ICCPR would thus impose an immediate, non-derogable obligation. More controversially, environmental obligations under the ICESCR would be subject to the progressive implementation framework set out in Article 2 of the Covenant. This clause introduces the requirement that a State “take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means”.³⁸² While this provision has been the cause of much angst among scholarly commentators, the General Comment issued to clarify this issue is fairly clear as to the meaning of this: a State has to show that it is doing everything possible to move towards practical realisation of these rights,³⁸³ and where in doing so it comes up against resource constraints, must seek assistance from the international community³⁸⁴. In the current context, this means that a State cannot plead a lack of resources in failing to deal with environmental problems that threaten its citizens’ health or access to food or water. If an environmental problem is beyond the financial, technical, or administrative reach of a government, that government must appeal to the international community for assistance with this matter:

“a distinction has to be made between the unwillingness and the inability of States to take action, the Committee considers that a state which claims it is unable to fulfil its obligation for reasons beyond its control (e.g. resource constraints) has to demonstrate that it has done everything in its power to ensure

³⁸² Art 2 ICESCR.

³⁸³ Article 2 “imposes an obligation to move as expeditiously and effectively as possible towards [the full realization of the rights in question]”, General Comment 3, paragraph 9.

³⁸⁴ “The Committee notes that the phrase “to the maximum of its available resources” was intended by the drafters of the Covenant to refer to both the resources existing within a State and those available from the international community through international cooperation and assistance.” General Comment 3, paragraph 13.

access to food, including appealing for support from the international community.”³⁸⁵

This brings us naturally to the question of transboundary obligations, a topic of particular relevance for environmental concerns.

4.3 Transnational State Responsibility

International cooperation is particularly relevant in any context where an environmental situation poses a threat to human rights. Unlike other human rights violations such as torture or deprivation of education, which are - though undoubtedly influenced by regional events - most often confined to individual states and more or less under the control of state influences, environmental degradation poses a serious risk to human rights globally due to the interconnected nature of the environmental system. Thus, over and above responsibilities of international reciprocity and community, it is in the best interest of States to offer assistance with environmental degradation;³⁸⁶ “[t]he environmental *problématique* does not respect, and is not contained within, national boundaries.”³⁸⁷ This transboundary nature of environmental issues has previously been used to argue against incorporating environmental issues into the human rights lexicon: because human rights have traditionally been seen as embodying a state-citizen relationship,³⁸⁸ the idea that states might be held responsible for the deprivation of rights due to environmental factors beyond their control (caused by neighbouring states, for example) has been seen as a strong reason to oppose environmental interpretations of existing rights. However, the older conception of rights as emanating linearly from State to citizen does not

³⁸⁵Robinson, M. United Nations High Commissioner for Human Rights *World Food Summit: Five Years Later* “The Right to Food: Achievements and Challenges” (2005) p106.

³⁸⁶“Viable arguments for multilateral cooperation acknowledge that environmental quality as an essential life support criterion is a common concern that is not more important than national interests; rather it is an important factor *to* national interests.” Amede Obiora, L. “Symbolic Episodes in the Quest for Environmental Justice” (1999) *Human Rights Quarterly* 21:2, emphasis added.

³⁸⁷Ridriquez-Rivera, *supra* n 326 at 6.

³⁸⁸ “[I]nternational human rights law has been seen to create a vertical relationship between the individual and his/her state” Skogly, I. “The obligation of international assistance and co-operation in the International Covenant on Economic, Social and Cultural Rights” in Bergsmo, M. (ed.) *Human Rights and Criminal Justice for the Downtrodden* (Marinus Nijhoff Publishers, Boston, 2003) p403.

reflect the modern reality of a globalised world, where citizens in one country *are* affected by the actions of governments other than their own. Not only does the transboundary nature of environmental problems thus fail to protect States from culpability where human rights are violated in consequence, this characteristic of environmental issues actually creates expanded duties so that despite traditional theories of national sovereignty, modern States *do* have duties to citizens other than their own.

The Special Rapporteur on the Right to Food discusses the necessity of this – ethical and logical, if not yet legal – obligation below:

“Although the primary responsibility to ensure human rights will always rest with the national Government, in the current climate of globalization and strong international interdependence, the national Government is not always able to protect its citizens from the impacts of decisions taken in other countries. All countries should therefore ensure that their policies do not contribute to human rights violations in other countries.”³⁸⁹

This idea of extraterritorial obligations has found support among the academic community, and it is increasingly recognised that “obligations may be more than vertical within the jurisdiction of a state, or horizontal among states: they may be diagonal... there may be human rights obligations that concern the relationship between a state and individuals in another state”.³⁹⁰ The Office of the High Commissioner of Human Rights has recently agreed, stating that “human rights law imposes extraterritorial duties”.³⁹¹ It is easy to see how these obligations to foreign citizens may exist with regards to environmental management, since the ability of States to meet their human rights obligations is directly dependent on shared environmental resources – irresponsible irrigation practice upstream is not only a national concern, regards the breach of the requirement of sustainability under the right to food, but directly threatens the ability of those States

³⁸⁹ Ziegler, J. Commission on Human Rights, “Economic Social and Cultural Rights: The Right to food – Report of the Special Rapporteur on the right to food”, E/CN.4/2005/47; p13

³⁹⁰ Skogly, supra n 388.

³⁹¹ Knox, J. “Linking Human Rights and Climate Change at the United Nations” (2009) *Harvard Environmental Law Review* 33, p492.

downstream to provide food and water to their citizens.³⁹² To use food as a further example, because of the heavy reliance on international trade to meet food requirements, even where a seemingly local environmental problem can have serious human rights repercussions if governments fail to deal with it; “it is now increasingly true that actions taken by one Government may have negative impacts on the right to food of individuals living on other countries.”³⁹³

In light of this, the requirement to ‘respect, protect and fulfil’ rights logically ought to be expanded to include the environmental preconditions of rights not only domestically, but at an international level also. So, while states might have a minimum obligation not to create an environmental menace to neighbouring states, it could be argued that they also have an obligation to actively contribute to environmental management efforts internationally. Legal support for the imposition of obligations around international cooperation and assistance will be the focus of this final section of the Chapter.

4.3.1 Technical Assistance

The 1945 Charter of the United Nations states in Article 1 that the very purpose of the United Nations is to “achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character”,³⁹⁴ a category under which problems of the environment must clearly fall as per previous analysis in this paper.³⁹⁵ That the international community is expected to actively participate in this achievement is clear, as the Charter goes on to state that “[a]ll members pledge themselves to take joint and separate action in co-operation with the [UN] for the achievement of...”³⁹⁶ amongst other

³⁹²There is some question as to whether ESCR rights are legitimate fodder for the debate around extraterritoriality – see General Comments. In any event, where the action is directly under the State’s control (for example, choosing to build a dam above a site heavily dependent upon seasonal fluctuations in water access) and has serious human rights consequences as a direct result (for example, widespread death by starvation), it is probable that this would be found to be in violation of the constructing State’s extraterritorial obligations.

³⁹³Ziegler, *supra* n 389.

³⁹⁴The Charter of the United Nations (June 1945), Art 1(3); UNCIO, 335.

³⁹⁵See Chapters One and Two for examples of environmental disintegrity being the cause of economic, social, cultural and humanitarian problems.

³⁹⁶Charter, Art 56.

cooperative goals, “solutions of international economic, social, health, and related problems”.³⁹⁷ This requirement of international cooperation and assistance has since been incorporated into vast numbers of declarations on a hugely diverse range of issues, and its validity as a principle of international law is well established.³⁹⁸ In particular, the provision of scientific and technical assistance is now widely accepted as a requirement of membership of the United Nations, though the extent to which this obligation may be subsumed by other priorities is a matter of some debate.³⁹⁹

Of particular interest for the purposes of this paper is the embodiment of this requirement in Article 2(1) the ICESCR, which states that as part of their requirement to progressively realise the rights contained in the Covenant, State parties must take the required steps both “individually and through international assistance and cooperation, especially economic and technical”. The significance of this has been an expansion of the ‘available resources’ limitation to include those resources available from the international community, so that an individual State’s lack of resources is not *in itself* an excuse for violations of ICESCR rights, unless they have also tried and failed to secure assistance from the international community. For example, regarding the right to food the CESCR has said that “a State claiming that it is unable to carry out its obligation for reasons beyond its control [...] has the burden of proving that [...] it has unsuccessfully sought to obtain international support to ensure the availability and accessibility of the necessary food” (General Comment 12, para. 17). It is as yet unclear how much of an effort is required when seeking assistance, for example, whether this requirement forces States to compromise certain policy strategies if that is a condition of assistance. It should be noted that this practice of conditionality has recently been condemned in a UN resolution which “*Reaffirms* that the promotion of international cooperation is a duty for States, and that it shall be implemented

³⁹⁷ Charter, Art 55(b).

³⁹⁸ Wolfrum, R. “International Economic and Social Co-operation” in Simma, B. *The Charter of the United Nations – A Commentary* (Oxford University Press: UK, 1994) p775. See also Bedgood, M. “Who then is my neighbour? Ethical decision making around our international obligations – the contribution of human rights theory and practice” in Boston, J. (ed) *Ethics and Public Policy – Contemporary Issues*, (Institute of Policy Studies: Wellington, 2010).

³⁹⁹ Note for example, discussions about the provision of nuclear technologies to countries considered a security threat by would-be donor states.

without any conditionality, and on the basis of mutual respect, in full compliance with the principles and purposes of the Charter of the United Nations, in particular respect for the sovereignty of States, and taking into account national priorities”

⁴⁰⁰ In the context of this paper, a failure to address an environmental disaster which threatens, for example, the right to health, can be considered a violation of that right if the State in question has not dealt with it to the maximum of its available resources *and* sought outside assistance. There is thus a duty upon States to seek, and presumably, to *accept* international assistance.⁴⁰¹

The parameters of the duty to provide assistance are significantly less well-defined. This duty has been described as an ‘imperfect obligation’, “addressed to anyone who is in a position to help and to which a certain amount of ambiguity will necessarily be attached”.⁴⁰² An unwillingness to accept binding obligations in respect to international assistance is reflected in the fact that even the CESCRC does not adopt the language of *obligation* in discussing what is required of donor countries.⁴⁰³ While the Committee “wishes to emphasize that... international cooperation for development and thus for the realization of economic, social and cultural rights is an obligation of all States”, and further, one that is “particularly incumbent upon those States which are in a position to assist others in this regard”, nowhere is the specific content of this obligation set out. As such, while States do have a duty to assist those struggling to meet their human rights obligations, the exact nature, origin, and extent of that assistance is not legally prescribed: “Treaties do not specify how much States should give, to whom, and

⁴⁰⁰ Human Rights Council Resolution 9/2, “Human rights and international solidarity”, p3.

⁴⁰¹ If the controversy around conditionality is resolved as discussed in the preceding footnote, a refusal to accept assistance raises the spectre of the developing concept of a Duty to Protect, whereby the international community is not only entitled, but obliged to provide assistance in protecting human rights. It could be argued that in an extreme situation, where a state fails to address environmental threats to the point where human life is threatened on a large scale, they have abdicated their sovereign right to non-interference, and that other states have a responsibility to provide the protections of sovereignty to those affected, *whether or not* the violating state wishes to accept such assistance. For a discussion of the development and difficulties associated with the Duty to Protect see Luopajarvi, K. “Is there an Obligation on States to Accept International Humanitarian Assistance to Internally Displaced Persons Under International Law?” (2003) *International Journal of Refugee Law* 15:4, p684; UN Secretary-General Report on Implementing the Responsibility to Protect A/63/677; Rothchild, D., Deng, F., Zartman, I., Kimaro, S. & Lyons, T. *Sovereignty as Responsibility: Conflict Management in Africa*, (Brookings Institution Press: UK, 1996).

⁴⁰² Bedgood, supra n 398..

⁴⁰³ *Ibid.*

in what circumstances; nor have States developed operational principles that would enable them to negotiate transparently the contributions that each should make in specific cases.”⁴⁰⁴ That the situation is legally unsatisfactory is well recognised,⁴⁰⁵ but the difficulties attendant upon gaining a consensus as to binding commitments within a sovereign state system may be all too easily imagined: “[w]hile States acknowledge their general commitment to a just international order, they remain unwilling to say that their decisions to assist other States and societies abroad are more than elective. In general, they wish to retain their freedom and to choose when to assist and to determine what kind of assistance is to be offered. As long as this is so, international assistance will remain uneven and inadequate.”⁴⁰⁶

While the provisions surrounding international assistance must necessarily be made more concrete across the entire spectrum of human rights, it is arguable that the expansion of existing rights to incorporate the protection of their environmental preconditions offers a unique opportunity to introduce firmer parameters around assistance. For example, in affirming that States have an obligation as part of the right to food to (among other things) better regulate the use of fertilisers and pesticides, educate farmers on sustainable production methods, better regulate land and water use, and to promote biodiversity, a General Comment issued by the CESCR could also require that States provide assistance in complementary areas. Using the current example, this could mean assisting in the spread of less environmentally damaging pesticide technologies, in educational exchange programs, in resourcing and training public servants, or in rewarding conservation programmes and promoting the sharing of seeds and genetic resources. In this way, an expanded interpretation of existing rights could

⁴⁰⁴Gostin, L. & Archer, R. “The Duty of States to Assist Other States in Need: Ethics, Human Rights, and International Law” (2007) *Journal of Law, Medicine and Ethics* 35, p529.

⁴⁰⁵“...if there is no legal obligation underpinning the human rights responsibility of international assistance and cooperation, inescapably all international assistance and cooperation fundamentally rests upon charity. While such a position may have been tenable in years gone by, it is unacceptable in the twenty-first century.”UN, Hunt 2008, Report of the Special Rapporteur on the right to the enjoyment of the highest attainable standard of physical and mental health: Addendum – Mission to the World Trade Organisation, UN Doc.E/CN.4/2004/49/Add.1; para. 133.

⁴⁰⁶ Gostin & Archer, supra n 404 at 531.

provide a framework for the better definition of obligations around assistance in human rights law more generally.

4.4 Conclusion

In this final Chapter, this paper has sought to outline the strategy by which an expanded concept of human rights law might best be achieved, in the process addressing some common objections to such an approach as well as an alternative tactic of creating a separate human right to the environment. The aim was to demonstrate that it is possible to create a legally binding obligation upon States which requires them to address the environmental determinants of their human rights status. A further, more aspirational goal is to extend that obligation to include not just the ordinary general requirement of international cooperation and assistance, but to set more specific targets in the hope of demanding greater action and more firm commitments from donor States. That this is necessary stems not only from the presently undemanding legal requirement of assistance, but from the compelling reality of the interrelated nature of environmental problems.

"Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients".⁴⁰⁷

- *World Charter for Nature*

CONCLUSION

In this conclusion I aim to draw each of the preceding chapters together to support the ultimate thesis of this paper – that it is not only logically necessary, but legally possible to adequately recognise the role of the environment in dictating to a large extent the ability of States to meet their obligations under international human rights law. That this can be achieved simply through exploiting the strengths of the existing law demonstrates the power of these instruments when they are permitted to realise their adaptive scope as living documents.

In Chapter One I set out the relationship between the environment and human rights, demonstrating that it is essentially one of dependence, with the goods that we take to be fundamental to the human rights regime such as food, water, health, and even life itself reliant upon the environment being capable of producing and sustaining these. This point is pivotal to my thesis as a whole, as it is precisely because human rights are so vulnerable to environmental influences that the international community must take action to prevent the further degradation of planetary resources, lest the universal achievement of human rights goals slip further and further away from our grasp.

Chapter Two described one route to preventing such an outcome: through the management of population growth. This approach formed one of the two pathways by which I argue that the existing law provides all the necessary legal tools for the resolution of environmental problems as they relate to human well-being. In this instance, I argued that targeting resources and institutional capabilities towards the swift, universal realisation of the legal rights to

⁴⁰⁷A/RES/37/7 (28th October 1982).

contraception, health, education, and gender equality, would have vast benefits in terms of reducing population growth and in turn the environmental pressures that threaten the ability of states to meet their human rights obligations in the future. It is hoped that this kind of human rights approach to the perceived population problem can allow a new dialogue to open up that recognises the advantages of a lower birth rate to both the individual and the international community, requiring as it does that the coercive tactics of previous experiments in population control be abandoned in favour of a strategy that simply empowers families to make their own decisions through the creation of facilitative conditions.

Chapter Three set out to describe a second example of the existing law having the potential to neutralise environmental threats to human rights realisation. Here the rights to food, water, health, and life were all examined in their current state to determine the extent to which the protection of the environmental preconditions of these rights is a legally compelling duty. Ultimately, I was found that this duty was in all cases either non-existent or incomplete, with a few ill-defined requirements referring to the principles of sustainability and environmental hygiene providing the strongest recognition of the human rights – environment link.

The inadequacy of this law was tackled in Chapter Four, which sought to explore the options for the future development of environmentally informed human rights. Here the arguments for the establishment of a new human right to the environment were addressed, ultimately concluding that this option, while rhetorically powerful, might not provide the best solution to the gaps in the legal regime. Rather, as in Chapter Two, the existing law once again provides us with the best opportunity to meet these needs, requiring only an expansion in the interpretation of the law rather than any new legal rule.

The overall goal of this research was to explore the limits of international human rights law in terms of its capacity to address the challenge that escalating environmental destruction poses to human well-being. While the bleak picture painted by the statistics on habitat destruction, loss of arable land, biodiversity

depletion and other natural resource devastation may initially incline observers to conclude that radical measures are required from the international legal community to address such threats to human rights standards, in fact it seems that a far less drastic approach may provide the desired answers. The existing conventions permit for a two-pronged approach to be adopted, focusing on both population and consumption as key determinants of environmental security. In the first instance, through the targeted realisation of reproductively-influential rights; and in the second, through requiring states to limit not only their own activities, but also those of private actors wherever such behaviour threatens the environment to the point of a potential violation of human rights.

It is my contention that these two approaches, if implemented, could provide the legal tools necessary to adequately address the threat which current trends of environmental degradation pose to the human rights regime. As has been discussed, a key advantage of utilising the existing law is that it permits for relatively swift action – a necessary condition of any approach that seeks to forestall ecological collapse and the attendant human rights disaster. While the above research is by no means a comprehensive plan of action, it is to be hoped that continued debate in this area will hasten the legal changes necessary to protect the environment in which the human rights struggle continues to be played out.

Bibliography

Primary Sources

The Charter of the United Nations (June 1945)

International Covenant on Civil and Political Rights (1966).

International Covenant on Economic Social and Cultural Rights (1966).

International Convention on the Elimination of All Forms of Racial Discrimination (1969).

Convention on Access to information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Aarhus, Denmark, (25 June, 1998).

Convention on the Elimination of All Forms of Discrimination Against Women (1979).

Convention on Migratory Species (1979).

Convention on the Rights of Persons with Disabilities (2006).

Declaration of the United Nations Conference on the Environment “Stockholm Convention” (1972)

United Nations Millennium Declaration (2000) A/RES/55/2.

Proclamation of Tehran (1968) A/CONF.32/41.

Agenda 21 (1992).

Hague Declaration on the Environment 28 I.L.M 1309 (1989).

Montreal Protocol, No. 26369, United Nations Treaty Series (A protocol of the 1985 Vienna Convention for the Protection of the Ozone Layer).

Vienna Declaration (1993) A/CONF.157/23.

Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (‘San Salvador Protocol’), 1988.

African Charter on the Rights and Welfare of the Child (1990)

Convention for the Protection of Human Rights and Fundamental Freedoms (or the European Convention).

Statute of the International Court of Justice [<http://www.icj-cij.org/documents/index.php?p1=4&p2=2&p3=0>].

Cases

International Court of Justice, *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 241–2.

International Court of Justice, *Gabčíkovo-Nagymaros Project (Hung. V Slov.)*, 1997 I.C.J. 7, 88 (Sept. 25).

African Commission on Human and Peoples Rights, Communication 155/96 *The Social and Economic Rights Action Center and the Center for Economic, and Social Rights / Nigeria*.

African Commission on Human and Peoples Rights, Communication 276/2003 *Centre for Minority Rights Development on behalf to Endorois Community v Kenya* (May 2009).

European Court of Human Rights, *Budayeva and Others v Russia* (App no 15339/02) & Ors (20 March 2008).

European Court of Human Rights, *Guerra and Others v. Italy* (116/1996/735/932) 19 February 1998.

European Court of Human Rights, *Oneryildiz v Turkey*, 41 Eur. Ct. H. R. 325, 356 (2004); 2002, App. No. 48939/99.

European Court of Human Rights *Osman v United Kingdom* [1998] EHRR 101.

European Court of Human Rights *Association X v. United Kingdom*, (Application No. 7154/75) 14 n. 47

European Commission *Mrs. W. v. the United Kingdom* (Application 9348/81.)

European Committee of Social Rights, *Marangopoulos Foundation for Human Rights (MFHR) v Greece*, Complaint No. 30/2005.

Supreme Court of India, *M.C. Mehta v Kamal Nath* (1997) 1 SCC 388.

Interpretative Materials and Commentary by the Governing Bodies

CESCR, General Comment 14 The Right to Health, (2000) E/C.12/2000/4.

CESCR, General Comment 15, The Right to Water, E/C.12/2002/11.

CESCR, General Comment 12, The Right to Food, E/C.12/1999/5.

OHCHR, General Comment No. 6, The Right to Life, 04/30/1982.

CEDAW Committee, General Recommendation 24, Women and Health, 02/05/1999,

GA Resolution on the Right to Water and Sanitation (64/292).

GA Resolution as a follow-up to the Millennium Development Goals (A/64/L.72)

GA Resolution on the Right to Food (A/Res/62/164.)

GA Resolution on the Right to Water (A/64/L.63/REV.1)

“Keeping the promise: united to achieve the Millennium Development Goals” (A/RES/65/1)

“The Need to Ensure a Healthy Environment” (A/RES/45/94)

“World Charter for Nature” (A/RES/37/7)

HRC “Human Right to Safe Drinking Water and Sanitation” A/HRC/RES/18/1.

HRC “Human rights and international solidarity” A/HRC/RES/9/2.

CESCR, Fact Sheet No.16 (Rev.1),

[<http://www.ohchr.org/Documents/Publications/FactSheet16rev.1en.pdf>].

Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment* E/CN.4/Sub.2/1994/9.

Council of Europe “Recommendation of the Committee of Ministers to member states

on the European Charter on Water Resources” (17 October 2001),

[<https://wcd.coe.int/ViewDoc.jsp?id=231615&Site=COE>].

Beijing World Conference on Women *Programme of Action* 1995.

Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention*

Conclusions of the Meeting of Experts on Human Rights and the Environment 16th January 2002

<<http://www2.ohchr.org/english/issues/environment/enviro/conclusions.htm>>; emphasis mine.

Economic and Social Council *Commission on the Status of Women - 2010 Report on the Status of Women* (2010) E/CN.6/2010/11; p39.

Expert Group Meeting on Completing the Fertility Transition, at United Nations Headquarters in New York (11-14 March 2002) Report of the Expert Group Meeting on Completing the Fertility Transition, p13.

Fourth World Conference on Women, *Beijing Declaration*.

FAO, “Pollinator Services for Sustainable Agriculture”, Global Action on Pollination Services for Sustainable Agriculture
[http://www.fao.org/fileadmin/templates/agphome/documents/Biodiversity-pollination/Pollination-FolderFlyer_web.pdf].

FAO Brief *The right to Food and Indigenous Peoples* (2008).

FAO, *The State of Food Insecurity in the World* (2010).

FAO, *Pamphlet on Universal Declaration of Human Rights – 50th Anniversary* (10 December 1998).

FAO *The Right to Food in National Constitutions* (1998)
[<http://www.fao.org/docrep/w9990e/w9990e12.htm>].

FAO, “*Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the context of National Food Security*”, Guideline 8E, (November 2004)
[<http://www.fao.org/docrep/meeting/009/y9825e/y9825e00.HTM>].

FAO *The State of the World’s Land and Water Resources for Food and Agriculture: Managing Systems at Risk* (FAO: Rome, 2011).

UDHR Official Website; *Questions- Are governments legally required to respect the principles outlined in the UDHR?* [<http://www.udhr.org/history/question.htm>].

Mandate of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights; [http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_9_1.pdf].

United Nations, Hunt, P. (2008) Report of the Special Rapporteur on the right to the enjoyment of the highest attainable standard of physical and mental health: Addendum – Mission to the World Trade Organisation, UN Doc.E/CN.4/2004/49/Add.1.

United Nations, “Meeting Global Targets for Water and Sanitation” in *Water for Life* [<http://www.un.org/waterforlifedecade/factsheet.html>].

United Nations Secretary-General, *Report on Implementing the Responsibility to Protect* (A/63/677).

United Nations Secretary-General, *The Balance which should be struck between scientific and technological progress and the intellectual, spiritual, cultural and moral advancement of humanity* (E/CN.4/1199).

United Nations, *Report of the International Conference on Population and Development* (1994), A/CONF.171/13.

United Nations Panel on “Water and the Millennium Development Goals” GA/10925 [<http://www.un.org/News/Press/docs/2010/ga10925.doc.htm>].

UN Commission for Social Development, Feb 10, 2011 *Anti-Poverty Experts in Commission for Social Development Offer Ways to Keep Ranks of People without Adequate Food, Clothing, Shelter from Swelling*.

United Nations Development Programme, *Human Development Report - Global Dimensions of Human Development* (1992).

United Nations Development Programme, *Population, Reproductive Health and the Millennium Development Goals* (2005), p iv.

United Nations Development Programme, *Human Rights and the Millennium Development Goals: Making the Link* [<http://hurilink.org/Primer-HR-MDGs.pdf>] p10.

UN Division for the Advancement of Women’s website [<http://www.un.org/womenwatch/daw/cedaw/reservations-country.htm>]

UNFPA, “State of World Population 2009: Facing a Changing World: Women, Population and Climate” (press release, 18 November 2009).

UNFPA, *Healthy Expectations: Celebrating Achievements of the Cairo Consensus and Highlighting the Urgency for Action* (2009).

UNFPA Dispatch “New Report: Linking Contraceptives to Human Rights” (March 24, 2011) [<http://www.unfpa.org/public/home/news/pid/7427>].

UNFPA & the Centre for Reproductive Rights *Briefing Paper: The Right to Contraceptive Information and Services for Women and Adolescents* (2010) USA.

UNFPA & Guttmacher Institute, *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*.

WHO Fact sheet N°333 *Newborns: Reducing Mortality* (August 2009).

United Nations Secretary-General (ed.), *Global Strategy for Women's and Children's health* (The Partnership for Maternal, Newborn and Child Health, 2010), Ch 3.

UNFPA, *Adding It Up* (2009) p7. Also see UN World Contraceptive

UNFPA “Empowering Women through Education” in *Promoting Gender Equality* (2008) [<http://www.unfpa.org/gender/empowerment2.htm>].

UNFPA “Lao PDR announce new commitment to save women and children” (press release, 9 June, 2011) [http://countryoffice.unfpa.org/lao/2011/06/09/3412/lao_pdr_announce_new_commitment_to_save_women_and_children/].

UN Population Division *Completing the Fertility Transition* (2002) [<http://www.un.org/esa/population/publications/completingfertility/Executive%20Summary.pdf>].

UN Population Fund, *Seven Billion Project* (2011) [<http://7billionactions.org/>].

UN Women [http://www.unwomen.org/focus-areas/?show=Economic_Empowerment].

WHO, *World Health Statistics 2010* (2010).

Other Secondary Sources

Aarssen, L. “Why Is Fertility Lower in Wealthier Countries? The Role of Relaxed-Fertility Selection” (2005) *Population and Development Review* 31:1.

Abrams, P. “Population control and sustainability: it’s the same old song but with a different meaning” (1997) in *Environmental Law* 27:4, pp1111-1135.

All Party Parliamentary Group on Population, Development and Reproductive Health *Return of the Population Growth Factor: Its Impact Upon the Millennium Goals* (Print Management Systems: UK, 2007).

Amede Obiora, L. “Symbolic Episodes in the Quest for Environmental Justice” (1999) *Human Rights Quarterly* 21:2.

American Law Institute, *Restatement (Third) of Foreign Relations Law* (1987) s102.

- Anderson, M. “Panel presentation for Interactive Thematic Dialog on the Global Food Crisis and Right to Food” UN General Assembly (New York, April 2009) [http://www.foodsystems-integrity.com/about_us].
- Astyk, S. “How Much Did the Green Revolution Matter? Or: Can We Feed the World Without Industrial Agriculture?” (2007) Post Carbon Institute [<http://www.energybulletin.net/node/25315>].
- Atapattu, S. “The Right to A Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment under International Law” (2002-2003) *Tulane Environmental Law Journal* 16:65, p73.
- Babor, D. “Population – Environment Linkages in International Law” (1999) *Denver Journal of International Law and Policy* 27:2, p205.
- Bailey, P. “The Creation of the Universal Declaration of Human Rights” [<http://www.universalrights.net/main/creation.htm>].
- Barker, J. “Mechanisms to Create and Support Conventions, Treaties, and Other Responses” (Eolss Publishers: UK, 2004) Section 6.
- Barnum, H. World Bank Population & Human Resources Department Working Paper, *Interaction of Infant Mortality and Fertility and the Effectiveness of Health and Family Planning Programs* (1988).
- Basher, A. “Empowerment of Microcredit Participants and Its Spillover Effects: Evidence from the Grameen Bank of Bangladesh ” (2007) *The Journal of Developing Areas* 40:2.
- BBC News “Attenborough Warns on Population” (13 April 2009) [http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/7996230.stm].
- Bedggood, M. “Who then is my neighbour? Ethical decision making around our international obligations – the contribution of human rights theory and practice” in Boston, J. (ed) *Ethics and Public Policy – Contemporary Issues*, (Institute of Policy Studies: Wellington, 2010). Billari, F & Kohler, H. “Patterns of Low and Lowest-Low Fertility in Europe” (2004) *Population Studies* 58:2.
- Blake, J. & Boer, B. “Human Rights, the Environment and the Tehran Declaration” (2009) *Environmental Policy & Law* 39:4-5
- Blanco, E. & Razzaque, J. “Ecosystem Services and Human Well-Being in a Globalized World: Assessing the Role of Law” (2009) in *Human Rights Quarterly* 31 692.
- Boland, R. “The Environment, population and women’s human rights” (1997) *Environmental Law* 27:4.

- Boyle, A. 'The Role of International Human Rights Law in the Protection of the Environment' in Boyle, A. & Anderson, M (eds) *Human Rights Approaches to Environmental Protection* (Clarendon Press: Oxford, 1996).
- Brown, B. "Earth as a Natural/Physical Environmental System" (2006) National Geographic Society
[<http://www.nationalgeographic.com/xpeditions/guides/geogsummary.pdf>; p11].
- Brown, L. "Food: Will There Be Enough?" in Mazur, L (Ed.) *A Pivotal Moment* (Island Press: USA, 2010).
- Caduto, M. & Bruchac, J. *Keepers of the Earth: Native American Stories & Environmental Activities for Children* (Fulcrum Publishing: Colorado, 1997).
- Cahill, G. "Famine Symposium: Physiology of Acute Starvation in Man" (1978) in *Ecology of Food and Nutrition* 6, p221.
- Carmona, M. The Nature of the Obligations under the International Covenant on Economic, Social and Cultural Rights (Intersentia: New York, 2003) p141.
- Cassel, D. "Does International Law Make A Difference?" (2001) *Chicago Journal of International Law* 2.
- Chance, G. "Environmental Contaminants and Children's Health : Cause for Concern, time for Action" (2001) *Paediatrics and Child Health* 6:10.
- Chapple, E. & Leitch, F. "The Right to Water: Does it Exist and is it Justiciable Content?" *Toward Rio+20: Contemporary Issues in International Environmental Law* symposium at the ANU College of Law, Environmental Law Student Society (28 May 2011).
- Claude, R. & Weston, B. *Human Rights in the World Community: Issues & Action* (University of Pennsylvania Press: USA, 2006).
- Cotula, L. (Ed.) FAO Publications, *The Right to Food and Access to Natural Resources: Using Human Rights Arguments and Mechanisms to Improve Resource Access for the Rural Poor* (Rome, 2008).
- Centre for Reproductive Rights "Briefing Paper: Beijing+5 Assessing Reproductive Rights" (November 2000)
[http://reproductiverights.org/sites/default/files/documents/pub_bp_Beijing+5.pdf].
- Centre for Security Studies & swisspeace, *Linking Environment and Conflict Prevention: The Role of the United Nations* (Centre for Security Studies: Zurich, 2008).

Center for Women's Global Leadership, *Fifth World Conference on Women and the 2005 CSW Review of the Beijing Platform for Action*, (March 2003) [<http://www.cwgl.rutgers.edu/globalcenter/policy/csw03/beijing10.pdf>].

Chefurka, P. *Population – The Elephant in the Room* (2007) [<http://www.paulchefurka.ca/Population.html>].

Chertow, M. "The IPAT Equation and its Variants" (2003) in *Journal of Industrial Economy* 4:4, pp13-29.

Chioke "Monitoring 10 years of ICPD in Asia" (2004), Third World Institute [<http://www.choike.org/2009/eng/informes/1869.html>].

Chowdhury, A. "The Infant Mortality-Fertility Debate: Some International Evidence" (1988) *Southern Economic Journal* 54:3.

Cohen, J. "Human Population Grows Up" in Mazur, L. (Ed.) *A Pivotal Moment* (Island Press: USA, 2010), pp27-37, p33.

Cohen, S. "The Broad Benefits of Investing in Sexual and Reproductive Health" (2004) *The Guttmacher Report on Public Policy* 7:1; p3.

Collins, L. "Are We There Yet? The Right to Environment in International and European Law" (2007) *McGill International Journal of Sustainable Development Law & Policy* 3.

Collins-Chobanian, S. "Beyond Sax and Welfare Interests: A Case for Environmental Rights" (2000) *Environmental Ethics* 22.

Commission on Behavioral and Social Sciences and Education *Critical Perspectives on Schooling and Fertility in the Developing World* (1999: The National Academies Press).

Commoner, B. *The Closing Circle* (Bantam Books: USA, 1980).

Connelly, M. *Fatal Misconception: the struggle to control world population* (Harvard University Press: USA, 2008).

Coomans, F. "The Ogoni Case before the African Commission on Human and Peoples' Rights" (2003) *International Comparative Law Quarterly* 52.

Council of Europe, Report of the Parliamentary Assembly, "Drafting an additional protocol to the European Convention on Human Rights concerning the right to a healthy environment" (September 2009) [<http://assembly.coe.int/Main.asp?link=/Documents/WorkingDocs/Doc09/EDOC12003.htm>].

Dalai Lama, “Caring for the Earth” (1991) The Office of His Holiness the Dalai Lama [<http://www.dalailama.com/messages/environment/caring-for-the-earth>].

Darroch, J. Sedgh. G. & Ball, H. *Contraceptive Technologies: Responding to Women’s Needs* (Guttmacher Institute, April 2011).

De Schutter, O. Special Rapporteur on the Right to Food (press release, 22 June 2010) [http://www.srfood.org/images/stories/pdf/press_releases/20100622_press_release_agroecology_en.pdf]. Also see the report submitted by Mr De Schutter to the General Assembly, A/HRC/16/49.

Devraj, A. “Diseases Follow Environmental Degradation” (2006) (IPS/IFEJ) [<http://www.ipsnews.net/news.asp?idnews=35695>].

Earthjustice, “Environmental Rights Report: Human Rights and the Environment: Materials the 61st Session of the UN Commission of Human Rights” (Geneva, 2005) [http://www.earthjustice.org/library/references/2005_ENVIRONMENTAL_RIGHTS_REPORTrev.pdf].

Ehrlich, P. *The Population Bomb* (Buccaneer Books: New York, 1995).

Eriksson, M. “Family Planning as a Human Rights Issue” in *Parenthood in modern society: legal and social issues for the twenty-first century* (Martinus Nijhoff Publishers: Netherlands, 1993).

European Commission DG ENV *Soil Biodiversity: Functions, Threats, and Tools for Policy Makers* (February 2010) [<http://ec.europa.eu/environment/soil/pdf/6%20Ch%204.pdf>]

Experts Group on Environmental Law of the World Commission on Environment & Development, *Environmental Protection and Sustainable Development: Legal Principles and Recommendations* (London: Graham and Trotman Publishers, 1987)

Faculty of Public Health *Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing* (Faculty of Public Health: London, 2010).

Faison, S. “Chinese Happily Break the One Child Rule” *The New York Times* (New York, 17 August 1997).

Feeney, J. *Population: The Elephant in the Room* (2 February 2009), BBC News [<http://news.bbc.co.uk/2/hi/science/nature/7865332.stm>].

- Finkle, J. "Impact of the 1994 Conference on Population and Development" (2002) in *Population Bulletin of the United Nations: Completing the Fertility Transition* 48/49.
- Freedman, L. & Isaacs, S. "Human Rights and Reproductive Choice" in *Studies in Family Planning* Vol. 24, No. 1 (Jan.-Feb., 1993).
- Freeman, M. "Women's Human Rights: Making the Theory a Reality" (1994) *Studies in Transnational Legal Policy* 26.
- Frontline Defenders, "Call upon a State to end a Human Rights Violation" *The United Nations Human Rights Committee*.
[http://www.frontlinedefenders.org/manual/en/hrc_m.htm].
- Genuis, S quoted in "Toxic Exposure and Mental Health: Opportunities for Treatment" (2009) *Health & Environment* 20
[<http://healthandenvironmentonline.com/issue-archive/mental-health/>].
- Gillespie, A. *The Illusion of Progress* (Earthscan Publications Ltd: UK, 2001).
- Glazebrook, S. "Human Rights and the Environment" (2009) *Victoria University of Wellington Law Review* 40.
- Gostin, L. & Archer, R. "The Duty of States to Assist Other States in Need: Ethics, Human Rights, and International Law" (2007) *Journal of Law, Medicine and Ethics* 35, p529.
- Goulet, R. "Food Sovereignty: A Step Forward in the Realisation of the Right to Food" (2009) in *Law, Social Justice and Global Development Journal* 1:13.
- Hamilton, C. *Requiem for a Species* (Earthscan Publications Ltd: UK, 2010).
- Hartmann, B. *Reproductive Rights and Wrongs: The global politics of population control* (South End Press: USA, 1999).
- Higer, A. "International Women's Activism and the 1994 Cairo Population Conference" in Meyer, M. & Prügl, E. (eds) *Gender Politics in Global Governance* (Rowman & Littlefield Publishers: UK, 1999).
- Holmes, C. writing for the UNEP Division of Environmental Law and Conventions, "The New Future of Human Rights and Environment: Moving the Global Agenda Forward – High Level Experts Meeting" in *MEA Bulletin* (2010).
- Hoodfar, H. &Assadpour, S. "The Politics of Population Policy in the Islamic Republic of Iran" (2000) *Studies in Family Planning* 31:1.
- ICJ Official website, "Advisory Jurisdiction" [<http://www.icj-cij.org/homepage/index.php>].

- Indira Ghandi National Open University “Effects of Agriculture on Human Environment” (2011) [<http://www.egyankosh.ac.in/bitstream/123456789/36533/1/Unit-8.pdf>].
- Interamerican Association for Environmental Defense (AIDA) *Large Dams in the Americas: Is the Cure Worse than the Disease?* (November 2009) AIDA [http://www.aida-americas.org/sites/default/files/DAMSREPORTExecsum_0_0.pdf].
- Inter-American Commission on Human Rights, *Report on the Situation of Human Rights in Ecuador* OEA/Ser.L/V/II.96, doc. 10 rev. 1 (1997).
- International Network for Economic, Social & Cultural Rights, “Background information on the ICESCR [http://www.escr-net.org/resources_more/resources_more_show.htm?doc_id=425251].
- Jensen, Eric T. "The international law of environmental warfare: active and passive damage during armed conflict" (2005) in *Vanderbilt Journal of Transnational Law* 38.1.
- King, A. Assistant Secretary-General and Special Adviser on Gender Issues and Advancement of Women, “The Global Perspective: Outcomes of Beijing+5 - Gender Equality, Development and Peace” (Keynote speech, The Commonwealth Secretariat and the United Nations Information Center, London, 4 December 2000).
- Kinver, M. “‘Pollination Crisis’ Hitting India’s Vegetable Farmers” *BBC News* (28 September 2010) [<http://www.bbc.co.uk/news/science-environment-11418033>].
- Knox, J. “Linking Human Rights and Climate Change and the United Nations” (2009) *Harvard International Law Review* 33.
- Lee, J. “The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary Law” (2000) *Columbia Journal Environmental Law* 25:283.
- Loewenberg, S. “Global food crisis takes heavy toll on east Africa” *The Lancet* 378: 9785 (2 July 2011). Mazur, L (Ed.) *A Pivotal Moment* (Island Press: USA, 2010).
- Luopajarvi, K. “Is there an Obligation on States to Accept International Humanitarian Assistance to Internally Displaced Persons Under International Law?” (2003) *International Journal of Refugee Law* 15:4.
- Meadows, D., Meadows, D., Randers, J. & Behrens, W. *The Limits to Growth* (Washington D.C.: Potomac Associates, 1972).

- McCaffrey, S. “A Human Right to Water: Domestic and International Implications” (1992-1993) *Georgetown International Environmental Law Review* 5:8.
- McGraw, G. “Water for Life: The Challenge Posed by the Un-Codified Human Right to Water in International Law” (2010) *The University for Peace Law Review* 1:30.
- McIntosh, C. & Finkle, L. “The Cairo Conference on Population and Development: A New Paradigm?” (1995) *Population and Development Review* 21:2; p227.
- McKibben, B. “The Enigma of Kerala: One State in India is proving Development Experts Wrong” *Double Take* (Colorado, 1995).
- Mechlem, K. “Food Security and the Right to Food in the Discourse of the United Nations” (2004) *European Law Journal* 10:5.
- Menon-Sen, K. & Kumar, A. *Women in India – How free? How Equal?* Report commissioned by the Office of the Resident Coordinator in India (2001).
- Mertz, T. “Nature’s Services: Ecosystems are more than Wildlife Habitat” in *Our Future* (2007) RAND
[<http://www.rand.org/scitech/stpi/ourfuture/NaturesServices/section1.html>].
- Meyer, M. & Prügl, E. (eds) *Gender Politics in Global Governance* (Rowman & Littlefield Publishers: UK, 1999).
- National Coordinating Committee for UDHR50, Franklin and Eleanor Roosevelt Institute *History of the UDHR* (2008) [<http://www.udhr.org/history/overview.htm>].
- Namibian Women’s Health Network “Submission to Human Rights Council’s Universal Periodic Review (UPR) of Namibia” (July, 2010)
[http://lib.ohchr.org/HRBodies/UPR/Documents/Session10/NA/NWHN_TheNamibianWomen%E2%80%99sHealthNetwork-eng.pdf].
- Norwood, C. “Ghana Women, Microcredit and Family Planning Practices: A Case Study from Rural Ghana” (2011) *Journal of Asian and African Studies* 46.
- Oasis Environmental Ltd “Heavy Eutrophication Eliminates Species” (2006)
[<http://www.oasisenviro.co.uk/eutrophication.htm>].
- Orellana, M., Kothari, M. & Chaudry, S. *Climate Change in the Work of the Committee on Economic, Social and Cultural Rights* (Friedrich-Ebert-Stiftung: Geneva, 2010).

- Parker, M. “Two Sides of the Same Coin: Considering Human Rights When Designing Environmental Policy” (2009) *Journal of Land Use* 25:1.
- Pearce, F. *Peoplequake* (Eden Project Books: UK, 2010).
- Picolotti, R. & Taillant, J. (Eds) *Linking Human Rights and the Environment* (University of Arizona Press: USA, 2003).
- Podmore, C. *Irrigation Salinity – Causes and Impacts* (October 2009) State of New South Wales Department of Industry and Investment [http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0018/310365/Irrigation-salinity-causes-and-impacts.pdf].
- Potts, M. “China’s One Child Policy” (2006) *British Medical Journal* 333.
- Potts, M. “Sex and the Birth Rate” (1997) *Population and Development Review* 23:1.
- Project DIANA at Yale Law School, *Draft Declaration of Principles on Human Rights and the Environment, 1994* (2005) at [http://www.yale.edu/lawweb/avalon/diana/undocs/33198-11.html].
- Ramcharan, B. G. “The Concept and Dimensions of the Right to Life” in Ramcharan, B. G. (Ed) *The Right to Life in International Law* (Martinus Nijhoff Publishers: Netherlands, 1985).
- Ramcharan, B. G. quoted in Commission on Human Rights, Ksentini, F. *Report of the Special Rapporteur on Prevention of Discrimination and Protection of Minorities: Human Rights and the Environment* E/CN.4/Sub.2/1994/.
- Robb, C. (ed) *International Environmental Law Reports: Human Rights and Environment* (Cambridge University Press: UK, 2001).
- Robinson, M. United Nations High Commissioner for Human Rights *The Right to Food in Theory and Practice* [http://www.fao.org/Legal/rtf/bkl.htm].
- Rodriguez-Rivera, L. “Is the Human Right to Environment Recognized Under International Law? It Depends on the Source” (2001) *Colorado Journal International Environmental Law & Policy* 12:1.
- Rand, A “Man’s Rights” in *Capitalism: The Unknown Ideal* (Penguin Group: USA, 1966).
- Reference Paper to the Asia Pacific Forum, *Human Rights and The Environment* (2007).
- Rice, X. “Hunger Pains: Famine in the Horn of Africa” *The Guardian* (8 August, 2011).

Robinson, K. *Education and Traditional Contraceptive Use: An Analysis of Nine Countries Using Demographic and Health Survey Data* (The University Center for International Studies, The University of North Carolina at Chapel Hill, 1996).

Robinson, M. United Nations High Commissioner for Human Rights *World Food Summit: Five Years Later* "The Right to Food: Achievements and Challenges" (2005).

Robinson, M. "Welcoming the downtrodden" (1998) *Refugees Magazine* 111.

Rothchild, D., Deng, F., Zartman, I., Kimaro, S. & Lyons, T. *Sovereignty as Responsibility: Conflict Management in Africa*, (Brookings Institution Press: UK, 1996).

Sardjunani, N. Delegation of the Republic of Indonesia, Submission to the Commission on Population and Development, Agenda Item 5: Programme Implementation and future program of work for the Secretariat in the field of Population (April 2009)
[http://www.un.org/esa/population/cpd/cpd2009/Country_Statements/Indonesia_AgendaItem5.pdf].

Schade, C. & Pimentel, D. "Population Crash: prospects for famine in the twenty-first century" in *Environment Development Sustainability* (2010) 12:245-262.

Schachter, O. *International Law in Theory and Practice* (1991).

Schmidt, Charles W. "A closer look at climate change scepticism" in *Environmental Health Perspectives* 118.12 (2010): A536

.*Science Desk Reference American Scientific*. New York: Wiley, 1999: 180.

Sen, A. "Fertility and Coercion" (1996) *University of Chicago Law Review* 63.

Shapiro, D. & Tambashe, B. "The Impact of Women's Employment and Education on contraceptive Use and Abortion in Kinshasa, Zaire" (1994) *Studies in Family Planning* 25:2.

Shelton, D. "The Environmental Jurisprudence of International Human Rights Tribunals" in Piccolotti & Taillant, supra n 184.

Shelton, D. "Human Rights and Environment: Past, Present and Future Linkages and the Value of a Declaration" (2009) Background Paper for High Level Expert Meeting of the New Future of Human Rights and Environment: Moving the Global Agenda Forward, (UNEP and OHCHR project).

Shelton, D. "Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?" (2006-2007) *Denver Journal International Law & Policy* 35, p169.

- Shelton, D. *Human Rights & The Environment: Jurisprudence of Human Rights Bodies* Background Paper No. 2 , Joint UNEP-OHCHR Expert Seminar on Human Rights and the Environment (Geneva, 14-16 January 2002); [<http://www2.ohchr.org/english/issues/environment/envIRON/bp2.htm>].
- Shelton, D. "What Happened in Rio to Human Rights?" (1992) *Yearbook of International Environmental Law* 2:75 Goldsmith, J. & Posner, E. "A Theory of Customary International Law" (1999) *The University of Chicago Law Review* 66: 4.
- Shrivastava, P. "Castrated environment: greening organizational studies" (1994) in *Organization Studies* 15:5 705.
- Singh, K. *Autobiography* (Oxford University Press: Delhi, 1994).
- Skogly, I. "The obligation of international assistance and co-operation in the International Covenant on Economic, Social and Cultural Rights" in Bergsmo, M. (ed.) *Human Rights and Criminal Justice for the Downtrodden* (Marinus Nijhoff Publishers, Boston, 2003).
- Speidel, J., Weiss, D., Ethelston, A. & Gilbert, S. "Family Planning and Reproductive Health: The Link to Environmental Preservation" (2007) *Population and Environment* 28.
- Stand Up For Your Rights "European Ministers ignore Parliament and UN bodies and refuse to codify the Human Right to a healthy and viable Environment into the European Convention on Human Rights." (press release, 23 June 2010) [<http://www.standupforyourrights.org/ip/uploads/downloads/PressRelease%2024%20juni%202010%20ENG.pdf>].
- Sterling, E. & Vintinner, E. "How Much Is Left? An Overview of the Water Crisis" in Mazur, L (Ed.) *A Pivotal Moment* (Island Press: USA, 2010).
- Stern, P., Dietz, T., Ruttan, V., Socolow, R. & Sweeney, J. (eds.) *Environmentally Significant Consumption: Research Direction* (National Academy Press: USA, 1997)
- Stockholm International Peace Research Institute *Recent Trends in Military Expenditure* [<http://www.sipri.org/research/armaments/milex/resultoutput/trends>].
- Sullivan, D. "Women's Human Rights and the 1993 World Conference on Human Rights" (1994) *The American Journal of International Law* 88:1.
- Taylor, P. *An Ecological Approach to International Law: Responding to the Challenges of Climate Change* (Routledge, London, 1998) p199.

Thier, D. "Time, Water Running Out for America's Biggest Aquifer" *AOL news* (Online, 21 April 2010) [<http://www.aolnews.com/earth-day/article/time-water-running-out-for-americas-biggest-aquifer/19446923>].

Thrift, J. "" (2005) *Journal of Public Mental Health* 6:4.

Tomuschat, C. *Human Rights: Between Idealism and Realism* (Oxford University Press: USA, 2003).

UK House of Commons International Development Committee *The 2010 Millennium Development Goals Review Summit Second Report of Session 2010-2011* (14 December 2010) p26.

U.S. Agency for International Development (USAID) *Achieving the Millennium Development Goals: The contribution of fulfilling the unmet need for family planning* (May 2006) pvii.

USAid, *Issues in Poverty Reduction and Natural Resource Management* (United states Agency for Development: USA, 2006).

US Central Intelligence Agency *World Factbook 2011* "China" (Washington: DC, 2011).

U.S. Department of the Interior *The Water Cycle: Infiltration* (31 March 2010) [<http://ga.water.usgs.gov/edu/watercycleinfiltration.html>].

U.S. Department of State *2008 Human Rights Report: China* (Feb 2009).

U.S. Department of State *2010 Human Rights Report: China* (Apr 2011).

Van Hollen, C. "Moving Targets: Routine IUD Insertion in Maternity Wards in Tamil Nadu, India" (1998) *Reproductive Health Matters* 6.

Vukovich, G. *Key actions for the further implementation of the Programme of Action of the International Conference on Population and Development* (1999).

Vorster, N. "An ethical critique of Milton Friedman's doctrine on economics and freedom." (2010) *Journal for the Study of Religions and Ideologies* 9:26.

Weasel, L. *Food Fray: Inside the Controversy over Genetically Modified Food* (AMACOM: USA, 2008).

Weiss, E. (Ed.) *Environmental Change and International Law New Challenges & Dimensions* (United Nations University Press, 1992).

Westra, L. "Ecological Integrity and Biological Integrity: The Right to Life and the Right to Health in Law" (2009) in *Transnational Law & Contemporary Problems* 18:3.

Wetter, J. “Is Rapid Population Growth Impeding Progress on the MDGs?” (2009) *Population Matters* Population Institute
[<http://blog.populationinstitute.org/2009/08/18/is-rapid-population-growth-impeding-progress-on-the-mdgs/>].

Wiles, E. “Aspirational Principles or Enforceable Rights? The Future for Socio-Economic Rights in National Law” (2006) *American University International Law Review* 22:35.

Wolfrum, R. “International Economic and Social Co-operation” in Simma, B. *The Charter of the United Nations – A Commentary* (Oxford University Press: UK, 1994)

World Population Conference, Bucharest, 1974 “World Population Plan of Action”, in *Population & Development Review*, Vol. 1, No. 1, (Sep. 1975) pp163-181;

Xenos, D. “Asserting the Right to Life (Article 2, ECHR) in the Context of Industry” (2007) *German Law Journal* 8:3.

Xiaofeng, G. “Most People Free to Have More Children” *China Daily* (11 July 2007) [http://www2.chinadaily.com.cn/china/2007-07/11/content_5432238.htm].

Ziegler, J. Commission on Human Rights, “Economic Social and Cultural Rights: The Right to food – Report of the Special Rapporteur on the right to food”, E/CN.4/2005/47.

Zukang, S. Under-Secretary-General for Economic and Social Affairs, Secretary-General of the 2012 UN Conference on Sustainable Development, “Agenda Item 5: General Debate on the Further implementation of the Programme of Action of the International Conference on Population and Development in light of its twentieth anniversary” (13 April 2011)
[<http://www.un.org/en/development/desa/usg/statements/44-session-commission-population-development-agenda5.shtml>].