RAPE OF THE WORLD: AN ECOFEMINIST CRITIQUE OF INTERNATIONAL ENVIRONMENTAL LAW

by

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Abstract

Over the last twenty years, international environmental law has attempted to address the global threats to the health of our planet including ozone layer depletion, climate change, global deforestation, the pollution of freshwater resources and the oceans and species extinction. Unfortunately, the state of the environment is not improving as fast as environmental conventions come forth. The premise for this thesis is therefore that international environmental law is not effective in protecting the natural environment.

Responsible for the survival of their families and communities, women in developing countries are the most vulnerable to environmental degradation as dwindling natural and freshwater resources and soil erosion threaten their survival base. Unfortunately, international environmental law does little to acknowledge this vulnerability and even less to assist women in developing countries cope with environmental degradation. The vast knowledge of ecosystems held by women in developing countries is also largely ignored, thus marginalizing their way of knowing and disregarding potential solutions to environmental problems.

This thesis therefore takes a critical look from an ecofeminist standpoint at the traditional characteristics of international environmental law such as states' sovereign right to exploit their natural resources, states' right to development and the emphasis of international environmental law on science and technology. The thesis also examines emerging principles of international environmental law such as sustainable development, intergenerational equity, common concern of humankind, and the precautionary principle, which attempt to address some of the concerns raised by the more traditional approach. However, the thesis concludes that despite these new developments, international environmental law is still premised on an androcentric perspective of the natural environment which impedes it from achieving true environmental protection and which

serves to continue the marginalization of women. In this thesis, I argue that a new conceptualization of the relationship between humankind and the natural environment is necessary in order to save our planet from ecological disaster and that ecofeminism can offer such an alternative view. Finally, the conclusion will suggest a few concrete ways of including women's perspectives and ways of knowing into the negotiation of environmental conventions and in their implementation.

Table of Contents

Abstract		ii
Table of Cor	ntents	iv
Acknowledg	ements	vi
Chapter 1	An Introduction	
	Introduction	1
	A few global indicators	2
	The ineffectiveness of international environmental	
	law	6
. '	Intellectual journey	10
1,142		
Chapter 2	Setting the Theoretical Framework: Ecofeminism and Related Theories	
	Introduction	14
•	What is ecofeminism?	17
	Why ecofeminism?	22
	Conceptual difficulties with choosing ecofeminism	
	as a theoretical framework	33
	Conclusions	48
Chapter 3	International Environmental Law and the Dominant Social Paradigm	
	Introduction	51
	Principle 21	52
	The right to development	64
	Is science really the best solution to global environmental	
	problems?	77
	International law as a tool of oppression	85
	Conclusions	92

Chapter 4	New Developments in International Environmental Law			
	Introduction	94		
	Sustainable development	96		
,	Equity	105		
	Precautionary principle	118		
•	Common concern of humankind	126		
	Conclusions	128		
Chapter 5	An Ecofeminist Approach to International Environmental Law			
	Environmental Law			
	Ecofeminist principles	130		
	Reality bites or improving international environmental			
	law within the dominant social paradigm	140		
	The bottom line: the inclusion of women's voices			
	in international environmental law	148		
	Conclusions	152		
Bibliography		153		

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Chapter 1 An Introduction

Mother of us all Place of our birth How can we stand aside and watch the rape of the world This is the beginning of the end This is the most heinous of crimes This is the deadliest of sins The greatest violation of all time Mother of us all Place of our birth We all are witness to the rape of the world You've seen her stripped mined You've heard of bombs exploded underground You know the sun shines hotter than ever before Some claim to have crowned her a queen with cities of concrete and steel But there is no glory no honor In what results from the rape of the world Mother of us all Place of our birth We all are witness to the rape of the world She has been clear-cut She has been dumped on She has been poisoned and beaten up And we have been witness to the rape of the world Mother of us all Place of our birth How can we stand aside and watch the rape of the world If you look you'll see it with your own eyes If you listen you will hear her cries If you care you will stand and testify And stop the rape of the world...

(Tracy Chapman, "Rape of the World")1

I. Introduction

The idea for this paper originated from my frustration as a student of international environmental law with its ineffectiveness in achieving environmental protection. In the last two decades, hundreds of bilateral and multilateral conventions have been adopted for the regional and global protection of the environment.² Unfortunately, the state of the environment is not improving as rapidly as the agreements come forth.³ On the contrary, the

¹ Tracy Chapman, "Rape of the World", song on the album entitled *New Beginning* (Elektra Entertainment Group, 1995).

² See E. Brown-Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order" (1993) 81 Geo.L.J. 675 at 679; see also E. Brown-Weiss, D. Magraw & P. Szasz, *International Environmental Law: Basic Instruments and References* (Ardsley-on-Hudson: Transnational Publishers, 1992).

³ This lack of success was acknowledged by the international community itself in assessing the success of the United Nations Conference on Environment and Development (UNCED) 5 years later: General Assembly,

health of the planet is deteriorating in many aspects. Climate temperatures are rising, forests are still depleted at an alarming rate, desertification is encroaching on more and more fertile lands, species still become extinct, natural disasters are increasing due to climate change, and acid rain and smog are a common phenomena.⁴

II. A few global indicators

A few concrete examples suffice to illustrate the interconnected nature of today's international environmental problems and responses. At the United Nations Conference on Environment and Development (UNCED) which took place in 1992, states adopted the *United Nations Framework Convention on Climate Change*,⁵ the first international instrument addressing the greenhouse effect. Greenhouse gases normally absorb and return to the Earth's surface heat produced by the sun's rays, and are thus necessary in order to keep the climate warm enough for species to inhabit the planet.⁶ However, the concentrations of greenhouse gases in the atmosphere are being drastically increased by human activities such as the burning of fossil fuels, deforestation, and agriculture.⁷ In turn, increased concentrations of carbon dioxide and other greenhouse gases enhance the global greenhouse effect,⁸ thus posing significant risks to the natural world and human society, such as flooded

Earth Summit +5: Programme for the Further Implementation of Agenda 21, UN GAOR, Spec. Sess., 23-27 June 1997, paragraph 4, which states the following:

We acknowledge that a number of positive results have been achieved, but we are deeply concerned that the overall trends for sustainable development are worse today than they were in 1992.

⁴ Or, in the words of Lester B. Brown, "[f]orests are shrinking, water tables are falling, soils are eroding, wetlands are disappearing, fisheries are collapsing, rangelands are deteriorating, rivers are running dry, temperatures are rising, coral reefs are dying, and plant and animal species are disappearing.": World Watch Institute, *State of the World 1998* (NY; London: W.W. Norton & Company, 1998) at 4 [hereinafter *State of the World*]. See generally C. Mungall & D. J. McLaren, *Planet Under Stress: The Challenge of Global Change* (Toronto: Oxford University Press, 1991) for an overview of global environmental problems.

⁵ 9 May 1992, (1992) 31 I.L.M. 851 [hereinafter *Climate Change Convention*]. For a historical account of the climate change regime, see generally F. Biermann, *Saving the Atmosphere: International Law, Developing Countries and Air Pollution* (Frankfurt am Main; Berlin; Bern; NY; Paris; Wien: Peter Lang, 1995) 43-47.

⁶ Mungall & McLaren, supra note 4 at 53.

⁷ *Ibid.* at 54.

⁸ Ibid.

coastal cities, diminished food production, and an increase in natural disasters.⁹ Despite the adoption of the *Climate Change Convention*, global emissions of carbon (which becomes carbon dioxide when released into the atmosphere) reached an all time high of 6.2 billion tons in 1996, bringing the atmospheric CO₂ concentration higher than at any time in the last 160,000 years.¹⁰

Since developed states are responsible for 76% of the world's carbon emissions since 1950, they agreed in 1992 to aim to reduce these emissions to 1990 levels by the year 2000.¹¹ But, as noted in *State of the World*, "this goal has disappeared in the cloud of greenhouse gases belching from the automobiles and smokestacks of industrial countries" and some developed states such as the United States, Australia and Japan are in fact producing emissions above their 1990 levels, ¹² thus making it doubtful that the goal for the year 2000 will be attained. In December 1997, more than 160 states met to sign the *Kyoto Protocol to the United Nations Framework Convention on Climate Change* ¹³ in which they committed themselves to reduce greenhouse gas emissions. However, the agreed reductions appear to be more of a negotiated compromise than a serious attempt at reversing the process of climate change. ¹⁴

Only one of the many issues interconnected with climate change is global deforestation, which claims 16 million hectares of the world's forest cover every year. ¹⁵ Not only is the world's forest area decreasing, but the quality of forests is also changing. According to the Worldwatch Institute, at least 180 million hectares of forests have been converted to

⁹ State of the World, supra note 4 at 114.

¹⁰ *Ibid.* at 113.

¹¹ Ibid. at 114; Climate Change Convention, supra note 5, article 4(2).

¹² These countries' emissions are 8.8, 9.6 and 12.5 percent above their 1990 levels, respectively: *State of the World, ibid.* at 114-115.

¹³ 11 December 1997, (1998) 37 I.L.M. 32.

¹⁴ Canada and the United States agreed to six and seven percent reductions respectively: See *ibid.*, Annex B.

^{15.} State of the World, supra note 4 at 22.

plantations.¹⁶ The rate of deforestation is alarming, as forests act as the "heart and lungs of the world".¹⁷ Additionally, forests perform essential tasks in preventing soil erosion, maintaining high water quality,¹⁸ and storing the world's biological diversity of plants and animal species.¹⁹ Forests also regulate climate by drawing carbon dioxide out of the atmosphere.²⁰ For example, tropical forests hold approximately one fifth of the world's terrestrial carbon pool of 500 billion tonnes.²¹ Deforestation is thus a major source of emissions of carbon dioxide and the resulting reduced forest cover cannot absorb the same amount of atmospheric carbon dioxide.²² Forests are also important as a social, cultural, economic and environmental resource, and constitute the homes of indigenous peoples worldwide.²³

In 1992, the international community adopted the *Non-legally Binding Authoritative* Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests ²⁴ to address global deforestation. However, according to the Worldwatch Institute, there has been a lack of progress in halting

¹⁶ *Ibid.* at 23.

¹⁷ Mungall & McLaren, supra note 4 at 168-169.

¹⁸ Ihid

¹⁹ Tropical rain forests alone cover only approximately 6-7% of the world's land surface area, but contain at least half of and possibly up to 90% of the world's species: see Andrew Hurrell, "Brazil and the International Politics of Amazonian Deforestation" in A. Hurrell and B. Kingsbury, eds., *The International Politics of the Environment: Actors, Interests and Institutions* (Oxford: Clarendon Press, 1992) 398 at 400.

²⁰See Mungall & McLaren, *supra* note 4 at 169-171; see also L. P. Breckenridge, "Protection of Biological and Cultural Diversity: Emerging Recognition of Local Community Rights in Ecosystems under International Environmental Law" (1992) 59 Tenn. L. Rev. 735 at 740; M. Bothe, "International Law and the Protection of the Environment" in M. Bothe, T. Kurzidem & T. Schmidt, eds., *Amazonia & Siberia: Legal Aspects of the Preservation of the Environment and Development in the Last Open Spaces* (London: Graham & Trotman, 1993) 237 at 244;

²¹ M. P. Marchak, *Logging the Globe* (Montreal; Kingston: McGill-Queen's University Press, 1995) at 149. ²² *Ibid.*

²³ J. Brunnée, "A Conceptual Framework for an International Forests Convention: Customary Law and Emerging Principles" in Canadian Council on International Law, ed., *Global Forests and International Environmental Law* (Cambridge, MA: Kluwer Law International, 1996) 41 at 45 [hereinafter "Conceptual Framework" in *Global Forests*].

²⁴ 13 June 1992, UN.Doc A/CONF.48/14, (1992) 31 I.L.M. 882.

deforestation and the situation has even grown worse.²⁵ Although there has been efforts made towards the adoption of a forest convention on the conservation of forests, states have not yet agreed on such a binding instrument.²⁶

Global deforestation and environmental degradation are also contributing to the loss of biological diversity at a rate of 1000 species per year.²⁷ At UNCED, states signed the *Convention on Biological Diversity* ²⁸ in order to address the disappearance of species from our planet, which is due mostly to habitat loss and degradation.²⁹ Four years later, statistics compiled by the World Conservation Union (IUCN) showed little progress in the protection of species.³⁰ For example, estimates for the rate of extinction of birds indicate that, in 1996, at least two out of three bird species were declining worldwide and eleven percent were either in immediate danger of extinction or vulnerable to extinction.³¹ A very high twenty-five percent of species of mammals will disappear from Earth if nothing is done for their protection and eleven percent are already endangered or even critically endangered.³²

Thus we find ourselves in the situation described by Alexandre Timoshenko:

²⁵ State of the World, supra note 4 at 39.

²⁶ The Intergovernmental Panel on Forests was set up by the United Nations in 1995 and replaced by the Intergovernmental Forest Forum in June 1997. The objectives of the Forum include working towards a consensus on a legally binding agreement dealing with the management of forests globally. However, no binding agreement has yet come out of these working groups (states cannot even agree that there is a need for a legally binding instrument!): See International Institute for Sustainable Development, "Second Session of the Intergovernmental Forum on Forests", (1998) 13:45 Earth Negotiations Bulletin, online: IISD http://www.iisd.ca/linkages/forestry/iff2.html (date accessed: 13 October 1998).

²⁷ State of the World, supra note 4 at 41.

²⁸ 22 May 1992, (1992) 11 I.L.M. 818 [hereinafter *Biodiversity Convention*].

²⁹ State of the World, supra note 4 at 47. The Biodiversity Convention is the first agreement to deal with species extinction as a global problem, although the Convention refers to all species as "biological resources". Before then (and since then), many conventions have been signed for the protection of specific species, especially fish or other marine species. For example, the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) was adopted in 1973 to put a stop to the hunting and trading of animal parts such as elephant ivory: see CITES, 3 March 1973, (1973) 12 I.L.M. 1088.

³⁰ See generally J. Baillie and B. Groombridge, eds., *1996 IUCN Red List of Threatened Animals* (Gland, Switzerland: World Conservation Union, 1996).

³¹ State of the World, supra note 4 at 43.

³² *Ibid.* at 46-47.

For decades the world has been living in a paradoxical situation. On the one hand, the activities to protect the environment have been mushrooming locally, nationally, regionally, and internationally. On the other hand, the environment has been deteriorating more and more. In spite of all efforts, this negative process cannot even be stopped. Such a widening gap between scope and result inevitably leads to a conclusion that there is something substantially wrong with the very approach to the ecological problem. A conceptual breakthrough is necessary.³³

III. The ineffectiveness of international environmental law

From the above account, we can see that environmental law³⁴ are not as effective as they should be in halting environmental degradation. At the same time, demonstrating the ineffectiveness of international environmental law is not an easy task. How do we define effectiveness? The effectiveness of international environmental agreements is difficult to assess since it "... presumes that we can reasonably foresee the results of alternative courses of action, although much in our experience testifies otherwise".³⁵ Some argue that the effectiveness of environmental agreements should be measured by the impacts these agreements have on political processes as an intermediary step to improving environmental quality.³⁶ Others hold that the effectiveness of an international environmental convention is

³³ A. S. Timoshenko, "Ecological Security: Response to Global Challenges" in E. Brown-Weiss, ed., *Environmental Change and International Law: New Challenges and Dimensions* (Tokyo: UN University Press, 1992) 413 at 414.

³⁴ In this thesis, the term international environmental law refers to a combination of customary law principles, binding conventions and non-binding "soft law instruments". However, my focus will be on international conventions, since the principles discussed, even if customary, have usually found their way into agreements. Moreover, international instruments (both binding and non-binding) are a good starting point for instituting change.

³⁵ M. Koskenniemi, "Comment on the Paper by Antonia Handler-Chayes, Abraham Chayes and Ronald B. Mitchell" in W. Lang ed., *Sustainable Development and International Law* (London: Graham & Trotman, 1995) 91 at 94.

³⁶ M. E. Levy, R. O. Keohane & P. M. Haas, "Improving the Effectiveness of International Environmental Institutions" in P. M. Haas *et al*, eds., *Institutions for the Earth: Sources of Effective International Protection* (Cambridge: M.A. MIT Press, 1993) 397 at 397.

not determined by whether or not the environmental threat has been eliminated, but rather if it would have been worse without the treaty.³⁷

In my opinion, the effectiveness of international environmental agreements must be measured by determining if the environmental threats that they are meant to address have been removed or, at the very least, reduced. As expressed by one commentator, "... the only meaningful unit by which to measure the success or failure of international environmental law is the health of planet itself".³⁸ To take any other approach is to lose sight of the purpose of these agreements, which is to protect the environment. In this regard, international environmental law does not measure up to the challenge.³⁹

The ineffectiveness of international environmental agreements is due partly to the negotiation process. For an environmental convention to be effective, it must secure the widespread participation of states. Despite the fact that formal rules of the United Nations provide for majority voting procedures,⁴⁰ the negotiation technique usually employed in the adoption of international instruments is diplomacy, which is based on consensus. As a result, the negotiations are often characterized by the inability to reach an agreement on difficult issues.⁴¹ For example, at UNCED only two of the projected seven treaties were signed.⁴²

³⁷ A. Handler Chayes, A. Chayes & R. B. Mitchell, "Active Compliance Management in Environmental Treaties" in Lang ed., *supra* note 35, 75 at 76.

³⁸ V. P. Nanda, *International Environmental Law and Policy* (NY: Transnational Publishers, 1995) at 4.

³⁹ See L. E. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Agreements* (NY: Oxford University Press, 1994) at 16 [hereinafter *Environmental Diplomacy*].

⁴⁰ G. Palmer, "The Earth Summit: What Went Wrong at Rio?" (1992) 70 Washington U.L.Q. 1005 at 1014; see also A. Chayes & A. Handler-Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Cambridge, Mass: Harvard University Press, 1995) at 129.

⁴¹ A. E. Boyle, "Saving the World? Implementation and Enforcement of International Environmental Agreements Through International Institutions" (1991) 3 J. of Env. L. 229 at 231.

⁴² L. Susskind, "What Will It Take to Ensure Effective Global Environmental Management? A Reassessment of Regime-building Accomplishments" in B.I. Spector, G. Sjöstedt and I.W. Zartman, eds., *Negotiating International Regimes* (London: Graham & Trotman, 1995) 221 at 221 [hereinafter "What Will It Take"].

Moreover, when consensus is reached, the resulting agreements usually represent a lowest common denominator and a vague statement of principles.⁴³

Once agreeements are signed, another possible reason for the ineffectiveness of international environmental law is the failure of states to comply with their obligations. ⁴⁴ First of all, because of insufficient data, ⁴⁵ it is difficult to assess the compliance of states with their substantive obligations. The vagueness and ambiguity of certain environmental provisions also make it troublesome to assess compliance by states. ⁴⁶ More importantly, compliance with both reporting and substantive obligations under international environmental agreements is largely dependent on states' financial, administrative and technical resources. This is especially significant in the case of developing countries, whose non-compliance is almost exclusively due to the lack resources necessary to implement their obligations. ⁴⁷

Therefore, the negotiation process and the non-compliance of states with their environmental obligations might explain the limited effectiveness of international environmental instruments in achieving environmental protection. However, this thesis will show that even if compliance could easily be measured and it was demonstrated that states were generally

⁴³ Boyle, *supra* note 41 at 231; A. D. Tarlock, "Stewardship Sovereignty: The Next Step in Former Prime Minister Palmer's Logic" (1992) 42 Wash. U.J. of Urban and Contemp. L. 21 at 23; *Environmental Diplomacy*, *supra* note 39 at 14; A. Daniel, "Environmental Threats to International Peace and Security: Combatting Common Security Threats Through Promotion of Compliance with International Environmental Agreements" (1994) Can. Council Int'l L.Proc. 134 at 138.

⁴⁴ The non-compliance of states with their obligations under environmental treaties has generated abundant literature! For example, see the following: Chayes & Handler-Chayes, *supra* note 40; Boyle, *supra* note 41; Daniel, *ibid.*; Chayes, Chayes & Mitchell, *supra* note 37; Sachariew Kamen, "Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms" (1991) 2 Y.B. Int'l Env. L. 31; "What Will It Take", *supra* note 42; Patrick Széll, "The Development of Multilateral Mechanisms for Monitoring Compliance" in Lang, *supra* note 35 at 97.

⁴⁵ This lack of data is also due to the failure of states to comply with their obligations, in this case their reporting obligations: see Chayes & Handler-Chayes, *ibid.* at 23; Kamen, *ibid.* at 42.

⁴⁶ Daniel, *supra* note 43 at 138; G. Handl, "Environmental Security and Global Change: The Challenge to International Law" (1990) 1 Y.B. Int'l Env. L. 3 at 10; M. Koskenniemi, "Breach of Treaty of Non-Compliance? Reflections on the Enforcement of the Montreal Protocol" (1992) 3 Y.B. Int'l Env. L. 123 at 123.

⁴⁷ Chayes & Handler-Chayes, supra note 40 at 14; Levy, Keohane & Haas, supra note 36 at 404-405.

complying with their environmental obligations,⁴⁸ international environmental law, as it is presently conceptualized, would still fail to effectively protect the environment. The main argument of this thesis is that international environmental law is tainted with androcentrism and this prevents it from achieving effective environmental protection.

In Chapter 3, I will show that the main features of international environmental law such as Principle 21, states'right to development and the emphasis on science and technology, are grounded in the dominant social paradigm, which reflects an androcentric view of Nature. I will show that the dominant social paradigm, characterised by a capitalist economic system, Western reductionist science and the dominant development model, has dominated women, people in developing countries, Nature and other subejcts of domination. Because the main features of international environmental law are based in this dominant social paradigm, international environmental law is fundamentally contradictory to effective environmental protection.

In Chapter 4, I will examine emerging principles in international environmental law such as sustainable development, equity, the precautionary principle and common concern of humankind, which appear to be more ecological in their approach. I will offer a critique of these principles in light of the concerns raised in Chapter 3 to determine whether these new principles improve the chances of international environmental law to protect the environment. However, as we will see in Chapter 4, these new principles fall short of challenging the dominant social paradigm. As a result, although they address some of the concerns that will be raised in Chapter 3, the emerging principles are still inadequate to

⁴⁸ Some have stated that because of their interdependence, most states comply with their international obligations most of the time. For example, see G. Palmer, "An International Regime for Environmental Protection" (1992) Wash. U.J. of Urban & Contemp. L. 5 at 6; *Environmental Diplomacy*, *supra* note 39 at 106; Chayes & Handler-Chayes, *ibid.* at 78.

achieve effective environmental protection. Therefore, I argue in this thesis that a reconceptualization of international environmental law is necessary.

IV. Intellectual journey

In my search for an alternative approach to environmental protection, I ran across interesting views of environmental ethics including deep ecology, social ecology and environmental justice. However, as I will explain in Chapter 2, something was missing from the analysis of these ideologies. I also came across indigenous views of Nature. The sustainability of the relationship between indigenous peoples and their land incited me to write a paper arguing for the mutual benefit of protecting indigenous peoples' lands and the environment. However, it was not until I read some ecofeminist literature that I found the element missing from ideologies such as deep ecology, social ecology and environmental justice: a gender dimension to the analysis of the exploitation of Nature. Ecofeminist literature encompasses gender, race, class and Nature in its critique of patriarchal institutions, and shares much of indigenous views of the kinship between human and non-human Nature.

Reading the works of ecofeminists such as Vandana Shiva⁴⁹ and Maria Mies⁵⁰ I also realized that environmental degradation has detrimental effects on the health and lives of women globally and that these impacts are different in nature than the effects on men. In the South, natural resource depletion is endangering the survival base of the poor and especially women, who depend on their environment for the survival of their families.⁵¹ Yet, women's voices

⁴⁹ V.Shiva, *Staying Alive: Women, Ecology and Development* (London:Zed Books, 1988); M.Mies & V. Shiva, *Ecofeminism* (London: Zed Books, 1993) [hereinafter *Ecofeminism*].

⁵⁰ Ecofeminism, ibid.

⁵¹ *Ibid.*

are often excluded from environmental decision-making. As an indication, the management ranks of most mainstream environmental organisations are dominated by men.⁵²

Moreover, the realisation that development, which I had considered as an obstacle to global environmental protection, was also detrimental to the lives of most women and children in developing countries, was yet another reason for joining these two causes into one thesis. If development has deleterious effects on the environment and on the lives of the poor, indigenous peoples and women in developing countries, why has it become such a fundamental characteristic of international environmental law? Who is benefitting from it? These are questions I wanted addressed. To argue that development poses a threat to the environment and should not be integrated into international environmental law would demonstrate a simplistic and Western-biased analysis of this complex issue. A more in-depth study of the causes of "underdevelopment" and of environmental degradation in developing countries is necessary.

Again, upon reading the works of ecofeminists from the South, I saw that the two issues (underdevelopment and environmental degradation) were closely related to each other and to the workings of the global economic system. Since international environmental law is based on the same capitalist system, I began to question the former's validity, both from the perspective of the environment and of women. However, my intention in this thesis is not to question the right of people all over the world to a decent standard of living, which is what the human right to development aims at achieving in theory. Rather, what I challenge in this thesis is states' right to development and the definition of development that has emerged in the context of the global market economy. In Chapter 5, I will suggest a different definition of development that focuses on the right of all people to the fulfillment of basic needs.

⁵² J. Seager, "Hysterical Housewives' and Other Mad Women: Grassroots Environmental Organizing in the United States in D.Rocheleau, B. Thomas-Slayter & E. Wangari, eds., *Feminist Political Ecology: Gobal Issues and Local Experiences* (NY: Routledge, 1996) at 271.

My inclusion of a gender dimension into a work which started out as mostly environmental also arises from my discontent with some environmentalist writings on the necessity to control population growth in order to save the planet from ecological disaster.⁵³ As expressed by many ecofeminists, population control measures can constitute yet another method of controlling women's bodies and fertility, this time in the name of the environment.⁵⁴ Janice Jiggins warns:

Women need to be at the forefront of the global agenda to ensure that developmental, environmental, and population policies are sensitive to gender relations and to women's own interest. They need to be there especially because many of the current proposals profoundly threaten the basic human rights of women. For example, although it is true that the goal of population stabilization could be reached by restricting births to 2.1 children per woman, policies that start from such cold arithmetic tend to lead to coercive control of female fertility. Population and environmental policies that target the reproductive functions of women have in the past threatened women's personal freedom and choice.⁵⁵

The stabilization of the world's population is a significant step in achieving sustainability on this planet, but it must be attained by women-centered and women-managed programmes to ensure that it respects women's basic human rights.⁵⁶

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⁵³ Some deep ecologists such as Bill Devall hold this view: see B. Devall, "The Deep Ecology Movement" in C. Merchant, ed., *Concepts in Critical Theory: Ecology* (New Jersey: Humanities Press, 1994) at 125. Sustainable development advocates behind the *Bruntdland Report* also hold this view: see World Commission on Environment and Development, *Our Common Future* (Oxford; New York: Oxford University Press, 1987). *State of the World, supra* note * stresses the importance of stabilizing population through increased family planning services and access to them, as well as education for women, but they do not suggest anything about women's roles in implementing these.

⁵⁴ See e.g. J.Jiggins, Changing the Boundaries: Women-Centered Perspectives on Population and Development; R. Braidotti, E. Charkiewicz, S. Haüsler & S. Wieringa, Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis (London: Zed Books in association with INSTRAW, 1994)

⁵⁵ Jiggins, *ibid*. at 6.

⁵⁶ See Women's Congress for a Healthy Planet, *Women's Action Agenda 21*, 8-12 November 1991, online: Women, Environment and Development Organization (WEDO)

<gopher://gopher.igc.apc.org:70/11/orgs/wedo/agenda21/wedo21/> (date accessed: 28 September 1998); Global Forum, "39- A Global Women's Treaty for NGOs Seeking a Just and Healthy Planet, online: Information Habitat http://www.igc.apc.org/habitat/treaties/women.html> (last modified: 30 August 1996).

Thus not only is a new approach to international environmental law-making necessary for environmental protection, it is also essential to development. The myth of "catching up development", as we will see in Chapter 3, only serves to oppress people in developing countries, especially women. A new definition of development valuing subsistence farming and aiming to fulfill the basic needs of food, shelter, and fresh water for every single human being on this planet, is necessary. Any other definition of development is unsustainable and unattainable.

To me, ecofeminism offers the best theoretical framework for the analysis of the interrelated issues of environmental protection, development, and patriarchal institutions such as capitalism and science. However, choosing ecofeminism as my main theoretical framework, as for any other theory, raises many difficulties, which will be explored in Chapter 2. One of these difficulties is that ecofeminism has rarely been applied to law, one of the main tools of oppression of Western patriarchy. For this reason, I sometimes had to rely on writings in environmental law and feminist legal theory in order to critique some of the fundamental characteristics of international environmental law.

On a more personal note, I have enjoyed discovering ecofeminist literature, which I had never been exposed to prior to beginning this research project. I hope that you, the reader, will enjoy my use of this literature in the critique of international environmental law throughout this thesis.

Bonne lecture.

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Chapter 2 - Setting the Theoretical Framework: Ecofeminism and Related Theories

I. Introduction

We saw in Chapter 1 the limited effectiveness of international environmental law in halting or even reducing the ecological threats to our planet, which is in part due to the negotiating process for environmental conventions and states' failure to comply with their environmental obligations. The purpose of this thesis is to argue that in addition and above and beyond the limitations discussed in Chapter 1, the main reason for international environmental law's inability to effectively achieve the goal of environmental protection is that it is based on an androcentric view of the world.

As I will show in Chapter 3, some of the essential features of international environmental law, such as states' sovereign right to exploit their natural resources, states' right to development, and the emphasis on science and technology, are based on an androcentric view of the natural world and have in fact impeded the achievement of environmental protection goals. Unfortunately, these same elements of international environmental instruments remain for the most part unchallenged and are still being offered as part of the solution to the environmental crisis. Moreover, as we will see in Chapter 4, recent development in international environmental law, such as inter/intragenerational equity, the precautionary principle and the common concern of humankind, attempt to address some of

the difficulties engendered by the more traditional features, but fail to challenge the androcentrism that international environmental law is based on.

As we saw in Chapter 1, environmental issues such as ozone layer depletion, water pollution, deforestation, climate change and desertification have global impacts. Moreover. environmental degradation has an immediate and detrimental effect on the lives of women, especially in developing countries.¹ As we will see in Chapter 3, the gendered nature of the international legal system as reflected in environmental conventions ill-conceived development programmes, has served the interests of the (male) elites at the expense of the environment and the lives of women. As outlined in Chapter 1, the close relationship between environmental degradation and the condition of women in developing countries was central to my decision to adopt ecofeminism as the main theoretical framework for a critique of international environmental law. Additionally, as Val Plumwood explains, ecofeminism offers "an integrated framework for the critique of both human domination and the domination of nature",2 which are both present in the dominant Western society and are reflected in international environmental law. Finally, my belief in the need to reconceptualize international environmental law based on a new relationship between human and non-human Nature is yet another reason for choosing ecofeminism as a theoretical framework. Ecofeminism can offer a non-androcentric, hierarchy-free approach to the conceptualization of international environmental law.

In this chapter, I lay out the theoretical framework that will be used throughout this thesis for critiquing international environmental law, which consists mainly of ecofeminism. I will attempt to briefly explain ecofeminist theories and the reasons for choosing such a theoretical

¹ See J. A. Tickner, Gender in International Relations: Feminist Perspectives on Achieving Global Security (NY: Columbia University Press, 1992) at 116-117 [hereinafter Global Security].

² V. Plumwood, Feminism and the Mastery of Nature (London; NY: Routledge, 1993) at 1-2 [hereinafter Mastery of Nature].

framework over other approaches such as deep ecology, social ecology and feminist approaches to international relations, international law and development.

There are many difficulties with choosing ecofeminism to formulate a critique of international environmental law. The first difficulty relates to the most controversial aspect of ecofeminist theories: arguments as to the connection between women and Nature. As we will see, the woman/Nature connection, which serves as the basis for ecofeminism, has been heavily criticized by certain ecofeminists and feminists for its essentialist assumption that woman's nature is nurture. The woman/Nature connection has also been under attack for justifying the continued oppression of women. Ecofeminists have also been reprimanded by women of colour, aboriginal women and women from developing countries for prioritizing gender over other forms of oppression and for failing to account for differences among women.

Many of these issues have recently been dealt with by ecofeminists themselves. As we will see in this chapter, recent ecofeminist theories attempt to include in their analysis of patriarchy all forms of oppressions, as well as differences among women based on race, class and national boundaries. Moreover, we will see that despite the essentialist assumptions underlying the connection between women and Nature, such a connection, if properly enunciated, can serve as a uniting force between women across national, cultural, racial and class boundaries and as a strong argument for the female voice to be heard in the international arena where environmental and development conventions are created, negotiated and applied.

II. What is Ecofeminism?

Ecofeminism is based on the idea of "merging the critical and transformative potentials of ecology and feminism which were expected to create a new, powerful movement for cultural and social change".³ Ecology is a science that recognizes and studies the interdependence and interconnectedness of all living systems.⁴ Feminism is at the very least a movement to end male oppression of women, but which is becoming a movement to end all forms of oppression;⁵ it speaks for the other in the male/female relationship,⁶ and also for the other in the numerous oppressor/oppressed relationships.

However, ecofeminism is not a homogeneous theory⁷ and does not lend itself to precise definition.⁸ Nonetheless, some generalisations notwithstanding and for the purposes of this thesis, I adopt the definition given by Karen Warren, which encompasses the diversity of oppressions. Warren defines ecofeminism as "the position that there are important

³ R. Braidotti, E. Charkiewicz, S. Haüsler & S. Wieringa, *Women, the Environment and Sustainable Development: Toward a Theoretical Synthesis* (London: Zed Books in association with INSTRAW, 1994) at 161.

⁴ *Ibid.* at 155; M. Bookchin, "The Concept of Social Ecology" in C. Merchant, ed., *Ecology: Key Concepts in Critical Theory* (New Jersey: Humanities Press, 1994) 152 at 155 [hereinafter *Ecology*].

⁵ K. J. Warren, "The Power and Promise of Ecological Feminism" in M. E. Zimmerman, ed., *Environmental Philosophy: From Animal Rights to Radical Ecology* (Englewood Cliffs, N.J.: Prentice Hall, 1993) 320 at 321[hereinafter "Power and Promise"].

⁶ J. Plant, "Searching for Common Ground: Ecofeminism and Bioregionalism" in I. Diamond & G. Feman Orenstein, eds, *Reweaving the World: The Emergence of Ecofeminism* (San Francisco: Sierra Club Books, 1990) [hereinafter *Reweaving*] 155 at 156.

⁷ See I. & G. Feman Orenstein, "Introduction" in *Reweaving*, *ibid.* ix-xv at xii; K. J. Warren, "Taking Empirical Data Seriously: An Ecofeminist Philosophical Perspective" in Karen Warren, ed., *Ecofeminism: Women, Culture, Nature* (Bloomington; Indianapolis: Indiana University Press, 1997) [hereinafter "Empirical Data" in *Women, Culture*] 3 at 4; Braidotti et al, *supra* note 3 at 162; Betty Wells & Danielle Wirth, "Remediating Development through an Ecofeminist Lens", in *Women, Culture, ibid.* 300 at 304. In this thesis, the term "ecofeminism" refers to the set of different ecofeminist theories and not to a single applicable theory.

⁸ Elaine Hughes has defined ecofeminism as "the application of feminist theory and practice to environmental issues": See E. Hughes, "Fishwives and Other Tails: Ecofeminism and Environmental Law" (1995) 8 C.J.W.L. 502 at 503. Although I understand this author's need for a simple definition in order to be able to apply it to law, ecofeminist theories are infinitely diverse and do not only constitute a feminist approach to environmental issues.

connections between how one treats women, people of color, and the underclass on one hand and how one treats the nonhuman natural environment on the other".9

There are many different strands of ecofeminism, finding their roots in different strands of feminism such as liberal feminism, Marxist feminism, radical and socialist feminisms, black and Third World feminisms. Liberal ecofeminists believe that environmental problems are the result of the rapid depletion of natural resources and the failure to stringently regulate environmental pollutants. For liberal ecofeminists, the solution to the environmental crisis thus lies within the present institutions of governance through the passage and enforcement of more stringent environmental laws and regulations. Following this approach, international environmental law could be sufficiently improved by providing more stringent control and conservation measures and by adding provisions relating to women. Liberal ecofeminists do not challenge the androcentric view of Nature on which international environmental law is based, as explained in the following criticism by Val Plumwood:

Thus uncritical equality endorses a model which is doubly phallocentric, for it is implicitly masculine not only in its account of the individual in society, but in its assumption that what constitutes and is valuable in human identity and culture is in opposition to nature. Second, the liberal approach fails to notice that such a rationalist model of the human as exclusive of nature is one which writes in assumptions not only of gender supremacy, but also of class, race and species supremacy.¹³

⁹ K. J. Warren, "Introduction" in *Women, Culture, supra* note 7 xi at xi. For similar definitions based on the connections between different kinds of oppression, see N. Sturgeon, "The Nature of Race: Discourses of Racial Difference in Ecofeminism" in *Women, Culture, ibid.* 260 at 260; J. Plant, "Learning to Live with Differences: The Challenge of Ecofeminist Community" in *Women, Culture, ibid.* 120 at 121.

¹⁰ "Empirical Data", *supra* note 7 at 4. According to some feminists such as J. Biehl, however, the lack of unity in ecofeminist theories renders this approach so "blatently self-contradictory as to be incoherent": J. Biehl, *Finding Our Way: Rethinking Ecofeminist Politics* (Montreal, NY: Black Rose Books, 1991) at 3; see also Braidotti *et al*, *supra* note 3 at 162

¹¹ C. Merchant, Earthcare: Women and the Environment (NY: Routledge, 1996) at 9 [hereinafter Earthcare].

¹² *Ibid.* at 5-7; C. Merchant, "Ecofeminism and Feminist Theory" in *Reweaving*, *supra* note 6, 100 at 100 [hereinafter "Feminist Theory"].

¹³ Mastery of Nature, supra note 2 at 28.

Furthermore, simply adding "women's provisions" to environmental conventions, as was done in the agreements adopted at the United Nations Conference on Environment and Development in 1992,¹⁴ is not an adequate solution to either the ecological crisis or to the ignorance of women's concerns. Rather, the conceptual framework of international environmental law must be restructured. The liberal ecofeminist approach fails to offer an alternative view to the dominant Western growth-oriented model on which environmental law is founded, and which has been detrimental to the environment and to the lives of women.

Radical or cultural ecofeminists believe that women are biologically connected to Nature and that this connection has permitted men to identify women with Nature and to "seek to enlist both in the service of male 'projects'". For cultural ecofeminists, then, the devaluation of women is directly linked to the devaluation of Nature. Surprisingly, most cultural ecofeminists embrace women's essential features such as intuition, ethic of care and other female ways of knowing, which in their opinion can help develop more sustainable relations within human society. and with the environment.

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¹⁴ For example, *Agenda 21* contains a chapter recognizing the role of women in attaining sustainable development: "Chapter 24: Global Action for Women Towards Sustainable and Equitable Development", *Agenda 21: Report of the United Nations Conference on Environment and Development*, 14 June 1992, U.N.Doc. A/CONF. 151/26/Rev.1 (Vol.III), online: United Nations Environment Program <gopher://unepphq.unep.org:70/00/un/unced/agenda21/> [hereinafter *Agenda 21*]; Principle 20 of the *Rio Declaration* states that "women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development": *Rio Declaration on Environment and Development*, 13 June 1992, U.N. Doc.A/CONF.151/5/Rev.1, 31 I.L.M. 874 [hereinafter *Rio Declaration*].

15 Y. King, "Healing the Wounds: Feminism, Ecology and the Nature/Culture Dualism" in *Reweaving*, *supra* note 6, 106 at 109-110 [hereinafter "Healing"].

¹⁶ See Mastery of Nature, supra note 2 at 30.

¹⁷ See Braidotti et al, supra note 3 at 102-103; Earthcare, supra note 11 at 11.

¹⁸ C.C. Joyner & G.E. Little, "It's Not Nice to Fool Mother Nature! The Mystique of Feminist Approaches to International Environmental Law" (1996) B.U. Int'l L.J. 223 at 248-249.

Social/ist¹⁹ ecofeminists hold that the key elements of the present environment and gender crises are the "twin impacts of production on ecology and of production on reproduction".²⁰ As explained by Carolyn Merchant, social/ist ecofeminists "ask how patriarchal relations of reproduction reveal the domination of women by men, and how capitalist relations of production reveal the domination of Nature by men".²¹ One of the differences between cultural and social/ist ecofeminists is the latter's inclusion of economics,²² capitalism²³ and history²⁴ in the explanation of the oppressions of women and Nature; these elements are not addressed by cultural ecofeminists.²⁵ Social/ist ecofeminists thus criticize cultural ecofeminists for being "ahistorical, essentialist... and antiintellectual".²⁶ For social/ist ecofeminists, an ecological society is only possible through a restructuring of society in decentralized communities, where all dominations are ended and economic and social hierarchies dismantled.²⁷

Development ecofeminists²⁸ add yet another dimension to the domination web: the domination of the South by the North. Developing countries have been colonized by

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¹⁹ The distinction between these two ecofeminist strands is blurry in the ecofeminist literature. Since to establish such a distinction is not necessary for the purposes of applying these theories to international environmental law (they both hold that the connection of women with Nature is a result of capitalist patriarchy), I will refrain from this difficult exercise.

²⁰ Earthcare, supra note 11 at 223; see also Hughes, supra note 8 at 508.

²¹ Earthcare, ibid. at 506; see also "Feminist Theory" in Reweaving, supra note 12 at 100.

²² "Healing", supra note 15 at 114.

²³ Earthcare, supra note 11 at 223.

²⁴ "Healing", supra note 15 at 115.

²⁵ Earthcare, supra note 11 at 223. Carolyn Merchant explains this dynamic:

Production oriented towards profit-maximization, sanctioned by the egocentric ethic, undercuts the conditions for its own perpetuation by destroying the environment from which it extracts 'free resources'. Production threatens biological reproduction by driving people onto marginal lands and into urban areas where they produce children as a labor asset to survive, while also threatening social reproduction by creating homelessness, poverty, crime, and political instability.

See also "Healing", ibid. at 117.

²⁶ "Healing", *ibid.* at 115.

²⁷ See Earthcare, supra note 11 at 13-14; Hughes, supra note 8 at 509.

²⁸ By development ecofeminists, I refer to women in developing countries fighting for their environment, feminists of the South participating in what has been termed the Women, Environment and Development debate (WED): see generally Braidotti *et al*, *supra* note 3 at chapter 5.

developed states and robbed of their natural resources.²⁹ Colonization has been replaced by development, but, as we will see in Chapter 3,³⁰ this "maldevelopment" has perpetuated the North domination of the South, its women and its environment.³¹

The perspective of development ecofeminists is significant in the context of international environmental law where North/South tensions are inevitable. Moreover, as we will see in Chapters 3 and 4, this approach offers important insights for the critique of environmental agreements' inclusion of the idea that developing countries have a right to development.³² of developing countries' right to development. As development ecofeminists have pointed out, international environmental law ignores the damaging effects that "maldevelopment" has had and continues to have on the environment and on women in developing countries.

In summary, the different ecofeminist theories acknowledge and serve to highlight the relationship between the oppression of women, people of colour, people of lower classes and people in developing countries on the one hand, and the domination of Nature by human (male) society on the other.

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²⁹ See generally *ibid.* at chapter 2; V. Shiva, *Staying Alive: Women, Ecology and Development* (London: Zed Books, 1988), chapter 1 [hereinafter *Staying Alive*].

³⁰ See Chapter 3, below.

³¹ Vandana Shiva explains:

The dichotomised ontology of man dominating woman and nature generates maldevelopment because it makes the colonising male the agent and model of 'development'. Women, the Third World and nature become underdeveloped, first by definition, and then, through the process of colonisation, in reality.

Staying Alive, supra note 29 at 41.

³² The binding effect of the inclusion of states' sovereign and legal right to development is still a debated issue in the international community. States' right to development is nonetheless included in many non-binding provisions or international instruments which deal with developmental and environmental issues, such as Principle 2 of the *Rio Declaration*, *supra* note 14.

III. Why Ecofeminism?

a) The dominant social paradigm

The underlying argument for this thesis is that international environmental law will never effectively protect the environment, because it is based on a dominant social paradigm that represents an androcentric view of Nature. The dominant social paradigm is well-captured in the following statement by deep ecologist Bill Devall:

The dominant paradigm in North America includes the belief that "economic growth", as measured by the Gross National Product, is a measure of progress, the belief that the primary goal of the governments of nation-states, after national defense, should be to create conditions that will increase production of commodities and satisfy material wants of citizens, and the belief that "technology can solve our problems." Nature, in this paradigm, is only a storehouse of resources which should be "developed" to satisfy ever-increasing numbers of humans an ever-increasing demands of humans. Science is wedded to technology, the development of techniques for control of natural processes (such as weather modification). Change ("planned obsolescence") is an end in itself. The new is valued over the old and the present over future generations. The goal of persons is personal satisfaction of wants and a higher standard of living as measured by possession of commodities (houses, autos, recreation vehicles, etc.). Whatever its origin, this paradigm continues to be dominant, to be preached through publicity (i.e. advertising), and to be part of the world view of most citizens in North America.³³

I will argue in Chapter 3 that the ineffectivness of international environmental law to achieve environmental protection is mainly due to the fact that this dominant social paradigm is reflected in essential features such as states' sovereign right to exploit their natural resources, states' right to development, and the emphasis on science and technology. As we will see,

³³ B. Devall, "The Deep Ecology Movement" in *Ecology*, *supra* note 4, 125 at 126. Although Devall fails to include in this social paradigm the elements of gender and social hierarchies, this definition presents a very clear picture of the dominant social paradigm and its facets, which constitute the basis for in environmental law.

these principles eventually come in direct conflict with the protection of the environment.³⁴ Thus, unless there is a major restructuring of the fundamental characteristics of international environmental law, based on a less androcentric relationship between human and non-human Nature, environmental degradation and the depletion of natural resources will continue to take place.

Furthermore, the dominant social paradigm as reflected in characteristics of international environmental law has also marginalized women,³⁵ especially in developing countries. International environmental law has failed to acknowledge that the effects of environmental degradation on women are different from the effects it has on men. Moreover, the gendered state system leaves little room for women's meaningful participation in the implementation of environmental conventions and the achievement of sustainable development.

b) Comparison of ecofeminism with other critical theories of the dominant social paradigm

The dominant social paradigm has been challenged by environmentalists and ecologists who want to replace it with a more ecological model. Among others, deep ecology and social ecology have suggested radical changes to the dominant social paradigm and to the way we view our relationship with Nature. However, as we will see, by leaving gender out of the

³⁴ See Chapter 3, below. As we saw in Chapter 1, international environmental law's failure to protect the environment is also due to many other factors such as states' failure to comply with their obligations, the lack of enforcement and developing countries' financial and administrative incapacity to comply: Chapter 1, below, at * However, I maintain that the root of the problem lies at the conceptual level of such instruments and the structure of the international system. To improve the effectiveness of international environmental law, we must start with conceptual changes.

^{35.} I realize that women have not been equally oppressed across racial, cultural, class and national boundaries. As we will see, in the environment /development context, women in developing countries have been directly affected by the gender bias in international environmental and development law, since they are the victims of ill-conceived development programmes and environmental degradation. Thus I will focus most of my discussions in this thesis, on women in developing countries, attempting however to consider all other women.

analysis, these approaches are not complete.³⁶ In turn, the environmental justice movement, which is based on grassroots community action especially in the United States, has addressed the intersectionality of gender, race and class, but its approach is still anthropocentric; therefore it cannot offer an alternative approach for international environmental protection. Finally, feminist critiques of international law and development on the other hand focus on gender as a basis of analysis but do not address the domination of Nature; for this reason, they do not offer an adequate theory for a critique of international environmental law.

i) Deep ecology

Deep ecology challenges the view that humans are separate and above Nature.³⁷ To deep ecologists, humans are not above or outside Nature, but part of "creation ongoing".³⁸ The main themes of deep ecology include the principle of the wholeness and integrity of the planet including humans,³⁹ or what has been termed biospherical⁴⁰ or biocentric⁴¹ egalitarianism; the rejection of subject/object, "man/nature" dualisms⁴²; technology as an appropriate tool for human welfare, not an end in itself;⁴³ a critique of science based on atomistic and hierarchical conceptions of the natural world;⁴⁴ the principle that diversity, including cultural diversity, is desirable;⁴⁵ "reinhabiting the land" with hunting-gathering and gardening as a goal; and local autonomy and decentralization.⁴⁶

³⁶ Global Security, supra note 1 at 119.

³⁷ See Braidotti et al, supra note 3 at 149.

³⁸ Devall, supra note 33 at 128.

³⁹ *Ibid* at 133.

⁴⁰ Arne Naess, "Deep Ecology" in *Ecology*, *supra* note 4, 120 at 120-123.

⁴¹ See Braidotti et al, supra note 3 at 150.

⁴² See Devall, *supra* note 33 at 133; Braidotti *et al*, *ibid*. at 150. Val Plumwood offers a more complete analysis of dualisms and includes, among others, the male/female dualism: see *Mastery of Nature*, *supra* note 2.

⁴³ See Devall, *ibid*, at 134.

⁴⁴ Braidotti et al, supra note 3 at 150.

⁴⁵ See Devall, *supra* note 33 at 134; Naess, *supra* note 40 at 121.

⁴⁶ See Devall, *ibid.* at 135; Naess, *ibid.* at 122-123; Braidotti et al, supra note 3 at 151.

Some deep ecologists also argue for a drastic reduction of the rate of population growth among humans though humane birth control programs.⁴⁷ However, not only is this position's potential harmful effects on women ignored by deep ecologists,⁴⁸ it also contradicts the principle of biospherical egalitarianism on which this philosophy rests. In fact, prioritizing the well-being of the planet over that of human beings reinforces, rather than negates, the duality between humans and Nature, by implying that humans are not part of Nature.⁴⁹

Both deep ecologists⁵⁰ and ecofeminists⁵¹ recognize the interconnectedness and interdependence of all species, both human and nonhuman. The distinction between these two approaches, as explained by Freya Mathews, is that in deep ecology this interconnectedness is understood to be holistic, where "the whole is understood to be more than the sum of its parts, and the parts are defined through their relations to one another and to the whole".⁵² On the other hand, for some ecofeminists, interconnectedness is interpreted as individualistic, where Nature is a community of separate beings.⁵³

⁴⁷ See *e.g.* Devall, *ibid.* at 134. Braidotti describes a split between soft and radical biocentrism deep ecologists. This position is held by the radical branch: Braidotti *et al*, *supra* note 3 at 151.

⁴⁸ It has been criticized by women working in the reproductive rights movement for justifying coercive population control programmes: see Braidotti et al, *ibid.* at 154.

⁴⁹ A. Smith, "Ecofeminism through an Anticolonial Framework" in *Women, Culture, supra* note 7, 21 at 25. She adds the following comments:

I often hear sentiments expressed to the effect that the world would be much better off if people just died or that the world needs to cleanse itself of people. Again, this sentiment assumes that people are not part of the world. To even make such a comment indicates that one has to be in a fairly privileged position in society where one is not faced with death on a regular basis. It also assumes that all people are equally responsible for massive environmental destruction, rather than facing the fact that it is people in positions of institutional power who are killing the earth and the people who are more marginalized to further their economic interests (*ibid.* at 26)

⁵⁰ Braidotti et al, supra note 3 at 150.

⁵¹ Biehl, supra, note 10 at 21.

⁵² Freva Mathews, "Ecofeminism and Deep Ecology", in *Ecology*, supra note 4, 235 at 237.

⁵³ *Ibid* . at 243.

However, becasue deep ecologists base their ideology on the interconnectedness between all species, some ecofeminists have accused them of being "shockingly sexist",⁵⁴ for failing to acknowledge that deep ecology consists in fact of "traditional woman consciousness".⁵⁵ Indeed, deep ecologists such as Warwick Fox treat critiques of other forms of domination, such as feminism, as irrelevant to the environmental crisis, and as having nothing to contribute to an environmental ethic.⁵⁶

ii) Social ecology

Social ecologists consider domination and hierarchy in human society as the basis for human domination over Nature.⁵⁷ Social ecologists thus challenge the very function of hierarchy as a stabilizing principle in both Nature and society,⁵⁸ as explained by Janet Biehl, a feminist social ecologist:⁵⁹

As a form of eco-anarchism, social ecology's guiding precept is that we cannot rid ourselves today of the ideology of dominating nature until we rid ourselves of hierarchy and class structures in human society - including not only sexism and homophobia and racism, but also the nation-state, economic exploitation, capitalism, and all the other social oppressions of our time. Neither nonhuman nature nor humanity will cease to be subject to domination until every human being is free of domination. In this respect women are objects of domination but not necessarily the sole or primary objects of domination.⁶⁰

⁵⁴ S. Doubiago, "Mama Coyote Talks to the Boys" in Judith Plant ed., *Healing the Wounds: The Promise of Ecofeminism* (London: Green Press, 1994), 40 at 40 [hereinafter *Healing the Wounds*].

⁵⁵ *Ibid.* See also Braidotti et al, supra note 3 at 154.

⁵⁶ See Mastery of Nature, supra note 2 at 17; Braidotti et al, ibid. at 155.

⁵⁷ Y. King, "The Ecology of Feminism and the Feminism of Ecology" in *Healing the Wounds*, *supra* note 54, 18 at 19 [hereinafter "Feminism of Ecology"; Braidotti et al, *supra* note * at 155.

⁵⁸ Bookchin, *supra* note 4 at 160; Braidotti et al, *supra* note * at 157.

⁵⁹ Janet Biehl is however not an ecofeminist. After expressing many reservations about ecofeminist theories, this author gave up on ecofeminism as a valid new paradigm for an ecological society: Biehl, *supra* note 10. ⁶⁰ *Ibid*, at 5.

Social ecologists argue for an ecological society based on small, community-scale social arrangements, decentralization, participatory democracy, consensus-based decision-making and "appropriate technologies" which would be "in tune with the communitarian scale of life and non-aggressive towards nature".⁶¹

However, as explained by Val Plumwood, by arguing that the domination of Nature will cease with the end of domination within human society, Biehl and other social ecologists attempt to resolve the problem of domination by creating yet another hierarchy of oppressions, 62 human-human domination coming before human-Nature domination. Plumwood also points out that the work of Murray Bookchin, one of the leading social ecologists, "rarely mentions non-human nature without attaching the word 'mere' to it",63 thus apparently considering non-human Nature as less important than human society. In this way, Bookchin reproduces the relationship between human and non-human Nature that is mainstreamed in the dominant social paradigm. For these reasons, in my view social ecology could not present an appropriate critique of international environmental law.

iii) Environmental justice movement

Another critique of the dominant social paradigm is put forth by adherents to the environmental justice movement. This grassroots community movement fights "the most vicious and pervasive kinds of inequalities in the country, including inequalities or discrimination based on race, gender and class" 64 found in the oppressive environmental

⁶¹ Braidotti et al, supra note 3 at 158-159.

⁶² Mastery of Nature, supra note 2 at 14.

⁶³ *Ibid.* at 15.

⁶⁴ D.E. Taylor, "Women of Color, Environmental Justice, and Ecofeminism" in *Women, Culture, supra* note 7, 38 at 41. The author adds:

The environmental justice activists looked at the relationship between class, race, power, control, money, and the exposure to environmental hazards and saw that increasing numbers of undesirable

practices of politicians and corporations, such as locating toxic waste sites, incinerators and polluting industries in poor coloured communities in the United States. According to environmental justice advocate Dorceta Taylor, movements such as feminism and ecofeminism wrongly emphasize the gender dimension over other dimensions of oppression, whereas the environmental justice movement "wages a struggle which is more balanced, with race, gender, and class forming the basic elements".65

Although the environmental justice movement struggles against the many different forms of oppression, it is primarily a grassroots movement⁶⁶ that has as its main goal the end of environmental racism against specific oppressed communities. Being born out of the necessity to fight unfair environmental practices, it is mainly reactionary and does not necessarily offer an alternative approach to the dominant social paradigm. More importantly, the environmental justice movement still takes an anthropocentric approach to environmental protection in that environmental degradation is opposed only when it affects specific communities of people and not for the environment's sake. Therefore, the environmental justice movement cannot offer an adequate critique of international environmental law, nor can it offer a suitable alternative approach.

iv) Feminist critiques of international law and of international relations theory

Feminist approaches to international law, development and international relations also provide some valuable insights into the gendered nature of the international legal system and its exclusion of women. Feminists such as Hilary Charlesworth, Christine Chinkin, Shelley

facilities and land uses were being foisted on communities of color after they were successfully blocked in other communities. (*Ibid.* at 49).

⁶⁵ *Ibid.* at 65.

⁶⁶ *Ibid.* at 66.

Wright⁶⁷ have challenged international law's claim to objectivity and universal application. These authors have shown that international law is in fact negotiated and created by male elites and thus reflects their interests and ignores the voices and concerns of others, such as women.

Furthermore, Charlesworth has demonstrated that the public/private distinction that is found in domestic law is reproduced at the international level.⁶⁸ For example, Charlesworth points out the distinction between public international law, which governs the relations between states, and private international law, which regulates the activities of individuals and corporations between different jurisdictions. Charlesworth's work on the public/private distinction that is reflected in the right to development is particularly useful for a critique of international environmental law, which, as we will see in Chapter 3,⁶⁹ has recently included the idea of states' right to development. Also useful to a critique of international environmental law is Karen Knop's feminist critique of the concept of state sovereignty, which is essential to the international legal system.⁷⁰

Feminist international relations theorists such as Ann Tickner⁷¹ have also challenged the gendered nature of basic assumptions of international politics such as state sovereignty and national security. International relations feminists have examined the effects of these fundamental principles on women, such as the violence committed against women in times of

⁶⁷ H. Charlesworth, C. Chinkin, S. Wright, "Feminist Approaches to International Law" (1991) 85 Am. J. Int'l L. 613 [hereinafter "Feminist Approaches"]; see also H. Charlesworth, "Alienating Oscar? Feminist Analysis of International Law" in D.G. Dallmeyer, ed., *Reconceiving Reality: Women and International Law* (Washington, D.C.: American Society of International Law, 1993) 1 [hereinafter "Alienating Oscar"].

⁶⁸ H. Charlesworth, "The Public/Private Distinction and the Right to Development in International Law" (1992) 12 Aus.Y.B. Int'l L. 190.

⁶⁹ See Chapter 4, below, at *.

⁷⁰ K. Knop, "Re/Statements: Feminism and Sovereignty in International Law" (1993) 3 Transnat'l and Contemp. Probs. 293 at 294.

⁷¹ Global Security, supra note 1. See also the following collections of essays: V. Spike Peterson & A. Sisson Runyan, Global Gender Issues (Boulder; San Francisco: Westview Press, 1993); R. Grant & K. Newland, eds., Gender and International Relations (Buckingham: Open University Press, 1991).

war, in the name of national security.⁷² Since state sovereignty and national security are still considered essential to the international system, and are reflected in provisions of international environmental conventions, these feminist approaches become relevant to a critique of international environmental law, especially since ecofeminists have rarely dealt with these issues. Furthermore, international relations feminists argue for a place for women in the international arena, based on women's participation in relations between states,⁷³ on the relevance of their experiences,⁷⁴ on the fact that many of the world's critical problems cannot be understood apart from gender politics,⁷⁵ and because women can provide valuable insights into world politics.⁷⁶

v) WID and GAD approaches to development

Feminist critiques of development such as the "Women in Development" (WID) perspective, also offer valuable insights into the dominant development model. These feminists have researched and denounced the devastating effects that development programmes have had on women in developing countries.⁷⁷ The WID critique of the dominant development model arose in the 1970s and 1980s to challenge development policies and programmes that reflected the perception that women's roles were strictly reproductive, as home makers, child bearers and rearers, and housewives⁷⁸. In the late 1980s, WID gave way to the Gender and Development (GAD) approach, which aimed not only at integrating women in development,

⁷² See *e.g.* C. Chinkin, "Peace and Force in International Law" in Dallmeyer, supra note 67, 171; J.A. Tickner, "Feminist Approaches to Issues of War and Peace" in Dallmeyer, *ibid.* 267.

⁷³ R. Grant & K. Newland, "Introduction" in Grant & Newland, *supra* note 71, 1 at 3.

⁷⁴ *Ibid.* at 5.

⁷⁵ *Ibid.* at 3.

⁷⁶ R. Keohane, "International Relations Theory: Contributions of a Feminist Standpoint" in Grant & Newland, *ibid.*, 41 at 41.

⁷⁷ See A. M. Goetz, "Feminism and the Claim to Know: Contradictions in Feminist Approaches to Women in Development", in Grant & Newland, *ibid.*, 133 at 134; Braidotti *et al*, *supra* note 3 at 78.

⁷⁸ Braidotti *et al. ibid.* at 78.

but also at using development policies as a tool to empower women and to transform gender relations.⁷⁹

Both WID and GAD approaches to development questioned the gendered nature of development policies, which often improved men's standard of living at the detriment of women. However, WID and GAD fell short of challenging the fundamental assumptions of the dominant development model of modernization and economic growth⁸⁰ and represented "no threat to the existing power structures and budget allocations within the development establishment."⁸¹ Moreover, the WID and GAD approaches, as feminist critiques of development and of the international system, focus primarily on gender as a basis of analysis and do not adequately address the effects that these patriarchal institutions have on the environment. In critiquing international environmental law, the environment must be a pivotal basis for analysis; feminist approaches to international relations and to development are mainly anthropocentric and thus lack this crucial element.

c) Conclusions

In summary, ecofeminism seems to offer the most appropriate theoretical framework for a critique of international environmental law. Ecofeminism recognizes the significant place that humans hold within the Earth's ecosystems but does not advocate taking humans out of the picture or drastically reducing their numbers in order to achieve an ecological society, as deep ecology does. Ecofeminism recognizes all forms of oppression, gender being linked to all of them,⁸² but equates the significance of the domination of Nature to other forms of domination. For this reason, ecofeminism provides a more hierarchy-free approach than do

⁷⁹ *Ibid.* at 82.

⁸⁰ *Ibid.* at 82-83.

⁸¹ Goetz, supra note 77 at 135.

⁸² P. Kelly, "Women and Power" in Women, Culture, supra note 7, 112 at 115.

social ecology, the environmental justice movement., or feminist approaches to international law and development.

Another reason for choosing ecofeminism as a theoretical framework in which to critique international environmental law rests in its practical implications. Ecofeminism is not only a theoretical position, it has "also become a new and rather diversified and decentralized social movement with a number of groups", 83 both in the North and in developing countries. Women around the world are organizing themselves into community, regional and international movements to fight environmental degradation. For example, women in developing countries have often organized movements, institutes and businesses to transform "maldevelopment" into sustainable development. 84 As Carolyn Merchant explains, women in developing countries "are often at the forefront of change to protect their own lives, those of their children, and the life of the planet". 85 The women involved in the rubber tappers' movement in Brazil, 86 as well as the Chipko movement in India, 87 are two well-known examples of women challenging the dominant social paradigm and protecting their environment.

⁸³ Braidotti et al, supra note 3 at 161.

⁸⁴ Earthcare, supra note 11 at 19.

⁸⁵ Ihid.

⁸⁶ The rubber tapper movement in Brazil struggled agains the government to defend the livelihoods of its members and obtained the establishment of extractive reserves. In this movement, women played critical roles as union members, elected leaders, teachers, church organizers, as well as on the front lines, standing between the chain saws and their forest homes: See C. Campbell, "Out on the Front Lines but Still Struggling for Voice: Women in the Rubber Tappers' Defense of the Forest in Xapuri Acre, Brazil" in D. Rocheleau, B. Thomas-Slayter,& E. Wangari, eds., *Feminist Political Ecology: Global Issues and Local Experiences* (London; NY: Routledge, 1996) 27.

⁸⁷ Women were the principal actors in the Chipko movement, a peaceful movement (the women would hug the trees to be saved) that stopped the cutting down of forests in a few areas in India: See P. Philipose, "Women Act: Women and Environmental Protection in India" in *Healing the Wounds, supra* note 54, 67; V. Shiva, *Ecology and the Politics of Survival: Conflicts over Natural Resources* (Tokyo, Japan; New Delhi; Newbury Park: UN University Press; Sage Publications, 1991) 103.

Therefore, in my view ecofeminism can offer the most complete critique of the androcentric assumptions of international environmental law and a promising alternative approach to its conceptualization, for the reasons summarized in the following passage:

The empirical and linguistic data provided by ecofeminism are significant philosophically. These data suggest (1) the historical and causal significance of ways in which environmental destruction disproportionately affects women and children; (2) the epistemological significance of the 'invisibility of women', especially of what women know (e.g. about trees), for policies which affect both women's livelihood and ecological sustainability; (3) the methodological significance of omitting, neglecting, or overlooking issues about gender, race, class, and age in framing environmental policies and theories; (4) the conceptual significance of mainstream assumptions, e.g., about rationality and the environment, which may inadvertently, unconsciously, and unintentionally sanction or perpetuate environmental activities, with disproportionately adverse effects on women, children, people of color, and the poor; (5) the political and practical significance of women-initiated protests and grassroots organizing activities for both women and the natural environment.⁸⁸

However, in choosing ecofeminism as the principal theoretical framework for this thesis, I must deal with the difficulties associated with this theory such as the criticisms related to the essentialist assumptions underlying a woman/Nature connection, the inclusion of a diversity of women's voices into a coherent and non-exclusive position, and the risk of applying ecofeminism to law.

IV. Conceptual Difficulties with Choosing Ecofeminism as a Theoretical Framework

a) Woman/Nature connection

The first and most controversial aspect of ecofeminism requiring consideration is the argument made by most ecofeminists as to the existence of a connection between women and

^{88 &}quot;Empirical Data", supra note 7 at 13-14.

Nature. Cultural ecofeminists, social/ist ecofeminists and development ecofeminists present different views on the nature of this connection, but all seem to agree that women do have a "special" connection with Nature.⁸⁹ Individual ecofeminists also differ in their opinions as to whether this woman/Nature connection is to be embraced as the basis for a caring and nurturing relationship between human and non-human Nature, or whether it can serve to continue the oppression of both.⁹⁰

Cultural ecofeminists argue that women's reproductive capacities bring them closer to Nature, the giver of all life.⁹¹ Cultural ecofeminists thus use female characteristics such as empathy, intuition, caring and nurturing which they say are inherent to all women, in describing the relationship of women with Nature.⁹² Because of these inherent qualities, women can offer a more caring and sustainable view of the relationship between human and non-human Nature.⁹³ Men, on the other hand, "tend to see the Earth as a material object that must be dominated, controlled, mastered, and developed for selfish comfort and profit".⁹⁴

Social/ist ecofeminists on the other hand believe that the connection between women and Nature, as well as women's more caring and nurturing characteristics, are socially and historically constructed, based on the oppression of both women and Nature by capitalist patriarchy. As opposed to cultural ecofeminists, social/ist ecofeminists recognize the critical role played by capitalism in the domination of both women and Nature. Social/ist ecofeminists refuse to ascribe the Woman/Nature connection to biology, as cultural

⁸⁹ C. Zabinski, "Scientific Ecology and Ecological Feminism: The Potential for Dialogue" in *Women, Culture*, *supra* note 7 314.

⁹⁰ "Healing", *supra* note 15 at 109-110.

⁹¹ Hughes, *supra* note 8 at 507.

⁹² See Braidotti *et al*, *supra* note 3 at 102-103; *Earthcare*, *supra* note 11 at 11; *Mastery of Nature*, *supra* note 2 at 9.

⁹³ Joyner & Little, *supra* note 18 at 248-249.

⁹⁴ *Ibid.* at 248; see also *Global Security*, *supra* note 1 at 101.

⁹⁵ See Plant, supra note 6 at 157; Earthcare, supra note 11 at 15.

⁹⁶ Earthcare, ibid. at 223.

ecofeminists do, since to do so would justify the continued oppression of women.⁹⁷ Moreover, since the connection between women and Nature is not biologically determined, their position of inferiority can be changed.⁹⁸

Whether the woman/Nature connection is based on biology or on social/historical construction, cultural and social/ist ecofeminists agree that women do have a connection with Nature based on their shared oppression by patriarchy.⁹⁹ A common ground for all ecofeminists is therefore the critique of patriarchy and the "male-centred (androcentric) ways of knowing, which account for the antagonistic, dualistic and hierarchical conceptions of self, society and cosmos, [and] are perceived to be at the roots of oppression"¹⁰⁰ and which have had a destructive impact on the environment and the lives of women all around the world.

Development ecofeminists also see a connection between women and Nature; however, this connection is based on survival. Because women of the South depend on their environment for food, fuel, fodder and water, environmental degradation threatens their survival base and increases their work burden as it forces them to travel greater distances to find these necessities. Development ecofeminists argue that because women of the South have considerable knowledge of their environment and represent the conjuncture of many forms of oppression based on race, class and gender, they are better suited to create an alternative approach to sustainable development. Thus for development ecofeminists, the woman/Nature connection is based on the everyday practice of women in developing countries, as well as their knowledge and dependence on the environment for survival.

⁹⁷ See Braidotti *et al, supra* note 3 at 98-99; A.E. Simon, "Whose Move? Breaking the Stalemate in Feminist and Environmental Activism" (1992) 2 U.C.L.A. Women's L.J. 145 at 160-161.

⁹⁸ Plant, supra note 6 at 157.

⁹⁹ Braidotti et al, supra note 3 at 162; "Healing", supra note 15 at 109.

¹⁰⁰ Braidotti et al, ibid.

¹⁰¹ *Ibid.* at 96; see also Philipose, *supra* note 87 at 67.

¹⁰² Braidotti et al, ibid. at 97.

¹⁰³ *Ibid.* at 120.

The woman/Nature connection has engendered criticisms for two main reasons. First, such a position has been criticized because of its underlying essentialist assumption that woman's nature is nurture. Secondly, some ecofeminists have voiced the concern that recognizing such a connection threatens the liberation of women from oppression.

i) Essentialism?

Some ecofeminists have raised the concern that ecofeminism's woman/Nature connection, based on women's ethic of care, reflects the essentialist assumption that women's nature is nurture. As explained by Ynestra King, "[t]he connection of women and nature has lent itself to a romanticization of women as good, and as apart from all the dastardly deeds of men and culture. The problem is that history, power, women, and nature are all a lot more complicated than that." This "woman=good" and "man=bad" approach is thus criticized by some for perpetuating the dualistic and hierarchical thinking that is challenged by ecofeminism. On the content of the connection of women and nature are all a lot more complicated than that the dualistic and hierarchical thinking that is challenged by ecofeminism.

¹⁰⁴ Earthcare, supra note 11 at 8.

¹⁰⁵ "Healing", *supra* note 15 at 111. This concern is reiterated by Val Plumwood, who recognizes that women have played a certain part in the environmental crisis:

Women do not necessarily treat other women as sisters or the earth as a mother; women are capable of conflict, of domination and even, in the right circumstances, of violence. Western women may not have been in the forefront of the attack on nature, driving the bulldozers and operating the chainsaws, but many of them have been support troops, or have been participants, often unwitting but still enthusiastic, in a modern consumer culture of which they are the main symbols, and which assaults nature in myriad direct and indirect ways daily.

Mastery of Nature, supra note 2 at 9.

¹⁰⁶ See K.J.Warren, "Introduction" in Zimmerman, *supra* note 5, 253 at 255 [hereinafter "Introduction"]; Braidotti *et al*, *supra* note 3 at 165; "Healing", *supra* note 15 at 117; L. Quinby, "Ecofeminism and the Politics of Resistance", in *Reweaving*, *supra* note 6, 122 at 126.

In addition, ecofeminists from the South such as Vandana Shiva have been criticized for their essentialist view, ¹⁰⁷ as explained in the following passage:

The problem with her approach is the essentialism she has constructed in the concrete relation of women with nature in subsistence agriculture as a theoretical category - the feminine principle as the life-giving force. She propagates the idea that only poor, rural women, bearing the brunt of environmental and developmental crisis in their daily struggle for survival, know, and have known, how to survive since time immemorial and therefore have solutions to the crisis.

Shiva idealizes subsistence agriculture and recreates a past where people lived in perfect harmony with nature, and women were highly respected in society. But this romantic past may never have existed... In India, there is large number of tribal peoples outside the caste system who, even today, are not integrated into society. Shiva's model of traditional society fails to account for highly exploitative structures along the axes of race, class and caste within Indian society today; she also ignores patriarchal structures within Indian society.¹⁰⁸

Shiva also ignores the fact that in developing countries, rural men also possess special knowledge of their environment, although this knowledge might be more closely related to their own traditional areas of work.¹⁰⁹ Additionally, Shiva is criticized for failing to account for differences between women in the South.¹¹⁰

In more general terms, focusing on a women/Nature connection to argue that women are better environmental managers "makes it difficult to admit that men can also develop an ethic of caring for nature".¹¹¹ This unfairly places the burden on women to clean up the environmental mess made by patriarchal institutions.¹¹²

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¹⁰⁷ For example, "... Vandana Shiva idealizes women as natural saviours of nature...": Braidotti *et al*, *supra* note 3 at 71.

¹⁰⁸ Ibid. at 94-95.

¹⁰⁹ *Ibid.* at 97.

¹¹⁰ Ibid. at 120.

¹¹¹ Earthcare, supra note 11 at 13.

¹¹² Ibid. at 216-217.

ii) Woman/Nature connection justifies the continued oppression of women

A second criticism of ecofeminism's reliance on a woman/Nature connection has been raised by those who argue that this connection serves as a justification for the continued oppression of women. Janet Biehl goes as far as stating that the woman/Nature connection is "a milestone in the passage in recent decades from a struggle for women's liberation to assertions of mere female chauvinism in ecofeminism and that it has been "immensely degrading for women". Biehl has thus vehemently opposed images of women as Nature and of Nature as female because she feels these associations have historically been used to oppress women and to restrict them from realizing their full potential, as explained in the following:

Despite ecofeminism's allegedly 'revolutionary' potential, some feminists (who are not ecofeminists) have criticized ecofeminism and its closely associated cultural feminism for their reactionary implications. Ecofeminist images of women, these critics correctly warn, retain the patriarchal stereotypes of what men expect women to be. These stereotypes freeze women as merely caring and nurturing beings, instead of expanding the full range of women's human potentialities and abilities. To focus overwhelmingly on women's 'caring nature' as the source of ecologically necessary 'values' easily leads to the notion that women are to remain intuitive and discourages them from expanding their human horizons and capacities.¹¹⁷

Biehl sees the woman/Nature connection as a trap for women; it restricts them from further development away from these "caring" and "nurturing" roles¹¹⁸ which have been historically

¹¹³ Braidotti *et al*, *supra* note 3 at 98 & 164. Some women of the South do not consider this connection to be problematic, as explained in the following passage:

While in the South's cultures the male/female relation has traditionally often been seen as complementary, in the North's perspective this relation has been one of superiority/inferiority since the middle ages. Therefore women from the South find identifying with nature less difficult and hence use this type of argument as a basis for their struggles (*Ibid.* at 120)

¹¹⁴ Biehl, supra note 10 at 16.

¹¹⁵ *Ibid*.

¹¹⁶ Ibid. at 11.

¹¹⁷ *Ibid.* at 15.

¹¹⁸ This concern is once again expressed in the following passage from her book:

assigned to them. Biehl's concerns over the stereotypical assignment of predetermined roles for women, based on the fact that they are closer to Nature, might be well founded in history. However, Biehl is ignoring the fact that this connection can also constitute a uniting force and that it has led women to form movements to protect their environment and to advocate for change. Moreover, what Biehl is suggesting is unacceptable both from a feminist and from an environmental point of view. By repudiating the woman/Nature connection and refusing to see it as a source of empowerment as some ecofeminists have done, 120 Biehl is sentencing women to become part of a dominant culture that has been destructive to Nature; this, Biehl argues, is in the name of women's personal development. As expressed by Val Plumwood, to simply reject the woman/Nature connection without replacing it implicitly endorses the dominant social paradigm of human relationship with non-human Nature and "unless the question of relation to nature is explicitly put up for consideration and renegotiation, it is already settled - and settled in an unsatisfactory way - by the dominant western model of humanity into which women will be fitted".121

The dominant social paradigm on which international environmental law is based constitutes an impediment to effective environmental protection. As we saw in Chapter 1,¹²² environmental degradation has detrimental effects on the lives of women and children, especially in developing countries. Is this what Biehl calls expanding women's human

For instrumental reasons - such as saving the biosphere - the overall message of ecofeminism is that women are expected to accept this *constricted and eternalized* definition of their humanity. Whether they want this *unenviable*, *even stagnant* cosmic status is dubious, to say the least. Once again, women are being asked to take the fall - this time, to save the planet. *They have to limit themselves to a constricted concept* of an immutable or eternal 'female nature' that allows for no development and carves their personalities in stone. Must women's potentialities for growth and development be sacrificed to save the biosphere? [emphasis added]

11.

Biehl, ibid. at 25.

¹¹⁹ Braidotti et al, supra note 3 at 164.

¹²⁰ See e.g. ibid. at 164; "Feminist Theory", supra note 12 at 100-105; Mastery of Nature, supra note 2 at 19-20; Diamond & Orenstein, supra note 7 at xi.

¹²¹ Mastery of Nature, ibid. at 23.

¹²² See Chapter 1, above.

horizons and capacities? Ecofeminism suggests an alternative approach to the relation between human and non-human Nature, one which is based on women's nurturing and caring characteristics, but which can also be a potential solution to the ecological crisis.

iii) Is the woman/Nature connection necessary?

Considering the criticisms raised in relation to ecofeminists' focus on the woman/Nature connection, is such a connection necessary in order to formulate a critique of international environmental law? Saskia Wieringa asks that the woman/Nature question remain an openended one. As she argues, this connection has had negative impacts on women, but has also been a source of power and mobilization. She resolves the woman/Nature connection dilemma in the following way:

A fruitful position in our mind is the recognition that women and nature are simultaneously subjugated, and that this subjugation takes historically and culturally specific forms. If women take themselves seriously as social agents and as constitutive factors in this process, their praxis to end this double subjugation can be rooted not so much in women's equation with nature, but in taking responsibility for their own lives and environment. Key concepts in this regard,... are connection and affinity. These two words indicate that the process of women's bonding, with each other and against the destruction of the environment, will never be easy or automatic, but the result of conscious action of individual women committed to fight against the subordination of nature, their sisters and themselves. 124

Indeed, the woman/Nature connection has served as a uniting force for women around the world. At both the Women's Congress for a Healthy Planet¹²⁵ and Planeta Femea,¹²⁶ the

¹²³ S. Wieringa, "The Relationship between Women and Nature: Debates within Feminism" in Braidotti *et al*, *supra* note 3, 59-76.

¹²⁴ *Ibid.* at 75.

¹²⁵ This congress took place in Miami in November 1991 in preparation for the 1992 UNCED held in Rio de Janeiro. The congress involved more than 1500 women from 83 countries: World's Women Congress for a Healthy Planet, *The Women's Action Agenda 21*, online: Women, Environment and Development Organization <gopher://gopher.igc.apc.org:70/11/orgs/wedo/agenda21/wedo21> (date accessed: 28 September 1998) [hereinafter *Women's Agenda 21*].

¹²⁶ Planeta Femea was the forum of women's groups and NGOs held in parallel to UNCED in 1992.

woman/Nature connection served to join women across national, cultural, class and racial boundaries in order to achieve a common position on environmental and development issues at the international level.¹²⁷ The *Women's Action Agenda 21*, ¹²⁸ a document representing the compilation of 1500 women's ideas, experiences and values, as well as their position on environmental and development issues, was adopted at the Congress. The key assumptions for these two events were that "women are caring, non-violent, concerned with their local and practical issues" ¹²⁹ and that women do indeed know better than men how to save the planet and themselves. ¹³⁰

Furthermore, in a male-dominated international system, the woman/Nature connection can serve as a justification for demanding women's full and meaningful participation in the negotiation of environmental conventions.¹³¹ Including women in decision-making for environmental protection will bring new perspectives to the forum, new perspectives that are more likely respectful of Nature and which would enhance international environmental law's ability to protect the environment.¹³²

¹²⁷ Braidotti et al, supra note 3 at 164.

¹²⁸ Women's Agenda 21, supra note 125.

¹²⁹ Braidotti et al, supra note 3 at 164-165.

¹³⁰ *Ibid*.

¹³¹ *Ibid.* at 103-104. I agree with Moira L. McConnell that women should not need to justify their full participation in the international law process; the fact that they exist, that they constitute more than half of the worlds' population and that they are underrepresented should be sufficient. However, I must also add that in the present male-dominated international system, women do need a reason to be fully included: see M.L. McConnell, "The Relationship Between Theories about Women and Theories about International Law" (1992) Can. Council Int'l L. Proc. 68.

¹³² This is well expressed by Janice Jiggins in the following passage:

^{...} women bring to the debate a unique voice. For many women, their experience of life and the way they relate to people and the natural environment bring a different vision of the relationship between physical and human resources. Women's vision includes nurturance rather than control, the management of networks of relationships rather than hierarchical dominance, and a concern for future generations as a guiding principle for today's decisions.

J. Jiggins, Changing the Boundaries: Women-Centered Perspectives on Population and the Environment (Washington, D.C.: Island Press, 1994) at 7.

b) Ecofeminism and the diversity of women's voices

i) Critiques of ecofeminism as ignoring differences among women

Ecofeminists have also been criticized by women of the South, women of colour and aboriginal women for failing to consider the real diversity of women's experiences across race, class and national boundaries. 133

Women from the South have critiqued Western ecofeminists for ignoring their concerns¹³⁴ and "of misrepresenting different women by homogenizing the experiences and conditions of western women across time and culture".¹³⁵ Moreover, these women denounce the consumption-oriented lifestyles of Western women and of the elites in the South.¹³⁶ Women in the South have also warned against early attempts by Western ecofeminists and environmentalists to control population in developing countries in order to solve the ecological crisis.¹³⁷ On the other hand, development ecofeminists who see the poor, rural women in developing countries as the "ultimate other" have also at times failed to account for differences among women in the South.¹³⁸

Women of colour have noted that the ecofeminist movement represents mainly the interests and opinions of white, middle-class women. 139 They blame the ecofeminist movement for not

¹³³ See "Introduction", *supra* note 106 at 255; "Healing", *supra* note 15 at 111; *Earthcare*, *supra* note 11 at 13; Braidotti *et al*, *supra* note 11 at 70-71.

^{134 &}quot;Feminist Approaches", supra note 67 at 619.

¹³⁵ Goetz, *supra* note 77 at 143.

¹³⁶ Earthcare, supra note 11 at 223.

¹³⁷ See *e.g.* Françoise d'Eaubonne, "The Time for Ecofeminism" in *Ecology*, *supra* note 4, 215; such criticism was brought by authors such as Maria Mies and Vandana Shiva: M. Mies & V. Shiva, *Ecofeminism* (London: Zed Books, 1993) at 292-294 [hereinafter *Ecofeminism*].

¹³⁸ Braidotti et al, supra note 3 at 120.

¹³⁹ Taylor, *supra* note 64 at 62-63.

adequately considering their experiences and struggles, which are as much about race and class as they are about gender. The oppression of women of colour being multidirectional, ¹⁴⁰ it is not adequate to simply add racism as another form of oppression without recognizing the effect of different oppressions when they are intertwined. ¹⁴¹ Women of colour argue that ecofeminists should pay attention to differences among women:

In other words, women have a complexity of loyalties. Instead of constantly attempting to make our identities less complex by emphasizing what we have in common as women, as has been the tendency of women who are feminists first and foremost, we should also pay attention to the differences among us.¹⁴²

Aboriginal women raise similar concerns regarding the many faces of oppression; for them, "sexism oppression often seems secondary to colonial oppression". Aboriginal women share with women of the South concerns regarding the colonizing position of environmental and feminist movements on population control. Another criticism of ecofeminism raised by aboriginal women is the appropriation by some ecofeminists of aboriginal views on the

Ecofeminism, supra note 137 at ?.

¹⁴⁰ *Ibid.* at 58, 62 & 69.

¹⁴¹ Noël Sturgeon explains this well in the following statement:

Certainly its historical location has meant that ecofeminism has been better equipped to deal with questions of race than its parent movements. Still, many ecofeminists concentrate primarily on the part sexism plays in environmental crises, theorizing racism as analogous to sexism, or a subsidiary problem, rather than a problem which is intertwined with sexism, classism, heterosexism, or speciesism.

Sturgeon, supra note 9 at 261.

¹⁴² Kelly, *supra* note 82 at 113.

¹⁴³ Smith, supra note 49 at 22.

¹⁴⁴ *Ibid.* at 27. However, ecofeminism has since its first days distanced itself from population control issues, as expressed by Maria Mies and Vandana Shiva in the following:

From an ecofeminist perspective it is essential that women be asked what they themselves want. In target-oriented, coercive population control programmes, poor women's views on family size are not sought. ...

An ecofeminist perspective, however, is not to look at reproduction in isolation, but to see it in the light of men-women relations, the sexual division of labour, sexual relations, and the overall economic, political and social situation, all of which, at present, are influenced by patriarchal and capitalist ideology and practice.

relationship between human and non-human Nature.¹⁴⁵ For some ecofeminists, aboriginal women represent the solution to the woman/Nature connection dilemma, as explained by Noël Sturgeon in the following:

Native American cultures appear so often in ecofeminist writings because they represent ecological structures that in some instances can also make claims to relative equality between men and women. The combination seems to be ecofeminist by definition. Furthermore, imagining that American Indian women embody the 'special relation' between women and nature at the same time that they are portrayed as representing nonpatriarchal cultures achieves an apparent resolution to one of the major contradictions within ecofeminism [i.e. the dilemma of the woman/Nature connection]... The figure of the Native American woman as the 'ultimate ecofeminist' mediates, for white ecofeminists, the conflict between the critique of the patriarchal connection between women and nature and the desire for that very connection. 146

Unfortunately, ecofeminists who praise aboriginal culture for their non-dominating relationship with Nature and with women have not joined in the struggles of aboriginal people and have not developed close relationships with aboriginal communities.¹⁴⁷ For this reason, ecofeminist appropriation of aboriginal spirituality and culture is heavily criticized by aboriginal women.

Hence I am faced with what I call the diversity dilemma. On the one hand, if I attempt to formulate a unified ecofeminist theory which I can then use to critique the androcentric bias of international environmental law, I run the risk of ignoring differences between women across race, class and national boundaries. On the other hand, if diversity and difference become my main concern, formulating an ecofeminist voice sufficiently strong to be heard in

¹⁴⁵ For example, cultural feminists such as Starhawk attempt to define a prowoman earth-based spirituality, which is based on aboriginal views, but ignore the fact that First Nations women have been fighting against Western imperialism and rationalism to preserve this indigenous spirituality: Starhawk, "Power, Authority and Mystery: Ecofeminism and Earth-based Spirituality" in *Reweaving*, *supra* note 6 at 73. Starhawk has been criticized by non-Native ecofeminists such as Ynestra King, "Healing", *supra* note 15 at 112; Hughes, *supra* note 8 at 508 and Braidotti *et al*, *supra* note 3 at 70-71.

¹⁴⁶ Sturgeon, supra note 9 at 269.

¹⁴⁷ Smith, *supra* note 49 at 30; see also Sturgeon, *ibid.* at 270.

the international forum becomes an impossible task. Focusing on difference may help to challenge the dominant social paradigm from a diversity of voices, but will likely leave it intact.

ii) The diversity dilemma

In the context of international human rights, Tracy Higgins expores the dilemma between on the one hand, international feminism (or a unified women's position), which presents risks of coercion, and on the other, anti-essentialism (or cultural relativism), which may serve as a justification for inaction or acceptance of inequalities between men and women. As this author argues, although possibly exclusionary, essentialism is appealing because it offers the promise of uniting all women. The assumption that gender is always culturally, racially and class contingent prevents women from being able to effectively critique existing legal institutions, especially at the international level. Higgins offers a more common ground between universalism and anti-essentialism: respecting both commonality and difference by recognizing both risk of coercion and inaction. 151

Similarly, Anne Marie Goetz points out that paying too much attention to differences between women makes it more difficult to explain oppression as a system, as we can see in the following passage:

¹⁴⁸ T.E. Higgins, "Anti-Essentialism, Relativism, and Human Rights" (1996) 19 Harv. Women's L.J. 89 at 111.

¹⁴⁹ *Ibid.* at 99-100.

¹⁵⁰ Ibid. at 103.

¹⁵¹ Ibid. at 122-126. Hilary Charlesworth agrees:

The oppression of women is universal, but the oppression is established and maintained in different ways. Feminist analysis of the international legal system requires, then, a more nuanced perspective than always necessary in a purely domestic context. It cannot present 'one true story' of women's domination worldwide; it must acknowledge the range of cultural, national, religious, economic, and social concerns and interests to which it responds.... At the same time, I think that it is important not to become paralyzed to the point of total relativism in this project, to insist that feminism disintegrate into a seriees of local or regional struggles."

[&]quot;Alienating Oscar", supra note 67 at 4.

... if the process of generalizing beyond the particular is made secondary to the valorization of personal experience, then the project of understanding how oppression is constituted as a system, and of locating the place where oppressions interconnect, and of facing our own implication in certain systems of oppression, is abandoned. Oppression comes to be seen as a dynamic between individuals. In the end, no politically useful understanding of how difference is constructed emerges. 152

In the context of development, Goetz also expresses the concern that diversity can be used by the dominant (male) society to further exclude women's voices. By dwelling on diversity and refusing to attempt to formulate a united women's voice at the international level, women are giving the international community an opportunity to marginalize their voices on the grounds that women cannot even agree amongst themselves. On the other hand, diversity having been used by patriarchy as a tool of domination, we should "celebrate diversity as variety, creativity, options in life styles and world views" in order to avoid reproducing the same pattern of domination and exclusion. As shown below, it is possible to formulate a united front at the international level without having to completely abandon the diversity of women's voices.

iii) The formulation of an inclusive and strong ecofeminist voice in the international forum

It would be contrary to the goals of ecofeminism to try to develop a unified and coherent "ecofeminist theory". 155 However, it is possible to unite women, while respecting their

¹⁵² Goetz, supra note 77 at 145.

¹⁵³ Ibid . at 146.

¹⁵⁴ Braidotti et al, supra note 3 at 50.

¹⁵⁵ Lee Quinby critiques certain ecofeminists' impulse to develop a coherent theory based on a monovocal subject, Woman; of a pure essence, Femininity; of a fixed place, Nature.."and warns against it: Quinby, *supra* note 106 at 126. On the other hand, Janet Biehl has repudiated ecofeminism as a theory, and holds that it, "far from being healthily diverse, is so blatently self-contradictory as to be incoherent". Biehl also points out that the lack of coherence within ecofeminist theory "leaves the critical observer no choice but to generalize": Biehl, *supra* note 10 at 3.

differences, for common struggles against oppression and environmental destruction. Some ecofeminists offer ways of including as many voices as possible and respecting differences.

Karen Warren describes her "ecofeminist ethic" as respecting and welcoming differences between women, but building on these differences in developing a global perspective on the role of male domination in the exploitation of women and Nature. Lee Quinby views ecofeminism as a "politics of resistance", where different social groups combine forces around a specific issue important to them in order to challenge the institutions of power.¹⁵⁷ Anne-Marie Goetz suggests "coalition building" as a possible solution to the diversity dilemma. As Goetz explains, coalition building means compromise, or the "subsuming of one oppression in the interests of addressing a greater need elsewhere", depending on the chosen struggle, but without a loss of identity.¹⁵⁸ Coalition building, much like Quinby's politics of resistance, acknowledges the fact that women experience many different oppressions and must engage in different struggles that conflict and supplement each other. 159 Therefore, as she explains, while certain women's issues will unite women across national borders, the same women might also be involved in struggles for racial justice or national liberation in which they will oppose other women from the oppressor nations. 160 This can also mean, in the environmental context, that women may form alliances with environmental groups on certain issues and oppose the same groups on other issues such as population control.

In summary, paying attention to women's differences is crucial to an ecofeminist approach, since "it is precisely the diversity of thought and action that makes this new politics so

^{156 &}quot;Power and Promise", supra note 5 at 331-333.

¹⁵⁷ Quinby, supra note 106.

¹⁵⁸ Goetz, *supra* note 77 at 151.

¹⁵⁹ *Ibid.* at 151.

¹⁶⁰ Ibid. at 152.

¹⁶¹ See "Healing", supra note 15 at 113; "Feminist Approaches", supra note 67 at 613.

promising as a catalyst for change in these troubled times", ¹⁶² and that can challenge the dominant social paradigm, which "interprets difference as hierarchical and uniformity as a prerequisite for equality". ¹⁶³ More importantly, however, an ecofeminist approach must also acknowledge that solidarity between women is not a given but must be constructed on this basis. ¹⁶⁴ This was accomplished with some degree of success at the Women's Congress for a Healthy Planet ¹⁶⁵ and Planeta Femea ¹⁶⁶. The *Women's Agenda 21* ¹⁶⁷ adopted at the Congress represents a "major breakthrough because for the first time ever women across political/geographical, class, race, professional and institutional divides came up with a critique of develoment and a collective position on the environmental crisis, arrived at in a participatory and democratic process". ¹⁶⁸ Planeta Femea also demonstrates that it is possible, although not without difficulties, ¹⁶⁹ to unite women across cultural, racial and economic boundaries for the common goal of environmental protection and sustainable development. ¹⁷⁰

V. Conclusions

Although ecofeminist theories have critiqued almost every aspect of Western society and numerous patriarchal institutions such as capitalism, religion, philosophy, science and development, they have managed to stay away from another significant tool of oppression: law. I am therefore stepping on uncommon ground by using ecofeminism to conduct a critique of international environmental law, and to offer in my conclusion, a new approach to

¹⁶² Diamond & Orenstein, supra note 7 at xii.

¹⁶³ Ecofeminism, supra note 137 at 2.

¹⁶⁴ Braidotti et al, supra note 3 at 72.

¹⁶⁵ Supra note 125.

¹⁶⁶ Supra note 126.

¹⁶⁷ Supra note 125.

¹⁶⁸ Braidotti et al, supra note 3 at 91 and 102-103.

¹⁶⁹ Braidotti notes the main problem associated with adopting a unified women's position, which is "... the overly simple assumption of the existence of a global sisterhood and the associated silence about problems related to differences among women..." (*Ibid.* at 103) which can result in excluding women's voices and thus reproducing patterns of domination. See also *ibid.* at 5-6, 103-104 and 175.

¹⁷⁰ Braidotti et al, *ibid.* at 5-6.

this discipline based on ecofeminist thought. Elaine Hughes has paved the way with her article on an ecofeminist approach to Canadian environmental law, using the Fisheries Act ¹⁷¹ as an illustration, but has left the domain of international environmental law untouched. ¹⁷² In addition, as expressed by Elaine Hughes, applying ecofeminism to international environmental law is to risk co-option of this theory. ¹⁷³ Ecofeminism repudiates the dominant social paradigm as well as patriarchal institutions for their oppression of women, people of colour, of lower classes, of developing countries, and of Nature. A reconceptualization of international environmental law based on ecofeminist principles would thus require doing away with such patriarchal institutions as state sovereignty, the global capitalist system and western science. Instead, to use ecofeminist principles in order to improve certain international environmental law principles for effective environmental protection, as I will suggest in the concluding chapter, seems paradoxical.

On the other hand, my ultimate objective in writing this thesis is to improve the effectiveness of international environmental law in order to save our planet from an ecological disaster. Since capitalism, state sovereignty and science are pillars of our Western society, simply suggesting their demolition will give me little credibility among decision-makers. I agree with Elaine Hughes that environmental law needs to be restructured away from the dominant social paradigm to give it any chance of halting environmental degradation and that ecofeminism can nevertheless offer us a valid critique of the existing fundamental characteristics of international environmental law, as well as a "rich source of ideas about how one might 're-vision' the entire framework of environmental law". 174 For this reason,

171 Hughes, supra note 8.

¹⁷² Joyner & Little, *supra* note 18 take a feminist approach to international environmental law which in fact resembles an ecofeminist approach; however, I tend to take their work with a grain of salt since it was written from a male perspective and they conduct a very superficial analysis of international environmental law and of feminist theories.

¹⁷³ Hughes, *supra* note 8 at 510-511.

¹⁷⁴ Ibid.

despite the risk of co-option, I will proceed to use ecofeminist principles to offer concrete suggestions for the improvement of international environmental law, in its present context, in order to achieve effective environmental protection and to include women in the negotiation and implementation of environmental conventions.

Chapter 3 - International Environmental Law and the Dominant Social Paradigm

I. Introduction

We saw in chapter 1 the limited effectiveness of international environmental law¹ in protecting the environment. The underlying argument of this thesis is that international environmental law cannot stop or slow down environmental degradation, or address the effects of the latter on women, because it is conceptualized from an androcentric perspective. As we will see throughout Chapters 3 and 4, the assumptions that underlie international environmental law and which transpire in general provisions as well as in more specific provisions, reflect an androcentric view of Nature. A few examples from environmental instruments demonstrate this view of Man as separate and above Nature. Principle 1 of the *Rio Declaration* states unequivocally that "[h]umans are at the centre for concerns for sustainable development".² The *Stockholm Declaration* refers to the "Human Environment", implying that it is ours to take and states in the preamble that "[o]f all things in the world, people are the most precious".³

¹ The term "International environmental law" used throughout this thesis refers to both customary international environmental law principles, as well as environmental instruments (both binding and non-binding) adopted by the international community. However, for the sake of clarity, my focus will be on conventions and other international "soft law" instruments, which often embody the principles developed in customary law.

² Rio Declaration on Environment and Development, 13 June 1992, U.N.Doc.A/CONF.151/5/Rev.1, 31 I.L.M. 874 [hereinafter *Rio Declaration*], Principle 1.

³ Stockholm Declaration on the Human Environment, 16 June 1972, U.N. Doc.A/CONF.48/14, 11 I.L.M. 1416, preamble [hereinafter Stockholm Declaration].

In this chapter, we will see that the main characteristics of international environmental law, such as Principle 21, the idea of states' right to development, as well as the focus on science and technology for finding solutions to the environmental problems, reflect this androcentric view of the natural world. Moreover, we will see that the dominant social paradigm,⁴ on which international environmental law is based, has oppressed and continues to oppress Nature, women, the poor in developing countries and other subjects of domination. The purpose of this chapter is thus to challenge, mostly from an ecofeminist perspective, the basic assumptions of international environmental law.

International law claims to be a set of objective norms, developed by the consent of abstract entities called states, which are considered sovereign and equal. This idea creates the illusion that international law is gender-neutral and universally applicable and justifies the dominant social paradigm view of the world as the norm. However, international law is and has been developed mostly by men and mainly reflects their interests. By claiming objectivity and universal applicability, international law silences the voices of the "others" such as women, aboriginal peoples, poor people in developing countries and the environment.

II. Principle 21

Most international agreements dealing with the protection of the environment have included, in some form or another, the following principle, which was perhaps most famously enunciated as Principle 21 of the *Stockholm Declaration on the Human Environment*:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own natural resources pursuant to their own environmental policies, and the responsibility to ensure that

⁴ For a description of the dominant social paradigm, see Chapter 2, above.

activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.⁵

Principle 21 comprises two elements:⁶ 1) The affirmation of states' sovereign right to exploit their own natural resources;⁷ and 2) the responsibility to ensure that activities within their control do not cause damage to the environment of other states. In other words, the second element of Principle 21 imposes a limit on states in their exploitation of natural resources when this exploitation hinders other states' right to exploit their own natural resources.

The first part of Principle 21, states' sovereign right to exploit their own natural resources, constitutes for developing countries a crucial element of any international environmental instrument because of the colonial exploitation of their resources by the North and the inequities of the international legal system.⁸ I am not disputing the right of developing countries over their own resources and their right to be free from colonial powers. However,

⁵ Principle 21, Stockholm Declaration, supra note 3. See also the following international environmental instruments, which reiterate this principle in one form or another: Convention on Biological Diversity, 5 June 1992, 31 I.L.M. 818, preamble and Articles 3 and 15(1) [hereinafter Biodiversity Convention]; United Nations Framework Convention on Climate Change, 9 May 1992, 31 I.L.M. 849, preamble [hereinafter Climate Change Convention]; Rio Declaration, supra note 2, Principle 2; Non-legally Binding Authoriative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, 13 June 1992, U.N.Doc.A/CONF.48/14, 31 I.L.M. 882, Principle 1(a) [hereinafter Forest Principles]; Convention on Long-Range Transboundary Air Pollution, 13 November 1979, 18 I.L.M. 1442, preamble [hereinafter LRTAP]; Vienna Convention for the Protection of the Ozone Layer, 22 March 1985, (1987) 26 I.L.M. 1516, preamble (hereinafter Vienna Convention); Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter, 29 December 1972, 11 I.L.M.1294; United Nations Convention on the Law of the Sea, 10 December 1982, 21 I.L.M. 332. For the sake of simplicity, I will refer to all formulations of this principle as Principle 21. This principle is believed by some to be a principle of customary international law: see Karin Mickelson, "Seeing the Forests, the Trees and the People: Coming to Terms with Developing Country Perspectives on the Proposed Global Forests Convention" in Canadian Council on International Law, ed., Global Forests and International Environmental Law (London; The Hague, Boston: Kluwer Law International, 1996) 239 at 246 [hereinafter Global Forests].

⁶ A. Kiss and D. Shelton, *International Environmental Law* (NY: Transnational Publishers, 1991) at 129.

⁷ This part of Principle 21 has sometimes been included on its own in environmental conventions. For example, the preamble to the *Biodiversity Convention*, *supra* note 5, recognizes that "States have sovereign rights over their own biological resources"; see also article 15(1) of the same convention.

⁸ Mickelson, supra note 5 at 243. She explains the importance of this principle to developing countries: Thus, it can be seen that far from being a mere assertion of autonomy in relation to resource use decision-making, the concept of sovereignty over resources comes to be seen as being linked at a fundamental level with concerns about human rights and the equity (or inequity) of international economic relations." *Ibid.* at 245-246.

as we will see, in most developing countries, states' sovereign right to exploit their resources is often carried out in disregard and at the detriment of the poor, women and Nature, to the benefit fo the ruling elites (usually male) of these countries. Furthermore, the principle reflects an androcentric and patriarchal view of the environment, which is considered only in terms of inert matter to be owned and exploited for the economic interests of states.

Val Plumwood elucidates that the androcentric view of Nature, as reflected in this first element of Principle 21, is based on Western rationalism, which uses dichotomies and dualisms such as human/nature, mind/body, and reason/nature (emotion) to equate women with Nature and to oppose both to (male) reason in order to justify their subordination. She explains in the following passage that the West's exploitation of Nature is based on the marginalization of the latter:

To be defined as 'nature' in this context is to be defined as passive, as non-agent and non-subject, as the 'environment' or invisible background conditions against which the 'foreground' achievements of reason or culture (provided typically by the white, western, male expert or entrepreneur) take place. It is to be defined as a terra nullius, a resource empty of its own purposes or meanings, and hence available to be annexed for the purposes of those supposedly identified with reason or intellect, and to be conceived and moulded in relation to these purposes. It means being seen as part of a sharply separate, even alien lower realm, whose domination is simply 'natural', flowing from nature itself and the nature(s) of things. 10

The androcentric view of Nature reflected in the principle of states' sovereign right to exploit their natural resources also serves the interests of a global world economic system. Carolyn Merchant argues that the transformation of the relationship between human and non-human

⁹ See generally, V. Plumwood, *Feminism and the Mastery of Nature* (London; NY: Routledge, 1993) [hereinafter *Mastery of Nature*].

¹⁰ *Ibid* at 4-5.

Nature came with the rise of Western science and capitalism.¹¹ She points out the role of these patriarchal institutions in the destruction of Nature:

The change in controlling imagery was directly related to changes in human attitudes and behavior toward the earth. Whereas the nurturing earth image can be viewed as a cultural constraint restricting the types of socially and morally sanctioned human actions allowable with respect to the earth, the new images of mastery and domination functioned as cultural sanctions for the denudation of nature. Society needed these new images as it continued the processes of commercialism and industrialization, which depended on activities directly altering the earth-mining, drainage, deforestation, and assarting (grubbing up stumps to clear fields). 12

A capitalist economic system attaches value to people and the environment solely based on their usefulness for human and economic ends. The "value of people and nonhuman nature lies in their utility in attaining a given end, such as economic supremacy or political power", 13 rather than the survival of humanity and the planet. Marilyn Waring criticizes the global economic system for not valuing the environment as such or the unpaid work of women. As to the former, Waring explains that the environment is not valuable to the capitalist economic system unless it is destroyed and transformed into commodities for the world market, 14 in which case environmental destruction is labeled "growth" and "production". 15 For example, forests are seen by capitalism as "vast uninhabited spaces that

¹¹ See generally C. Merchant, *Earthcare: Women and the Environment* (NY: Routledge, 1996) [hereinafter *Earthcare*].

¹² *Ibid.* at 77; see also M. Mies and V. Shiva, *Ecofeminism* (London: Zed Books, 1993) at 104-105 [hereinafter *Ecofeminism*].

¹³ J. Biehl, Finding Our Way: Rethinking Ecofeminist Politics (Montreal; NY: Black Rose Books, 1991) at 19-20; see also J. Plant, "Learning to Live with Differences: The Challenge of Ecofeminist Community" in K. J. Warren, Ecofeminism: Women, Culture, Nature (Bloomington; Indianapolis: Indiana University Press, 1997) 120 at 123 [hereinafter "Live with Differences" in Women, Culture]; R.Braidotti, E. Charkiewicz, S. Haüsler and S. Wieringa, Women, the Environment and Sustainable Development: Toward a Theoretical Synthesis (London: Zed Books in association with INSTRAW, 1994) at 251-252.

¹⁴M. Waring, If Women Counted: A New Feminist Economics (New York: Harper & Row, 1988) at 20. She explains:

But the system says that forests, rainfall, water resources, fossil fuels, seafood, soil, grasslands, and the quality of the air that we breathe are worthless when preserved for future generations. It is their use, exploitation, and payment for them in the market that... establishes their validity. It is in their destruction that they become simple and indisputable facts of experience.

¹⁵ *Ibid.* at 31-32; see also World Watch Institute, *State of the World 1998* (NY;London: W.W. Norton & Company, 1998) at 27.

are valuable only when converted to agriculture or mined for timber. Standing forest is seen as wasted and unproductive". ¹⁶ The benefits derived from forests such as producing food, fodder, fish and medicines, purifying and regulating water supplies and climates, providing pollination, pest control, habitat and refuge, as well as educational, recreational, aesthetic and cultural benefits are ignored. ¹⁷ In this economic system, what incentives exist to keep the tree standing?

In the same way that the global market system ignores the non-economic value of Nature, it disregards the unpaid labour of women, as explained by Waring in the following passage:

... all the other reproductive work that women do is widely viewed as unproductive. Growing and processing food, nurturing, educating, and running a household - all part of the complex process of reproduction - are unacknowledged as part of the production system. A women who supplies such labor is not seen by economists as performing work of value. Yet the satisfaction of basic needs to sustain human society is fundamental to any economic system. By this failure to acknowledge the primacy of reproduction, the male face of economics is fatally flawed. 18

Economic indicators such as the Gross National Product (GNP) and the United Nations System of Accounting fail to consider women's unpaid reproductive labour, which includes women's work in the production of goods and services for household consumption and the market, human reproductive activities such as fetching water and firewood, child-rearing, care for the elderly and disabled, and community activities.¹⁹ The food that women produce in developing countries for home consumption is not counted in agricultural statistics "even though it subsidizes visible agricultural development."²⁰ Similarly, the GNP does not take

18 Waring, supra note 14 at 28.

¹⁶ State of the World, ibid.

¹⁷ Ibid.

¹⁹ United Nations General Assembly, Report of the Secretary General on Sustainable Development and International Economic Cooperation: Women in Development, UNGA, 52nd Sess., UN.Doc.A/52/345 (1997) paragraph 15 [hereinafter Women in Development]. See also B. Wells & D. Wirth, "Remediating Development through an Ecofeminist Lens" in Women, Culture, supra note 13, 300 at 305.

²⁰ Wells & Wirth, ibid.

into account natural resource depletion and environmental destruction, nor does it assign a value to the non-economic values of environmental resources.²¹

Finally, the view of Nature as resources to be exploited also promotes the interests of states seeking to enhance their own power in the international system by ensuring their access to natural resources, even through geographical expansion (i.e. colonization in the seventeenth century) and military aggression if necessary.²² In a world of sovereign states, natural resources are thus considered as crucial elements of state power.²³

The first part of Principle 21 affirms states' sovereign right to the exploitation of their environment. The flip side of this right is the obligation of states not to interfere with other states' exploitation of their own resources. In other words, states must ensure that activities within their control does not damage the natural resources of other states. This principle is an extension of the customary law principle that arose in international law in the context of

²¹ Waring, *supra* note 14 at 261. Waring gives forests as an example for these "other values" and how they could be integrated into the economic system:

A forest can be viewed as an economic resource, as a socio-cultural amenity, and as an ecosystem. The economic resource may be for forestry or fuel or achieved through tourism. As a sociocultural amenity, we may tramp or bushwalk or birdwatch or simply marvel at the beauty of a forest... To adequately portray these three dimensions of resources would require quite different 'measures'... But neoclassical economics and national income accounting afford us only one view of the world.

Ibid.

²² J.A.Tickner, Gender in International Relations: Feminist Perspectives on Achieving Global Security (NY:Columbia University Press, 1992) at 99 [hereinafter Global Security].

²³ *Ibid* at 100-101.

transfrontier pollution.²⁴ This restriction on states' sovereign right of exploitation is well established and is found in the second element of Principle 21.²⁵

In theory, the second part of Principle 21 thus constitutes a basis for state responsibility in the case of harm to another state's environment.²⁶ However, the principle assumes that the states causing the damage are identifiable and geographically adjacent, that the effect of the harm has limited expansion, that causation is relatively easy to establish, and that the damage can be calculated and compensated.²⁷ As a result, this obligation is particularly difficult to apply in the case of environmental degradation of global commons such as the oceans, the ozone layer, climate and the extinction of species worldwide.²⁸ The principle thus focuses on the resolution of conflicting interests between states relating to natural resources that are found in areas bordering two or more territories and common areas beyond national territories.²⁹ Moreover, Principle 21 applies to activities beyond the territorial jurisdiction of states into common areas.³⁰

²⁴ The first case to deal with this obligation was the *Trail Smelter Arbitration (USA v Canada)* (1938/1941), UN.RIAA, Vol. III, 1911 at 1965; it was reiterated in a few other cases such as the *Corfu Channel case (UK v Albania)*, [1949] I.C.J Rep.4. This customary law principle is however "locked in the state versus state model": See A.D. Tarlock, "Exclusive Sovereignty Versus Sustainable Development of a Shared Resource: The Dilemma of Latin American Rainforest Management" (1997) 32 Tex. Int'l L.J. 37 at 49-50. Tarlock holds that on the other hand, Principle 21 implies a duty towards the international community. See also J. Brunnée, "A Conceptual Framework for an International Forests Convention: Customary Law and Emerging Principles" in *Global Forests*, *supra* note 5, 41 at 48-49.

²⁵ For a discussion of the evolution of this obligation through the caselaw, see F. Biermann, Saving the Atmosphere: International Law, Developing Countries and Air Pollution (Frankfurt am Main; Berlin; Bern; NY; Paris; Wien: Peter Lang, 1995) at 17-18; L. M. Jurgielewicz, Global Environmental Change and International Law: Prospects for Progress in the Legal Order (Lanham; London: University Press of America, 1996) at 53-55; Kiss & Shelton, supra note 6 at 122-126.

 ²⁶ See generally F.O. Vicuna, "State Responsibility, Liability, and Remedial Measures under International Law: New Criteria for Environmental Protection" in E. Brown-Weiss ed., *Environmental Change and International Law: New Challenges and Dimensions* (Tokyo: UN University Press, 1992) [hereinafter *New Challenges*]
 27 T. Iwama, "Emerging Principles and Rules for the Prevention and Mitigation of Environmental Harm" in *New Challenges*, *ibid.* 107 at 107.

²⁸ V. P. Nanda, *International Environmental Law and Policy* (NY: Transnational Publishers, 1995) at 2. ²⁹ Iwama, *supra* note 27 at 107. See also Brunnée, *supra* note 24 at 48.

³⁰ Principle 21 mandates states to ensure that "activities" within their "control" (not jurisdiction) do not cause damage to the environment of other states: see Jurgielewicz, *supra* note 25 at 55; Kiss & Shelton, *supra* note 6 at 130. Edith Brown-Weiss explains that access to resources in the areas beyond national territories has traditionally been determined on first-come first served basis. As we will see in Chapter 4, the principle of

State sovereignty

Inherent in Principle 21 are two related and fundamental tenets of international law: state sovereignty and territorial integrity.³¹ State sovereignty is an essential concept of international law and is the basis for environmental instruments that "...permit the exploitation of a country's resources, as well as the right to exploit shared or common resources 'on a first-come, first-served basis'".³²

State sovereignty has been compared by some to an individual's personality and territorial integrity as his property, as explained in the following passage by international lawyer Louis Henkin:

With much mutatis mutandis, states are to be seen like individuals in the state of nature. Like all men (and women), all states are equal, equal in status and rights (as well as duties). Like individuals, states have 'personhood', including moral status and 'will' - the ability to decide, to agree, to offer and accept moral commitment. All states have rights, implying reciprocal duties. A state's rights include the right to life, i.e. the right to continue to exist. It has a right to liberty, to internal autonomy, and to be let alone, which we sometimes political independence. A state has a right to pursue happiness. A state also has the right to property, including its territory, which implies territorial integrity.

 \dots Like individuals forming a society, states that enter into relations with each other create a political system reflecting a social contract.³³

intergenerational equity has attempted to address this inequity: see E. Brown-Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order" (1993) 81 Geo. L.J. 675 at 703-704 [hereinafter "Contemporary Issues"].

³¹ It is interesting to note that the *Climate Change Convention* includes a statement of Principle 21 as well as the reaffirmation in the preamble of "the principle of sovereignty of states in international cooperation to address climate change": See *Climate Change Convention*, *supra* note 5, preamble.

³² Nanda, supra note 28 at 1.

³³ Louis Henkin, "The Mythology of Sovereignty" in (1992) Can. Council Int. L. 15 at 18, cited in K. Knop, "Restatements: Feminism and Sovereignty in International Law" (1993) 3 Transnat'l and Contemp. Problems 293 at 319.

Most feminist critiques of state sovereignty have focused on this analogy³⁴ and pointed out its androcentrism. State sovereignty seen in this way implies competition among states for access to natural resources for economic expansion and the legitimation of force to safeguard the national interests of each individual state.³⁵ Moreover, sovereignty and national interests have traditionally been seen in terms of national security in a strategic and military sense, legitimizing the use of force where national interests require it.³⁶ However, the legitimation of force to protect national boundaries ignores the fact that militarism and warfare represent a threat to the world's ecological security and to the lives of women and children. Modern warfare has devastating impacts on the natural environment, as was demonstrated in the Gulf War of 1991, where entire ecosystems were wiped out by the wilful destruction of oil wells.³⁷ Also, in times of war, women and children form the majority of civilian casualties.³⁸

At a conceptual level too, state sovereignty is not well suited to environmental protection, especially in the case of global commons.³⁹ Individual states' national interests, too often

³⁴ Knop, *ibid.* at 320-321.

³⁵ H. Charlesworth, C. Chinkin & S. Wright, "Feminist Approaches to International Law" (1991) 85 Am. J. Int'l L. 613 at 621-622 [hereinafter "Feminist Approaches"].

³⁶ Ann Tickner explains that although the functions of the state extend beyond national security to health and social welfare for example, national security issues "offer a sense of shared political purpose lacking in most other areas of public policy" and the state derives much of its legitimacy from its security function, both abroad and at home. As Tickner also notes, matters of national security are almost exclusively dealt with by men: See *Global Security*, *supra* note 22 at 43.

³⁷ For a discussion of the effects of the Gulf War on women and the environment, see A. E. Christiansen, "Rhetoric, Rape, and Ecowarfare in the Persian Gulf" in *Women, Culture, supra* note 13, 239.

³⁸ C. M. Chinkin, "Peace and Force in International Law" in D. G. Dallmeyer, ed., *Reconceiving Reality: Women and International Law* (Washington, D.C.: American Society of International Law, 1993) 203 at 204. Women are also frequently raped or forced into prostitution during times of war: see *ibid.* at 205. The use of rape as a weapon of war has become more evident. In Rwanda from April 1994 to April 1995, estimates of the number of women and girls raped range from 15,700 to 250,000: See UN Department of Information, "Women at a Glance", online: UN Dept of Information http://www.un.org/ecosocdev/geninfo/women/women96.htm (date accessed: 28 September 1998).

³⁹ J.A. Tickner, "Foreword" in V. Spike Peterson, ed., *Gendered States: Feminist (Re)Visions of International Relations Theory* (Boulder; London: Lynne Rienne Publishers, 1992), ix at ix [hereinafter *Gendered States*]. See also Y. Berthelot, "Are International Institutions in Favour of the Environment?" in L. Campiglio *et al*, *The Environment After Rio: International Law and Economics* (London; Boston: Graham & Trotman/Martinus Nijhoff, 1994) 267 at 274. This author points out the tension in international environmental negotiations between collective action and sovereignty.

defined by economic parameters, often hinder the analysis and the finding of common solutions to international environmental problems. Global environmental threats such as climate change, ozone layer depletion, deforestation and the loss of biological diversity, do not fit within state boundaries and their solution cannot usually be defined as a "national interest". Traditional security thinking based on competing national interests thus cannot ensure security in a global and ecological sense, because it hinders the analysis for finding common solutions to international environmental problems. National defense institutions are useless against ecological threats such as ozone layer depletion, acid rain and water pollution, which are indifferent to national boundaries. As explained by Marilyn Waring, "[n]either highly sophisticated weapon systems nor bloated military budgets can halt deforestation or arrest the soil erosion... Blocking external aggression may be relatively simple compared with stopping the deterioration of life support systems". The limits of state sovereignty in dealing with environmental issues are expressed in the following passage:

Earth does not recognize sovereignty as we know it. The sovereignty of the Earth preceded and still supercedes human sovereignties. The sovereignty of the Earth is not a static or finished state in which power is held within one entity or system. Rather, it is an interactive and dynamic process in which power and energy and authority are shared within a total system in ways that enhance the prospects for the continuance of life.⁴³

However, national security does not have to be restricted to strategic and military terms. For women, for example, security can mean safe working conditions, freedom from the threat of war or from the economic hardships of foreign debt.⁴⁴ Security could also mean the satisfaction of basic human needs such as food and shelter or the enjoyment of basic human

⁴⁰ Nanda, *supra* note 28 at 5-6.

⁴¹ See Global Security, supra note 22 at 113.

⁴² Waring, supra note 14 at 275.

⁴³ P. Mische, "Ecological Security and the Need to Reconceptualize Sovereignty" (1989) 14 Alternatives 424 at 424; see also A. Sisson Runyan, "The 'State' of Nature: A Garden Unfit for Women and Other Living Things" in *Gendered States, supra* note 39, 123 at 133.

⁴⁴ Global Security, supra note 22 at 54.

rights. More importantly, any feminist definition of security must "include the elimination of all types of violence including violence produced by gender relations and subordination".⁴⁵

National security can also mean environmental security.⁴⁶ This new concept of environmental security has emerged to account for environmental degradation and the possible international conflicts that may arise out of the scarcity of resources.⁴⁷ Brunnée & Toope argue for a more ecocentric approach to security which would focus on the maintenance of the planet's ecology at least to sustain life-support systems. As they explain, in this approach to environmental security, "[e]nergy would be redirected to the protection of the environment itself, rather than merely being concerned with the security of state structures".⁴⁸

Since this ecocentric approach to environmental security is not likely to be accepted by states still mainly concerned with sovereignty and territorial integrity, the authors alternatively argue for an expanded definition of security which includes the quality of life of citizens:

As a matter of *human* concern, and at an admittedly instrumental level, the security of the environment has become an increasingly important preoccupation... An impaired environment, therefore, is relevant to security not only because of the violent subnational and international conflict that it may engender, but because security relates also to our quality of life and standard of living.⁴⁹

⁴⁵ Ibid at 58.

⁴⁶ A lot of ink has been spilled about environmental security. The concept is still controversial in the literature and remains undefined: for example, see J. Brunnée & S. Toope, "Environmental Security and Freshwater Resources: A Case for International Ecosystem Law" (1994) 5 Y.B.I.E.L. 41 at 41; J. T. Mathews, "Redefining Security" (1989) 68 Foreign Affairs 162; A. S. Timoshenko, "Ecological Security: Response to Global Challenges" in *New Challenges*, supra note 27, 413; Mische, *supra* note 43; I do not purport to deal with the concept in this thesis. Rather, the concept illustrates the inability of certain principles of international environmental law such as state sovereignty, to deal with threats that transcend boundaries: see Timoshenko, *ibid.* at 422, who holds that the concept of environmental security ".. evidently lacks something in quality to make it accepted by experts on international security issues or to function as a basic concept for international crisis management".

⁴⁷ Brunnée & Toope, *ibid.* at 41.

⁴⁸ *Ibid.* at 46.

⁴⁹ *Ibid.* at 46.

States have increasingly recognized that threats to national security include many non-military threats, as indicated in the following statement of the Department of Foreign Affairs and International Trade of Canada:

The new international context also imposes "non-traditional" threats, in particular, threats that transcend political borders and affect whole regions or even the globe.... We now recognize the danger posed to this and future generations by environmental degradation, social inequity, lack of economic opportunity and overpopulation...⁵⁰

In summary, since the only limit on states' sovereign right to exploit their natural resources is to ensure that this exploitation does not hinder other states' identical right, the protection of the environment is often superseded by more pressing economic and social demands. Although sovereignty has been limited at times by the need to cooperate with other states to solve global problems related to the economy, health care, human rights, development, environmental emergencies, traffic and communications, illegal drug trafficking and terrorism,⁵¹ the concept is still central to international environmental law and is always included in environmental agreements. Since the implementation of environmental conventions lies solely with each individual state, it is difficult for the international community to prevent states from prioritizing other (economic) national interests over environmental goals. National economic interests are particularly significant to developing countries, which often consider international environmental protection efforts as yet another

⁵⁰ Foreign Affairs and International Trade Information Systems, *Canada in the World: Government Statement* (Her Majesty the Queen in Right of Canada, 1995) at 3. See also Principle 25 of the *Rio Declaration, supra* note 2, which provides that "[p]eace, development and environmental protection are interdependent and indivisible"; D. Freestone & E. Hey, "Implementing the Precautionary Principle: Challenges and Opportunities" in D. Freestone & E. Hey, eds., *The Precautionary Principle and International Law: The Challenge of Implementation* (The Hague; Cambridge, MA: Kluwer Law International, 1996), 249 at 250.

⁵¹ A. Kiss, "The Implications of Global Change for the International Legal System" in *New Challenges*, *supra* note 27 315 at 333.

form of imperialism by the North.⁵² For this reason, international environmental conventions also often include states' right to development.

III. The Right to Development

A second characteristic of international environmental conventions is their inclusion of provisions regarding the right of developing countries to develop. The right to development was defined by the 1986 *United Nations Declaration on the Right to Development* as the entitlement "to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized".⁵³ The same instrument states that the right to development is a "inalienable and universal right".⁵⁴ However the legal status of the right to development seems unclear.⁵⁵ In the environmental context, this right was first mentioned at the 1972 Stockholm Conference,

52 See generally, Mickelson, *supra* note 5.

customary law but that it can be argued that it is an emerging right: see Mickelson, ibid. at 253.

⁵³ 4 December 1986, UNGA Res. 41/128, UN Doc.A/41/53, 40 Y.B.U.N. 717, article 1. S.P.Marks defines the right as the following:

^{...} the individual right to benefit from a development policy based on the satisfaction of material and nonmaterial human needs and to participate in the development process, and the collective right of developing countries (and peoples not yet having exercised their right to self-determination) to succeed in establishing a new international economic order, that it, in eliminating the structural obstacles to their development inherent in current international economic relations.

See S.P.Marks, "Emerging Human Rights: A New Generation for the 1980s?" (1981) 33 Rutgers L.Rev. 435 at 445, cited in Mickelson, *supra* note 5 at 250.

Although I agree with this author that the right to development entails both and individual and a collective right, my critique of this right will focus on the right of **states** to develop. My argument is premised on the fact that the development of a state has not always translated into economic, social, cultural and political rights for the citizens within the states, especially not when it comes to the poor or women in developing countries.

54 *Ibid.* See also Mickelson. *ibid.* at 252.

⁵⁵ Tarlock holds that the right to development is recognized in both customary law and international agreements but points out that this is still controversial because of the United States' consistent objections to the recognition of this right for developing countries: see Tarlock, supra note 24, footnote reference #37. Karin Mickelson mentions that references to the right to development have been mostly in non-binding declarations and that its legal status is unclear. Moreover, she holds that it is questionable whether the right is part of

when it was recognized that development and environmental protection are interdependent.⁵⁶ The *Climate Change Convention* affirms states' right to sustainable development:

The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.⁵⁷

The preamble to the *Biodiversity Convention* recognizes that development is an overriding priority for developing countries⁵⁸ and the preamble to the *Climate Change Convention* also recognizes that in order to be able to develop, developing countries' energy consumption will need to grow, thus implying that their right to develop overrides reducing emissions of greenhouse gases.⁵⁹ Principle 3 of the *Rio Declaration* seems to recognize the existence of a right to development:

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.⁶⁰

However, regardless of the legal status of the right to development, it is still often a crucial element of international environmental instruments, especially since UNCED. For the same reasons that developing countries insist on the inclusion of Principle 21 in international

⁵⁶ Principle 8 of the Stockholm Declaration, supra note 3 provides the following:
Economic and social development is essential for ensuring a favourable living and working environment for man and for creating conditions on earth that are necessary for the improvement of the quality of life.

⁵⁷ Climate Change Convention, supra note 5, article 3(4).

⁵⁸ Biodiversity Convention, supra note 5, preamble.

⁵⁹ Climate Change Convention, supra note 5, preamble. Another illustration of the right to development is found in Principle 2(a) of the Forest Principles, supra note 5:

States have the sovereign and inalienable right to utilize, manage and develop their forests in accordance with their development needs and level of socio-economic development and on the basis of national policies consistent with sustainable development and legislation, including the conversion of such areas for other uses within the overall socio-economic development plan and based on rational land-use policies.

⁶⁰ Rio Declaration, supra note 3, Principle 3.

environmental conventions, the right to development usually plays a crucial role in the negotiations to international environmental agreements. Developing states feel threatened by the push towards greater environmental protection, which they consider to be a "new wave of environmental colonialism".⁶¹ From developing countries' perspective, the developed countries, after exploiting their natural resources and polluting the environment, cannot tell the former that they must limit their economic development in order to protect natural resources for the sake of the whole planet. In all fairness, developing countries must not be asked to forego the opportunity to develop in order to preserve the resources essential to the international community;⁶² they should not bear the costs of the North's overexploitation and pollution. The right to development can thus be seen as forcing the North to take developing countries' concerns over the past and present inequities of the international system seriously.⁶³ On the other hand, if the South does not take part in the global efforts to address environmental issues, the efforts of the North will be in vain. The inclusion of the right to development in international environmental instruments is thus essential because of the need for these countries to sign on to environmental conventions.

The right to development is based on the dominant development model, which is defined by ecofeminist Vandana Shiva in the following passage:

"Development" was to have been a postcolonial project, a choice for accepting a model of progress in which the entire world remade itself on the model of the colonizing modern West, without having to undergo the subjugation and exploitation that colonialism entailed. The assumption was that western style progress was possible for all. Development, as the improved well-being of all, was thus equated with the westernization of economic categories - of needs, of productivity, of growth. Concepts and categories about economic development and natural resource utilization that had emerged in the specific context of industrialization and capitalist

⁶¹ I. M. Porras, "The Rio Declaration: A New Basis for International Cooperation" in P. Sands, ed., *Greening International Law* (London: Earthscan Publications ltd, 1993) 20 at 23; see also Nanda, *supra* note 28 at 13-14. 62 G. Handl, "Environmental Protection and Development in Third World Countries: Common Destiny-Common Responsibility" (1988) 20 N.Y.U.J. Int'l L. & Politics 603 at 608.

⁶³ Mickelson, supra note 5 at 250.

growth in a center of colonial power were raised to the level of universal assumptions and applicability in the entirely different context of basic needs satisfaction for the people of the new independent Third World countries.⁶⁴

According to the dominant development model, the solutions to "underdevelopment" are found in the global market economy though the transfer of financial resources, technology and trained personnel from developed to developing countries in the form of development aid programmes and projects, and through large-scale energy and resource intensive industrialisation and modernisation projects. The dominant development model is based on the assumption that the model of "good life" in the North is both desirable and attainable for populations of developing countries. Modernity and progress as defined by Northern lifestyles have "penetrated into virtually all corners of the globe with the help of Western media". Subsistence lifestyles are portrayed as "poverty" although they satisfy basic human needs, as explained in the following passage:

Culturally perceived poverty need not be real material poverty: subsistence economies which satisfy basic needs through self-provisioning are not poor in the sense of being deprived. Yet the ideology of development declares them so because they do not participate overwhelmingly in the market economy, and do not consume commodities produced for and distributed through the market even though they might be satisfying those needs through self-provisioning mechanisms.⁶⁸

Unfortunately, the Northern standard of living is impossible to achieve for all people on the planet.⁶⁹ As estimated by one author, even if the planet had an unlimited amount of

⁶⁴ V. Shiva, "Development, Ecology, and Women" in J. Plant, ed., *Healing the Wounds: The Promise of Ecofeminism* (London: Green Press, 1994) 80 at 80 [hereinafter *Healing the Wounds*]. Shiva rightly calls this type of development "maldevelopment".

⁶⁵ H. Charlesworth, "The Public/Private Distinction and the Right to Development in International Law" (1992) 12 Aus. Y.B. of Int'l L. 190 at 196-197 [hereinafter "Public/Private"].

⁶⁶ See Ecofeminism, supra note 12 at 55.

⁶⁷ Braidotti et al, supra note 13 at 10.

⁶⁸ V. Shiva, Staying Alive: Women, Ecology and Development (London: Zed Books, 1988) at 10; see also Braidotti et al, ibid. at 22.

⁶⁹ I am using here the term "Northern" to distinguish between developed and developing countries while acknowledging that North American consumption patterns and standards of living are much less sustainable than most of their European counterparts.

resources, it would take developing countries 500 years to reach Northern levels of development.⁷⁰ As Maria Mies puts it, for the Northern standard of living to be attained by the entire planet's population, two more planets would be needed: one for the raw materials, and the other to dump the waste produced.⁷¹ She has thus correctly called this model of development the "myth of catching up development".⁷² The myth of catching up development based on a capitalist, growth-oriented economic system is the "product of white, Western, male thinking which is essentially reductionist and serves an economic structure based on exploitation, profit maximization and capital accumulation in the North"⁷³ and perpetuates the oppression of what Mies and Shiva have called the "colonies": the South, Nature and women.⁷⁴

Under the dominant development model, development has meant the transformation of sustainable, subsistence-based economies into economies based on large scale development projects such as dams, energy plants, mines, irrigation schemes and cash-crop production for exports.⁷⁵ Unsound Western practices such as monocropping and the aggressive use of chemical pesticides and fertilizers have replaced sustainable subsistence agriculture, as explained by Waring:

The monocrop (one species) forestry approach is succored and encouraged by national income accounting. Policies encourage export cropping and market income.

70 Ecofeminism, supra note 12 at 60.

⁷¹ *Ibid.* at 252.

⁷² *Ibid.* at 55; see also *Staying Alive*, *supra* note 68, chapter 1.

⁷³ Braidotti et al, supra note 13 at 110.

⁷⁴ *Ecofeminism*, *supra* note 12 at 251; see also *Staying Alive*, *supra* note 68 at 6, where Shiva explains that development is based on the introduction of the domination of man over Nature and women, where "Nature and women are turned into passive objects, to be used and exploited for the uncontrolled and uncontrollable desires of alienated man. From being the creators and sustainers of life, nature and women are reduced to being 'resources' in the fragmented anti-life model of maldevelopment."

⁷⁵ See S. Ghosh, "A Plea for Re-examining the Concepts of Development and Reorienting Science and Technology" in S. Bahugunnal, V. Shiva & M.N. Buch, *Environment Crisis and Sustainable Development* (Dehra Dun: Natraj Publishers, 1992) 31 for a discussion of the effects of ill-conceived development programmes promoting large-scale irrigation and energy schemes, as well as the use of pesticides, on the environment in India.

Women farmers concentrate on subsistence cropping and feeding people. Many of the characteristics of their traditional agri-ecosystems are socially, environmentally, and economically much more desirable than those of monocrop systems. They utilize soil resources and phytosynthetically active radiation more efficiently. They resist insect pests and plant pathogens in weeds better. They produce a more varied diet. They better utilize local resources and nonhybrid, open-pollinated, locally adapted, insect-resistant seeds. They contribute to (subsistence) economic stability.⁷⁶

In most cases, this type of development has worsened the situation of people in developing countries, except for the ruling elites. Catching-up development has led to large debts, "resulting in structural adjustment and economic austerity measures".⁷⁷ From an ecofeminist perspective, development thus constitutes yet another form of colonialism.⁷⁸

Furthermore, under the dominant development model, natural resources and people constitute commodities to be exchanged on the global market,⁷⁹ and "the organising principle for natural resource use is the maximisation of profits and capital accumulation".⁸⁰ Development has also meant the introduction of powerful and polluting technologies to replace traditional and sustainable small-scale technologies.⁸¹ The dominant development model, anchored in a

⁷⁶ Waring, *supra* note 14 at 264.; see also *Ecofeminism*, supra note 12 at 71-72; Wells & Wirth, *supra* note 19 at 302. Although the use of fertilizers has plateaued or declined in the North, it has continued to expand in developing countries: *State of the World, supra* note 15 at 16.

⁷⁷ Braidotti et al, supra note 13 at 26.

⁷⁸ Staying Alive, supra note 68 at 2. The author the colonizing effect of development on women and Nature:

Development was thus reduced to a continuation of the process of colonisation; it became an extension of the project of wealth creation in modern western patriarchy's economic vision, which was based on the exploitation or exclusion of women (of the west and non-west), on the exploitation and degradation of nature, and on the exploitation and erosion of other cultures. 'Development' could not but entail destruction for women, nature and subjugated cultures, which is why, throughout the Third World, women, peasants and tribals are struggling for liberation from 'development' just as they earlier struggled for liberation from colonialism.

The insistence of developing countries to have their right to development included in environmental conventions in order to address international inequalities between North and South thus seems to downplay the impossibility of achieving this right.

⁷⁹ Staying Alive, ibid. at 9.

⁸⁰ *Ibid.* .

⁸¹ *Ibid.* at 6. The main indicator of development is the GNP. As we saw above, the GNP does not take into account the depletion of natural resources, the level of pollution caused by economic development, nor the unpaid work of women in subsistence economies. Moreover, as expressed by Sailendranath Ghosh, GNP is the measure of development "regardless of how much of it is usable for life's sustenance and how much for killing life (armament)": see Ghosh, *supra* note 75 at 31.

global market economy that is based on profit maximization and continuous growth, has been one of the major causes of environmental degradation in developing countries, as we can see from the following passage:

The exploitation of natural resources for economic gain has become an inherent part of development and has led to the realization by some people that these resources, whether rain forests, fish stocks, or fresh water, are no longer abundant and are in short supply. The global gifts of production have been widespread soil and coastal erosion, desertification, and deforestation. Water and air pollution are inherited by each generation as a result of past economic activity...⁸²

Resource-intensive industries have put excessive demands on natural resources and disrupted ecological processes, thus impeding Nature from regenerating itself⁸³ and leading to natural resource depletion, soil erosion and environmental degradation. Cash crop agriculture has intensified the use of chemical pesticides and reduced the diversity of Nature to accomodate market needs. Dams and irrigation schemes necessary for industrial production and large-scale agriculture, as well as agricultural run-offs and waste discharges, have polluted freshwater sources and constitute a severe threat to the health and survival of children, who are the most vulnerable.⁸⁴

Moreover, the transformation of sustainable subsistence agriculture in the South to cash crops meant for export has also increased the living standards of the male elites of the South at the expense of women and children, who have been displaced by cash-crop production and often unable to satisfy their requirements for food.⁸⁵ The reservation of vast areas of land for cash-crops for exports has increased the income of men who work on export cash-crops, but at the

⁸² Waring, supra note 14 at 251.

⁸³ Staying Alive, supra note 68 at 8.

⁸⁴ Ecofeminism, supra note 12 at 81.

⁸⁵Ecofeminism, supra note 12 at 71-75; see also Staying Alive, supra note 68 at 3. Cash crops are considered the domain of men and subsistence agriculture the domain of women: Women in development, supra note 19, paragraph 38.

same time has increased the work burden of women⁸⁶ since they have to travel greater distances to find fertile soils (food), fodder and fuel in order to be able to sustain their families.⁸⁷ Women are then unjustly "accused of destroying the forests in search of fuel, polluting and exhausing water sources in search of drinking water, and exhausting the land resources by producing too many additional mouths to feed."⁸⁸

As we can see from the above, the people who have benefited from development in developing countries have been mostly the ruling male elites and the urban middle classes.⁸⁹ As a result, the social inequalities between classes that exist in the North have been reproduced and intensified in developing countries.⁹⁰ Cuts in public spending in order to service outside debt by developing states have affected social areas of life such as health and education and led to the marginalization and impoverishment of an increasing number of people, especially women.⁹¹ Is this a solution to the inequalities that exist between North and South which the right to development is meant to address?

The 1986 Declaration on the Right to Development ⁹² in theory provides equality of opportunity for women in the process of development, as well as equality for women in the access to basic resources and fair distribution of income. However, other provisions of the declaration indicate that discrimination against women is not considered to be a major

86 P. Kelly, "Women and Power" in Women, Culture, supra note 13, 112-119 at 116.

⁸⁷ K. J. Warren, "Taking Empirical Data Seriously: An Ecofeminist Philosophical Perspective" in *Women, Culture*, *ibid.* 3 at 8.

⁸⁸ Ecofeminism, supra note 12 at 279. The same authors point out that international environmental conventions such as the Montreal Protocol on Substances that Deplete the Ozone Layer, 16 September 1987, 26 I.L.M. 1550, and the Climate Convention, supra note 5, are often viewed as a means of dispossessing the poor in order to "save" natural resources and the global commons. As they explain, "[t]he victims are transformed into villains in these ecological plans - and women, who have struggled most to protect their children in the face of ecological threats, become the elements who have to be policed to protect the planet". Ibid, at 86.

⁸⁹ Braidotti et al, supra note 13 at 26.

⁹⁰ *Ibid.* at 26.

⁹¹ *Ibid*.

⁹² Supra note 53, art.8.

obstacle to development.⁹³ In reality, development programmes have largely ignored the realities of women and as a result, have often worked to deteriorate the situation of women and children in developing countries.⁹⁴

Also significant in the discourse of development has been the push for population control. In some cases, population control programmes became a pre-condition for a state to receive development aid. Population control has also been raised in the environmental debate. For example, the preamble to the *Stockholm Declaration* states that "[t]he natural growth of population continuously presents problems on the preservation of the environment, and adequate policies and measures should be adopted, as appropriate, to face these problems". However, as expressed by Janice Jiggins, controlling births in order to control global population growth has come to mean "controlling women's fertility". Thus the acknowledgement of states' right to development must ensure that women will not be subjected to population control programmes that are not completely voluntary.

As we saw in our discussion of Principle 21, environmental degradation and the impoverishment of women in developing countries have been perpetuated by the use of Western economic indicators as measures of development. However, he Gross National

⁹³ "Public/Private", *supra* note 65 at 196. Charlesworth gives as an example of such provisions article 5 of the declaration, which provides for the obligation of states to take steps to eliminate violations of human rights, but does not include sex discrimination.

⁹⁴ The number of rural women in developing countries living in poverty has risen by 50% over the last two decades due to traditional approaches to economic development: see United Nations Development Fund for Women (UNIFEM), "Eradicating Feminized Poverty", online: UNIFEM < http://www.unifem.undp.org/ec-pov.htm>(date accessed: 23 April 1998). See also "Feminist Approaches", *supra* note 35 at 639-640; See L. _stergaard, "Statistics" in L. _stergaard, ed., *Gender and Development: A Practical Guide* (NY: Routledge, 1992), chapter 1, which discusses the exclusion of women's economic roles in most development studies.

95 Braidotti *et al*, supra note 13 at 23-25; see also _stergaard, *ibid.* at 25; J. Jiggins, *Changing the Boundaries: Women-centered Perspectives on Population and the Environment* (Washington, D.C.: Island Press,1994) at 12.

96 Stockholm Declaration, supra note 3, preamble.

⁹⁷ Jiggins, supra note 95 at 150.

⁹⁸ See above. Marilyn Waring has carried out extensive research on the oppressive nature of the UN system of accounting. She argues that this patriarchal system values destructive activities and ignores women's work, which is related to reproduction and essential to the survival of the human species: Waring, *supra* note 14.

Product (GNP) is the principal measure of economic growth and the tool used to measure progress towards development, although, as we saw above, ⁹⁹ it fails to take into account natural resource depletion and the subsistence economies of women in developing countries. ¹⁰⁰ The use of the GNP as a measure of development has thus meant "that the web of life around women, children and the environment is excluded from central concern. The status of women and children and the state of the environment have never functioned as 'indicators' of development". ¹⁰¹ Because credit is dependent on indicators such as the GNP, developing countries faced with debilitating external debts have little choice but to exploit their natural resources for export without consideration for the effects their depletion has on the environment, women and the poor in general.

Moreover, failing to take into account the unpaid labour of women when tabulating the GNP has negative effects on the right to development of women in developing countries. First, because their unpaid work is excluded from the economy and men are employed on cash-crop farms, women find themselves performing two jobs, one as agricultural workers and the other as mother and homemaker; consequently, their overwork reduces their life expectancy. Secondly, because they are considered as "non-producers", women are excluded from development aid programmes; their subsistence farming thus receives little support. Third, women may not be seen as bearers of the right to development since they are considered to be supported by male household heads. Finally, even when women find

⁹⁹ See discussion on Principle 21, above at *.

¹⁰⁰ As indicated in a recent report of the Secretary General, gender analysis is however beginning to infiltrate economic decision-making including in the scope of economic activities both the paid and unpaid sectors of the economy: *Women in Development*, *supra* note 19, paragraph 9.

¹⁰¹ Ecofeminism, supra note 12 at 74.

^{102 &}quot;Public/Private", supra note 65 at 200.

¹⁰³ *Ibid.*.

¹⁰⁴ Ibid. at 201-202. See also "Feminist Approaches", supra note 35 at 641.

¹⁰⁵ "Public/Private", *ibid.* at 202. See Ostergaard, *supra* note 94 at 20-23 for an explanation of the male bias of the concept of "head of household".

work in the market economy, little attention is paid to their work conditions and their exploitation. 106

Furthermore, as Hilary Charlesworth argues, the right to development has helped to impose on developing countries the West's public/private dichotomy. The public/private distinction serves to exclude women from development aid programmes because their unpaid work is not considered to be "work"; if aid is provided, it is to marginalize women in their role as mothers and homemakers. Subsistence agriculture, which is mostly done by women, is not considered to be part of the market economy and thus receives little support. Women in developing countries are rarely the beneficiaries of training programmes for agriculture, business, and other typically "male" trades in the West; when training is provided, it reproduces gender stereotypes by giving women domestic training. Finally, because their subsistence food production is ignored by the market economy, women rarely have access to tools which would reduce their work burden and which are granted to men through development aid. 111

Studies in the 1970s demonstrated the devastating effects that development policies were having on women in the developing countries.¹¹² This realisation led to the UN Decade for Women's strategy of integrating women into development programmes.¹¹³ However, the Women in Development (WID) approach did not challenge the underlying assumptions of

^{106 &}quot;Public/Private", ibid. at 203.

¹⁰⁷ Ibid. at 198-199; see also "Feminist Approaches", supra note 35 at 640.

^{108 &}quot;Public/Private", ibid at 200-201; "Feminist Approaches", ibid at 641.

^{109 &}quot;Public/Private", ibid at 201.

¹¹⁰ *Ibid* at 202.

¹¹¹ Waring, supra note 14 at 239.

¹¹² The most significant of those studies was carried out by Ester Boserup, *Women's Role in Economic Development* (London: Allen and Unwin, 1970).

¹¹³ A.M. Goetz, "Feminism and the Claim to Know: Contradictions in Feminist Approaches to Women in Development in R. Grant & K. Newlands, eds., *Gender in International Relations* (Buckingham: Open University Press, 1991) 133 at 138.

development itself such as modernisation, industrialisation and the public/private distinction.¹¹⁴ The WID approach wrongly assumed that all women in the South needed was access to resources and services in order to contribute to the "growth" of their national economies.¹¹⁵ Integration of women into development usually meant the design of "special" small-scale development projects for women.¹¹⁶ Still today, development policies fail to include women's concerns into mainstream development projects.¹¹⁷

By failing to distinguish between the economic position of women and men in developing countries, the right to development does not challenge "the pervasive, and detrimental, assumption that women's work is of a lesser order than men's"¹¹⁸ and thus serves to make women and their concerns invisible in development policies.¹¹⁹ The result of women's invisibility is massive poverty, increased work burdens and decreased resource base.¹²⁰ Furthermore, the invisibility of women in development policies means that their intimate knowledge of their environment and of sustainable agricultural methods is not integrated into these policies. In most development projects, this valuable and sustainable knowledge is replaced by "the 'reductionist mind' of outside experts".¹²¹ Women are thus directly affected by environmental and developmental policies which they have not had the opportunity to influence.

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^{114 &}quot;Public/Private", *supra* note 65 at 199. Some even say that it was meant to preserve the primacy of the economic growth model: see Braidotti *et al*, *supra* note 13 at 118.

¹¹⁵ Braidotti et al, supra note 13 at 118.

¹¹⁶ Goetz, *supra* note 113 at 139.

¹¹⁷ See *Ibid.*; "Public/Private", *iupra* note 65 at 139. Following the Fourth World Conference on Women and UNCED, gender mainstreaming in economic policies, including development, became an objective for UN organizations and agencies: See *Women in Development, supra* note 19.

[&]quot;Public/Private", *ibid.* at 203-204; "Feminist Approaches", *supra* note 35 at 641.

¹¹⁹ Goetz, supra note 113 at 137 & 140.

^{120 &}quot;Feminist Approaches", supra note 35 at 639-640.

¹²¹ D. Curtin, "Women's Knowledge as Expert Knowledge: Indian Women and Ecodevelopment", in *Women, Culture, supra* note 19, 82 at 84.

In summary, although the right of people in the South to the fulfillment of basic needs is not questioned, the inclusion of states' right to development in environmental conventions, this right presently being defined by the dominant development model, in fact oppresses poor people in the South, especially women who have been negatively affected by development. Moreover, in most cases development has contributed to environmental degradation in the South; it is ironic that it is now offered as part of the solution to the environmental crisis. Furthermore, although the inclusion of the right to development in many international environmental instruments has been in preambles and non-binding provisions, there is a potential danger that environmental goals will be superseded, or at least qualified, by this right, as they are by the binding affirmation of states' right to exploit their natural resources. For example, the preamble to the *Climate Change Convention* illustrates an aspect of development that is sure to come into conflict with the mitigation of climate change:

Recognizing that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development and that, in order for developing countries to progress towards that goal, their energy consumption will need to grow taking into account the possibilities for achieving greater energy efficiency and for controlling greenhouse gas emissions in general, including through the application of new technologies on terms which make such an application economically and socially beneficial; 122

We will see in Chapter 4 that the emerging principle of sustainable development attempts to address some of these concerns and introduces a temporal aspect to development. Unfortunately, sustainable development is still based on a capitalist market economy and fails to challenge the content of the right to development or the measure of its achievement. In chapter 5, I will suggest the substitution of development or sustainable development for what ecofeminists have called "sustainable livelihoods", which are defined as the fulfillment of basic human needs and based on the laws of Nature, not of the market.

¹²² Climate Convention, supra note 5, preamble.

IV. <u>Is Science Really the Best Solution to Global Environmental Problems?</u>

Science has an important role to play in identifying potential environmental threats.¹²³ This role is recognized by provisions encouraging research,¹²⁴ scientific cooperation¹²⁵ and the exchange of scientific information¹²⁶ between signatory states to environmental conventions. For example, Principle 9 of the *Rio Declaration* demonstrates the important role of science and technology in achieving sustainable development:

States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies. 127

Scientific findings are also useful for establishing limits of the Earth's capacity to regenerate and thus the extent to which humankind can influence it without any irreversible effects. For example, in the management of species such as fish, conventions rely on the best scientific

¹²³ See J. Marton-Lefèvre, "The Role of the Scientific Community in the Preparation of and Follow-up to UNCED" in B. I. Spector, G. I. Sjöstedt, I. W. Zartman, *Negotiating International Regimes: Lessons Learned from the United Nations Conference on Environment and Development* (London; Norwell, MA: Graham & Trotman/Martinus Nijhoff, 1994) 171 at 178; for an account of the role of science in the adoption of the *Climate Change Convention*, see S. Boehmer-Christiansen, "Scientific Uncertainty and Power Politics: The Framework Convention on Climate Change and the Role of Scientific Advice" in *ibid.*, 199.

¹²⁴ For example, see the following: *Biodiversity Convention, supra* note 5, art.12(a) & (b); *Convention for the Conservation of Salmon in the North Atlantic Ocean*, 2 March 1982, preamble; *Convention for the Conservation of Antarctic Seals*, 11 February 1971, 11 I.L.M. 251, preamble [hereinafter *Antarctic Seals Convention*]; *Forest Principles, supra* note 5, Principle 12(a).

¹²⁵ Biodiversity Convention, ibid. arts. 12(c) & 18; Climate Change Convention, supra note 5, art.4(g); 126 Climate Change Convention, ibid. art.4(h); Forest Principles, supra note 5, Principle 12(c);

¹²⁷ Rio Declaration, supra note 2; see also the preamble to the Climate Change Convention, ibid. which recognizes that "... steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas"; Agenda 21 dedicates a whole chapter to the role of science in the achievement of sustainable development and states that "... the sciences are increasingly being understood as an essential component in the search for feasible pathways towards sustainable development": Agenda 21: Programme of Action for Sustainable Development, 14 June 1992, UN Doc. A/CONF.151/26/Rev.1(Vol.1 and III), online: United Nations Environment Programme <gopher://gopher://unepphq.unep.org:70/00/un/unced/agenda21/>, Chapter 35 entitled "Science for Sustainable Development", paragraph 35.2 [hereinafter Agenda 21].

evidence in order to determine the "allowable catch". Finally, science is useful in pointing to different options towards finding solutions to environmental problems. 129

Sustainable technologies are also an essential element of global environmental protection. For example, article 16 of the *Biodiversity Convention* states that "... both access to and transfer of technology among Contracting Parties are essential elements for the attainment of the objectives of this Convention...".¹³⁰ The transfer of sustainable technologies to developing countries is thus included in recent provisions in environmental instruments.¹³¹

However, the unconditional reliance of the international community on science and technology for achieving global environmental protection fails to acknowledge the fact that these contributed to the environmental crisis in the first place. As can be seen from the following passage, Western science has in fact played a significant role in the global degradation of the environment:

The rapid advances in science and technology may have given us the internal combustion engine, air-conditioning, and space travel as well as unparalleled advances in medicine, but these advances have not been without cost. The hole in the ozone layer, marine pollution, habitat destruction and possibly (or perhaps even probably) global climate change, are the prices we have paid or are still to pay. The

and survival of humankind": see Marton-Lefèvre, supra note 123 at 178.

¹²⁸ For example, see Antarctic Seals Convention, supra note 124, art.3(2); International Convention for the Conservation of Atlantic Tunas, 14 May 1986, art.VIII(1)(a); Convention on the Conservation of Antarctic Marine Living Resources, 20 May 1980, 19 I.L.M 837, preamble; Vienna Convention, supra note 5, art.4(2).

129 For example, the preamble to the Climate Change Convention, supra note 5, provides the following:

Recognizing that steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas.

See also Rio Declaration, supra note 2, Principle 9. Julie Marton-Lefèvre goes further than this and holds that since UNCED, "[s]cience is now also looked upon as the provider of policy frameworks... for the development

¹³⁰ Biodiversity Convention, supra note 5, article 16(1).

¹³¹ For example, see *Biodiversity Convention*, *ibid.*, article 16; *Forest Principles*, *supra* note 5, principle 11; *Climate Convention*, *supra* note 5, articles 4(3) and 5. According to *Agenda 21*, environmentally sound technologies "... protect the environment, are less polluting, use all resources in a more sustainable manner, recycle more of their wastes and products, and handle residual wastes in a more acceptable manner than the technologies for which they were substitutes": see *Agenda 21*, *supra* note 127, Chapter 34 entitled "Transfer of Environmentally Sound Technology, Cooperation and Capacity-building", paragraph 34.1.

further paradox is of course that it is scientists who are also telling us about these new risks. 132

Moreover, international environmental law does not address the fact that science and technology have been used by Western society to marginalize women and to dominate Nature. This is because one of the main assumptions of the modern scientific methodology is that it confers objectivity on the knowledge that it accumulates. ¹³³ Ecofeminists have challenged science's separation of facts and values for justifying the destruction of values such as reverence for life and for perpetuating man's conquest over Nature. ¹³⁴ Carolyn Merchant sees the Scientific Revolution of the sixteenth century as the beginning of the Western patriarchal domination of Nature. Before the "Enlightenment" period, Nature was seen both as a living, nurturing mother and as wild, uncontrollable and capable of violence, storms and droughts. ¹³⁵ However, with the rise of Western science working at the service of capitalism, Nature was transformed into inert manipulable matter, ¹³⁶ suited to be exploited for human (male) needs and profit. Science has also served the purpose of economic development, which was framed in the language of science. ¹³⁷ Ecofeminist Vandana Shiva explains the relationship between science and "maldevelopment":

Maldevelopment is intellectually based on, and justified through, reductionist categories of scientific thought and action. Politically and economically each project which has fragmented nature and displaced women from productive work has been legitimised as 'scientific' by operationalising reductionist concepts to realise uniformity, centralisation and control. Development is thus the introduction of

¹³² Freestone & Hey, supra note 50 at 250.

¹³³ C. Zabinski, "Scientific Ecology and Ecological Feminism: The Potential for Dialogue" in Women,, Culture, supra note 19, 314-326 at 320. See D. Rocheleau, B. Thomas-Slayter and E. Wangari, "Gender and Environment: A Feminist Political Ecology Perspective" in D. Rocheleau, B. Thomas-Slayter and E. Wangari, eds., Feminist Political Ecology: Global Issues and Local Experiences (New York: Routledge, 1996) 3 at 9. For a feminist critique of science, see Sandra Harding, The Science Question in Feminism (Ithaca, NY: Cornell University Press, 1986); Feminism and Methodology: Social Science Issues (Bloomington: Indiana University Press, 1987); Whose Science? Whose Knowledge? Thinking from Women's Lives (Ithaca, NY: Cornell University Press, 1991).

¹³⁴ Ghosh, supra note 75 at 34.

¹³⁵ Earthcare, supra note 11 at 77 [hereinafter Earthcare].

¹³⁶ Ibid at 86; Ecofeminism, supra note 12 at 266-267.

¹³⁷ Braidotti et al, supra note 13 at 23.

'scientific agriculture', 'scientific animal husbandry', 'scientific water management' and so on. The reductionist and universalising tendencies of such 'science' become inherently violent and destructive in a world which is inherently interrelated and diverse. 138

The inherent paradox involved in considering science and technology transfer as an essential element of the solution to the environmental crisis and to the achievement of sustainable development is observed by Shiva:

The UNCED process, instead of challenging the sanctity of science and technology and rendering these structures more transparent, actually makes technology more opaque, more mystical and magical. The environmental crisis was precipitated by the view that nature was inadequate, and that technology could improve on it. Now it seems that the dominant view is to propose the disease as the medicine, and 'technology transfer' as become the magical cure for every ecological illness...

To question the omnipotence of science and technology's ability to solve ecological problems is an important step in the decolonization of the North. 139

Morever, the dependence of the international community on scientific findings before action is taken on an environmental problem becomes problematic when science cannot identify the causes and impacts of environmental problems with certainty. Scientific uncertainty has in fact often impeded international environmental law-making by justifying state inaction. For example, in the context of global climate change, although states expressed their concerns as to the issue of climate change and stated that scientific uncertainties should not impede the adoption of such a convention, the level of uncertainty did in the end influence how much countries were willing to do to alleviate the risks. One commentator attributes

¹³⁸ See Staying Alive, supra note 68.

¹³⁹ V. Shiva, "Decolonizing the North" in *Ecofeminism*, supra note 12, 264 at 273.

¹⁴⁰ Nanda, *supra* note 28 at 4. See also Boehmer-Christiansen, *supra* note 123 at 197.

¹⁴¹ O. McIntyre & T. Mosedale, "The Precautionary Principle as a Norm of Customary International Law" (1997) 2 J. Env. L. 221 at 221; see also L. E. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Agreements* (NY: Oxford University Press, 1994) at 16.

¹⁴² See M. J. Lalonde, "The Role of Risk Analysis in the 1992 Framework Convention on Climate Change" (1993) 15 Mich. J. Int'l L. 215 at 232. See also Boehmer-Christiansen, *supra* note 123 at 198.

the problem of scientific uncertainty to the inappropriateness of the scientific method to decision-making:

... while science makes the environment speak in the policy process it virtually never provides an articulation which has the necessary clarity and unambiguity for purposes of decision-making... The problem has been called one of "scientific uncertainty" but in reality it is one of the inappropriateness of scientific methods in the identification of most environmental problems. However, inappropriate or not, scientific research is the only acceptable means of identifying environmental issues for policy responses. 143

Additionally, the emphasis on science in the design of international environmental instruments often results in a reductionist, species or substance specific approach to environmental protection. Reductionism, which is central to Western science, is explained by Shiva as reducing "complex ecosystems to a single component, and a single component to a single function. It further allows the manipulation of the ecosystem in a manner that maximizes the single-function, single-component exploitation". Reductionism is reflected in certain environmental conventions in their focus on the management or conservation of a single species such as, for example, polar bears, Antarctic seals, the salmon in the North Atlantic ocean, and mollusks thus failing to take into account the ecosystem in which these species reside and the interdependence of the protected species with others. The regulation of pollution has also usually taken a specific substance approach, as for transboundary pollution. Aside from the fact that such an approach is not effective in the

¹⁴³ K. von Moltke,"The Relationship between Policy, Science, Technology, Economics and Law in the Implementation of the Precautionary Principle" in Freestone & Hey, *supra* note 50, 97 at 99.

¹⁴⁴ Staying Alive, supra note 68 at 23-24. See also Rocheleau et al, supra note 133 at 9.

¹⁴⁵ Agreement on Conservation of Polar Bears, 15 November 1973, 13 I.L.M. 13.

¹⁴⁶ Antarctic Seals Convention, supra note 124.

¹⁴⁷ Convention for the Conservation of Salmon in the North Atlantic Ocean, supra note 124.

¹⁴⁸ Agreement Concerning Measures for Protection of the Stocks of Deep-Sea Prawns, European Lobsters, Norway Lobsters and Crabs (as amended), 7 March 1952, UNTS No.2302, online:UNTS

http://www.un.org/Depts/Treaty/collection/series/ (date accessed: 14 October 1998).

¹⁴⁹ See Global Security, supra note 22 at 102.

¹⁵⁰ For example, the LRTAP, supra note 5 has adopted a protocol for each polluting substance it deals with such as nitrogen oxides, volatile organic compounds and sulphur emissions: see Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on the Reduction of Sulphur Emissions or their

protection of species or the prevention of pollution, it applies the Western mechanistic view of Nature that has served to dominate it. Ann Ticker explains:

Ecologists are critical of environmental management in general. They claim that management techniques grow out of the reductionist methodology of modern science that cannot cope with complex issues whose interdependencies are barely understood. Such methodologies, evident in the use of computer models, perpetuate the dominating, instrumental view of nature that attempts to render it more serviceable for human needs and that leaves hierarchies- feminists would include gender hierarchies- intact. A mechanistic view of nature leads to the assumption that it can be tinkered with and improved for human purposes...¹⁵¹

Most environmental conventions function on a "list" basis: only the species or substances listed in the annexes to the conventions are to be protected, and only the activities that have been identified as harmful are listed and prohibited. One of the problems with this approach is that to add a species to the protection list or an activity or substance to the prohibited list, international consensus must be reached, with the danger of the lowest common denominator being adopted. Also, the decisions made usually reflect the balance of certain interests, not necessarily the interests of the environment or the species concerned. On the other hand, if "reverse listing" were adopted, it would set out permitted activities, all other activities being prohibited until it was shown that they presented acceptable risks to the

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Transboundary Fluxes by at least 30%, 24 September 1984, 27 I.L.M. 707; Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes , 31 October 1988, 28 I.L.M. 214; Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emmissions of Volatile Organic Compounds or Their Transboundary Fluxes , 18 November 1991, (1992) 31 I.L.M. 568; Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Further Reduction of Sulphur Emissions , 14 June 1994, 33 I.L.M. 1540.

¹⁵¹ Global Security, supra note 68 at 121. Some conventions have taken an ecosystem approach to environmental protection. For example, see the Agreement between the United States and Canada on Great Lakes Water Quality, Canada and the United States, 22 November 1978, 30 U.S.T. 1383, as amended by the Protocol Respecting Great Lakes Water Quality, 16 October 1987, T.I.A.S. No. 10,798.

¹⁵² Freestone & Hey, supra note 50 at 265.

¹⁵³ E. Hey, "The Precautionary Concept in Environmental Policy and Law: Institutionalizing Caution" (1992) 4 Geo. Int'l Env. L. Rev. 303 at 312-313; see also J. Cameron & J. Abouchar, "The Status of the Precautionary Principle in International Law" in Freestone & Hey eds., *supra* note 50 29 at 49-50.

environment.¹⁵⁴ As we will see in Chapter 4, this approach reflects a more precautionary approach to environmental protection.¹⁵⁵

Above all, the acceptance of Western science as the only valid form of knowledge for the purposes of international environmental law making ignores the valuable insights of women and local communities when it comes to the environmental management of ecosystems, with the result of pushing them to the margins. Vandana Shiva argues that women in subsistence economies have a holistic and ecological knowledge of Nature's cycles and processes because they depend on it for the production of food for their families and communities. Women every day deal with complex systems of home, community and local environment, whereas specialized Western science usually focuses on only one of these domains.

¹⁵⁴ Abouchar and Cameron give an example of "precautionary listing" in the context of species protection. A resolution adopted by the parties to CITES provides that for species currently threatened with extinction or potentially threatened, parties who wish to downlist species must show that the species will not be traded or endangered by the change in the list: See Cameron & Abouchar, *ibid.* at 49-50. The Resolution alluded to is *Resolution on the Protection of the Global Climate for Present and Future Generations of Mankind*, 27 January 1989, UN GAOR, UN Doc.A/RES/43/53.

¹⁵⁵ See Chapter 4, below.

¹⁵⁶ J. Seager, "'Hysterical Housewives' and Other Mad Women: Grassroots Environmental Organizing in the United States" in Rocheleau et al, *supra* note 133, 271 at 281. *Agenda 21* provides for the "linking" (as opposed to the "integration") of science and indigenous and local knowledge:

Countries, with the assistance of international organizations, where required, should:

⁽h) Develop methods to link the findings of the established sciences with the indigenous knowledge of different cultures. The methods should be tested using pilot studies. They should be developed at the local level and should concentrate on the links between the traditional knowledge of indigenous groups and corresponding, current "advanced science", with particular focus on disseminating and applying the results to environmental protection and sustainable development.

The double reference to Western science as "established" or "advanced" in comparison with indigenous knowledge has the effect of marginalizing the latter because it is "less" than the former. Moreover, the indigenous knowledge needs to be measured against Western scientific standards by "pilot studies", seemingly questioning its validity: *Agenda 21*, *supra* note 127, paragraph 35.7(h).

¹⁵⁷ Staying Alive, supra note 68 at 24.

¹⁵⁸ Rocheleau et al, supra note 133 at 8. The authors explain that the conflict between women and specialized sciences revolves around the separation of formal (i.e. scientific) and informal (i.e. practice) ways of knowing.

Some instruments acknowledge women's important role in achieving sustainable development. For example, Principle 20 of the Rio Declaration states that "women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development". 159 Agenda 21 dedicates a whole chapter to the role of women in sustainable development. However, there is no mechanism to ensure that women's intimate knowledge of their environment is integrated into environmental conventions. Because women's knowledge is not considered to be "scientific", it is usually ignored in the design of environmental and developmental policies and the potential benefits that could be derived from this knowledge for the environment and local communities are never realized. 161

Finally, international environmental law's emphasis on science and technology as holding the key to the environmental crisis is an irresponsible way to deal with environmental issues because it avoids implementing the real solution to global environmental problems: a fundamental change in the relationship between humans and Nature. Some human problems do not have an already made or ready-to-be-discovered technical solution. As we saw above, science is essential in identifying certain environmental problems and in sounding the alarm when these should be dealt with by decision-makers. Science can also play a role in indicating the path to the resolution of these environmental problems and in monitoring progress. However, scientists are not and should not be decisionmakers.

¹⁵⁹ Rio Declaration, supra note 2, Principle 20. See also Biodiversity Convention, supra note 5, preamble; Forest Principles, supra note 5, principle 5(b). These instruments also acknowledge the special knowledge of local ecosystems and their sustainable management by indigenous peoples: for example, see Rio Declaration, ibid., Principle 22; Agenda 21, supra note 127, chapter 26; Forest Principles, ibid., Principle 2(d)

¹⁶⁰ Agenda 21, ibid., Chapter 24. On the other hand, the "Science" chapter of Agenda 21 makes no mention of women's specific knowledge of their environment: see Agenda 21, ibid., Chapter 35.

¹⁶¹ See *Global Security, supra* note 22 at 125.

¹⁶² Nanda, supra note 28 at 5.

¹⁶³ See above.

¹⁶⁴ However, Boehmer-Christiansen warns against too much involvement of scientists in policy-making:

The institutions searching for a new knowledge must protect their own relevance and their (always fragile) global organization, growth, and status. They justify claims to resources by searching for

"[w]hile science can help decisionmakers, the decisions made must be essentially ethical in nature". 165 Until we change our view of humankind as separate and above Nature and as entitled to exploit it for our own ends, science will continue to be a potential tool of exploitation. However, if an ethical change in our view of Nature takes place, science has the potential of playing a significant role in global environmental protection.

In summary, we have shown that the main features of international environmental law reflect the dominant social paradigm and represent an androcentric view of the relationship between human and non-human Nature. However, challenging the androcentrism of international environmental law is not an easy task because, as we will see in the following section, it is considered to be an objective and universally applicable body of law. However, as we will see, international law in fact reflects the interests of the male ruling elites and has served to oppress Nature, women and other subjects of domination.

V. International Law as a Tool of Oppression

a) International law as a set of objective norms

International law purports to be a set of objective, gender-neutral and universally applicable norms, created by equal and sovereign states. According to conventional wisdom, international law is created by the consent of states, 167 which are considered to be

environmental threats, by weakening them, or by promising redress. It is therefore difficult to base policy on science; science is a moving target with few loyalties.

See Boehmer-Christiansen, supra note 123 at 198.

¹⁶⁵ *Ibid.* See also Jiggins, *supra* note * at 9.

^{166 &}quot;Feminist Approaches", supra note 35 at 644; G. Palmer, "The Earth Summit: What Went Wrong at Rio?" (1992) 70 Washington U.L.Q. 1005 at 1015.

¹⁶⁷ C.C. Joyner & G.E. Little, "It's Not Nice to Fool Mother Nature! The Mystique of Feminist Approaches to International Environmental Law" (1996) B.U. Int'l L.J. 223.

autonomous actors functioning independently of human control.¹⁶⁸ In fact, international law is created by men, who "founded, developed, and interpreted the theoretical foundations and historical tradition of international law"¹⁶⁹ and represents the interests of the male elites of each state¹⁷⁰, as we can see from the following:

The structure of the international legal order reflects a male perspective and ensures its continued dominance. The primary subjects of international law are states and, increasingly, international organizations... Power structures within governments are overwhelmingly masculine: women have significant positions of power in very few states, and in those where they do, their numbers are minuscule. Women are either unrepresented or underrepresented in the national and global decision-making processes.

States are patriarchal structures not only because they exclude women from elite positions and decision-making roles, but also because they are based on the concentration of power in, and control by, an elite and the domestic legitimation of a monopoly over the use of force to maintain that control. This foundation is reinforced by international legal principles of sovereign equality, political independence and territorial integrity and the legitimation of force to defend those attributes.¹⁷¹

The statement equally applies to international environmental law, which is also largely negotiated and adopted by men through an inherently male-biased international legal system.¹⁷² Despite the inclusion in the United Nations Charter of a gender equality provision,¹⁷³ women represent only a minuscule proportion of decision-makers and policy planners in United Nations organizations and national governments.¹⁷⁴ When they do find

¹⁶⁸ Ibid at 244.

¹⁶⁹ *Ibid* at 243-244; "Feminist Approaches", *supra* note 35 at 614-615.

^{170 &}quot;Feminist Approaches", *ibid* at 615.

¹⁷¹ *Ibid* at 621-622.

¹⁷² Joyner & Little, *supra* note 167 at 229 & 234; Knop, *supra* note 33 at 294.

¹⁷³ Article 8 of the UN Charter provides that:

The UN shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

The wording of the provision is however careful not to impose on the UN an obligation to have both sexes equally represented within in its organs.

¹⁷⁴ For example, only 24 women have been elected heads of state or government in this century; women hold 10.3% of the seats in the world's parliaments; of the 185 highest-ranking diplomats to the UN, 8 are women; the percentage of female cabinet ministers in the world was 6.2% in 1996: see United Nations Department of Public Information, "Women at a Glance", *supra* note 38.

themselves in decision-making positions, women's negotiating styles tend to be measured against already established male demeanor and strategies.¹⁷⁵ Since 1985, there have been some marginal improvements in the representation of women in the United Nations, but it has been estimated that at the rate of present change, it will take almost four more decades (until 2021) for women to hold 50% of the professional positions.¹⁷⁶ The significance of the small number of women in international organizations is that "[1]ong-term domination of all bodies wielding political power, nationally and internationally means that issues traditionally of concern to men become seen as general human concerns, while women's concerns are relegated to a special, limited category."¹⁷⁷

The approach taken by the United Nations to address women's concerns has been to create specialized agencies¹⁷⁸ dealing with women's concerns and to adopt special conventions such as the *Convention on the Elimination of Discrimination against Women* ¹⁷⁹. However, the creation of "special" instruments and agencies for women has had the effect of marginalizing their interests and concerns instead of mainstreaming them. ¹⁸⁰ Following the Fourth World Conference on Women, various organisations and intergovernmental bodies of the United Nations recognized these problems and designed mandates for gender mainstreaming. ¹⁸¹

¹⁷⁵ Knop, *supra* note 33 at 305.

^{176 &}quot;Feminist Approaches", supra note 35 at 623.

¹⁷⁷ Ibid at 625.

¹⁷⁸ Such agencies include the Commission on the Status of Women (CSW); the Committee on the Elimination of Discrimination against Women (CEDAW); the Interagency Committee on Women and Gender Equality; the Special Adviser on Gender Issues and the Division for the Advancement of Women; The United Nations Development Fund for Women (UNIFEM); and the International Research and Training Institute for the Advancement of Women (INSTRAW): see United Nations Department of Public Information, "Women: Global Gender Agenda and the United Nations", online: UN Dept of Information

http://www.un.org/ecosocdev/geninfo/women/gender.htm (date accessed: 23 April 1998).

¹⁷⁹ 1 March 1980, 19 I.L.M. 33.

¹⁸⁰ H. Charlesworth, "Alienating Oscar? Feminist Analysis of International Law" in D. G. Dallmeyer, ed., *Reconceiving Reality: Women and International Law* (Washington, D.C.: American Society of International Law, 1993) 1 at 6 [hereinafter "Alienating Oscar"].

¹⁸¹ In July 1997, ECOSOC passed agreed conclusions 1997/2 on gender mainstreaming and the Secretary-General's reform proposals submitted to the General Assembly in 1997 call for gender mainstreaming in all policies and programmes: see Commission on the Status of Women, Follow-up to the Fourth World Conference on Women: Review of mainstreaming in organisations of the UN system, UN ESCOR, 42nd Sess.,

In the environmental context, the environmental instruments adopted at UNCED have included "special" provisions acknowledging the role that women can play in environmental protection and sustainable development and the need to include them in policy-making. For example, Principle 20 of the *Rio Declaration* states that "[w]omen have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development". 182 Agenda 21 dedicates a whole chapter to women as "major groups" in the achievement of sustainable development. 183 Moreover, this chapter acknowledges the effects of environmental degradation in developing countries on women and children in rural areas and encourages the building up of gender-sensitive databases on the impacts of environmental degradation on them. Yet, environmental treaties have not recognized that the effects of environmental degradation are different for men and women. 184

By including "special" provisions like Principle 20, the international community is satisfied that it has addressed women's concerns. However, since these provisions are usually included in non-binding instruments or in the preamble of binding conventions, they are often weighed against other binding provisions which do not reflect women's perspectives.

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U.N.Doc.E/CN.6/1998/3 (1998), paragraph 20 [hereinafter Follow-up]. The UN General Assembly passsed resolution 50/104 on December 20, 1997 which urged governments to develop methodologies for incorporating a gender perspective into all aspects of policy-making: see Women in Development, supra note 19, paragraph 1. Gender mainstreaming has been defined by ECOSOC as "... the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and society spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality": Economic and Social Council, Report of the Economic and Social Council for 1997: Agreed Conclusions 1997/2, ECOSOC, 1997, UN Doc.A/52/3, online: Division for the Advancement of Women http://www.un.org/womenwatch/daw/followup/main.htm (date accessed: 28 September 1998).

182 Rio Declaration, supra note 2. See also Biodiversity Convention, supra note 5, preamble; Forest Principles, supra note 5, Principle 5(b).

¹⁸³ Agenda 21, supra note 127, Chapter 24.

¹⁸⁴ *Ibid.*, paragraphs 24.6 and 24.8. For example, women are particularly vulnerable to environmental toxins and thus differently affected by pollution than men. The *Bruntdland Report* does not touch on this issue: World Commission on Environment and Development (Brundtland Report), *Our Common Future* (Oxford; New York: Oxford University Press, 1987). See *Global Security*, *supra* note 22 at 116.

The result is that giving women a meaningful role in achieving sustainable development is not considered a priority. Reports on national plans for the follow-up to UNCED and the implementation of *Agenda 21*, including Chapter 24, have indicated plans for the advancement of women have been designed but not implemented at both the international and national levels. ¹⁸⁵ In this way, international environmental law silences women's voices but nevertheless affects their lives. The United Nations Environment Program (UNEP) recognized in 1997 that traditional approaches of creating women's special agencies and programmes have caused problems and conflicts and certain areas and adjusted its policies to ensure that a gender perspective is reflected in all policy design. ¹⁸⁶ However, The meager success of Chapter 24 of Agenda 21 on the role of women in the achievement of sustainable development might be a relevant indicator in the prediction of success for gender mainstreaming policies.

Thus the idea that international law is created by gender-free and abstract entities has the effect of making women invisible in the eyes of international law, ¹⁸⁷ which is considered to be objective and universally applicable. ¹⁸⁸ Because states are the primary subjects of international law, an underlying assumption of international law is that its impact falls on the state and not directly on the individuals who make up the state. ¹⁸⁹ Where international law applies directly to individuals, as in human rights conventions, it is assumed to be universally applicable and does not account for the fact that it affects men and women differently; it thus silences women's particular experiences. ¹⁹⁰ Instead, the global oppression of women and the

185 Commission on Sustainable Development, Report of the Secretary-General on the Overall Progress Achieved since the United Nations Conference on Environment and Development, UN CSD, 5th Sess., U.N.Doc.E/CN.17/1997/2/Add.22 (1997), paragraph 9.

¹⁸⁶ *Ibid.* paragraph 26.

^{187 &}quot;Feminist Approaches", supra note 35 at 625; Knop, supra note 33 at 295.

^{188 &}quot;Feminist Approaches", *ibid*. at 613. The authors explain that "[i]nternational legal structures and principles masquerade as 'human' - universally applicable sets of standards. They are more accurately described as international men's law": *ibid* at 644.

^{189 &}quot;Feminist Approaches", *ibid.* at 625.

¹⁹⁰ Ibid at 625; "Public/Private", supra note * at 203.

failure of international law to adequately address it should make us question international law's basic assumption.¹⁹¹

The universality of international law has been challenged by developing states, which have argued that it supports western values and interests.¹⁹² Some analogies have been made between the plight of developing countries and that of women because they both have to be "trained" to fit the developed/male worlds, but have both resisted assimilation and argued for radical change emphasizing cooperation.¹⁹³ However, as we saw above,¹⁹⁴ developing states' criticisms have ignored feminist concerns and perspectives; the power structures of many of these countries in fact reproduce the exclusion of women found in western societies.¹⁹⁵

¹⁹¹ "Alienating Oscar", *supra* note 180 at 7. Hilary Charlesworth adds:

Patriarchy is not a temporary imperfection in an otherwise adequate system; it is part of the structure of the system and is constantly reinforced by it.

^{192 &}quot;Feminist Approaches", supra note 35 at 616

¹⁹³ *Ibid* at 618.

¹⁹⁴ See discussion of the right to development, above.

^{195 &}quot;Feminist Approaches", supra note 35 at 618.

b) Public/Private distinction in international law

Furthermore, Hilary Charlesworth argues that international law reproduces the public/private dichotomy found in domestic legal systems. She maintains that the distinction between the public and private spheres is an ideological construct that is a dominant feature of Western society and serves to exclude women by relegating them to the "private sphere". One of the functions of the public/private dichotomy in domestic law is to distinguish between those areas that are appropriate for legal regulation ("public") and those that are not ("private"). The distinction therefore results in silencing of women's voices and disregarding their concerns, such as domestic violence, because these are found within the private sphere. The non-regulation of the private sphere permits "self-regulation" and ultimately perpetuates male dominance. 198

According to Charlesworth, the public/private dichotomy is reproduced in international law in two ways. First, "public" international law is said to regulate the relations between states and "private" international law to govern the rules of conflict between national legal systems. Secondly, international law distinguishes between matters in the "private" sphere, which are seen as falling within each state's jurisdiction and cannot be regulated by the international community, and matters in the "public" sphere, which are of international concern. As a result of this last public/private distinction in international law, women are

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^{196 &}quot;Public/Private", *supra* note 65 at 194; see also "Feminist Approaches", *supra* note 35 at 629. The authors also point out the following:

The language of the public/private distinction is built into the language of the law itself: law lays claim to rationality, culture, power, objectivity - all terms associated with the domestic, private, female sphere: feeling, emotion, passivity, subjectivity. (ibid at 627)

^{197 &}quot;Public/Private", ibid at 192.

^{198 &}quot;Alienating Oscar", supra note 180 at 10-11.

^{199 &}quot;Public/Private", supra note 65 at 194; "Feminist Approaches", supra note 35 at 625.

²⁰⁰ "Public/Private', *ibid* at 194; "Feminist Approaches", *ibid*. at 625.

invisible because as individual "citizens" they fall in the "private" sphere of domestic jurisdiction of individual states.²⁰¹ In turn, states fail to address women's concerns because they fall within the private sphere of national law.²⁰² Furthermore, the public/private distinction makes it difficult for the international community to regulate the protection of natural resources found within state boundaries since they are not usually considered a matter of international concern unless their depletion has global repercussions. International law is also impeded by this distinction from regulating the activities of individuals or corporations under individual states' jurisdiction, even if these activities have adverse impacts on the environment of another state or on the global environment.

As we will see in Chapter 4, the emerging principle of "common concern of humankind" blurs the distinction between the public and the private in the context of the global protection of the environment.

VI. Conclusions

In this chapter, I have shown that the main features of international environmental law, such as states' sovereign right to exploit their resources, states' right to development, as well as the emphasis on science and technology for providing the solutions to environmental problems, are based in the dominant social paradigm. International environmental law will thus unlikely ever achieve effective environmental protection because the patriarchal institutions of which the dominant social paradigm is comprised, including the capitalist economic system, Western science and the dominant development model have and continue to serve to dominate Nature. In parallel, I have also demonstrated that the same dominant social paradigm has and continues to oppress and marginalize women and the poor. Environmental

²⁰¹ Knop, supra note 33 at 295

²⁰² *Ibid.*

degradation in developing countries has detrimental effects on the lives of women and children, yet international environmental law does not address these issues directly, probably because the dominant social paradigm continues to marginalize them. In Chapter 4,we will see that emerging principles of international environmental law attempt to address some of the concerns raised in this chapter.

Chapter 4 - New Developments in International

Environmental Law

Humans are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Rio Declaration, Principle 1.

I. Introduction

The main features of international environmental law, such as Principle 21, states' right to development, and its emphasis on science and technology, are based in the dominant social paradigm. Moreover, the gendered state system perpetuates the dominant social paradigm as the norm and marginalizes alternative perspectives such as those of women and the poor in developing countries. For this reason, international environmental law reflects an androcentric approach to environmental protection, which ironically impedes it from ever achieving effective environmental protection, and results in the marginalization of all "others": women, people of colour, the poor, people in developing countries and Nature.

More recently, especially since the 1992 United Nations Conference on Environment and Development (UNCED), there has been an attempt in international environmental law to address some of the concerns raised in Chapter 3 about the dominant social paradigm and to take a more ecological approach to global environmental protection. For example, international environmental law increasingly deals with global environmental problems

¹ See Chapter 3, above.

rather than strictly with transboundary pollution;² the conservation of entire ecosystems rather than enumerated species;³ and it promotes preventive or precautionary measures instead of liability for transboundary harm.⁴

Emerging principles such as sustainable development, intra/intergenerational equity, the precautionary principle and common concern of humankind suggest that international environmental law "may have begun to circumscribe environmentally appropriate conduct with a view to the carrying capacity of the environment". Arguably, these emerging principles address some of the concerns raised in the preceding chapter. However, they fail to challenge the dominant social paradigm and androcentric approach to environmental protection reflected in international environmental law. The first principle stated in the *Rio Declaration* and quoted at the beginning of this chapter is a perfect illustration of the androcentric view of Man above Nature which still grounds international environmental law. As a result, these new principles of international environmental law are still lacking in addressing environmental degradation and ensuring the conservation of Nature.

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² See E. Brown-Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order" (1993) 81 Geo. L.J. 675 at 679-680 [hereinafter "Contemporary Issues"]. Some examples of this phenomenon include the *Convention on Biological Diversity*, 5 June 1992, 31 I.L.M. 818 [hereinafter *Biodiversity Convention*], the *United Nations Convention to Combat Desertification in those Countries Experimenting Serious Drought and/or Desertification, Particularly in Africa*, 12 September 1994, 33 I.L.M. 1328 [hereinafter the *Desertification Convention*] and the *United Nations Framework Convention on Climate Change*, 9 May 1992, 31 I.L.M. 849 [hereinafter *Climate Change Convention*].

³ See "Contemporary Issues", *ibid.* at 680. For example, see the *Convention on Wetlands of International Importance Especially as Waterfowl Habitat*, 2 February 1971, 11 I.L.M. 963; *Agreement between the United States and Canada on Great Lakes Water Quality*, Canada and the United States, 22 November 1978, 30 U.S.T. 1383, 11 I.L.M. 694, as amended by the *Protocol Respecting Great Lakes Water Quality*, 16 October 1987, T.I.A.S. No. 10,798; *Agenda 21: Programme of Action for Sustainable Development*, Report of the United Nations Conference on Environment and Development, U.N.Doc.A/CONF.151/26/Rev.1, paragraph 18.8 [hereinafter *Agenda 21*].

⁴ J. L. Dunoff, "From Green to Global: Toward the Transformation of International Environmental Law" (1995) 19 Harv. Envtl. L.Rev. 241 at 247-248.

⁵ J. Brunnée & S. Toope, "Environmental Security and Freshwater Resources: A Case for International Ecosystem Law" (1994) 5 Y.B.I.E.L. 41 at 66 [hereinafter "Ecosystem Law"].

⁶ I.Porras, "The Rio Declaration: A New Basis for International Cooperation" in P. Sands, ed., *Greening International Law* (London: Earthscan Publications ltd, 1993) 20 at 24. See also the preamble to the *Desertification Convention*, *supra* note 2, which affirms "... that human beings in affected or threatened areas are at the centre of concerns to combat desertification and mitigate the effects of drought."

II. Sustainable Development

The dominant development model outlined in Chapter 3 has been questioned since the recognition by the international community that extending the Northern living standards to the global population is not only impossible, but will undoubtedly lead to the destruction of the planet. In 1987, the *Brundtland Report* pointed out that ill-conceived development programmes lead to environmental degradation in the South. Since then, the international community has acknowledged the close relationship between environment, development and sustainability, which was specifically addressed at the United Nations Conference on Environment and Development (UNCED) in 1992. Many authors in fact agree that UNCED marked the beginning of a new phase of international environmental law in which environment and economic issues are joined under the rubric of sustainable development, now an established principle of international environmental law and policy.

⁷ R. Braidotti, E.Charkiewicz, S. Haüsler & S. Wieringa, *Women, The Environment and Sustainable Development: Towards a Theoretical Synthesis* (London: Zed Books, in association with INSTRAW, 1994) at 24-25.

⁸ World Commission on Environment and Development, *Our Common Future* (Oxford; New York: Oxford University Press, 1987) [hereinafter the *Brundtland Report*].

⁹ Braidotti et al, supra note 7 at 24-25.

[&]quot;Contemporary Issues", *supra* note 2 at 679. See also M.P. Williams Silveira, "The Rio Process: Marriage of Environment and Development" in W. Lang, ed., *Sustainable Development and International Law* (London: Graham & Trotman, 1995), 9 at 10. Philippe Sands argues that the integration of environmental concerns into development programmes dates back to before UNCED or even the Stockholm Conference of 1972, to the first United Nations conference on conservation which was held in 1949, but he acknowledges that only in the past decade has the relationship between the two been fully recognized by the international community: see P. Sands, "International Law in the Field of Sustainable Development: Emerging Legal Principles" in W. Lang, ed., *ibid*, 53 at 61. For a history of the integration of environment and development in international environmental policy, see A. S. Timoshenko, "From Stockholm to Rio: the Institutionalization of Sustainable Development", in W.Lang ed., *ibid*, 143-160. For example, see Principle 4 of the *Rio Declaration on Environment and Development*, 13 June 1992, U.N.Doc.A/CONF.151/5/Rev.1, 31 I.L.M. 882 [hereinafter *Rio Declaration*].

In a separate opinion in the judgment of International Court of Justice in the Case Concerning the Cabcikovo-Nagymaros Project (Hungary/Slovakia), [1997] I.C.J. Rep.92, Vice-President Weeramantry discusses the principle of sustainable development, which is held to be "an integral part of modern international law", both by its inclusion in numerous legal instruments and by a general recognition of the concept by the international community. See also Brunnée & Toope, supra note 5 at 66. Because sustainable development has been so quickly integrated into mainstream discourse of international environmental law, Betty Wells and Danielle Wirth question its ability to put an end to the oppression of nature, indigenous cultures, women and children:

The *Brundtland Report* defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their needs", 12 thus including temporal and equitable concerns. Sustainable development therefore attempts to remedy the short-term, profit-maximization exploitation of natural resources taking place in the name of economic development. 13 It advocates the sustainable use and management of natural resources, which entails states' acceptance of limits on their use and exploitation of these resources for the benefit of future generations. 14 As we saw in Chapter 3, *Principle 21* 15 and similar provisions affirm states' sovereign right to use and exploit the natural resources found on their territories without any outside interference. The only limit on this right, which is found in the second part of *Principle 21*, is the corresponding duty of states to ensure that they do not cause damage to the environment of other states. Sustainability in the use of natural resources introduces a temporal limit to states' sovereign right to exploit these resources: the consideration of the needs of future generations. 16

Sustainable development also means the integration of environmental considerations into economic and developmental decision-making and of developmental considerations in the implementation of environmental objectives.¹⁷ Principle 4 of the *Rio Declaration* provides that "[i]n order to achieve sustainable development, environmental protection shall constitute

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See B.Wells & D. Wirth, "Remediating Development through an Ecofeminist Lens" in K.J. Warren, ed., *Ecofeminism: Women, Culture, Nature* (Bloomington; Indianapolis: Indiana University Press, 1997), 300 at 301 [hereinafter *Women, Culture*].

¹² Brundtland Report, supra note 8.

Although developed states are not without blame in this area!

¹⁴ Sands, *supra* note 10 at 59.

¹⁵ Principle 21, *Stockholm Declaration on the Human Environment*, 16 June 1972, U.N.Doc.A/CONF.48/14, reprinted in (1972) 11 I.L.M. 1416 [hereinafter *Stockholm Declaration*]. See Chapter 3, above, for a discussion of Principle 21.

¹⁶ Sands, supra note 10 at 61.

¹⁷ Ibid.

an integral part of the development process and cannot be considered in isolation from it". ¹⁸ The preamble to the *Climate Change Convention* states that ""responses to climate change should be coordinated with social and economic development in an integrated manner...". Article 3 of the same convention, which provides for the right to development of developing countries, reiterates that economic development is essential for adopting measures to address climate change. ¹⁹

The integration of environmental considerations into development is a step in the right direction, considering the devastating effects that past development programmes have had on the environment in the South, as we saw in Chapter 3. Sustainable development thus ensures that development in the South will not lead to irreversible environmental degradation. Moreover, the integration of environment and development addresses developing countries' main concern of development, but without jeopardizing the environment. The integration also aims at protecting the environment, without stifling the right of people in developing countries to a higher standard of living.

Under present international environmental law, the achievement of sustainable development is dependent on economic growth in a global market economy.²⁰ For example, *Agenda 21* devotes an entire chapter to the importance of economic instruments to achieve sustainable development in developing countries,²¹ and recommends the following:

principle 13(d).

19 Climate Change Convention, supra note 2, preamble & art. 3(4). See also article 4(1)(f) which obliges states to take climate change into account in their relevant social, economic and environmental policies.

¹⁸ Rio Declaration, supra note 10, Principle 4. See also Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, 13 June 1992, U.N.Doc.A/CONF.48/14, 31 1.L.M. 882 [hereinafter Forest Principles], principle 13(d).

²⁰ M. Mies & V. Shiva, *Ecofeminism* (London: Zed Books, 1993)at 269 [hereinafter *Ecofeminism*]. Principle 3(c) of the *Forest Principles*, *supra* note *, provides that "[a]ll aspects of environmental protection and social and economic development as they relate to forests and forest lands should be integrated and comprehensive." *Agenda 21, supra* note 3, chapter 2.

Environment and trade policies should be mutually supportive. An open, multilateral trading system makes possible a more efficient allocation and use of resources and thereby contributes to an increase in production and incomes and to lessening demands on the environment. It thus provides additional resources needed for economic growth and development and improved environmental protection. A sound environment, on the other hand, provides the ecological and other resources needed to sustain growth and underpin a continuing expansion of trade. An open multilateral trading system, supported by the adoption of sound environmental policies, would have a positive impact on the environment and contribute to sustainable development.

Because it integrates environmental and economic considerations within a global market economy, some caution that sustainable development has come to signify "sustained economic growth", thus jeopardizing environmental protection. Marc Pallemaerts warns that the integration of environment and economics suggests that there is no longer a tension between economic development and environmental protection, but rather that the former is now considered a condition for the latter.²² Principle 12 of the *Rio Declaration* demonstrates the danger of integration:

States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.²³ [emphasis added]

Understood in this fashion, sustainable development thus fails to question the assumption that continuous economic growth will eventually lead to the destruction of the planet. As Lester Brown explains, "[j]ust as a continuously growing cancer eventually destroys its life-

²² M. Pallemaerts, "International Environmental Law From Stockholm to Rio: Back to the Future?" in P. Sands, ed., *Greening International Law* (London: Earthscan Publications, 1993), 1 at 17.

²³ Rio Declaration, supra note 10, Principle 12. See also Climate Change Convention, supra note 2, article 3(5); Forest Principles, supra note 18, principles 7(a) and 13(a).

support systems by destroying its host, a continuously expanding global economy is slowly destroying its host- the Earth's ecosystem". Amarc Pallemaerts questions the motive behind the adoption of sustainable development as a principle of international environmental law. He suspects that mainstream sustainable development's emphasis on trade, financial resources and other economic concerns is nothing more than the desire of development and growth ideologues to change their tune in order to be more "green". In this commentator's view, provisions such as Principle 12 have the effect of "smothering international environmental law and policy by merging it, as it were, with international economic law and development law". According to him, international environmental law is no longer a discipline of its own, and has instead become a "mere appendage" to the law of sustainable development, subordinated to economic rationality and jeopardizing its role in the global protection of the environment.

Although sustainable development imposes restraints on states' use of natural resources, it does so only insofar as development activities would undermine the ecological base for further development in the future.²⁸ Sustainable development, as now used in international environmental policy, appears not primarily concerned with environmental protection, but rather with the sustainable exploitation of natural resources.²⁹ Seen in this light, although sustainable development advocates a sustainable use of resources, it remains utilitarian in outlook.³⁰

²⁴ L. R. Brown, "The Future of Growth" in Worldwatch Institute, *State of the World 1998* (NY;London: W.W. Norton & Company, 1998) at 4.

²⁵ Pallemaerts, *supra* note 22 at 14.

²⁶ *Ibid.* at 17.

²⁷ *Ibid.* at 19.

²⁸, G. Handl, "Sustainable Development: General Rules versus Specific Obligations" in W. Lang, ed., *supra* note 10, 35 at 38 [hereinafter "Rules and Obligations"]; see also G. Handl, "Environmental Security and Global Change: The Challenge to International Law" (1990) 1 Y.B.I.E.L. 3 at 24-25 [hereinafter "Environmental Security"].

²⁹ Brunnée & Toope, *supra* note 5 at 67. The authors state that "...ecological criteria are used in a utilitarian fashion to facilitate trade-offs between human priorities, and not to ensure environmental health per se".

³⁰ *Ibid.* at 70; "Rules and Obligations", supra note 28 at 38.

From this we can see that the principle of sustainable development still reflects an androcentric view of Nature, as did its predecessor, the dominant development model.³¹ Principle 1 of the *Rio Declaration* states unequivocally that "[h]uman beings are at the center of concerns for sustainable development".³² Sustainable development, as presently defined, does not challenge the view that Nature constitutes a set of "resources" to serve human and economic ends,³³ but instead perpetuates this view. However, as long as Nature is seen in this androcentric way, sustainable development will come in conflict with effective environmental protection. Günther Handl convincingly argues that "unless 'sustainable development' is deemed to contain also an essential preservationist aspect, and not just to reflect an instrumentalist, development-oriented view of environmental resources, true sustainability will remain an elusive goal".³⁴

In Chapter 3, I pointed out that development under the dominant development model has further impoverished the poor in developing countries, especially women, by replacing sustainable subsistence lifestyles with cash-crop agriculture and massive exploitation of natural resources. According to the dominant development model, women's unpaid labour is not considered as productive and is not incorporated into economic indicators, nor is the depletion of natural resources taken into account. Development, based on the dominant development model and patriarchal economic indicators such as the GNP, has thus served to exploit Nature and women in the service of men and the ruling elites of developing countries. Unfortunately, sustainable development does not challenge the dominant development model

³¹ Brunnée & Toope, *ibid.* at 70; "Rules and Obligations", *ibid.* at 38.

³² Rio Declaration, supra note 10, Principle 1.

³³ C. Merchant, *Earthcare: Women and the Environment* (New York: Routledge, 1996) at 214 [hereinafter *Earthcare*]. For example, the preamble to the *Forest Principles* provides that "[f]orests are essential to economic development": *Forest Principles*, supra note 18, preamble.

³⁴ "Rules and Obligations", *supra* note 28, footnote reference #16 at 38.

³⁵ See Chapter 3, above.

itself and thus does little to remedy this situation.³⁶ Instead, sustainable development endorses permanent economic growth in the achievement of environmental protection and a decent standard of living for all people on Earth.³⁷ The paradox found in the concept of sustainable development is explained in the following passage from an ecofeminist work:

Firstly, growth is viewed only as growth of capital. What goes unperceived is the destruction in nature and in people's subsistence economy that this growth creates. The two simultaneously created 'externalities' of growth - environmental destruction and poverty creation - are then causally linked, not to the processes of growth, but to each other. Poverty, it is stated, causes environmental destruction. The disease is then offered as a cure: growth will solve the problems of poverty and the environmental crisis it has given rise to in the first place. This is the message of the World Bank development reports, of the Brundtland Report, Our Common Future and of the UNCED process.³⁸

Principle 8 of the *Rio Declaration* recognizes that unsustainable Northern consumption patterns must be reduced to achieve sustainable development, but falls short of prescribing measures by which developed states must do this.³⁹ The UNCED agreements also downplay the role of transnational corporations (mostly Northern) in contributing to global environmental degradation and the oppression of women and the poor in the name of profit.⁴⁰ Instead, in the UNCED agreements TNCs are considered to be "major groups" in the achievement of sustainable development, on the same footing as nongovernmental organizations, women and indigenous peoples.⁴¹

³⁶ Sustainable development qualifies the dominant development model by including future generations' right to exploit resources but does not challenge the view that humans are entitled to carry out this exploitation.

³⁷ According to Mies and Shiva, sustainable development does not question the paradigm of permanent growth: see *Ecofeminism*, *supra* note 20 at 251 and 269-270. For example, Paragraph 2.19 of *Agenda 21* states that the increase in the standard of living of people in developing countries is to be achieved through "sustained economic growth": *Agenda 21*, *supra* note 3, paragraphs 2.19 and 2.23.

³⁸ Ecofeminism, supra note 20 at 268.

³⁹ Braidotti et al, supra note 7 at 25-26.

⁴⁰ Ibid.

⁴¹ Agenda 21 dedicates a chapter to each of these groups, which are joined together under the rubric "major groups", and reiterates their respective roles in the achievement of sustainable development: Agenda 21, supra note 3, chapters 23 to 32.

Furthermore, the achievement of sustainable development through the state system ensures that national interests will be prioritized when in conflict with sustainable development objectives. The inclusion of provisions stating the sovereign right of states to exploit their natural resources along with sustainable development provisions shows that "states continue to hold the view that national development concerns override international legal restraints flowing from the concept of sustainable development".⁴²

Finally, sustainable development does not guarantee that women's concerns will be addressed, nor that they will be asked to participate in the process of its achievement. Although recent international environmental instruments such as the *Rio Declaration* recognize the important role of women in environmental management and development, the same instruments also emphasize the role of national governments in the implementation of sustainable development. As explained by one author, this leaves "little room for doubt that 'sustainable development' is an objective to be realized within the boundaries of each and every nation". The fact that sustainable development is to be reached within a state system that is gendered raises serious doubts as to the effective participation of women in its achievement. Agreements addressing sustainable development issues fail to spell out

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⁴² "Rules and Obligations", *supra* note * at 38.

⁴³ Rio Declaration, supra note 10, Principle 20. The preamble to the Biodiversity Convention, supra note 2, also recognizes the "vital role that women play in conservation and sustainable use of biological diversity" and affirms the need for their full participation at all levels of policy-making and implementation. See also Principle 5(b) of the Forest Principles, supra note 18.

⁴⁴ "Rules and Obligations", *supra* note 28 at 39. For example, the preamble to the *Forest Principles*, *supra* note 18, states:

Recognizing that the responsibility for forest management, conservation and sustainable development is in many States allocated among federal/national, state/provincial and local levels of government, each State, in accordance with its constitution and/or national legislation, should pursue these principles at the appropriate level of government.

^{45 &}quot;Rules and Obligations", *ibid.* at 39.

⁴⁶ In fact, due to discrimination, many women are unable to exercise their full potential in the management of natural resources and environmental management, given their lack of training, status, land and property rights and capital: See United Nations General Assembly, *Earth Summit +5: Programme for the Further Implementation of Agenda 21*, UN GAOR, Spec. Sess., Advance Unedited Text, online: DPSCD http://www.un.org/ecosocdev/geninfo/sustdev/womensus.html (date accessed: 2 February 1998) [hereinafter *Earth Summit+5*]. See also C. C. Joyner & G. E. Little, "It's Not Nice to Fool Mother Nature! The Mystique of

concrete obligations for states to ensure the full participation of women in the design and implementation of policies on sustainable development. Instead, the inclusion of women in sustainable development is done in non-binding instruments such as Agenda 21. The result is that although frameworks are designed by national governments for the participation of women in decision-making, such frameworks are rarely implemented.⁴⁸ The inclusion of "special" provisions dealing with women also has the effect of marginalizing them. For example, a Progress Report on UNCED done by the Commission on Sustainable Development states that "... the basic premise is not that women in decision-making will make different kinds of decisions than men but that their access and impact on political and economic decisin-making will empower them politically, economically and socially".⁴⁹

The meaningful participation of women at all levels of decision-making in environmental and developmental policies is essential to ensure that women are not subjected to population control programmes, as has been the case in the developmental context. The mainstream discourse of sustainable development requires a reduction in population growth. For example, the *Brundtland Report* states the following:

Present rates of population growth cannot continue... This gap between numbers and resources is all the more compelling because so much of the population growth is

resources is all the more compelling because so much of the population growth is

Feminist Approaches to International Environmental Law" (1996) B.U. Int'l L.J. 223 at 258. The follow-up report to the Fourth World Conference on Women shows that nations plans adopted by signatory states include programs for gender mainstreaming. However, only 42% of signatories submitted nations plans and none indicated the financial resources available to implement them: see Economic and Social Council, *Synthesized Report of the Secretary General on National Action Plans and Strategies for Implementation of the Beijing Platform for Action*, UN ESCOR, 42nd Sess, (1998). Moreover, follow-up to UNCED and Agenda 21 (chapter 24- role of women) shows that the rate of change of women in decision-making positions is small and that further action is necessary, that in most countries and international organizations frameworks for the advancement of women have been developed but not implemented: see Commission on Sustainable Development, *Report of the Secretary-General on the Overall Progress Achieved since the United Nations Conference on Environment and Development*, UN CSD, 5th Sess., U.N.Doc.E/CN.17/1997/2/Add.22 (1997), paragraph 9 [hereinafter *Overall Progress Report*].

⁴⁷ For example, see the UNCED agreements: *Rio Declaration, supra* note 10; *Biodiversity Convention, supra* note 2; *Climate Change Convention, supra* note 2; *Forest Principles, supra* note 18.

⁴⁸ Overall Progress Report, supra note 46, paragraph 9.

⁴⁹ *Ibid.*, para.12.

⁵⁰ See Chapter 3, above.

concentrated in low-income countries, ecologically disadvantaged regions, and poor households. 51

As mentioned in Chapter 3, although the stabilization of the world's population is necessary to achieve sustainable development, it must be carried out through women-centered and women-managed programmes in order to ensure. Additionally, the participation of women in sustainable development, in the design and implementation of environmental and developmental programmes, is necessary for the survival of the planet, as women can bring a less androcentric approach to environmental protection and development.

III. Equity

a) Intergenerational equity

Sustainable development, as defined in the *Brundtland Report*,⁵² is inherently intergenerational.⁵³ Intergenerational equity is thus implied in the concept of sustainable development and has become an integral part of international environmental law.⁵⁴ Intergenerational equity seeks to ensure that the needs of future generations will be considered in present decision-making concerning the management of natural resources by

⁵¹ Brundtland Report, supra note 8 at 95. See also Rio Declaration, supra note 10, Principle 8. However, Chapter 5 of Agenda 21 provides that population should be achieved by the empowerment of women and through women-centered reproductive health services: Agenda 21, supra note 3, Chapter 5. ⁵² Supra note 8.

⁵³ The definition of sustainable development found in the Brundtland Report is "development that meets the needs of the present *without compromising the ability of future generations to meet their needs*" [emphasis added]; Handl qualifies intergenerational equity as an underpinning of sustainable development: see "Environmental Security", supra note 28. See also "Contemporary Issues", *supra* note 2 at 707; E. Brown-Weiss, "Environmental Equity: The Imperative for the Twenty-First Century" in W.Lang ed., *supra* note 10, 17 at 21 [hereinafter "Environmental Equity"].

⁵⁴ G.F. Maggio, "Inter/Intra-generational Equity: Current Applications under International Law for Promoting the Sustainable Development of Natural Resources" (1997) 4 Buff. Env.L.J. 161 at 163. See also A. Kiss, "The Rights and Interests of Future Generations and the Precautionary Principle" in D. Freestone & E. Hey, eds., *The Precautionary Principle and International Law: The Challenge of Implementation* (The Hague: Kluwer Law International, 1996), 19 at 22 and 24.

striking a balance between present consumption needs and preserving the resources necessary for future generations.⁵⁵ The principle thus imposes a restraint on states' sovereign right to exploit their natural resources by requiring them to consider the interests of future generations.⁵⁶ For example, Principle 3 of the *Rio Declaration* states that "[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations".⁵⁷ The principle has also been included on its own in a number of international environmental instruments.⁵⁸

Intergenerational equity entails rights and obligations. It acknowledges the rights of future generations to "benefit from and develop the natural and cultural patrimony inherited from previous generations" in no worse condition than the previous generation had it. Intergenerational equity also signifies the right of future generations to those natural resources necessary to guarantee basic "economic, social and cultural rights over an indefinite period of time". Edith Brown-Weiss divides the corresponding obligations into the three principles of intergenerational equity. First, intergenerational equity commands the conservation of **options** for future generations; under this principle, each generation must conserve the diversity of the resource base in order to guarantee future generations a diversity

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⁵⁵ Maggio, ibid. at 163.

⁵⁶ Brunnée & Toope, *supra* note 5 at 68. However, as explained by Maggio, formulations of inter-generational equity avoid the use of the term "trust" (i.e. planetary trust) because states felt that it implied obligations interfering with their national sovereignty; see Maggio, *ibid.* at 203.

⁵⁷ Rio Declaration, supra note 10, Principle 3.

For example, see the Climate Change Convention, supra note 2, art.3(1); Forest Principles, supra note 18, Principle 2(b); Rio Declaration, ibid., Principle 3; Biodiversity Convention, supra note 2, preamble; Stockholm Declaration, supra note 15, Principle 1; Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, February 15 1972, 26 U.S.T. 2403, TIAS no.8165; Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 3 March 1973, 27 U.S.T. 1087, TIAS No. 8249, 12 I.L.M. 88; Convention Concerning the Protection of the World Cultural and Natural Heritage, 23 November 1972, 27 UST 37, TIAS No. 8226, 11 I.L.M. 1358 [hereinafter World Heritage Convention].

⁵⁹ Kiss, *supra* note 54 at 22.

⁶⁰ Kiss, *ibid*. at 24; see also Brunnée & Toope, supra note 5 at 70.

⁶¹ E. Brown-Weiss, "Intergenerational Equity in International Law" (1987) 81 A.S.I.L. Proceedings 126 at 129-131 [hereinafter "Intergenerational Equity"]; E. Brown-Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Tokyo: UN University, 1989) 38-45 [hereinafter *In Fairness*].

of options, ⁶² thus entailing the conservation of renewable and non-renewable resources, ecosystems, as well as the cultural heritage of human knowledge and art. ⁶³ Brown-Weiss also notes that the conservation of options can be accomplished by new technological developments designed to create substitutes for existing resources or to exploit them more efficiently, as well as conservation measures. ⁶⁴

The second principle of intergenerational equity identified by Brown-Weiss is the conservation of the **quality** of resources for future generations. This principle requires the present generation to maintain the quality of the planet so that it is passed on to future generations in no worse condition than it was received. Finally, intergenerational equity requires the conservation of **access** to resources by future generations whereby each generation must provide its own members with equal rights of access to the resources inherited from past generations so that each can use these resources "to improve their economic and social welfare". 66

The principle of intergenerational equity requires the difficult balance between economic, environmental and equitable considerations in a temporal context.⁶⁷ Unfortunately, international environmental law does not prescribe how these factors should be balanced,⁶⁸ nor does it address the possible conflicts between them.⁶⁹ The resulting danger is that the needs of future generations will lose out in the balance when measured against more pressing economic demands on resources.

62 "Intergenerational Equity", ibid. at 129-130; In Fairness, ibid. at 40

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 ⁶³ See Kiss, supra note 54 at 22; Brunnée & Toope, supra note 5 at 68.
 ⁶⁴ "Intergenerational Equity", supra note 61 at 129-130; In Fairness, supra note 61 at 41-42.

^{65 &}quot;Intergenerational Equity", ibid. at 130; In Fairness, ibid. at 42-43.

⁶⁶ "Intergenerational Equity", *ibid.* at 131; *In Fairness*, *ibid.* at 43-45. This is referred to by Brown-Weiss as "intragenerational equity".

⁶⁷ Maggio, supra note 54 at 171.

⁶⁸ *Ibid.* at 185-186.

⁶⁹ *Ibid.* at 173.

Furthermore, the principle of intergenerational equity is found in the preamble of binding agreements, or in non-binding instruments such as the *Rio Declaration*.⁷⁰. Intergenerational equity provisions usually being used in conjunction with sustainable development provisions further limits the former's beneficial impacts by bestowing more significance upon present economic and developmental concerns than to the unknown needs of future generations.⁷¹

From an ecofeminist perspective, a number of problems arise from the concept of intergenerational equity itself. For example, Brown-Weiss acknowledges the unequal access to resources between developed and developing countries, as well as between the rich and the poor, and argues that wealthier countries and communities should contribute to the costs incurred by poor countries and communities to protect resources, help them gain access to the economic benefits from them and to cope with environmental degradation. As she points out, "[i]ntragenerational justice requires wealthier countries and communities to assist impoverished ones in realizing such access. However, in arguing this, Brown-Weiss does not account for unequal power relations between developed and developing countries, based on colonialism and development. Moreover, Brown-Weiss makes no distinction between access to resources between women and men and seems to ignore the very significant fact that women are discriminated against globally for access to resources.

Another problem with the concept arises with the definition of the "needs" of present and future generations which are to be fulfilled. Edith Brown-Weiss argues that sufficient quality, diversity and quantity of natural resources must be conserved to ensure that the needs

⁷⁰ As Maggio explains, "inter-generational equity has been accorded little more than lip service in the preamble of instruments dealing with environmental protection and development": *Ibid.* at 186.

⁷¹ See Brunnée & Toope, *supra* note 5 at 68.

⁷² In Fairness, supra note 61 at 27-28.

⁷³ *Ibid.* at 28.

⁷⁴ See generally J. Jiggins, *Changing the Boundaries: Women-Centered Perspectives on Population and the Environment* (Washington, D.C.: Island Press, 1994), chapter 2.

of future generations are met, regardless of what they are.⁷⁵ However, Brown-Weiss appears to leave untouched the dominant social paradigm and the necessity of sustained economic growth, as we can see from the following passage:

Conservation of environmental quality and economic development must go together to ensure sustained benefits of the planet for both present and future generations. This means trade-offs are inevitable in determining whether one generation is conserving quality. For example, we may exhaust more reserves of a natural resource and cause modest levels of pollution, but pass on a higher level of income, capital and knowledge sufficient to enable future generations to develop substitutes for the depleted resource and methods for abating or removing pollutants.⁷⁶

If the definition of future needs is still dependent upon Western ideas of economic growth and materialism, intergenerational equity cannot mandate the consideration of more than one generation into the future, as humanity will not be able to sustain itself any longer. Therefore, just as development must be redefined to mean the fulfillment of basic needs, the needs of present and future generations must be redefined to mean the same thing. Otherwise, there is a danger that the "wants" will define the "needs"; these "wants" can differ from one generation to the next, from one state to another, and will definitely be influenced by the amount of natural resources available for exploitation. The "wants" of present and future generations, as they are defined by the dominant social paradigm cannot be sustained for future generations.

More importantly, for the purposes of this thesis, the concept of intergenerational equity fails to challenge the prevailing androcentric view of Nature. At the centre of the concept are future generations of humans; the non-human natural world is not given consideration, except to satisfy the needs of future generations. Brown-Weiss herself refers to the environment as "natural resources" to be used by the present generations without compromising future

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⁷⁵ See *In Fairness*, *supra* note 61 at 38.

⁷⁶ *Ibid.* at 42-43.

human populations.⁷⁷ Some have thus observed that this concept remains "human focused in outlook".⁷⁸

b) Intragenerational equity

A second aspect of equity in international environmental law is equity among states and between people within states for access to natural resources and responsibility for environmental harm. Traditionally, equity among states was defined as the allocation between states of natural resources not located within the territory of individual states, but on a first-come, first-served basis. However, this traditional concept is eroding and equity among states has come to mean environmental equity between nations, as well as between people within nations. 80

Commentators such as Brown-Weiss and Maggio have termed this concept intragenerational equity. Maggio explains that intragenerational equity is "... directed at the serious socioeconomic asymmetry in resource access and use within and between societies and nations that has exacerbated environmental degradation and the inability of a large part of humanity to meet adequately even its basic needs"⁸¹.

81 Maggio, ibid. at 164.

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⁷⁷ See "Intergenerational Equity", *supra* note 61. However, this is not the only possible definition of inter/intra-generational equity. Maggio, *supra* note 54, notes that another and more controversial view argues that equity should extend to other species as well as to human beings - I tend to agree with this view! For e.g. see A. D'Amato & S.K.Chopra, "Whales: Towards Their Emerging Right to Life" (1991) 85 Am.J. Int'l L.; C.D.Stone, "Should Trees Have Standing? Legal Rights for Natural Objects" (1972) 45 Southern California L.Rev. 450.

J. Brunnée & S. Toope, "Environmental Security and Freshwater Resources: Ecosystem Regime Building", (1997) 91 Am.J.Int'l L.26 at 29.
 "Contemporary Issues", *supra* note 2 at 703-704; see also "Environmental Equity", *supra* note 53 at 18.

⁷⁹ "Contemporary Issues", *supra* note 2 at 703-704; see also "Environmental Equity", *supra* note 53 at 18.

⁸⁰ "Environmental Equity", *ibid.* at 22-23; see also Maggio, *supra* note 54 at 192; Principle 4 of the *Rio Declaration*, *supra* note 10 provides that the eradication of poverty is an essential requirement for sustainable development, "in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world".

In contemporary international environmental agreements, intragenerational equity is reflected in provisions acknowledging the common but differentiated responsibilities of states⁸² and the special situation of developing countries, 83 as well as in provisions prescribing the sharing of benefits derived from natural resources between states and between people within states.⁸⁴ As we will see below, intragenerational equity also means recognition by the international community of the need to decrease disparities in standards of living between people living on the planet.⁸⁵

Common but differentiated responsibilities and the special situation of developing countries

The recognition of states' common but differentiated responsibilities for environmental degradation and for environmental protection is included in most agreements adopted at UNCED and beyond. 86 Principle 7 of the Rio Declaration sets out the parameters of the principle:

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, states have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development

See also Climate Change Convention, supra note 2, preamble, arts.3(1) & 4(1).

For example, article 3(1) of the *Climate Change Convention* provides that states should protect the climate system in accordance with their common but differentiated responsibilities and respective capacities. The preamble, which differentiates between emissions of greenhouse gases from developed states and those from developing states: See Climate Change Convention, supra note 2, preamble and art.3(1). See also Rio Declaration, supra note 10, Principle 7. See discussion of this concept below.

⁸³For example, see the following provisions: *Biodiversity Convention*, *supra* note 2, preamble and art.20(5)-(7); Climate Change Convention, ibid., art.3(2); Rio Declaration, ibid., Principle 6; Forest Principles, supra note 18, Principle 9(a); Desertification Convention, supra note 2, arts. 3(d) and 4(2)(b). See discussion of this concept below.

⁸⁴ See discussion of this concept in the context of the *Biodiversity Convention*, below.

⁸⁶ Although according to Maggio, supra note 54 at 207, most developed states do not consider it a general norm of international law. This principle was partially enunciated in Principle 23 of the Stockholm Declaration, supra note 15:

It will be essential in all cases to consider the systems of values prevailing in each country, and the extent of applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries.

in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.⁸⁷

The recognition of states' common but differentiated responsibilities comprises two elements. First, it acknowledges the role and responsibility of developed states in causing many current environmental problems. Secondly, the statement also admits that developing states do not have the necessary administrative, technological or financial resources to enable them to adequately address environmental threats. By the affirmation of states' common but differentiated responsibilities, international environmental law thus recognizes the necessity of a global partnership between North and South in addressing environmental problems, while assigning special responsibility to the North and acknowledging the constraints of developing countries. In this way, the principle attempts to bridge the North-South gap.

International environmental law also recognizes the special situation and needs of developing countries and seeks to assist them to achieve environmental protection and sustainable development by including in environmental agreements some provisions mandating financial assistance⁹³ and technology transfer from developed to developing states.⁹⁴ For example, the preamble to the *Biodiversity Convention* acknowledges that "...special provision is required

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⁸⁷ Rio Declaration, supra note 10.

⁸⁸ For example, the preamble to the *Climate Change Convention*, *supra* note 2, notes that "... the largest share of historical and current global emissions of greenhouse gases has originated in developed countries..."

⁸⁹ Maggio, supra note 54 at 205;.

⁹⁰ Williams Silveira, supra note 10 at 10

⁹¹ See F. Biermann, Saving the Atmosphere: International Law, Developing Countries and Air Pollution (Frankfurt am Main; Berlin; Bern; NY; Paris; Wien: Peter Lang, 1995) at 54-64 for a discussion of this in the context of climate change.

⁹² Dunoff, supra note 4 at 292.

See Maggio, supra note 54 at 205

For example, see the following provisions: *Biodiversity Convention*, supra note 2, art.1 & 20; Climate Change Convention, supra note 2, art.4(3) & (4); Forest Principles, supra note 18, Principle 7(b)

⁹⁴ For example, see the following provisions: *Rio Declaration*, supra note 10, Principle 9; *Biodiversity Convention*, supra note 2, arts.1 & 16; Climate Change Convention, supra note 2, art. 4(3) & (5); Forest Principles, supra note 18, Principle 11. For a detailed discussion and critique of technology transfer, see Chapter 3, above.

to meet the needs of developing countries, including the provision of new and additional financial resources and appropriate access to relevant technologies"⁹⁵.

The recognition of states' common but differentiated responsibilities and of the special situation of developing countries transforms the nature of the provision of financial and technological assistance to developing states from aid to an international obligation for developed states. In fact, agreements will go as far as recognizing that the compliance of developing states with their environmental obligations will depend on the compliance of developed states with their obligations of financial and technological assistance. For example, article 20(4) of the *Biodiversity Convention* provides the following:

The extent to which developing country Parties will effectively implement their commitments under this Convention will depend on the effective implementation by developed country Parties of their commitments under this Convention related to financial resources and transfer of technology and will take fully into account the fact that economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties.⁹⁷

Sharing of benefits - the Biodiversity Convention

Another aspect of intragenerational equity is the affirmation that benefits that are derived from the environment must be shared between states as well as between people within individual states. For example, article 1 of the *Biodiversity Convention* lists the sharing of benefits as one of the objectives of the convention:

⁹⁵ Biodiversity Convention, supra note 2; see also arts 20(5)-(7) of the same convention and article 3(2) of the Climate Change Convention, supra note 2, which states the following:

The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.

See also the preamble and art.4(8) of the latter convention; Principle 6 of the *Rio Declaration*, *supra* note 10; *Desertification Convention*, *supra* note 2, arts. 3(d) and 4(2)(b).

⁹⁶ Maggio, *supra* note 54 at 206-207.

⁹⁷ Biodiversity Convention, supra note 2; see also Climate Change Convention, supra note 2, art.4(7); Montreal Protocol on Substances that Deplete the Ozone Layer, 16 September 1987, 26 I.L.M. 1550, art.5(5).

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the *fair and equitable sharing of the benefits arising out of the utilization of genetic resources*, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. ⁹⁸ [emphasis added]

Although the idea of sharing of benefits represents a move away from the view that states compete for access to natural resources, as reflected in Principle 21-type provisions, ⁹⁹ it fails to acknowledge the unfair nature of past and present relations between developed and developing states. The provisions contained in the *Biodiversity Convention* relating to the sharing of benefits derived from biological resources appear to benefit mostly developed states by granting them access to the biological diversity found in developing states, which is essential for the pharmaceutical industry of the former. For example, article 15(2) of this convention provides the following:

Each Contracting Party shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention. ¹⁰⁰

Although the *Biodiversity Convention* also provides for the sharing among nations of the results of research and of the benefits derived from the commercial utilization of biological resources, ¹⁰¹ this aspect of sharing will undoubtedly run up against the patent rights of individual corporations. ¹⁰² Since the obstacles to the sharing of benefits derived from natural resources seem greater than the obstacles to their taking in the first place, arguably these

⁹⁸ Biodiversity Convention, supra note 2, art.1.

⁹⁹ See Chapter 3, above, for a discussion of Principle 21.

¹⁰⁰ Biodiversity Convention, supra note 2, art.15(2).

¹⁰¹ *Ibid.*, art.15(7).

Article 16(5) urges states to cooperate regarding patent rights in order to ensure that these rights are supportive of the Convention objectives. However, this obligation is "subject to national legislation" and "international [commercial] law".

provisions constitute another form of exploitation of the South and its resources by the North. Furthermore, the sharing of benefits under the *Biodiversity Convention* depends on the agreement between states to exchange genetic resources. This feature fails to acknowledge the uneven playing field between developed and developing nations and could potentially result in inequitable terms for the exchange of genetic resources to the detriment of developing countries.

Finally, provisions regarding the sharing of benefits derived from biological resources do not meaningfully include either the local and indigenous communities or the women who depend on these "genetic" resources for their survival. The preamble to the Biodiversity Convention recognizes the close and traditional dependence of indigenous and local communities on biological resources and "the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices" but does not provide any mechanism for the protection of indigenous peoples, their knowledge and practices. The *Biodiversity* Convention also states that women have an important role to play in the conservation of biological resources but fails to provide for the protection of natural resources essential for the survival of women and their families. 104 The Convention also omits to specifically provide for the sharing of benefits derived from natural resources with indigenous peoples, local communities or women. Thus what is likely to happen is that the resources will be sold to the Northern pharmaceutical industries, on "mutually agreed terms", which under the protection of patent laws will not be required to share any of the benefits with the local communities and women whose resources have disappeared. If anyone in the developing world is likely to benefit, it will be the elites of these states.

¹⁰³ For example, article 15(4) provides that access to genetic resources will be granted "on mutually agreed terms"; articles 15(7), 16(3) and 19(2) refer to "mutually agreed terms" between contracting parties.

¹⁰⁴ As discussed in Chapter 3, above, the inclusion of "special" provisions has the effect of marginalizing these groups.

Decreasing disparities and eradicating poverty

Intragenerational equity has also been reflected in international environmental law through the acknowledgement of the existence of poverty in developing countries and the need to prescribe its eradication as a condition for the achievement of sustainable development. Principle 5 of the *Rio Declaration* demonstrates this commitment:

All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world. ¹⁰⁵

The recognition by the international community of the need to fight poverty in developing countries addresses some of the inequalities between developed and developing states produced by the dominant development model and economic system. However, a statement like Principle 5 is problematic in two ways. First, Principle 5 does not distinguish between poverty in general and the extreme poverty of most women and children in developing countries and moreover fails to recognize that poverty affects women differently than men. ¹⁰⁶

The statement that poverty eradication is a requirement for the achievement of sustainable development neglects the fact that development under the dominant development model has largely been the cause of poverty in the South. Moreover, statements such as the following forest principle imply that the poor in developing countries are a major cause of natural resource depletion, while downplaying the role of the global market and consumption patterns in the North. Principle 9(b) of the *Forest Principles* provides the following:

¹⁰⁵ Rio Declaration, supra note 10, Principle 5; see also Biodiversity Convention, supra note 2, art.20(4). ¹⁰⁶ Studies show that the majority of the world's poor are women. Since the 1970s, the number of rural women living below the poverty line has increased by 50%, in comparisont to 30% for men: See Earth Summit +5, supra note 46.

¹⁰⁷ See Chapter 3, above.

The problems that hinder efforts to attain the conservation and sustainable use of forest resources and that stem from the lack of alternative options available to local communities, in particular the urban poor and poor rural populations who are economically and socially dependent on forests and forest resources, should be addressed by Governments and the international community. 108

Thus under the mainstream environmental discourse, the eradication of poverty and sustainable development are considered as interdependent. More importantly, statements such as that in Principle 5 avoid dealing with the real causes of poverty and environmental degradation in developing countries which are based in the dominant social paradigm and continue the exploitation of Nature and people by a capitalist economic system and a colonial world order. ¹⁰⁹

In summary, although the emerging principle of inter/intragenerational equity attempts to limit states' sovereign right to exploit their natural resources for the benefit of all states and all people, now and in the future, it is still androcentric in approach as its focus remains upon humans. The concept of equity does not include equity between human and non-human Nature. Moreover, the principle does not acknowledge and adequately address past and present power relations between developed and developing countries, the rich and the poor, men and women. The provision in the *Biodiversity Convention* prescribing the sharing of benefits derived from biological resources demonstrates this. Although at first sight this provision appears to reflect equitable concerns, its failure to recognize the unequal power relations between developed and developing states will likely result in benefitting the former (and its pharmaceutical industry) more than developing countries. Furthermore, the principle

¹⁰⁸ Forest Principles, supra note 18, Principle 9(b).

For example, the uneven distribution of wealth between the inhabitants of this planet is not recognized as the source of poverty in developing countries, when 80% of the world's resources are consumed by 20% of the population and 80% of global environmental degradation is also created by the same 20%: See Global Forum,

[&]quot;I1- Treaty on Alternative Economic Models", paragraph 3, online: Information Habitat http://www.igc.apc.org/habitat/treaties/altecon.html (last updated: 30 August 1996).

¹¹⁰ See P. Taylor, An Ecological Approach to International Law: Responding to Challenges of Climate Change (London; New York, Routledge, 1998) at 292.

fails to recognize the unequal power relations between the rich and the poor and men and women which will greatly affect their rights of access to resources as defined by intra/intergenerational equity. Finally, since the central focus of inter/intragenerational equity is to ensure that present and future generations will have equal rights to the exploitation of Nature, the principle still reflects an androcentric view of Nature and is therefore inadequate in achieving effective environmental protection.

IV. Precautionary Principle

In the face of scientific uncertainty, states tend to be resistant to restricting their economic development or other national interests in order to address a particular environmental issue. Scientific uncertainty thus hinders environmental protection. A new principle of international environmental law has recently emerged to remedy this situation of inaction in the face of scientific uncertainty. The inclusion of the precautionary principle in many international environmental instruments, especially since UNCED, leaves little doubt that it is now established in international environmental law. Principle 15 of the Rio Declaration sets out the precautionary principles 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

III J. Cameron, & J. Abouchar, "The Status of the Precautionary Principle in International Law" in Freestone & Hey, eds., *supra* note 54, 29 at 51-52; O. McIntyre & T. Mosedale, "The Precautionary Principle as a Norm of Customary International Law" (1997) 2 J. Env. L. 221 at 230; D. Freestone & E. Hey, "Implementing the Precautionary Principle: Challenges and Opportunities" in Freestone & Hey eds., *ibid.* 249 at 249 [hereinafter "Challenges and Opportunities"]. On the other hand, von Moltke argues that the principle is not a binding mandate but a guide for policy development: see K. von Moltke, "The Relationship Between Policy, Science, Technology, Economics and Law in the Implementation of the Precautionary Principle" in Freestone & Hey, *ibid.* 97 at 106. Cameron and Abouchar argue that based on state practice, the precautionary principle is also established as a principle of customary international law: Cameron & Abouchar, *ibid.* at 29. However, these authors also acknowledge that others do not share this view. See *contra*, C. Tinker, "State Responsibility and the Precautionary Principle" in Freestone & Hey, *ibid.*, 53 at 53, who argues that the principle is not a clear obligation under international law as to trigger state liability for its breach.

or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. 112

The precautionary principle recognizes the limits of science and the necessity to act even in the face of scientific uncertainty, 113 thus guiding policy-makers in balancing science, technology and economics for the protection of the environment. 114 In this way, the precautionary principle moves the burden of decisionmaking from scientists to policy-makers. 115 The precautionary principle also replaces the traditional assimilative capacity approach to environmental protection, 116 which is characterised by the following assumptions: first, that the environment has a determinable assimilative or carrying capacity to absorb a certain level of anthropogenic disruptions before great harm is done; 117 secondly, that science can adequately predict environmental threats; thirdly, that science can provide

No. Declaration, supra note 10, Principle 15. The precautionary principle is also formulated in different ways in the following agreements: Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, 29 January 1991, 30 I.L.M. 773, art.4(3) [hereinafter Bamako Convention]; Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 4 August 1995, U.N.Doc.A/Conf.164/22/Rev.1, 34 I.L.M. 1542, article 5(c); Climate Change Convention, supra note 2, art. 3(3); 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, April 9, 1992, art. 3(2); Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 17 March 1992, 31 I.L.M. 1312, art. 2(5)(a); Convention for the Protection of the Marine Environment of the North-East Atlantic, Paris, 23 September 1992, (1993) 32 I.L.M. 1069, art.2(2)(a)[hereinafter Ospar Convention]; Biodiversity Convention, supra note 2, preamble; Vienna Convention on the Protection of the Ozone Layer, 22 March 1985, (1987) 26 I.L.M. 1529, preamble; Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Further Reduction of Sulphur Emissions, 14 June 1994, 33 I.L.M. 1540, preamble.

¹¹³ "Contemporary Issues", supra note 2 at 690.

Geo. Int'l Env. L.Rev. 303 at 307-309; D. & E. Hey, "Origins and Development of the Precautionary Principle" in Freestone & Hey, supra note 54, 3 at 10-12 [hereinafter Origins and Development"]; von Moltke, *supra* note 111 at 101. To one author, the precautionary principle aspires to achieve a radical breakthrough in the way policy-makers balance "risks, costs of regulatory measures and benefits of activities that cause risks": A. Nollkaemper, "'What you risk is what you value', and Other Dilemnas Encountered in the Legal Assaults on Risks" in Freestone & Hey, *supra* note 54, 73 at 75.

¹¹⁵ Kiss, supra note 54 at 27.

[&]quot;Origins and Development", supra note 114 at 13.

^{117 &}quot;Environmental Security", *supra* note 28 at 22. An example of this approach is found in the preamble to the *Convention on the Prevention of Marime Pollution by Dumping of Wastes and Other Matter (London)*, 29 December 1972, 11 I.L.M. 1294, which states that "[t]he capacity of the sea to assimilate wastes and render them harmless and its ability to regenerate natural resources, is not unlimited"; see also Hey, *supra* note 114 at 306.

the technical solutions necessary to mitigate the threats once they have been predicted; fourth, that there will remain sufficient time to mitigate the threat once it has been discovered, and finally, that acting at this late stage is making the best use of scarce financial resources.¹¹⁸

The precautionary principle thus replaces the assimilative capacity approach on which much of early international environmental law is based by an approach which holds that inputs of pollutants into the environment should be eliminated or at least reduced as much as possible. In situations where alternative technologies or substances are available and comparable in economic terms, the precautionary principle dictates clearly to choose the environmentally friendly option. Moreover, once the relevant threshold is reached, the precautionary principle dictates that the high costs of regulatory measures or the technological infeasibility do not constitute reasons for inaction in the face of an environmental risk. Procedurally, the precautionary principle dictates the adoption of straightforward and fast procedures for amending environmental instruments when there is new scientific knowledge.

Thus the precautionary principle requires states to take action where a risk has been identified, even where science has not determined the causal link between the risky activities and their impacts on the environment.¹²⁴ According to many commentators, the

¹¹⁸ "Environmental Security", *supra* note 28 at 22; Hey, supra note 114 at 305-308; Martin Lalonde, "The Role of Risk Analysis in the 1992 Framework Convention on Climate Change" (1993) 15 Mich.J. Int'l L. 215 at 225-226.

^{119 &}quot;Origins and Development", *supra* note 114 at 13.

von Moltke, supra note 111 at 101.

¹²¹ See below for a discussion of thresholds.

Nollkaemper, supra note 114 at 75-76. However, as we will see below, the use of BAT permits the bringing of technological and economic feasibility considerations into decision-making.

[&]quot;Contemporary Issues", *supra* note 2 at 688-689.

Brunnée & Toope, *supra* note 5 at 69; see also "Origins and Development", *supra* note 114 at 13; "Environmental Security", *supra* note 114 at 22; Lalonde, *supra* note 118 at 226-227; Nollkaemper, *supra* note 114 at 75-76.

precautionary principle entails four (non-legally binding) obligations for states.¹²⁵ First, the principle requires the application of clean production methods, the best available technology (BAT) and best environmental practices.¹²⁶ Secondly, environmental and economic assessments must be used in decision-making on the quality of the environment.¹²⁷ Third, the principle encourages research, (scientific and economic especially), and finally, it requires the development and application of legal, administrative and technical procedures that facilitate its implementation.¹²⁸

The precautionary principle can also translate into the adoption of "reverse listing": where there is a degree of uncertainty, but where the threshold of risk is crossed, an activity presenting a risk to the environment would be prohibited unless it was shown that the risk would not materialize to harm the environment. For example, as mentioned in Chapter 3, a resolution adopted by the parties to the *Convention on the International Trade of Endangered and Threatened Species of Flora and Fauna (CITES)* provides that scientific uncertainty should not impede a species from being listed and protected. Pursuant to this resolution, protection of listed species can only be reduced if it shown by the party requesting

125 "Origins and Developme

¹²⁵ "Origins and Development", *supra* note 114 at 13; McIntyre & Mosedale, supra note 111 at 236; Hey, supra note 114 at 305-306 and 309-311; "Environmental Security", *supra* note 28 at 21. This list is not exhaustive nor static. For example, paragraph 17.21 of Agenda provides the elements of the principle in the context of marine pollution:

A precautionary and anticipatory rather than reactive approach is necessary to prevent the degradation of the marine environment. This requires, inter alia, the adoption of precautionary measures, environmental impact assessments, clean production techniques, recycling, waste audits and minimization, construction and/or improvement of sewage treatment facilities, quality management criteria for handling or hazardous substances, and a comprehensive approach to damaging impact from air, land and water.

¹²⁶ *Ibid*.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Nollkaemper, supra note 114 at 85-86.

¹³⁰ See Chapter 3, above.

¹³¹ CITES, supra note 58.

¹³² Criteria for Amendment of Appendices I and II, GA Res.9.17, 9th Mtg. of the Conference of the Parties to CITES, 7-18 November 1994.

the change to the Appendix that the species will not be endangered as a result of the change. 133

Therefore, the precautionary principle attempts to address some of the issues raised in Chapter 3 as to scientific uncertainty. Ellen Hey explains the new approach of the precautionary principle:

The precautionary concept advocates a shift away from the primacy of scientific proof and traditional economic analyses that do not account for environmental degradation. Instead, emphasis is placed on: 1) the vulnerability of the environment; 2) the limitations of science to accurately predict threats to the environment, and the measures required to prevent such threats; 3) the availability of alternatives (both methods of production and products) which permit the termination or minimization of inputs into the environment; and 4) the need for long-term, holistic economic considerations, accounting for, among other things, environmental degradation and the costs of waste treatment". 134

Some have even maintained that the precautionary principle represents a shift in paradigm in international environmental law from "a predominantly economic and anthropocentric stance to a primary eco-centric point of view". Although I agree that the precautionary principle reflects a more environmentally friendly approach to scientific uncertainty than the traditional assimilative capacity approach, some difficulties remain. First, the precautionary principle still remains a principle or a guide for policy-making and does not create any binding or concrete obligations upon states. It is often included in the preamble of instruments, or in non-binding instruments such as the *Rio Declaration* and *Agenda 21*. This means that it places no direct obligation on the parties, but that other obligations under

¹³³ "Challenges and Opportunities", *supra* note 111 at 265.

¹³⁴ Hey, *supra* note 114 at 308.

¹³⁵ McIntyre & Mosedale, *supra* note 111 at 222 and 240-241.

¹³⁶ "Challenges and Opportunities", *supra* note 111 at 253; Nollkaemper, *supra* note 114 at 80.

For example, the precautionary principle is included in the preamble of the following agreements: *Biodiversity Convention*, supra note 2; *Vienna Convention*, supra note 112; *Sulphur Protocol*, supra note 112.

the convention will be interpreted in light of it.¹³⁸ Since the inclusion of the precautionary principle is still a relatively new phenomenon, it is difficult to measure the extent to which it guides state action, and the degree to which states comply.¹³⁹

The second difficulty with the precautionary principle is the degree of uncertainty ¹⁴⁰ or threshold necessary for states to act despite scientific uncertainty. As enacted in environmental instruments, the principle still requires "reasonable grounds for concern", ¹⁴¹ "threats of serious or irreversible damage", ¹⁴² or that the carrying out of a certain activity "may cause harm to humans or the environment". ¹⁴³ The precautionary principle comes into play usually when the risk is so high that the activity may result in long lasting and irreversible damage. ¹⁴⁴ However, beyond this minimum threshold, "... the circumstances of each case, and the relative negotiation strengths of the parties determine the formulation of the principle in a convention...". ¹⁴⁵ The vagueness of the threshold to be applied means that the level of threat posed to the environment before state action is required depends on policy choices ¹⁴⁶ that will balance threats to the environment along with other factors, such as the economic desirability of the activity. ¹⁴⁷ Moreover, the danger of requiring a certain threshold of harm before action is taken is explained in the following:

... the most worrying aspect of the way in which the precautionary principle is presently formulated in treaties is that it does not at all address (speculative) risks of environmental effects not known to reach threshold levels. The precautionary principle is intended to improve the way the law deals with uncertainties. Yet, as currently formulated

¹³⁸ Cameron & Abouchar, *supra* note 111 at 41. However, the same authors also argue that because it is included in non-binding instruments such as the *Rio Declaration* and *Agenda 21*, it reflects state practice and is in this way a customary principle of international law.

¹³⁹ See Tinker, *supra* note 111 at 57.

¹⁴⁰ See Brunnée & Toope, *supra* note 5 at 69.

¹⁴¹ Ospar Convention, supra note 112, art.2(2)

¹⁴² Rio Declaration, supra note 10, principle 15; Climate Change Convention, supra note 2, art.3(3).

¹⁴³ Bamako Convention, supra note 112, art.4(3)(f).

¹⁴⁴ Kiss, *supra* note 54 at 27.

¹⁴⁵ Cameron & Abouchar, *supra* note * at 44.

¹⁴⁶ See "Challenges and Opportunities", supra note 111 at 258-259.

¹⁴⁷ See Nollkaemper, *supra* note 114 at 87-88.

it deals only with risks known to be of a high enough magnitude, and not with uncertainties. In itself, it does little to protect the environment against the unknown. 148

From an ecofeminist perspective, the criteria to be applied when deciding on a threshold before action is required are likely to reflect androcentric views and interests. How are "reasonable grounds for concern" defined? How are they assessed? Who assesses them? In the balancing of different interests that is involved in risk management, the end result is likely to reflect the values and interests of the decisionmakers. Thus the interests of the environment, as well as the special concerns of women, are not likely to be addressed in this balancing act.

Additionally, provisions enacting the precautionary principle in treaties have also watered down the concept by including cost effectiveness as an element. As we saw above, the precautionary principle involves an economic assessment element as well as a scientific one. For example, Principle 15 of the *Rio Declaration* seems to restrict the application of the principle to "cost-effective" measures. Moreover, the application of the Best Available Technology (BAT) requires decisionmakers to take into account many factors, including the economic feasibility of the technology in question. However, the result of making BAT a major element of the precautionary principle is a shift in focus from avoiding environmental threats to the availability and the economic feasibility of technologies. By relying on science and technology, as well as economic criteria for its application (i.e. the scientific and

¹⁴⁸ Nollkaemper, *ibid.* at 83-84.

153 See Nollkaemper, *ibid.* at 89.

Brunnée & Toope, *supra* note 5 at 69.

Author von Moltke explains:

Without consideration of economic boundary conditions, the precautionary principle is in fact a meaningless declaration of good intentions. Only by introducing the economic dimension does it create the appropriate tension between human demands on the environment and the environment's need to be protected from such demands.

See von Moltke, supra note 111 at 107.

¹⁵¹ See above, for the full text of Principle 15.

¹⁵² Nollkaemper, *supra* note 114 at 89; see also John S. Gray, "Integrating Scientific Methods into Decision-Making" in Freestone & Hey, supra note 54, 133 at 136.

economic feasibility of alternative technologies), the precautionary principle falls short of challenging the dominant social paradigm characterised by Western science and a capitalist economic system.

In summary, although the precautionary principle mandates state action in the face of scientific uncertainty, it still requires the environmental threat to cross a certain threshold of acceptable risk, and this threshold is often set as high as requiring risk of irreversible and long lasting damage to the environment. Moreover, the requirement to apply the best available technology where it is available and economically feasible, has watered down the precautionary principle and again turns to technology as the solution to environmental problems.

Again, I am not questioning that science and technology have an important role to play in the development and implementation of international environmental law. As mentioned in Chapter 3, science plays a significant role in identifying risks to the environment and in stressing the importance of action to international decisionmakers. On the other hand, science does not have all the answers concerning environmental threats. Science can never absolutely prove the environmental impacts of a certain activity because there are too many factors involved and "... the environment is too complex to be comprehensively described in strictly scientific terms". ¹⁵⁴ For this reason, decision-makers, not scientists, should be determining when a certain environmental threat deserves attention. ¹⁵⁵ The precautionary principle addresses this to a certain extent, by handing back to the policy-makers the burden of deciding to act on an environmental problem and in managing the risks involved.

¹⁵⁴ von Moltke, *supra* note 111 at 98.

¹⁵⁵ John S. Gray on the other hand, argues that scientists should play an even greater role in policy making under the precautionary principle: Gray, *supra* note 152 at 143.

However, as we will see in Chapter 5, the precautionary principle should also ensure that the assessment of the risks of a specific environmental threat also considers the knowledge and concerns of local communities and especially women. Moreover, as presently enunciated, the precautionary principle is still almost entirely dependent on Western science to cross the original threshold that mandates state action.

V. Common Concern of Humankind

Recently, the concept of "common concern of humankind" has also emerged in international environmental law. The concept is derived from the earlier concept of "common heritage of mankind", which was used to manage global resources beyond the jurisdiction of individual states, such as the high seas, deep seabed and outer space, in the interest of equal access and shared exploitation. The concept of common concern was first expressed in the General Assembly *Resolution on the Protection of the Global Climate for Present and Future Generations of Mankind* and since UNCED it has been included in a few international instruments. For example, the preamble to the *Climate Change Convention* affirms that "change in the Earth's climate and its adverse effects are a common concern of

Emerging Principles" in Canadian Council on International Law, ed., *Global Forests and International Environmental Law* (Cambridge, MA: Kluwer Law International, 1996) 41 at 56. See also A.D.Tarlock, "Stewardship Sovereignty: The Next Step in Former Prime Minister Palmer's Logic" (1992) 42 Wash. U.J. of Urban and Contemp. L. 21at 47; T. Iwama, "Emerging Principles and Rules for the Prevention and Mitigation of Environmental Harm" in E. Brown-Weiss, ed., *Environmental Change and International Law: New Challenges and Dimensions* (Tokyo: United Nations University Press, 1992) 107 at 114. For example, see the following treaties for references to the common heritage of mankind: *World Heritage Convention, supra* note 58, preamble; *United Nations Convention on the Law of the Sea*, 10 December 1982, 21 I.L.M. 332, article 136; *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*, 5 December 1979, (1979) 18 I.L.M. 1434, article 11.

¹⁵⁷ 27 January 1989, UN Doc.A/RES/43/53. See Brunnée, *ibid.* at 57;

¹⁵⁸ See Brunnée, *ibid.* at 57; see footnote reference #97 for a list of non-binding declarations including the concept.

humankind". 159 Whereas its predecessor applied only to global resources beyond the territory of states, common concern of humankind can apply to natural resources located within the national jurisdiction of states, as long as the benefits derived from those resources or the impacts of their degradation are global. 160

The concept limits state sovereignty in the interests of the international community as a whole, even where the concern is situated on the territory of individual states. ¹⁶¹ In this way, common concern begins to blur the distinction between what is "public" and what is "private" in international law for the greater goal of environmental protection. However, the concept of common concern does not go as far as "internationalizing" the ownership of the resources to be protected in the interests of the international community. ¹⁶² As such, the concept is not mainly concerned with states' property rights over their natural resources, but with their use. ¹⁶³ Nevertheless, as noted by Boyle in the context of biological diversity protection, "permanent sovereignty over biological resources is no longer a basis for exclusion of others, but entails instead a commitment to cooperate for the good of the international community at large". ¹⁶⁴

Common concern may also promote the globalization of environmental protection and engages the liability of all states for the protection of ecosystems globally. Taylor explains that this feature enables the concept to bridge some gaps found in international environmental

¹⁵⁹ Climate Change Convention, supra note 2, preamble. See also Biodiversity Convention, supra note 2, preamble.

preamble.

160 See "Environmental Security", supra note 28 at 73. For example, the conservation of biological diversity is considered a common concern of humankind: See *Biodiversity Convention*, *ibid*.

¹⁶¹ See Brunnée, supra note 156 at 56; Taylor, *supra* note 110 at 279.

¹⁶² See A. E. Boyle, "The Convention on Biological Diversity" in L. Campiglio, *et al*, eds., *The Environment After Rio: International Law and Economics* (London; Boston: Graham & Trotman/Martinus Nijhoff, 1994) 111 at 117.

¹⁶³ Brunnée, supra note 156 at 59; see also Taylor, supra note 110 at 294.

¹⁶⁴ Boyle, *supra* note 162 at 118.

Taylor, supra note 110 at 278; Brunnée, supra note 156 at 59. See also Iwama, *supra* note 156 at 114; "Environmental Security", supra note 28 at 73.

law between the protection of states' territories, the protection of areas beyond the national jurisdiction of states, and the recognition and protection of the global environment. On the other hand, because of the same feature, the concept of common concern falls short of challenging fundamental principles of international law such as state sovereignty over resources. Moreover, as expressed by Günther Handl, a general recognition of common concerns over environmental problems is one thing, and the acceptance by states of limits imposed on their right to exploit their own resources is "quite another". 168

Common concern differs from other principles of international law in that its express objective is environmental protection. Common concern also acknowledges the interconnectedness and interdependence of the earth's ecosystems and of the activities of humanity. In this respect, common concern represents a holistic and ecological concept. However, common concern of humankind is only a limited concept of environmental protection because the justification is humanity's common use, i.e. the environment is protected for humanity's sake not for its own sake. In this way, the concept of common concern of humankind still reflects an androcentric approach to environmental protection.

VI. Conclusions

In concluding this chapter, I would like to point out that the new developments in international environmental law that I have outlined, such as sustainable development, inter/intragenerational equity, the precautionary principle and the common concern of

¹⁶⁶ Taylor, *supra* note 110 at 294.

¹⁶⁷ See "Environmental Security", supra note 28 at 73-74.

¹⁶⁸ "Environmental Security", *supra* note 28 at 31.

¹⁶⁹ Taylor, *supra* note 110 at 293.

¹⁷⁰ *Ibid.* at 278 and 293. Taylor talks about "common interest" and not "common concern", but defines the former as "collective international concern in conservation of the earth's natural resources, in the interests of the whole of humanity".

¹⁷¹ *Ibid.* at 294.

¹⁷² *Ibid.* at 293.

humankind, do constitute a step towards more effective environmental protection, as they attempt to address some of the issues raised in Chapter 3. At the same time, these principles disappointingly fail to challenge the dominant social paradigm and androcentric perspective on which international environmental law is based. In my opinion, for international environmental law to achieve the protection of our planet from an ecological disaster, it will have to enact different principles, based on an entirely different, hierarchy-free, non-dominating relationship with Nature and with other human beings. As we will see in Chapter 5, ecofeminists can offer such an alternative approach. Therefore I will offer in Chapter 5 suggestions on how these principles can be improved in light of ecofeminist principles.

Chapter 5 - An Ecofeminist Approach to

International Environmental Law

I. Ecofeminist principles

Certain essential features of international environmental law, such as Principle 21, states' right to development, and the emphasis on science and technology, are potentially contrary to environmental protection. These characteristics of international environmental law are based on the dominant social paradigm, which reflects an androcentric view of Nature as constituting resources to be exploited for human and economic ends. In this way, I argued in Chapter 3 that international environmental law will not achieve effective environmental protection as long as it is based on this dominant social paradigm. The emerging principles of international environmental law outlined in Chapter 4, such as sustainable development, inter/intragenerational equity, the precautionary principle and the common concern of humankind, represent a step towards more effective environmental protection by addressing some of the flaws of the dominant social paradigm, such as the shortsightedness and

¹ See Chapter 3, above.

² The following passage expresses the goal of this kind of environmental reform, which has characterised international environmental law:

The notion of environmental reform is based on the assumption that the system can be remedied by improving the tools (better science, appropriate technologies, the introduction of environmental accounting into the operational system of enterprises/national economies, and better management of resources).

See R. Braidotti, E. Charkiewicz, S. Haüsler and S. Wieringa, *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis* (London: Zed Books in association with INSTRAW, 1994) at 126.

inequitable effects of the economic system, scientific uncertainty and the limitations of state sovereignty. Unfortunately, these new principles of international environmental law fall short of challenging the dominant social paradigm and the androcentric view of Nature that it reflects.

As we saw throughout this thesis, the dominant social paradigm means the oppression of women, the poor, people of colour, developing states and Nature. The dominant social paradigm, characterised by a capitalist economic system, the Western scientific way of knowing, state sovereignty, and an androcentric view of Nature, thus cannot serve as the basis for effective international *environmental* law, which has as its objective the protection of Nature. Therefore, an alternative approach to international environmental law must replace the dominant social paradigm in order to save our natural environment. As we saw in Chapter 2, ecofeminism can offer such an alternative approach, based on a more equitable relationship between human and nonhuman Nature and embodying certain founding principles. As we will see, some of these principles have already been suggested by the women of the world at the Women's Congress for a Healthy Planet, Planeta Femea and the Fourth World Conference on Women in Beijing, and have been included in some international instruments.

³ This Congress took place in Miami in November 1991 in preparation for the 1992 United Nations Conference on Environment and Development (UNCED). The Congress involved more than 1500 women from 83 countries. At this Congress, *The Women's Action Agenda 21* was adopted. See World's Women Congress, *Women's Action Agenda 21*, online: Women, Environment and Development Organization <gopher://gopher.igc.apc.org:70/11/orgs/wedo/agenda21/wedo21/ > (date accessed: 28 September 1998) [hereinafter *Women's Agenda 21*].

At this conference, women's NGOs adopted A Global Women's Treaty for NGOs Seeking a Just and Healthy Planet: See Global Forum, "39- A Global Women's Treaty for NGOs Seeking a Just and Healthy Planet: See Global Forum", online: Information Habitat http://www.igc.apc.org/habitat/treaties/women.html (last modified: 30 August 1996) [hereinafter "Women's Treaty"].

⁵ This Conference was held in Beijing in September 1995. At the Conference, a Declaration was adopted by the international community, but no binding instruments were signed. See United Nations, *Report of the Fourth World Conference on Women: Beijing Declaration and Platform for Action*, 1995, UN Doc.A/CONF.177/20, online: http://www.un.org/womenwatch/daw/beijing/platform/declar.htm (last accessed: September 28 1998) [hereinafter *FWCW Report*].

a) New relationship between humans and Nature

The first and most important principle that must underlie any approach to environmental protection is the embodiment of a relationship between humankind and Nature that is based on the recognition of our interconnectedness and on mutual respect. Humans must come to see themselves as part of Nature, and not as separate from and above it.⁶ The patriarchal view of Nature reflected in the dominant social paradigm, which considers it as consisting of "natural resources" to be used for human ends and profit maximization must be challenged and replaced.⁷

To replace the dominant view of Nature, Carolyn Merchant suggests a "partnership ethic", a relationship between human and nonhuman communities based on equity, a moral consideration for both humans and Nature, respect for cultural and biological diversity, and the inclusion of women, minorities and nonhuman Nature "in the code of ethical accountability". The *Women's Action Agenda 21* recognized the principle of global equity

⁶ See J. Jiggins, *Changing the Boundaries: Women-Centered Perspective on Population and the Environment* (Washington, D.C.: Island Press, 1994) at 35; see also Y. King, "Healing the Wounds: Feminism, Ecology, and the Nature/Culture Dualism" in I. Diamond & G. Feman Orenstein, eds., *Reweaving the World: The Emergence of Ecofeminism* (San Francisco: Sierra Club Books, 1990) 106 at 117-118.

⁷ Val Plumwood explains the backgrounding of Nature in the dominant social paradigm:

This backgrounding of women and nature is deeply embedded in the rationality of the economic system and in the structures of contemporary society [ref. omitted]. What is involved in the backgrounding of nature is the denial of dependence on biospheric processes, and a view of humans as apart, outside of nature, which is treated as a limitless provider without needs of its own. Dominant western culture has systematically inferiorised, backgrounded and denied dependency on the whole sphere of reproduction and subsistence. This denial of dependency is a major factor in the perpetuation of the non-sustainable modes of using nature which loom as such a threat to the future of western society."

V. Plumwood, Feminism and the Mastery of Nature (London & NY: Routledge, 1993) at 21. See also R. Radford Ruether, "Toward an Ecological-Feminist Theory of Nature" in J. Plant, Healing the Wounds: The Promise of Ecofeminism (London: Green Print, 1989) 145 at 145 [hereinafter Healing].

⁸ Merchant, C., *Earthcare: Women and the Environment* (New York: Routledge, 1996) at 216-217 [hereinafter *Earthcare*]; see also Marie Mies, who suggests a subsistence perspective based on a new relationship to nature, where nature is respected for her own sake and as a precondition for survival: M. Mies, "The Need for a New Vision: the Subsistence Perspective" in M. Mies & V. Shiva, *Ecofeminism* (London: Zed Books, 1993) 297.

in its *Code of Environmental Ethics and Accountability*, which holds that "international law should be based on equity, respect for humans and other species, and biological and cultural diversity". An ecological relationship with Nature based on ecofeminism would also recognize the sacredness of all life, "according to which life on earth can be preserved only if people again begin to perceive all life forms as sacred and respect them as such", ¹⁰ and the intrinsic value of biodiversity. ¹¹ Maria Mies suggests a "subsistence perspective" whereby humankind respects Nature for its own sake and as a precondition for survival. ¹²

If humankind sees itself as part of Nature and not as separate from it, and recognizes its dependence on Nature for its survival, the exploitation of the environment for economic ends and material consumption by the North no longer makes sense and must end. Instead, the fulfillment of basic needs for all of humanity while respecting Nature's regenerative processes, would define our relationship with Nature and promote the attainment of sustainable livelihoods for all.

b) Sustainable livelihoods

As we saw in Chapter 4, sustainable development has come to mean sustained economic growth, or the responsible management of natural resources to ensure continuous exploitation for future generations.¹³ The frustration of many ecofeminists, feminists and environmentalists with this concept has incited them to use the more ecological term of

⁹ Women's Agenda 21, supra note 3.

¹⁰ Ecofeminism, supra note 8 at 17-18.

Women's Agenda 21, supra note 3.

¹² M. Mies, *supra* note 8. Starhawk promotes the adoption of an "earth-based spirituality" which values, diversity, interconnection and translates into compassion for all living species. In this earth-based spirituality, humans are not seen as separate from Nature, but as Nature: see Starhawk," Feminist Earth-based Spirituality and Ecofeminism" in *Healing*, *supra* note 7, 174-188; Vandana Shiva calls it the "feminine principle": see V. Shiva, *Staying Alive: Women, Ecology and Development* (London: Zed Books, 1988)[hereinafter *Staying Alive*].

¹³ See Chapter 4, above.

"sustainable livelihoods".¹⁴ Thus an ecofeminist approach to international environmental law would also redefine sustainable development¹⁵ to a more "holistic notion of politically, socially and culturally sustainable development, that is, sustainable livelihoods for all",¹⁶ which emphasizes the fulfillment of basic needs such as health, food, water and shelter.¹⁷ The quality of life would be defined by "the development of human relationships, creativity, cultural and artistic expression, spirituality, reverence for the natural world and celebration of life..." and not the acquisition of material goods for consumption.¹⁸

The achievement of sustainable livelihoods would also be achieved through the self-sufficiency of local communities and decentralization from the state.¹⁹ Judith Plant argues for bioregionalism, which she describes as "living within the limits and the gifts provided by a place, creating a way of life that can be passed on to future generations".²⁰ Others argue that community-based, locally sustainable lifestyles are an achievable form of development, both in the North and South.²¹ Conservation and development projects would involve all local groups affected and would be based on the local needs, local natural resources and local resource use.²² This would include, among others, the introduction and support of sustainable agricultural practices.²³

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¹⁴ Braidotti et al, supra note 2 at 133-137; Women's Agenda 21, supra note 3; Starhawk, supra note 12 at 182-183.

¹⁵ Ecofeminists are not the only or first ones to have challenged the dominant development model and to offer alternative models of development. For a discussion of alternative approaches to development, see Braidotti *et al. supra* note 2 at 107-122.

¹⁶ *Ibid.* at 102-103.

¹⁷ Global Forum, "17- Treaty on Consumption and Lifestyle", online: Information Habitat

http://www.igc.apc.org/habitat/treaties/consume.html (last modified: 30 August 1996), paragraph 12 [hereinafter "Consumption Treaty"]. The "Women's Treaty" promotes "the adoption of a model of sustainable development based on sustainable livelihoods for all peoples with full human rights including access to clean air and water, food, shelter, health, education and information and the enjoyment of civil liberties and spiritual and cultural integrity: "Women's Treaty", *supra* note 4, paragraph 7.

¹⁸ "Consumption Treaty", *ibid*, paragraph 4.

¹⁹ See Mies, *supra* note 8.

²⁰ J. Plant, "Searching for a Common Ground: Ecofeminism and Bioregionalism" in *Reweaving*, *supra* note 6, 155 at 158.

²¹ Braidotti et al, supra, note 2 at 170. See also Mies, supra note 8; Women's Agenda 21, supra note 3.

²² Braidotti et al, ibid. at 183-184.

²³ Women's Agenda 21, supra note 3.

Sustainable livelihoods would obey Nature's cycles and processes, not the capitalist market's laws of return.²⁴ Under sustainable livelihoods, then, the environment could no longer be considered as inputs to the production process or as consumption goods in the market economy.²⁵ International trade would be conducted with the objective of improving the well-being of all people, in developed as well as in developing countries, and would recognize the need to promote socially just and ecologically sustainable development.²⁶ An ecofeminist approach to international environmental law would also encourage the attainment of sustainable livelihoods by reducing the gap between developed and developing countries through the cancellation of foreign debt and other equitable means.²⁷

Finally, an alternative development model based on ecofeminist principles would also be based on women-centered, women-managed comprehensive reproductive health care and family planning, including the right to prenatal care, safe and legal voluntary contraceptives and abortion, sex education and information in order to stabilize population.²⁸ The need to stabilize population growth for the achievement of sustainable livelihoods globally is a valid concern, but it will only be justly achieved if women desire to have a smaller number of children, which in turn depends on the improvement of their social, economic and health status and living conditions.²⁹ Target-driven birth control policies not only defeat the purpose of population control, but endanger the lives of women and jeopardize their

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²⁴ Braidotti et al, supra note 2 at 110.

²⁵ Jiggins, *supra* note 6 at 28.

²⁶ Global Forum, "12- Alternative Treaty on Trade and Sustainable Development", online: Information Habitat http://www.igc.apc.org/habitat/treaties/trade.html (last modified: 30 August 1996), paragraph 1.

²⁷ *Ibid.*, paragraph 4.

²⁸ "Women's Treaty", *supra* note 4, paragraph 10. See also *Women's Agenda 21*, supra, note 3; *Agenda 21*: *Programme of Action for Sustainable Development*, Report of the United Nations Conference on Environment and Development, 1992, U.N.Doc. A/CONF.151/26/Rev.1 (Vol.I and III), para.24.3(e) [hereinafter *Agenda 21*]; Jiggins, *supra* note 6 at 152.

Global Forum, "40-Treaty on Population, Environment and Development", paragraph 5, online: Information Habitat http://www.igc.apc.org/habitat/treaties/populat.htm (last updated: 30 August 1996) [hereinafter "Population Treaty"].

freedom.³⁰ Instead, the right of all women to exercise free choice and to control their fertility and to plan their families must be recognized and their access to education and land resources enforced.³¹ There would also be the recognition that because of high levels of per capita consumption, population growth in the North is a greater environmental threat than population growth in the South.³²

In summary, the concept of sustainable livelihoods, which would replace the concept of sustainable development that is presently premised on sustained economic growth, would truly integrate environmental sustainability, gender equality and social justice³³.

c) Recovery of people-centered science and appropriate technologies

We saw in Chapters 3 and 4 that the emphasis placed in international environmental law on science and technology as the solution to the environmental crisis disregards the fact that Western science contributed to the environmental problem in the first place and has served to marginalize women and their way of knowing. An ecofeminist approach to international environmental law would first redefine scientific principles to be more holistic and respectful of Nature and women. For example, *The Women's Action Agenda 21* suggest a more holistic definition of biology, "one that gives priority to conservation biology and ecology and stops the trend in reductionist methods at the gene and molecular level, a trend that negates the

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³⁰ Braidotti *et al*, *supra* note 2 at 146. Jiggins, *supra* note 6 at 172, gives four reasons why these kinds of policies are counter-productive:

^{1.} Increased rates of contraceptive acceptance do not guarantee high rates of effective and continuing use.

^{2.} Target-driven policies give rise to a backlash or clandestine avoidance that in the end makes coercive population control inoperable.

^{3.} Contraceptive services do little to change the context in which men and women make decisions about their fertility and sexuality...

^{4.} By targetting women as the instrument for the achievement of state policy, target-driven policies diminish rather than augment women's capacity to make decisions in their own interest.

³¹ See "Population Treaty", *supra* note 29, paragraph 3; Jiggins, *supra* note 6.

^{32 &}quot;Consumption Treaty", *supra* note 17, paragraph 11.

³³ FWCW Report, supra ,note 5, par.248.

primacy of the organism and ecosystem".³⁴ Secondly, science must include and validate the knowledge of local communities and women in monitoring, assessing and in finding solutions to local and global environmental problems.³⁵ Thus "people's science of life", based on observation, the recovery of peoples' disregarded knowledges, as well as the use of feeling, intuition, and experience as ways of knowing³⁶ must be given as much credibility and weight as the science of the dominant social paradigm. In this regard, an ecofeminist approach to international environmental law would also recognize that indigenous peoples, especially women, can provide vital wisdom and leadership in the conservation of natural resources and the safeguard of the planet.³⁷

Recognizing the fact that science and technology have been used by patriarchal institutions to dominate Nature, an alternative approach to global environmental protection would include the transfer of ecologically sustainable and appropriate technologies, whose long-term effects, costs and benefits for the environment, people and women have been closely scrutinized.³⁸ Furthermore, priority must be given to women of developing countries, who must be granted access to appropriate technologies for the provision of safe water, renewable energy sources, sustainable agricultural practices and basic health care.³⁹

Finally, science is a valid, but not sole, indicator of environmental problems and environmentally-friendly technologies constitute an important part of their solutions, but none of these hold the key to the environmental crisis. Western science and technology must therefore be supplemented by a "people's science of life" and most of all, by a change in attitude towards Nature. Based on an ecological relationship between human and nonhuman

³⁴ Women's Agenda 21, supra note 3.

³⁵ As we saw in Chapter 3, women have extensive knowledge of the workings of ecosystems and natural processes, based on everyday practice and experience.

³⁶ Braidotti *et al. supra* note 2 at 111; see also Jiggins, *supra* note 6 at 206.

³⁷ Women's Agenda 21, supra note 3

³⁸ Ibid.

³⁹ *Ibid.*; *Agenda 21*, *supra* note 28, par. 24.3(d); *FWCW Report* supra note 5, par.256(k).

Nature, science's only purposes could then become the protection of the environment and the health of all living species.

d) Cooperation for the preservation of the environment and the attainment of sustainable livelihoods

We saw in Chapter 3 that state sovereignty and Principle 21 provisions hinder environmental protection because they incite competition among states for access to natural resources. The emphasis of international environmental law on state sovereignty impedes the finding of effective global solutions.⁴⁰ A third principle that would underlie an ecofeminist approach to environmental protection is thus the replacement of competition among states and individuals for access to natural resources by cooperation between all concerned for the preservation of the environment and the achievement of sustainable livelihoods for all.⁴¹

Some feminists argue for an alternative view of the state as connected and interdependent with other states instead of a separate autonomous entity protected by its borders. A feminist conception of the state and sovereignty could then emphasize cooperation and the ability to "act in concert" across national boundaries. An ecofeminist vision of the world might also emphasize a "primary affiliation to planet Earth rather than the nation state."

44 "Alienating Oscar", ibid. at 11.

⁴⁰ See generally H. Charlesworth, C.Chinkin, & S. Wright, "Feminist Approaches to International Law" (1991) 85 Am.J.Int'l L.613.

⁴¹ Women's Agenda 21, supra note 3.

⁴² K. Knop, "Re/Statements: Feminism and Sovereignty in International Law" (1993) 3 Transnat.and Contemp. Probs. 293 at 321.

⁴³ H. Charlesworth, "Alienating Oscar? Feminist Analysis of International Law" in D. G. Dallmeyer, ed., *Reconceiving Reality: Women and International Law* (Washington, D.C.: American Society of International Law, 1993) 1 at 11 [hereinafter "Alienating Oscar"]; see also R. Keohane, "International Relations Theory: Contributions of a Feminist Standpoint" in R. Grant & K. Newland, eds., *Gender and International Relations* (Buckingham: Open University Press, 1991), 41 at 43.

of the planet and all its inhabitants because some concerns, such as environmental protection and violence against women, for example, transcend boundaries.⁴⁵

Moreover, we saw in Chapter 3 that military activities have detrimental effects on the environment and on the lives of women. An alternative approach to international environmental law based on ecofeminism thus necessitates complete demilitarization and "the transfer of the world's vast military resources to positive, life-enforcing programs". Security would no longer be defined in military terms, but in a comprehensive way, encompassing personal security, local security where all basic needs are met, and global security where the rights of all people and species to live in a healthy environment are respected. Principle 25 of the *Rio Declaration* begins to acknowledge the importance of demilitarization for environmental protection by stating that development, environment and peace are interrelated and interdependent. In the *Beijing Declaration* adopted by the international community at the Fourth World Conference on Women, states declare being determined to "take positive steps to...work actively towards general and complete disarmament under strict and effective international control..."

In summary, an ecofeminist approach to international environmental law would require a major restructuring, if not replacement, of patriarchal institutions such as state sovereignty, the global market system and Western science. As we saw in the preceding chapters, the dominant social paradigm, which is characterised by these "pillars" of Western society, has

⁴⁵ Women's Agenda 21, supra note 3. See also Knop, supra note 42 at 308-309.

⁴⁶ See Chapter 3, above; see also Global Forum, "45- Treaty on Militarism, the Environment and Development", paras 2.4 and 10, online: Information Habitat

http://www.igc.apc.org/habitat/treaties/militar.htm>(last updated: 30 August 1996) [hereinafter "Militarism Treaty"].

⁴⁷ Women's Agenda 21, supra note 3; see also "Militarism Treaty", ibid., para.5.

^{48 &}quot;Militarism Treaty", *ibid.*, paragraph 6.

⁴⁹ Rio Declaration on Environment and Development, 13 June 1992, UN Doc.A/CONF.151/5/Rev.1, 31 I.L.M. 876, Principle 25.

⁵⁰ FWCW Report, supra note 5, para. 28.

served to dominate women, the poor, minorities, developing states and Nature. It thus cannot serve as the basis for an international set of norms that aim to protect Nature and affects the others.

II. Reality bites or improving international environmental law within the dominant social paradigm

The implementation of the above principles is where my idealism runs into the realities of the world order. The capitalist economic system has expanded and globalized, widening the gap between developed and developing nations. The centrality of state sovereignty in the international legal system appears here to stay and is expressed in all recent international environmental instruments through provisions establishing states' sovereign right to exploit their resources. Finally, as more financial resources are poured into scientific research for monitoring and remedying environmental problems, it is apparent that Western science is meant to play a crucial role in the achievement of sustainable development.⁵¹ However, without overthrowing our entire world view, it might be possible to reconceptualize international environmental law in order to incorporate the above principles. However, this remains a difficult task and I do not propose to offer here all the answers, but only a few suggestions.

⁵¹ Chapter 35 of *Agenda 21* is entitled "Science for Sustainable Development". Paragraph 35.2 states that "... the sciences are increasingly being understood as an essential component in the search for feasible pathways towards sustainable development." The main impetus of this chapter is to promose four programme areas: 1) strengthening the scientific basis for sustainable management; 2) enhancing scientific understanding; 3) improving long-term scientific assessment; and 4) building up scientific capacity and capability: see *Agenda 21*, *supra* note 28, Chapter 35, paragraphs 35.2 and 35.4.

Interluide

Before I attempt to tinker with some of the principles and features of international environmental law in order to render them more ecofeminist-like, I must express my strong reservations in carrying out such an exercise. A true ecofeminist approach to international environmental law requires replacing the dominant social paradigm. Such an approach cannot be true to itself unless patriarchal institutions such as the global capitalist economic system, Western science and the present international system are replaced by the principles set out above. However, this substitution is not likely to happen in the near future and thus I am stuck between a rock and a hard place. On the one hand, if I stop here, I have written a thesis that validly points out the major flaws of international environmental law, but which offers idealistic solutions that could never be realistically implemented. On the other hand, if I continue, I risk the co-option of a theory which has fundamentally challenged the dominant social paradigm for its oppression of women, the poor, people of colour and Nature by using it to "adjust" international environmental law to ecofeminist principles within that dominant social paradigm. However, since my ultimate goal in writing this thesis is to challenge the androcentrism of international environmental law and to incite change in policy-making to give priority to the protection of our environment, I will take that risk and extend my apologies to all ecofeminists of the world. Some good might come out of it.

Thus I offer some suggestions on the improvement of international environmental law within the dominant social paradigm.⁵² I will offer some comments on the theoretical framework of international environmental law, including state sovereignty, the role of science and

⁵² These are only suggestions! The analysis of the feasibility of carrying them out is the topic for a potential doctoral thesis.

technology and of the global market system, as well as a few practical methods for more concrete changes to the workings of international law through the international system.

a) The international system and state sovereignty

As we saw in Chapter 4, although the state remains a significant actor in the creation of international law, states have limited their national sovereignty over their resources for the common benefit of the planet, by recognizing that certain environmental issues such as the protection of biodiversity and the global climate are "common concerns of humankind".
However, as we also saw in Chapter 4, the problem with the concept of "common concern of humankind" is the definition of what constitutes a "common concern" and who defines it. Should states, which uphold their national interests and economic development using the same resources, be allowed to define what constitutes a common concern? Moreover, the introduction of the principle of common concern is difficult in situations where the environmental resource to be protected falls completely within individual states' territories, as for example, in the case of forests.
Finally, when competing with binding provisions recognizing the sovereign right of states over their natural resources, the "common concern" is likely to lose in the balance.

Nevertheless, the concept of common concern of humankind constitutes a step in the right direction, by attempting to bypass national sovereignty when the good of the international community and the planet demands it. The application of the concept could be improved by ensuring that the determination of environmental issues that deserve to be defined as a

⁵³ See Chapter 4, above; see A. E. Boyle, "The Convention on Biological Diversity" in L.Campiglio *et al*, eds., *The Environment after Rio: International Law and Economics* (London; Dordrecht; Boston: Graham & Trotman/Martinus Nijhoff, 1994) 111 at 117-118.

⁵⁴ The Forests Principles did not include a provision, even in the preamble, to the effect that forests constitute a "common concern of humankind": see A. D. Tarlock, "Exclusive Sovereignty versus Sustainable Development of a Shared Resource: The Dilemma of Latin American Rainforest Management" (1997) 32 Tex. Int'l L. J. 37 at 47-48.

"common concern" is done by an independent entity, and is based on environmental and social factors (including the impacts that particular forms of environmental degradation have on women), rather than on economic considerations and other national interests. The recommendations of this independent body would then have to be implemented by the international community and the protection of the common concern mandated.

b) Environmental protection within a global market system

We saw in Chapter 3 that the global market system on which international environmental law is based has served the interests of a few at the expense of the majority of people in the world and that of Nature. Under capitalism, the environment constitutes natural resources to be exploited for economic profit and disregards the unpaid work of women worldwide. As we saw in Chapter 4, sustainable development was introduced to address the short-term, profit-maximization exploitation of natural resources, in order to meet the needs of future generations.

However, we also saw that sustainable development is presently premised on sustained economic growth in a global market economy thus ignoring the possibility that continuous economic growth will exacerbate the existing environmental crisis, as well as the uneven power relations between developed and developing countries, the rich and the poor, and men and women which are inherent in the global market economy. Moreover, we saw that the economic indicators such as the United Nations Systems of Accounting (UNSA) and Gross National Product (GNP) that are used to measure development do not account for environmental degradation or women's unpaid labour, thus contributing to natural resource depletion and the marginalization of women. Finally, we saw that sustainable development

⁵⁵ See Chapter 3, above.

has provided proponents of population control programmes with an additional argument in favour of such policies, thus endangering the health and freedom of women.⁵⁶

Although the globalization of the capitalist market is a reality, sustainable development does not have to exclusively mean sustained economic growth. Realistically, sustainable development could mean more ecologically and socially sustainable development and be measured by the fulfillment of basic needs for all citizens, whether through a global economy or through subsistence means. For this, barren economic indicators such as the GNP and the UNSA can be replaced by full cost accounting⁵⁷ which values the unpaid work of women⁵⁸ and subsistence communities and accounts for natural resource depletion. In this way, progress towards development would be measured by indicators such as the health of people, their access to education, health care, food and clean water, as well as by the preservation of natural resources and general environmental quality. Furthermore, ecological and social costs must be included in the prices paid for all goods and services.⁵⁹

Sustainable development will also be achieved through the narrowing of the gaps between those who have and those who have not. In a global market economy, this is not an easy task. Globalization of the market has increased the gap between developed and developing countries, the rich and the poor, and between men and women. The concept of intragenerational equity, which as we saw in Chapter 4 is reflected in provisions relating to states' common but differentiated responsibilities, the sharing of benefits and the eradication

⁵⁶ See Chapter 4, above.

⁵⁷ See Women's Agenda 21, supra note 3.

⁵⁸ The United Nations has adopted a framework for mainstreaming gender into economic policies, which states that a prerequisite for mainstreaming gender is the integration of the paid and unpaid sector: see United Nations General Assembly, Sustainable Development and International Economic Cooperation: Women in Development - Effective Mobilization and Integration of Women in Development - Mainstreaming the Gender Perspective into Economic Policies: a Preliminary Framework for Action, UNGA, 52nd Sess., UN Doc.A/52/345 (1997)[hereinafterWomen in Development].

⁵⁹ "Consumption Treaty", *supra* note 17, paragraph 6.

of poverty, attempts to narrow this gap in order to achieve sustainable development. Intergenerational equity attempts to narrow the gap between generations, in order to ensure that future generations will have access to the same quality and quantity of resources. However, as we saw in Chapter 4, intra/intergenerational equity fails to account for the uneven relationships that characterise and cause these gaps. Furthermore, although intragenerational equity mandates financial and technical assistance by developed states to developing states, it does not guarantee that women or the poor will benefit from this kind of assistance.

Finally, sustainable development must be achieved through the stabilization of the world's population control, but this must be done on a voluntary basis and through women-centered, women-managed comprehensive reproductive health services in order to ensure social justice and success. More importantly, it must be accompanied with a reduction in the consumption patterns of the population living in developed countries. Binding provisions as to the reduction of Northern consumption patterns are a crucial element in any international effort at achieving sustainable development. All of the above changes to the meaning and measure of sustainable development are in my view possible within a global market economy.

The concept of intra/intergenerational equity could be improved by adding to the equity equation all of the planet's species and by specifically acknowledging the inferior situation of women worldwide. Thus sustainable development would be achieved without jeopardizing the rights of future generations of all species, including humans. The inclusion of nonhuman Nature in the concept would at least ensure that species will not become extinct because of overexploitation or environmental pollution and would recognize our interconnectedness with it. The inclusion of women in the concept, translated by the inclusion of specific provisions dealing with gender equality and the special vulnerability of women to

⁶⁰ See Chapter 4, above.

environmental degradation, would ensure that equal access to health care, education and land resources for women in developing countries would be given priority.

c) Role of science in international environmental protection

We saw in Chapter 3 that science plays an important role in the global protection of the environment. Science is relied upon in order to first sound the alarm in relation to a potential environmental threat; this can be problematic since states are reluctant to act if there is scientific uncertainty in relation to a particular environmental concern. In our Western society, science and technology are also expected to hold the key to environmental problems: better emission technology to stop the pollution of the atmosphere, more efficient ways of producing energy, scientific methods of artificially conserving and reproducing animal and plant species, and better agricultural technologies to stop world hunger. However, we also saw in Chapter 3 that by relying on science and technology to solve environmental problems, international environmental law is ignoring the fact that they contributed to the problem in the first place. Furthermore, Western science has also contributed to "maldevelopment" in the South and thus to the domination of the South by the North. Finally, by ignoring the valuable insights of women for the sustainable management of ecosystems and environmental resources, science has also marginalized women.

The emerging precautionary principle has attempted to address the problem of inaction in the face of scientific uncertainty. The precautionary principle mandates action on a particular environmental concern where a risk has been identified, even where science has not determined a causal link between the activity and the condition of the environment.⁶⁴ The

⁶² See Braidotti *et al*, *supra* note 2 at 126.

⁶¹ See Chapter 3, above.

⁶³ See Chapter 3, above.

⁶⁴ See Chapter 4, above.

principle requires clean production methods, the use of the best available technology and the best environmental practices, environmental and economic impact assessment, and scientific and economic research.⁶⁵

However, from an ecofeminist perspective, the precautionary principle is not without its problems. First, the criteria used to determine the threshold of an environmental threat before action is taken is likely to be androcentric, in that it will reflect the interests of the decision-makers. Secondly, the focus on the best available technology risks shifting the focus from environmental protection to availability and economic feasibility of technologies.

With a few changes, however, the precautionary principle has the potential to address some of these concerns. First, when establishing a threshold for action, the criteria to be considered should also include, among economic factors, Nature's best interest (i.e. the preservation of species, the introduction of environmental pollutants into Nature, etc...), as well as women's concerns about their health or resource base. Secondly, in collecting information about a potential environmental threat, the knowledge of women and local communities about their ecosystems and their concerns about their degradation should be seriously taken into account. Thirdly, the best available technology requirement should be replaced by the requirement to use the most appropriate and sustainable technology and priority should be given to technologies assisting people, especially women, in meeting their basic needs. Since in developing countries often the most appropriate and sustainable technologies should usually be "low-tech", the issue of economic feasibility should rarely arise. Furthermore, economic costs should only be considered if the environmental and the social costs of not introducing sustainable technologies are also considered on an equal basis.

⁶⁵ Ibid.

⁶⁶ As we saw in Chapter 1, above, women are more vulnerable to certain environmental pollutants than men and in developing countries, environmental degradation threatens their resource base for survival.

In summary, international environmental law's emerging principles, such as sustainable development, intra/intergenerational equity and the precautionary principle, represent a step in the direction of more effective and equitable environmental protection. The small improvements I have suggested would make these principles slightly more ecofeminist-like thus ensuring a greater respect for women, the poor, people in developing countries, and for Nature. However, for these improvements to lead to more effective environmental protection, they should find their way into binding provisions of environmental conventions. Since this is not likely to happen, we could argue that these new "improved" principles should at least be included in the preamble of agreements, thus "defining the conventions' conceptual underpinnings". If this is the case, international organizations such as the United Nations and its many agencies, must reinforce these principles by mainstreaming them in policies, programmes and decision-making in all areas.

III. The bottom line: the inclusion of women's voices in international environmental law

Whether the connection between women and the environment is biologically or socially constructed by the productive and reproductive roles of men and women, or whether this connection exists at all, women are key actors in the conservation of the environment and natural resources all over the world⁶⁹. Moreover, women and children living in rural areas in

⁶⁸ *Ibid.* Although including these principles in the preamble means that environmental protection will always be at risk of being outweighed by states' national interest, where their national sovereignty over their resources is recognized in a binding provision.

⁶⁷ Jutta Brunnée suggests including such principles in a separate article entitled "principles", as opposed to "commitments", as was done in article 3 of the *Climate Change Convention*.: J. Brunnée, "A Conceptual Framework for an International Forests Convention: Customary Law and Emerging Principles" in Canadian Council on International Law, ed., *Global Forests and International Environmental Law* (Cambridge, MA: Kluwer Law International, 1996) 41 at 77.

⁶⁹ See Women's Agenda 21, supra note 3; FWCW Report, supra note 5, paragraphs 248 and 250; Commission on the Status of Women, Report of the Secretary-General on the Preparations for the Fourth World Conference on Women -Action for Equality, Development and Peace: Review and Appraisal of the Implementation of the Nairobi Forward-Looking Strategies for the Advancement of Women, UN ESCOR, 1995, UN.Doc.E/CN.6/1995/3/Add.9, paragraphs 6 and 23 [hereinafter CSW Report];

developing countries are especially vulnerable to environmental degradation⁷⁰. Women also make up half of the world population. Therefore, without any further justification necessary, women deserve to be full participants in the design and implementation of environmental conventions. Thus the first step towards implementing an ecofeminist approach would be to recognize "the interconnectedness of women, the environment, economic policies, development strategies, social justice and the survival of all species"⁷¹.

Women's perspectives must therefore be integrated at all levels of decision-making⁷². For this to happen, women must be represented in equal numbers in international organizations such as United Nations agencies and bodies, national governments, development agencies and economic bodies such as the World Bank and the International Monetary Fund. Although the need to involve women in decision-making about environmental issues was recognized by the international community at UNCED⁷³, the proportion of women in UN bodies and national governments is still meager⁷⁴. The international community must give priority to attaining equality of representation in all legislative bodies at the international, national and local levels and progress must be stringently monitored and evaluated⁷⁵. The need for equal

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UNDAW/UNDSD/UNPF/INSTRAW, Expert Group Meeting on Women: Population and Sustainable Development: The Road from Rio, Cairo and Beijing, 1996, UN Doc.EGM/WPSD/1996/REP.1, paragraph 28, online: United Nations <gopher://gopher.un.org:70/00/esc/cn6/1997/environment/EGMWPSD1 >. [hereinafter Expert Group]

⁷⁰ FWCW Report, supra note 5, paragraph 247; Expert Group, ibid.; CSW Report, ibid., paragraphs 1 and 20.

⁷¹ Women's Agenda 21, supra note 3.
72 See Agenda 21, supra note 28, para. 24.7.

⁷³ Ibid.; see also Convention on Biological Diversity, 5 June 1992, 31 I.L.M. 818, preamble.

⁷⁴ Globally, only 10% of legislative bodies seats, and an even lower proportion of ministerial positions are held by women, despite the objective of 30% set by ECOSOC to be attained by 1995. See *FWCW Report supra* note 5, para.182; see also C.C. Joyner & G. E. Little, "It's Not Nice to Fool Mother Nature! The Mystique of Feminist Approaches to International Environmental Law" (1996) B.U. Int'l L.J. 223 at 231-232; *CSW Report*, *supra* note 69, paragraphs 17, 41, 53: the situation is not better in developed countries where "a disappointing picture still prevails regarding the access of women to top decision-making in the field of the environment". However, it seems to be slowly improving: Paragraph 34 of that report states that many national reports have noted that the number of women in decision-making positions in ministries related to the environment and agriculture has increased (although it does not state the importance of the increase).

⁷⁵ Expert Group, supra note 69, par.73; the Expert Group argues for a 30% representation, and that this objective is relevant only for institutions (i.e. international institutions and national ministries) dealing with sustainable development and population (see par.68). However, areas such as global trade and science, for example, which also indirectly affect the environment and women, are left out.

representation is most urgent in areas affecting women such as environment, development and population, but must eventually be extended to all areas. Furthermore, a new gender-sensitive model for exercising power would have to be developed so that women in decision-making positions would not be disadvantaged⁷⁶ by male negotiating tactics and strategies⁷⁷. Finally, women need to be equally represented in "the management of financial and corporate institutions, whose decision-making most significantly affects environmental quality"⁷⁸.

Second, considering the significant influence of women's organizations on legal institutions in addressing the environment⁷⁹, women's organizations must obtain extensive support, as suggested by the Expert Group Meeting:

Given that empowerment of women is an issue of human rights and is essential to achieving sustainable and equitable development, and given critical role played by women's organizations in the move towards more sustainable development, the United Nations and other multilateral and bilateral donors should enhance their procedures for support to women's organizations, in all their diversity. In line with agreements in Rio, Cairo and Beijing, financial and in kind assistance to women's organizations should be increased in all areas of empowerment, including support to local women to relieve their burden of multiple roles.⁸⁰

Third, women must actively participate in the implementation of international environmental conventions. Women's perspectives must be included in the planning and carrying out of all development and conservation projects⁸¹. Every funding proposal should be thus scrutinized for the participation of women⁸². Additionally, more projects specifically targeting women, such as access to drinking water, upgrading technologies and other ways to reduce their work

⁸² Women's Agenda 21, supra note 3; FWCW Report, supra note 5, para.254(b)(c).

⁷⁶ Expert Group, ibid. para.71.

⁷⁷ Knop, *supra* note 42 at 305.

⁷⁸ FWCW Report, supra note 5, para.249.

⁷⁹ CSW Report, supra note 69, para.13.

⁸⁰ Expert Group, supra note 69, para.79.

⁸¹ FWCW Report, supra note 5, para.254(b); Expert Group, ibid., para.81, although I must note here that the Expert Group argues for "gender mainstreaming", which takes into account both women and men equally.

burden, should be designed⁸³. Studies on the impacts of development projects on women and the environment must be carried out⁸⁴. Finally, involving women at the local level must include "legal reforms, policy and administrative reforms to ensure women's equal rights to natural resources, including access to, ownership and control over land and other forms of property, credit, inheritance..."⁸⁵. Although in my opinion this last idea perpetuates the anthropocentric view of Nature, it is nevertheless a realistic way of protecting Nature by giving more control over natural resources to women.

Finally and most importantly, a gender perspective must be mainstreamed into all decision-making, policies, programmes, and institutions relating to women's issues, the environment, development, economic and trade issues, and eventually into all areas of decision-making. Moreover, gender mainstreaming must take place at all levels of policy-making, including the United Nations, national and municipal governments. The Economic and Social Council of the United Nations defines gender mainstreaming as the following:

Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.⁸⁷

⁸³ Women's Agenda 21, ibid. suggests that half of development resources be targeting women specifically. ⁸⁴ FWCW Report, supra note 5, par.256(b), 258(b); Agenda 21, supra note 28, paragraph 24.8.

⁸⁵ Expert Group, supra note 69, para.86; see FWCW Report, supra note 5, par.35; the Women's Agenda 21, supra note 3, holds that these entitlements should be regarded as human rights.

⁸⁶ Women in Development, supra note 58.

⁸⁷ Economic and Social Council, *Report of the Economic and Social Council for 1997: Agreed Conclusions 1997/2*, ECOSOC, 1997, UN Doc.A/52/3, online: Division for the Advancement of Women http://www.un.org/womenwatch/daw/followup/main.htm (date accessed: 28 September 1998). The *Framework for Action*, *supra* note *, paragraph 9, provides policy-makers at all levels with guidelines on the integration of a gender analysis into economic policies noting the three underlying premises:

^{...}first, the scope of economic activity includes both the paid and unpaid sectors of the economy; second, gender is one of the factors that mediates and shapes economic decision-making and the distribution of work, productive input, income and wealth; and third, institutions themselves are structures which produce and transmit gender biases that affect all economic relations.

Gender mainstreaming is perhaps the best way of addressing women's concerns, of including their voices and of ensuring their participation in the achievement of environmental protection, but must be carried out with the full and meaningful participation of women.

Conclusions

Although I am convinced that the androcentric bias that underlies international environmental law will hinder it from achieving effective environmental protection, this body of law does have tremendous potential to move towards better environmental protection. After all, emerging principles of international environmental law such as sustainable development, inter/intragenerational equity, the precautionary principle and the common concern of humankind have set the stage and influenced domestic laws and policies all over the world. Thus my belief that global change can start from the international level to trickle down to the individual in order to promote global environmental protection.

However, I still believe that the key to the protection of the global and local environment lies in a change of our collective and individual attitude towards Nature. Ecofeminism points out that there are important connections between how our Western society has treated and continues to treat women, the poor, and people of colour on the one hand, and how it has plundered the earth and exploited its resources on the other. It is only when we come to change our view of humankind as separate from and above Nature, and we begin to act in accordance with the reality of the interconnectedness of all species, that we can hope to live in harmony with our environment and stop the rape of the world.

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