



**A COMPARATIVE STUDY OF LAWS AND POLICIES
IMPACTING ON CONSERVATION OF BIODIVERSITY
WITH SPECIAL REFERENCE TO AGRICULTURAL
BIODIVERSITY**

BY

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ABSTRACT

The process of rapid development comes with a price and it is mostly done at the expense of biodiversity and general environmental degradation. The complex interrelationship between agricultural biodiversity and biotechnology as well as the conflicting institutional interplay in the international governance of the conservation and use of plant genetic resources has resulted in a trade-environment deadlock between the technologically advanced developed nations and genetically resource rich developing and least developed nations to the detriment of the collective interests of the global community. The aim of the current research is to investigate the origins, operations and effects of legal regimes, policies and practices related to conservation of biodiversity. It undertakes a comparative study of laws and policies in this area to gain an in-depth understanding of the factors behind the lack of success in conserving biodiversity in general and agricultural biodiversity in particular and explores ways in which the conflicts between the WTO Agreements and the CBD can be resolved. The research undertook a socio-legal approach utilizing a qualitative research method which predominantly relied on content analysis of provisions in the various treaties that had a bearing on conservation of biodiversity as well as decided cases, reports and studies that analyzed the implementation of these treaties. The findings of the study indicated that global governance structures such as the WTO and the CBD have to reinvent themselves in order to meet the challenges of the millennia brought about by cutting edge technologies such as modern biotechnology. The global community also must have an Ubuntu mindset i.e. unity consciousness to tackle global challenges such as biodiversity loss and global warming which threatens the wellbeing of the planet and its inhabitants. Without such a mindset, no technology, policies or laws will be able to avert the global crises which may culminate into massive extinctions and jeopardize the future of this planet. We need to ensure that our policies and laws are entrenched with ethical values promoted at the global level aimed at ensuring the wellbeing of all.

خلاصة البحث

إن عملية التطوير السريع تأتي مع السعر ويتم ذلك في الغالب بآثار ضارة على التنوع البيولوجي و البيئة العامة. وقد أدى الترابط المعقدة بين التنوع البيولوجي الزراعي و التكنولوجيا الحيوية وكذلك التفاعل المؤسسي في الإدارة العالمية للحفاظ واستخدام الموارد الوراثية النباتية إلى طريق مسدود للتجارة والبيئة بين الدول المتقدمة تقدا من الناحية التكنولوجية والدول النامية و الأقل نموا الغنية بالموارد وراثيا على نحو يضر المصلحة العامة للمجتمع العالمي. وكان الهدف من البحث الحالية هو لتحقيق الأسباب والعمليات و آثار الأنظمة القانونية والسياسات و الممارسات المتعلقة بحفظ التنوع البيولوجي. إنه يتولى دراسة مقارنة للقوانين والسياسات في هذا المجال لاكتساب فهم متعمق للعوامل وراء عدم النجاح في المحافظة على التنوع البيولوجي عموما وفي التنوع البيولوجي الزراعي على وجه الخصوص ويستكشف السبل التي تمكن على حل صراعات بين اتفاقيات منظمة التجارة العالمية و اتفاقية التنوع البيولوجي. أجرى البحث نهج الاجتماعية و القانونية باستخدام أسلوب البحث النوعي التي تعتمد في الغالب على تحليل مضمون الأحكام الواردة في المعاهدات المختلفة التي قد تؤثر على حفظ التنوع البيولوجي وكذلك القضايا التي قد قررت والتقارير والدراسات التي حللت تنفيذ هذه المعاهدات. وأشارت نتائج الدراسة إلى أنه يجب على هياكل الحوكمة العالمية مثل منظمة التجارة العالمية واتفاقية التنوع البيولوجي اصلاح نفسها من أجل مواجهة تحديات الألفية التي أحدثتها التقنيات المتطورة مثل التكنولوجيا الحيوية الحديثة. يجب على المجتمع العالمي أيضا أن يكون له التفكير أوبونتو يعني ان يكون على نفس المستوى من الوعي لمعالجة التحديات العالمية مثل فقدان التنوع البيولوجي و ظاهرة الاحتباس الحراري التي تهدد رفاه الكوكب و سكانه. بدون مثل هذا التفكير ، فليس هناك أي تكنولوجيا أو سياسات أو قوانين تكون قادرة على تجنب الأزمات العالمية التي قد تفضي الى انقراض هائل و تعرض للخطر مستقبل هذا الكوكب. نحن بحاجة للتأكد من أن السياسات والقوانين لدينا هي راسخة بالأخلاقيات العالمية التي تضمن الرفاهية للجميع.

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Lekha Kunju Pillai Laxman

Signature

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This thesis is lovingly dedicated to the memory of my late father, K. Laxman and my beloved mother S. Leela who has taught me never to give up in my quest for truth in the name of God. It is also in special honor of the three billion people in this world living on less than \$2.50 a day and the 22,000 children who die each day due to poverty.

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Biosafety Act, 2007 of Malaysia
Bangkok Declaration, 1967
Codex Alimentarius International Food Standards
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
Convention on the Transboundary Effects of Industrial Accidents
International Convention for the Protection of New Varieties of Plants ("UPOV Convention")
International Convention on Economic, Social, and Cultural Rights
Marrakesh Agreement Establishing the World Trade Organization.
1985 Nature Conservation and Amenity Lands Order
The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)
The Agreement on Technical Barriers to Trade (TBT)
The ASEAN Declaration on Heritage Parks and Reserves
The Cartagena Protocol on Biosafety (CPB)
The Clean Air Act of Germany
The Convention on Biological Diversity (CBD)
the Convention on the Rights of the Child
The Executive Order 430 of Philippines
The General Agreement on Tariffs and Trade (GATT)
The Jakarta Resolution on Sustainable Development
The United Nations Framework Convention on Climate Change
The International Plant Protection Convention (IPPC)
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The Law of the Sea Convention
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The Vienna Convention on the Law of Treaties
Treaty of the Functioning of the European Union
UNESCO Convention for the Protection of the World Cultural and Natural Heritage
Wildlife and Countryside Act, 1981 of the United Kingdom

LIST OF ABBREVIATIONS

Acronym Name

AIA	Advanced Informed Agreement
AB	Appellate Body (for the WTO)
ABS	Access to Genetic Resources and Benefit Sharing
AGR	Access to Genetic Resources
APEC	Asia-Pacific Economic Cooperation Group
ASEAN	Association of South-East Asian Nations
AWGE	ASEAN Working Group on Environment
AWGNCB	ASEAN Working Group on Conservation and Biodiversity
Bt.	Bacillus Thuringiensis
BEAs	Bilateral Environmental Agreements
CAC	Codex Alimentarius Commission
CBD	Convention on Biological Diversity
CCD	Convention on Combat Desertification
CERES	Coalition for Environmentally Responsible Economies
CGIAR	Consultative Group on International Agriculture Research
CGRFA	Commission on Genetic Resources for Food and Agriculture
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on Migratory Species
COP	Conference of the Parties to the Convention on Biological Diversity
CSR	Corporate Social Responsibility
CTE	Committee on Trade and Environment (of the World Trade Organization)
DNA	Deoxyribonucleic acid
EC	European Community
ECA	UN Economic and Social Commission for Africa
ECE	UN Economic Commission for Europe
ECJ	European Court of Justice
ECLAC	UN Economic and Social Commission for Latin America and the Caribbean
EKC	The environmental Kuznets curve
EMS	Environmental Management System
ENGOS	Environmental Non-Governmental Organizations
EPA	Environmental Protection Agency
ESCAP	UN Economic and Social Commission for Asia and the Pacific
ESCWA	UN Economic and Social Commission for West Asia
ETM	Environmental Trade Measure
EU	European Union
FAO	UN Food and Agriculture Organization
FD	Framework Directive
G8	Group of Eight
GATS	General Agreement on Trade in Services

GATT	General Agreement on Tariff and Trade
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
GISP	Global Invasive Species Programme
GM	Genetic Modification
	GMO Genetically modified organism
GNP	Gross National Product
GR	Genetic Resources
HGT	Horizontal Gene Transfer
IAEA	International Atomic Energy Agency
IARCs	International Agricultural Research Centers
IAS	Invasive Alien Species
IATTC	International Organization for Standardization
IBRD	International Bank for Reconstruction and Development or World Bank
ICAO	International Civil Aviation Organization
ICSU	International Council of Scientific Unions
IE	International Expert Group on Biotechnology, Innovation and Intellectual Property
IEA	International Energy Agency
IFAD	International Fund for Agricultural Development (of UN)
IGC	Intergovernmental Committee on Genetic Resources and Intellectual Property Rights; Traditional Knowledge and Folklore (of WIPO)
ILC	Indigenous and Local Communities
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
IPCC	International Panel on Climate Change
IPOA	International Plan of Action
IPPC	International Plant Protection Convention
IPR	Intellectual property rights
ISDR	International Strategy for Disaster Reduction
ISO	Inter-American Tropical Tuna Commission
ITC	International Trade Centre
ITLOS	International Tribunal for the Law of the Sea
ITO	International Trade Organization
ITPGRFA	International Treaty for Plant Genetic Resources for Food and Agriculture
ITTO	International Tropical Timber Organization
ITU	International Telecommunications Union
IUCN	World Conservation Union (previously International Union for the Conservation of Nature and Natural Resources)
IWC	International Whaling Commission
LDC	Least Developed Country
LMO	Living Modified Organism
LMO-FFP	Living Modified Organism for Food and Feed or for Food Processing

LOP	Level of Protection
MA	Millennium Ecosystem Assessment
MAI	Multilateral Agreement on Investment
MAT	Mutually Agreed Terms
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MEPC	Marine Environment Protection Committee
MFN	Most Favored Nation
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
OCHA	Office for the Coordination of Humanitarian Affairs
OHCHR	Office of the High Commissioner for Human Rights
PBR	Plant Breeder's Rights
PCB	Polychlorinated Biphenyl
PD	Pesticide Directive
PGRFA	Plant Genetic resources for Food and Agriculture
PGRs	Plant Genetic Resources
PIC	Prior Informed Consent
PP	Precautionary Principle
PPD	Process and production method
RNA	Ribonucleic acid
rDNA	Recombinant Deoxyribonucleic acid
SAC	Special Area of Conservation
SBC	Secretariat of the Basel Convention
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice (of COP)
SCBD	Secretariat of the Convention on Biological Diversity
SCM Agreement	Subsidies and Countervailing Agreement
SCP	Standing Committee on the Law of Patents (WIPO)
SPA	Special Protection Area
SPLT	Substantive Patent Law Treaty
SPS	Uruguay Round Agreement on the Application of Sanitary and Phytosanitary Measures
TAC	Total allowable catch
TCE	Traditional Cultural Expressions
TED	Turtle Excluder Device
TEG	Technical Expert Group of the CBD
TK	Traditional Knowledge
TEK	Traditional Ecological Knowledge
TT	Technology Transfer
TBT Agreement	Agreement on Technical Barriers to Trade
TRAFFIC	Trade Records Analysis of Fauna and Flora in Commerce
TRIPS	WTO Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCCD	UN Convention to Combat Desertification
UNCED	UN Conference on Environment and Development

UNECE	UN Economic Commission for Europe
UNCTAD	UN Conference on Trade and Development
UNDESA/DSD	United Nations Department of Economic and Social Affairs Division of Sustainable Development
UNDESA/CSD	United Nations Department of Economic and Social Affairs Commission of Sustainable Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCAP	United Nations Economic and Social Commission of the Asia Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	UN Framework Convention on Climate Change
UNFF	UN Forum on Forests
UNFPA	United Nations Population Fund
UN-HABITAT	UN Human Settlements Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNU	United Nations University
UPOV	<i>Union Internationale pour la Protection des Obtentions Végétales</i> (International Union for the Protection of New Varieties of Plants)
WCMC	World Conservation Monitoring Group
WCO	World Customs Organization
WEHAB	Water, Energy, Health, Agriculture & Biodiversity
WFP	World Food Programme
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Tourism Organization
WTO	World Trade Organization
WWF	World Wide Fund for Nature

CHAPTER ONE

THE CONSERVATION OF GLOBAL BIODIVERSITY & RESEARCH FRAMEWORK

O great King, the birds of the air and the beasts have as equal a right to live and move about in any part of the land as thou. The land belongs to the people and all living things; thou art only the guardian of it.

A sermon on Buddhism preached to King Devanampiya Tissa around 223 BC¹

1.0 INTRODUCTION

Man is part and parcel of the ecology of the earth and the delicate balance of nature is maintained when man co-exists with all species in a symbiotic relationship. The infinite value of biological diversity (hereinafter biodiversity)² is irrefutable for it has sustained the planet from time immemorial. Numerous benefits both material and non-material continually accrue from natural ecosystem processes but many are yet to be discovered by mankind.³ Some of these possess immense economic value⁴ for it has

¹ Ian McHarg, "Values, process and form," in *The fitness of man's environment*, edited by the Smithsonian Institution, Smithsonian Institution Press, 1968, 213

² 'Biodiversity' is an extremely complex cum multilayered term and thus extremely difficult to define with precision. The concept of biodiversity relates to all life form on earth; it goes beyond the organisms and includes their genetic make-up, and the invisible ecosystem processes and services of which individual species are a part (e.g. photosynthesis, soil formation and pollination). The most legally accepted definition of "biodiversity" is "the variability among living organisms from all sources, including, inter alia, terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they part; this includes diversity within species, between species and of ecosystems"; this definition was formulated during the 1992 United Nations Earth Summit in Rio De Janeiro and is currently adopted by the United Nations Convention on Biological Diversity as per Article 2. Source: <<http://www.cbd.int/doc/meetings/sbstta/sbstta-11/official/sbstta-11-17-en.pdf>> (accessed 12 January 2009).

³ Balmford, A., Bennun L., ten Brink, B. et al., "The Convention on Biological Diversity's 2010 target," *Himalayan Journal of Sciences*, vol.3 issue 4 (Jan-June 2005): 43-45, 43. See also: Raustiala, Kal and Victor, David G., " Biodiversity since Rio: The Future of the Convention on Biological Diversity," *Environment*, vol.38 no.4 (May 1996): 17-43, 18; Díaz S, Fargione J, Stuart Chapin F III, Tilman D, "Biodiversity Loss threatens Human Wellbeing," *PLoS Biology*, vol.4 issue 8 (August 2006): 1300-1305, 1300

⁴ Ansari, Abdul Haseeb and Jamal, Parveen, "The Convention on Biological Diversity: A Critical Appraisal with Special Reference to Malaysia," *Indian Journal of International Law*, vol.40, no.2 (April-June 2000):137-177, 144

the potential to yield tangible benefits as a result of direct harvesting of plants and animals for food, medicine, fuel, etc. whilst others have environmental benefits such as regulation of air quality and climate, water purification, disease control, biological pest control, pollination, shoreline protection and prevention of soil erosion.⁵ It has been estimated that 40 percent of the global economy is based on biological products and processes.⁶ Non-material benefits are also obtained from eco-systems namely spiritual, cultural, aesthetic and recreational values not to mention research values as well as traditional knowledge systems.⁷ It is safe to surmise that biological diversity offers significant benefits to the global community for it not only sustains livelihoods but life itself.⁸ Its universal relevance thus necessitates the safeguarding of the collective biological diversity⁹ as its protection is a fundamental part of efforts to ensure a thriving and healthy environment for present and future generations of humans and all other living species¹⁰.

The global population today is undergoing various challenges that are closely linked to the environment they live in. The inclination of humans to set themselves apart from the environment and the species that co-habit with them whilst assuming to be superior even to the laws of nature have given rise to many of the challenges faced by the global inhabitants today. In the name of development,¹¹ many nations have

⁵ The ASEAN Centre for Biodiversity (ACB), "Importance of Biodiversity," <http://www.aseanbiodiversity.org/index.php?option=com_content&view=article&id=78&Itemid=97> accessed 20 January 2009

⁶ Koziell, I., *Diversity not Adversity: Sustaining Livelihoods with Biodiversity*, International Institute for Environment and Development and Department for International Development, 2001, 1

⁷ ACB, n. 5

⁸ Koziell, n.6, 1

⁹ Ansari & Parveen, n. 4, 138

¹⁰ Macquarie Statement: Statement of the Third Colloquium of the IUCN Academy of Environmental Law in *Biodiversity Conservation, Law and Livelihoods: Bridging the North-South Divide*, Michael I Jefferey, Jeremy Firestone, Karen Bubna-Litic (eds.), Cambridge University Press, 2008, xiii.

¹¹ 'Development' is a concept associated with positive attributes. In fact it denotes "evolution from within" and until mid-twentieth century, it was "synonymous with evolution as self-organization." But today the "development ideology" is closely intertwined with the process of globalization – it has "implied the globalization of the priorities, patterns and prejudices of the West." Thus it is not self-

engaged in non-sustainable activities that have endangered the biodiversity of the world. Thus, many species of plants and animals are fast becoming extinct if not already so.¹² The existing pool of genetic resources thus is eroding rapidly mainly due to globalization, habitat loss and fragmentation, species introduction, global warming, overharvesting of flora and fauna, climate change, pollution, tourism.¹³ Other contributing factors include industrialization, loss of indigenous knowledge, widespread use of simple variety crop, and lack of gene banks.¹⁴ Amongst these factors, destruction and deterioration of habitats as well as introductions of exotic species constitute the greatest of threats to biodiversity particularly in tropical developing countries.¹⁵

All of the above mentioned drivers of biodiversity loss not only threaten the sustainability of global biodiversity but also cultural diversity due to the close linkages between the two since they are “mutually reinforcing and mutually dependent.”¹⁶ Although biological diversity is relatively a newer concept than cultural diversity,¹⁷ both diversities are crucial since they “consist of values of and for the very long

generated but imposed, does not come from within but externally guided. The net effect is homogeneity and uniformity as opposed to “maintenance of diversity.” Source: Shiva, Vandana, *Biopiracy: the plunder of nature and knowledge*, South End Press, 1997, 107

¹² Ansari, Abdul Haseeb, “Future Directions in Conservation of Biological Diversity: An Interdisciplinary Approach,” 1 in *Biodiversity Conservation, Law and Livelihoods: Bridging the North-South Divide*, Michael I Jefferey, Jeremy Firestone, Karen Bubna-Litic (eds.), Cambridge University Press, 2008

¹³ Jeffery et al., n. 10, 1

¹⁴ Ansari & Parveen, n. 4, 137

¹⁵ Ammann, Klaus, “The impact of agricultural biotechnology on biodiversity: A Review,” at 3, <<http://www.botanischergarten.ch/Biotech-Biodiv/Report-Biodiv-Biotech12.pdf>> accessed 15 April 2009

¹⁶ UNESCO & UNEP, “Cultural Diversity and Biodiversity for Sustainable Development,” at 8, <<http://unesdoc.unesco.org/images/0013/001322/132262e.pdf>> accessed 15 February 2009. See also Jeffery et al. n.10, 1

¹⁷ There is a general consensus that the concept ‘biological diversity’ was introduced in 1986 and within a very short time was developed and enshrined in multilateral environmental agreements. Source: Bridgewater, P., Arico, S. and Scott, J., “Biological Diversity and Cultural Diversity: The Heritage of Nature and Culture through the Looking Glass of Multilateral Agreements,” *International Journal of Heritage Studies* vol.13 no.4-5 (July-September 2007): 405-419, 405

term.”¹⁸ In fact a growing body of evidence has validated the link between biological and cultural diversity and continues to explore the interface between these and other forms of diversity.¹⁹ This has led to the realization of the crucial role of indigenous peoples around the world both as “custodians of biodiversity and proponents of cultural diversity.”²⁰ Although there is tremendous diversity in the cultures and values of these indigenous peoples, all of them have a commonality. They subscribe to conservation of nature in which the Earth and its resources are “a sacred heritage” arising from the “intergenerational obligation to pass the land to future generations” as well as “to use it in sustainable ways.”²¹

Cultural diversity irrefutably is a “powerful guarantee of biodiversity” given that “human action with respect to the environment, including management itself, is a social act and an expression of culture.”²² Both these diversities are not only jointly addressed in many Multilateral Environmental Agreements (MEAs)²³ but also “recognized, explicitly and implicitly, as part of the global heritage of humankind, with the attendant responsibilities that flow from that.”²⁴ Nevertheless, their mutual strengths have not been adequately tapped in the MEAs to address the rapid loss of biodiversity of global proportions.²⁵

Maintaining and protecting global biodiversity requires addressing these multitudinous factors in order to stem the rate of loss occurring at such an unprecedented rate which simultaneously creates ecological imbalances and ultimately

¹⁸ UNESCO & UNEP, n. 16

¹⁹ Bridgewater et al., n. 17, 406

²⁰ Ibid.

²¹ Id.

²² UNESCO & UNEP, n. 16

²³ Multilateral environmental agreement is “an intergovernmental document intended as legally binding with a primary stated purpose of preventing or managing human impacts on natural resources.” Source: Kanie, Norichika, “Governance with Multilateral Environmental Agreements: A Healthy or Ill-Equipped Fragmentation?” <<http://www.cenerforumreform.org>> accessed 12 April 2009

²⁴ Bridgewater et al. n. 17, 405

²⁵ Ibid.

erodes the capacity of this planet to sustain life on earth.²⁶ The mode and mechanisms to address these factors are increasingly subsumed by international environmental governance²⁷ in the 21st century as environmental protection is progressively viewed from a global perspective.²⁸

The face of modern international environmental law has undergone successive transformations beginning from the 1970s. Not only were a multitude of international environmental instruments²⁹ (bilateral and multilateral of the binding and non-binding types) concluded,³⁰ the look and feel of these provisions had also drastically altered to resolve complex environmental issues threatening our planet. The provisions of these instruments are “more stringent and detailed” in comparison to their predecessors, their “subject matter wider in scope” and the “provisions for implementation more sophisticated.”³¹

Environmental problem solving however does not occur in the context of “streamlined” international institutions like other international policy fields such as trade, economic policy or health.³² The existing institutional architecture has evolved incrementally over the last forty years in an “ad hoc and fragmented” manner³³ in response to environmental issues that increasingly epitomizes “the complexity and

²⁶ Extracts from UN Secretary-General Ban Ki-moon’s speech on International Day for Biological Diversity on 22 May 2007, <<http://www.un.org/News/Press/docs/2007/sgsm10994.doc.htm>> accessed 8 May 2009

²⁷ International environmental governance consists of the United Nation’s Environmental Program (UNEP), a multitude of international environmental agreements and various international institutions dealing with environmental issues. Source: Simon, Nils and Dröge, Susanne, “Rio 2012 and Reform of International Environmental Governance,” in *On the Road to Sustainable Development: How to Reconcile Climate Protection and Economic Growth*, Bärbel Kofler and Nina Netzer (eds.), May 2012

²⁸ Jeffery, Michael I., “An International Regime for Protected Areas,” at 1, <http://www.earthlore.ca/clients/WPC/English/grfx/sessions/PDFs/session_1/Jeffery.pdf> accessed 9 May 2009

²⁹ The International Environmental Agreements Database (University of Oregon, United States) contains details on over 1,100 multilateral and 1,500 bilateral agreements. Source: Simon and Dröge, n. 27, 105

³⁰ Weiss, Edith Brown, “International Environmental Law: Contemporary Issues and the Emergence of a New World Order,” *Georgetown Law Journal* vol.81 (March 1993): 675-710, 678

³¹ *Ibid.*

³² Kanie, n. 23, 67

³³ *Ibid.*