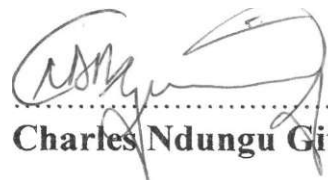


DECLARATION

I, Charles Ndungu Githuka, do hereby declare that this is my original work; arrived at through reading, research and reasoning and the same has not been submitted and is not currently being submitted for any academic accreditation in any other institution. All information obtained from other sources has been duly acknowledged.

The dissertation comprises 20,008 words in all.


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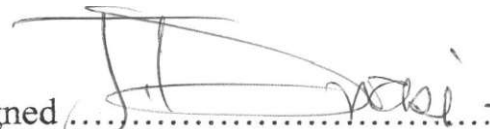
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DEDICATION

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To Master Swami Gyankirti, he who guides along the path of luminous consciousness.

ACKNOWLEDGEMENT

I am most grateful to Master Swami Gyankirti for his timeous supply of a bounty of invaluable books without which this work would not have been possible.

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**CONCEPTUAL FOUNDATIONS FOR THE ELIMINATION OF
ENVIRONMENTAL DEPREDATION: LEGAL APPLICATION
OF ENVIRONMENTAL THERAPY ^**

BY CHARLES NDUNGU GITHUKA
G/62/P/7786/2003 '

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CHAPTER ONE

1.0.0 INTRODUCTION

1.1.0 *BACKGROUND*

This dissertation seeks to investigate the actual causes of the worsening environmental depredation and to recommend the incorporation, into international environmental law, of possible means — mainly mind-based — of arresting the degradations and then restoring and sustaining a healthy global environment. The writer is of the view that total effectiveness of international environmental law in eliminating environmental depredation may be achieved only by identifying the root causes of environmental depredation and prescribing, within the law, practical and cheap means of healing global environment. It appears that hitherto international environmental law has been targeting symptoms rather than the malady itself. In the result the law fails to prescribe efficacious means of checking the depredation. The law tends instead to contain and be governed by mind-sets which generate concepts that lead to a more degraded environment.

The dissertation is therefore premised on the proposition that environmental depredation results from the powerful negative mental concepts predominating existing international environmental law and that environmental depredation will be resolved only by incorporation, into that law, of positive mental concepts and the prescription of the means for their manifestation in the physical world. The natural creative power of the mind will thereby be harnessed to effectively serve the environmental cause for the benefit of succeeding generations of all 'beings' in the biosphere.

1.2.0. OBJECTIVES

This research seeks to demonstrate that international environmental law lacks full effectiveness due to its failure to incorporate the means for actually resolving environmental depredation and to establish that such prerequisites are to be found principally within the creative power of the mind. I am therefore proposing that international environmental law be blended with the various mental concepts that are likely to be manifested, in the physical universe, as ameliorative influence on the environment and which have been acknowledged by science and metaphysics as valid,

efficacious and cost-effective besides being suitable for application through wide public participation. By harnessing the infinite power of the mind to the international environmental law the environment will be effectively protected and preserved in such a way as to make sustainable development feasible and realistic.

1.3.0. LITERATURE REVIEW

A cross-section of environmental law conventions has been considered in order to find out if any of them identifies the actual causes of the environmental problems each seeks to resolve and if any of them actually provides an effective remedy therefor. The numerous treaties seeking protection, preservation, conservation and development of fisheries or specific fishes, whaling, wildlife, birds, specific locale such as navigable transboundary water-courses, wetlands, mangrove forests and marine ecosystems *et cetera*, acknowledge the existence of problems leading to depredation but none seeks their real root causes nor do they prescribe how the problems are to be resolved. The conventions addressing pollution of the air, water and pollution from land-based sources do identify the pollutants as something or other originating from human activities but the causation of the pollutants or means of controlling their ultimate source is not reflected in the treaties.

The convention on the protection of the ozone layer and its several protocols identify the culprit chemical substances produced by human beings but they neither reach the ultimate source of the substances or how these will be countered nor do they reflect any awareness of the existence of any means by which humans may neutralize the harmful substances. The replacement of the harmful chemicals with others perceived as less harmful provides only a temporary solution, which is liable to be circumvented in due course.

All the treaties reflect the concepts of human interests, dominance and control over the environment, mainly expressed in terms of human rights. Even where the conventions appear to be concerned with or about the environment itself they turn out to be limited by the prevailing human attitudes and therefore to serve human purposes, invariably at the expense of the environment. The protection of the environment is, for example, touted by the Declaration of the United Nations Conference on the Human Environment (1972 Stockholm Declaration) to be man's solemn responsibility,¹ and by

¹ 1972 Declaration of the United Nations Conference on Human Environment (1972 Stockholm

the World Charter for Nature to be "each person's duty,"² but none of these and many other instruments specify how the person is to undertake the task. For the 1992 United Nations Conference on Environment and Development (UNCED) "human beings are at the centre of concerns for sustainable development" yet nothing is asked of them and no adjustments to their mental concepts and resultant attitudes are demanded of them.

Philippe Sands acknowledges that environmental depredation has resulted from single-minded pursuit of anthropocentric interests as exemplified by the conventions and declarations generated at UNCED.⁴ His optimism about increasing awareness and trend towards ecocentricism, and therefore protection of the environment is, however, not borne out by the actual contents of the international and regional treaties. Sands does not in that treatise prescribe, nor does he find prescribed in any of the conventions, the means for controlling that single-minded pursuit or whatever spurs it. This paper seeks to suggest some of the desirable solutions to the otherwise intractable environmental depredation.

Patricia W. Birnie and Alan E. Boyle feel that the approach to accord rights to individuals, peoples, generations and animals, and possibly the environment itself, is usually intended to effect a reorientation of the relationship between man and the environment.⁵ These authors did not consider reorientation to be a mental process capable of impacting on the environment. This paper will seek to show how appropriate reorientation may be achieved, within environmental law context, by engaging the creative power of consciousness-directed mind.

Christopher D. Stone in his advocacy of juridical rights for natural objects considered the "psychic and social-psychic aspects" of the environment.⁶ He noted an increased awareness of the risk on the health of the environment necessitating man to reconsider his attitudes and to effect far-reaching social changes concerning people's consciousness towards the environment. Regarding popular consciousness, Stone wonders if it has been causally responsible for our material state of affairs and whether

Declaration).

² 1982 World Charter for Nature (World Charter).

³ 1992 United Nations Conference on Environment and Development (UNCED).

⁴ PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 15 (Cambridge University Press 2nd ed. 2003) (1995).

⁵ PATRICIA W. BIRNIE AND ALAN E. BOYLE, *INTERNATIONAL LAW & ENVIRONMENT* (2nd ed. 2002) (1992).

⁶ CHRISTOPHER D. STONE, *SHOULD TREES HAVE A STANDING?— TOWARDS LEGAL RIGHTS FOR NATURAL OBJECTS* (1972). Vol 45, 450 *Southern California Law Review*, 450-501.

we ought to shift our consciousness.⁷ He does not, however, answer his significant questions regarding exactly to what and on what grounds we may shift the consciousness towards the environment. This work will show how the mental concepts and consciousness are causally related to environmental depredation and how they may be harnessed to international environmental law for the improvement of the environment.

Stone explores the spiritual and moral dimensions of environmental crisis of humankind and gnats (representing the rest of nature) and comes up with a gloomy picture of an apparent inability to extricate intrinsic nature from the steely web of human interests embodied in insensitive social and corporate institutions.⁸ Stone is, nevertheless, unable to grant plants, rivers and mountains any senses, feelings or sentience and therefore any rights on parity with human beings. It will be shown that the "natural objects" are not only basically identical to humans but that in fact they are sentient and beneficially influential to the environment in very crucial ways. As such the natural objects deserve a place within international environmental law.

Plants and other "natural objects" have been denied any worthy considerations on the basis that they are non-sentient, have no feelings and are inanimate or inorganic. Peter Tompkins and Christopher Bird in their fascinating account of the physical, emotional and spiritual relations between plants and human beings demonstrate just how erroneous the popular human conceptions about non-humans are.⁹ Cleve Backster established that the plants, down to the cellular level, are highly sensitive and responsive to human intentions, good or bad, irrespective of obstacles or distances.¹⁰ Plants, too, were shown to be capable of varied emotions and intelligent communication. Brian J. Ford similarly reveals that plants, animals and microorganisms feel and communicate and that in some cases their senses are keener than humans'.¹¹ More importantly they play invaluable roles in the biosphere and need to be enlisted by environmental law. Their contribution in reversal of the environmental depredation will also be considered in the context of environmental law.

James Redfield while noting that there is energy underlying all matter that is amenable to mental influence, pointed to the possibility that the mental energy we

⁷ Stone *supra* note 6, at 493.

"CHRISTOPHER D. STONE, THE GNAT IS OLDER THAN MAN (1993).

⁹ PETER TOMPKINS AND CHRISTOPHE BIRD, THE SECRET LIFE OF PLANTS (1973).

¹⁰ CLEVE BACKSTER, PRIMARY PERCEPTION (2003).

¹¹ BRIAN J. FORD, THE SECRET LANGUAGE OF LIFE. (2000).

project does affect the physical universe.¹² The role played by energy and its relationship with every aspect of the environment will be considered as a means that may be used in international environmental law to eliminate environmental depredation.

Tompkins and Bird reveal the wonders of macro and microorganisms teeming within and around the soil and of the fantastic natural capacities of plants.¹³ They give detailed descriptions of several mind-based methods for treating and restoring immensely polluted soils and the biosphere which are cheap, non-technical and easy-to-apply and which have no side effects whatsoever. These will be recommended for incorporation into international environmental law in order to make the law applicable and effective.

Lyall Watson¹⁴ collates a wide range of scientific research findings and not only similarly concludes that all plants and animals have sensitivity, response and communication abilities but that even the inorganic matter, at the subatomic level, displays awareness and response to human thoughts. The plants, animals, microorganisms and inorganic matter can play a critical role in the recovery of the degraded environment and its sustenance. This paper will show how that may be achieved through international environmental law.

F.D. Wilson finds matter to be insubstantial and operating more as a process than a thing.¹⁵ Since mental impact on matter, at subatomic level, may help in curing the degraded environment it will be recommended that international environmental law does incorporate mind-based means of achieving such ends.

The identity of mind and matter and the influence of mind over matter and vice versa has been the subject of numerous religions, psychological and scientific observations. Wayne B. Chandler relates the Hermetic principle of mentalism whereby mind creates matter in all its forms.¹⁶ The application of that principle to the causation of environmental depredation and its reversal will be considered for possible adoption by international environmental law.

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Bhagwan Shree Rajneesh expresses it as a truism that matter and mind are one. He reveals how the mind, through its faculty to imagine, creates or destroys matter and

¹² JAMES REDFIELD, *THE CELESTINE PROPHECY* (1994).

¹³ PETER TOMPKINS AND CHRISTOPHE BIRD, *SECRETS OF THE SOIL: NEW SOLUTIONS FOR RESTORING OUR PLANET* (1998).

¹⁴ LYALL WATSON, *SUPERNATURE - A NATURAL HISTORY OF THE SUPERNATURAL* (1973).

¹⁵ F.D. WILSON, *MIND IS TIME* (1986).

¹⁶ WAYNE B. CHANDLER, *ANCIENT FUTURE* (1999).

¹⁷ BHAGWAN SHREE RAJNEESH, *THE TANTRIC VISION* vol II. (1979).

how the mind's creative imagination impacts on human body and on matter generally.¹⁸ Rajneesh shows the relationship between the manifest body-mind structure and the unmanifest consciousness which results in the creation of positive or negative phenomena.¹⁹ It will be demonstrated that environmental depredation has resulted from the misapplication of the creative imagination of the mind and that its proper, conscious application through international environmental law will lead to the restoration of a healthy environment.

Neale Donald Walsch records about the creative power of the individual, and of the collective, consciousness. He records the process by which thoughts, which are merely energy, become matter in its various forms. That is the same way how the environment, good or bad, is created.

Dr. Joseph Murphy reveals that the subconscious mind is the only creative force and as such it creates harmonious conditions, agreeable surroundings and the best or worst of everything, as desired, international environmental law need to tap this power, which is available in all persons, to advance environmental cause more effectively.

Kitty Ferguson, notes that all ordinary matter in the universe is made up of atoms which at the core consist of particles that are really energy in their nature and that the human mind does influence and manipulate those particles.

Masaru Emoto by his photography of ice crystals has demonstrated that water is highly sensitive, receptive and responsive to thoughts, intentions and emotions as well as to physical conditions such as environmental pollution.²³ This sensitivity of water offers the perfect link in healing the environment and international environmental law should regard water from that perspective.

In their recent treatise William A. Tiller *et al.* demonstrate how physical matter and energy are directly connected to human consciousness.²⁴ It will be proposed here that a paradigm shift is urgently needed in international environmental law which will entail the harnessing of consciousness-directed mind as the tool for resolving environmental depredation.

¹⁸ BHAGWAN SHREE RAJNEESH, YOGA- SCIENCE OF THE SOUL (1976).

¹⁹ BHAGWAN SHREE RAJNEESH, I AM THAT (1984).

²⁰ NEAL DONALD WALSCH, CONVERSATIONS WITH GOD, AN UNCOMMON DIALOGUE (1997).

²¹ JOSEPH MURPHY, THE POWER OF YOUR SUBCONSCIOUS MIND (1963).

²² KITTY FERGUSON, THE FIRE IN THE EQUATIONS (1994).

²³ MASARU EMOTO, THE HIDDEN MESSAGES IN WATER (2004).

²⁴ TILLER ET AL, CONSCIOUS ACTS OF CREATION (2001).

The above review indicates that, for the international environmental law to be fully effective in completely and permanently eradicating environmental depredation and restoring a healthy sustainable environment there is need to reinforce the basic legal concepts that form the matrix of the international environmental law as well as the domestic legislation. There is also need to provide, in such law, the means by which their goals may be attained. The recommendations made by such eminent legal scholars as Sands, Birnie, Boyle and Stone, among many others, for "reorientation" of human attitudes towards the environment, making of serious "reconsideration of our consciousness towards the environment" and the adoption of "a radical new theory or myth ..." concerning human relationship with the environment and the other occupants of the biosphere all clearly support that conclusion. The scientific and metaphysical literature reviewed above appear to provide some of the means for making the desired reconsideration, reorientation and the adoption of any new theories or myths into — and so as to reinforce — the international environmental law. The mind, considering its omnipresence and effect as a creative force, clearly stands out as the leading, if not the only, source of the desirable solutions and concepts.

1.4.0. METHODOLOGY

In this research I will adopt a qualitative approach. It will therefore entail the consideration of a wide range of international and regional treaties as well as soft law relating to global environment in order to determine whether or not the weaknesses or shortcomings that render the international environmental law largely non-effective in resolving environmental depredation are related to the mental-legal concepts forming the matrix of such law. Consideration will also be made as to prevailing concepts may be altered or reinforced to attain full efficacy of international environmental law.

The research will also entail analysis of books, journals, articles and other authoritative writings on environmental law, particularly on aspects of causation and elimination of environmental depredation as well as treatises on energy, mind, matter and the creation and alteration of matter in order to ascertain if they offer any solutions to environmental depredation.

The approach will therefore be analytical of how and why the state of environmental depredation is as it is. It will also be descriptive of how the environment, pristine or degraded, is mentally created and manifested. The paper will prescribe the incorporation into international environmental law of the concepts that may be conducive

for initiating processes, such as the creative power of the mind, which are effective in restoring, recreating and maintaining a healthy, sustainable and holistic environment.

1.5.0. JUSTIFICATION

The world has been engaged in a search for effective means of eliminating environmental depredation. It is hoped that this paper will provide one such means. If it does, as I hope it will, then the global effort towards protection, conservation, preservation and development of a sustainable global environment for the present and future generations will have been advanced to some considerable extent.

Once the effectiveness of the international environmental law in eliminating environmental depredation is enhanced through the creative power of consciousness-directed mind and the ideal environment is restored and sustained the benefits to all forms of life in the biosphere, present and future, including ecosystems and biological diversity will become obvious. The need to resort to the current restrictive, coercive and punitive measures or inordinately expensive enforcement procedures used by international environmental law and domestic legislations will become less. Once enriched and public participation is increased, the law is unlikely to meet resistance or to need vigorous enforcement. A healthy environment will be a boon to all existence. Human fear of loss of economic and political power will dissipate when it dawns on people that they need less of either in a healthy environment which yields all their diverse needs. Chemical and fertilizers manufacturers — the arch enemies of healthy environment — and their workers may experience a shocking set-back but would soon discover better and more rewarding engagements for their enterprising minds in an environment teeming with abundance of resources and services.

I expect that anybody reading this dissertation will realize that there are, within reach of each person, easy solutions to many of the otherwise daunting global environmental problems if only the appropriate mental conceptions are incorporated into the international environmental law and domestic regimes. It is reasonable to expect such a person, once convinced and encouraged by law, to start adjusting his or her mental attitudes, orientation and conduct towards the environment and to increase his or her consciousness towards the environment and all "beings" in the biosphere. Some may even to seek to convert others. Some of the people who read or become familiar with the message of this dissertation may even want to be part of any movement that might exist

now or in the future for the propagation and practice of any means of upholding a sustainable environment.

1.6.0 CHAPTER BREAKDOWN

The dissertation will comprise five chapters. This introduction is the first chapter and comprises the research proposal. It acquaints the reader with the study, outlines the problems that the dissertation seeks to address and states the thesis of the research. The objectives of the research are set out here and a detailed literature review is undertaken. The methodology to be adopted is outlined and the justification for the research is also enunciated in the first chapter.

In chapter two, a wide range of conventions on international environmental law and various authoritative treatises on international environmental law will be analysed. In that analysis focus will be trained on provisions in such conventions and treatises, if any, acknowledging or relating to the mental causation of environmental depredation. Particular attention will be paid to the concepts forming the basis of such conventions and their impact on the environment. The analysis will also be aimed at finding out if there are any recommended methods of resolving such depredation based on the creative power of the mind. Here note will be made of any mental concepts that may be related to the causation or aggravation of environmental depredation which are adopted or encouraged by the law — or even disregarded. Inquiry will further be made into the international environmental law to see if there are any measures, hinged on the mind, thereby recommended for resolving environmental depredation. The analysis will lead to the conclusion that the international environmental law does not recognise the root cause of environmental depredation as being mind-based nor does it prescribe any effective means, relying on the creative power of the mind or otherwise, by which environmental depredation will be resolved.

In chapter three a wide range of literature on science, psychology, mentalism and metaphysics will be considered in so far as they concern the relationship of matter, energy and mind in the creation of physical reality. It will be demonstrated that matter, in all its states and conditions, is a creation of the mind and therefore that the entire environment is a creation of the mind. It becomes obvious that the matter is malleable and amenable to mind's influence and therefore that environmental depredation is a direct creation of the mind. It also follows that environmental depredation can only be stopped and reversed and that the environment may only be restored and improved by the

conscious application of the creative power of the mind — which feat is within everybody's capacity. The conclusion will be reached that the solution to environmental depredation lies in the mind and that international environmental law needs to urgently incorporate the creative mental process in order for the law to be fully effective.

In chapter four recommendations will be made for the incorporation, into the matrix of international environmental law, of the emotive and positive concepts which the creative power of the mind may evoke. These concepts may be evoked in not only curing the debilitated environment but also in actually checking and reversing the environmental depredation. The same positive concepts may be evoked and then re-create and restore a healthy and sustainable global environment. Additionally" recommendations will be made for the incorporation into international environmental law of the various mind-based means, methods, products and practices that are proven to be effective in resolving environmental depredation. Illustrations will be made of how or the manner in which the incorporation of the concepts or the means, methods, products and practices into specific international environmental law will counter the aspect of environmental depredation which the particular international environmental law has been seeking — so far without any success — to resolve.

The conclusion reached as a result of the study will be expressed in chapter five. The study concludes that the prevailing environmental depredation can be effectively resolved by the application of consciousness-directed mind working on positive concepts, within the matrix of international environmental law, in the creation of a healthy sustainable environment. In that holistic process the natural resources and environmental services will be actually restored and, in most cases, increased or enhanced. The net result will be that the economic, social and political interests of human beings over those resources and services will be better secured in a sustainable manner. What is proposed then is a means of attaining sustainable development.

CHAPTER TWO

2.1.0 THE LEGAL OUTLOOK ON THE CAUSES AND CURES OF ENVIRONMENTAL DEPREDATION

International Environmental Law is said to comprise those substantive, procedural and institutional rules of international law that have the protection of the environment as their primary objective.²⁵ That scope was extended by the introduction of rules now known as the 'international law in the field of sustainable development'.²⁶ These rules of international law, like any other juridical norms, have at the core of each some mind-set or concept concerning its core purpose or goal.

2.2.0. SOME OF THE PREDOMINANT CONCEPTS IN INTERNATIONAL ENVIRONMENTAL LAW

The concepts that form the matrix of international environmental law presumably aim to secure protection, preservation, conservation and development of the environment. The emergent concept of sustainable development aims at integrating environmental protection with economic development. These are emotive concepts intended to appeal to the thoughts, intentions and emotions of people causing them to act responsibly towards the environment. It is a communication whose effectiveness depends on appropriateness of the various concepts for their intended purposes. I will examine some of the concepts that are prevalent in international environmental law for their appropriateness in attaining their set goals. I will also investigate whether or not the concepts prescribe the means for attaining their respective set goals, which should be an indicator of their appropriateness or lack of it. The inquiry begins with the over-weighted concept that human beings have an inherent right over the resources and services of the environment, including all ecosystems and biodiversity.

2.2.1. CONCEPT OF RIGHTS OVER RESOURCES

The concepts that are most prevalent in international environmental law are those regarded, coincidentally, as basic human rights, including economic, social, cultural and political rights. Although 'right' as a concept has been found by eminent jurists to be ambiguous and anomalous,²⁷ it is a concept that nevertheless pervades all human

²⁵ Sands *Supra* note 4, at 15.

²⁶ 1992 Rio Declaration on Environment and Development (Rio Declaration) Principle 27; also Agenda 21, Chapter 39, para.39.1.

²⁷ LLOYD, D. INTRODUCTION TO JURISPRUDENCE 28 and 355-357 (7th ed.2001)

activities and is firmly ingrained in international law. It is also firmly established in international environmental law, especially the international law in the field of sustainable development. The strong presence of the concept of rights in the same arena as the concept of environmental protection has had the effect of distorting or dampening the efforts to protect, preserve, conserve or improve the environment. Sometimes the effort to protect the environment appears sidelined by the concepts that commend its exploitation.

This conflict is significant in that the success or effectiveness of the international environmental law or its failure or shortcomings might lie here. It is a conflict in which neither side should win, nor lose. If the 'rights' side wins the environment would be overwhelmed and, with its disintegration, life on earth might completely cease. If, on the other hand, the 'environmental protection' side wins all of life might survive abundantly but human beings, upon lacking all forms of sustenance, would soon perish. Such disastrous ending, either way, must be avoided, if possible.

Is there then any possibility that this seemingly irreconcilable conflict might be resolved such that sustainability of both environment and development is attained without significantly affecting the capacity or balance of either of them? Has the search by international institutions for a mechanism to render international environmental law effective been fruitful? How can that search be given direction and impetus? Answering these and many other pertinent questions would entail a thorough inquiry into the possibility and methods of incorporating more appropriate concepts into international environmental law - if it is found wanting in that respect. In the process the law will be made more effective in eliminating depredation and in restoring natural environmental harmony.

Many of the rights humans claim over resources were enshrined in the international law long before the protection of the environment became a global concern.²⁸ That in itself tends to give the rights an edge in the conflict. It is also on this basis that the rights could be enjoyed without almost any restraint in favour of environmental protection or other considerations. Even after the United Nations General Assembly (UNGA) finally recognized the relationship of the quality of human

²⁸ United Nations Charter; 1948 Universal Declaration of Human Rights; 1948 American Declaration of Rights and Duties of Man; 1950 European Convention for the Protection of Human Rights and Fundamental Freedoms; 1961 European Social Charter and the 1969 American Convention on Human Rights.

environment and enjoyment of human rights,¹² thereby opening the way for many other treaties in recognising 'environmental rights', the inclination was always towards the human rights prevailing over the environmental concerns.

The 1972 Stockholm Declaration was avowedly about the environment as it related to human beings. It therefore portrayed as paramount the concept of human rights over the environment, upholding the fundamental right of man to freedom, equality and adequate conditions of life in an environment of a quality that permits a life of dignity and well-being. In order to ensure the continuity of that right it declared that man bears a solemn responsibility to protect and improve the environment for the present and future generations.³⁰ In pursuit of dignity and well being man has almost totally denatured the environment and has in the process seriously endangered all life - of the present and future generations. It is unfortunate that the 'solemn responsibility' was not exercised with diligence and more so that it was dropped altogether in the 1992 Rio Declaration. Had man built on the concept of responsibility, rather than excessively on the concepts of economic and social environmental rights, the environment would have been spared much of the depredation it has suffered. A chance to strike a balance was lost, but probably not irretrievably so.

The concept underlying the Stockholm Declaration was plainly for the exploitation, not protection, of the environment. Its inappropriateness is demonstrated by the resultant, ever worsening, environmental depredation. The incidental but faint concept of protection and improvement of the environment was, by design, subservient to human-rights concept. In addition it lacked the means of implementation and was therefore bound to be ineffective in attaining any appreciable environmental protection. The 1992 Rio Declaration only further enshrined that systemic conception of environment as exclusively and entirely a means of fulfilling human rights. The prevalent concept is then that sustainable development must pivot upon human benefits and concerns. The objective of protection of the environment is still so as to ensure enjoyment of those benefits, including higher quality of life for all people, by present and future generations of human beings.

Environmental rights are simply human civil and political rights that have metamorphosed in the context of environmental law. Environmental rights include the right for a human being to have safe or clean environment; to live in an environment

²⁹ United Nations General Assembly Resolution 2398 (xxii) (1968).

^M 1972 Stockholm Declaration *supra* note 1, Principle 1.

adequate to his or her health or well being; to access environmental information and means of redress when environmental rights are transgressed; to access environmental services, such as clean water and air; to work in safe, healthy environment et cetera. The conceptual basis remains that those rights take precedence over environmental protection. The result is worsening environmental depredation for which there appears to be no satisfactory solution. There is, nevertheless, the need to urgently find effective remedies.

2.3.0. CONCEPTS ABOUT SPECIFIC ASPECTS OF THE ENVIRONMENT

The environment is one indivisible whole whose elements inter-relate in most intricate ways, each influencing all the others incessantly. The development of international environmental law has, however, been on sectoral basis depending on human interests in some aspect or other of the environment or threat from damage to such aspect of the environment. I will therefore take an over-view of the international environmental law relating to the major sectors of the environment, focussing particularly on the governing concepts, starting with perhaps the most expansive — the atmosphere.

2.3.1. THE ATMOSPHERE

The atmosphere is, to the human mind, apparently too expansive to be reduced into a single concept or to be perceived as vulnerable. That probably explains why no convention specifically addresses the entire atmosphere as a vital aspect of the environment. Conventions have however emerged concerning degradation of a part or the other of the atmosphere by human activities and resultant wastes. These appear to be premised on the concept of safeguarding human health and environment, especially the ambient air.

The 1985 Vienna Convention, together with its Protocols that followed in rapid succession, was conceived, received and complied with unusually well.³¹ That was perhaps because of the scientific unanimity at the time on the perceived deleterious effects that imminently threatened all life on earth or because of fear arising from the accepted concepts about such consequences, or both. Industrialists and other commercial players considerably subjugated their economic interests to the concerns of environmental protection. The scientists and manufacturers soon produced, out of new concepts, the Hydrochlorofluorocarbons (HCFCs) as substitutes — though transitional

³¹ 1985 Convention for the Protection of the Ozone Layer and its 1987 Montreal Protocol, 1990 London Protocol, 1982 Copenhagen Protocol, 1995 Vienna Protocol, 1997 Montreal and 1999 Beijing Protocol.

and to be also phased out — for condemned Chlorofluorocarbons (CFCs) and halons. The Ozone story underscored the role and significance of appropriate concepts and images in environmental protection.

There are many other conventions that are concerned with human activities in the atmosphere or with the substances and gases that humans introduce into the atmosphere. Generally however, the conventions are addressed to, and expect obedience by, those manufacturing, transporting or using the offending substances. Each convention acknowledges some level of 'permissible emission' of the pollutant and only seeks to limit emission. None recognizes or recommends any technique or means of eliminating, neutralizing or transmuting these troublesome elements. There being no internationally applicable and binding treaty for the regulation of trade, production and use of hazardous or toxic substances, chemicals pesticides and persistent organic pollutants, and in view of the permissibility concept, the desired limitation has been illusive. Moreover, since the operative concept is that of economic interests, room is created for flagrant abuse, such as that which necessitated the 1991 Bamako Convention.³² Considering that these substances, especially chemicals and pesticides, are very widely used it is necessary to raise public awareness on the dangers — short-term and long-term — posed thereby. It is also necessary to sensitize them about the utility of appropriate positive concepts in management of such substances.

The negotiations that preceded the signing of the Convention on Climate Change and of its Kyoto Protocol demonstrated the seriousness of each party on the twin issue of economic interests and environmental protection. It appears that the two concepts were well represented and balanced in these very widely accepted international agreements. There emerged the concept of responsible control of levels of carbon dioxide and greenhouse gases in the atmosphere on basis of emission by sources and removals by sinks within a time frame. Indications are that some signatories have made remarkable strides in actualizing that concept. Their achievements are however negated by those states which - though major producers of the culprit gases — nevertheless prefer the economic rights concept and thereby render the convention far less effective. To be fully effective a concept needs to command wide global acceptance and actualisation.

³² Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991 Bamako Convention).

³³ 1992 United Nations Framework Convention on Climate Change (1992 Climate Change Convention) and the 1997 Protocol to the United Nations Framework Convention on Climate Change (1997 Kyoto Protocol)

There exists knowledge, though not widespread, of some practices which are non-technical and almost cost-free that may be adopted for healing of the atmosphere and regularising any chemical or atomic disorders. In the process we would concretize the various gains that have been made in international environmental law in favour of a holistic atmosphere. To complement the efforts made with regard to the 1985 Vienna Convention and its protocols on the protection of the ozone layer and the Convention on Climate Change and to ensure continued and sustainable emission control and removal sinks it would be worthwhile for the international community to consider any alternative technologies and methods that would prove to be effective and far cheaper and cleaner in protecting the atmosphere in the short and long run. Some of these will be discussed later.

2.3.2. WATER

Water constitutes the bulk of all matter in the biosphere including those of humans, animals, plants, insects, microorganisms and the material forming the earth itself. McTaggart underscores this fact when she notes that in any living cell, there are ten thousand molecules of water for each molecule of protein.³⁴ Yet, or perhaps because of that, water has always been taken for granted.

The prevailing concept regarding water is one of human beings having an inherent right to use water. The concept concretized recently as an environmental right but only after the availability of clean, safe water became a near-impossibility, in developed and undeveloped countries alike. The scarcity was perceived as a threat to human health and welfare. Water rights are nowadays so central that even conflicts, including armed and internecine, are thereby justified. Nevertheless water — in some parts of the atmosphere, underground, watercourses, lakes and in oceans — is so infused with pollutants that it can hardly be chemically classified as water. The available or accepted means of purifying polluted water are limited and prohibitively expensive.

Despite a host of domestic, regional and international laws adopted ostensibly for the protection of the water medium of the environment the degradation of water through pollution by means of a variety of human activities continues unabated. Perhaps the first among those laws — or more accurately concepts — is the pioneering 1909 Boundary Waters Treaty between United States and Canada concerning prevention of

³⁴ LYNNE MCTAGGART, *THE FIELD : THE QUEST FOR THE SECRET FORCE OF THE UNIVERSE* 64 (2001).

pollution and use of waters of the Great Lakes and across their boundary."¹⁵ Although there followed numerous other treaties and protocols specifically for the protection of the aquatic environment, effective protection of water remains an illusion — a misconception. No wonder the 1992 Watercourses Convention seeks similar goals, on a global scale, as did the 1909 Boundary Waters Treaty sought, and yet it sounds comfortingly new. The underlying and operative concept in all these treaties is use of water by human beings. Protection is, therefore, of the human right to use water. By lacking fundamental conceptual change over the years, the conventions remain largely ineffective and the aquatic environment, meanwhile, worsens. There is a failure to relate that ineffectiveness and deteriorating condition of water environment to the concept of use as an inherent right — unhindered by any concepts of responsibility, restraint or consideration for other users, especially the creatures to whom water is their natural habitat.

People have always used water, as of right, for domestic and agricultural needs, as a source of food, for transport of themselves and goods, and as a medium to receive and take away their unwanted wastes. The discharge, into water, of wastes — even of admittedly toxic and hazardous substances — is similarly regarded as a right whose exercise is perceived as humanly unavoidable. Despite the nearly one century of treaty protection of rivers, lakes, territorial waters and high seas there is very little evidence that any country or region has achieved real protection of aquatic environment. The conventions are most wary to use compulsive precepts such as prohibit, forbid, unlawful et cetera, preferring instead the established euphemism of international diplomacy.

The case of the Rhine is illustrative and typical of the ineffectiveness of conventions in providing protection to water medium of the environment because of inappropriate concepts. Notwithstanding the several international or regional conventions on pollution of aquatic environment,¹⁶ the 1963 Rhine Convention was deemed absolutely necessary.¹⁷ A Commission was established by that Convention with

¹⁵ 1909 Treaty Relating to the Boundary Waters and Questions Arising Along the Boundary Between the United States and Canada (Washington).

¹⁶ 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Watercourses Convention).

¹⁷ 1950 Protocol to Establish Tripartite Standing Committee on Polluted Waters (Brussels); 1960 Convention on the Protection of Lake Constance Against Pollution (Steckborn) and 1962 Convention Concerning the Protection of the Waters of Lake Geneva Against Pollution (Paris).

¹⁸ 1963 Agreement Concerning the International Commission for the Protection of the Rhine Against Pollution (Berne) (1963 Rhine Convention).

a clear environmental mandate to research and prepare measures to protect the Rhine from pollution, and prepare arrangements for its protection. Protection of the Rhine remained illusive obviously because the research did not blame the prevailing concept of right to use the water for any purposes and to discharge toxic wastes into it as the actual cause of the pollution. The ill-health of the Rhine became so critical that in 1976 two conventions were adopted on the same day — one on chemical pollution generally,³⁹ and the other particularly on chlorides.⁴⁰ Meanwhile each party's industries continued pouring lethal garbage into the Rhine, each respecting the others' right to pollute. The conventions did not incorporate any means for eliminating the polluting chemicals. To date, notwithstanding the conventions, the Rhine remains poisoned, because the underlying concepts regarding water have not changed.

The conventions relating to aquatic environment seem to be premised on the concept that the environment and therefore the natural resources including those within aquatic environment exist to provide human for requirements. The principles expressed in the 1972 Stockholm Declaration and the 1992 Rio Declaration exemplify that concept and have had profound impact which has been experienced as environmental depredation.

This conceptual weakness, ingrained in the conventions, makes the international environmental law relating to aquatic environment largely ineffective in protecting that environment and the life therein. The treaties are proclaimed to be for the 'protection,' 'preservation,' 'conservation' of the environment or 'prevention' of pollution. The pollutant may be oil from land-based sources, ships or the sea bed;⁴¹ or it may be toxic substances and other wastes from land-based sources such as industries and agriculture,⁴² or again it may be radioactive or other hazardous substances or wastes,^{4j} or simply from

³⁹ 1976 Convention for the Protection of the Rhine Against Chemical Pollution (Bonn) 3 December 1976, in force 1 February 1979 (1976 Rhine Chemical Convention).

⁴⁰ 1976 Convention on the Protection of the Rhine River Against Pollution by Chlorides (1976 Rhine Chloride Convention).

⁴¹ 1954 International Convention for the Prevention of Pollution of the Sea by Oil, which came into force over four years after signing; 1969 Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil and other Harmful Substances, which, surprisingly, come into force only two months after initial signing; 1976 Protocol for Co-operation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency; 1977 Convention on Civil Liability for Oil Pollution Damages Resulting from Exploration for and Exploitation of Seabed Mineral Resources, which is nevertheless still not in force; 1983 Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region or the 1992 International Convention on Civil Liability for Oil Pollution Damage.

⁴² 1972 Convention on Prevention of Marine Pollution by Dumping of Wastes and other Matter, which came into force nearly three years later; 1974 Convention on the Prevention of Marine Pollution from Land Based sources; 1976 Rhine Chemical and Chloride Conventions, *supra* notes 38 and 39.

⁴³ 1963 Treaty Banning Nuclear Weapon Tests in Atmosphere, in Outer Space and Under Water, which came into force almost immediately; 1971 Treaty on Prohibition of the Emplacement of Nuclear

ships plying the high seas or aircrafts overflying the same.⁴⁴ The immediate source of the pollutant is some human activity, usually for economic gains, well founded on same elaborate conceptual base which is justified on economic, social or cultural basis. In agonizing how to reconcile economic gains with environmental threats — provided these are also recognizable as threats to human survival — a lot of time elapses and meanwhile a lot of damage is caused to the environment. That is how most treaties which sounded urgent when being made take many years before coming into force,⁴⁵ while others hardly ever come into force, probably because in practice they would militate against those prevailing concepts and the attendant human rights.

The United Nations Convention on the Law of the Sea (1982 UNCLOS),⁴⁶ the framework law of the sea, is widely regarded as a codification of the customary law of the sea. With the endorsement by Agenda 21 of its provisions on protection and preservation of marine environment as a reflection international law, UNCLOS ranks as the most authoritative and influential global marine environmental treaty. To attain the aims of establishing legal order and promoting peaceful uses of the seas and oceans and of ensuring equitable utilization of the resources of the seas and oceans and the conservation of their living resources, UNCLOS contains provisions and cutting-edge principles that sound impressively appropriate.

On closer scrutiny of the provisions of UNCLOS it is clear, however, that the underlying concepts relate to, and the real purposes are, the securing of economic, cultural, social and political interests of the various human players. The result is that living and other marine resources continue to dwindle as rapidly as marine pollution accelerates. Pertinent reports of the Joint Group of Experts on the Scientific Aspects of the Marine Environment (GESAMP) attest to the marine environmental deterioration

Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof; 1982 United Nations Convention on the Law of the Sea (UNCLOS) 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency; 1989 Convention on Control of Transboundary Movement of Hazardous Wastes and their Disposal; 1996 Protocol on Prevention of Pollution of Mediterranean Sea by Transboundary Movement of Hazardous Wastes and their Disposal.

⁴⁴ 1972 Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircrafts, which took two years to come into force and the 1976 Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircrafts.

⁴⁵ 1972 London Dumping Convention taking nearly three years, 1976 Rhine Chemical Convention came into force nearly two years later, the 1976 Rhine Chloride Convention took nearly ten years, while 1982 UNCLOS took nearly twelve years to come into force. See also *supra* note 41.

⁴⁶ 1982 United Nations Convention on the Law of the Sea (1982 UNCLOS).

such that the coastal pollution was increasing and more widespread in 1990 globally than in 1982 and by 2001 the situation was getting worse.⁴⁷

Preceding UNCLOS was the United Nations Environment Programme (UNEP) Regional Seas Programme, an elaborate action plan covering fourteen regions globally

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and generating thirty-two framework conventions. From such a widespread web of action plan, policies and international agreements all aimed at the "protection" of marine environment one would expect that protection to be very evident, throughout the planet. Whatever has been done does not seem to have sufficiently protected the environment. Concerning the Regional Seas Conventions, Sands observes that "these commitments are general in nature, and it is doubtful whether they could create enforceable obligations in specific situations except in the most egregious case."⁴⁹ The fact is that the conventions are not conceived or intended to create any inhibitions or enforceable obligations that would bridle man's self-interests. Nearly all the Regional Seas Framework Conventions define pollution as: -

the introduction *by man*, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results, or is likely to result, in such deleterious effects as harm to living resources and marine life, *hazards to human health*, hindrance to marine *activities*, including *fishing* and other legitimate *uses* of the sea, impairment of quality *for use* of seawater and reduction of *amenities*,⁵⁰ (emphasis added).

Those living resources, including whales, dolphins, turtles and fish, are not perceived as having sensitivity, sentience or capacity to suffer due to the pollution and little regard for them is therefore expressed in the definition. Although human beings do not ordinarily live within the marine environment, it is their health, and not that of the natural inhabitants of that environment, that these conventions seek to safeguard by preventing pollution. The use of expressions such as 'fishing', 'legitimate uses', 'quality for use' and 'reduction of amenities' in the definition reveals the anthropocentric purposes behind the concepts that necessitated the conventions in the first place. The

⁴⁷ GESAMP Reports and Studies No. 39 (1990) and GESAMP, 'A Sea of Troubles,' GESAMP REPORT No. 70 (2001) at 15.

⁴⁸ Mediterranean (1975), Kuwait (1978), Wider Caribbean (1981), East Asia (1981), South-East Pacific (1981), Red Sea and Gulf of Aden (1982), South Pacific (1982), West and Central Africa (1982), Eastern Africa (1985), North-West Pacific (1944), South Asia (1995), Black Sea (1996), North-East Pacific (2001) and Upper South-West Atlantic.

⁴⁹ Sands *supra* note 4, at 406.

⁵⁰ In, for example, 1976 Convention for Protection of the Mediterranean Sea Against Pollution (1976 Barcelona Convention), Art 2 (a), revised; 1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the East African Region (1985 Nairobi Convention) Art 2 (b) and 1986 Convention for the Protection of Natural Resources and Environment of the South Pacific Region (1986 Noumea Convention) Art 2 (f).

environment is disregarded in the conflict, for after all, "People, not trees or lakes, decide moral controversies."⁵¹

When exploitative concepts and mind-sets prevail, human beings are more likely to fail to recognize or conceive any means, methods, skills or other possibilities of purifying water or effectively protecting the environment. Yet all these solutions exist within easy reach, if only people care to recognize and apply them. I shall later consider some means, methods and skills which have been known and empirically found to be effective in purifying water — even large quantities of it — at minimal or no cost. Given the state of the global environmental depredation any prospective solutions must be seriously considered and, if found useful, incorporated into the legal instruments seeking to eliminate environmental depredation.

2.3.3. SOME WATER RESIDENTS — FISH, FUR SEALS AND WHALES

There are numerous treaties relating to the preservation, conservation and protection of fish, whales and fur seals or the regulation of fishing and whaling deemed necessary and promulgated between 1867 and 2002. No other aquatic creatures have been regarded as needing any such specific consideration — not even under UNCLOS. Those goals have remained, throughout 135 years, so elusive that at the start of the twenty-first century we still need instruments for the conservation, management, protection and sustainable utilization of those particular creatures viewed as having economic value to humans. That we still have such need is an admission of consistent non-effectiveness of all those conventions.

People have always caught and eaten fish and other sea creatures — as an inherent right. The concepts underlying popular legends in support of that right govern and influence how humans treat and use sea creatures. Thus human dependence on various species of fish as a source of protein, much more than all other sources put together, is regarded as natural.⁵² The incidental destruction of innumerable by-catch victims is also justified by those same concepts. There is, however, an ever-abiding fear of over-exploitation and depletion of these aquatic living resources. That concept of fear relates to loss of sustenance by humans, not to the possible extinction of the over-exploited species.

⁵¹ Stone *supra* note 8, at 271.

⁵² Global Biodiversity, Status of the Earth's Resources (1992), compiled by Conservation Monitoring Centre: Chapman & Hall, at 365.

The treaties are notably concerned with the regulation of where, how and what fish, whale or seals the parties may or may not catch. In so doing they are apportioning rights of access to competing economic interests. Until recently there was hardly any mention of the environment itself in the treaties as a crucial factor in the fisheries debate and conflicts. The interests that inspired the fisheries treaties in mid-nineteenth century are the very same ones that necessitate fresh fisheries conventions at the beginning of the twenty-first century. It may not be clear if and why most of the recent conventions are deemed necessary but it is clear that the underlying concepts, and therefore the negative results in the form of environmental depredation, are always the same.

Those initial conventions were concerned with the perpetual debate on over-exploitation of particular species or regional stocks,⁵³ or in particular places,³⁴ or as between states in relation to fishing in a transboundary watercourse.³³ Others related to external limits of territorial fishing rights or to the protection and conservation of natural resources not entirely within the jurisdiction of any single state such as migratory species and the resolution of conflicts, mainly over competing commercial self-interests, that would invariably arise.⁵⁶ The well-being of the species never actually counted, as illustrated by the outcome of the 1893 *Pacific Fur Seal Arbitration* at the heart of which was the environmental issue of protecting and preserving endangered fur seals in the Bering Sea fisheries.³⁷ The United States of America had, inter alia, claimed — as against United Kingdom, and obviously other states operating in the Bering Sea — the inherent right to protection and property of migratory fur seals outside its three-mile territorial waters from on-going indiscriminate destruction and extermination by over-exploitation. The arbitrators held that the United States had no right of protection or property in the fur seals frequenting its islands in the Bering Sea when such seals are found outside the ordinary three-mile limit of its territorial waters. The arbitrators, however, adopted elaborate regulations — evidently the forerunners of

³³ 1867 Convention Between France and Great Britain Relative to Fisheries (Paris); 1891 Agreement Between the Government of United States of America and the Government of Her Britannic Majesty for a *Mondus Vivendi* in relation to Fur Seal Fisheries in the Bering Sea; 1923 Convention for the Preservation of Halibut Fishery of North Pacific Ocean; 1930 Convention for the Preservation of Halibut Fishery; 1931 Convention for the Regulation of Whaling et cetera.

³⁴ 1882 Treaty for the Regulation of the Police of the North Sea Fisheries (Overfishing Convention); 1952 International Convention for the High Seas Fisheries of North Pacific Ocean et cetera.

³⁵ 1869 Convention Establishing Uniform Regulations Concerning Fishing in the Rhine Between Constance and Basel (Berne).

⁵ 1892 Treaty Between Great Britain and the United States Submitting to Arbitration the Questions Relating to the Seal Fisheries in the Bering Sea (Washington).

⁵⁷ 56 Bering Sea Fur Seals Fisheries Arbitration (Great Britain v United States) Moore's International Arbitration (1893) 755.

some of the major provisions of UNCLOS — for the protection and preservation of the fur seals beyond the jurisdictional limits of the various states. The parties to the dispute, and all the other interested states, would not accept the curtailment or limitation of their perceived rights in what they considered to be free-for-all natural resources, even when extinction of a species, at least in a certain locale, was a real possibility. The nations preferred to interpret the decision as a proclamation of absolute freedom to fish on the high seas, a concept that is still prevalent — UNCLOS notwithstanding.

In early 1970s, a similar confrontation was irking Iceland, United Kingdom and Federal Republic of Germany necessitating International Court of Justice's (ICJ) arbitration in which it was decided, *inter alia*, that where there are potentially conflicting traditional fishing rights in the high seas neither right is absolute, a concept that seemed to give the fishing states permission to gear up the scramble.⁵⁸ The fish had no recognizable rights at all.

Commercial concern and the competition it begets has induced reckless or mindless fishing practices, such as fishing with dangerously long driftnets, notwithstanding prohibition by a convention — though confined to South Pacific.⁵⁹ The widespread use of the long driftnet, which is regarded as the most destructive fishing technology ever devised by man, results in indiscriminate annihilation and wastefulness of non-target fish, turtles, whales, dolphins and other marine mammals, sea birds and living marine environment generally through whose habitat the driftnets happen to sweep.⁶⁰ The commercial catch sought is a relatively tiny fraction of the total victims. The driftnetters entertain no concepts of the welfare or sustainability of the marine living resources.

Similar deterioration in relationship between human and sea creatures, especially the edible ones, is further exemplified by the international law for the regulation of whaling. There are some coastal communities who were traditionally dependent on whale meat, oil and other products in addition to — in the case of some such as the Inupiat Eskimos of North Alaska—-their social, cultural and religious needs in limited subsistence catch.⁶¹ In every sense those communities were 'self-regulating'

⁵⁸ Fisheries Jurisdiction (United Kingdom v. Iceland) (Jurisdiction) (1973) ICJ Reports 3 and Fisheries Jurisdiction (Federal Republic of Germany v. Iceland) (Jurisdiction) (1974) ICJ Reports 175.

⁵⁹ 1989 Convention for the Prohibition of Fishing with Long Driftnets in South Pacific (1989 Wellington Convention).

⁶⁰ Stone *supra* note 8, at 8.

⁶¹ MICHAEL CHIROPOLOS, Inupiat Subsistence and the Bowhead Whale: Can Indigenous Hunting

in whaling matters, a factor dependent on their traditional concepts and respect for whales as sentient creatures and their awareness of inter-connectedness of the cosmos. Enter the fierce concept of commercial whaling and the population of whales is drastically reduced, making regulation so vital that in 23 years three conventions had to be promulgated in rapid succession. The survival of whales is additionally threatened by pollution of the ocean, even in the polar regions where they feed. Whales have never been so unsafe.

Obviously international environmental law is rendered largely ineffective in redressing the dangers facing marine living resources as a result of human economic interests. Human beings readily resist or avoid the law aimed at protecting and preserving marine life and regulating the consumption thereof. Some are even prepared to cheat, as some nations have done on pretext of 'scientific whaling' exception, while others would rather withdraw from membership of International Whaling Commission (IWC), as Canada and Iceland did recently. A few more are contemplating either following suit, or forming an alternative organisation more sympathetic to their economic claims over whales than the IWC, which they consider usurped by non-whaling interests — of conservationists. These economic interests are actually founded upon concepts already ingrained in international environmental law, which recognises the human claims of inherent right over marine living resources. The law faintly attempts to balance those interests with continued existence of the resources by introducing concepts such as the requirement for 'sustainable catch', 'sustainable yield', 'total allowable catch' et cetera. It does not however provide the means by which those concepts may be actualised.

These catchy phrases are intended to express the underlying wish that depletion be avoided. It is hoped that not only is the harvested population of species restored but that a steady supply can be maintained well into future generations, of human beings. The law does not prescribe how the balance will be struck and a steady supply maintained or how the harvested stock will be restored. I will later demonstrate that appropriate concepts, incorporated in international environmental law, would lead to elimination of environmental depredation and help attain sustainability of marine ecosystems, biodiversity and resources.

Cultures Coexist With Endangered Animal Species?, *Colo. Int'l Env'tl. L. & Policy* 213 (1994).

⁶² 1931 Convention for the Regulation of Whaling (Geneva), in force by January 1935; 1937 International Agreement for the Regulation of Whaling (London) and the 1946 International Convention for the Regulation of Whaling (Washington), in force two years later.

2.3.4. LAND AND VEGETATION

Basic and vital as land is, the international community has never conceived the need for a treaty to protect or conserve land *per-se* or to prevent its degradation. In the occasional convention where land or soil is mentioned it is by an incidental or oblique reference. Vegetation on land or in marine environment has also been taken for granted even though it plays indispensable roles including the absorption of enormous quantities of excess carbon dioxide and nitrogen from the atmosphere and yielding life supporting oxygen besides generating all the basics in the global food chain.

The 1972 Stockholm Declaration defined natural resources of the earth as
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including air, water, land, flora and fauna. Several conventions address issues

concerning some flora and fauna in "natural state" or "wild" as subjects for protection, conservation or preservation. No such attention is given to land. Thus most authors, including Sands,⁶⁴ have not said much about protection of the land itself. The 1992 Rio Declaration only refers to co-operation of states in a spirit of partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem.⁶⁵ The Convention on Biological Diversity is silent regarding land⁶⁶ Land, where most of the ecosystems and biodiversity are based, is taken for granted. It has been observed that unlike the Stockholm Declaration, the Rio Declaration is explicitly anthropocentric in character and makes no reference to animal rights or to the conservation of flora, fauna, habitats, and ecosystems.⁶⁷

Perhaps the most specific and generous consideration for land, which by
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definition includes soil, was made in the 1994 Convention to Combat Desertification. Land was therein defined as the terrestrial bio-productive system that comprises soil, vegetation, other biota, and ecological and hydrological processes that operate within the system. Land degradation was however confined to arid, semi-arid and dry sub-humid areas.⁶⁹ For the rest of the world degradation of land as a result of soil erosion or deterioration of the physical, chemical and biological or economic properties of soil —

⁶³ 1972 Stockholm Declaration *Supra* note 1, Principle 2.

⁶⁴ Sands *supra* note 4. Not one of his 21 chapters is dedicated to land or flora and fauna.

⁶⁵ 1992 Rio Declaration *Supra* note 3, Principle 7.

⁶⁶ 1992 Convention on Biological Diversity (1992 Biodiversity Convention).

⁶⁷ Bernie and Boyle *supra* note 5, at 83.

⁶⁸ 1994 United Nations Convention to Combat Desertification in those Countries Experiencing Serious Droughts and/or Desertification, Particularly in Africa (1994 Convention to Combat Desertification).

⁶⁹ *Id.* Article 1 (f)

even through excessive fertilizers, agricultural chemicals, pesticides, acidification, deforestation and settlements et cetera — would not then amount to land degradation. But they too, nevertheless, degrade the land.

Land suffers persistent over-use and abuse by human beings due to the prevailing concepts. People conceive it as their inherent right to use land, as they will, in order to survive. They regard it as having infinite resilience. The concepts which are imprinted in people's minds by chemical and fertilizer merchants only lead to further poisoning and degrading of the soil. Such soil becomes utterly useless for supporting vital micro-organisms and plant life. The result is that land yields increasingly less food and survival of various life forms is thereby threatened.

Several Conventions are premised on the concept that most sources of pollution are land-based.⁷⁰ They do not, however, acknowledge that the pollutants affect the land itself first before affecting other media of the environment. The pollutants those conventions are concerned with are mainly industrial chemicals and other toxic wastes, heavy metals, radioactive substances and wastes and residue substances from agricultural fertilizers, pesticides, fungicides and herbicides et cetera. Such pollutants also eventually affect aquatic environment, especially the crucial phytoplankton.

The earth, after such persistent 'massacre' of species and ecosystems, is hardly decently clothed with plant cover. The Global Biodiversity Report states that:-

Higher plants occur in virtually all ecosystems of the world, even in the sea, but their distribution is very uneven. Two thirds of the world's flowering plants are tropical, emphasizing the great importance of plant conservation in the tropics. Many large or economically important families are almost entirely restricted to the tropics.⁷¹

The casual juxtaposition of 'conservation' and 'economically important' in the above passage is revealing of the governing concepts. The so-called lower plants are even more numerous and no less important, even for human economy, but obviously only demeaning concepts of them prevail. As a result their crucial role in an inter-related and inter-dependent environment is downplayed.

Though so wide in range and global distribution, plants are usually mentioned in international environmental law only as incidental in matters of protection, preservation

⁷⁰ 1974 Convention on Prevention of Marine Pollution from Land-Based Sources (Paris); 1980 Athens Protocol for the Protection of Mediterranean Sea Against Pollution from Land-Based Resources; Protocol for the Protection of South-East Pacific Against Pollution from Land-Based Sources (Quito); 1990 Protocol Concerning Pollution from Land-Based Sources (Kuwait); 1990 Protocol Concerning Pollution from Land-Based Sources and Activities (Cartagena).

⁷¹ 1992 Global Biodiversity Report Supra note 52, at 65.

or conservation of nature, wildlife and wetlands in specified areas.⁷² Prevalent concepts are based on economic or aesthetic value of plants. Those lacking such utility are regarded as weeds or valueless plants deserving no attention or preservation.

Forests, especially the tropical moist forests, the monsoon forests of Asia, Montane, riverine and mangrove forests are habitats for infinite species, ecosystems and biodiversity. Forests are also homes and sources of sustenance and livelihood for millions of people living in or out of them. They constitute the world's water catchment zones and prevent soil erosion. Forests are perceived as sources of timber and a host of other economically viable non-timber resources including medicines, rubber, fruits, rattans, gums and resins — over which people hold dear the concept of inherent rights. The single-minded pursuit of those economic gains and the disregard of plants' place in nature have resulted in dangerous disturbance of the balance in the plant kingdom and the forest-based ecosystems and biodiversity. Industrial and other uses of wood-fuel such as the historical steam engine, ore smelting,⁷³ tobacco and tea curing and domestic hearths also decimate forest cover.

Despite the importance of forests, the first international law to address forests was the 1983 International Tropical Timber Agreement.⁷⁴ The title is clearly indicative of the concept of economic value-approach. Moreover the "produced" timber is dead, not conserved trees. That convention, as did its 1994 improvement,⁷⁵ although paying fashionable homage to conservation of forests, regarded forests from singularly anthropocentric and economic stand-points. The 1994 ITTA envisioned the development of industrial timber, reforestation and encouragement of sustainable utilization and conservation of timber-producing forests and their genetic resources. It mattered not that tropical and other natural forests, with all their ecosystems and biodiversity have to be cleared then replaced, if at all, with monoculture forests which do not normally support varied ecosystems and biodiversity. The concept behind the

⁷² 1913 Act of Foundation of a Consultative Committee for the International Protection of Nature; 1933 Convention Relative to the Preservation of Fauna and Flora in their Natural State; 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere; 1968 African Convention on the Conservation of Nature and Natural Resources; 1971 Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat; 1979 Convention on Conservation of European Wildlife and Natural Habitats and 1985 Association of South East Asian Nations Agreement on the Conservation of Nature and Natural Resources et cetera

⁷³ Global Biodiversity Report *supra* note 52, at 256 — on the Brazilian iron-ore smelting at Grand Carajas Programme designed to consume 2300Km² of forest as charcoal each year.

⁷⁴ 1983 International Tropical Timber Agreement (1983 ITTA).

⁷⁵ 1994 International Tropical Timber Agreement (Geneva)(1994 ITTA) which came into force in 1997 replacing the 1983 convention.

projected expansion and diversification of international trade in timber was hardly in consonance with maintenance of ecological balance.

Instead of a convention for world-wide protection of forests, ecosystems and the services that forests nurture, the international community settled for lukewarm arrangements such as the 1985 Tropical Forestry Action Plan and the UNCED 1992 Forest Principles,⁷⁶ both notably non-binding. These and the ITTA Conventions target principally the tropical forests presumably because more than two-thirds of the world's genetic resources, ecosystems and biodiversity constitute or inhabit these forests and hold infinite potential for economic and aesthetic exploitation. The guiding concepts are obvious. It is absurd for the world to be so non-committal about protection of forests and yet be so anxious to have adequate carbon and nitrogen sinks.

The Biodiversity Convention stated its objectives as including the conservation of biological diversity, the sustainable use of biodiversity and the fair and equitable sharing of the benefits arising out of utilization of genetic resources. In the process it left no doubt that the underlying concepts are based on human economic, social and political interests on the global scene. The Convention enjoins parties to adopt measures for conservation and sustainable use of biological resources — confined to those with actual or potential use or value to humans. It also expects them to rehabilitate and restore degraded ecosystems and promote the recovery of threatened species but does not, however, prescribe how that will be achieved. Very significantly though, the Convention calls upon parties to "support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced."⁷⁷ This amounts to expansion of the scope of acceptable concepts. It is therefore a very welcome development which can give international environmental law the impetus it so much needs. In practice useful local knowledge for maintaining sustainability or restoring degraded areas inexpensively has been shut out or ridiculed as primitive, unorthodox or unscientific. Yet such local knowledge was founded on potent concepts many of which have been scientifically verified while the others can be so verified if some attention is given to them.

The lack of appropriate concepts capable of mental translation into actual restoration and conservation of the environment and the failure to adopt the various

⁷⁶ The Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, adopted at the UNCED on 13 June 1992.

⁷⁷ Biodiversity Convention Supra note 66, Article 10 (d).

practices that reverse depredation and revive land and vegetation — including food and fodder crops — have resulted in the present frightening state of environmental depredation. The result has been a degraded environment, notably high levels of greenhouse gases and dangerously low levels of oxygen, directly connected to decreased vegetation.

2.3.5. ANIMALS

Animals, besides the domesticated ones, are conceptually regarded by humans as wildlife and generally perceived as dangerous. Given that mentality, only the animals within specified areas such as parks, reserves or sanctuaries have received recognition in international environmental law as needing protection, conservation or preservation. Even so, the efforts still turn out to serve only aesthetic and economic requirements of succeeding human generations. The prevalence of those concepts has affected the effectiveness of the conventions intended to secure protection for the animals.

Despite the various conventions adopted between 1913 and 1968, it had become imperative, by 1973, for the international community to take drastic measures to secure meaningful protection of some specified fauna and flora in form of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Agreement on the Conservation of the Polar Bears (Polar Bears Agreement).⁷⁸ Similar protection had to be extended to vicuna and to migratory species of wild animals in

⁷⁹ 1979. All these conventions were obviously necessitated by the decimation that resulted from human attitudes, beliefs and practices. Apart from prohibiting trade in the listed endangered wild fauna and flora, bears and vicuna little attempt was made to reorient or alter those underlying concepts within the matrix of international environmental law.

2.3.6 THE EFFECTS OF INAPPROPRIATE CONCEPTS

From the foregoing review it emerges that international environmental law is dominated by negative mental concepts. These, it will be shown, invariably lead to the causation of environmental depredation. International environmental law becomes, for that very reason, largely ineffective in protecting, conserving, preserving or even

⁷⁸ 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973 CITES) and the 1973 Agreement on the Conservation of Polar Bears (1973 Polar Bears Agreement).

⁷⁹ 1979 Convention for the Conservation and Management of the Vicuna and the 1979 Convention on the Conservation of Migratory Species of Wild Animals (1979 Bonn Convention).

developing the environment. Sustainable development has in the process become illusive. Moreover, these concepts lead to the attitudes whereby the various aspects of the environment are either taken for granted or overlooked altogether. These, including the atmosphere, land water, aquatic and land fauna and flora and the teeming birds, insects and micro-organisms are perceived as playing no role in the universal drama apart from providing for human needs. The international environmental law is clearly lacking a matrix of positive mental concepts and consciousness which, as we shall see, are virtually necessary for the creation and manifestation of a healthy global environment. The lack of that matrix of positive concepts and consciousness has resulted in the failure, by the international community to reverse environmentally unsustainable trends — their urgent mission even as late as the 1997 Nairobi

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Declaration. Failure to tap the appropriate concepts and consciousness by the various United Nations organs, especially the UNEP, leaves them in a situation where they totally lack the means by which to fulfil their respective mandates.

In a few instances the need for the incorporation of the right concepts and consciousness have been hinted at in international agreements. The 1972 Stockholm Declaration considered education in environmental matters essential for enhancing enlightened opinion and responsible conduct by individuals, enterprises and

⁸¹

communities. ^{R9} It had also recommended scientific research and sharing of information and experience. The 1992 Rio declaration, while acknowledging the need for accessing information and sharing of scientific advantages, specifically placed a high premium on knowledge and practices of the indigenous people and their communities in relation to environmental management and development.⁸³ The education, information, scientific research and the communities knowledge and practice all refer to concepts and consciousness. Although many conventions, including Biodiversity Convention, make provisions for education accessing of information, scientific research and technology transfer they convey no positive concepts or consciousness. The knowledge and practices of local communities, all over the world, does not seem to have been tapped, anywhere. In order therefore to eliminate environmental depredation it is imperative that the negative concepts in international environmental law are replaced

⁸⁰ 1997 Nairobi Declaration on the Role and Mandate of the United Nations Environment Programme (1997 Nairobi Declaration).

⁸¹ 1972 Stockholm Declaration *supra* note 1, Principle 19.

⁸² *Id.* Principle 20.

⁸³ 1992 Rio Declaration on Environment and Development (1992 Rio Declaration), Principle 22.

with positive ones. The positive concepts have to be that they will engender in people a sense of awareness of all "things" or "beings" in the universe through the shared consciousness. They should also usher in an education that enhances a considerate, holistic and spiritual outlook towards the environment and the so called natural objects. The need for education and for appropriate concepts and consciousness to form the basis of international environmental law has now been widely acknowledged, not only by distinguished scholars but also by international environmental bodies.

Stone clearly recognised the necessity for drastic changes in people's attitudes — the totality of concepts — and consciousness towards the environment. Birnie and Boyle who conclude that a reorientation — a mental process — is imperative in dealing with environmental depredation and for attaining sustainable development. Sands is firmly for the reconsideration of the attitudes and for reflection of holistic spiritual education within the law. His suspicion that consciousness is causally involved in the creation of the physical environment was, as will be demonstrated, quite correct. The commonness of consciousness in humans and natural objects is now a scientifically established fact as will emerge in the next chapter.

The 2000 Malmo Ministerial Declaration approvingly noted that the gains of past human development are emerging at the dawn of twenty-first century as a *new consciousness*. This emergent consciousness is the tool for the creation of requisite reorientation, attitudes, education and positive concepts. It is the means for the practical creation of actual matter in the physical universe. That manifestation of the consciousness will be perceived and enjoyed as a healthy sustainable environment capable of sustaining all forms of life through generations.

3.1.0 CONSCIOUS MEND — THE ULTIMATE COMMON DENOMINATOR

Noting that environmental depredation has become such an acute concern of humanity which must be resolved or else all life perishes, an investigation of how depredation is caused and how it can be effectively eliminated becomes imperative. When we view pristine environment we perceive matter, most pleasant to our senses. When that matter is polluted we feel repulsion, which we so amply express in international and domestic environmental law. When scientists, however, look at subatomic level of matter, pristine or polluted, they find only vibrant energy that exhibits intelligence and consciousness — pervading the universe. That is the reality of matter which makes up our environment. With our minds we, unwittingly, create that matter — polluted or wholesome.

The recent discovery of the sciences concerning matter and energy, and the impact of conscious mind on either form, has always been common wisdom of religious sages in the past. Those who distilled the Vedic, Hermetic, Taoist and other expressions of truth in the remote past taught that all there is in the universe is, not solid matter, but energy vibrating at varying frequencies;⁸⁴ that all 'things' are interconnected, interdependent and supremely conscious and that nothing is created or destroyed — everything only changes form. They taught wholeness of the apparent infinite diversity.⁸⁵ We have all but lost the sense of wholeness along with the balance and harmony in life, especially in the biosphere. We need to understand and restore that wholeness and to infuse international environmental law with concepts of wholeness in order to effectively eliminate environmental depredation.

3.2.0 THE ENERGETIC ATOM

Until the Greek atomists split matter down to the atom, the universe was considered as be made of concrete matter.⁸⁶ Quantum mechanics has eventually helped humanity re-discover the ageless secrets within the atom. The atom is found to contain space within which infinitesimal particles whirl at incredibly fast speeds. Watson illustrated the hollowness of the atom — and therefore of matter all over the universe —

⁸⁴ Chandler *supra* note 16, at 35 and 43.

⁸⁵ Rajneesh *supra* note 19.

⁸⁶ RUSSELL, HISTORY OF WESTERN PHILOSOPHY 83 (3rd ed. 1979) (1946).

by saying that if an atom were the size of an Olympic stadium, its nucleus would be the size of a pea at the centre, the rest being empty space. The deeper we look into matter the less concreteness we find — there are only vast spaces, endless motion and intense fields of energy. Substantiality of matter is based more on the interaction of components and their relative motion rather than any tangible substance. All atoms, and their particles at subatomic level are constituted and behave exactly the same — be they in a human, elephant, tree bacteria, stone, water or air.

The whirling of electrons, neutrons and protons within the atom generates an electrical charge and as a result each atom is packed with energy. Energy is all there is in the otherwise empty atom. The electrical charge in all atoms is the energy that is in, and is shared by, all beings. Walsch records God saying "I have built into all things an energy that transmits its signal throughout the universe. Every person, animal, plant, rock, tree — every physical thing — sends out energy, like a radio transmitter".⁹⁰ Redfield says that this energy forms the basis of and radiates outward from all things, including humans, and concludes that "this energy is what science has always been looking for: some common stuff underlying all matter."⁹¹

The ceaseless criss-crossing and intermingling of this energy is what holds together the physicality we observe and measure as matter⁹² Rajneesh teaches that energy is all there is and that it exists and moves in very many ways and in infinitely many forms — manifested or unmanifested. This energy that is present in the atoms has been known and observed by sages and its manifestation is ordinarily called the "aura." Kirlian photography has focussed on the manifestation of that energy and has availed indistiputable evidence. Redfield recently related a simple way by which anybody may see the energy.

Planet earth constantly receives energy from the universe, mainly in form of light and electromagnetic waves — after some filtering by ozone layer. Some of the energy enters into people, animals, plants, micro-organisms and other matter on earth

⁸⁷ Watson *supra* note 14, at 123.

⁸⁸ Wilson *supra* note 15, at 98

⁸⁹ Id. at 93-5.

⁹⁰ Walsch *supra* note 20, at 82.

⁹¹ Redfield *supra* note 11, at 59 - 75.

⁹² Id. at 82.

⁹³ OSHO, THE PSYCHOLOGY OF THE ESOTERIC 36: The Rebel Publishing House GmbH.

right into the centre of the atoms. The incoming energy exerts influence on the recipient biosphere and is also influenced by the energy therein.

3.3.0 CREATION OF MATTER

Science and metaphysics are now in agreement that mind and matter are both expressions of rapidly vibrating energy, the former being the subtlest and the latter being the grossest. They are also agreed that mind, and nothing else, creates matter. Mind is the source of all the matter that is perceived in the universe. Wilson says that a given state of matter (solid, liquid or gaseous) is dependent upon the extent of the movement and vibration of component atoms or molecules — which seems to provide matter with 'thingness' — and that the mind, in the process of observation, makes matter substantial.⁹⁴

Mind is therefore not a thing but a form of subtle energy. Mind is a procession of thoughts which run in form of images, very much like slides in a motion picture. Thoughts themselves are a form of energy of which Walsch says: -

These innumerable energies are ... attracted to each other ... Like Thoughts attract Like Thoughts along the matrix — and when enough of these similar energies "clump together"... their vibrations become heavier, they slow down — and become matter ... Thoughts do create physical form — and when many people are thinking the same thing, there is a very high likelihood their thoughts will form reality.⁹⁵

Chandler reinforces this by stating that "[t]he All — living mind or spirit — creates by projecting incalculable number of mental images that seem very real to us humans, but are as illusive as the mental images in our own minds ... the spirit of thought, or the living mind, pervades our mental creation".⁹⁶ Humans have corresponding ability to create by mental images or concepts.

Rajneesh explains the process by saying that mind has a faculty to imagine and once the image is imprinted and accepted, the mind proceeds to create and manifest that image in accordance with its basic law that "mind follows imagination."⁹⁷ Murphy amplifies this saying:-

The faculty of image-making is called imagination. It is one of the primal faculties of mind and has power to project and clothe your ideas, giving them visibility on the screen of space. You can discipline, control and direct your imagination constructively and get what you want in life,

⁹⁴ Wilson *supra* note 15, at 94 - 98.

⁹⁵ Walsch *supra* note 20, at 88.

⁹⁶ Chandler *supra* note 16, at 35 and 55.

⁹⁷ Rajneesh *supra* note 18, at 74 - 77.

or you can use it negatively and imagine what you don't want in life. The mental images which you contemplate and consciously accept as true are impressed on your subconscious mind and made manifest in your life.⁹⁸

Within the body, Murphy says, creation is actualised in a process whereby "every thought entertained by your conscious mind and accepted as true is sent by your brain to your solar plexus, the brain of your subconscious mind, to be made into your flesh, and to be brought forth into your world as a reality".⁹⁹

McTaggart explains the vital role of consciousness in this process of creation of matter saying, "in quantum physics ... the scale of all possibilities of any quantum particle collapsed into a set entity as soon as it was observed or measurement taken."¹⁰⁰ Thus in consciously observing or measuring we create the physical reality. For Emoto, "what you really know as possible in your heart is possible. We make it possible in our minds. What we imagine in our minds becomes our world."¹⁰¹ The quantum vibration of particles — which sometimes behave as a particles and at other times as waves — is understood to mean that everything creates sound, of which water is the keenest listener.¹⁰²

That then is how matter is created by consciousness acting upon the subtle mental energy — how mental images, or concepts become matter. This most central and unique position of mental images or concepts cannot be over-emphasized. By that process, humanity has played a crucial role in creation of matter — solid, liquid or gaseous — that has degraded the environment. This realization should lead to the conclusion that the same mental process ought to be used for eliminating environmental depredation. If the images or concepts that we consciously entertain and accepts as true in our minds are negative and unwholesome we end up with degraded environment. It follows also that if the images or concepts we cherish are positive and wholesome we create a holistic and healthy environment. That is the way to create sustainable environment —the means by which the world community may easily attain sustainable development.

⁹⁸ Murphy *supra* note 21, at 197-8.

⁹⁹Id. at 92.

¹⁰⁰ McTaggart *supra* note 34, at 11.

¹⁰¹ Emoto *supra* note 23, at prologue xxii.

¹⁰² Id. at 39-43.

3..4.0 THE UNIVERSAL COMMUNION

It is now known that there is incessant communication, within matter thus created, throughout the universe. Watson, writing about life on earth which embraces every animal, organisms and plant, observes that:-

The instructions for all life are written in the same simple language ... Living systems consist of highly organized matter; they create order out of disorder ... biochemical systems exchange matter with their surroundings all the time, they are open thermodynamic ... processes. This is the secret of life. It means that *there is a continuous communication not only between living things and their environment, but among all things living [being] in that environment.* An intricate web of interaction connects all life into one vast, self-maintaining system. Each part is
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related to every other part and we are all part of the whole, part of supernature (emphasis added).

Upon quantum division of an atom, comprising electrons, protons and neutrons, into finer particles of matter we come to a class of matter particles, called 'fermions' and 'bosons,' which play the exclusive role of carrying information through a message system of four physical forces.¹⁰⁴ Of the four fundamental forces — gravitational, electromagnetic, strong nuclear and weak nuclear — Ferguson notes that:-

these four forces are responsible for all messages among all fermions in the universe and for all interactions among them. Without the four forces, every fermion, every particle of ordinary matter, would exist, if it existed at all, in isolation, with no means of contacting or influencing any other, oblivious of every other. To put it bluntly, it would seem that whatever *doesn't* happen by means of one of the four forces doesn't happen [at all].¹⁰⁵

Particle physicists are now aware that each subatomic particle encodes and carries the information of all the other particles in the universe and each communicates with all the others by signalling its unique frequency.¹⁰⁶ This informed communion of particles — known as nonlocality, which McTaggart defines as the ability of a quantum entity, such an electron, to influence another quantum particle instantaneously over any distance despite there being no exchange of force or energy — is happening
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continuously among all the atoms, all the time. Nonlocality must be the secret nexus of all existence.

¹⁰³ Watson *supra* note 14, at 19-20.

¹⁰⁴ Ferguson *supra* note 22, at 46-47.

¹⁰⁵ Id. at 47.

¹⁰⁶ McTaggart *supra* note 34, at 19, 26 and 59.

¹⁰⁷ Id. at 11.

This Communion must be the basis upon which "matter" on the more subtle sub-microscopic level is closer to a process than a thing, closer to a function than a material thing. Wilson aptly notes, "*it is only at this elemental level that similarities between energy and mental processes become discernible*"¹⁰⁸ Tiller *et al* on their part conclude, "*that mind, not matter, is ultimately considered as being primary,*"¹¹⁰ So mind or intelligent energy in various forms, is all there is in the universe. The environmental depredation which we observe and are so concerned with is then, really, a form of mind.

This universal mind is what makes the particles "observer conscious" and the behaviour of atoms and of single or group cells to indicate presence of total *consciousness*. Scientists have concluded, "Consciousness was a global phenomenon that occurred everywhere in the body, and not simply in our brains. Consciousness, at its most basic, was coherent light."¹¹¹ So we find cells of a sponge separated by sieving into single individuals purposefully re-assembling themselves into a functional organism or a cell from the root of a plant, such as a carrot, developing unfalteringly into a whole (carrot) plant.¹¹² The cells 'know' how, when and why to act as they precisely do because they are made up of conscious mind. They are consciousness or awareness itself.

All accounts of the physical, emotional and spiritual nature of plants clearly indicate the presence of conscious mind in so-called inanimate things.¹¹³ The ability of plants to instantly perceive human intentions, even from considerable distances, and their response to human thoughts and actions or even to environmental stimuli underscores the consciousness of non-human beings, even at cellular level.¹¹⁴ It is testimony of universal nonlocal communion. Similar conscious or intelligent as opposed to instinctual — behaviour and responses have been observed in studies on mammals, birds, insects, fish, cold-blooded creatures, plants and micro-organisms, including

¹⁰⁸ Wilson *supra* note 15 at 93.

¹⁰⁹ *Id.* at 114.

¹¹⁰ Tiller *et al supra* note 24, at 2.

¹¹¹ McTaggart *supra* note 34, at 94.

¹¹² Watson *supra* note 14, at 26 - 27.

¹¹³ Tompkins and Bird *supra* note 9. This illuminates on scientifically confirmed details under such topics as 'Plants can Read Your Mind', 'Plants That Open Doors,' 'Plants Will Grow to Please You,' 'The Harmonic Life of Plants,' 'Plants and Electromagnetism,' 'Force Fields, Humans and Plants,' 'The Mystery of Plant and Human Auras,' 'Live Plants or Dead Planets' and 'Mind Over Matter' et cetera.

¹¹⁴ Backster *supra* note 10.

single-celled ones.¹¹⁵ That can only be regarded as manifestation of consciousness. Dean Radin's conclusion after extension research is, as indicated by the choice of the title of his book, that the whole universe is conscious — is one consciousness!¹¹⁶

3.5.0 THE ALL-PERVADING INFLUENCE OF THE CONSCIOUS MIND

Mind not only creates communicative matter but it constantly influences every aspect of matter. The influence is through the nonlocal information-sharing of the particles of atoms. The information transmitted nonlocally by each subatomic particle in the matrix of universal consciousness exerts influence on every other particle in the universe, instantaneously. The exchange and mutual influence therefore goes on in respect of organized forms of energy — be they persons, plants, animals, insects, micro-organisms, rocks or other so called inorganic matter. The influence is exerted through consciousness-directed mind.

Tiller *et al* have observed that consciousness-directed intention is a powerful force that must be incorporated in any new scientific paradigm.¹¹⁷ They note that through focussed intention experimental measurements are influenced; that basic chemical reactions and basic material properties can be strongly altered and that therapeutic action of homeotherapy appears to act at the information aspect rather than the particles aspect of nature. Humans are in a particularly advantageous position for determining and influencing this conscious information throughout the universal matrix. Humans are also capable of greatly raising the level of their consciousness, as well as the level of universal consciousness. It is significant therefore that if we intend to heal the degraded environment we should consciously direct our intention at the information aspect of the pollutants — to alter or transmute them at that level so that they manifest as healthy environment.

The acknowledgement of the power and role of consciousness-directed mind in the creation of whatever matter also explain the potency and the working of such practices as agnihotra, biodynamics, potentized water, sonic bloom and prayers in healing the environment and accentuating plant growth, health and yield as will be discussed below.

¹¹⁵ Ford *supra* note 11.

¹¹⁶ DEAN RADIN, *THE CONSCIOUS UNIVERSE: THE SCIENTIFIC TRUTH OF PSYCHIC PHENOMENA* (1997).

¹¹⁷ Tiller *et al supra* note 24, at 2.

Watson has established that psychokinesis(PK) is a force of mental origin that can influence the movement of principal objects and that it is most effective at the subatomic level, on the basis of consciousness-directed intention.¹¹⁸ He also illustrates everybody's extra-sensory perception (ESP) in nonlocal accessing of information such as remote viewing, thoughtography, the blind 'seeing' colours or 'reading' newsprint and music under glass, psychometry and dowsing. Dean Radin's extensive research confirms ESP to be natural capability in all humans.¹¹⁹ Consciousness-directed intention in the mind has been known to influence naturally occurring levels of such elements as ionizing radiation — an exciting prospect regarding the taming of radioactive wastes and other hazardous substances.¹²⁰

The biodynamic preparations prescribed by Dr. Steiner also seem to influence the selected environment at information level. When horns, filled with cow dung are buried in the earth for six months the dung receives information-packed energies from the earth and the cosmos. The resultant manure is then methodically stir-mixed with water, in homeopathic quantities. In the process, the mixture receives more telluric and cosmic energies that are accentuated or channelled by the consciousness-directed intention of the person mixing it. Concerning the one-hour stirring in which you keep reversing the direction of flow every so often, it has been observed that:-

The important thing is to put your thoughts and determination into what you are doing. Steiner says you should put your very life into it, so that what comes back out of the earth is a reflection of your own effort and spirit... all aspects of the physical world are permeated and guided by the spiritual... I am putting energy into this stirring.¹²¹

The admixture thus potentized has proved to have powerful influence in revivifying the entire biosphere — healing ravaged soils, restoring micro-organisms, eliminating plant diseases and pests checking radiation, transmuting harmful elements, cleansing water and air and restoring a perfectly sustainable balance in the biosphere. The result is improved health and productivity of plants thereby benefiting people, animals and the ecosystem and biodiversity abundantly. Pollution is also eliminated in the locale where biodynamic preparation is applied.

¹¹⁸ Watson *supra* note 14.

¹¹⁹ Dean *supra* note 116.

¹²⁰ Tiller *et al supra* note 24, at 4.

¹²¹ Tompkins and Bird *supra* note 9, at 9.

Patrick Flanagan scientifically demonstrated how Steiner's biodynamic preparations are infused with vital cosmic energies in the stirring process.¹²² Flanagan realized that Steiner's idea that cosmic energy enters the water each time the direction of stirring is reversed is correct. He observed that at this reversal it looks like chaos but the turbulence is in fact filled with millions, if not billions, of vortices. In this vortical flow of water resides its great sensitivity to cosmic forces and its power as a bearer of formative living process. Cosmic energies get captured in water undergoing turbulent chaotic movement or vortical flow and these energies remain in the water. Flanagan established that a vortex puts electric charge on the particles of matter suspended in water and thus renders them colloidal. In a colloidal state, particles are more readily ingestible by both micro-organisms and single-celled root hairs.

The tiny colloids thus energized retain a charge, called Zefa-potential, that is optimally long-lasting and which, according to pioneer colloid chemist, Thomas Riddick, "is a basic law of nature: it plays a vital role in plant and animal life to maintain a discreteness among billions of circulating cells that nourish the organism. The whole human, [animal and plant] body is made up of colloids and all its flows are based on electric attractions." On those principles, Flanagan established a method of potentizing water, which becomes highly beneficial to people, animals, plants and microorganisms by revivifying and enhancing their health, growth and productivity. This scientific discovery of the secrets of nature should be applied for healing the environment.

Another frontier where consciousness-directed intention operates with similarly beneficent results in enhancing growth, health and yield of plants and improvement of the soil and other media of the environment, is the 'Sonic Bloom'. In this innovation, the stomata — the tiny mouths in the leaves of plants — are stimulated by a diapason of bird or bird-like music to open up and gulp nutrients and water vapour in the air or folia-feed sprayed onto the plants along with cosmic energies.¹²⁴ Sonic Bloom, in which intention is powerfully relayed, acknowledges the vital role the chirping birds play naturally.

There are other techniques, re-discovered or developed, for consciously and intentionally attracting, channelling and distributing cosmic energy. These include 'Cosmiculture' in which cosmic energies are radionically channelled into the ground through special pipes to rejuvenate, enrich and revitalize the soil for earlier fruiting,

¹²² Tompkins and Bird *supra* note 13, at 109-114.

¹²³ Tompkins and Bird *supra* note 13, at 110.

¹²⁴ *Id.* at 129-137.

increased yields in plants. The produce of the healthy stock is of higher quality and nutrition, has longer shelf life and better resistance to pests.¹²⁵ The cosmic "pipes are also sometimes used to broadcast biodynamic preparations and potentized water, with remarkable results.

Agnihotra, probably a real panacea for healing the environment, involves preparing a small fire in a copper or gold pyramid of fixed size and putting some grains of rice into the ghee and cow-dung fire exactly at sunrise and sunset while chanting a mantra. The consciousness-directed intention plays a pivotal role in the practice of agnihotra and has the effect of directing the benefits to the target environment. Agnihotra is an ancient Ayurvedic science of purification of the atmosphere by fire. Vasant says that, by agnihotra fire and practice, tremendous amounts of nutrients and fragrance are injected into the atmosphere and that the elements required to make certain life-sustaining essentials are again attracted to the planet, which is what will make our planet whole again. The holistic, inexpensive and non-technical process, which anybody can practice,

¹²⁵ Tompkins and Bird supra note 13, at 290.

¹²⁶ VASANT VP : Why Homa Farming <www.agnihotra.org/satsang.htm> (accessed on 26 May 2005) consisting of excerpts from Vasant's book entitled "*Homa Therapy, Our Last Chance..* Homa Therapy of agnihotra was, so Vasant says, introduced by the Vedas which, like the *Celestine Prophecy*, regarding the energy underlying all matter, predicted that the practice would re-emerge around the end of the second century in time of its dire need and has been practiced sporadically in the East. Agnihotra is also discussed in *The Secrets of the soil* (1998) in the chapter entitled "*purified with Fire,* " where the authors note its increasing practice in USA, Europe, South and Central America and even Middle East. The chant is replete with intent, imagery and accentuation of the various aspects of the environment:-

Om Dyauh santih

May there be peace and bliss in heavenly spheres

antariksam santih

May there be peace and bliss in the interim space in between the planets

prthivi santih

May there be peace and bliss on the earth

apah santih

May there be peace and bliss with all the water resources of the planet

osadhayah santih

May there be peace and bliss with all the medicinal herbs that grow on the planet

vanaspatayah santih

May there be peace and bliss with all the plant kingdom.

visve devah santih

May there be peace and bliss with all the invisible blessing entities in the universe

brahma santih

May there be peace and bliss with Brahma (The word Brahma and Abraham come from the same Sanskrit root "Brih" - to expand; the ever expanding universe)

sarvam santih

Let there be peace and bliss all pervading

santireva santih

Let the peace and bliss be mine

Sa ma santiredhi

Om santih santih santih

can benefit agriculture, environment, medicine, psychotherapy, and numerous other areas that are currently sources of unresolved worries.

Agnihotra offers, according to Vasant, the final solution to global pollution by arresting the improper refusion and fission of atoms and promoting the harmonious molding of things, thereby producing new beneficial elements. The polluting elements are transmuted into beneficial ones. Pollution in the atmosphere, soil, water and in all life forms is undone through the practice of *agnihotra*. Health and productivity of flora and fauna are greatly enhanced and so is the quality of life for all generations, of whatever. *Agnihotra* has remarkable effects in controlling radiation, which highly commends the practice for taming the worrisome radioactive substances, especially the hazardous nuclear waste.

Emoto has vividly illustrated the profound influence of consciousness-directed intention over water through ice-crystal photographs leading one to conclude that similar influence and responses must occur in other media of the environment. This is more probable when one considers that water itself is by far the most preponderant component in flora and fauna, including humans. Particles in atoms of water hold the information, transmitted nonlocally, just like all other particles. The capacity for the memory of water and its ability to imprint and store information from molecules of other substances must therefore be of unsurpassed importance.

Emoto demonstrates water's capability to sense and react to information transmitted as emotive words — spoken or written — or its ability to perceive or register positive emotions such as love, gratitude or appreciation or true prayers and to produce corresponding responses. He photographed these concepts as magnificent ice-crystals. Unlike the negative emotions, which retard frequency and destroy harmony, the positive emotions dissipate evil vibrations, replacing them with joyous and harmonious ones. Water that was exposed to ill feelings or derogatory words, spoken or printed, or polluted or chlorinated water resulted either in ungainly crystals or no crystals at all.

Nearly everyone makes a prayer in some way, for a purpose or other. Most prayers are however premised on fear or greed or both and accordingly attract like rewards. With change of conceptual attitude, imagery and objectives, consciousness-directed intention expressed in prayers, locally or worldwide, would become beneficial to the entire environment. A prayer proper when it happens has a very powerful influence on matter. The prayer, for example, performed for half an hour by a Shinto priest at Fujiwara Dam cleared the polluted water of the dam in about an hour. The crystals

produced from the purified water were of astounding grandeur.¹²⁷ Prayers by healers have been known to heal people and animals, even nonlocally, and to make plants grow healthier and yield higher and more nutritious crops. Plants or seeds handled by mentally depressed persons become retarded.

Consciousness-directed mind and intention seem to function on the basis of morphic resonance. Dr. Rupert Sheldrake formulated the theory that all forms of self-organizing living things — including molecules, organisms, societies and galaxies — are shaped by morphic fields, that resonate with similar fields. The morphic resonance is like a cumulative memory by which similar systems, such as human bodies, plants and animals, are able to 'remember' how to look and act throughout cultures and times. By morphic resonance nonlocal influence of like upon like is exerted through space and time. Thus when an event happens creating a morphic field, after which there is resonance with that field, the likelihood is that similar events will happen repeatedly. When someone becomes aware of something or some knowledge, other people also tend to become aware of it without communication. Concepts and consciousness do create morphic fields and morphic resonance all the time.

Once morphic resonance is established, it extends to all space and time simultaneously so that its effects will be experienced nonlocally throughout the universe. If we therefore consciously establish morphic resonance of concepts about a healthy sustainable global environment, those concepts will be distributed instantaneously. They will immediately impact beneficially on the environment, throughout. If a part of the environment, say a section of the atmosphere, water or land, is impacted that way there is likelihood all the other corresponding parts will be similarly benefited through morphic resonance. It is quite easy and possible to establish morphic resonance of agnihotra, biodynamic preparations, sonic bloom, radionics and such other consciousness-directed concepts and practices and thereby benefit the global environment.

Given the universal oneness of matter and the nonlocal sharing of information, human beings are certainly not the only ones who influence *the* universal processes. All other 'things' do have a definite effect. The so-called non-living things are made of exactly identical atoms, and they have consciousness, just like the living things do. They too have the identical capacity to manipulate and even create reality in ways we are yet to comprehend. The infinite ingenuity obviously based on conscious intelligence-sharing of

¹²⁷ Emoto *supra* note 23, at 89-90.

universal information and not instinct — of animals, plants and sea-creatures in influencing their environment and in adapting to and resolving pertinent problems tends to support that view. Influences, such as those illustrated above and many more, are happening all the time nonlocally while the energy criss-crosses incessantly in its universal matrix. We are, in that process, unwittingly influencing the environment, mostly the wrong way. That is especially so when we intend mechanically — expressing fear or despair about pollution or environmental depredation. By intentionally addressing positive emotive feelings, words, images or concepts, prayer or music to the vast water medium of the environment we can thus very substantially eliminate environmental depredation.

People must therefore not over-whelm the other components of the environment with negativity but should co-operate in improving the environment. It is undeniably obvious that there are as many solutions to environmental depredation as there are conscious atoms in the universe. That all-pervading consciousness must be directed intentionally and positively by all, collectively resonating to appropriate morphic field for the restoration and sustenance of the pristine environment. It is therefore possible to create a viable environment that is capable of continuously meeting the rigorous demands of sustainable development.

CHAPTER FOUR

4.1.0 *LEGAL APPLICATION OF SOLUTIONS TO ENVIRONMENTAL DEPREDAATION*

The concern expressed at every forum addressing the rapidly deteriorating environment and the obvious ineffectiveness of enforcement mechanisms of international environmental law clearly indicate the existence of an unbridged schism between the problems posed by environmental depredation and their real legal solutions. The international environmental law is formulated in the search for those solutions within the juristic arena. That no satisfactorily effective solutions have actually been found over the past decades seems to suggest that the search should be extended beyond the beaten path. International environmental law should be prepared to liberally borrow appropriate concepts from sciences, metaphysics and customary practices if it is to effectively serve its purpose of reversing environmental depredation. There is also need to incorporate into the law suitable concepts for restoring, protecting, preserving and conserving the environment in a sustainable manner.

Laws, including international environmental law, are mental constructs intended to inspire the formulation of certain concepts that will condition people to act or react in specific desired ways or abstain from doing so. As we have seen, the international environmental law is framed such that it tends to encourage the formation of negative concepts, including concepts of human exploitation of resources available naturally in the environment and other emotional concepts founded, to a very large extent, on fear. In that negativity lies the root cause of the global environmental depredation. As established earlier, the consciousness-directed mind creates the physical reality in form of conditions or state of matter according to the accepted and expressed mental concepts and images. The lawmakers must therefore re-think and be prepared to make even unconventional adjustments in order to make the international environment law fully effective. They should find a way of melding the international environmental law with those solutions that have been offered by sciences and metaphysics. They should incorporate methods that are or were customarily practiced by some communities around the world and which have been empirically found to be beneficial to the environment in a holistic way.

4.2.0 *IMPRINTING APPROPRIATE MENTAL CONCEPTS*

The solutions offered by science, metaphysics and customary knowledge are, at their core, consciousness-directed mind processes that generate appropriate concepts and

images. The creation of the desired environment has clearly to be achieved by the harnessing and application of the creative power of the mind. That conclusion is inescapable considering that the environment itself—in a healthy or degraded state — is a creation of the mind. It follows logically that the means for restoration of the environment will also be created by the imaginative mind. The language and imagery of international environmental law should therefore be such as will easily and naturally evoke positive concepts which consciousness-direct mind can readily create into a healthy environment.

4.2.1 DEFINITIONS

Definitions of terms or specific words in statutes and international agreements do invariably play a very pivotal role in the formation of concepts or images and consequently in the creation of the environment, polluted or otherwise. Particular attention should therefore be paid to the definitions in international environmental law. Negative definitions evoke grim images and concepts that in turn transform, in the process of creation of matter, into deleterious environmental conditions. Such negative definitions would have to be replaced with their polar opposites to achieve corresponding gains of a healthy, sustaining and sustainable environment. We should start with a holistic definition of the term 'environment'.

Instruments which have served as the hub of environmental matters and law and which have powerfully influenced the course of environmental events, such as the 1972 Stockholm Declaration and the 1992 Rio Declaration, happen to have no definition of the environment. If they had a suitably emotive definition of environment, which embraces all the components of environment and is rich in positive imagery, their impact would have been remarkably different and the environment would have been spared much harm. All the major environmental conventions and domestic statutes would also need to adopt such encompassing and suitable definitions. Any current definitions of terms that are narrow and so crafted that they can only evoke negative imagery, need to be replaced with definitions which will lead to creation of positive results in the environment.

Since consciousness-directed intention produces the physical matter out of mental images or concepts, a radical alteration of the habitual imagery in environmental matters and law will need to be undertaken. One core area that may be an ideal theatre is the many-faced pollution. The current definition of pollution in international environmental

law and also in domestic statutes is bound to cause people to generate mental images that are created into matter that is inherently pollutant. The more people think of pollution in terms of such definition the more negative images are mentally created and revealed in the physical world as pollutants. A closer look at the law and the mind-sets reveals that the environment we describe and define therein is replicated exactly in the physical realm. That is how we have ended up with an exponential increase in pollutants. The more we fearfully think about pollution the deeper we get entrapped in the vicious circle.

It is advisable then to drop, altogether, the negative definition of pollution in law and from people's minds and to replace it with one enabling creation of the excellent environment we wish to have. The predominant thoughts and concepts induced by such definition would then be of the ideal environment. Once these are accepted at the subconscious level of the mind by a sizeable number of people in a given locale or in the whole world, the creation of the desired environment will invariably ensue. The healthful, wholesome environment will arise when the nonlocal vibrations of those positive thoughts and concepts, intermingling in space, slow down enough to coalesce and form matter corresponding in every respect with the positive thoughts and images. The more the people conceiving positive concepts, the faster is the depredation reversed. The involvement and participation of the public is therefore vital. For effective participation people will need to have appropriate concepts conveyed to them through the international environmental Law.

4.2.2 INFORMATION

Considering that the information in any particle of matter is shared nonlocally — that is simultaneously and instantaneously — with all the other particles in the universe, it is vitally important that the drafters of international environmental law ensure that only information suited to concepts and images likely to create a healthy environment is evoked and relayed. Such information will transmit the consciousness-directed intentions of the universal mind. Information concerning fear and any sense of insufficiency, inadequacy or want of anything in the environment — so common in conventions and news media — must therefore be avoided. When the positive information is predominantly imprinted in, and shared by, the particles of matter everywhere the environment will be thereby cured — without, perhaps, any need for incurring any expenses or invoking costly enforcement procedures.

Human beings are in a unique position — and they have compelling reasons — to initiate a chain of exchange of beneficial quantum information, deliberately intentioned to create a holistic environment throughout the globe. There might be enough people with sufficiently raised levels of consciousness to establish what Redfield calls a "critical mass."¹²⁸ Such a concentration of acute consciousness would very easily create a positive morphic field with a potential to expand exponentially. In the process the particles with positive information would predominate universally. The stronger and more widespread the morphic field, the greater and more evident is the benefit to the physical universe, including the environment. The converse is also bound to hold true that the weaker and more sparse the negative information in the universe, the less evidence of pollution and environmental depredation that there will be, in the biosphere and universally.

While aiming to eliminate environmental depredation and to attain sustainable development international environmental law should therefore seek to establish, in people's minds, dominant positive information that will generate concepts and images which consciousness-intentioned and directed mind may convert into healthy environment. It is clear also that the international environmental law, especially the fundamental and frame-work conventions, need to be amended so as to embrace definitions, descriptions and such other devices as will facilitate positive image-making by the mind. That way the law will enhance global public consciousness so as to trigger the mental process by which environmental depredation will be eliminated.

4.3.0 IMPLEMENTATION OF THE LAW INFUSED WITH POSITIVE CONCEPTS

Every person on earth has the inborn capacity for, and lives by, image-making. That capacity can and should be productively used to improve and sustain the environment, which ought truly to be everybody's concern. The environmental law, once amended so as to include concepts suited to the creation of healthy environment, will need to be propagated and popularised in a global programme of education. Such a programme can borrow much from the advertisement industry for intensity and effectiveness. The advertisement of goods and services exploits, in very subtle ways, the image-making power of the mind. Once global predominance of positive concepts and imagery is attained the creation and sustenance of a healthy global environment will inexorably follow.

¹²⁸ Redfield *supra* note 12, at 18-19.

There are many enough instances that demonstrate that the above postulation is not Utopian. We have noted how mind not only creates matter but also influences matter in infinite ways, for the better or for the worse. Implementation of international environmental law infused with the positive concepts will be by simply engaging the image-making capacity of human beings, consciously and intentionally focussed on the desired healthy environment. The right of the people to access information about, and their participation in, mental creation of the desired healthy environment — as expected under the Aarhus Convention — would have practical meaning and application. A few examples of how the implementation may be achieved will now be considered.

4.3.1 ATMOSPHERE

Considering the central importance of the atmosphere there would be need to have a framework convention on the atmosphere. Such a convention would contain appropriate definitions of the various aspects of the atmosphere and establish a basis for harmonious inter-relationship of human activities in respect of such aspects to ensure overall health of the entire atmosphere. The concepts and thoughts promoted by such definitions would be of purification and replenishment of the atmosphere, not at all about pollution.

The convention would provide, through the definitions, the conceptual matrix for the balanced creation of the various components of a healthy atmosphere such as ozone, oxygen, nitrogen and other gases. It would also lay the conceptual basis for the reduction of the harmful excesses of greenhouse and other gases such as carbon dioxide, nitrogen, CFCs, HCFCs and halons so as to restore the optimum natural balance.

The convention on atmosphere would also recommend the recognition and widespread adoption of all known practices and methods that heal the atmosphere such as organic farming, agnihotra, biodynamics, radionics, sonic bloom and use of water potentized the Flanagan- way. It would additionally encourage prayers by as many people as possible and especially by healers and others exceptionally gifted and whose practice would improve the atmosphere as well as the rest of the environment. In acknowledging those practices and methods the convention will tap a rich wealth of appropriate concepts that are currently either condemned or ignored but which hold the key to the recovery of the environment.

It is possible for humans to actually clean up the pollution currently in the atmosphere upto and beyond the ozone layer. That need not take long if the conceptualisation is thorough, sincere, intense and widespread. The Ozone Convention

and its Protocols may, after appropriate amendments, continue regulating further production and emission of the ozone depleting substances — in which role they will immensely be made more effective if amendments introduce positive concepts. Any excesses of such substances, including those of greenhouse gases, will be dealt with by the self-perpetuating consciousness-intentioned process of influencing matter at particle information level and the inducing of morphic resonance in the atmosphere.

The conceptual approach will also provide a reliable solution to the monumental problem posed by the radioactive and other hazardous wastes, industrial chemicals, persistent organic pollutants, agricultural chemicals and fertilizers and a whole range of pollutant gases. All these would be amenable to the control of the consciousness-directed mind. The currently feared wide-ranging catastrophic consequences of ozone depletion, global warming, climate change and extinction of ecosystems and biodiversity could thus be safely avoided. By the same token sustainable development will be attained.

4.3.2 WATER

Most of the earth is water, which is almost totally polluted. There is urgency in restoring the purity of water. To achieve that we need convention specifically addressing water — not just as a resource for human use but as the most vital component of the environment. The convention should aim at encouraging people worldwide to think and conceive of water in its nourishing purity. It would be framed such that it is capable of evoking concepts of purification of water. Once water is purified globally it will not only satisfy all the human needs but also adequately serve all the other "beings" that depend on it — which means every living thing. In the process the current spiralling panic that is characterized by the increased insistence on water rights of the humans will be permanently quelled.

The convention would appropriately define water in its natural purity, stressing its qualities and abundance in all beings and describing its numerous beneficial aspects. Pollution of water would then be depicted as the despoiling of the magnificence of water. Such definition and description of water, once widely imbibed by mind globally, will easily lead to the restoration of water to its pristine state. It should be easy and cost-free to attain water purity and to maintain it in that pure state. Just as one Shinto monk could in a purposeful prayer, lasting only thirty minutes, purify all the water of a dam, one billion or even one million people — consciously, intentionally and prayerfully focussed

on global water purity — could easily purify the entire water resources of the earth, in a short time and maintain it that way.

Water, being especially sensitive and responsive to vibrations, thoughts or images as demonstrated by Emoto and by virtue of its being the commonest element on the planet, would be the most ideal medium to focus on in administering environmental therapy — starting with the plentiful water in the body of the person so ministering. Expression of love, gratitude and images of beauty, tranquillity and grace by a portion of the world population, encouraged by such a convention, would effectively cure all the water in the environment. The practice of agnihotra, prayer and the application of potentized water would have remarkable effects of purifying water anywhere. A water convention would provide for the practice of such and other means of purifying water and research into others.

4.3.3 LAND, FLORA AND FAUNA

Curing the atmosphere and water would in itself greatly relieve the land, flora and fauna of the effects of environmental pollution and depredation. To complete the relief, however, there will be need to enshrine, in one or several conventions, which may be domesticated by states, an appropriate definition and description of pristine land environment — complete with natural inter-relatedness, inter-dependence and symbiosis of the infinite ecosystems and biodiversity therein.

The fact that all matter, at the subatomic level, is basically conscious mind-energy and therefore the reality that all plants, animals, insects, microorganisms and even the earth itself are sentient and sensitive, should be brought out in international environmental law as an accepted truth. That would form a basis for adjustment or reorientation of prevailing concepts. It will also be a source of concepts that are suited not only for the creation of the desired environment but also as a means for sustaining it. People will formulate the appropriate concepts for respecting and sustaining the environment.

The international environmental law dealing with land as an aspect of the environment would also recognize and recommend the embracing of techniques that improve soil fertility and wholeness of plant growth, health and yield. Additionally, the law would recommend other methods or practices that enhance the vitality of soil, flora and fauna and the environment generally such as agnihotra, biodynamics, radionics, sonic bloom et cetera. The law should commend organic farming, where natural animal manure

and vegetal compost are applied in preference to ruinous chemical fertilizers. It should also recommend inter-cropping, non-chemical weeding, judicious use of weeds which bring up or transmute minerals and trace elements in the soil in order to benefit food crops.

Recognition should be given, in the law, to mass-reared beneficial micro-organisms, insects and other biological controls of pests — these being superior to chemicals by their capacity to obviate the necessity of pesticides, herbicides, insecticides, soil fumigants and other poisons routinely applied to crops or the soil. The many conventions dealing with land-based pollutants, chiefly agricultural chemicals and their residue, would in this process find a way of attaining their objectives.

Pfeiffer's method of transforming the bulk of vegetal and other organic urban garbage and slaughterhouse refuse into cheap but potent organic fertilizer, employing only bacteria and other micro-organisms to do so and without any side effects at all, is another innovation the international and domestic environmental law should incorporate and use to solve the otherwise intractable problem of urban pollution. The resultant and much needed organic humus would replace pollutant fertilizers and chemicals.

International environmental law should enshrine the right of a farmer to choose to practice organic farming and other environmentally friendly practices without undue pressures and restrictions. Additionally the law ought to require that a certain minimum percentage of land in any one country or in each farm, whatever the size, is devoted to organic farming, with no chemicals applied at all.

The wondrous advantage of these therapies is that any one of them addresses and cures, simultaneously, several components or aspects of the environment. The practices can even work complementarily. The net result is that the holistic, pristine environment can be fully restored and maintained within a reasonably short time at hardly any cost. The global application of the environmental therapies would make practical realities of the ambitions of the Biodiversity Convention and numerous other conventions and domestic environmental law concerned with protection or conservation of flora and fauna or with the elimination, mainly in urban areas, of polluting vegetal and sewerage wastes, poisonous chemicals, ionizing radiation, acids and excessive greenhouse gases.

4.4.0 INFORMATION AND EDUCATION

It should be made the duty of all States, ideally under the Aarhus Convention, to disseminate — and a right of all persons to access and receive — every information

relating to all the known environmental therapy procedures, techniques and practices and about their effectiveness. The state should urge and involve its citizens in the application thereof through conscious mental and physical participation. The information should be availed cost-free at all levels of society.

In order to perpetuate a healthy environment the teaching of environmental education including the role of the mind in creation of the environment and the environmental therapies and their practice should be made part of the curriculums in all educational institutions. The right to environmental education should therefore be a right under the Aarhus or other conventions. That right should accordingly be enshrined in those conventions and also in domestic legislations.

4.5.0 THE ROLE OF UNITED NATIONS — INSTITUTIONS

The United Nations would at last have the means by which effectively convert the world-wide dirge about environmental depredation into potent songs of celebration for a restored environment. Through its institutions the United Nations can realize actual and effective protection, conservation, preservation and development of a holistic environment. At long last sustainable development could become feasible and realistic.

UNEP would then have a very meaningful role to play co-ordinating the incorporation of those mind-based solutions into the international environmental law. It would in addition be engaged in global promotion, adoption and implementation of the practices and procedures that yield those solutions. It would have, perhaps for the first time, the actual means by which to play its crucial role and carry out its mandate. Ministerial declarations, unlike earlier ones such as the 1997 Nairobi Declaration or the 2000 Malmo Declaration, would, for the first time, have some tangible and practical recommendations to make with certainty of the results.

The various United Nations institutions and commissions established by conventions would need to adopt phraseology that is conducive to formation of creative relevant images or concepts and such practices as are appropriate to their respective mandates. Each is bound to find suitable mind-based means of effectively fulfilling its role in protecting, conserving, preserving or improving the environment. The International Atomic Energy Agency (IAEA), for example, would realize that in the properly consciousness-intentioned and directed mind it has an unfailing tool for carrying out its mandate of developing peaceful uses of atomic energy, protecting nuclear material, preventing nuclear accidents and promoting safety of nuclear installations and

even neutralizing harmful radiation. The Joint Group of Experts on Scientific Aspects of Marine Pollution (GESAMP), the International Tribunal for the Law of the Sea (ITLOS) and the International Seabed Authority would also find the practical and effective means of addressing, instantaneously, all the particles in the expansive seas. In communicating the appropriate information nonlocally these institutions would enable to efficiently perform the tasks they are mandated to do, quickly and effectively — far beyond the present expectations.

In their duty to assess available information and to assess environmental and social-economic impacts of climate change and formulate response strategies GESAMP and the Intergovernment Panel on Climate Change (IPCC) would find consciousness-directed mind, functioning at particle-information level, to be an invaluable ally. The Food and Agricultural Organization if it took up and encouraged consciousness-directed mind-based agricultural techniques, would before long find all its perennial problems solved and the globe satiated with plenitude, on a properly sustainable basis.

With a pollution-free restored environment, the World Health Organization (WHO) would witness true health. It would then be left with only the role of sustaining that health — with a wide choice of means to do so including conventional medicine, treatments depending on the power of positive mental-imaging and application of the traditional practices and medicines efficacious in maintaining holistic health. The United Nations Education and Scientific Organization (UNESCO) would, using its worldwide network, disseminate knowledge about the various mind-based means of healing and restoring the environment. When the world sufficiently learns that one lesson, it will have learned all the other knowledge in the universe. It will thereby become an idyllic home for all beings, organic or inorganic.

CHAPTER FIVE

5.1.0 CONCLUSION

The proposal made in this dissertation, if incorporated into the international environmental law and sincerely implemented, would enable the law to actually be effective in eliminating environmental depredation and attaining sustainable development. In the process, myriad other problems afflicting not only humans but also all other creatures throughout the globe would be resolved. The proposal therefore offers the means for checking and reversing environmental depredation. It also provides the means by which all the problems that result from environmental depredation are eliminated in a relatively short time and at minimal costs. The world is desperately yearning for such solutions. All the solutions needed are at hand

Indeed, as the 2000 Malmo Ministerial Declaration concluded, we can now better coordinate legal instruments. Incorporating these mind-based solutions into international environmental law will be the essence of that coordination. The world community has a crucial role to play and must play the role without undue delay if life on earth is to be saved. It is time for a radical paradigm shift that will be best introduced through international environmental law. The emergent new consciousness recognized and welcomed by the 2000 Malmo Ministerial Declaration must be recognized and incorporated into international environmental law. This consciousness needs to be in the matrix of the law in order for the process of mental creation of the desirable environment to function. The incorporation of the concepts that are amenable to the power of the consciousness-directed mind in international environmental law and making that power operational is the desirable radical paradigm shift.

The International community crossed the threshold of twenty-first century with the determination, as expressed by the ministers of environment at the 2000 Malmo Conference, to arrest and reverse the growing trends of environmental degradation that threaten sustainability of the planet. In my humble view those goals and more can be attained, but only if the creative power of the consciousness-directed mind is fully engaged — within the context of international environmental law — in the global endeavour.

The 2000 Malmo Declaration observed that there are sufficient human and material resources available for arresting and reversing environmental depredation. These resources can however only serve those purposes if they are appreciated and utilized from the perspective of consciousness-directed or intentioned mind and its acknowledged role in the creation of matter. For resolving environmental depredation the most potent aspect of human resource will be his or her consciousness-directed mind. This resource is liberally available in every person. Once the function of the consciousness-directed mind becomes the basis upon which international environmental law is implemented, a large array of benefits will ensue.

It will, for the first time, be possible and practical to effectively arrest environmental depredation without prejudicing sustainable development. When there are appropriate positive concepts ingrained in international environmental law and sufficiently accepted by a sizeable number of the world population, the creation of bad elements in the environment will steadily decrease. At the same time the creation of the good elements that constitute a healthy environment will steadily increase. The success of those humans in thus influencing the environment will serve to strength their consciousness, with the result that their ability to create an even healthier environment will be enhanced further.

The creation of a healthy environment will mean that pollution will be eliminated in that very process. The elimination of pollution in the ambient air, atmosphere generally, water and land will also result in the eradication of virtually all diseases and pests afflicting people, animals and plants. The control and eventual taming of the radioactive and other hazardous wastes and substances will further improve the health of people, animals and marine life and of plants on land and in the sea. These benefits will be particularly significant in urban areas where the majority of the world human population resides.

Given a healthy environment with chemical and acid-free soil and proper ozone shield above, all types of plants will grow sturdily and yield more highly nutritious produce. Proper consciousness-directed mind-based agricultural practices will make it possible and practical to reclaim vast tracks of land lost to deforestation, soil erosion and desertification and convert it to productive agricultural land. Such practices will enhance productivity of the current agricultural land as well as the reclaimed land besides improving the nutritional quality of food and fodder alike. Healthy crops will better resist pests, while growing and during storage, resulting in greatly increased food security.

There will be, on securely sustainable basis, sufficient nourishment for the ever-increasing population of all species, including human, with the result that food security will be a reality throughout the world, on a continuous basis.

The seas, lakes and rivers, once rendered healthy again, will be able to adequately and comfortably support all the life that is justly dependent thereon. In a healthy natural surrounding the fish, whales, dolphins, seals, turtles and all other marine creatures will thrive abundantly and be able to replenish any considerate and moderate catch thereof. A sustainable balance of the food chain will be attainable thereby making sustainable utilization of marine resources practicable. Moreover with purification of water, a wide range of benefits will be achieved in its domestic, agricultural and industrial uses. Considerable savings will be made in not having to resort to costly purification and chlorination process.

The adoption and global practice of consciousness-directed creation and maintenance of vegetation, including forests and marine flora, will result in reversal of deforestation, desertification and general loss of vegetation cover. The benefits accruing from forests in form of non-timber forest resources will be very welcome to impoverished communities around the world, especially in the developing countries. Of more importance, however, is the reclamation of vast lands that had been rendered unproductive and inhospitable. Indeed the capacity to convert all land on earth, including land ruined by deforestation, desertification, soil erosion, acidification, salinity, infusion of chemicals and fertilizers into habitable, productive and life-supporting state of sustainable development is within the creative power of the mind.

The twin problem of depletion of ozone layer and deleterious climate change would be solved with this single solution. Consciousness-directed mind would not only be able to transmute the excessive ozone depleting substances but it would also create sufficient vegetation sinks for excessive greenhouse gases. Once balance and harmony are restored on earth, the impact will be universally felt and replicated nonlocally through morphic resonance. The creation of the appropriate morphic fields will lead to beneficial morphic resonance throughout planet earth. The result will be the restoration of pristine environment which will be capable of comfortably sustaining itself and support human development.

It becomes clear then that the consciousness-directed or intentioned mind unquestionably offers the only means of totally eliminating environmental depredation and attaining a truly sustainable balance and harmony in environmental protection and

economic development. By incorporating, into the international environmental law, the mental concepts that are amenable to the process of creation of matter by the consciousness-directed mind we would enable the law to effectively fulfil its vital mandate. Only then can there be a sustainable global environment. Only then can protection, conservation, preservation or development of the environment be meaningful or practicable. Only then will it be possible for succeeding generations of human beings as well as those of all the other beings in the environment to obtain all their needs for healthy growth, development and existence on a sustainable basis. The clamour for human rights over the environment will almost sizzle off while the conflicts of individuals and nations over exploitation of natural resources will be considerably diminished. Sustainable development then becomes plainly a matter of the mind.

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