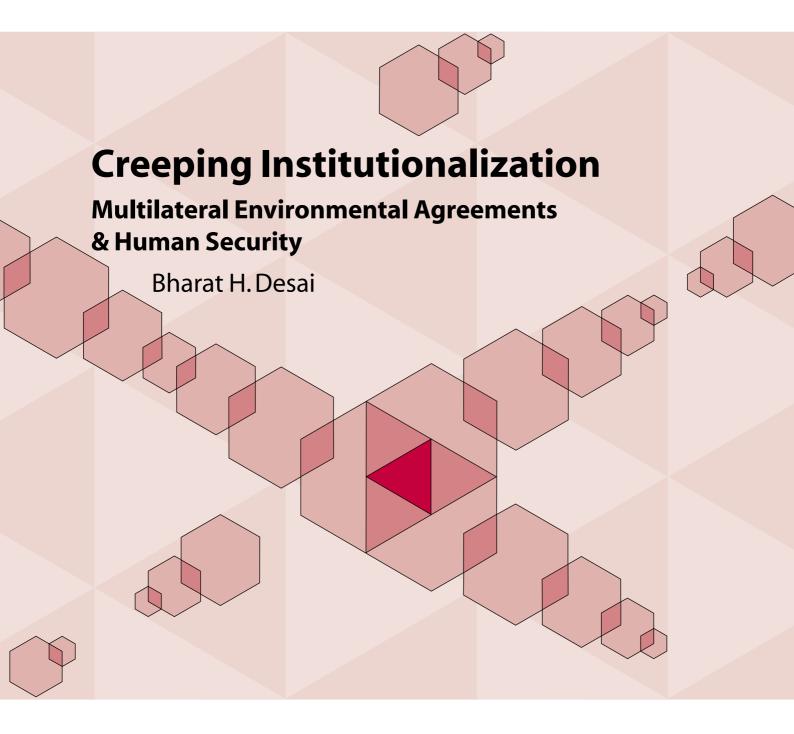




Institute for Environment and Human Security



InterSecTions

'Interdisciplinary Security ConnecTions' Publication Series of UNU-EHS

No.4/2006

UNU Institute for Environment and Human Security (UNU-EHS) UN Campus Hermann-Ehlers-Str. 10 D-53113 Bonn, Germany

Copyright UNU-EHS 2006 Cover design by Gerd Zschäbitz Copy editor: Ilona Roberts

Printed at Paffenholz, Bornheim, Germany December 2006, 1st edition, 1000 print run

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the UNU-EHS or the United Nations University of any of the views expressed.

This is a purely scholar work of the author and does not necessarily reflect views of the Government of India.

This study was co-sponsored by the International Human Dimensions Programme on Global Environmental Change (IHDP).

ISBN: 3-9810582-8-3 (printed version) ISBN: 3-9810582-9-1 (electronic version)

ISSN: 1814-6430

InterSecTions

'Interdisciplinary Security ConnecTions'

Publication Series of UNU-EHS

No. 4/2006

Creeping Institutionalization

Multilateral Environmental Agreements & Human Security

Bharat H. Desai

Foreword

The United Nations University is mandated to establish links between the UN System and the academic community, to use these partnerships as a mechanism generating policy relevant knowledge and highlighting existing and emerging issues which are of concern for the United Nations and its Member States.

No doubt that policy relevant science must step over the traditional disciplinary limits of scholarly work in order to capture the complexities of the problems and their possible solutions. The interactions between humans and their environment are exemplary in this context. Ecosystems may seem to be the primary domain of ecologists and biologists, but safeguarding and sustainably managing them imply the involvement of legal experts, political scientists, but also land use planners, landscape architects and many more scientific and technical disciplines. Human-environment interaction has even its security ramification. The establishment of the United Nations University Institute for Environment and Human Security in 2003 aptly proves the recognition of the need to address the inherent threats, risks and challenges. In an earlier issue of InterSecTions series Hans Günter Brauch, a prominent political scientist, described the evolution of the scientific as well as political process, which he called the "securitisation of environment". Dr. Brauch's essay was followed by the institutional analysis of the global environmental governance authored by Dr. Andreas Rechkemmer.

After those successful publications UNU-EHS is again proud to present this issue of InterSecTions, written by Professor Dr. Bharat H. Desai, who gives an excellent and thought provoking account of the creeping institutionalization of the global environmental governance. His "story" is not only proving that environment is as much a legal as a security issue. It goes well beyond the fields of his legal expertise as he analyses the creeping institutionalization from the point of view of psychology of the state actors. The reader can follow page by page how the growing environmental awareness is being translated into multilateral actions, treaties including the "thickening web" of Multilateral Environmental Agreements (MEAs) and the "softness of hard law".

Many people, dedicated to environmental preservation and rehabilitation tend to be impatient with the pace of development and the results reached so far. Yet even for the most critical reader this essay of Prof. Desai must carry some "good news" about the well established and irreversible process at intergovernmental level, a "secret success story" of the UN System and its environmental programme UNEP. The accelerating rate of establishing and ratifying MEAs show both the will and the means to achieve some of our cherished environmental goals.

The present issue of the InterSecTions series is the first one which was cosponsored by a partner of UNU-EHS, the International Human Dimension Programme of the Global Environmental Change Project IHDP-GEC of the International Science Council (ICSU) and the International Science Council (ISSC).

As a networking organization we are very pleased to facilitate the publication of this scientific analysis of a relevant and actual process together with competent international partners.

Janos J. Bogardi Director UNU-EHS

Foreword

Environmental affairs did not play any significant role in international diplomacy until the late 1960s. The collective consciousness of the necessity for a sustainable use of the planet's natural resources was long enough limited to national or non-governmental initiatives. It was in 1968 that the United Nations General Assembly first recognized the need to engage into environmental issues of global concern. In 1972, the UN organized the first world conference on the environment ever in Stockholm and called it the UN Conference on the Human Environment (UNCHE). At about the same time, the United Nations Environment Programme (UNEP) was set up. Ever since, a series of world conferences on environmental and sustainable development issues have been held such as the Rio Earth Summit (1992) and the World Summit on Sustainable Development in Johannesburg (2002). This series of world conferences and the mission of UNEP form two components of a system that is commonly referred to as *global environmental governance*. Yet its third and most predominant component is the fast and ever expanding grid of Multilateral Environmental Agreements (MEAs), a multitude of inter-state treaties and conventions of either regional or global scope.

This study deals with the emergence of MEAs as relatively recent tools of international law making processes and aims to both categorize them in terms of scope, fit and scale, and assess their effectiveness within the realm of global governance for the environment. Dr. Desai, a distinguished scholar and intimate connoisseur of the field, analyses the rise of multilateral legal treaties as sort of a twin of the postmodern institution-building boom under the UN framework. Moreover, legal treaties – at least in the given context – are perceived and described as both cause and effect of political institutions.

One of the remarkable features of MEAs is their issue-specific nature as opposed to the merely generic and abstract notion of classic international law. The author sees this as perhaps their major strength. As such, environmental treaties among states are perceived as a cornerstone within global regulation. The fact that environmental concerns have become a major subject of international and inter-state law is largely owned to the emergence of MEAs. However, despite all progress the author identifies the downside of the plethora of environmental treaties as well – a total of some 500 have become somewhat unmanageable, and oversight and coordination are nearly impossible. Without the creation of a central mechanism that ensures synergies and efficiency among them, the continuous trend towards issue-specific treaties risks to undermine the above described results significantly. This argument points towards a collective political effort to strengthen UNEP as the central node of global environmental governance in the 21st century.

Andreas Rechkemmer

Executive Director

International Human Dimensions Programme (IHDP)



About the Author

Professor Bharat H. Desai holds the prestigious Jawaharlal Nehru Chair in International Environmental Law and is Professor of International Law at the Centre for International Legal Studies of Jawaharlal Nehru University in New Delhi. He was formerly Director and Head of the Department, Centre for Environmental Law, WWF-India (1997-99). As a Humboldt Fellow, he worked at University of Bonn on the treatise Institutionalizing International Environmental Law. Main areas of his current research work include law-making and institution-building processes in centralized legalization on sectoral environmental issues, international environmental governance, legal status of the secretariats of multilateral environmental agreements (MEAs) as well as 'synergy and inter-linkages' concerning MEAs.

Prof. Desai is engaged in promotion of teaching and research of International Law and International Environmental Law as well as 'Regional Capacity Building in Environmental law' in the South Asian region. At the domestic level, apart from his basic work on Environmental Law in India, he is being consulted by the Indian Ministry of Environment & Forests and Ministry of External Affairs. Prof. Desai has also been inducted as a member of the official Indian Delegations to various intergovernmental meetings. He has written extensively in the fields of International Law, International Environmental Law, International Environmental Law in South Asia and Environmental Law in India.

Table of Contents

Introduction	9
Institutionalized Cooperation	9
Multilateral Environmental Regulation	
Role of International Institutions	
Thickening Web of MEAs	13
Role of 'Trigger Events'	
Changing Character of MEAs	
Rio's Contribution	
Common Concerns of Humankind	19
UNEP as a 'Catalyst'	
Montevideo Programme	21
Proliferation of MEAs	25
Tools for Social Engineering	28
Treaties as 'Processes'	29
Salient Characteristics	30
Sui Generis Treaties	32
'Softness' of Hard Law	34
Framework Convention Approach	
Institutional Structures	39
Conclusion	42
Abbreviations	44
References	45

Introduction

In the international law making process, Multilateral Environmental Agreements (MEAs) have emerged as the "predominant legal method for addressing environmental problems that cross national boundaries" (Harward Law Review 1991:1521). An estimated 500 international conventions related to the environment have arrived since 1868. Out of them, almost 300 have been negotiated since the 1972 UN Conference on Human Environment. Multilateral Environment Agreements can be generally put in three categories: (a) core environmental conventions and related agreements of global significance, which have been closely associated with UNEP (in terms of initiative for negotiation, development and/or activities); (b) global conventions relevant to the environment, including regional conventions of global significance, which have been negotiated independently of UNEP; and (c) other MEAs, which are restricted by scope and geographical range (UNEP 2001; 2001a). MEAs are in fact part of a broader trend of "increasingly more complex web of international treaties, conventions, and agreements" (UNU 1999:5), to address a specific issue, resource, specie, sector or region. It entails a continuous process of law making that takes cognizance of relevant scientific, socio-economic and political factors. It, in turn, provides vibrancy to the 'process' and keeps it in tune with the changing needs and priorities of the international community. Thus, it ensures continuous revitalization of law as a tool to address specific problematique.

The employment of issue specific tools and techniques characterise the law making process in this rapidly expanding branch of international law. In view of the commonalities of interests for some of the common concerns and workability of the lowest common denominator approach, 'state sovereignty' per se does not pose an insurmountable problem for marathon intergovernmental processes for institutionalized cooperation on environmental issues. Even as essentially state-centric process becomes complex, it rests upon bedrock of consensus that emerges from negotiations. It provides interesting lessons as regards willingness of the states to 'share' their sovereign decisionmaking concerning a specific problem area in a global framework. The emergence of 'centralized' multilateral environmental regulations decisively impinges upon human welfare and security. The regulatory approach is primarily conditioned by anthropogenic and utilitarian considerations. As such it is essential to fully comprehend the technique of multilateral environmental regulation and, though it, 'creeping' process of institutionalization in the field, as well as its role and contribution in furthering human security.

Institutionalized Cooperation

There has been rapid growth and close organic linkage between law making and institution building processes especially in the post-UN

Multilateral Environmental Agreements (MEAs) have emerged as the "predominant legal method for addressing environmental problems that cross national boundaries". In a rapidly changing global environment, sovereign states have come to rely upon international institutions to promote inter-state cooperation on a wide range of issues.

Charter period. Most of the institutional structures brought into being by the states, serve as platforms for international cooperation. It seems most of them emanate from the thickening web of multilateral treaties. Thus, institutions have become both products of the giant state-centric treaty-making machine as well as contributors to the enterprise. As a corollary, there has been phenomenal growth in international institutions. This is especially so in case of the multilateral regulatory processes concerning environmental issues. The environment related global conferencing and multilateralism is a classic example of need-based responses of the states to address specific problems. In this organic and continuous treaty-making exercise, states have sought to create and, in turn, rely upon institutional mechanisms as fulcrum to serve specific purposes. As such advent and proliferation of multilateral environmental agreements (MEAs) is reflection of functional approach at work. It also underscores craving of the states for institutional structures as facilitators, catalysts and almost inevitable cooperative frameworks.

In a rapidly changing global environment, sovereign states have come to rely upon international institutions to promote inter-state cooperation on a wide range of issues. The process of institutionalizing cooperation has been based upon the bedrock of 'shared sovereignties'. It has emerged as the need of the hour and one of the best tools to address global challenges in their various manifestations. Thus, it seems, institutionalized cooperation has emerged as a functional necessity. It has provided a tool to the states to grapple with problems as they arise. The process does have its limitations, weaknesses and faces a challenge of growing institutional fragmentation.

Nonetheless, marathon task of bringing together a large number of sovereign states on common institutional platforms has given fillip to the basic rule of the game – sovereign equality of the states – and emergence of consensual decision-making approach in contrast to obsessive reliance upon either weighted voting or brute majorities. It has resulted in far reaching implications for the quality and content of law-making, equity and transparency in problem-solving techniques as well as proliferation of international institutions as a response to emerging challenges.

It is noteworthy that the states have engaged in law making processes that have novelty in terms of issue-specific regulatory framework. However, in essence, it reflects a constructive process akin to 'codification' that rests on state practice. The basic legal underpinnings of the process are derived from fundamental principles of state responsibility under international law. The 'process' involves efforts to work out multilateral treaties on even routine issues of international cooperation, apart from dealing with common problems (described more recently as 'common concerns'). It has ushered in an intricate mosaic of treaties at bilateral, regional and global levels. Thus treaties seem to have now become cornerstone of multilateral regulatory enterprise.

Multilateral Environmental Regulation

Multilateral treaty-making has emerged as one of the important sources of international law. It does not appear to be sheer coincidence that the *International Court of Justice* (ICJ), while dealing with a 'dispute' submitted to it, is expected to apply "international conventions" as one of the sources.

The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply: a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting states; b.international custom, as evidence of a general practice accepted as law; c. the general principles of law recognized by civilized nations; d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law. (ICJ 2006: Art. 38.1; emphasis added)

The Statute of ICJ has not laid down any order in which the Court is expected to apply various sources of international law. Still, placing international convention at the top of the list of sources available to the court, testifies the value and emergence of treaties as the most important source. It is also no less significant that the United Nations Charter has sought to give "respect for the obligations arising from treaties" a pride of place in the preamble itself and has placed onus on its plenary organ (the General Assembly) to encourage the progressive development of international law and its "codification" (UN 1945: Preable; Art. 13). Thus, based upon this crucial mandate, the General Assembly established International Law Commission (as a subsidiary organ of the Assembly) immediately after the UN Charter took the roots. The General Assembly adopted resolution 174 (II) on 21 November 1947 that established the International Law Commission (ILC) and approved its Statute. The ILC formally came into being in 1948 with a mandate to work for "the progressive development and codification of international law, in accordance with article 13(1) (a) of the Charter of the United Nations. The ILC comprises 34 members, elected for a five-year period (quinquennium) sessions (UN 2006).

The initial decades after the UN came into being; there was a flurry of movement for codifying a host of established customary principles of international law. It did unleash an era of codification and 'progressive' development of international law. In essence it heralded a mammoth treaty-making process in every conceivable area of international law. It seems the UN system itself (for instance 'specialized agencies' like ILO and IMO) regularly churn out conventions that meet the needs of their member states to regulate specific areas (like occupational health and safety as well as maritime safety and pollution). They have in fact unleashed a "gigantic treaty network" (Lee 1998; Alverez 2002:218) that covers many crucial areas of human activities. Interestingly, in the past three decades or so, the baton for triggering

Multilateral treatymaking has emerged as one of the important sources of international law. the treaty-making process seems to have been 'diffused' as the process is no longer exclusive preserve of the ILC. The states seem to have tacitly allowed functional international organizations and a host of other intergovernmental actors on the international scene, to engage in a treaty-making enterprise. The web of international law seems to be gradually thickening largely due to proliferation of treaties for regulating state activities in various spheres of international life. The speed at which pages of the official register of the United Nations – UN treaty series – are swelling, provide classic testimony to this vibrant process. The UN Charter provides a mechanism for 'registration' of treaties:

- 1. Every treaty and every international agreement entered into by any Member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.
- 2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations. (UN 1945: Art. 102)

Interestingly, in the past three decades [...] the states seem to have tacitly allowed functional international organizations [...] to engage in a treaty-making enterprise.

In view of the very nature of present day environmental challenges, the legal responses have started affecting the day-to-day lives of people across the globe, as it is no longer confined only to matters of high state affairs. It can be attributed to the development of both multilateral environmental agreements (the so-called hard law) on a variety of sectoral issues, as well as a host of other rules and standards (now widely known as soft law), for regulating state behavior. The web of multilateral environmental regulatory framework is gradually thickening in terms of its range as well as content, notwithstanding its partial and uneven growth. The final form of hard law still does require explicit consent of the states (expressed through signature, followed by ratification or accession of the legal instrument in question). Interestingly, the law making process is now not the exclusive preserve of the states alone, as it is effectively getting influenced and shaped by a host of non-state actors including intergovernmental organizations, non-governmental organizations as well as think tanks, academic institutions, business groups and individual experts. The advent of the 'observer' system within the UN system as well as other intergovernmental processes has lifted the veil of secrecy from erstwhile state-centric law-making process.

Role of International Institutions

Some of the intergovernmental institutions in the environmental field do actively contribute to the process. In a way they act as a catalyst and provide a platform to the states. They facilitate negotiations by providing vital scientific input on the sectoral environmental issues in question. In the recent years, emergence of several MEAs was actively shaped by international institutions on issues such as ozone layer depletion (UNEP), climate change (WMO and UNEP), transboun-

dary movements of hazardous wastes (UNEP), persistent organic pollutants (FAO and UNEP).

This *sui generis* law making process has started making inroads in to the cherished domain of sovereign jurisdiction of the states. Increasing need for international cooperation has propelled states to come together on common platforms, including institutional ones. As such the notion of 'sharing sovereignties in common' by the states to address some of the common concerns is gradually gaining ground.

If one examines the growing mosaic of international environmental law, one cannot but feel the absence of a central law making institution, which can give a coherent shape and direction to the development of law. The law making process hitherto has been distinctly characterised by ad hoc and need-based responses. The remarkable growth of sectoral environmental regulatory framework testifies to this. As a result, sector-specific rules and principles have proliferated in areas ranging from atmosphere (e.g. air pollution, ozone, climate change etc.), to transboundary movements of substances (e.g. hazardous wastes, chemicals etc.), to conservation of living resources (endangered species, migratory species, wetlands, biological diversity etc.). Many of the earlier MEAs were largely a result of the perceived need to take conservation or protection measures. Moreover, except for certain exceptional cases, the main thrust of these sectoral regulatory measures has been, primarily, anthropocentric i.e. to protect long term human utilitarian interest in a species or a natural resource.

Significantly, a notable feature of these negotiations (as well as the multilateral environmental agreements resulting there from) is that they do not remain a one-time affair especially due to the nature of the issues sought to be addressed. Most of these MEAs reflect a process, comprising several components that critically depend upon emergence of consensus and political will of the states to go ahead on the issue. The cumulative political and legal effect of series of instruments adopted by the states on a given environmental issue has been popularly described as 'regimes'. Irrespective of the binding or non-binding character of the obligations contained in these instruments, they have a gradual, pervasive regulatory effect on the state behaviour. It, in turn, makes significant inroads into the domestic environmental policy and law making process of the states.

Thickening Web of MEAs

The pace of growth of multilateral instruments concerning environmental issues is unprecedented. During 1990-94, more than 50 such international instruments, most of them multilateral (representing 10-15% increase) (Kiss and Shelton 1994:1), came to be adopted by the states. MEAs arrived at in recent years have a great diversity and most of them underscore the global character as well as multidimensional nature of environmental problems. Interestingly, there is an increasing tendency among the states, especially the industrialized

The growing mosaic of international environmental law [... shows] the absence of a central law making institution.

The complex regimes thrown up by varied MEAs have generated debate about the need for and efficacy of such a form of "global governance" in a given area.

ones, to push for a global framework for more and more environmental issues. There is, however, also a lot of scepticism and even some opposition to this approach. This often makes multilateral environmental negotiations on such issues complicated, contentious and full of calculated ambiguity. In essence, it reflects hard-headed political and economic interests of the states, which often results in a stalemate. For instance, the refusal of the Unites States to ratify the Kyoto Climate Change Protocol (1997) to the 1992 UN Framework Convention on Climate Change is a classic illustration of the vital national interests dictating the state behaviour even on an issue regarded as a 'common concern of humankind'. Interestingly, the US not only refused to ratify the Kyoto Protocol but also took an unprecedented step to 'de-sign' the Protocol. The US, being the largest emitter of greenhouse gases has effectively engaged in 'hold-out'. Notwithstanding this, the Protocol did come into force on 16 February 2005 and (as of 18 April 2006), 163 states and regional economic integration organizations have deposited instruments of ratifications, accessions, approvals or acceptances. This took the total percentage of Annex I Parties' emissions to 61.6% (UNFCCC 2006).

The subject matter of MEAs range from issues such as protection of species (whale) or flora and fauna in general (Convention on International Trade in Endangered Species of Wild Fauna and Flora; CITES), cultural and heritage sites (WHC), regulation of trade of hazardous chemicals and wastes (Basel Convention), air pollution (LRTAP) and persistent organic pollutants (POPs) to more remote issues like ozone depletion, climate change and biological diversity. The core MEA have come to be categorized into mainly five groups: the biodiversity-related conventions, the atmospheric conventions, the land conventions, the chemicals and hazardous wastes conventions, and the regional seas conventions and related agreements. It seems, as a part of the organic law-making process, MEAs on a host of these issues have in fact "changed over time, just as political, economic, social, and technological conditions have changed over time" (Weiss 1998:89).

The increasing reliance upon this source of international environmental law presents long-term implications for the law making process as well as for the body of international law as a whole. In fact the complex regimes thrown up by varied MEAs have generated debate about the need for and efficacy of such a form of "global governance" in a given area (Sand 1990; Haas 1995; Haas and Haas 1995; French 2000; Desai 2002; 2006). As such the thickening web of these regimes, their law making potential, inherent complexities, flexibility, large participation of states, role of non-state actors and issues of implementation and compliance need to be closely examined to assess efficacy of such multilateral regulatory techniques. The issues of effectiveness of international environmental regimes as well as enforcement of and compliance with MEAs, however, are beyond the scope of the present study.

The MEAs in the recent years have a great diversity. Most of them underscore the multidimensional nature of environmental problems.

For instance, the Millennium Ecosystem Assessment (2005) has focused on the linkages between ecosystems (defined as a dynamic complex of plant, animal, and micro-organism communities and the nonliving environment interacting as a functional unit) and human well-being (that includes basic material for a good life, health, good social relations, security, freedom of choice and action). The Millennium Ecosystem Assessment has dealt with the full range of ecosystems – from those relatively undisturbed, such as natural forests, to landscapes with mixed patterns of human use, to ecosystems intensively managed and modified by humans, such as agricultural land and urban areas. It has examined as to how changes in ecosystem services influence human well-being (Millennium Ecosystem Assessment 2005).

It seems our ever growing developmental quest (especially for raw materials, food, fresh water and energy) has "substantially reduced nature's ability to continue providing the services we need in our daily lives" (Rekacewicz 2006:6). There seem to be an increasing tendency among the states, especially industrialized ones, to push for a global framework for more and more environmental issues. Due to sharp differences in perceptions in understanding the 'historic' contributions to global environmental problems (such as climate change and ozone layer depletion), often multilateral environmental negotiations turn out to be acrimonious and virtually a battlefield due to sharp polarization of views among the Northern developed countries and the Southern developing countries.

Role of 'Trigger Events'

In many cases, it seems, some 'trigger' events (or responsible factors) give birth to MEAs to regulate state behavior concerning a specific issue. For instance, findings of the British Antarctic Expedition raised concerns about depletion of the Earth's protective ozone layer (leading to 1985 Vienna Convention) as well as growing incidences of dumping of hazardous wastes especially in developing countries led to an outcry against such practices (leading to 1987 UNEP Guidelines and 1989 Basel Convention). It can be said that impact of such 'trigger events' could be different in each of the cases where regulatory process is set in motion. Further course is chartered as dictated by diverse interests, objectives and priorities laid down by the states parties. Interestingly, the content, format, phraseology used, in-built law-making mechanisms formulated, institutional devices designed as well as funding patterns also show considerable variations among the MEAs. The growth and changing character of international environmental law could be mainly assigned to circumstances and responsible factors during the pre-1972 Stockholm Conference period, contribution of the Stockholm Conference and the 1992 Rio Earth Summit that decisively brought to the fore mega-conferencing technique to address global environmental problems.

There seem to be an increasing tendency among the states, especially industrialized ones, to push for a global framework for more and more environmental issues.

It was only in the 1970s that the issue of protection of environment came on to the global stage in a big way.

Changing Character of MEAs

In the pre-Stockholm period, the treaty-making efforts were primarily guided by very limited concerns such as the regulation of marine pollution or nuclear energy issues or conservation of particular specie(s) such as the whale. Some of the early international conventions in this direction were, for instance, International Convention for the Regulation of Whaling (1946); International Convention for the Prevention of Pollution of the Sea by Oil (1954); Convention on Third Party Liability in the Field of Nuclear Energy (1960) as amended by the Additional Protocol of 28th January 1964 and by the Protocol of 16th November 1982.

In this early era, it is the principles of "unfettered national sovereignty over natural resources and absolute freedom of the seas beyond the three-mile territorial limit" (Brown Weiss 1992:7) provided the guiding force to emerging international environmental law. The inherent perception of the architects of earliest international, as opposed to global, regulatory efforts were in fact mainly directed towards the use of the living and non-living resources and not environment protection per se. Most of them strongly reflected utilitarian character. For example, the Convention for the Protection of Birds Useful to Agriculture (1902), sought to address those birds, which were regarded as "useful" to agriculture at the time, as compared to certain "non-useful birds" such as eagles, and falcons, which have now come to be protected. Thus, the negotiators as well as draftsmen at that time essentially took into account "short term utility, the immediate usefulness of protected species" (Kiss and Shelton 2000:56), as dictated by the prevailing societal needs.

In view of such utilitarian approach at work, the legal responses for regulation of state behavior in this era were sporadic and catered to specific needs (mainly economic), especially at the regional level. It was only in the 1970s that the issue of protection of environment came on to the global stage in a big way. Two major developments in fact set the tone and goaded the states to come out with some concrete measures for fears of impending global environmental crisis. It gradually started being understood, especially in highly industrialized states that the human impact on the environment, through endless material growth "necessitates a readjustment of current perspectives on ecological issues and a redefinition of our conventional views" (Nazli 1972:9). A sense of caution and finiteness of human progress on the planet earth was underscored at the time by several important reports and scholarly writings (Falk 1972; Meadows et al. 1972).

The 1972 Stockholm Conference that came to be convened by the UN General Assembly launched a formal process of institutionalization of international environmental cooperation. It became major landmark in providing a sound trajectory as far as international environmental policy and law were concerned. The Stockholm Declaration comprised 26 principles that, in addition to the general concern for environment, also took cognizance of developmental concerns of the

developing countries. The most notable component of it was principle 21, which sought to put forward a two-part statement that:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction (UNCHE 1972: 2-65).

Rio's Contribution

The preparatory process for the United Nations Conference on Environment and Development (UNCED) was launched as a sequel to the mandate given by the United Nations General Assembly. The Assembly did provide detailed guidelines for the purpose, especially regarding its structure, time schedule, participation of other organs, organizations and programmes of the UN system and funding. UNEP – as the principal UN environmental programme till date – was neither entrusted with the task of organizing the mega-event nor was assigned with any major responsibility in the matter. Ironically, the original initiative for convening the UNCED – as a follow-up to the 1987 report of the Brundtland Commission (WCED 1987) – had come from the UNEP Governing Council (UNEP 1989). Instead, a special committee (PrepCOM), serviced by an ad hoc secretariat, was entrusted with the preparatory task for the UNCED. The PrepCOM had an ambitious task cut out for it, to be attained within a period of about two years. The PrepCOM held four meetings. Each of them was for the duration of four or five weeks. The PrepCOM meetings were attended by most of the members states of the United Nations, UN specialized agencies, other intergovernmental institutions, non-governmental organizations as well as host of other 'interest groups' on environmental and developmental issues. The first session of the PrepCOM was held in Nairobi in August 1990, second and third sessions were held in Geneva in March and August 1991 and the final session was held in New York in April 1992, which prepared the final documentation for the UNCED, beginning in the first week of June 1992 (Johnson 1993:43). The PrepCOM, in spite of the time constraints, was expected to impart a "strong impetus and direction" (Strong 1990) for the development of a variety of international legal instruments that were proposed.

An assessment of the contribution made by UNCED may be perceived variously, depending upon what one expected of it. From the perspective of its contribution to the development of international environmental law, however, it may be seen in terms of immediate results obtained as well as UNCED's impact on the norm-setting process per se. UNCED itself may be regarded as one of the most remarkable events in the history of multilateral environmental negotiations. It may even be regarded as unparalleled for the coming together of such a large number of states to address global problems, which came to be regarded as 'common concerns of humankind'.

UNCED itself may be regarded as one of the most remarkable events in the history of multilateral environmental negotiations.

One may attribute success in reaching [... CBD and UNFCCC] agreements mainly to the need for urgent action, states inclination to go for 'precautionary measures', convergence of competing interests of the negotiating states and workability of the politically convenient and consensus based "lowest common denominator".

Just prior to the UNCED, and simultaneously with the PrepCOM, preparations had started to bring about concrete results concerning international legal instruments on the problems of climate change as well as biological diversity. Both these instruments were concluded before the UNCED commenced. In fact, assigning the task of negotiations to a specially constituted Intergovernmental Negotiating Committees (INC), to prepare draft text of agreements on both issues, greatly helped in accelerating the process. The conclusion of negotiations and reaching of consensus within a short span of less than two years was indeed significant. When the two multilateral agreements i.e. UN Framework Convention on Climate Change (UNFCCC) (ILM 1992:851-873) as well as Convention on Biological Diversity (CBD) (ILM 1992:822-841) opened for signature at UNCED, more than 150 states put their signatures to them. One may attribute success in reaching these 'framework' agreements mainly to the need for urgent action, states inclination to go for 'precautionary measures', convergence of competing interests of the negotiating states and workability of the politically convenient and consensus based "lowest common denominator".

In terms of contents, both these agreements (UNFCCC and CBD) carried some soft obligations couched in a hard treaty form. However, in view of the intrinsic scientific uncertainty on both the issues as well as inadequate assessments at the national level on them, the instruments had to be designed as frameworks that required in-built law making and follow-up actions by the parties. For instance, the UNFCCC has used formulations in laying down general commitments, which call upon the parties to formulate, develop and cooperate or prescribe reporting requirements (UNFCCC 1988: Art. 4.1).

Similarly, the CBD lays down obligations for the parties, which are to be carried out as far as possible, and as appropriate, or in accordance with its particular conditions and capabilities (CBD 2001:Art.5-11;14). The fact that an overwhelming majority of states appended their signatures to both these agreements immediately showed that they felt it was politically convenient to go for the carefully crafted consensus.

In the heat of the moment, most of the states wanted to be seen on the right side. Both these 'hard' legal instruments, comprising vague and hortatory obligations, brought together a complex array of actors within the ambit of the process of crafting of respective regimes. The very nature of the issues at stake required the states to face political as well as economic problems in addressing them. For instance, MEAs on climate change and biological diversity provided an opportunity to lay down the groundwork by the respective Conference of Parties (COP) for in-built law making process linked to the emergence of concrete scientific evidence (as regards anthropogenic influence on climate change and loss biological diversity), embedded 'calculated ambiguities' and other unresolved issues. This imparted the muchneeded flexibility to the nascent regimes. Moreover, incorporation of some of the emerging principles of international environmental law in these agreements, underscored their growing acceptability for judging the threshold of environmental behavior of states. It seems the

Rio Summit heralded coming of age of multilateral environmental regulatory technique.

Common Concerns of Humankind

The premise that some of the global environmental problems need global solutions has brought about change in the perception on these issues as common concerns of humankind. The General Assembly considered the agenda item proposed by the Government of Malta, on "Conservation of climate as part of the common heritage of mankind" and adopted the resolution "Protection of Global Climate for Present and Future Generations of Mankind" on 6 December 1988. The GA resolution 43/53 (UN 1988) was adopted without vote. These efforts by Malta in this connection, however, to have the General Assembly declare conservation of climate as common heritage of mankind did not succeed. The idea of common heritage of mankind was originally mooted in a Maltese proposal by Arvid Pardo (UN 1998) for debate on law of the sea. As a result, the *United Nations Convention* on Law of the Sea (UNCLOS) provided that "the Area and its resources are the common heritage of mankind" (UN 1982: Art. 136); and further UNCLOS states that area "means the sea-bed and the ocean floor and subsoil thereof, beyond the limits of national jurisdiction" (UN 1982: Art. 1.1). As per article 140 the activities in the area were to be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States (UN 1982: Art. 140). The International Sea-Bed Authority was to provide for the equitable sharing of financial and other economic benefits derived from activities in the Area through appropriate mechanism. The UNCLOS came into force after a period of 12 years, on 16 November 1994. The Assembly recognized instead the issue of climate change as a common concern of mankind. The echo of this salutary declaratory statement came to be reflected in two global conventions on climate change and biological diversity (adopted at the 1992 Rio Earth Summit). The very first paragraph of the Preamble to the Framework Convention on Climate Change states: "Acknowledging that change in the Earth's climate and its adverse effects are a common concern of humankind" (ILM 1992:849). The Preamble to the Convention on Biological Diversity also states: "Affirming that the conservation of biological diversity is a common concern of humankind" (ILM 1992:822).

In a sense the notion of common concern caters to the requirement of international community interest in a common resource as opposed to limited national interest. It lays down prima facie basis for common action for a regulatory framework on those issues, which cannot be addressed, in a bilateral context or by a limited number of states.

UNEP as a 'Catalyst'

One of the important mandates *United Nations Environment Programme* (UNEP) carved out was to act as a catalyst in the developThe notion of common concern [...] lays down prima facie basis for common action for a regulatory framework on those issues, which cannot be addressed, in a bilateral context or by a limited number of states.

"In the exploitation of natural resources shared by two or more countries, each state must cooperate [...] to achieve optimum use of such resources without causing damage to the legitimate interests of others."

ment of multilateral legal instruments. Initially, when UNEP embarked upon efforts in this direction, it prepared a set of 15 draft principles on the conduct of states in the field of environment regarding conservation and harmonious utilization of natural resources shared by two or more states (ILM 1978:1097-99). These principles emerged in the wake of a request by the UN General Assembly, which called for adequate international standards for the conservation and utilization of natural resources common to two or more states (UNGA 1973). The Charter of Economic Rights and Duties of States, adopted by the General Assembly, also incorporated a similar principle. Article 3 of the Charter of Economic Rights and Duties of States annexed to the UN General Assembly resolution 3281(XXIX) of 12 December 1974 (UNGA 1974) provided:

In the exploitation of natural resources shared by two or more countries, each state must cooperate on the basis of a system of information and prior consultation in order to achieve optimum use of such resources without causing damage to the legitimate interests of others (ILM 1974: 251).

These draft principles were adopted by the UNEP Governing Council but, for inexplicable reasons, were not subsequently considered by the General Assembly. The explanatory note to the draft makes it very clear that it did not seek to refer to a "specific legal obligation under international law, or the absence of such obligation, and did not intend to express an opinion (as far as they do not reflect already existing rules of general international law) whether these principles "should be incorporated in the body of general international law". The Explanatory Note to the Draft Principles of Conduct read as: "The draft principles of conduct, in this note have been drawn up for the guidance of States in the field of the environment with respect to the conservation and harmonious utilization of natural resources shared by two or more States". The principles refer to such conduct of individual States as is considered conducive to the attainment of the said objective in a manner which does not adversely affect the environment. Moreover, the principles aim to encourage States sharing a natural resource, to co-operate in the field of the environment.

It seems the effort was to avoid language which might create the impression of intending to refer to, as the case may be, either a specific legal obligation under international law, or to the absence of such obligation.

The language used throughout does not seek to prejudice whether or to what extent the conduct envisaged in the principles is already prescribed by existing rules of general international law. Neither does the formulation intend to express an opinion as to whether or to what extent and in what manner the principles-as far as they do not reflect already existing rules of general international law-should be incorporated in the body of general international law." (ILM 1978:1097-98).

Montevideo Programme

In the background of this initial effort (for formulation of some general principles of international environmental law), the Governing Council of UNEP adopted an ambitious plan for the development and periodic review of environmental law, which was prepared at an ad hoc meeting of senior government officials expert in environmental law at Montevideo (Montevideo Programme). This meeting took place in Montevideo from 28 October to 6 November 1981 to establish a framework, methods and programme, for the development and periodic review of environmental law, and to contribute to the preparation and implementation of the environmental law component of the system-wide medium-term environment programme (UNEP 1981; UN 1981:839-40; UN 1982a:1030). This Programme was adopted by the UNEP Governing Council¹ and became an ambitious exercise in laying down a framework, method and programme for the development of environmental law. It recognized the importance of codification and progressive development of environmental law to promote international co-operation, mutual understanding and friendly relations among states, apart from serving as an essential instrument for proper environmental management and improvement of the quality of life.

Initially, UNEP was able to crystallize a normative framework through the first phase (1981-1992) of the Montevideo Programme to regulate conduct of the states. The significance of this exercise, through the means of soft law instruments, has been that they become precursors to hard obligations. Expert Working Groups prepare drafts of most of these instruments through painstaking work. An interesting facet of such drafts is usage of vague language, which is politically convenient to the states. They are non-legally binding (non-legal soft law) and have, at best, an educative value. This has turned out to have a subtle influence and is effective in the long run. As a result, a number of international agreements have taken shape on issues such as depletion of the ozone layer, the Convention for the Protection of the Ozone Layer (Vienna, 1985) and the Protocol on Substances that Deplete the Ozone Layer in Montreal, 1987, both entered into force on 22 September 1988 and 1 January 1989 (ILM 1987:1529, 1550; ILM 1991:539; 541; ILM 1993:874); and transboundary movements of hazardous wastes and their disposal in 1989, namely the Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Basel 1989, which entered into force on 24 May 1992 (ILM 1989:657). They also served as a basis for developing conventions on climate change, which is the Framework Convention on Climate Change (Rio de Janeiro, 1992), which came into force on 21 March 1994 (ILM 1992:849); and the Convention on

UNEP was able to crystallize a normative framework through the first phase (1981-1992) of the Montevideo Programme to regulate conduct of the states.

¹ The UNEP Governing Council resolution 10/21 of 31 May 1982 adopted the experts' programme and endorsed their conclusions and recommendations; see UNEP GC report A/37/25, 31 May 1982.

In the second phase, the Montevideo Programme was further elaborated to address emerging environmental challenges and to develop relevant legal regimes.

Biological Diversity (Rio de Janeiro, 1992), which entered into force on 29 December 1993 (ILM 1992:822).

In the light of the experience of the first phase of the Montevideo Programme, UNEP carried out an exercise to strengthen it. At two review sessions of the Meeting of Senior Government Officials Expert in Environmental Law, a second phase of the Montevideo Programme was adopted. UNEP organized these two sessions of the Meeting of Senior Government Officials Expert in Environmental Law for the Review of the Montevideo Programme, that took place in Rio de Janeiro (October and November 1991) and in Nairobi (September 1992). It was attended by government experts from more than 80 developing and developed countries as well as observers from relevant international organizations (UNEP 1993; UN 1993:820-21; see also Montevideo Programme II; UN 1993: 820-21). In the second phase, the Montevideo Programme was further elaborated to address emerging environmental challenges and to develop relevant legal regimes. It was adopted by the UNEP Governing Council, as a broad strategy for the activities of UNEP in the field of environmental law for the 1990s (UN 1993:820-21; UNEP 1993a). The Governing Council in its decision underscored role of UNEP for:

continued progressive development of international environmental law as a means of wider adherence to and more efficient implementation of international environmental conventions, as well as future negotiating process for legal instruments in the field of sustainable development (UNEP 1993a).

The Montevideo Programme II identified 19 principal areas for the development of environmental law, each of which contained the objectives, strategies and activities to be carried out under it. The Montevideo Programme II comprised following 19 elements: (A) Enhancing the capacity of States to participate effectively in the development and implementation of environmental law; (B) Implementation of international legal instruments in the field of the environment; (C) Adequacy of existing international instruments; (D) Dispute avoidance and settlement; (E) Legal and administrative mechanisms for the prevention and redress of pollution and other environmental damage; (F) Environmental impact assessment; (G) Environmental awareness, education, information and public participation; (H) Concepts or principles significant for the future of environmental law; (I) Protection of the stratospheric ozone layer; (J) Transboundary air pollution control; (K) Conservation, management and sustainable development of soils and forests; (L) Transport, handling and disposal of hazardous wastes; (M) International trade in potentially harmful chemicals; (N) Environmental protection and integrated management, development and use of inland water resources; (O) Marine pollution from land-based sources; (P) Management of coastal areas; (Q) Protection of marine environment and the law of the sea; (R) International co-operation in environmental emergencies; and (S) Additional subjects for possible consideration during present decade (UNEP 1993b).

The programme, in general, sought to ensure full participation of all the states in the development and effective implementation of environmental law and policy, implementation of relevant international legal instruments and to evaluate adequacy of these instruments for the respective problem areas, apart from specific environmental issues. It has also taken cognizance of new areas which will necessitate international legal responses, such as environmental protection of areas beyond the limits of national jurisdiction, biotechnology, liability and compensation, environment and trade, environmental implications of international agreements not directly relating to environment, human settlements and transfer of technology and technical cooperation (UNEP 1993b:17).

In order to align UNEP's priorities with those of the governments, mid-term review of the Montevideo Programme has provided an opportunity for stock taking. This has sought to ensure effectiveness of UNEP's role in international environmental law making. As such the mid-term review (1996) provided a series of suggestions (see *Report of the Meeting of Senior Government Officials Expert in Environmental Law for the Mid-Term Review of the Programme for the Development and Periodic Review of Environmental Law for the 1990s*, Nairobi, 2-6 December 1996; UNEP/Env.Law/3/3 of 10 December 1996).

The Governing Council of UNEP launched a process in 1999 for the third phase of the Montevideo Programme. It had called for convening a meeting of senior government experts in environmental law in the year 2000, for the "preparation of a new programme for the development and periodic review of environmental law" (UNEP Governing Council Decision 20/3 of 3 February 1999 on "Programme for the Development and Periodic Review of Environmental Law beyond the year 2000"). This Decision authorized the Executive Director of UNEP to use the current Programme (phase II) as strategic guidance for the work of UNEP in the field of environmental law until the Governing Council adopts a new programme. As a follow-up to this renewed mandate, the Executive Director convened the Meeting of Senior Government Officials Expert in Environmental Law in October 2000. This meeting to prepare a Programme for the Development and Periodic Review of Environmental Law for the First Decade of the Twenty-First Century was held at UN Offices in Nairobi from 23 – 27 October 2000.

The deliberations at the meeting were facilitated by two documents, namely possible components of a programme and implementation of the programme for the 1990s (see the documents (i) "Possible Components of a Programme for the Development and Periodic Review of Environmental Law for the First Decade of the Twenty-First Century", UNEP/Env.Law/4/2 as well as (ii) "Implementation of the Programme for the Development and Periodic Review of Environmental Law for the 1990s", UNEP/Env.Law/4/3).

Following extensive debate and elaboration on 20 proposed subject areas; the meeting adopted a draft Montevideo Programme III for presentation in February 2001 to the twenty-first session of the UNEP

The [...] Montevideo
Programme III
encompasses various
elements aiming to
enhance the effectiveness
of environmental law.

The Montevideo
Programme still provides
raison d'etre for UNEP's
role as 'environmental
voice' of the UN.

Governing Council (GC), which also served as Second Session of the Global Ministerial Environment Forum. The draft Montevideo Programme III encompasses various elements aiming to enhance the effectiveness of environmental law, apart from addressing sectoral environmental issues of current concern (UNEP 2000; Environmental Policy and Law 2000: 268; and Report of the Executive Director on Policy Responses of the United Nations Environment Programme to Tackle Emerging Environmental Problems in Sustainable Development; Items 4 (b) and 5 of the provisional agenda for the Twenty-First Session of the Governing Council of UNEP). It was adopted by the twenty-first session of the Governing Council providing a road map to UNEP for the development of environmental law in the next decade. The 21st Session of the UNEP GC adopted the "Programme for the Development and Periodic Review of Environmental Law for the First Decade of the Twenty-first Century" as the broad strategy for the activities of UNEP in the field of environmental law. The GC requested the Executive Director to implement the Programme, within available resources and programme of work of UNEP. It also called for close collaboration with states, conferences of the parties and secretariats of multilateral environmental agreements, other international organizations, non-state actors and persons, (see the Governing Council Decision 21/23 of 9 February 2001).

Thus the Montevideo Programme has emerged as a major pillar and provides mandate for UNEP's role in international environmental regulatory process. In fact it has facilitated an interesting interplay between the scientific processes, the public policy making and its expression through environmental law. In the course of more than two decades of implementation of the Montevideo Programme, the range, as well as content of UNEP's role in international environmental law making, has undergone significant changes. However, in view of the increasing technicalities of the sectoral environmental issues in the negotiations for multilateral agreements, it makes sense that UNEP collaborates with other 'specialized agencies' of the UN. For instance, on the issue of chemicals, Food and Agriculture Organization (FAO) has joined UNEP in the negotiations for a global convention on the recent Convention on Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam, 1998). The Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was adopted at Rotterdam on 10 September 1998. It seeks to curtail the \$1.5 trillion trade in hazardous pesticides and chemicals; (see UNEP 1998; UNEP 1998a). Both UNEP and Food and Agriculture Organization (FAO) are jointly providing facility for an interim secretariat for this convention (UNEP 1998b; UNEP 1999).

With the entry of other high profile actors especially within the UN system in this cherished domain, UNEP faces competition. These, coupled with other factors, have affected UNEP's ability to set the global environmental agenda. But the Montevideo Programme still provides *raison d'etre* for UNEP's role as 'environmental voice' of the UN.

It goes without saying that treaties have placed regulatory frameworks in different areas of international law on a sound footing. There could be disadvantages of treaties especially if the contracting parties take unduly long time to bring them legally into force. The methodology of treaty-making followed in different areas and tools and techniques adopted to address specific problems do vary. Still, there is no denying that treaties have brought certainty to the applicable law in a given area. They also have been responsible, in general, to promote frameworks for institutionalized international cooperation.

Proliferation of MEAs

Multilateral Environmental Agreements (MEAs) have emerged as "predominant legal methods for addressing environmental problems that cross national boundaries" (Harvard Law Review 1991:1521). The pace at which the multilateral instruments concerning environmental issues are growing remains unprecedented. In a way it reflects strong sense of multilateralism at work to address some of the common concerns that sovereign states consider necessary to regulate through these instruments. There are, however, some issue-specific common elements and differences in the treaty-making resorted to in some of the sectors (see Table I for comparative picture of 20 selected MEAs).

The pace at which the multilateral instruments concerning environmental issues are growing remains unprecedented.

Table I
Comparative Status of Selected [Twenty] Multilateral Environmental Agreements

(As of 5 June 2006)

MEAs	YEAR	ENTRY INTO FORCE	PARTIES Ratification	HOST INSTI- TUTION	SEAT	DECISION- MAKING ORGAN	ISSUES COVERED
Convention on Wetlands of International Importance	1971	21.12.1975	152	IUCN	Gland	СОР	Conservation and Wise Use of Wetlands, Primarily as habitat for the Water- bird
Convention for the Protection Of World Cultural and Natural Heritage	1972	17.12.1975	182	UNESCO	Paris	General Assembly of States Parties	Protection and Conservation of Cultural and Natural Heritage
Convention for the Prevention Of Marine Pollution by Dumping of Wastes	1972	30.08.1975	81	IMO	London	Consultative Meeting of the Parties	All Sources of Pollution of the Marine Environment Especially Dumping of Waste
Protocol to the Convention on The Prevention of Marine Pollution by Dumping of Wastes	1996	NOT IN FORCE	27	IMO	London	Meetings of the Parties (MOP)	All Sources of Pollution of the Marine Environment Especially Dumping of Waste
Convention on International Trade in Endangered Species	1973	1.07.1975	169	UNEP	Geneva	СОР	International Trade in Endangered Species of Wild Fauna and Flora
Convention on Migratory Species of Wild Animals (CMS)	1979	1.11.1983	97	UNEP	Bonn	СОР	Conservation & Management [wise use Of Migratory Species of Wild Animals And their Habitats
Agreement for the Conservation of Bats in Europe [EUROBATS]	1991	16.01.1994	23	UNEP Collocated With CMS	Bonn	МОР	Conservation of Bats, especially threats from Habitat Degradation, Disturbance of Roosting Sites and Certain Pesticides
Agreement for the Conservation Of Small Cetaceans of the Baltic and North Sea [ASCOBANS]	1992	29.03.1994	8	UNEP Collocated With CMS	Bonn	МОР	to Achieve and Maintain a Favorable Conservation Status for Small Cetaceans
Agreement on the Conservation Of African-Eurasian Migratory Water birds [AEWA]	1995	1.11.1999	12	UNEP Collocated With CMS	Bonn	МОР	to Maintain Favorable Conservation Status for Migratory Waterbirds, Especially Endangered Species

MEAs	YEAR	ENTRY INTO FORCE	PARTIES Ratification	HOST INSTI- TUTION	SEAT	DECISION- MAKING ORGAN	ISSUES COVERED
Convention on Substances That Deplete the Ozone Layer [Vienna]	1985	22.09.1988	190	UNEP	Nairobi	COP	Atmospheric Ozone Layer above the Planetary Boundary Layer
Protocol on Substances That Deplete the Ozone Layer Layer [Montreal]	1987	1.01.1989	189 London (181) Copen'gen (172) Montreal (143) Beijing (110)	UNEP	Nairobi	COP	Atmospheric Ozone Layer above The Planetary Boun- dary Layer
Convention on Transboundary Movements of Hazardous Wastes And their Disposal [Basel]	1989	5.05.1992	168	UNEP	Geneva	СОР	Transboundary Movements of Hazardous Wastes and their Disposal
`Protocol on Liability and Compensation for Damage Resul- ting from Trans- boundary Move- ments of Hazardous Wastes and their Disposal [Basel]	1999	NOT IN FORCE	07	UNEP	Geneva	МОР	Comprehensive Regime for Liability and For Adequate and Prompt Compensation for Damage
United Nations Framework Convention on Climate Change [UNFCCC]	1992	21.03.1994	189	UN	Bonn	СОР	Changes in the Earth's Climate System due to Anthropogenic Interference
Protocol to the UNFCCC [Kyoto]	1997	16.02.2005	163	UN	Bonn	МОР	Quantified Emission Limitation and Reduction Commitments for Annex I Parties
Convention on Biological Diversity [CBD]	1992	29.12.1993	188	UNEP	Mon- treal	СОР	Biological Diversity and Biological Resources
Protocol on Biosafe- ty to the CBD [Cartagena]	2000	11.09.2003	132	UNEP	Mon- treal	МОР	Transboundary Move- ment, Transit, Handling And Use of Living Modi- fied Organisms
United Nations Convention to Combat Desertification	1994	26.12.1996	191	UN	Bonn	СОР	Combating Desertifica- tion and Mitigate the Effects of Drought, parti- cularly in Africa
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	1998	24.02.2004	106	UNEP and FAO	Geneva & Rome	СОР	Promote shared responsibility and cooperative effort mong the Parties in the international trade of certain hazardous chemicals, in order to protect human health and the environment from potential harm and to contribute to their environmentally sound use.
Stockholm Convention on Persistent Organic Pollutants	2001	17.05.2004	124	UNEP	Geneva	СОР	Protect human health and the environment from persistent organic pollu- tants

The growing trend of environmental treaty-making does not undermine the historical contribution of 'customary law'.

Tools for Social Engineering

The current process of law-making has brought about significant corpus of 'codified' normative frameworks for regulating environmental behavior of the sovereign states. It could have been partly triggered from the perceived inadequacies of the traditional rules of customary international law to grapple with the simmering environmental challenge. At the same time it has generated institutional mechanisms, which serve as tools for the regulatory frameworks. The growing trend of environmental treaty-making does not undermine the historical contribution of 'customary law'. However, it was initially argued that "general international law (or customary law) contains no rules or standards related to the protection of the environment as such" and, therefore, the customary law "provides limited means of social engineering" (Brownlie 1974:1). While contending such 'limitations' of the traditional customary methods of norm-setting, however, Brownlie has underscored relevance of three trends: (i) the rules of state responsibility; (ii) 'territorial' sovereignty of states that permits use and enjoyment of resources subject to the rules of state responsibility; and (iii) old concept of 'freedom of the sea' provided for elements of reasonable user and non-exhaustive enjoyment (Brownlie 1974:1-11).

Such a view in a way ignored the state practice developed through the normative contribution of landmark award in the *Train Smelter* arbitration (United States v. Canada; 3 *Reports of International Arbitral Awards*: 1905; 1938; 1941) as well as ICJ judgment in the *Corfu Channel* case U.K: v. Albania (ICJ Reports 1949: 4), that states:

"every state has a duty not to knowingly allow its territory to be used for acts contrary to the rights of other states." (Brownlie 1998: 283-288)

That perception came to be radically altered, subsequently, when it came to be emphatically acknowledged that the "legal underpinnings of the protection of the environment continue to be the institutions of general international law." (Brownlie 1998: 283-288).

lan Brownlie, who had argued in a published article in 1974 (Brownlie 1974) about so-called 'inadequacy' and relevance of general international law in environmental matters, came to acknowledge in 1998 that it *did* provide such basic legal underpinning for environment protection. Even as a 'generalist', Brownlie felt the necessity of incorporation, for the first time, in his text book on international law of a six page chapter on 'legal aspects of the protection of the environment'.

The recent decisions of the ICJ in the *Nauru case* (ICJ 1992:240), in the *Nuclear Weapons* advisory opinion (ICJ 1996:226) as well as *Gabcikovo/Nagymaros* project case (Indian Journal of International Law 1998:74-152) did emphatically seek to put the record straight (general obligations of states to ensure that activities within their jurisdiction and control respect the environment of other states or areas beyond the limits of national jurisdiction) in terms of relevance

and contribution of the rules of general international law to address such environment related disputes.

The gradual thickening web of treaties reflects growing practice among states to regard them as a primary source of law making in the field. As per the state practice, nomenclature of a multilateral instrument depends upon the idiosyncrasies of the parties. As such it is not necessary that the contracting parties need to use specific words. In order to decipher the nature of the instrument the states have arrived at, one needs to look for the intention of the parties as well as content of the instrument. In general, use of the words 'treaty' or 'agreement' is common place. The Vienna Convention on the Law of Treaties (1969: Art. 2. a) defines a 'treaty' as "an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation. It has contributed in gradually bringing about relative certainty in the normative process as well as subtle and creeping 'institutionalization' of international environmental law itself. In view of various advantages of such codification and unprecedented treaty-making venture, multilateral treaties have been used as the most effective and a "predominant method" (Harvard Law Review, 1991:1521) for regulating state behavior on a global problematique.

The gradual thickening web of treaties reflects growing practice among states to regard them as a primary source of law making in the field.

Treaties as 'Processes'

Unlike the traditional method of resorting to development of customary norms, states resort to treaties for the sake of, among others, convenience, certainty of the law and as required by the contingencies of a specific issue. Moreover, law making on environmental issues is greatly facilitated by treaties due to a sense of urgency involved in the matter as well as scientific uncertainties intrinsically embedded into them. The sovereign states have found that it is possible to have treaties as 'frameworks'. They, in turn, could be shaped to grow with availability of scientific evidence and convergence of interests of the respective contacting parties. The process is also duly colored by the atmospherics and posturing of main actors as dictated by circumstances of specific treaty-making exercise. Thus by their very nature, such skeleton (framework) treaties require in-built law-making mechanisms in order to facilitate gradual tightening up of the specific treaty. As a corollary, the whole treaty operates as a 'process', necessitating engagement of the contracting parties at regular intervals and efforts on arriving at convergence/balancing of interests to build up the regime. As a result of such continuous and marathon enterprise, MEAs have emerged as a unique technique containing flexibility, pragmatism, in-built law making mechanism as well as consensual approach to norm-setting. They manifest increasing state-centric institutionalized cooperation that contributes to the broader trend of "increasingly more complex web of international treaties, conventions, and agreements" (UNU 1999:5; 8). This vibrant process is in no

less measure pushed, contributed and taken forward by growing participation of civil society groups and other actors. It has almost become routine to witness inherently state-centric treaty making exercise being baked in the fire that is kept alive often by growing cacophony of participation by civil society groups. It also runs the risk of degenerating into law-making on the street. Notwithstanding that, the role and contribution of such 'observers' has become an integral and inevitable part of the treaty making process.

Salient Characteristics

MEAs have emerged as one of the best examples of institutionalized intergovernmental cooperation to address specific environmental issues.

MEAs have emerged as one of the best examples of institutionalized intergovernmental cooperation to address specific environmental issues. In a way, this form of governance is *sui generis* as it has all the trappings of an international 'organization' without formally being one. As a matter of fact, these forms of governance cater to the requirement for *ad hoc* bodies flowing from multilateral treaties akin to functional international organizations. The legal instrument in question provides the backbone to the institutionalized cooperative mechanism. Their existence is determined by the political will of the contracting states and tailored to the need to address a specific global *problematique*. Through their various institutionalized forms (such as plenary political bodies, subsidiary scientific and technical bodies, funding mechanisms and compliance committees) MEAs have established processes of cooperation to address new and complex challenges as they arise.

As treaty-based bodies, MEAs primarily seek to put into place ad hoc and autonomous arrangements that are tailored to address a sectoral global environmental issue. In view of the very nature of this problem-specific institutional arrangement, a MEA is expected to be 'wound up' as and when its desired objectives are met. Its autonomous nature is determined by the instrument in question as well as political will of the contracting states as reflected through the decisions (arrived at through lowest common denominator) of the conference or meeting of the Parties of MEA. Many questions arise as regards the origin, initiation, process and workability of these treaty based regimes. This includes issues such as role of a 'trigger event' that forces states to consider possible legalization on an environmental problem, an institutional catalyst that initiates preparatory process for crystallization of regulatory framework, negotiating process to arrive at consensual text of the instrument, subsequent law-making process to 'flesh out' the gaps or inherent ambiguities, their regulatory contribution, inherent complexities, flexibility, large participation of states, role of non state actors and issues of implementation and compliance.

It seems evident that treaty-making on environmental issues has developed into a sustained practice and fine art largely due to inclination of the states to resort to multilateralism to address some

of the common concerns of humankind. It has been argued that opportunities for multilateralism "appear to abound", as they have in the "aftermath of both twentieth-century 'non-cold wars' (Schechter 1999:3). The states, ostensibly, claim to act in the 'common interest' while joining multilateral environmental negotiations. There is a general hypothesis that it is the *common interest* of states that propels them to negotiate a multilateral environmental agreement. In general, however, the states are guided by their self-interest rather than any notion of common interest. In many of the cases, move for an international legal instrument is pushed by a trigger event, e.g. in case of the ozone layer depletion or the climate change issue. The initiatives in both these cases came in the wake of dire scientific findings, which forced international action. Still, in view of the very nature of these negotiations and participation of a large majority of the states, the final outcome is achieved through the notion of slowest boat in the race (lowest common denominator). Interestingly, almost all of the MEAs negotiated in recent years have seen participation of an unprecedented number of states. For example (as of 5 June 2006): the 1992 Framework Convention on Climate Change has been ratified by 189 states (and the European Economic Community, as an organization); the Kyoto Protocol has been ratified by 163 states (comprising 61.6% emissions as compared to 55% required to bring it into force); similarly the 1994 United Nations Convention to Combat Desertification (UNCCD) has been ratified by 191 states; the 1992 Convention on Biological Diversity has been ratified by 188 states; and the 2000 Cartagena Protocol on Biosafety has been ratified by 131 states (it entered into force on 11 September 2003) (CBD 2003).

In some quarters, it still remains a matter of debate as regards "sense" (Sand 1991:55-60) of negotiating MEAs. It could be due to the intricate nature of negotiations, scientific uncertainty plaguing the negotiations as well as negotiated final text of the instrument, and long gestation period for the treaty to enter into force as they come of age gradually over a long period of time. As such enforcement of and compliance with such treaties intrinsically remains a problem. Notwithstanding these teething troubles, it seems, the very weaknesses are the strengths of MEAs. It is no mean achievement that most of the global MEAs have been joined by a staggering number of sovereign states (most of the global treaties such as on wetlands, cultural and natural heritage, endangered species, ozone layer deletion, transboundary movements of hazardous wastes, climate change, biological diversity, desertification, hazardous chemicals & pesticides in international trade, persistent organic pollutants have more than 100 states parties to them). Such interest and participation of sovereign states could be possible especially due to much needed in-built latitude and accommodation of political convenience to address issues that have basic underpinnings in the crucial socio-economic and developmental priorities of the states.

The nature and character of MEAs crafted by the states has witnessed a sea change over the years. Many of the traditional multilateral

In general, however, the states are guided by their self-interest rather than any notion of common interest. In many of the cases, move for an international legal instrument is pushed by a trigger event.

[...] Out of an estimated 500 international conventions related to the environment, almost 300 have been negotiated since the 1972 UN Conference on Human Environment.

agreements among the states, especially concerning sharing of common international resources such as waters, enshrined provisions prohibiting fouling or pollution of waters as well as affixed state responsibility for the purpose. Issues of mainly regional concern such as acid rain and air pollution as well as protection of flora and fauna later followed it. The range of issues, however, sought to be addressed within the framework of multilateral agreements in the past three decades or so is quite remarkable. It appears that states are gradually inclining towards specialized multilateral agreements as a mode of grappling with global environmental problems. The range, content as well as complexity of these MEAs surpasses law-making endeavors in other spheres of international law. The considerable 'proliferation' of such MEAs in recent years underscores that state practice in this respect seem have come to stay. It is understood that out of an estimated 500 international conventions related to the environment, almost 300 have been negotiated since the 1972 UN Conference on Human Environment. Multilateral Environment Agreements can be generally put in three categories: (a) core environmental conventions and related agreements of global significance, which have been closely associated with UNEP (in terms of initiative for negotiation, development and/or activities); (b) global conventions relevant to the environment, including regional conventions of global significance, which have been negotiated independently of UNEP; and (c) other MEAs, which are restricted by scope and geographical range. (For further details on MEAs see UNEP 2001a).

Sui Generis Treaties

The *sui generis* environmental law making process has started making inroads in to the cherished domain of sovereign jurisdiction of the states. Increasing need for international cooperation has propelled states to come together on common platforms, including institutional ones. As such the notion of 'sharing of sovereignties' by the states on common concerns is gradually gaining ground. The subject matter of MEAs range from issues such as protection of a species (whale) or flora and fauna in general (CITES), cultural and heritage sites, regulation of trade of hazardous chemicals and wastes, air pollution and persistent organic pollutants to more remote issues like ozone depletion, climate change and biological diversity. MEAs on a host of these issues have in fact "changed over time, just as political, economic, social, and technological conditions have changed over time" (Brown Weiss 1998:89).

Most of these hard instruments do not end up as a one-time process as they do not adopt an all-comprehensive approach in negotiating a MEA, which was witnessed especially during the marathon negotiations on the *Law of the Sea Convention* (1973-1982) resulting in the "Constitution for the Oceans" (Koh 1983: xxxiii). It imparted lessons as regards placing all the issues in a single basket for thread-

bare negotiations and arriving at a consensual text. In the context of environmental issues, the negotiating process is faced with the requirement for urgency action. This has to often materialise in the face of unavailability of concrete scientific evidence as well as a high degree of adaptability of the legal system to rapid and frequent change. As compared to the earlier traditional treaty making experiences, most of the environmental issues are mired in significant amount of scientific uncertainty as well as high political and economic stakes for states, especially the powerful ones. Cumulatively, these factors push states to go for a legal instrument that can gradually evolve and unfold, while it accommodates competing interests. Therefore, in case of most of the recent MEAs, the so-called hard law turns out to be not so hard in actual practice.

At the inauguration of the instrument (entry in to force), it resembles like an empty shell that waits for the long drawn fleshing out process. MEAs that emerge as an end product from marathon negotiations, spread over relatively short time-span, are generally in whittled down form to facilitate consensus. The skeleton, in turn, necessitates a step-by-step process to harden the commitments and flesh out the gaps and work on the calculated ambiguities that could be part of the finally adopted text of the instrument that includes definition of the core elements, removing calculated ambiguities and/or spelling out details of the mechanisms in the convention or even launch a separate process to work on issues requiring detailed treatment (for instance Article 27 of the Cartagena Protocol on Biosafety has called for a process to address issue of 'liability and redress' concerning transboundary movements of living modified organisms). This process is conditioned more by the economic and political compulsions of the states parties, as compared to the technical nature of the issue in question, availability of scientific evidence or legal requirements per se.

Many of the MEAs provide a bare framework, to be supplemented by the 'fleshing out' of the subsequent legal instruments (generally known as protocols). In that sense, some of the hard legal instruments comprise soft obligations at their core (hard shell with a soft belly). Thus, there is a need to jettison the traditional notion that all treaties are governed by a single set of rules in view of material differences in different types of treaties. Instead, they may well be judged from their contents, which will "affect their legal character as well" (McNair 1930:100).

Many of the traditional multilateral agreements among states, especially concerning sharing of common international resources such as waters, did enshrine provisions prohibiting fouling or pollution of waters as well as state responsibility for the purpose. Issues of mainly regional concern such as acid rain and air pollution as well as protection of flora and fauna later followed it. The states, it appears, are gradually inching more towards specialized multilateral agreements as a mode of grappling with environmental problems having

[...] In case of most of the recent MEAs, the so-called hard law turns out to be not so hard in actual practice.

global character. The range, as well as complexity of these MEAs resulting from marathon multilateral negotiations, often instituted by global conferences, are unprecedented. As a corollary to it, various institutional structures that have emerged (such as conference of parties or subsidiary bodies), provide platforms for continuous institutionalized cooperation on a specific environmental issue. These institutions provide not only a servicing base to the contracting states of a MEA but also play an important role in the in-built law making process of a regime.

The thickening of frameworks of MEAs has engaged an overwhelming number of states in multilateral negotiations. One of the important factors influencing these negotiations is the balancing between "national sovereignty and international interdependence" (Benedick 1993:229). The unfolding scenario reveals that more and more states are gradually opting for legal as well as institutional cooperation within multilateral frameworks for a wide variety of environmental issues. A host of factors are influencing the state behaviour in this context. The process gets added colour and spice from the lobbying and participation (as observers) of a number of nonstate actors that are recognized under the broad umbrella rubric of major groups or the civil society or stakeholders. Significantly, a notable feature of these negotiations (as well as the multilateral environmental instruments resulting there from) is that they do not remain a one-time affair. The very nature of the issues dealt by these processes make it inevitable that they remain continuous law-making enterprises (probably as industrious as the honey bees!). Most of the MEAs reflect a process, comprising several components that critically depend upon emergence of consensus and political will of the states to go forward on the issue. The cumulative political and legal effect of series of instruments adopted by the states on a given environmental issue could be described as a 'regime'. Irrespective of the binding or non-binding character of the obligations contained in these instruments, they have a gradual, pervasive regulatory effect on the state behaviour. It, in turn, makes significant inroads into the domestic environmental policy and law making process of the states. The complex regimes thrown up by different MEAs have generated debate about the need for and efficacy of such a form of "global governance" in a given area (Sand 1990; Haas and Haas 1995; French 2000: Desai 2000: Desai 2002).

Most of the MEAs reflect a process, comprising several components that critically depend upon emergence of consensus and political will of the states to go forward on the issue.

'Softness' of Hard Law

The 'content' of and final 'form' taken by the treaties is proportional to the sense of urgency involved, paucity of time as well as reluctance of the key actors to permit specificity into the regime so as to apportion concrete obligations to attain basic objectives. Most of these treaties, upon their entry into force, warrant regular 'scrutiny' and assessments. In turn they necessitate formal meetings of the states parties, at

regular intervals, in order to carry out intensive stock taking, to fill up the gaps on the basis of available scientific evidence, crystallization of views of the parties as regards the best cost-effective course open to them. Such a sliding scale normative approach can not be possible without in-built 'softness' in the treaty itself (Boyle 2000: 25-38).

As a manifestation of such paradoxical situation (need for a hard instrument whittled down due to need to accommodate political convenience of the states), some of the treaties in fact boldly carry title of 'framework convention' in their nomenclature itself. In such cases it is expected that the parties will gradually seek to fill up the gaps left out at the stage of adoption of the instrument. These framework conventions could be best described as having a hard shell with soft belly. This is due to the softness of the language (content) used in the instrument as well as intention of the states parties that these frameworks per se will not create 'hard' obligations (such as concrete timetables, quotas, ceilings or other measures). It is such an understanding that precisely provides the basis for adoption of the instrument in question. In that eventuality the negotiating states are not too much concerned about the ideal or purity of a treaty. What they immediately look for could be described as a kind of 'working draft' that will be refined, revised and strengthened as and when convergence of their interests permits it. It is this unusual treaty making practice, based on the bedrock of political latitude and 'softness' that facilitates participation of a large number of states in such 'flexible' instruments.

These innovative formulations facilitate realization of the states' quest for negotiating a so-called hard treaty and yet keep the language used as open-ended or non-binding for the time being (Schachter 1977:296-304). If such loose ends are not allowed, the instrument in question will not take off and suffer either premature death or lead to serious 'hold-out' problems. It could force key parties to remain out of the treaty by either refusal to sign or ratify it. Therefore, in effect, such a treaty-making practice leads to what may also be described as 'treaties-in-work'. These variations, flowing from competing interests of states, are part and parcel of the giant multilateral treaty making machine at work on diverse areas of international law. Such variations squarely fall within the ambit of the Vienna Convention on the Law of Treaties. No specific nomenclature or form, except the 'written' one, is required for a treaty. Article 2(1) (a) of the Vienna Convention defines a treaty as:

an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation (Vienna Convention on the Law of Treaties 1969a: Art. 2.a)

For instance, in the *Qatar v. Bahrain* case, even an agreed 'minute' of the discussions between the two parties was considered as an agreement (lack of registration or late registration under Article 102 of the

Irrespective of the binding or non-binding character of the obligations contained in these instruments, they have a gradual, pervasive regulatory effect on state behaviour.

UN Charter does not have any consequence for the actual validity of such treaty) to confer jurisdiction upon the International Court of Justice. The Court concluded that "the Minutes of 25 December 1990, like the exchanges of letters of December 1987, constitute an international agreement creating rights and obligations for the Parties"; see Case Concerning Maritime Delimitation and Territorial Questions between Qatar and Bahrain (ICJ 1994: 112). In this context, however, intention of the negotiating states and the language used remain the material element to determine nature of the instrument.

Framework Convention Approach

A sense of urgency is generally inherent in most of the multilateral environmental negotiations. Unlike the traditional international law making, states cannot now afford the luxury of waiting for the emergence of a hardened customary norm through the practice of states. Instead, the soft law norms are often adopted as an instant guideline for regulating states' behaviour. Interestingly, even this soft law in many cases becomes just a prelude to the formulation of hard law in the form of a multilateral environmental agreement.

As mentioned earlier, the rapidity and often tight time frame of negotiations (for instance, conventions of climate change and biological diversity were negotiated within a period of about fifteen months and in time for the 1992 Rio Earth Summit) does not leave enough time for the norm-setting process to crystallize or soft norms to harden through emergence of consensus among the states. As such, one can often smell the flavour of these soft norms even in the hard shell of a multilateral agreement. However, such peculiar characteristics, do not normatively pose much of a problem since that suits most of the states. Often adoption of a multilateral environmental agreement, with a 'soft belly' of obligations is a stopgap stage that allows breathing space for the normativity to harden alongside emergence of consensus in the evolution of a particular regime.

In recent years states have preferred to go for such *legal soft-law* – a multilateral environmental agreement which cannot be enforced on its own. Such legal instruments, though known as *law-making* treaties, warrant further action on the part of the states parties to realize their basic objectives. This has been described as *framework convention-protocol* approach in law making. The factors that contribute to states' inclination to go for this approach are complex.

The multilateral treaty making is a marathon and painstaking process. In the past, efforts of the negotiating states to go for an all-comprehensive approach, which encompasses threadbare discussions and giving finality to all the issues on the agenda of negotiations, including concrete obligations and the dispute settlement mechanism, have proved to be exhaustive and time consuming exercise. They did not envisage use of calculated ambiguity and in-built law making mechanism. In view of the very nature of the environmental

In recent years states
have preferred to go for
such legal soft-law –
a multilateral
environmental
agreement which
cannot be enforced
on its own.

issues, states now, generally, prefer to go for exhortatory and/or discretionary language in such agreements. At the same time they prefer some scientific certainty before accepting concrete obligations. This is especially so as the legally binding obligations would entail some painful measures by states at the domestic level, which have the potential to unleash bitter political and economic implications.

In going for a skeletal form of multilateral environmental agreements, states seek to grapple with scientific uncertainty on the issue in question, avoid taking hard decisions in the short term, try to take as many states as possible on board, minimize hold-out problems, and yet have a legal regime which brings accolades for the signatory states (keeping an eye on the domestic public opinion). Often the psychological pressure is so much that hardly any of the negotiating states prefers to be seen on the wrong side of the regulatory effort as well as emerging consensus. As the rationale for this approach goes, the contracting states just lay down broad policy outlines through the device of the framework convention and leave nettlesome details to be worked out in the subsequent instruments (generally known as protocols) that may be negotiated at a later date.

The Convention, that entered into force on 1 July 1975, on International Trade in Endangered Species (CITES) (ILM 1973:1055) has been one of the earliest examples of this approach. In fact the CITES contained endangered species listed in three appendices (ibid. Articles III, IV and V.), which the parties could review from time to time. A species' name can be put in a particular annex depending upon its endangered status. This has provided a flexible in-built law making mechanism for the parties, though each amendment to the lists needs to be accepted by the states for its entry into force. The UN Economic Commission for Europe's (ECE) Long Range Transboundary Air Pollution Convention (LRTAP)² is another example of this approach. The LRTAP regime in fact comprises five separate protocols designed on different long-range transboundary pollutants. The five protocols to the 1979 LRTAP Convention are: (i) Protocol on Long-term Financing of a Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (ILM 1988: 701); (ii) Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes, Helsinki, 8 July 1987 (ILM 1987: 707); (iii) Protocol Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, Sofia, 31 October 1988 (ILM 1989:212); (iv) Protocol Concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, Geneva, 18 November 1991 (ILM 1992:573); (v) Protocol on Further Reduction of Sulphur Emissions, Oslo, 14 June 1994 (ILM 1994:1542). Thus in terms of the substances as well as precise timetables, the LRTAP has shown remarkable flexibility

In going for a skeletal form of multilateral environmental agreements, states seek to grapple with scientific uncertainty on the issue in question, avoid taking hard decisions in the short term, try to take as many states as possible on board, minimize hold-out problems, and yet have a legal regime which brings accolades for the signatory states.

² Convention on Long-range Transboundary Air Pollution, Geneva, 13 November 1979. Its participation is open to all member states of the United Nations Economic Commission for Europe. However, it also includes USA, Canada and the former Soviet Union. It entered into force on 16 March 1983; (ILM 1979:1442).

The legal character of these agreements range from legally binding multilateral environmental agreements to 'less formal' memoranda of understanding.

as well as possibility for in-built law making. The Convention on Migratory Species of Wild Animals (CMS) also follows this new genre of treaties containing flexibility and adjustment of the regime through a 'list of species' (in the appendix II; ILM 1980:15) as well as providing an umbrella for the development of 'agreements' on specific species. Article V of the CMS provides detailed guidelines for 'agreements' that covers individual species or, more often, for a group of species listed in Appendix II. The legal character of these agreements range from legally binding multilateral environmental agreements to 'less formal' memoranda of understanding. Their objective is to restore the migratory species to a favorable conservation status or to maintain it at that status. A series of such agreements worked out under the tutelage of CMS include: Agreement on the Conservation of Seals in the Wadden Sea (1990); Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (1991); Agreement on the Conservation of Bats in Europe (1991); Agreement on the Conservation of African Eurasian Migratory Waterbirds (1995); Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (1996); Memorandum of Understanding concerning Conservation Measures for the Siberian Crane (1993); Memorandum of Understanding concerning Conservation Measures for the Slender-billed Curlew (1994); Memorandum of Understanding concerning Conservation Measures for Marine Turtles of Atlantic Coast of Africa (1999); Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard (2000); Agreement on the Conservation of the Albatrosses and Petrels (2001); Memorandum of Understanding concerning Conservation Measures for Marine Turtles of the Indian Ocean and South-East Asia (2001); Memorandum of Understanding concerning Conservation and Restoration of the Bukhara Deer (2002); Memorandum of Understanding concerning Conservation Measures for the Aquatic Warbler (2003) (UNEP 2003).

Such framework conventions play an important role for setting in motion a normative process, through an exhortatory agreement, which is sought to evolve in due course. The process of enshrining precise legal obligations as well as time frame for carrying them out is conditioned by the political will (coupled with economic considerations) on the part of the states. Curiously, various international actors, including the civil society, play influential roles in goading states towards further regulatory measures. MEAs have generally followed the devices of protocols or agreements to strengthen the main framework conventions. Often the appendices to the convention also serve, as in the cases of CITES and CMS, the purpose of a protocol. Such protocols or agreements stand on their own feet as they are independent multilateral instruments that require a separate set of signatures and ratifications.

In spite of the flexibility and adaptability of this approach, doubts persist as regards its utility especially since it also takes long time for the framework convention as well as protocols to enter into force.

Several powerful states, whose economic interests are to be affected, have tried to reduce the lowest common denominator to the barest possible minimum. Even for the negotiation and acceptance of the protocols, they are often marred by foot-dragging and long delays. Such hold outs by powerful states can often effectively cripple the protocol as well as raise the abatement costs. For instance, the Kyoto Climate Protocol adopted by the third meeting of the Conference of Parties to the Framework Convention on Climate Change, at Kyoto (Japan) on 11 December 1997. It has provided commitments exclusively for the developed country parties to reduce their combined greenhouse gas emissions by at least 5.2% compared to 1990 levels, by the period 2008-12. This delicately arrived at compromise for reduction of Greenhouse Gas (GHG) emissions, within a time bound programme, has been held hostage by 'hold-out' problem due to refusal to ratify the Kyoto Protocol (and even de-signing of it) if by the United States that accounts for the highest (almost 25%) of total global GHG emissions. Armed with the US Senate vote (making it contingent upon participation of key developing countries), the US administration's withdrawal from the Kyoto bargain has put question mark on meeting the targets within the initial commitment period. It could even turn out to be a bargaining tactic to put maximum pressure either to delay in meeting the targets and/ or to permit subterfuges which will, in actual effect, significantly weaken developed country parties' commitments (UNFCCC 1998).

Institutional Structures

It is now common knowledge that almost all multilateral agreements in the environmental field give birth to some institutional forms. These institutional forms provide backbone to the agreement. The primary mandate of these so-called 'regime' specific institutional mechanisms is to give effect to the provisions of the concerned MEA. According to Young

all regimes are properly understood as social institutions. By contrast, *organizations* are physical entities possessing offices, personnel, equipment, budgets, and individual legal personalities. They play important roles in implementing and administering the provisions of many, though by no means all, international regimes (Young 1995: 245; emphasis in original).

For the purposes of the present work, however, the author has considered regimes in the legal sense of constituting several intergovernmental measures/instruments on a specific *sectoral* environmental issue. Thus, for instance, the legal regime on the depletion of the ozone layer is covered by the 1985 Vienna Convention, 1987 Montreal Protocol as well as series of subsequent 'amendments' and 'adjustments' concerning the controlled substances under the Protocol. Cumulatively, all these measures can be said to provide the legal regime on the issue of ozone depletion. Similarly, the author has

It is now common knowledge that almost all multilateral agreements in the environmental field give birth to some institutional forms. These institutional forms provide backbone to the agreement.

The MEA reflects a symbiotic relationship between a law-making process and an institution-building process.

considered institutional mechanism under the regime as providing 'regime-based institutions' having their *sui generis* character.

The MEA reflects a symbiotic relationship between a law-making process and an institution-building process. It is almost natural to put into place institutions that are considered so essential for international cooperation. They, in fact, provide backbone to the agreement. As a result, it seems almost inconceivable that any such treaty does not provide for institutional mechanisms as they have become functional necessities.

The negotiating states invariably seek to incorporate structures that could suit requirements of a specific sectoral issue. The potential menu for such purpose would include institutions ranging from decision-making mechanism (called Conference of Parties or Meeting of the Parties), to executive organs (such as bureau, standing committee or executive committee) to other subsidiary bodies that perform advisory functions for scientific or technical or implementation purposes (subsidiary body on science & technological advice, review panel, subsidiary body on implementation, scientific council, review committee or other special purpose bodies) to funding mechanisms (called fund, trust fund, mechanism, facility etc.). There has been, generally, a practice to 'learn' from institutional experiences from other treaties and to emulate them or even improve upon them. It is interesting to note that there are so many variations among the 'trust funds' that are specific to MEAs and where 'specialized agencies' are involved.

As most MEAs are sectoral in nature, their objectives and priorities do vary from one another, even if they fall within the ambit of a thematic area or cluster (like biodiversity related or chemicals and wastes). Still, there are some common patterns in terms of institutional structures as many focus upon 'sustainable development' (the 'Rio Conventions' like CBD, UNCCD and UNFCCC) or seek to address the issue of sustainable use of natural resources and the environment. As such the variations in institutional structures among MEAs could be dictated by specific requirements of the sectoral environmental issue.

The Conference of the Parties (COP) is the supreme decision-making organ of the convention. It provides an overarching umbrella for the institutions of the convention. As a plenary forum for the states parties to the convention, it has the final authority in legal and institutional matters. COP does not remain in session and, in a way, remains invisible. It generally meets every year or even at the interval of two or three years. There are some other subsidiary bodies which cater to the specific requirement of the each convention. They include technical bodies such as Subsidiary Body on Implementation (SBI), Subsidiary Body on Science and Technology Advice (SBSTA), Committee on Science & Technology, Scientific Council, Heritage Fund, Multilateral Fund, Financial Mechanism etc.

The frequency of COP meetings may depend upon the need for normative improvement, stocktaking and decisions to provide guidance for realizing objectives of the agreement. COP represents a political decision making process. It not only can interpret the authority of the convention but also give effect to the in-built law-making process. The entire institutional mechanism of the convention works under the supervision of the COP. Even the subsidiary bodies of the convention, which have the same membership as COP, also report to and work under the authority of COP. The deliberations at the subsidiary body meetings and 'decisions' taken therein, remain as 'draft' until endorsed by the COP at its regular session. Thus the COP, representing the political process, seeks to keep the convention in tune with the changing requirements in order to realize the objectives of the convention.

The nature of the particular sectoral environmental issue being dealt with by the COP also involves different approaches. In some cases, the primary task of the COP may be just to lay down the threshold for certain activities beyond which states would incur responsibility [e.g. UNFCCC] or protection of certain species and natural resources [e.g. CITES]. The strategy followed by the COP in such cases centers around constantly evaluating the performance and adjusting the particular regime as per scientific requirements. In some other cases, the COP may focus on the prohibition of certain activities by the states [e.g. Basel Convention] or phase-out of certain substances [e.g. Ozone Protocol]. In cases requiring prohibition, the COP does not try to find any 'safe' levels for the regulatory process. Thus the COPs employ different tools and techniques to translate goals of the convention into action. The process can be said to be 'living' in the sense that, as per the political consensus, the COP utilizes ideas and innovations through legal concepts and formulations, which may be convenient to the states and in some cases even 'calculated ambiguity' may be the best preferred option for the COP. For instance, the compulsion of the scientific uncertainty could force the states to go for precautionary measures and need for 'burden sharing' as dictated by 'equity' considerations could force the states to adopt criteria of 'differentiation' (based on historical contributions to specific environmental problems such as climate change) as a primary basis to give effect to obligations. Sometimes, consensus may comprise accommodation of 'subterfuges' in matters ranging from apportionment of funding contributions to affixing responsibility.

Among the institutional structures, the secretariat remains the most visible institution, whose primary function is to provide services to the convention (ILM 1972:963; ILM 1972a:1385; ILM 1973:1055; ILM 1979:1442; ILM 1980a:15-19; ILM 1987:1529; ILM 1991a:775; ILM 1992a:849; 818; ILM 1994a:1332). The location of secretariat in a host country triggers a chain of legal implications. It is a two stage exercise. As soon as the respective convention comes into force, the first step is to establish an 'interim secretariat' to organize the convening of the first meeting of the COP. It is this first meeting of the COP that takes decision on the establishment of permanent secretariat of the convention, location of the secretariat within an existing institution as

Among the institutional structures, the secretariat remains the most visible institution, whose primary function is to provide services to the convention.

It is now an established practice to have an institutional structure as a servicing arm for the Convention.

well as various ground rules for the functioning of the servicing arm. In most of the cases, an existing international institution is requested to 'house' and provide the secretariat to the convention. It also necessitates a crucial decision as regards location of the 'seat' of the convention in a 'host' country.

It is now an established practice to have an institutional structure as a servicing arm for the Convention. There is a familiar pattern among all the secretariats of the MEAs, with variations to cater to the specific requirements of the convention. The use of nomenclature of 'secretariat' is the common practice for such a servicing arm. However, in some cases, it has been designated as the Bureau (Ramsar Convention 2006), the World Heritage (Secretariat) Centre (World Heritage Convention 2006) and the Executive Body (Long Range Transboundary Air Pollution Convention, LRTAP 2006)

It is a common practice to have the secretariat of the protocols/ agreements, which flow from the main convention, along with the secretariat of the convention itself. Interestingly, it is not necessary to locate the secretariat at the 'headquarters' of the international institution that agrees to provide secretariat services. MEA secretariats are located as per offers made by the states and accepted by the *Conference of the Parties* (COP) and their location could be away from the main seat of the international institution that has agreed to 'house' the secretariat.

The secretariat of the convention performs a vital role in the process of 'servicing' the COP and other subsidiary bodies of the convention. This comprises the task of providing vital administrative, technical and scientific support to the COP as well as subsidiary bodies. The secretariat can also be expected to provide advice in the implementation of the convention when the contracting parties so request. The executive secretary of the convention, as chief executive officer, takes the lead in not only translating the political will of the parties, as reflected in the decisions of the COP, but also in ensuring efficient performance of the institutional mechanism. The work of various institutional mechanisms under MEAs reveals that they evolve along with evolution and development of the regime itself. In a way they provide fine testimony to the working, in actual practice, of the institutionalized international environmental cooperation. In actual practice it works slowly and steadily. It is literally 'creeping' process of institutionalization to cater to the requirements of the sovereign states that are parties to a specific regime.

Conclusion

The technique of multilateral environmental regulation has now come of age. In view of its central thrust to address some of the common concerns of humankind, the methodology has drawn participation of unprecedented number of sovereign states. It has sought to cover a broad range of issues including migratory species of wild

animals, conservation of biological diversity, combating desertification, ensuring stabilization of greenhouse gas emissions in the atmosphere, ensuring safe and environmentally sound movements of hazardous wastes and chemicals and 'prohibition' of so-called 'dirty dozens' that contribute in spreading of persistent organic pollutants across countries and continents. Thus utilization of a legal tool to attain these specific environmental objectives does have long term implications to further human welfare and security on this endangered planet. It goes without saying that genesis of the law making approach and associated 'creeping' institutionalization revolve around anthropogenic and utilitarian considerations. At the same time it does underscore strong linkage between environmental protection and larger dimension of human security.

MEAs have now emerged as predominant technique to grapple with a large number of environmental challenges that are perceived as threats to the humankind. The proliferation of MEAs as well as participation of unprecedented number of sovereign states decisively point towards utility of the legal technique as well as growing concerns for threats emanating from many of these global issues. It seems the thickening web of treaty-making has sought to put into place 'living' mechanisms that are guided by crystallization of scientific understanding, convergence of vital interests of key actors in the field as well as other considerations. MEAs are sui generis in comparison with treaty making in other spheres of international life. They have brought into existence regimes that are legal entities and duly guided by motto of 'sharing of sovereignties in common'. They are almost akin to international organizations in their full splendor. It seems they have emerged as functional necessities to cater to specific global environmental problematique.

The proliferation of MEAs has posed practical problems of their coordination. As a part of the larger debate on international environmental governance, various issues including synergy and interlinkages concerning MEAs were examined. These issues and future direction of efficacy and effectiveness of multilateral environmental regulatory technique will need to be addressed by the sovereign states. As a predominant legal technique for protection of global environment, MEAs are set to play vital role securing human welfare and security in the twenty first century.

MEAs are set to play vital role in securing human welfare and security in the twenty first century.

Abbreviations

CBD Convention on Biological Diversity

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CMS Convention on Migratory Species

COP Conference of Parties

ECE Economic Commission for Europe FAO Food and Agriculture Organization

GA General Assembly

GAOR General Assembly Official Records

GC Governing Council
GHG Greenhouse Gas

ICJ International Court of Justice
ILC International Law Commission

ILM International Legal M

ILO International Labour OrganisationIMO International Maritime Organisation

INC Intergovernmental Negotiating CommitteesLRTAP Long –Range Transboundary Air PollutionMEAs Multilateral Environmental Agreements

MOP Meetings of the Parties

PIC Informed Consent Procedure
POPs Persistent Organic Pollutants
PrepCom Preparatory Committee Sessions
SBI Subsidiary Body on Implementation

SBSTA Subsidiary Body on Science and Technology Advice

UN United Nations

UNCCD Secretariat of the UN Convention to Combat Desertification
UNCED United Nations Conference on Environment and Development

UNCHE United Nations Conference on the Human Environment

UNCLOS United Nations Convention on Law of the Sea.
UNEP United Nations Environmental Programme

UNEP-WCMC United Nations Environmental Programme - World Conservation Monitoring Centre

UNFCCC UN Framework Convention on Climate Change

UNGA UN General Assembly
UNU United Nations University

WCED World Commission on Environment and Development

WCMC World Conservation Monitoring Centre

WHC World Heritage Convention

WMO World Meteorological Organization

References

- Alvarez, Jose E. (2002): The New Treaty Makers. In: *Boston College International and Comparative Law Review.* Vol.XXV; no.2; pp.213-234.
- Benedick, R.E. (1993): Perspectives of a Negotiation Practitioner. In: Sjöstedt, G. (Ed.): *International Environmental Negotiation*. Sage Publications, Newbury Park, p.229.
- Boyle, A. (2000): Some Reflections on the Relationship of Treaties and Soft Law. In: Gowlland-Debbas, V. (Ed.): *Multilateral Treaty-Making: The Current Status of Challenges to and Reforms Needed in the International Legislative Process.* Martinus Nijhoff; The Haque; pp.25-38.
- Brown Weiss, E. (1992): *Global Environmental Change and International Edith Law: The Introductory Framework.* Tokyo: United Nations University Press.
- Brown Weiss, E. (1998): The Five International Treaties: A Living History. In: Weiss, E.B; Jacobson, H.K. (Eds.): *Engaging Countries: Strengthening Compliance with International Environmental Accords.* MIT Press; Cambridge, pp.89.
- Brownlie, Ian (1974): A Survey of International Customary Rules of Environmental Protection. In: Teclaff, Ludwik A.; Utton; Albert E. (Eds.): *International Environmental Law.* New York; Praeger; pp.1-11.
- Brownlie, Ian (1998): *Principles of Public International Law.* Oxford. Clarendon Press. 5th edition. Chapter XIII.
- CBD (2001): *Text of the Convention.* http://www.biodiv.org/convention/convention.shtml; October 2006.
- CBD (2003): <www.cbd.int>; 17 June 2003.
- Desai, B.H. (2000): Revitalizing International Environmental Institutions: The UN Task Force Report and Beyond. In: *Indian Journal of International Law.* Vol.40; no.3; pp.455-504.
- Desai, B.H. (2002): Mapping the Future of International Environmental Governance. In: *Yearbook of International Environmental Law.* Vol.13, pp.43-61.
- Desai, B.H. (2006): *UNEP: A Global Environmental Authority? In: Environmental Policy and Law;* vol.36, nos.3-4, pp.137-157.
- Environmental Policy and Law (2000): Vol.30; no.6; p.268.
- Falk, R.A. (1972): *This Endangered Planet: Prospects and Proposals for Human Survival.* Vintage Books, New York.
- French, H. (2000): Strengthening Global Environmental Governance. In: *Vanishing Borders: Protecting the Planet in the Age of Globalization.* W.W.Norton & Company, New York, pp.144-162.
- Haas, P.M; Haas, E.B. (1995): Learning to Learn: Some Thoughts on Improving International Governance of the Global Problematique. Kluwer International; London; pp.295-331.
- Haas, Peter M. (1995): Global Environmental Governance. In: *Commission on Global Governance, Issues in Global Governance.* Kluwer International; London; pp.333-369.
- Harvard Law Review (1991): Developments in the Law: International Environmental Law. In: *Harvard Law Review*. Vol.104; no.3; p.1521.
- Harvard Law Review (1991): Developments in the Law: International Environmental Law. In: *Harvard Law Review*. Vol.104; No.3; p.1521.
- ICJ (1949): International Court of Justice. Corfu Channel Case. http://www.icj-cij.org/

- ICJ (1992): *ICJ Reports.* Case Concerning Phosphate Lands In Nauro. Nauro v. Australia. http://www.icj-cij.org
- ICJ (1994): Jurisdiction and Admissibility. Paragraph 30 and 41 of the Judgment of 1 July 1994. In: ICJ Reports http://www.icj-cij.org/ 4 June 2006.
- ICJ (1996): *ICJ Reports.* Advisory Opinion on Legality of the Threat or Use of Nueclear Weapons. http://www.icj-cij.org; June 2006.
- ICJ (2006): *Statue of the Court.* http://www.icj-cij.org/icjwww/ibasicdocuments/ibasictext/ ibasicstatute.htm#CHAPTER_III>; Article 38.15 June 2006.
- ILM (1972): Convention on Wetlands of International Importance (1971). In: *ILM.* Vol. 11; Article 14, pp. 963.
- ILM (1972a): Convention for the Protection of the World Cultural and Natural Heritage (1972), In: *ILM.* Vol. 12 pp. 1385.
- ILM (1974): International Legal Materials. Vol. 14; p.251.
- ILM (1978): Convention on Long-range Transboundary Air Pollution. In: *International Legal Materials*. Vol. 18.
- ILM (1978): UNEP Principles on Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States. In: *International Legal Materials*. Vol.17; pp.1097-99.
- ILM (1979): Convention on Long Range Transboundary Air Pollution (1979). In: *International Legal Materials*. Vol.18, Art. 11; pp. 1442.
- ILM (1980): Endangered Migratory Species. Appendix I. Migratory Species to be Subject to Agreements. Appendix II; Art. III; Art. IV of the Convention on the Conservation of Migratory Species of Wild Animals. Bonn, 23 June 1979; In: *International Legal Materials*. Vol.19; p.15.
- ILM (1980a): Convention on the Conservation of Migratory Species of Wild Animals (1979). In: *International Legal Materials.* Vol. 19; pp.15.
- ILM (1987): Convention for the Protection of the Ozone Layer (Vienna, 1985); Art. 7; Protocol on Substances that Deplete the Ozone Layer (Montreal 1987); In: *International Legal Materials*. Vol.26, p.1529; p. 1550.
- ILM (1988): International Legal Materials. Vol.27, p. 701.
- ILM (1989): International Legal Materials. Vol.28; p.657; p. 212.
- ILM (1991): Amendments and Adjustments to the Montreal Protocol. In: *International Legal Materials*. Vol.30; p.539; p.541;
- ILM (1991a): Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989). In: *ILM.* Vol. 30; Article 16; pp. 775.
- ILM (1992): UN Framework Convention on Climate Change (1992). In: *International Legal Materials*. Vol. 31; Art. 8; p. 849; p. 573.
- ILM (1992a): Convention on Biological Diversity (1992). In: *International Legal Materials*. Vol. 31; Art. 24; pp. 818.
- ILM (1993): Amendments and Adjustments to the Montreal Protocol. In: *International Legal Materials*. Vol.32; p.874.
- ILM (1993): Convention on International Trade in Endangered Species of Wild Flora and Fauna. In: *ILM*. Vol.12, Washington D.C., 3 March 1973.

- ILM (1994): International Legal Materials. Vo. 33, p.1542.
- ILM (1994a): Convention to Combat Desertification in Those Countries Experiencing Drought and/or Desertification, particularly in Africa (1994). In: *International Legal Materials.* Vol. 33; Art. 23; pp. 1332.
- Indian Journal of International Law (1998): Gabcikovo/ Nagymaros Project Case. Hungary v. Slovakia. Judgment of 25 September 1997. In: *Indian Journal of International Law.* Vol. 38, no. 1; pp.74-152.
- Johnson, S.P. (1993): *The Earth Summit: the United Nations Conference on Environment and Development* (UNCED). Graham and Trotman, London.
- Kiss, A.; Shelton, D. (1994): *International Environmental Law: 1994 Supplement.* Transnational, New York; p.1.
- Kiss, A.; Shelton, D. (2000): *International Environmental Law.* 2nd edn, New York: Transnational Publishers, New York.
- Koh; Tommy T. B. (1983): Remarks by the President of the Third U.N. Conference on the Law of the Sea, Montego Bay (Jamaica), 10 December 1982. In: United Nations, U.N. *Convention on the Law of the Sea. New York:* UN, 1983, p.xxxiii.
- Lee, R. (1998): Multilateral Treaty-Making and Negotiation Technique: An Appraisal. In: Chang, B.; Brown, E. (Eds.): Contemporary Problems of International Law: Essays in Honour of Georg Schwartzenberger on His Eightieth Birthday.
- LRTAP (2006): *Convention on Long Range Transboundary Air Pollution.* Article 11; n.62; http://www.unece.org/env/lrtap/; November 2006.
- McNair, A.D. (1930): The Functions and Differing Legal Character of Treaties. In: *British Yearbook of International Law* (BYIL). Vol.11, p.100.
- Meadows, D.H; Meadows, D.L.; Randers, J; Behrens, W.W. (1972): The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind. Potomac, New York.
- Millennium Ecosystem Assessment (2005): *Ecosystems and Human Well-being-Synthesis: A Report of the Millennium Ecosystem Assessment.* Island Press, Washington DC. <www.millenniumassessment. org>; 3 June 2006.
- Nazli, C. (1972): Population, Resources and Technology: Political Implications of the Environmental Crisis. In: Kay D.A.; Skolnikoff E.U. (Eds.): *World Eco-Crisis: International Organizations in Response*. Uni. of Wisconsin Press, Madision, Wisco., p.9.
- Ramsar Convention (2006): *The Ramsar Convention on Wetlands.* Article 8; n.62. http://www.ramsar.org/; November 2006.
- Rekacewicz, P. (2006): *Planet in Peril: An Atlas of Current Threats to People and the Environment.* UNEP/GRID Arendal, Le Monde Diplomatique, Paris. p.6.
- Sand, P.H. (1990): Lessons Learned in Global Environmental Governance. World Resources Institute; Washington D.C., pp.1-60.
- Sand, P.H. (1991): To Treaty or Not to Treaty? A Survey of Practical Experience. In: Sand, P.H.: *Transnational Environemental Law: Lessons in Global Change.* The Hague. Kluwer Law International.
- Schachter, Oscar (1977): Twilight Existence of Non-Binding International Agreements. In: *American Journal of International Law.* Vol.71; pp.296-304.
- Schechter, Michael G. (1999): International Institutions. Obstacles, Agents, or Conduits of Global Structural Change? In: *Innovation in Multilateralism*. Tokyo. UNU.

Strong, M (1990): *Introductory Statement of the UNCED Secretary-General.* Opening of the First Session of the PrepCOM on 6 August 1990; In: UN oc.A/Conf.151/PC/5/Add.1.

UN (1945): UN Charter. <www.un.org>; June 2006.

UN (1981): UN Yearbook. UN

UN (1982): *United Nations Convention on Law of the Sea.* http://www.un.org/Depts/los/convention_agreements/ texts/unclos/UNCLOS-TOC.htm>; October 2006.

UN (1982a): UN Yearbook. UN.

UN (1988): Protection of Global Climate for Present and Future Generations of Mankind. *GA Resolution* 43/53. UN.

UN (1993): UN Yearbook. Vol.47, 1993, pp. 820-21.

UN (1998): The United Nations Convention on the Law of the Sea. A Historical Perspective. http://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm; November 2006.

UN (2006): International Law Commission. <www.un.org/law/ilc>; 15 June 2006.

UNCHE (1972): UNCHE Report. In: International Legal Materials (ILM); vol.11, p.1416. and Corr.1 (1972).

UNEP (1981): Report of the Ad Hoc Meeting of Senior Government Officials Experts in Environmental Law. UNEP/GC 10/5/Add.2; Annex, Ch.11,1981.

UNEP (1989): The UNEP Governing Council Resolution 15/3. 25 May 1989. In: *GAOR*, 44th Session; Supp. No.25 (A/44/25), annex.

UNEP (1993): *Programme for the Development and Periodic Review of Environmental Law for the 1990s.* UNEP; Nairobi, pp.1-17.

UNEP (1993a): 17th Governing Council Session. Decision 17/25. 21 May 1993. http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=54>

UNEP (1993b): *Montevideo Programme II.* http://www.unep.org/dpdl/law/PDF/Montevideo_II.pdf; November 2006.

UNEP (1998): Annual Report 1998. UNEP; pp.7; 21.

UNEP (1998a): Rotterdam PIC Convention. UNEP/FAO/PIC/CONF.5; 17 September 1998.

UNEP (1998b): UNEP GC Decision SS.V/5. 22 May 1998.

UNEP (1999): UNEP GC Decision 20/22. 4 February 1999.

UNEP (2000): UNEP/Env.Law/4/4. 21 October 2000.

UNEP (2001): International Environmental Governance: Multilateral Environmental Agreements. UNEP/IGM/1/INF/1. 30 March 2001, pp.3-4; UNEP.

UNEP (2001a): First Meeting of the Open-ended Intergovernmental Group of Ministers or their Representatives on International Environmental Governance, New York, Doc. UNEP/IGM/1/INF/3; <www.unep.org/IEG>; 18 April 2001.

UNEP (2001a): International Environmental Governance: Multilateral Environmental Agreements. First Meeting of the Open-ended Intergovernmental Group of Ministers or their Representatives on International Environmental Governance. New York; 18 April 2001; Doc. UNEP/IGM/1/INF/3; 6 April 2001.

UNEP (2003): WCMC < www.wcmc.org/uk/cms>; 8 July 2003.

- UNFCCC (1988): The Kyoto Protocol to the Convention on Climate Change. Art. 4.1; UNFCCC. Bonn.
- UNFCCC (2006): Kyoto Protocol. http://unfccc.int/essential_background/kyoto_protocol/items/2830.php; 4 July 2006.
- UNGA (1973): Cooperation In the Field of the Environment Concerning Natural Resources Shared by Two or More States. UN General Assembly Resolution 3129 (XXVIII).
- UNGA (1974): Charter of Economic Rights and Duties of States. UN General Assembly Resolution 3281 (XXIX).
- UNU (1999): Inter-Linkages: Synergies and Coordination between Multilateral Environmental Agreements. UNU, Tokyo.
- Vienna Convention on the Law of Treaties (1969): *Vienna Convention on the Law of Treaties.* Article 2(a). <www.unoq.ch/archives/vienna/vien_69.htm; www.unoq.ch/archives/vienna/vien_86.htm>
- Vienna Convention on the Law of Treaties (1969a) *Vienna Convention on the Law of Treaties.* Article 2(a) http://untreaty.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf; 19 May 2006.
- WCED (1987): Our Common Future. OUP, Oxford.
- Weiss, E.B. (1998): The Five International Treaties: A Living History. In: Weiss, E.B; Jacobson, H.K. (Eds.): *Engaging Countries: Strengthening Compliance with International Environmental Accords.* MIT Press, Cambridge, pp.89.
- World Heritage Convention (2006): *The World Heritage Convention.* Art. 14; n.62. http://whc.unesco.org/; November 2006.
- Young, O.R. (1995): Perspectives on International Organizations. In: Sjostedt, Gunnar, G. (Ed.): *International Environmental Negotiation*. Sage Publications; Newbury Park.

Notes	

Notes	

InterSecTions

ISSN: 1814-6430

No. 1/2005 *Nothing begets Nothing.* The Creeping Disaster

of Land Degradation, by Paul L. G. Vlek,

January 2005.

ISBN: 3-9810200-0-6 (printed version ISBN: 3-9810200-1-4 (electronic version)

No. 2/2005 Environment and Human Security. Towards

Freedom from Hazard Impacts,

by Hans Günter Brauch,

April 2005.

ISBN: 3-9810200-2-2 (printed version) ISBN: 3-9810200-3-0 (electronic version)

No. 3/2005 Global Governance and UN Reform. Challenges

and Opportunities fpr Environment and Human

Security, by Andreas Rechkemmer,

September 2005.

ISBN: 3-9810200-6-5 (printed version) ISBN: 3-9810200-7-3 (electronic version)

No. 4/2006 *Creeping Institutionalization. Multilateral*

Environmental Agreements & Human Security,

by Bharat H. Desai December 2006

ISBN: 3-9810582-8-3 (printed version) ISBN: 3-9810582-9-1 (electronic version)

"InterSecTions" are distributed free of charge.
Please address orders and inquires by fax and email only.

UNU-EHS Publications UN Campus Hermann-Ehlers-Str. 10 53113 Bonn Germany

Tel.:++49 (0)228 815-0202 Fax:++49 (0)228 815-0299

E-Mail: roberts@ehs.unu.edu info@ehs.unu.edu

United Nations University Institute for Environment and Human Security (UNU-EHS)

UNU-EHS reflects the overall mission of UNU: 'Advancing Knowledge for Human Security and Development'.

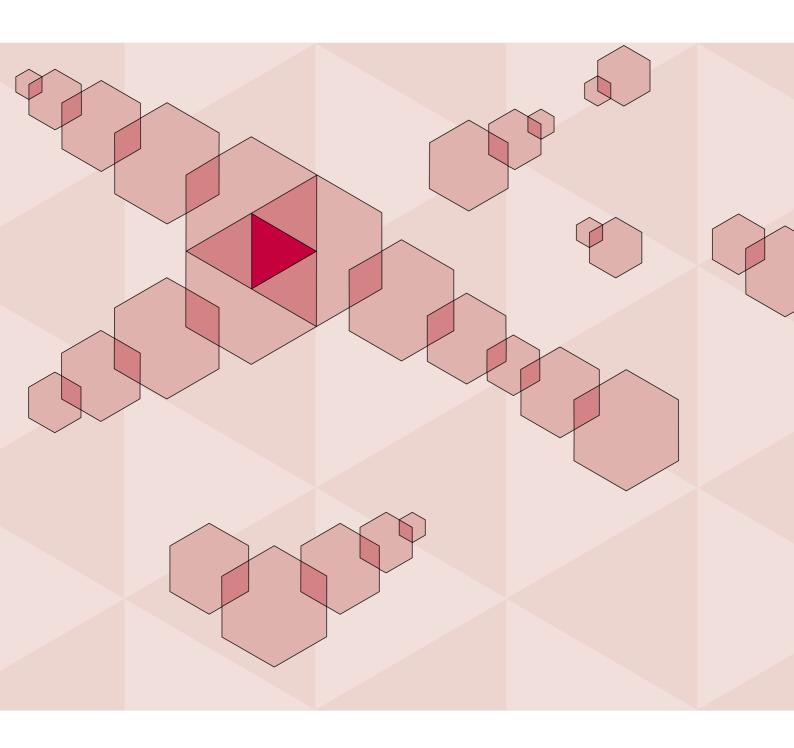
UNU-EHS explores threats to human security from environmental degradation, unsustainable land use practices, and from natural and man-made hazards. The Institute spearheads UNU's research and capacity building activities in the broad interdisciplinary field of 'risk and vulnerability'.

Within this framework UNU-EHS aims to:

- Foster better understanding of forces and processes of environmental degradations and their influence on hazard magnitude and frequency and subsequent disasters;
- Explore links between different hazard events as well as creeping processes such as climate change, soil erosion and their impact on the inherent risk and vulnerability;
- Contribute to development, testing and verification of vulnerability indicators, and investigate relationships between risks, vulnerability and coping capacity.

Its activities focus on:

- Generating knowledge;
- Building capacity, with focus on young professionals and institutions in developing countries;
- Disseminating knowledge to decision makers.



UNITED NATIONS UNIVERSITY

Institute for Environment and Human Security (UNU-EHS) UN Campus

Hermann-Ehlers-Str. 10

D - 53113 Bonn, Germany

Tel: ++ 49 (0) 228 815-0202

Fax: ++ 49 (0) 228 815-0299 E-Mail: info@ehs.unu.edu

Website: www.ehs.unu.edu