Global Environmental Governance

A Reform Agenda

Adil Najam • Mihaela Papa • Nadaa Taiyab

iisd International Institute for Sustainable Development / Institut international du développement durable

Ministry of Foreign Affairs of Denmark

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Global Environmental Governance: A Reform Agenda

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Preface

by Carsten Staur

Is the system of global environmental governance a success or a failure? What are the salient features of the system and what are the challenges it faces? And given the history of the debate and attempts to restructure and improve global environmental governance, what would be the elements of reform that are both practical and realistic?

These are some of the key questions addressed in this study, which was prepared under the auspices of the International Institute for Sustainable Development (IISD) and led by Professor Adil Najam from the Fletcher School of Law and Diplomacy, drawing on the advice from an international group of experts.

The study shows that an impressive institutional machinery has actually been built, but also that the overall state of the global environment seems not to have improved as a consequence of this. Numerous multilateral environmental agreements have been concluded; many meetings are held each year to advance implementation; and significant amounts of human resources are spent to produce national reports on the efforts undertaken. Yet, as the Millennium Ecosystem Assessment and the work of the Intergovernmental Panel on Climate Change have shown us, ecosystem decline and global warming continue, representing real dangers to our planet.

The study attempts to show us a way out of this paradoxical situation. Rather than getting bogged down by the findings of fragmentation and incoherence, insufficient cooperation and coordination, inefficiency and lack of implementation, the study sees these features as an expression of a system that has outgrown itself in the wake of its own success. And, rather than proposing grand organizational reforms, the study proposes to work with the existing pieces.

It is refreshing to see an attempt to link the smallest, most specific item of short-term change with an overall longer-term vision. As the study points out, there seems to be broad international support of the five goals, which constitute the basis of a vision for the global environmental governance system. These are leadership, knowledge, coherence, performance and mainstreaming.

Within such a longer-term guiding framework, the study proposes specific steps of reform which are meant to mutually support each other and pave the way for more far-reaching reform.

Without attempting to comment on each of the goals within the longer-term vision, the need to integrate global environmental objectives in national sustainable development and poverty reduction strategies should be highlighted. Without such integration in broader policy frameworks, including the identification of concrete win-win situations and informed decisions on how to manage trade-offs between differing objectives, it is difficult to imagine how to overcome the paradox of institutional success and environmental degradation.

The study is published at an important juncture. Reforms of the institutional framework for environmental governance at the global level are subject to renewed deliberations at the UN General Assembly, when reforms leading to system-wide coherence across the UN family involved in humanitarian, development and environment operations at the country-level are being proposed by a distinguished panel of heads of state and government, ministers and other eminent persons.

I want to thank the President and CEO of IISD, David Runnalls, the staff at IISD, Professor Adil Najam and his colleagues Mihaela Papa and Nadaa Taiyab, as well as the members of the international expert advisory group for all the efforts made in preparing this important study. I sincerely hope that the study will get the attention it deserves and that it will prove useful in the ongoing reform processes.

Carsten Staur
State Secretary, Ambassador
Ministry of Foreign Affairs
Denmark

Preface

by David Runnalls

The first global conference on the environment, held in Stockholm in 1972, set in motion three decades of discussion, negotiation and ratification of a whole series of international environmental agreements. My late colleague, Konrad von Moltke, had a list of more than 500 different agreements and even he was not sure that he had identified all of them.

The Stockholm Conference spawned the United Nations Environment Programme. The Earth Summit, held in Rio 20 years later, brought with it the Conventions on Biological Diversity, Climate Change and Desertification and created another UN political institution, the Commission on Sustainable Development. And the desire to host a prestigious international institution led to the decisions to locate the small and underfunded secretariats of many of these agreements in many geographically diverse homes—from Montreal to Bonn to Rome and some places in between. In a sense, we have been embarrassed by our own success. Major institutions, such as the World Bank as well as the World Trade Organization, claim sustainable development as their overarching goal. A similar growth of interest is also seen within non-UN international and regional institutions in terms of environmental and sustainable development concerns.

The international environmental institutions have each evolved differently, but they all have something in common. They are unusually open, both to civil society actors and to the business community. My own Institute is proud to have contributed to this openness and transparency through our publication of the *Earth Negotiations Bulletin*, which is present at virtually every meeting of the Conferences of the Parties.

The immense growth of the system of global environmental governance signifies the world's growing appreciation of the scope and scale of the problems. However, this growth has also made the system unwieldy and increasingly incoherent. There is now a general agreement that this system is more cumbersome and less effective than it must be if we are to confront the serious environmental challenges laid out in such international reports as those of the IPCC and the Millennium Ecosystem Assessment. Although many of these institutions remain small and fragile, their tasks are vital and they can often bring substantial financial resources to bear.

There have been lots and lots of proposed schemes and solutions to the global environmental governance "problem." These range from the reform of UNEP to the creation of a World or Global Environmental Organization. They involve "clustering" some of the secretariats by specialty, or even merging some or all of them.

The Danish Government approached IISD and asked us if we could help make some sense out of this debate, to summarize the options and to make some recommendations for progress. The timing has been propitious, as there is a major UN reform process well underway, which includes global environmental governance as one of its prime goals.

The work has been directed by IISD Associate, Adil Najam, a Professor at the Fletcher School of Law and Diplomacy at Tufts University, and by two of his Fletcher colleagues, Mihaela Papa and Nadaa Taiyab. It was reviewed by an international Advisory Group which I had the privilege to chair. The group included eminent experts from diverse backgrounds, all serving in their individual capacities. The Advisory Group met twice, once in Boston, courtesy of the Fletcher School, and once in the Conference Room of the Danish Foreign Ministry in Copenhagen.

We have made some recommendations which we think can be taken up within the practical politics of the moment and which we think would make the system work much better. We have drawn inspiration from Konrad von Moltke who never gave up on this system despite its frequent failures, and who constantly reminded us of just how complex the art of environmental governance can be. As Konrad put it in an IISD paper, it is "The Organization of the Impossible."

I want to thank the Danish Government for supporting this project and continuing to fund its publication and follow-up. And I would like to congratulate Dr. Najam and his colleagues on a job well and promptly done.

David Runnalls
President and CEO
International Institute for Sustainable Development (IISD)

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"We understand global environmental governance (GEG) as the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection."

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"Even though the GEG system has achieved much in the way of new treaties, more money and a more participatory and active system than anyone might have imagined three decades ago, environmental degradation continues."

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Introduction

We understand global environmental governance (GEG) as the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection. Since environmental issues entered the international agenda in the early 1970s, global environmental politics and policies have been developing rapidly. The environmental governance system we have today reflects both the successes and failures of this development. There is great awareness of environmental threats and numerous efforts have emerged to address them globally. At the same time—and partly because of the rather spectacular growth in awareness and initiatives—the GEG system has outgrown its original design and intent. The system's high maintenance needs, its internal redundancies and its inherent inefficiencies have combined to have the perverse effect of distracting from the most important GEG goal of all—improved environmental performance.

Even though the GEG system has achieved much in the way of new treaties, more money and a more participatory and active system than anyone might have imagined three decades ago, environmental degradation continues. Indeed, because we know so much more about environmental conditions and environmental processes, we also know more about what is not going well with the global environment. This state of affairs is well documented in the *Millennium Ecosystem Assessment* (2006). For example, despite the feverish discussions about global climate change, carbon emissions continue to rise; global atmospheric CO_2 levels that were around 300 parts per million (ppm) in the early 1900s have now reached approximately 380 ppm. The *Millennium Ecosystem Assessment* also found that approximately 60 per cent of the ecosystems that it examined were either being degraded or used unsustainably. Since 1980, 35 per cent of the world's mangroves have been lost and 20 per cent of the world's precious coral reefs have been destroyed. A decade after the signing of the Biodiversity Convention, the species extinction rate is still 1,000 times higher than what would be occurring naturally, without human impact. Despite the dozens of global and regional fisheries treaties, an estimated 90 per cent of the total weight of large predators in the oceans—such as tuna, sharks and swordfish—have disappeared over the last few decades. Estimates suggest that we may still be losing as much as 150,000 square kilometres of forest each year.[1]

Given increasing evidence of environmental degradation, the system needs reform urgently. However, it should be noted that the system

needs reform not because it has "failed," but because it has outgrown its own original design. Much like children who outgrow their clothes as they mature, or small towns that need new infrastructure as they blossom into large cities, the GEG system needs to be rethought so that it can meet the challenges of its own growth, respond to future issues and move from its current emphasis on awareness-raising and treaty creation to actual environmental action and implementation.

This book seeks to identify a number of practical steps that can foster a more efficient and effective environmental regime, making better use of the resources available and designed in a way that will be more helpful to the implementation of international environmental agreements for developing as well as developed countries. The project objectives are:

(a) to analyze past and current efforts at GEG reform;

(b) to outline a practical overall direction for rationalized GEG in a bottom-up reform of the international environmental governance system; and

(c) to propose a set of realistic and desirable steps to achieve meaningful reform.

We begin from the obvious but important premise that the objective of GEG reform is not simply institutional harmony and efficiency; it is to bring about tangible environmental improvement and positive movement towards the ultimate goal of sustainable development. In identifying our recommendations, we have consciously sought ideas that might lead us to: (a) a balance between short-term incremental improvements and deeper-rooted, longer-term institutional change; (b) improved implementation of existing environmental instruments and improved effectiveness of existing institutions, including better coordination among them; (c) better incorporation of non-state actors; (d) meaningful mainstreaming of the environmental and sustainable development agenda into other policy streams; and (e) greater prominence and confidence in global environmental institutions and initiatives among international leaders and within public opinion.

To make this a manageable exercise, we will focus on *environmental* governance. However, we understand and very much identify with the needs to contextualize environmental governance within the framework of sustainable development. We believe that global environmental governance is a key component of sustainable development governance, but the latter is larger than the former. Our focus is on the former within the context of the latter. Similarly, we are convinced that

the efficacy of *global* environmental governance will ultimately depend on implementation at global and domestic levels. National implementation is the ultimate key, both to the efficacy of the GEG system and to meaningful environmental improvements. However, for the purpose of this study, we will focus principally on the global and institutional aspects of GEG reform, including efforts to create the support for domestic implementation, but not including the considerable challenges of domestic implementation. That is a very important issue—one worthy of serious study—but lies beyond the scope and mandate of this current research.

The analysis and recommendations contained in this book are the result of literature reviews and consultations with an Advisory Group of experts who brought a wealth of experience from international organizations, governments, civil society and academia. The Advisory Group met twice—in Boston, USA, in October 2005, and in Copenhagen, Denmark, in March 2006—to discuss issues related to reforming the GEG system.

Members of the Advisory Group have all served in their individual capacities and their insights and inputs have informed and influenced all aspects of this study. However, the content of the study is entirely the responsibility of the authors and no other institutional or individual endorsement is either implied or intended. Members of the Advisory Group included: Adnan Amin (Kenya); Pamela S. Chasek (USA); Erik Fiil (Denmark); George Greene (Canada); Mark Halle (USA/Italy); Benoît Martimort-Asso (France); William Moomaw (USA); Kilaparti Ramakrishna (India); Philippe Roch (Switzerland); David Runnalls (Canada); Mukul Sanwal (India); Youba Sokona (Mali); and Detlef Sprinz (Germany).

This book seeks to do three things.

First, Chapter 1 seeks to organize some of the lessons from the recent debates on GEG reform, including how the system has evolved, the types of problems that have been identified, the various models for reform that have been proposed, and a snapshot of previous and ongoing initiatives for GEG reform.

Next, Chapter 2 builds upon the above and analyzes in much greater detail the six key areas of concern, or challenges that have been generally identified as priorities for GEG reform. We approach this diagnosis with the goals of (a) identifying the extent of the challenge (whether the identified problem is, in fact, critical); and (b) highlighting available best practice in dealing with the challenge.

Finally, Chapter 3 begins outlining a menu of reform proposals that build upon the diagnosis and seeks to identify short- and long-term recommendations that are both doable and worth doing and are likely to bring about meaningful and practical reform of the global environmental system.

Chapter 1

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"Within the context of the evolution of global environmental politics and policy, the end goal of global environmental governance is to improve the state of the environment and to eventually lead to the broader goal of sustainable development."

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"Although the debate on GEG has focused overwhelmingly on reform of the UNEP (United Nations Environment Programme), the issue is far more expansive. This is largely because, since 1972, the business of global environmental governance has grown in many new directions."

"…it is clear that while the system of global environmental governance has grown in size and scope, it has not been entirely effective in achieving its larger goal of actually improving the global environment, of achieving sustainable development, or even of reversing the major trends of degradation."

Chapter 1
A Primer on the GEG Reform Debate

This chapter is a primer on the global environmental governance (GEG) reform debate to date. The chapter is neither a critical assessment of the debate nor an exhaustive summary of its various strands. We do not seek to assess the viability of particular proposals, nor to prescribe the desirability of particular directions. Instead, *the goals of this chapter are to (a) briefly highlight the key aspects of the evolution of GEG; (b) identify the challenges that have accompanied this evolution; (c) categorize broad archetypes of reform packages that have been proposed; and (d) provide a snapshot of some of the ongoing and recent GEG reform initiatives*. This will be followed in Chapter 2 by a more analytical diagnosis of the key strands of concern identified in this first chapter and then Chapter 3 offers a set of recommendations.

An Evolving System of Global Environmental Governance

GEG refers to the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate global environmental protection. Within the context of the evolution of global environmental politics and policy, the end goal of global environmental governance is to improve the state of the environment and to eventually lead to the broader goal of sustainable development. The focus of this book, as mentioned earlier, is on *environmental* governance in the context of sustainable development.

The major institutional decision coming out of the United Nations Conference on the Human Environment (Stockholm, 1972) was the establishment of the United Nations Environment Programme (UNEP), which was created to play the lead role in GEG by coordinating environmental activities within the UN agencies and acting as a catalyst for new initiatives. Since then, the world has seen hectic activity in global environmental policy (and, more recently, in sustainable development policy) and a host of treaties, organizations and mechanisms have emerged. The 1992 Rio Earth Summit and the 2002 Johannesburg Summit on Sustainable Development mark just two of the many policy landmarks of this rapid evolution of the GEG system.[2]

EMG Membership: Who deals with the Environment

A measure of the diversity of actors within the United Nations system whose activities somehow impact the environment is the membership of the UN Environmental Management Group (EMG) which was established by the UN Secretary General to "enhance UN system-wide inter-agency coordination" and whose membership consists of "programmes, organs and specialized agencies of the UN system, and all of the secretariats of multilateral environmental agreements." Each of these organizations has a defined environmental mandate and many have specified environmental activities. The membership of this group gives a still incomplete but impressive, picture of the breadth of actors that influence global environmental governance.

Basel Convention Secretariat

Convention on Biodiversity
(CBD) Secretariat

Convention on International Trade in Endangered Species
(CITES) Secretariat

Convention on Migratory Species
(CMS) Secretariat

Economic and Social Commission for Africa
(ECA)

Economic Commission for Europe
(ECE)

Economic and Social Commission for Latin America and the Caribbean
(ECLAC)

Economic and Social Commission for Asia and the Pacific
(ESCAP)

Economic and Social Commission for West Asia
(ESCWA)

Food and Agriculture Organization
(FAO)

Global Environment Facility
(GEF)

International Atomic Energy Agency
(IAEA)

International Civil Aviation Organization
(ICAO)

International Fund for Agricultural Development
(IFAD)

International Labour Organization
(ILO)

International Maritime Organization
(IMO)

International Strategy for Disaster Reduction
(ISDR) Secretariat

International Trade Center
(ITC)

International Telecommunication Union
(ITU)

Office for the Coordination of Humanitarian Affairs
(OCHA)

Office of the High Commissioner for Human Rights
(OHCHR)

Ramsar Convention on Wetlands Secretariat

Convention to Combat Desertification
(CCD) Secretariat

UN Conference on Trade and Development
(UNCTAD)

UN Department of Economic and Social Affairs/
Division for Sustainable Development
(UNDESA/DSD)

United Nations Development Programme
(UNDP)

United Nations Environment Programme
(UNEP)

United Nations Educational, Scientific and Cultural Organization
(UNESCO)

United Nations Framework Convention on Climate Change
(UNFCCC) Secretariat

United Nations Population Fund
(UNFPA)

United Nations Human Settlements Programme
(HABITAT)

United Nations High Commissioner for Refugees
(UNHCR)

United Nations Children's Fund
(UNICEF)

United Nations Industrial Development Organization
(UNIDO)

United Nations Institute for Training and Research
(UNITAR)

United Nations University
(UNU)

Universal Postal Union
(UPU)

World Food Program
(WFP)

World Health Organization
(WHO)

World Intellectual Property Organization
(WIPO)

World Meteorological Organization
(WMO)

The World Bank

World Trade Organization
(WTO)

World Tourism Organization
(WTO)

Over the last few years a heated debate has emerged among policy-makers as well as scholars on the possible need and potential directions of a reform in the GEG system so that it can keep up with its own rapid evolution. Although the debate on GEG has focused overwhelmingly on reform of the United Nations Environment Programme (UNEP), the issue is far more expansive. This is largely because, since 1972, the business of global environmental governance has grown in many new directions. Much of this evolution is, in fact, quite positive and points to *an expanded (certainly busier) global system of environmental governance*. In particular, the GEG system has expanded in three ways:[3]

More Actors

- There has been a proliferation of *international environmental institutions* within the UN system, such as the Commission on Sustainable Development (CSD) and the Environmental Management Group (EMG). Over 30 UN Agencies and programs now have a stake in environmental management. Major institutions, such as the World Bank as well as the World Trade Organization (WTO), now claim sustainable development to be central to their their overarching goals. A similar growth of interest is also seen within non-UN international and regional institutions in terms of environmental and sustainable development concerns.
- The proliferation of multilateral environmental agreements (MEAs) has also led to a mushrooming of *specialized MEA secretariats* and epistemic communities dealing with and providing intergovernmental forums for different pieces of the global environmental agenda.
- The interest in the global environment has been spurred by, and has also led to, an increasingly active and larger contingent of *civil society actors* influencing global environmental governance. Not only has the number of non-state actors influencing the GEG system increased, but these actors have also become more diverse and varied in their interests and in the ways in which they influence the system. They now include not only large international non-governmental organizations (NGOs), but also networks of more community-based organizations, businesses and knowledge communities.

More Money

- *Multiple sources of funding* for international environmental action are now available. These not only include the operational budgets

of the various organizations but also specialized funding mechanisms created either as part of specific treaties or in general. For example, the Global Environment Facility (GEF), created in 1991 has financed US$4.8 billion in projects and generated co-financing of US$15.6 billion.[4]

- In addition, there are also substantial amounts available from donor *aid flows, international organizations, UN agencies and international NGOs* for environmental projects.
- While the sum of these monies probably pales in comparison to the enormity of the global challenges, *the amounts are fairly large* nonetheless. The sources of funds vary greatly as do the destinations.

More Rules and Norms

- According to some estimates, *over 500 MEAs* have been signed. While most of these are regional and minilateral arrangements, a significant number are truly global in nature. Arguably, environment is the second most common area of global rule-making after international trade (although environmental treaties tend to be more declaratory than most trade agreements which are more rule-based). In particular, there was a burst of activity in terms of new high-profile agreements in the immediate aftermath of the 1992 Rio Earth Summit; these agreements are only now reaching maturity and many are still in the pre-implementation phase.[5]
- Rules and norms on the environment are being created with increasing frequency by *non-environmental regimes*, including, for example, the World Trade Organization, the Millennium Development Goals, lending policy safeguards of the International Finance Corporation and of major private banks, etc.
- The *greater buy-in into the concept of sustainable development* from international organizations, civil society, national governments and the private sector has also led these organizations to begin articulating norms and (sometimes) policies aimed at global environmental improvement and the quest for sustainable development.[6]

The expanded engagement in GEG along these various dimensions is generally a positive development. However, in spite of the considerable increase in institutional, human and financial resources dedicated to GEG and despite environmental quality achievements in a few areas, the global commons continue to degrade at an alarming rate. Given the reality of increasing carbon emissions, dwindling forest cover, declin-

ing fish stocks and disappearing biodiversity, it is clear that while the system of global environmental governance has grown in size and scope, it has not been entirely effective in achieving its larger goals of actually improving the global environment, of achieving sustainable development or even of reversing the major trends of degradation. In fairness, it may be too soon to seek such results from a system that is still evolving. Yet, it seems that the very evolution of the GEG system might have created new institutional challenges for the system itself. In other words, *the rapid evolution of global environmental governance has led the system to outgrow itself*.

Through a review of the now sizeable literature on GEG and discussions with the project Advisory Group, we have identified six broad areas of concern that are usually cited as needing attention:

(a) Proliferation of MEAs and fragmentation of GEG

(b) Lack of cooperation and coordination among international organizations

(c) Lack of implementation, enforcement, and effectiveness in GEG

(d) Inefficient use of resources

(e) GEG outside the environmental arena

(f) Non-state actors in a state-centric system

Here we will briefly identify the concerns that are usually cited under each of these headings. Chapter 2 will then be organized around these six themes and will analyze each of these areas of concern separately.

(a) ***Proliferation of MEAs and fragmentation of GEG.*** There are too many organizations engaged in environmental governance in too many different places, often with duplicative mandates. The MEA secretariats are located in disparate parts of the world, have varying levels of autonomy and focus on separate, but interrelated, environmental problems. For example, the climate secretariat is administered by the UN secretariat whereas the ozone and biodiversity secretariats report to UNEP. The Convention on Biodiversity is located in Montreal; Desertification and the UNFCCC in Bonn; CITES and the Basel Convention in Geneva. Fragmentation can lead to conflicting agendas, geographical dispersion and inconsistency in rules and norms, as the different secretariats have limited opportunity to interact and cooperate. Geographical dispersion leads to higher travel and personnel costs, larger reporting burdens and "negotiating fatigue." In particular, this drains scarce human and institutional resources in developing

countries and tends to distract the best resources towards global governance rather than towards national implementation.

(b) ***Lack of cooperation and coordination among international organizations.*** The concern here is about the absence of any meaningful coordination mechanisms for GEG. Theoretically, such coordination is part of UNEP's natural mandate. However, UNEP has never been given the resources or the political capital to fulfill this mandate. UNEP's ability to "coordinate" other UN agencies is further hampered by the sheer number of agencies and programs in the UN that have some stake in environmental protection. The creation of the GEF as the main financing mechanism, the various MEA secretariats, and the Commission on Sustainable Development (CSD) have detracted from UNEP's authority and led to fractious turf wars and inter-agency politics. A climate of inter-agency distrust, uneven resource endowments and unclear (and sometimes contradictory) mandates from the Member States has not been conducive to either institutional cooperation or coordination.

(c) ***Lack of implementation, enforcement and effectiveness in GEG.*** The GEG system has turned into a "negotiating system" that seems to be in a perpetual state of negotiation and is obsessed with continuing negotiations rather than thinking about the implementation of existing agreements. The implementation deficit is compounded by the fact that there is a dearth of enforcement mechanisms and little to no focus on ensuring that the instruments are effective in meeting their original objectives. The environmental system contains no meaningful dispute settlement body and few options are available to ensure or enforce compliance. As with many other international processes and institutions, consensus building in MEA negotiations is driven more by political feasibility than by science. This problem, of course, is endemic to international organizations and is not unique to the GEG system. However, ignoring science in the case of complex and long-term environmental processes can have much higher costs and more lasting effects than in many other arenas.

(d) ***Inefficient use of resources.*** The concern that is usually raised here is that the system as a whole seems to have significant (even if insufficient) resources, but the duplication and lack of coordination within the system can mean that resources are not always used most efficiently. In 2000, for example, the World Bank had an active portfolio of over US$5 billion in environmental projects, the UNDP's portfolio was over US$1.2 billion in the same year, and the

GEF has funded over US$4.5 billion of projects since its inception.[7] National governments, civil society and the private sector in aggregate also expend significant financial resources on environmental projects. In spite of this impressive pool of money, particular elements of the system remain chronically under-funded. Geographic fragmentation and duplication of activities can result in higher operational costs and inefficient use of resources. With greater coherence in the system of governance and financing, a great deal more could be achieved with the existing resources.

(e) ***GEG outside the environmental arena.*** An increasing number of important decisions affecting environmental governance now take place outside the environmental arena, in areas such as trade, investment and international development. While institutions like the WTO, UNDP and the World Bank have begun to pay much more attention to environment and sustainable development than in the past, they still remain largely outside the discussions on global environmental governance. Or, rather, environmental actors remain at the periphery of decisions about environmental governance. For the most part, environmental decision-makers tend to talk only to each other and are neither invited to be, nor make an effort to be, meaningfully involved in broader development decision-making. Additionally, health and security issues are increasingly being linked to GEG. For the system of global environmental governance as a whole to be effective, it needs to find ways to link more meaningfully to other areas on global policy, to mainstream environmental considerations into economic and security decisions, and to ensure meaningful coherence between environmental and other global public policy spheres.

(f) ***Non-state actors in a state-centric system.*** The institutions engaged in global environmental governance are designed to be state-centric. However, civil society actors, such as environmental NGOs and business, are playing an increasingly large role in global environmental policy-making. Environmental NGOs have played important roles in stimulating international conventions, drafting treaties, providing scientific information and monitoring implementation. NGOs can also be critical in environmental implementation. The private sector is becoming increasingly engaged in GEG through voluntary commitments and public-private partnerships. The GEG system, however, was not designed to accommodate these myriad non-state actors. The challenge for GEG is to create the institutional space to allow non-state actors to realize their full potential.

There is much debate among scholars and practitioners about the actual importance of these various "deficiencies." However, there is a general consensus among policy-makers and scholars that we should invest some thought into improving the system as it now exists. There is also an emerging sense that the discussion of GEG reform must go beyond simply reform of UNEP, to envision a system wherein the many different parts can interact more efficiently and effectively in realizing the ultimate goals of environmental protection and sustainable development.

In reviewing the evolution of the GEG system and the emergence of these challenges, it seems that the problem is not so much that the system is deficient, but rather that the system has outgrown its own design and is no longer able to cope with new realities. Indeed, many of the concerns we have identified are there precisely because the system has been successful in growing very fast and because of the resultant increase in the number of instruments and institutions for GEG. Such a perspective suggests that the challenge is not one of "fixing" a system that is broken; rather it is one of updating the system to meet the realities and challenges of its own evolution.

Models of Global Environmental Governance Reform

Improving global environmental governance has been an issue of dynamic debate in academic and policy-making circles ever since environmental issues entered the international agenda in the 1970s. Since then, both environmental threats and international responses to them have increased in their number and complexity. The key challenge of global environmental governance has, however, remained the same: *how to design an institutional framework (system) that would best protect the global environment*.

Model #1. The Compliance Model

Description: Advocates creation of a body that could provide binding decisions to hold states and private actors accountable for non-compliance with MEAs and resulting environmental damage.

Designs: Several potential bodies with such enforcement powers have been proposed. First, a *World Environment Court*[8] is envisioned as a permanent institution along the lines of the European Court of Human Rights, to ensure compliance with MEAs and upholding the new right to a healthy environment. Second, *upgrading the Trusteeship Council*[9] to have authority over global commons and also represent interests of potential beneficiaries of the trust, especially future generations. Third, reinterpreting the mandate of the *Security Council*[10] to include environmental security, when it has already accommodated non-traditional

threats such as humanitarian emergencies and gross violations of human rights.

Potential: Ideally, the compliance model would solve the free rider problem, ensure care for the global commons, match judicial enforcement available elsewhere (especially in the WTO), enhance predictability and intergenerational concern of environmental law and directly impact compliance with MEAs. In practice, states are reluctant to expose themselves to the compliance body's oversight and value judgments. There is a history of avoiding third party adjudication in international environmental law; inability to punish global commons' violators by exclusion or fines; and low support for the exercise of "enforcement" provisions. Finally, the probability of all states voluntarily accepting the compliance model is extremely low.

Model #2. The New Agency Model

Description: Refers to creating a new organization outside UNEP with concentrated environmental responsibilities and the ability to steer UN agencies in relation to environmental issues.

Designs: The most ambitious designs of the new agency require joining environmental and development programs and agencies (UNEP, CSD, UNDP and others) *within a World Organization for Environment and Development*[11] or a *World Sustainable Development Organization*.[12] Other proposals include creating a *Global Environmental Organization*,[13] modelled after the WTO, with broad rule-making authority to address market failures and facilitate negotiation of international standards to be implemented by all countries. Other designs use the *Global Environment Facility as a role model*[14] for governance; advocate *strengthening the role of ECOSOC and CSD*[15] in discussing and overseeing system-wide coordination; propose an *organization for environmental bargaining*[16] to trade environmental goods for money; or aim to *reinforce G8 with leader-level G20*[17] to serve as a platform for building the new agency.

Potential: Creation of a new agency is an opportunity to put together the best features of existing agencies and guide global environmental policy-making. Such an agency could address the problems of fragmentation and weakness of environmental governance within the UN system. However, putting all environmental agreements under one umbrella would be a major challenge, because the current system is strongly decentralized and individual environmental entities strongly resist takeovers. Putting Bretton Woods institutions under the same umbrella seems even less realistic. Benefits of the new agency remain uncertain: it can potentially promote cooperation and increase states'

environmental concern, but it risks being another big bureaucracy with modest civil society influence and no additional *financial* and technology transfer to developing countries.[18]

Model #3. Upgrading UNEP Model

Description: Takes UNEP as a departure point for improving environmental governance and suggests upgrading it to a specialized agency to strengthen its status.

Designs: This model is similar to the previous but distinct in that it seeks the strengthening of UNEP rather than its replacement by a different super-organization. UNEP itself has been both an active participant and a focus of the reform debate.[19] It has faced significant challenges since its creation (limiting legal mandate, lack of funds, location). The most broadly discussed proposal is upgrading *UNEP to a specialized agency*[20] so that it can adopt treaties, have its own budget and potentially use innovative financial mechanisms. UNEP would strengthen its role as an *"anchor" institution*[21] for global environment by drawing on its ability to serve as information and capacity clearinghouse and set broad policy guidelines for action within the Global Ministerial Environment Forum (GMEF). Similarly, it has been suggested that UNEP could be upgraded into a decentralized *United Nations Environment Organization*[22] (UNEO). UNEO would have its own legal identity, and would comprise general assembly, executive structure and secretariat. It would incorporate UNEP and GMEF; take up UNEP's mandate with respect to its normative function; and serve as the authority for environment within the UN system.

Potential: The current debate on environmental governance seems to converge around the proposal to upgrade UNEP into a specialized agency as a middle ground between making a major change in the system and doing nothing. Upgrading UNEP requires less financial and diplomatic investment than adding a completely new organization. While UNEP has a record of institutional success and learning, its potential to perform when given better legal status, more funds and more staff is promising. On the downside, focusing reform debate only on UNEP distracts us from the broader institutional challenges, and it is not yet clear just how much of a difference specialized agency status will actually give.[23]

Model #4. Organizational Streamlining Model

Description: Addresses the need for improved coordination and synergies among various entities within the system of global environmental governance.

Designs: Improving coordination is work in progress and an ongoing challenge within the UN system. Integrating environmental institutions into clusters (or *clustering*[24]) has been discussed as a way to achieve goals of environmental conventions, while also pursuing efficiency gains and improving coherence of environmental governance. Clusters can be issue-based, functional/organizational, or they can have a particular regional scope (co-location and "merger" of secretariats). Another way to achieve synergies involves addressing duplication and overlaps by *clarifying mandates* of different entities, addressing their conflicting agendas and building upon their *interlinkages.*[25] The inconsistencies between global trade rules and MEAs illustrate the need for organizational streamlining. Finally there is *implementation streamlining* with states to develop plans for coordinating the implementation of the Rio Conventions on climate change, desertification and biological diversity.

Potential: Institutional fragmentation is not without its advantages:[26] it increases visibility of environmental protection, promotes specialization and innovation, and increases commitments of states that host secretariats. Some degree of redundancy is also desirable as it functions as insurance against institutional decline.[27] However, fragmentation has many disadvantages including institutional overlap, high financial and administrative costs, and increased reporting demands felt especially in developing countries. The effect of these disadvantages is reduction of state participation and decrease in implementation of environmental law. All organizational streamlining proposals need to be well designed in order to contribute to the solution of the problem. Otherwise they may worsen the current situation.

Model #5. Multiple Actors Model

Description: Argues that the system of governance comprises multiple actors whose actions need to be mutually reinforcing and better coordinated. Without better integration of these multiple actors, organizational rearrangement cannot resolve institutional problems.

Designs: Multiplicity of actors and interactions form a multidimensional "system" of global environmental governance.[28] It includes states, international environmental organizations, related international organizations, civil society organizations, and public concern and action. Focus on organizations as a single dimension of governance distracts attention from the fact that institutional will is required to affect decision-making procedures and change institutional boundaries.[29] First reform proposal is to *integrate environment into the larger context of sustainable development* and to allow multiple organizations to flour-

ish but create venues for these organizations to interact and "transact." Preferring environmental to sustainable development governance may result in further marginalization of environmental problems on the international agenda, alienation of developing countries, and continuing regime clashes between environment and other relevant international regimes. A *General Agreement on Environment and Development* should be negotiated to codify universally accepted sustainable development principles and serve as an umbrella for existing MEAs.[30] The second reform proposal is to create *multiple channels of implementation*. The quality of global environmental governance will be increasingly determined by the interaction among five entities in implementation and the ability of the system to facilitate their interaction, e.g., through global public policy networks.[31]

Potential: This model adopts a broad definition of the problem of global environmental governance. Accordingly, the solutions proposed are broad and offer directions the system should follow, rather than specific organizational improvements. While organizational thinking leaves an illusion of control over governance, systems thinking acknowledges the messiness and uncertainty of the system. The complexity of today's environmental threats like climate change and responses to them prove that multiple channels of implementation naturally emerge but can lack direction if one is not provided by the system. Whether the system is mature enough to reverse environmental degradation via strategic directions and normative guidance remains to be seen.

GEG Reform Initiatives and Why They Don't Succeed

The United Nations appears to be in a continual state of reform. In fact, the earlier attempts at reforming the United Nations started literally months after the organization was created. Yet, it is not easy to bring about change in international organizations. Adding new elements and organizations has tended to be easy; changing existing ones next to impossible.

The story of attempts to reform global environmental governance has been exactly the same. The current wave of calls to reform UNEP can be traced back to the Nairobi Declaration of 1997, which attempted to revitalize an ailing UNEP whose authority had steadily diminished in the 1980s and 1990s (historians, however, could argue that reform was being sought even before that and in fact within months of the organization's creation in 1972 there were discussions about how it could be changed).

In focusing on the recent demands for GEG reform, we find that calls for reform have been consistent over the last decade and have been consistently growing in intensity, both from within the UN and from national governments, academics and civil society. The following list provides an incomplete but representative sampling of some recent GEG reform initiatives:

- *UN Secretary General, Kofi Annan, launched a UN-wide reform initiative (1997)*. Kofi Annan placed the issue of improving the coordination and effectiveness of environmental institutions on the international political agenda by releasing his 1997 program for reform *Renewing the United Nations*.[32]
- *The Nairobi Declaration on the Role and Mandate of UNEP (1997)* restated UNEP's role as the leading authority in the field of the environment. The Declaration was adopted by the UNEP Governing Council and endorsed by the UN General Assembly to revive UNEP and reestablish its authority, which had diminished since the creation of the Commission on Sustainable Development (CSD).[33]
- *The UN Task Force on Environment and Human Settlements (1997)* was appointed by the Secretary General, Kofi Annan, to focus on inter-agency linkages and the revitalization of UNEP. The Task Force's recommendations were adopted by the General Assembly, leading to the creation of two new coordinating bodies: the Environmental Management Group (EMG) and the Global Ministerial Environment Forum (GMEF).[34]
- *The Inter-agency Environment Management Group (1999)* was established as a mechanism to provide UNEP with an effective and strong coordinating role within the UN system on environmental matters.
- *The Malmo Declaration (2000)* was adopted by the GMEF. It requested that the World Summit on Sustainable Development (WSSD) review the requirements for an enhanced institutional structure for GEG, including how to strengthen UNEP and broaden its financial base and how to better incorporate non-state actors into the GEG system.[35]
- *The Cartagena Process (2000–2002)* was initiated to assess options for reforming GEG. The 21st Session of the UNEP Governing Council/Global Ministerial Environment Forum (GC/GMEF) convened the Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental Governance

(IGC/IEG) to assess the options for strengthening UNEP, improving the effectiveness of MEAs and improving international policy-making coherence. The report from the process was transmitted to the CSD and to the WSSD.[36]

- *The Johannesburg Plan of Implementation (2002)*, adopted by the WSSD, called for the full implementation of the Cartagena decision.
- *The Eighth Special Session of the UNEP Governing Council/Global Ministerial Environment Forum Jeju, Republic of Korea* met to discuss progress on the Cartagena decision.[37]
- *French President, Jacques Chirac, calls for creation of a United Nations Environmental Organization (UNEO) at the UN General Assembly (2003)*. In response to President Chirac's presentation, an informal working group was set up to facilitate dialogue among governments on UNEP reform.
- *The Bali Strategic Plan for Technical Support and Capacity-building was adopted by the GC/GMEF (2004)*. The Bali Plan outlined proposals for improving the capacity of developing countries and economies in transition to implement MEAs.
- *The UN Summit (2005)* called for strengthening coordination within the framework of international environmental governance and for the integration of environmental activities at the operational level into the broader sustainable development framework.[38]
- *A High Level Panel on UN-wide Coherence in the Areas of Humanitarian Assistance, the Environment, and Development (2006)* was created after the World Summit in New York (2005).

In addition, environmental NGOs and scholars have also been forwarding various recommendations on GEG reform. The World Resources Institute (WRI) in the USA, the Institute of Sustainable Development and International Relations (IDDRI) in France, Ecologic in Germany and the Global Environmental Governance Project at Yale University are just a few examples of institutes that have devoted considerable resources to examining this question. Numerous books have been published and journals launched on the issue of global environmental governance in the past decade. More recently, leaders such as the French President and the UN Secretary-General have all highlighted the need for GEG reform.

In spite of this long history of attempts to reform the GEG system and the obvious appetite for reform, real change remains elusive. There are a number of possible reasons for this, including:

- ***There is inertia within the system and a desire to maintain the status quo.*** Although the UN has engaged in many self-reform initiatives, actors in the system have an incentive to maintain the status quo. Neither national delegates nor international environmental bureaucrats seem motivated to allow meaningful change in the terms of the GEG system; a system in which, despite all its faults, they feel comfortable and have learned to use to their individual and institutional advantage. The proposals that do emerge, such as those originating from the IEG Working Group, tend to advocate a soft approach and incremental change.
- ***Lack of leadership.*** While those within the GEG system seem hamstrung by inertia, there is also an apparent lack of will and leadership by political leaders to take the initiative. Occasionally there have been a few calls for action, but these have mostly not gone beyond the declaratory phase.
- ***Developing country concerns.*** Developing countries have legitimate concerns about the state of the international system. They are already distrustful of the international system in general and are especially concerned about the rapid growth of environmental instruments and its possible impacts on their economic growth. Although developing countries are not necessarily beholden to the status quo, they fear that any change will necessarily make things even worse from their perspective.
- ***Institutional fiefdoms.*** UN institutions are often loath to let go of any part of their authority or competence even where overlap and duplication are obvious. Having already created a complex system of myriad interlocking and overlapping institutions we now find, not surprisingly, that each institution is passionately committed to its own perpetuation.
- ***Lack of political will and the balance of national interests versus global environmental problems.*** National economic and security interests can often run counter to environmental concerns and, consequently, not all nations wish to have a strong system of GEG. Indeed, even when the logic of a stronger global environmental system is apparent, it tends to be overwhelmed by the fact that actors within the system are primarily charged with safeguarding their narrower national and institutional interests.
- ***There is a marked retreat in the importance attached to environmental issues by the international community.*** This has been particularly apparent in the last few years as the new emphasis on international security has distracted attention from a host of other

issues, including those related to the state of the global environment.

In spite of these constraints, the momentum for reform is present. We find at least three reasons why, despite these chronic problems, the search for GEG reform should continue and why there might even be some ripeness in the possibility of real reform:

- First, there is a *confluence of opinion between NGOs, academics and policy entrepreneurs within the system that reform is inevitable*. Slowly, but perceptibly, the demand for reform is growing and with this growth the ability of the system to resist reform is also eroding. Indeed, the mounting level of activity and frustration in the reform debate may itself be providing a window of opportunity in which a set of practical and doable recommendations may have the chance to come to fruition.
- Second, *not only the number, but the nature of those calling for reform has changed*. Such calls have recently begun to come from the highest levels of national government and many governments have become consistent in raising these calls at the highest levels. Additionally, high-level reform attempts that seek UN-wide as well as GEG reform are beginning to gather relatively greater political support and traction. This does not mean that new initiatives for system-wide reform would necessarily be any more successful than prior ones, but it does demonstrate that there are consistent and important demandeurs for change. The most recent among the many such processes is the recently launched High-Level Process for United Nations System-Wide Coherence in the areas of Humanitarian Assistance, Environment and Development.
- Third, and most important, *the collective and accumulated experience of numerous reform attempts have given the champions of reform a much clearer and better sense of which reform packages are, in fact, politically possible as well as conceptually desirable*. One senses a moment of practical sobriety where "wild" proposals are no longer being thrown about, but also a setting in of the realization that change has to be more than just cosmetic if it is to bear the fruits of an improved global environment and a shift towards sustainable development.

Chapter 2

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"States, especially developing countries, struggle to meet institutional demands as the number of institutions increases. Participation in GEG represents a challenge for all states, especially developing countries, which use very scarce resources to participate in negotiations and meetings, and to satisfy reporting requirements and other MEA demands."

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Chapter 2
Key Challenges to Effective Global Environmental Governance

In this chapter we take the six key areas of concern that were identified earlier and analyze each of them in greater depth to determine the extent of the challenge and the emerging trends in terms of how it is being managed. We are particularly interested in figuring out just how important each of these challenges is and which actions, among the actions that are already being taken, are most effective in responding to the concerns.

Some of these challenges are, in fact, endemic to the international system and not specific only to global environmental governance. However, each has a potentially important impact on the future of GEG. The remainder of this chapter will diagnose each of the following six challenges: (a) proliferation of MEAs and fragmentation of GEG; (b) lack of cooperation and coordination among international organizations; (c) lack of implementation, enforcement and effectiveness in GEG; (d) inefficient use of resources; (e) GEG outside the environmental arena; and (f) non-state actors in a state-centric system.

Challenge #1. Proliferation of MEAs and Fragmentation of GEG

The proliferation of MEAs, and the resulting fragmentation of international environmental institutions, is often described as one of the key challenges of GEG. The rapid growth of environmental agreements, MEA-related instruments and geographically dispersed institutions has left environmental governance in disarray. There are inconsistencies in rules and norms, and the hectic pace of activities can overwhelm and financially drain some, particularly the poorest, countries.

All of this feeds into the concerns that the GEG system is operating at a suboptimal level: its agreements, institutions and resources are unable to achieve their full potential and possible synergies remain unexploited. The very ability of GEG to address complex interconnected environmental threats is questioned because the incoherent system of solutions is becoming even more complex than the problems it was meant to address.

Diagnosis

Five interrelated concerns are often identified as parts of the MEA proliferation problem. They are: treaty congestion; institutional fragmentation; states' struggle to meet institutional demands; duplication and conflicting agendas in GEG; and the diminishing role of science in GEG. However, there are also some positive aspects of proliferation and fragmentation that also need to be acknowledged.

Treaty congestion[39] is a common description of the state of GEG as there are more than 500 MEAs registered with the UN, including 61 atmosphere-related; 155 biodiversity-related; 179 related to chemicals, hazardous substances and waste; 46 land conventions; and 196 conventions that are broadly related to issues dealing with water.[40] It is argued that the large number of MEAs creates messiness, incoherence and confusion in GEG, and incites demands for order and central decision-making authority. However, the three-digit MEA number may be misleading as it does not acknowledge that many of the MEAs are institutionally linked, e.g., come clustered in institutional packages like *The Law of the Sea* or are protocols nested under the same framework convention. Furthermore, many are regional in nature, only some MEAs have the full support of the international community and/or binding provisions that go beyond reporting requirements. There has also been a tendency to assume that the autonomy of legal agreements implies autonomy of secretariats. This has led to an institutional congestion that is actually more disturbing than MEA proliferation. As a result, MEA secretariats have developed an institutional interest in further expansion of their work. Even more disturbing is the proliferation of new subsidiary bodies and ad hoc working groups within MEAs.[41] It is these that eventually clutter and overwhelm the MEA negotiating calendar and can eventually distract from actual implementation. One should note here that there is a distinction to be made between the more recent post-Rio conventions that are still in their formative stages and the more established older conventions that tend to be far more focused and circumscribed in their substantive and institutional ambitions.

Institutional and policy fragmentation takes place as separate conventions address related environmental threats, while convention secretariats become geographically dispersed and operate in different political, normative and geographical contexts.[42] For example, while it is widely recognized that there is a complex system of interrelated cause-and-effect chains among climate, biodiversity, desertification, water and forestry, each responding convention has its own defined objects and commitments that fragment institutional commitments and create

artificial issue barriers.[43] Moreover, the institutional arrangements that have the ability to establish better coordination and synergies, tend to be geographically dispersed. Climate and Desertification Secretariats are in Bonn, the Biodiversity Secretariat is in Montreal, CITES in Geneva, etc. Whether reorganization of the system and eventual clustering based on issues/themes, governance functions or location can improve GEG is continuously discussed. Most seem to believe that such clustering will be beneficial, and some headway is already being made. Such clustering could also have significant financial benefits. For example, a rough estimate of the cost-efficiency gains of hosting seven biodiversity-related convention COPs back-to-back could be more than US$50 million.[44] However, significant practical and political hurdles remain in making this a reality.

States, especially developing countries, struggle to meet institutional demands as the number of institutions increases. Participation in GEG represents a challenge for all states, especially developing countries, which use very scarce resources to participate in negotiations and meetings, and to satisfy reporting requirements and other MEA demands.[45] Overstretched human and financial resources needed for global governance leave developing countries with fewer resources for implementation or to mitigate environmental threats of most concern to them. Harmonizing national reporting on biodiversity-related conventions has been pursued, but the process has been difficult and given the structure of the "harmonized" process, it remains unclear exactly how it improves the implementation of conventions at the national level or saves national resources.[46]

Duplication and conflicting agendas occur because new treaties often tend to be negotiated from scratch and have different stakeholders than the pre-existing MEAs. Building upon previous treaties in the similar issue-area or making sure that the new treaty smoothly fits into the current system is not necessarily a priority for negotiators. Furthermore, as MEAs are a product of time- and energy-consuming multilateral negotiations,[47] their text is frequently left ambiguous or unclear from the operational perspective, or simply does not represent a common body of law. For example, while both CITES and CBD have a conservation focus; in practice they put a different emphasis on preservation and sustainable living. Similarly, while the Montreal Protocol proposed HFCs as alternatives to CFCs, they were considered greenhouse gases under the Kyoto Protocol, sending opposite policy signals to countries that had signed both agreements. Finally, the proliferation of international courts and tribunals raises a concern about multiple tribunals addressing the same dispute without adequate rules

for dealing with overlapping jurisdiction,[48] e.g., the International Court of Justice or the Law of the Sea Tribunal. Eventual overlaps between the environment and trade have been under consideration at the Doha round of WTO negotiations.

The role of science in GEG is diminishing because of the proliferation of MEAs and fragmentation of GEG and the difficulties of coordination. Namely, science needs to be credible and to cross political barriers to influence policy, while its own influence decreases as it is spread thin through multiple scientific bodies, each looking at a small piece of the environment puzzle rather than looking at the larger picture of interconnections. International policies for managing the global atmosphere are a case in point: science clearly calls for a comprehensive policy response, while the existing approach is highly dysfunctional, as it locks policies in sub-issue specific solutions.[49] The force of scientific arguments has reemerged through integrated assessments like the Millennium Ecosystem Assessment. Still, without authoritative science—including relevant expertise from both developed and developing countries—and clear avenues for knowledge to influence policy processes, the role of science in GEG is likely to be further marginalized.

There are, however, positive aspects of proliferation of MEAs that need to be acknowledged. For example:[50]

- *Visibility and awareness of environmental threats rises* with the number of MEAs and more conversations about these threats in multiple forums allow all actors multiple opportunities for action.
- *Some degree of redundancy is desirable*. Duplication can be beneficial as it can be an insurance against institutional decline and makes the system more robust.[51]
- *Competition can bring about better, more innovative results*. As agencies compete for limited funds and attention they are continuously trying to build up their core competencies, reassess and further develop their mandates and improve their performance.
- *Secretariats develop pockets of expertise and their hosts have the pride of ownership*. A positive impact of geographic fragmentation of GEG includes the opportunity for secretariats to evolve into competence centres and form "epistemic communities" that can then push both knowledge and policy.[52] States hosting the secretariats can act as sponsors of agreements (e.g., host contributions through Bonn Fund) and develop a special stake in their success.
- *Cooperation benefits go beyond environment*. Cooperation in the international system is often celebrated per se because it contributes to

peace. Environmental cooperation can spill over to other areas of international affairs. The "rule of law" in the international system increases predictability of state relations and established working relationships promote peaceful settlement of eventual disputes.

- *Numerous entry points for global civil society* are provided by a system with many institutions. A reduction or centralization of institutional structures may close some of the windows of opportunity that allow for more meaningful civil society participation in what remains a state-centric system. It may also reduce the ability of small countries to influence global agenda-setting.

Trends

The issue of proliferation and fragmentation has been hotly debated for a number of years. Partly as a result of this debate, some things have begun to change and at least some of the key trends suggest that things are happening—albeit slowly—to respond to this challenge.

- *Proliferation and fragmentation may be slowing because of negotiation fatigue and as international environmental law matures*. The problem of MEA proliferation and fragmentation is largely a result of the evolving system of international environmental law and its explosive growth between the Stockholm and Rio conferences. A decrease in the rate of emergence of new conventions in the late 1990s has sometimes been described as "negotiation fatigue."[53] Struggling to meet current MEA obligations, states become less interested in creating new MEAs. Thus, the GEG system may be beginning to regulate its own growth. As international environmental law matures there is also a trend towards relatively more sophistication of instruments, including:[54] enlargement in the scope of agreements (treating entire ecosystems rather than particular species, and treating global rather than transboundary pollution); moving focus from liability for harm towards prevention; increasing the use of detailed procedural and substantive requirements; and establishing innovative legislative and regulatory mechanisms (provisional application pending full ratification, moving beyond unanimity).
- *Treaties are recognizing the problem*. The three "Rio MEAs" (climate, biodiversity and desertification) have all come to recognize the problem of fragmentation and advocate synergistic approaches. They call for greater information exchange and recognize the issue connections and there is even movement towards joint meetings of their scientific bodies. This is a useful step, but certainly not enough.

- *Some proactive treaty secretariats reaching out to coordinate*. Some proactive parts of the system are beginning to respond to the problem. For example, the Ramsar Bureau has taken a number of steps towards establishing linkages with other instruments—including the CBD, Convention on Migratory Species, CCD, CITES, World Heritage Convention, etc.—in recognition of the overlaps and cooperation needed for implementation. These are still early steps and mostly focused around information exchange. However, theoretically, these could be a model for better interaction between multiple treaties. Importantly, the questions remain: Is this form of informational exchange enough? Would other, larger, secretariats have the incentive or interest to follow Ramsar's lead?

- *Some promising efforts towards clustering conventions are taking place*. Ambitious clustering efforts have been undertaken by treaties relating to chemicals management. Clustering of three conventions is being pursued by the secretariats of the Basel Convention on Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants.[55] The expected end result is a coherent legal framework to support environmentally sound management of hazardous chemicals and wastes through their whole lifecycle, including production, use, trade and disposal. The short-term clustering focus is enhanced by programmatic and functional cooperation (capacity-building, science and technology, legal affairs, institutional matters, monitoring and reporting, information and awareness-raising) and longer-term measures would include integration of program support services and developing common services within the chemicals/wastes cluster and also with other co-located Convention secretariats or UNEP units. A significant milestone in the process was the decision to appoint a joint head of the secretariats of both the Stockholm and Rotterdam conventions.[56] Another significant aspect of chemicals management is the recent global agreement on a Strategic Approach to International Chemicals Management (SAICM).[57] However, the clustering experiment is also showing that the process is going to be far from easy. For example, as of September 2005, the parties to the Rotterdam Convention concluded that no further action could take place without more detailed identification of financial and administrative arrangements.[58] That, possibly, is where the rubber will hit the road.

Assessment

As we look at other parts of the international system we find that issues of proliferation of instruments and actors and fragmentation of final response have been often discussed in human rights, humanitarian aid, and peace-building communities.[59] The very existence of multiple international institutions is not necessarily a problem because it gives actors within the system multiple opportunities to articulate values they hold in common. Multiplicity of institutions becomes a problem when institutions siphon off resources towards institutional maintenance rather than implementation, or when they begin coming in each other's way because of duplication or working at cross-purposes.

The problem of proliferation and fragmentation within the GEG system is sometimes *overemphasized by those who want to have a system governed or controlled from the top down*. In the past this has led to calls for grand "super-organizations" for the environment. This approach is dangerous because it calls for mechanical fixes that themselves have no guarantee of working, and where the failure of that single super-organization could spell disaster for the entire system. In this light, proliferation provides the current system with a certain resilience to institutional decline. There also seems to be a tacit consensus that all instruments that are present in GEG are needed. Namely, there is no major initiative by a large number of states to remove a particular body of environmental law or deny funding to a particular secretariat to the extent that it would disappear. Finally, it should be noted that, over time, proliferation tends to slow down, especially as treaties mature and move from the negotiation phase into the implementation phase; this may be beginning to happen with the three Rio Conventions.

The central issue in the debate should be whether environmental protection at the international and national levels is supported or undermined by the multiplicity of institutions. To what extent does the diversity of GEG instruments and fragmentation of its institutions help countries address their national environmental priorities by allowing them multiple opportunities to benefit from the GEG system? Furthermore, does this diversity help the system respond to global environmental problems? From this perspective, proliferation of MEAs and fragmentation of GEG should be addressed because they significantly undermine countries' interests and, by extension, the whole GEG system in three key ways:

- *Perverse incentives in GEG weaken policy-making*. The system has turned into a negotiating system and there is an incentive to keep adding new instruments. Consequently, not enough attention is

paid to continuously build upon previous knowledge and existing instruments and institutions. Secretariats have an incentive to strengthen and proliferate within their issue areas and no requirement to prove their efficacy and relevance to the GEG system as a whole.

- *GEG resource demands leave fewer resources for environmental protection at home*. The system extracts a high cost in terms of sapping valuable human resources, particularly from capacity constrained developing countries. While awareness of the problem has been high for years, surprisingly little has been done to rationalize the demands on countries or at least provide evidence of potential savings.
- *Science as a driver of environmental cooperation is undermined*, which decreases countries' commitment to and the credibility of GEG. To the extent that science does play an important role in individual issue areas, the importance of cross-sectoral knowledge to influence the overall shape of the GEG system is minimized.

Against this background, the most important emerging trends are advances in chemicals management: achieving a global and comprehensive policy response for all types of chemicals, appointing a joint head for conventions as an incentive to achieve synergies and exploring financial savings.

Challenge #2. Lack of Cooperation and Coordination Among International Organizations

Because of its cross-cutting nature, coordination was always an important goal of environmental governance. UNEP was designed to be the coordinator-in-chief; however, from the very beginning, it had to contend with much bigger, better endowed and politically more powerful organizations that had significant environmental impact but no interest and no incentive to be "coordinated" by UNEP which was (and is) one of the youngest and least-endowed of all international organizations. To make matters worse, the Member States have never honestly attempted to give UNEP the political capital or the resources to meet the mandate of coordination they so generously lavished upon it. It is not surprising that some have argued that the Member States, particularly the more powerful ones, have actually wanted UNEP to fail in this particular task.[60] In its original design, the Environment Fund was supposed to give UNEP "clout"—and for as long as there were real resources with UNEP for deployment, it did enjoy influence.

The rapid growth in the number of actors that now impact global environmental governance has made coordination more important, but

also more difficult. The creation of the GEF as a main financing mechanism, the various MEA secretariats and the CSD have further detracted from UNEP's authority and led to fractious turf wars and inter-agency politics.[61] This climate of inter-agency distrust, uneven resource endowments and unclear (and sometimes contradictory) mandates from the Member States, has not been conducive to either institutional cooperation or coordination. The challenge of coordination in policies and implementation lies at the heart of the GEG crisis, as it has led to gaps in international policy, fragmentation of effort and sometimes competing or incoherent decision-making structures.

Diagnosis

The four key issues that are often identified within the coordination-cooperation debate are: (a) the overwhelming challenge of coordination both at international and national levels; (b) the weak status and role of UNEP; (c) the lack of authoritative science leading international environmental policy; and (d) the leadership deficit in the GEG.

The sheer number of institutions that affect global environmental governance is bewildering. Let us review just some of the intergovernmental actors involved:

- The United Nations Environment Programme (UNEP), created in 1972, is the most immediately associated with GEG as its principal stated mandate is to coordinate environmental programs within the UN and be a catalyst for new initiatives.
- The Commission on Sustainable Development (CSD), created in 1992, was created to coordinate between the three pillars of sustainable development, through monitoring implementation of *Agenda 21* and coordinating the follow-up from the 1992 Rio Summit.
- The United Nations Development Programme (UNDP), created in 1965, has a large environmental portfolio and plays a major role in implementing the Millennium Development Goals (MDGs), including reduction of environmental degradation. The UNDP's country offices play a direct role in GEG through assisting governments with designing institutions and implementing policies to alleviate poverty and improve the environment.
- Specialized Agencies within the UN deal with specific environmental issues. For example, the World Meteorological Organization (WMO) deals with atmosphere and climate. The Food and Agriculture Organization (FAO) is the lead UN agency responsible for assessing the state of global agriculture, forests and

fisheries and for promoting sustainable development of resources. The International Atomic Energy Agency (IAEA) monitors nuclear safety and radioactive waste. These organizations are autonomous bodies with their own governance structures, separate political agendas and often much larger budgets than UNEP, and each has pressures of its own to contend with.

- International development banks have a large and increasing impact on GEG through their projects and environmental strategies. For example, the requirements of the World Bank Environmental Impact Assessments and other environmental safeguard policies and guidelines often serve as *de facto* global standards for projects in developing countries. UNEP's influence over the priorities of a large and powerful organization such as the World Bank is negligible.[62] International environmental financing institutions such as the Global Environment Facility (GEF) and the multilateral fund for the implementation of the Montreal Protocol are not truly governed by UNEP. In fact, the GEF has actively resisted attempts by UNEP to play a stronger role in shaping the GEF's priorities and programs, even though UNEP is supposed to be one of its three implementing agencies.[63]
- An increasing number of environmental issues have now found their way onto the agenda of the World Trade Organization (WTO) either through its rules or its dispute settlement mechanisms. Because countries tend to take trade and trade rules far more seriously than environment and environmental regimes, WTO debates are now becoming important determinants of government action as well as the direction of GEG.

Indeed, GEG coordination seems to be mission impossible. The question is whether it is something even worth trying to do. Given the overwhelming number of organizations influencing global environmental governance, achieving high levels of coordination is not feasible from the start. In fact, even the bodies that are responsible for coordination have been proliferating, with the Environmental Management Group (EMG) and the Global Ministerial Environment Forum (GMEF) the newest additions. The irony is that although there are many institutions, the key players—i.e., the Member States—within all these institutions are the same. *The failure of coordination, therefore, has to be seen not just as a failure of the institutions, but as a failure of the "owners" of these institutions: the Member States.*

UNEP's inability to coordinate: politics and institutional weakness. Not only are the actors in GEG complex and myriad, the organization

meant to coordinate them, UNEP, is smaller and weaker than just about all the other parts of the system. UNEP is itself fragmented and it can be difficult enough to coordinate its eight divisions; six regional offices; seven liaison offices; seven out-posted offices; six collaborating centres; a number of convention secretariats; and five scientific advisory groups.[64] During the Stockholm negotiations of 1972, there was general agreement that environmental action needed a framework, but countries were deeply divided over the appropriate institutional arrangement. The creation of an environmental super-agency was quickly shot down due to concerns over its cost, its potential impact on sovereignty and existing UN agencies' fear that they will lose a portion of their budgets, programming or authority. Finally, the only politically acceptable solution was an organization that would "have minimal administration and not compete legally or financially with existing organizations."[65] So, UNEP was created to "promote international cooperation in the field of the environment and to recommend, as appropriate, policies to this end, and to provide general policy guidance for the direction and coordination of environmental programs within the UN system"[66] and designed in a way that prevented it from fulfilling this mandate. It was, what Konrad von Moltke called, "the organization of the impossible."[67]

The failure of the policy coordination mandate has been evident since the creation of UNEP: well-established UN agencies working in the field of environment (WHO, FAO, IAEA, WMO, World Bank, GATT/WTO) refuse to be coordinated by the new, weak agency lacking authority. Later, new bodies were established that also did not need to or want to recognize UNEP's authority (Global Environment Facility and Commission on Sustainable Development) and further weakened UNEP's role in global environmental policy. Although UNEP has been very successful in catalyzing negotiations on the new MEAs, it has been relatively unsuccessful at coordinating the policies and activities arising from the conventions once they are launched, as conventions become autonomous and often better endowed than UNEP itself.

Several structural features have inhibited UNEP's ability to realize this impossible mandate:[68] UNEP's *status as a Programme* constrains its authority, as it is a subsidiary body of the General Assembly, rather than a separate, autonomous organization; its *governance structure* allows the needs and demands of Member States to take precedence over its overall mission; UNEP's *financial structure* is overly dependent on voluntary contributions and, therefore, unreliable and subject to donor whims; UNEP's *location in Nairobi*—the only UN agency to be headquartered in the South—endeared it to the developing countries in its early years and has, in fact, made it far more South-friendly than

most international organizations, but it has also bred a certain resistance and hostility from the North and kept it far from the corridors of influence.

The weak connections between science and environmental policy-making. There is no question that sound environmental governance must be based on the best scientific knowledge available. However, there are (a) large knowledge gaps in our understanding of global interactions between environmental processes and impacts,[69] and (b) highly fragmented links between science and existing decision-making structures.[70] The assessment of the global environmental situation and the provision of the most current scientific information on the environment to decision-makers is one of UNEP's central mandates. Yet, UNEP is not seen as the authoritative scientific or knowledge voice on the environment, even as many other international organizations are in their respective fields (for example, the World Health Organization).

There is, in fact, a lot of good science on the environment. For example, the Intergovernmental Panel on Climate Change (IPCC) is generally considered to be a success.[71] UNEP has itself launched a number of initiatives, including the Global Environment Outlook, and the Earthwatch program which was meant to coordinate, harmonize and catalyze environmental monitoring and assessment activities throughout the UN system. The missing link, however, is not a lack of scientific information; rather, it is the lack of synthesis of the information that is available. Such synthesis is key for international policy-making in a number of arenas, but particularly so for the environment because of its interconnected nature. In the current situation, information from multiple sources, gathered in multiple ways, is difficult to compare, is not digestible to policy-makers, does not provide a complete picture of the environmental situation, and often fails to consistently study the same issues and substances over time.[72]

Leadership deficit: "Fire in the belly" needed to improve GEG performance. The question of leadership in global environmental institutions has rarely been discussed in literature. Yet, it may be the most crucial of all issues and probably the one issue that can make a lasting difference. Our focus here is on the individuals who lead institutions or have the ability to influence the directions of institutions. The malaise that the GEG system has been facing in recent years is at least a malaise born out of a leadership deficit. The leadership deficit shows up in two different but related contexts.

First, there is *the failure of global leaders to demonstrate the political will and invest the type of political capital that is needed to raise the profile of*

environmental issues to the appropriate level. While the GEG system has been remarkably successful in hosting high-profile global events, even periodic summits, these have now become routine photo-ops and no longer inspire global action the way they last did at Rio in 1992. More important, as one surveys world politics, it is difficult to identify either individual global leaders of stature or countries who are willing to speak out persistently, boldly and strongly for environmental quality. What one finds, instead, are canned slogans and predictable palliatives. While little can be done about the leadership deficit discussed above, there is another type of leadership deficit about which something can be done. This is the second context—*the deficit in leadership within the GEG system*. There are, in fact, many strong managers and leaders who head various international environmental institutions (maybe too many), but there is no overall leader willing to speak for and work on behalf of the system as a whole. The result is strong "commanders" trying to wrest as much as they can for their fiefdom, their agency, their program. In essence, a leadership landscape that is more feudal than tribal (since tribal systems actually have high levels of coordination among the chiefs).

The GEG system has been the strongest when it had strong and entrepreneurial leaders who were willing—sometimes ruthlessly—to try to move the system towards bold and new directions. The need is for leaders whose personal ambitions align with the interests of the system as a whole, who know how to use the power of ideas, who are prepared to take risks, and those with a sense of mission and a "fire in their belly."[73]

The international system is not very good at choosing such leaders for any of its institutions, largely because the Member States, particularly the powerful ones, have little interest in doing so. But because the international community also places environment at a lower priority, maybe it can be pushed to seek more proactive leaders for environmental institutions. Even a few key countries could lead the charge towards selecting leaders for key agencies who are committed to a stronger GEG system, rather than their own fiefdoms. For example, maybe the litmus test to be used in appointing new heads of MEA secretariats should be the commitment of the candidates to rationalize their secretariat's functions through harmonization, coordination, clustered meetings, etc.

Trends

The prevailing trends in relation to the challenge of coordination and cooperation are not too encouraging. A few important trends are presented here:

- ***UNEP and the Global Environment Facility: A struggling relationship.*** In 1991, the GEF was formed to fund environmental projects addressing biodiversity loss, climate change, degradation of international waters and depletion of the ozone layer.[74] Rather than placing the GEF under the auspices of UNEP, the GEF was created as an independent financial organization and located in Washington, DC, and was effectively under the control of the World Bank, but with UNDP and UNEP also listed as "implementing agencies." In spite of UNEP's key role in international environmental policy formulation, UNEP's relationship with the GEF has been kept weak and it has been denied the one instrument that could have given it real influence. Attempts on the part of UNEP to play a greater role in shaping the GEF's priorities have had limited success. UNEP Governing Council decisions have repeatedly called for a strengthened role for UNEP within the GEF, but to little avail.[75]
- ***Commission on Sustainable Development (CSD): An uncertain future.*** The Rio summit brought the issues of economic growth, social development and the environmental quality under the conceptual umbrella of sustainable development and adopted *Agenda 21* as its blueprint for the future. The CSD was created to coordinate between the three pillars of sustainable development: by monitoring the implementation of *Agenda 21*, and coordinating the follow-up to the Rio summit.[76] In reality, CSD proved relatively ineffective at coordinating cross-sectoral issues and, instead, focused its energies on environmental issues, such as the Forestry Principles, and work on energy and fresh water. Sadly, because it was often populated by "negotiators," it soon became another negotiation body rather than one focused on implementation. The result was duplication and overlap with UNEP and other institutions, causing larger coordination problems with environmental governance. The trend has been marked by a needless, palpable and dangerous tension between CSD and UNEP because of the unclear division of labour. Coordination difficulties between CSD and UNEP were further compounded by the decision to establish the CSD secretariat in New York instead of Nairobi. The CSD has been unable to deliver on its original mandate (of monitoring *Agenda 21* implementation) and on its assumed role (of negotiating decisions that move sustainable development forward). However, it has been quite successful as a model for incorporating multiple stakeholders and in becoming a regular forum where different stakeholders regularly meet, interact, network and exchange ideas. Of all the institutions that are related somehow to the environment, the CSD's future

remains the most uncertain and the disenchantment with its performance is quite broadly based.

- ***Environmental Management Group (EMG): Yet another layer of coordination bureaucracy.*** The EMG is chaired by the UNEP Executive Director and includes heads of UN specialized agencies, funds and programs and MEA secretariats.[77] Although a worthy idea, the EMG has not yet lived up to its promise as there has been little high-level political engagement in its work. Reasons for this include too many UN coordination forums for time-constrained senior management (e.g., the Chief Executives Board, the High-Level Committees on Programmes and on Management, the UN Development Group, etc.); the negative perception of the EMG as an instrument for UNEP's control; and human and financial resource constraints (professional staff of two people and a budget of US$500,000).[78] Most important, there is no clear sense of outcomes for the coordinating that EMG seeks, nor a sense of what different agencies will gain from such coordination. In essence, the EMG not only lacks resources but also clarity of purpose.

- ***Global Ministerial Environment Forum (GMEF) has the potential to become a more effective forum for high-level policy interaction.*** The GMEF is an annual meeting of national environment ministers to discuss high-level policy issues, which meets as part of the UNEP Governing Council's regular and special sessions. At GMEF's first meeting in 2000, the GMEF adopted the Malmo Declaration, calling for the role of UNEP to be strengthened and its financial base broadened and made more predictable.[79] Many argue that the role of the GMEF should be enhanced to become the body through which international environmental policy formulation would take place. The GMEF could also increase interaction among non-state actors and among the pillars of sustainable development through the participation of NGOs and the private sector and by involving ministers from other government sectors in its deliberations.[80]

- ***There is recognition to turn UNEP into a voice for authoritative environmental knowledge.*** For example, the UNEP Governing Council—as part of the Cartagena process for reform—recently established a "Science Initiative" to strengthen UNEP's ability to monitor and assess global environmental change.[81] This includes a proposal to create an Environment Watch System as an integrated structure for scientific discussion underpinning international environmental governance. There is also a proposal to create an Intergovernmental Panel on Environmental Change to give scien-

tific and technical advice to the UNEP Governing Council/GMEF. Actions to create greater capacity for scientific assessment in developing countries are also laid in the Bali Strategic Plan for Technology Support and Capacity Building. These activities and the high-level recognition of the importance of strengthening environmental monitoring and linkages between science and policy-making are positive trends underlying which is the belief that GEG needs to be grounded in authoritative science and knowledge.

Only the last two of these five trends are encouraging. Moreover, the meta-trend that emerges from the above is that there is a creeping proliferation of coordination mechanisms. What is needed, it seems, is (a) fewer rather than more coordination forums; and (b) a focus on the means to coordinate with rather than simply the mandate.

Assessment

The call for more cooperation and coordination and the need for a more efficiency is a perennial concern of all who work in or study international organizations. Diplomats easily agree on the need, and the search for better coordination becomes a never-ending saga. The lack of coordination is an easy scapegoat. When it does happen, coordination happens either by command (strong leadership with authority, carrots and sticks) or by consensus (capacity to orchestrate a coherent response and mobilize the key factors around common objectives and priorities), or a combination thereof.[82] Coordination by default (the absence of a formal coordinating entity, but cooperation through the exchange of info) and laissez faire (lack of coordination) are becoming rare, as the international system becomes busier and more involved.

In terms of GEG, discussions of the problem of cooperation and coordination have mainly focused on the nature of UNEP's mandate, UNEP's failure to realize it and bodies that would compensate for UNEP's coordination failure. *Adding more layers of coordination and staying in a continuous process of reform has made it more difficult to deal with the problem*. Ironically, the GEG system still faces the very same needs that resulted in UNEP's establishment: *there is no common outlook and general policy guidance in the field of environment*. This situation is unsustainable because the lack of direction diminishes the overall performance of the GEG and weakens the GEG even further while it is faced with continuous pressure to coordinate with other fields.

To the extent that environmental issues, by their very interconnected nature, require a level of coordination and cooperation, this is a serious problem. And some lessons are quite evident.

- The key question is the one of incentives. How can an incentive structure be created so that the key agencies see it in their own interest to coordinate with other institutions? It seems equally obvious that the key to the incentive structure will come not from the institutions *but from the Member States who, after all, are the real "owners" and "operators" of all these institutions.*
- A second point that is evident from this diagnosis is that *full coordination of all activities or all actors is neither possible, nor desirable*. The goal, then, is to identify the key areas in which coordination is desirable and feasible, and focus our efforts there. It is obvious that UNEP has to have a central role in being the catalyst for cooperation and coordination. However, it is no longer obvious that UNEP alone needs to play this role. The solution may well be in figuring out who can coordinate what best.
- It should also be clearly understood that *whoever is given the responsibility to coordinate should also be given the means to coordinate*. Without that, the mandate is meaningless. As is so often pointed out, in the 1970s and 1980s, UNEP devoted 30 per cent of its annual budget to coordinating environmental activities of other organizations. Currently, the Environmental Management Group (see below) spends over 90 per cent of its US$0.5 million budget on staff salaries and internal operations, and no resources within UNEP's budget are specifically earmarked for coordination activities.[83]
- The challenge of coordination is not limited to coordination between environmental and other institutions, it is also the *coordination among environmental institutions* (for example, the MEA Secretariats) and, even more important, *coordination among the various agencies and actors that are involved in producing knowledge and science* that can influence good environmental decision-making.
- Finally, *the single best opportunity for reform-minded countries to influence this matter is by influencing the choice of future leaders of international environmental institutions,* and stating and demonstrating a commitment to GEG system-wide cooperation as a prerequisite to their appointment.

Challenge #3. Lack of Implementation, Compliance, Enforcement and Effectiveness

The global environmental governance system has been very prolific in negotiating MEAs but, except for a few exceptions, has a rather dismal record of turning agreements into actual change on the ground in terms of either the quality of the environment or the lives of those who

live in those environments.[84] The literature makes rather academic distinctions between *implementation* (referring to actions parties take to make a treaty operative in their national legal system); *compliance* (adherence to treaty provisions and upholding the spirit of the treaty); enforcement (methods available to force states to comply and implement MEAs); and *effectiveness* (the effect of the treaty as a whole in achieving its objective).[85] These are conceptually useful distinctions, but from a policy perspective and in the context of our initial goal, our concern is with *performance* of international environmental instruments where *performance is defined as the sum of implementation, compliance, enforcement and effectiveness*. The ultimate test of GEG has to be environmental performance, in that not only must the actual environmental quality be maintained and improved as intended (effectiveness) but the sanctity of the governance instrument must be respected (implementation, compliance, enforcement).[86]

The crux of the challenge here is that the GEG system has been so frantically obsessed with negotiating new agreements that it has paid little attention to whether these agreements perform or not. As discussed above, merely reaching agreement seems to have become the goal to such an extent that a performance focus is nearly entirely absent from the discourse. The system becomes overrun by negotiators and their career and institutional interests, and the very absence of implementers from the GEG discourse can translate into the absence of implementation concerns. Additionally, the seduction of international negotiation can steal away the best human resources, especially in developing countries, so that precious few are left back home to carry out the work of domestic implementation of what the negotiators decide.[87]

Diagnosis

The problem becomes apparent at three interconnected levels: when laws are made (*negotiation level*); when laws are not complied with and enforcement mechanisms do not exist (*global level*); and when those implementing laws closest to environmental threats are marginalized (*domestic level*).

Designing agreements that are doomed to fail. From one perspective, MEAs are condemned to succeed. Environmental negotiators invariably find something to agree upon during those wee hours of the night, right before time runs out. Yet, the very same desire to come to some agreement—any agreement—can lead to agreements that just cannot or will not bring about the environmental improvement (effectiveness) that they were meant to.[88] Reaching agreements may bring instant rewards to negotiators, but agreements can become a success only if

states have the intention and capacity to make them work domestically.[89] In too many MEAs, too many countries seem to lack either one or both. Treaty texts are broad, ambiguous and difficult to implement in practice, negotiations tend to end up with measures acceptable to the least enthusiastic party, while eventual free riders are not coerced into action. When agreements are reached, the extent of the financial commitment necessary to make them work may be unclear and often no serious funding is made available. The process of consensus building in MEAs is driven by political feasibility, rather than science, so there is an inherent discrepancy between problems and solutions. The legitimacy and fairness of laws is another concern both in terms of the process of negotiation and its outcomes.[90] Now there is an increasing awareness of deficiencies of the MEA negotiation process and their impact on compliance and regime performance.[91] Still, if we observe environmental processes over time (from Stockholm to Rio and onwards) their evolution may seem slow, but in some cases it may lead to real improvements (e.g., trade in endangered species and ozone depletion).

Lack of global instruments to ensure compliance and enforcement. At the international level, sovereign states need first to give their consent to an enforcement body in order to be made to comply with international laws. Such consent is rare because states fear that their costs outweigh benefits and that institutions could interpret given mandates broader than envisioned. The perceptions of sovereignty are slowly changing and there is strong pressure to act when global commons are threatened.[92] In the absence of means of enforcement or of dispute resolution, environmental regimes have developed under a very different logic from others regimes like, for example, the rule-based trade regime. Environmental regimes are relatively new and predominantly norm-driven where the instrument of compliance is persuasion and assistance; i.e., carrots and carrots. Carrots are particularly well suited in GEG because there is a large discrepancy of effort developed and developing countries need to undertake to make the same rules work in practice, and there is a powerful equity discourse that works against stick-based solutions globally. While responsibilities accepted within environmental regimes may be common, differentiation in practice and compliance expectations is a necessity. For example, while developed countries are pursuing mitigation of environmental threats (reducing their impact), developing countries are still mainstreaming, i.e., ensuring that environmental concerns are integrated at all levels.

Failure to shift focus from negotiation to local level implementation (and the problem of "capacity building"). Environmental improvement depends on looking beyond the basic implementation of the instru-

ment (how many reports have been sent?) to implementation of targets of that instrument domestically (have they been met and, if not, why, and how can they be met?).[93] At the same time it is necessary to identify how regime targets fit within overall countries' needs. Yet, those who are closest to environmental threats and who are most responsible for implementing MEAs on the ground, seem to be most marginalized and underrepresented in GEG. The whole GEG system has a built-in incentive to negotiate rather than implement: there are few global institutions with a mandate for implementation and negotiators invade the system leaving little space for either implementers or experts. The requirements of the many activities in GEG (negotiating, satisfying treaty requirements, participating at meetings, etc.) both divert national focus from implementation needs and prevent implementation due to shortages of personnel and financial resources. "Capacity building" is pursued as the possible remedy but remains underspecified as a concept[94] while appropriateness of its uses is contested in practice. For example, irrelevant "capacities" being built for irrelevant actors (i.e, training foreign ministry officials in MEA implementation), or redundant capacities being developed (i.e., negotiators being trained repeatedly for more negotiation). However, there is a creeping realization that the first step has to be a determination of which capacities are needed where, and that this assessment has to be done with participation from those whose capacities are being built. This realization has led to some promising initiatives, such as the Bali Strategic Plan for Technology Support and Capacity Building and individual projects like UNEP's attention on national judiciary capacity building and provision of environmental law training materials.[95]

There are positive aspects of the current state of implementation, compliance, enforcement and effectiveness in GEG. Although the problems in this area are important, there are a number of positive aspects that need to be acknowledged.

- *There are undeniable MEA success stories and hidden pockets of excellence in performance*. The Montreal Protocol on Ozone Layer Depletion is widely cited as a success story in terms of GEG performance: implementation, compliance, enforcement and effectiveness. Moreover, this is a case where the carrot-carrot approach seems to have worked largely due to the presence of a real fund with real resources to disburse in order to bring developing countries to par.[96] Another example is the Antarctic Treaty and its ability, through its 1991 protocol, to bar oil and mineral exploration in the Antarctic for 50 years in a resource-hungry world. CITES is yet another implementation success. A key contributor to CITES' effec-

tiveness has been its close collaboration with civil society (especially WWF, IUCN and their joint program, TRAFFIC) and the fact that because this is a more mature agreement, countries are more likely to send implementers rather than negotiators to decision meetings.

- *Good management and enforcement can go hand-in-hand*. The traditional views of compliance suggest that states accept only those treaties in their own interest; that they breach them intentionally; and, therefore, coercive action is necessary. On the other hand, management approach proponents say that non-compliance results from capacity limitations and rule ambiguity. Traditionalists tend to recommend tough enforcement, while the latter group recommends capacity building and financial assistance and transparency of rules and actions. The example of the European Union suggests that the two approaches can be combined for best effect and operate at two levels through centralized supervision by EU's supranational institutions and decentralized supervision, where national courts and societal watchdogs induce state compliance.[97]
- *Enforcing environmental standards through international and regional institutions shows promise*. Over the last decade environment has begun to be mainstreamed into the work of the international institutions including the World Bank, WTO and International Court of Justice (ICJ). Their situation is not ideal, but significant and irreversible progress has been made, for example, through the use of World Bank's environmental assessments; WTO's Appellate Body's environment and trade jurisprudence;[98] and the ICJ's judgments on environment-related cases that have advanced the meaning of environmental principles and acted as a source of law (e.g., cases on nuclear tests and Gabcikovo-Nagymaros case). Through the EU enlargement, the EU environmental standards are spreading across the European continent and the EU has recently also showed global leadership in making the Kyoto Protocol come to life.[99] Greater regional focus is promising even outside the EU: strengthening regional networks among UNDP, regional commissions and various UNEP regional offices can further move the discussions from global negotiation levels closer towards national implementation.

Trends

Some promising examples of innovative mechanisms to deal with implementation, compliance, enforcement and effectiveness are identifiable and these trends can be built upon.

- International environmental law has begun to develop *innovative legislative and regulatory mechanisms* to improve compliance with MEAs and their implementation. For example, there are moves away from the unanimity/consensus principle and towards qualified majorities in the Whaling Commission as well as in the Montreal Protocol.[100] There are a number of attempts to create Compliance Committees that would function through a plenary, a bureau, a facilitative branch and an enforcement branch. The World Summit on Sustainable Development, held in Johannesburg in 2002, began experimenting with voluntary multi-stakeholder partnerships.
- *Transparency within GEG has been significantly enhanced* through increasing use of formal prior informed consent procedures and information exchange provisions in MEAs. For example, the Rotterdam Convention builds on the existing voluntary PIC procedure, operated by UNEP and FAO since 1989, which establishes that export of a chemical covered by the Convention can only take place with the PIC of the importing party. The Convention on the Law of the Non-Navigational Uses of International Watercourses, goes beyond customary law into requirements to negotiate on the possible effects on planned measures on the condition of an international watercourse (notify before implementation and allow states the time to reply.) Finally, the UNECE Convention on the Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), grants the public rights and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice. This Convention together with the Protocol on Pollutant Release and Transfer Register, is important in improving government accountability, transparency and responsiveness.
- Both in academia and practice there has been an *increasing use of qualitative and quantitative indicators of implementation, compliance, enforcement and effectiveness*. For example, the International Network for Environmental Compliance and Enforcement, in cooperation with OECD, developed a project to assist enforcement agencies in designing compliance and enforcement indicators and using them for agencies' performance assessments.[101] Similarly, academics have been developing models that target various aspects of regime effectiveness, including conditions for success, effectiveness of regime provisions, behavioural changes or regime impact on the biophysical environment.[102] Although much of this research

has not yet been put to use by policy-makers, this move towards empirical analysis is a positive trend that could have high payoffs in the future.

Assessment

Lack of implementation, compliance, enforcement and effectiveness is a common problem in the international system. However, environmental and sustainable development law has two special characteristics: an extreme reliance on soft law, and a great tradition of civil society involvement.[103] While the latter will be discussed later, GEG's reliance on the dense network of soft laws has had a strong normative dimension. Namely soft law principles have, over time, become norms and expectations of behaviour and eventually hardened, becoming incorporated in treaties.

While the lack of attention on environmental performance is distressing, a case can be made that although this is an important problem, it is not a crisis. It could be argued (a) that environmental regimes are yet young and, as such, are rightly focusing on treaty creation at this stage because treaty performance will follow in time; (b) that the evidence from the successful treaties suggest that over time the negotiators are, in fact, replaced by implementers in the decision-making process and the focus does shift towards performance; (c) that the management approach to implementation which focuses on capacity creation and financial assistance has worked some treaties and, given the time, is likely to work in other environmental regimes; and (d) that environmental regimes have purposely chosen to go down the persuasion path rather than the enforcement path and, over time, normative soft law does harden into expected state behaviour, which most countries do adhere to most of the time.

There is some merit in this argument, but some actions must not be postponed. First, because of the nature of global environmental problems, some means have to be found of getting local and national implementers and their priorities accounted for in the GEG system. Second, while negotiation is important, it must not distract from the challenges of performance. Third, in the absence of enforcement measures in the GEG system, disputes will travel to forums where enforcement is available (for example, trade). This highlights the need to place environment sensibilities into those non-environmental enforcement mechanisms and also of thinking seriously about developing environment compliance mechanisms, even if at a limited level.

Challenge #4. Inefficient Use of Resources

There are many sources of funding for the global environment: multilateral financial flows associated with multilateral organizations; MEAs and multilateral financial mechanisms; debt relief; private capital flows; non-traditional sources of financing; financing via the non-governmental sector; and domestic capital flows. Still, elements of the GEG system remain chronically under-funded and the lack of financial resources is considered to be a key obstacle to treaty compliance, particularly in developing countries.

Inefficiency in the use of the monies that are available is another chronic complaint. Inefficiencies are everybody's loss: they act as a disincentive for donors to invest in the system, diminish the credibility of the system's institutions and fail to provide funds to those who need them most. Minimizing inefficiencies through synergies-oriented financial management could produce significant extra funding.

Diagnosis

Criticism of the use of resources in GEG mostly falls under two categories: "not enough money" advocates focus on the lack of funds to cover the needs and on ways to mobilize new funds; and "management failure" proponents suggest that the resources available are not being used well and large sums of money that are available are spread too thinly across a fragmented system. Although the question of just how much money there is in the system is surprisingly difficult to answer, this diagnosis will attempt to take a first stab at it.

There is not enough money where it is needed: Goals are a moving target and voluntary funds are unpredictable. The argument that there is not enough money in GEG is rarely contested because of systematic under-funding of treaty obligations, expanding institutional mandates, increasing environmental threats that need to be addressed or helping overburdened states to participate in the system. There is, however, surprisingly little information available on exactly how much money is invested in the system. However, the fact that there may be a significant amount of money in the system (see below) does not imply that there is *enough* money to do all that has been promised or is needed. There are, in fact, two kinds of "money questions" related to GEG. The first is about the amounts needed to actually manage the system and its various institutions and activities. The second, related but distinct, is about resources that have been promised, explicitly or implicitly, to developing countries to enable them to take on the commitments that are sought from them.

In terms of the first issues, the problem is not just the amount of money available for the functioning of the GEG system, but also its reliability. Fluctuation of resources is a key problem because of the heavy dependence on voluntary funding. UNEP is a case in point. Although designated as the principal UN policy body in the UN system, it has suffered from budget uncertainty from one biennial budgetary period to the next, unreliable voluntary contributions and donors' requirements to earmark the money for specific projects or purposes.[104] The primacy of the cash-flow challenge has contributed to UNEP's short-term focus and its unease with committing to the type of long-term and visionary programs that better fit its mandate.

In terms of the second issue, funding is both needed and was promised when developed countries reaffirmed in *Agenda 21* (Chapter 33) their commitment to reach 0.7 per cent of GNP for official development assistance; but only a few delivered. Asking for more money for GEG is also promoting the additionality principle in international law. Pressure from the South for additional funding also holds developing countries together and sets the accountability record straight. The money question, therefore, is seen by developing countries as fundamental to the bargain they had made in agreeing to enter the GEG system; from their perspective it is a bargain that was not kept.

The money that is available is neither managed efficiently nor used appropriately. The challenge is broader than just the question of how much money there is and how reliably it can be accessed. It is also a question of how the available money is used. The GEG system loses money through funding contradictions, overlaps due to GEG fragmentation and lack of synergies between available environment and development funding. Efficiency of the system is also constrained by the lack of transparency in financing for the global environment. The assumption that resources in the GEG system are used inefficiently is widely accepted and there is much anecdotal evidence of it. There is a deep sense that the GEG system spends significantly on keeping the "system" and its institutions going, but relatively little actually gets spent on environmental action. However, the fact that there is very little information on just how much money is flowing through the system and for what purposes, makes pinning the inefficiencies or doing something about them all the more difficult. In the final analysis, the reputation of the GEG system is undermined because it remains unclear whether the resources available within the GEG are being spent wisely, or even ethically.

Because of the fragmented system, there can be duplications and even contradictions in the spending by different elements of the system. For

example, the Multilateral Fund of the Montreal Protocol has spent between US$250–300 million[105] promoting HFCs and HCFCs as substitutes for ozone depleting CFCs, but the Kyoto Protocol now targets HFCs and PFCs (also promoted under Montreal) for reduction because of their greenhouse potential.[106] Even when contradictions are avoided, the fragmented nature of GEG necessarily results in fragmentation of funding for similar needs across treaties. For example, as activities of the Global Biodiversity Forum and efforts to cluster chemicals management suggest, potential for financial savings exists through closer cooperation. Savings from joint action could be in areas of capacity building, science and technology, legal and institutional matters, monitoring and reporting, information and awareness-raising, and program support services.[107]

Finally, despite the acceptance of a sustainable development agenda in Rio 1992, there is still a strong environment vs. development divide in financing. This was visible in the lack of interaction between the UN Summit on Financing for Development and the World Summit on Sustainable Development and the continuing failure of international financial institutions to fully redirect their financing and accountability towards the environmental aspects of sustainable development.[108] A sad example of the mismatch between environment and development is the lack of adequate funding for adaptation to climate change in low-lying coastal areas, which fight for their basic survival.

Although not "enough," there is more money in the system than we might imagine. It is frustratingly difficult to estimate the total amount of money available for environmental activities in the GEG system. But even the most basic back-of-the-envelope type calculations suggest that the system is better endowed than many imagine. This, of course, is not necessarily good news because (a) it is also true that most people would underestimate just how much money it takes to maintain a global governance system, and (b) it suggests that the fragmentation and inefficiency of the system is not allowing us to make best use of these resources. However, on the positive side, it suggests that in a more rationalized system there could be significant cost savings that could be diverted towards much-needed environmental action. Our very preliminary and rough estimation of only the key GEG institutions suggests that the basic funds that are channeled by multilateral institutions, treaty mechanisms, regional development banks and a few key environmental NGOs add up to nearly US$10 billion per annum (*see Annex 1*). A fuller and more thorough accounting of funds would probably show that the amount is much higher; but, even this amount can be considered significant, since this does not account for the bilateral and national flows of investment into global environmental issues.

Our very rough analysis highlights three key points: First, finding out just how much money is flowing through the system—and for what—is a first important step towards putting these resources to better use. Second, significant, but dispersed, investments are in fact being made in global environmental issues. Third, it is not necessarily bad that the money is dispersed to multiple recipients, what one wants is not concentration of resources at a single entity, but better communication and coordination among the multiple recipients.

Besides multilateral funding, other significant funds come from bilateral donors, innovative financing and market-based mechanisms, other NGOs and individual donors. Overall, the GEG system has an impressive array of funding opportunities for a whole variety of activities. The diversity of financial mechanisms has enabled all stakeholders in the system to see what works and when, and in this way move up the learning curve.[109]

Trends

The trends in terms of resource efficiency are mixed, but some positive trends are evident.

- *There is an active search for innovative funding mechanisms to service the GEG system*. Recognizing the need for new models of GEG financing, a number of attempts are underway to seek innovative financing models for environmental protection activities. Among the models discussed are cross-sectoral partnerships; UNDP and the GEF collaboration on innovative modes of concessional lending; the UNEP finance initiative; IUCN's work on self-sustaining financing mechanisms for conservation of the world's protected areas; currency-transaction taxes; "topic-specific" global funds; private sector involvement; "debt-for-nature swaps"; search for global markets for public goods; etc.[110] Innovative financing is clearly a necessity because multilateral funding cannot be large enough to realize *Agenda 21* and generate sustainable revenue flows to meet the needs of interested local communities. Still, it needs to complement rather than replace development assistance.
- *Efforts to capture the level of bilateral funding are improving*. For example, three markers for biodiversity, climate change and desertification were introduced in the OECD Credit Reporting System (CRS) in 1998, to capture transactions targeting the three conventions. The OECD/CRS provides a snapshot of the funding status of implementation of the three conventions and enables the users to analyze funding trends for specific issues. This system provides the first set of consistent and comparable funding data targeting the

three conventions, but it remains criticized for lack of completeness and accuracy of its output.[111]

- *Global Environment Facility: An experiment in coordinated funding.* The GEF is currently the only multi-convention financing entity. Despite its management woes, it does improve funding stability in the GEG and begins to realize the concept of clustering and has an innovative structure for financial decision-making. First, its regular replenishments contribute to funding stability in GEG, enable policy planning and ensure cooperation of developing countries. Second, it achieves synergies at the project level and looks across multiple issues in its decision-making. Third, the GEF adopted a double-weighted majority voting system, which requires a 60 per cent majority of the total number of participating states as well as a 60 per cent majority of the total amount of contributions made to the trust fund of the GEF.[112] The institution is beset with other problems, and the current replenishment negotiations are going poorly, but in terms of a single-window, coordinated funding mechanism it serves a vital purpose.
- *Towards better resource allocation frameworks?* There has been a heated debate on the GEF's limits when offering financial assistance to developing countries. The participants in the GEF's third replenishment requested establishing a framework for allocation based on global environmental priorities and on countries' performance. The framework has been agreed to in principle in September 2005, but it is still unclear how it will work in practice.[113]

Assessment

Inefficient use of resources is a common problem in the international system because of its complex nature, especially the existence of multiple actors and instruments, and lack of central control. Improving resource efficiency and transparency has become a major priority in recent years.[114] For example, the humanitarian field has benefited from the introduction of the Financial Tracking System (FTS),[115] which is a global, real-time database of humanitarian aid, managed by the UN Office for Coordination of Humanitarian Affairs. It indicates to what extent populations in crisis receive humanitarian aid, and in what proportion to needs, and helps mobilize responses of national, regional and international relief systems. The GEG system could learn from other fields, especially in terms of developing a financial tracking system.

Investing in the environment is not a key priority for most of the states in the international system, and environmental projects continue to

fight for attention. This was again visible at the 2005 World Summit in New York, where the outcome document's section on "Financing for Development" has no references to environmental issues.[116] Therefore, *both the quantity of funding and quality of its allocation are extremely relevant for sustaining the GEG system*. The most important aspect of addressing inefficiencies in the use of resources is improving institutional performance in GEG. In the Millennium Report, the UN Secretary-General imagined the UN of the future in a catalytic role: deriving its influence from values it represents, norms it sets and sustains, stimulation of global concern and action and the trust it inspires by practical performance.[117] The GEG of the future should follow this catalytic model.

Currently, the belief that the system is ineffective and wasteful of its resources comes with a heavy reputational price and creates further reluctance among uninterested donors. The problem is, therefore, a serious one and relates to: *(a) attracting new resources to the system; (b) better coordinating the use of the resources already available to the system; and (c) creating confidence in the system's ability to utilize both existing and new resources efficiently in terms of its institutional activities and effectiveness in terms of its substantive environmental activities.*

Challenge #5. GEG Outside the Environmental Arena

Many of the most important decisions affecting the environment occur outside the complex web of international treaties and organizations that comprise the formal GEG system. Decisions related to investment, development, and trade affect patterns of natural resource use, production and consumption to, arguably, an even greater extent than the negotiation of MEAs. Security and environment are linked through both the potential for conflict arising from scarcity of natural resources and environmental degradation in conflict zones. Environmental issues are also spilling over into the health arena, as the health risks posed by environmental degradation become increasingly prevalent.

The system of international trade consists of trade rules arising from World Trade Organization (WTO) Agreements and various Regional Free Trade Agreements and their respective dispute resolution mechanisms have particularly deep impacts on global environmental governance. The international system of finance and investment influences long-term national development trajectories through project finance and national economic policy of developing nations. Moreover, there is a large imbalance between trade and financial institutions and environmental institutions. The financial resources and political clout of Multilateral Development Banks (MDBs) and development agencies

dwarf those of UNEP and the GEF. It is not surprising that economic priorities often take precedence over the environmental considerations. The key issue facing global environmental governance is how to more effectively mainstream environmental considerations into economic decisions and into other non-environmental arenas.

Diagnosis

That environmental concerns are spilling over into non-environmental arenas is not a "problem." Indeed, it is an objective. The issue of mainstreaming is about ensuring that the links between environment and other issues are acknowledged and environmental concerns are given due importance in forums, regulations and policies dealing with these other issues.

Trade and environment: friends or foes? No one doubts that trade and environment are closely linked. It is the nature of the link and what should be done about it that remains disputed. Although the primary objective of the WTO is the liberalization of trade, the preamble of the 1994 WTO Agreement recognizes that trade should be conducted "in accordance with the objective of sustainable development, seeking to both protect and preserve the environment." Nevertheless, the legal obligations and policy priority of the WTO is, and will remain, trade. There has been a long debate about how to deal with environmental issues in the WTO context and in 2001 the Doha Ministerial of the WTO brought the environment directly into the WTO negotiating agenda. Developing countries have remained rather wary of using trade rules for environmental protection. Many developing countries argue that environmental standards that restrict trade are just another form of protectionism. However, others argue that trade can be a powerful tool for environmental protection and point out that trade is also used to promote the protection of other values, such as intellectual property.

Trade is also a frequently used instrument within MEAs. There are approximately 20–30 MEAs containing trade measures, generally restricting trade on certain products between Parties and/or non-Parties.[118] Measures include requirements on reporting trade flows, labelling requirements, permits and licences, export bans or systems of prior notification.[119] Trade measures can be quite effective in providing a means of compliance and enforcement. For example, the Convention on the International Trade in Endangered Species (CITES) bans or restricts trade in species considered endangered and permits the application of trade sanctions on Parties that do not comply. As of 2000, CITES had applied 17 trade bans, all of which induced the offending countries to return to compliance.[120] Other common trade

provisions used in MEAs include hazardous waste trade under the Basel Convention, prohibition of trade in ozone-depleting substances under the Montreal Protocol and restricting the import of some living genetically modified organisms under the Cartagena Protocol on Biosafety. Although this could technically be a violation of WTO rules, the issue has never been brought up before the WTO Dispute Settlement Body.[121]

Integration of environmental considerations into investment and development is crucial to effective environmental governance. *International investment rules can restrict the ability of national governments to implement environmental regulations*. Although there is no single treaty governing investment rules, myriad bilateral and multilateral treaties exist to facilitate foreign investment and, mainly, to reduce risks faced by investors.[122] Strengthening the rights of investors sometimes comes at the expense of national environmental regulations. Concerns over restrictions on governments to impose environmental and social standards also led to the demise of the proposed Multilateral Agreement on Investment (MAI) in 1998, which would have significantly strengthened investor rights.[123]

National regulatory frameworks to integrate environmental considerations into private sector investment are often not strong enough. Foreign direct investment flows have significant implications for environmental sustainability in the short and long run. For example, investments in fossil fuel-based energy production can lock in a greenhouse gas-intensive energy strategy for a generation. On the other hand, private sector investment flows are critical to add sustainable energy resources, sounder industrial processes, and better natural resource use. Climate change mitigation, in particular, will require heavy investment into climate-friendly energy technology. Ideally, environmental considerations should be integrated into private sector FDI through national level policies. However, the steep increase in FDI has outpaced the ability of many countries to implement appropriate regulatory frameworks and the desire to attract FDI has even retarded efforts to do so.[124] Even where strong regulations exist, developing countries also lack the capacity to execute effective enforcement.

Multilateral Development Banks (MDBs) and bilateral aid agencies manage huge portfolios of investment with significant environmental implications. Like private sector investment, MDBs and bilateral aid agencies finance infrastructure and other development projects that impact patterns of natural resource use, production methods, and consumption patterns. Although FDI dwarfs flow from MDBs and bilateral aid agencies, these public financiers exercise a great deal of influence over

national policies. The World Bank and the IMF use structural and sectoral adjustment loans that are tied to policy changes. MDBs, the IMF, and aid donors also work closely with developing country governments in providing policy advice and capacity building. However, over the years MDBs have incorporated environmental concerns into their processes and standards, although their critics maintain that more still needs to be done.

Health, environment and human security. Poverty, infectious disease and environmental degradation have been recently defined in a common cluster as threats to international security.[125] Health topics have been moving to central places on the international agenda. It has been argued that the expansion of conventional international health law is emerging as an important tool for multilateral cooperation.[126] Environmental risk factors that greatly affect our health include: unsafe water, sanitation and hygiene, urban air pollution, indoor smoke from solid fuels, lead exposure and others, but key concerns at the global level relate to potential health impacts of climate change arising from increased exposures to thermal extremes, from increases in weather disasters, changing dynamics of disease vectors, etc.[127]

Environment, peace and security. Principle 25 of the 1992 Rio Declaration says: "Peace, development and environmental protection are interdependent and indivisible." Recent events in the international system reaffirm the importance of this principle. Namely, conflicts over illegal exploitation of natural resources have been discussed at the Security Council level (e.g., Congo and coltan), sudden natural disasters outlined the imperative of sustainable development, climate change has raised serious security concerns over vulnerable populations, millions of climate refugees and their uncertain legal status and eventual destabilization due to reduction of carrying capacity and possible food, water and energy scarcity.

Trends

The general trend in this area is a positive one and points towards greater integration of environmental concerns into other policy areas. However, the pace and extent of such mainstreaming and policy coherence remains a concern.

- *The WTO is, slowly, coming to accept the trade and environment linkage* and there are a number of signs of forward movement, but very slow forward movement. Although the Doha round of negotiations has landed into troubles of its own, that discussion has clearly moved environmental issues from the WTO Preamble directly into the substantive agenda of this and any future negotia-

tions. These negotiations have not yet borne fruit in meaningful ways, but simply by being part of the negotiating agenda they have assumed greater prominence. Importantly, there are serious discussions within the WTO establishing more meaningful working relationships with relevant MEA secretariats.

- There are moves towards *incorporating environmental objectives into investment agreements*. There are approximately 2,500 international investment agreements (IIAs) currently in force, most of which cover certain basic principles and tilt the balance of rights in favour of investors and may conflict with legitimate national exercises of environmental regulation and even the fulfillment of obligations under MEAs.[128] It is being argued that this model for IIAs is outdated and a new approach is necessary to meet the needs of sustainable development and the global economy of the 21st century.[129]
- *Multilateral development banks and international financial institutions are beginning to develop their own principles and standards for environmental performance* and these standards are becoming more robust. Although debates persist about the legitimacy of such standards, the World Bank and other MDBs now apply Environmental Impact Assessments on projects prior to approval. The International Finance Corporation, for example, has recently approved a new set of environmental and social standards. The World Bank has its own established standards, although debates persist about their efficacy. Regional development banks are in the process of updating their standards. These have also led to such standards being developed by the private sector. For example, the Equator Principles is a voluntary initiative by adopted banks to promote better environmental practices. Pressure from NGO groups accusing banks challenging the commercial banking industry for "bankrolling disasters" catalyzed the creation of the Equator Principles, a set of social and environmental principles based on the World Bank and IFC environmental standards.[130] The Equator Principles have been adopted by some of the largest international financial institutions, such as HSBC and Citigroup. These institutions will require their customers to, for example, create social and environmental plans and comply with them.

Assessment

The link between environment and other fields is a reality and it is a positive trend that these linkages are being increasingly acknowledged in multiple forums. The problem, however, is the less-than-satisfactory

levels of interaction and cooperation between environment and other arenas. The challenge is also to encourage these other arenas to incorporate environmental linkages more fully and more positively into their policy frameworks.

Cooperation among fields becomes challenging when disputes arise among different bodies of law; this has been the perceived challenge within the trade and environment arena. However, particularly with the Doha Round negotiations, the trade system has begun to acknowledge the importance of environment and there are attempts for the WTO to better coordinate with relevant MEA secretariats. The international system in general has been witnessing a powerful move to law in issue areas like human rights (European Court of Human Rights, International Tribunals and International Criminal Court) and trade (WTO Appellate Body, international commercial arbitration).[131] The GEG system, however, has not followed this trend. Environmental governance systems have been built around the concept of convincing parties of the utility of environmental action and providing them financial and other incentives (e.g., Montreal Fund, etc.) to comply. While such GEG methods are positive, as the environmental field matures, we should also expect the emergence of forums of dispute resolution.

Challenge #6. Non-state Actors in a State-centric System

The debate on environmental governance has largely centred on how to reform a state-centric system of international organizations, multilateral treaties and national government implementation. The shortcomings of GEG are analyzed in terms of the inability of international organizations to coordinate activities and the failure of national governments to implement treaties. As a result, the traditional approach to GEG reform often overlooks the tremendous contribution and increasing involvement of civil society actors and the private sector in international policy-making, capacity building and implementation.[132] NGOs are playing an increasingly large role, not just as stakeholders, but as "motors" of international environmental policy-making through setting agendas, drafting treaties, providing scientific information and monitoring implementation.[133] Local and international NGOs also engage in implementation and capacity building. In addition to the achievements of civil society, great strides have been made in engaging the private sector as partners in development and environmental protection rather than as culprits of environmental degradation.

Although the UN has begun incorporating non-state actors into the GEG system through greater access to policy-making forums and through partnerships, the current state-centric nature of global envi-

ronmental governance does not allow civil society actors the institutional space to realize their full potential. Rather than analyzing the "problem" of non-state actors, this section examines the "potential" for non-state actors to strengthen environmental governance and work towards sustainable development.

Diagnosis

It is quite clear that civil society and the private sector are important actors within the global environmental governance system, that their importance is growing, and that there is the potential for them to contribute more to the effectiveness of the GEG system.

Civil society plays a key role in GEG. NGOs have played a crucial role in global environmental governance from generating agendas, providing information and research for negotiations, mobilizing public opinion, implementation and monitoring. On a national level, NGOs have been involved in drafting national strategies and regulations and have even served as technical advisors to governmental negotiations.[134] NGOs were key catalysts to the creation of many conventions, including the Aarhus Convention on Public Access, CITES and the Convention on Biodiversity.[135] Even the creation of international environmental organizations, such as UNEP, the GEF and the CSD, were partly due to the active efforts of civil society.[136]

- *NGOs are important knowledge providers*. Organizations such as the World Resources Institute (WRI) and IUCN – The World Conservation Union specialize in providing up-to-date research and data on pressing environmental issues. The *Global Environment Outlook*, produced by UNEP, is a good example of a formalized collaboration of an international organization and civil society.[137] The *Millennium Ecosystem Assessment*, launched by Kofi Annan, was produced by a partnership of representatives of international conventions, leaders from the private sector and civil society.
- *NGOs are active in creating international norms*. Through awareness campaigns and education, NGOs can apply the political pressure necessary to induce governments to agree to international agreements. For example, the International Campaign to Ban Landmines, a coalition of 1,400 NGOs from 90 countries, convinced 146 countries to sign a landmine ban at a time when 52 countries were producing landmines and 2.5 million landmines were being laid each year.[138] The vigorous efforts of NGO networks led to the creation of the World Commission on Dams to set norms for greater weighting of environmental and social impacts of dam-building during the financial decision-making process.[139]

- *NGOs are key implementers of environment and development programs in many developing countries*. For example, in Chennai, India, the "Civic Exnoras" associations manage the primary waste collection for half a million people. The Rural Advancement Committee in Bangladesh has a 17,000-member staff that works with more than three million people in rural communities and has established 35,000 schools.[140] Internationally, the coalition of NGOs that form TRAFFIC, the wildlife monitoring network for the 1975 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), plays a critical role in the implementation of CITES.[141] NGOs are deeply involved in implementation of *Agenda 21*, and their role in capacity building and monitoring is significant.

The Private Sector: From opponents to partners? Businesses have faced both internal and external pressures to become more environmentally friendly. Transnational corporations have long been characterized as culprits of global environmental degradation, moving capital and production to countries with the lowest environmental standards in search of higher profit margins. However, since the 1990s, the UN and some civil society actors have changed tactics by engaging the private sector in partnerships to become part of the solution through voluntary corporate social responsibility. The private sector has also begun to respond with initiatives such as the World Business Council on Sustainable Development (WBCSD).[142] At the same time, clean technologies are getting cheaper and it has been shown that carefully crafted, moderately demanding regulations can inspire businesses to create profitable, environmentally friendly innovations.[143] A few interesting initiatives are listed here:

- *The Global Compact*. In 1999, at the World Economic Forum, Kofi Annan challenged business leaders to join a Global Compact that would bring together companies with the UN, unions and civil society to support universal environmental and social principles. Launched in 2000, the Global Compact consists of 2,300 participants that have pledged to advance 10 principles related to human rights, labour, the environment and anti-corruption.[144] The Global Compact is fully voluntary and has no enforcement mechanism.
- *Voluntary Partnerships*. The WSSD in 2002 led to the creation of some 300 new voluntary and non-binding "partnership agreements" between and among governments, the private sector and NGOs.[145] These "Partnerships for Sustainable Development" cover a great diversity of issues including energy, freshwater, science and education, biodiversity, trade, desertification, and poverty eradica-

tion and a diversity of functions, such as implementation or policy-making. However, critics argue that little tangible action and implementation has come out of these "Type II" Partnerships.

- *Environmental Reporting, Voluntary Standards and Environmental Management Systems*. An increasing number of businesses have begun issuing environment/sustainable development reports as part of their corporate social responsibility programs. Up to 10,000 corporations publish environmental reports, including 45 per cent of the 250 largest companies in the world.[146] To create a standard for high-quality reporting, a coalition of NGOs, business and international organizations have created the Global Reporting Initiative (GRI) which has developed a set of internationally recognized sustainability reporting guidelines.[147] NGOs are often heavily involved in developing such standards and/or in the verification and accreditation process. Notable examples include the Forestry Stewardship Council, a globally accredited standard for sustainable forest management. Companies are also beginning to develop Environmental Management Systems (EMSs), sets of policies defining how a company will manage the environmental impacts of its operations, which often exceed legal requirements for compliance. Many are choosing to implement EMSs that are accredited by the International Organization for Standardization's (ISO's) 14001 Standard and Europe's Eco-Management and Audit Scheme (EMAS).[148]

Trends

There are a number of trends that can be built upon during the GEG reform process.

- *NGOs are becoming increasingly involved in international policy-making*. The explosion of NGOs into the GEG system began with the Rio Conference in 1992. The United Nations Conference on Environment and Development (UNCED) Secretariat began the trend by relaxing the accreditation rules for NGOs to attend the conference. *Agenda 21* affirmed that the commitment and genuine involvement of non-state actors is critical to achieving sustainable development goals.[149] Successive world conferences would follow this model, each using its own accreditation process as there were no formally integrated rules for NGOs participating in international conferences.[150] Almost 3,000 NGOs participated in the Johannesburg World Summit on Sustainable Development (WSSD). NGOs are a permanent presence at MEA negotiations and many governments have gotten into the regular practice of

involving NGOs in their negotiation preparations and sometimes in negotiation delegations; however, such practices vary widely and some governments remain opposed to increased NGO participation on sovereignty grounds.

- *UNEP's Global Forum and annual CSD meetings are becoming important venues for state and non-state actors to interact*. Both CSD and UNEP have been particularly forthcoming in encouraging their participation at their flagship events. Indeed, especially for the CSD, one of the biggest values of these events is that they bring together state and non-state actors in a setting where dialogue, interaction, networking and mutual learning can happen.
- *The integration of partnerships into international organizations needs work, but is growing*. The need to improve coordination with non-state actors (NGOs and the private sector) is being acknowledged by the UN at the highest levels. A recent report of the Secretary General of the UN describes partnerships as one of the UN's "major innovations" and calls for the UN to move towards a more systematic approach to partnerships with a greater emphasis on impact and sustainability. A few examples of developments in partnership work include:[151] (a) the creation, by the CSD, of an interactive online database of partnerships and partnership fairs being held at CSD sessions; and (b) the creation, by the UNDP, of a Division for Business Partnerships to create the necessary institutional structures, policies and capacity to manage partnerships with non-state actors.

Assessment

There are no silver bullets. Neither NGOs nor the private sector are substitutes for government action.

NGOs are by no means a panacea or replacement for government regulations and programs, but they play a key role as catalysts, partners and innovators in GEG. NGOs are not the answer to all the problems of global environmental governance. Civil society organizations are just as susceptible as governments to issues of legitimacy, transparency and accountability.[152] Similarly, there are limits of voluntary action by the private sector in the absence of government regulation. Voluntary corporate social responsibility and codes of conduct are seen as important tools for environmental governance, but voluntary action has limitations. Critics argue that many voluntary codes are little more than public relations ploys. Voluntary codes are often declarations of vague business principles and lack independent performance monitoring. Others further argue that the sustainability partnerships and the Global

Compact are "green wash" and a mechanism through which states can avoid making binding commitments.[153] At the same time, it is becoming clear that businesses have started turning from opponents to partners and NGOs have become much more than stakeholders: they are driving the agenda at the national and international level and acting as "civic entrepreneurs," i.e., experimenting with new ways of affecting social change, which can then be scaled up by government and the private sector.[154]

In a number of areas, including the environment, there is the emergence of global public policy networks (GPPNs), or non-hierarchical, multicultural partnerships that bring together governments, international organizations, corporations, and civil society.[155] The emergence of GPPNs results from the realization that civil society on the one hand and the private sector on the other have important roles to play but so does government. Each has comparative advantages which need to be nurtured: governments with their legitimate right to make and implement regulations; the private sector with its ability to use market forces; and civil society with its nimbleness and commitment to values. None of these can be a silver bullet, and the ideal condition is where each operates to its strengths and in concert with the others. The problem, to the extent that there is one, is that the GEG system remains a predominantly state-centric system and has not evolved to allow for this sort of concerted action.

There are a number of institutional impediments preventing partnerships with business and civil society from realizing their full potential. In many UN organizations, partnership work remains "at the institutional fringes, conducted parallel to, but disconnected from, the main lines of work."[156] UN bodies often do not have resources available specifically for partnership work and legal hurdles contribute to time lags in implementing partnerships. Furthermore, there is a need for greater transparency and consistency in partner selection and a mechanism for systematic and comparable assessment of partnerships. The integration of non-state actors into intergovernmental GEG institutions has generally happened on an ad hoc basis. Consequently, there is now a need to re-examine institutional structures, which were created to serve a state-centric system, and formalize mechanisms for allowing partnerships with non-state actors to reach their full potential.

Chapter 3

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"There is much in the GEG system that does, in fact, work well. Moreover, there are a number of encouraging trends that can, and should, be built upon."

"Ultimately, all GEG efforts must be for the purpose of improving the actual state of the global environment. This can best be achieved if a systemic (as opposed to a piecemeal) approach is taken."

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Chapter 3
Elements of a Reform Agenda

The previous two chapters have presented a broad evaluation of the intense debates that have been ongoing on the various dimensions of the global environmental governance challenge. Our purpose here has not been to present an exhaustive review of these discussions. Rather, we have sought to only highlight what we believe are some of the key aspects of the intellectual and policy debates on GEG reform. The premise of this study is built upon the following ideas:

- First, any calls for GEG reform should begin with a recognition of—indeed, a celebration of—the *important strides made by global environmental policy over the last three decades*. Having said that, there is a *clear—and urgent—need for global environmental governance reform*. Such reform is most likely to be effective if it comes along with system-wide UN reform.
- Second, while the need for reform is urgent, the reform agenda need not be drastic. There is much in the GEG system that does, in fact, work well. Moreover, there are a number of encouraging trends that can, and should, be built upon. In short, *the system need not be entirely dismantled to be rebuilt*. However, this is not to propose merely cosmetic change. Instead, it is to suggest that the reform agenda should strengthen those elements of the GEG system that do work, while at the same time *targeting a limited number of the most critical challenges and deficiencies*. Conceptually, as well as strategically, the need is for a small but targeted agenda of reform that is both doable and worth doing. *Grandiose schemes for massive overhaul of the GEG system are neither desirable nor realistic*.
- Finally, in order to be meaningful, a reform agenda should not only be targeted at the most important challenges and concerns, but should also be *contextualized within a larger and longer-term vision of what the eventual state of the GEG system should be like*. While the immediate steps should be identified with an eye on that which is desirable and doable, the ultimate goals of the reform agenda should be more ambitious and should be clearly in sight. *Ultimately, all GEG efforts must be for the purpose of improving the actual state of the global environment*. This can best be achieved if a systemic (as opposed to a piecemeal) approach is taken.

In building from these broad ideas, it seems to us that the most appropriate place to start is not by thinking about what *should* be done, nor

even about what *can* be done, but rather to start from thinking about *why* we want to do anything at all. Do we have a shared vision of what the global environmental governance system should eventually look like? What is it that we want the GEG system to do? What is the direction that we want the system to move in? What, after all, is the purpose of GEG reform? Having a longer-term vision of the direction that we want the GEG system to move in will not only allow us to identify the short-term measures that might begin moving the system in that direction, but should also help us in evaluating the progress towards those goals, and making any course corrections that might be necessary.

As dicussed in Chapters 1 and 2, there does seem to be an unstated but robust consensus on what should be the central goals of the GEG system. Five goals, in particular, stand out as being particularly important and command broad-based support:

- ***Goal #1. Leadership.*** The GEG system should grasp the attention and visible support of high-profile political leaders. The key institutions within the system should be managed by leaders of the highest professional calibre and international repute; all working together towards the best interests of the GEG system as a whole.
- ***Goal #2. Knowledge.*** Science should be the authoritative basis of sound environmental policy. The GEG system should be seen as a knowledge-based and knowledge-producing system.
- ***Goal #3. Coherence.*** GEG should operate as a coherent "system" with reasonable coordination, regular communication and a shared sense of direction among its various elements.
- ***Goal #4. Performance.*** The institutions that make up the GEG system should be well-managed; they should have the resources they need and should use these resources efficiently; and they should be effective in implementation. The ultimate purpose of the GEG system is to improve the global environmental condition.
- ***Goal #5. Mainstreaming.*** The GEG system should seek to incorporate environmental concerns and actions within other areas of international policy and action, and particularly so in the context of sustainable development.

We believe that these goals can be the basis of a shared global vision for the global environmental governance system. While many different ideas have been proposed for the reform of the GEG system, most of them seek to actualize some or all of these goals in various ways. Indeed, there are many different pathways that could be adopted to arrive at these goals. The remainder of this chapter will outline one set

of pathways and a set of practical recommendations for how the GEG system may be better aligned with these goals.

It should also be noted that although the recommendations below are divided broadly around the five major goals identified above, many of them overlap and have multiple benefits. For example, one of the recommendations made in the leadership section—appointing the same individual as executive head of multiple related MEA secretariats—would not only encourage outstanding candidates to be interested in these positions, but would also enhance system coherence. Many other recommendations also have similarly parallel and overlapping benefits in multiple areas, even if they are discussed in only one section.

Goal #1. Leadership

There is probably no better investment in GEG reform than an investment in leadership. The larger goal is a GEG system that commands the respect, attention and active support of high-profile world leaders; and is composed of institutions that are led by the most outstanding, able and competent leaders available, who view the overall goals of GEG excellence as the common cause and purpose of all organizations within the system. Leadership, in this sense, is not only a driver of system-wide excellence, it is a sign of it.

Leadership is a broad concept and can mean different things. Here we refer only to individual leaders—both in terms of the political capital that world leaders are willing to invest in the GEG system and its reform, and also the individuals who lead the various institutions within the GEG system. Moreover, in talking about leadership within the GEG system we refer to the collectivity of individuals leadings the various components of the global environmental system, in particular, UNEP, MEA secretariats, various international environmental funds, etc. What we need is: (a) a cadre of political "champions" for the environment; (b) improvement in the selection of the leaders and the management of global environmental organizations; and (c) a demonstrated commitment among this leadership to hold the common interests of the GEG system above the interests of their organizational fiefdoms. Some steps that might move the GEG system in this direction include:

- ***Mobilize a coalition of high-profile, well-known and widely respected world leaders, who can visibly and consistently champion the cause of GEG reform.***
  - Countries and individual world leaders who have already taken the initiative to raise this concern should *identify and convene other committed international leaders—including current and*

former government leaders as well as civil society leaders, environmentally-conscious famous personalities, etc.—to invest their political capital and public profile to push for improved global environmental governance and performance. This will not only keep the topic alive in the public mind, but will give space and sustenance to champions of change within the system, including to institutional and domestic environmental leadership.

- Such a coalition of world leaders (serviced by a technically and politically competent secretariat) could use their own convening power as well as existing high-impact forums such as G8 meetings, European Union Summits, the UN General Assembly, the World Economic Forum, the World Social Forum, etc. to highlight the need and to demonstrate their support for a strong and meaningful GEG system.
- The EU may be particularly well-placed to take the lead in mobilizing such a coalition given that a number of EU leaders and Member States are already committed to GEG reform.

• ***Streamline the process of selecting leaders of environmental organizations with the explicit goal of improving the GEG system as a whole.***

- Invest in the selection of leaders for global environmental organizations—e.g., UNEP, key MEA secretariats, environmental funds, etc.—who explicitly support and have demonstrated a willingness to invest in system-wide GEG reform, including on key issues such as MEA clustering, financial coordination and transparency, and institutional harmonization. *The best—and possibly only—time to influence the leadership of these organizations is at the time of their selection*. If stated criteria for selection include the commitment to institutional harmonization and GEG system reform, candidates will be motivated to think about inter-institutional relations and beyond institutional fiefdoms. In particular, *candidates for heads of UNEP, MEA secretariats, environmental funds, etc., should be encouraged (if not required) to articulate their vision of how to enhance the coherence among various components of the GEG system and the steps they plan to take to make the GEG system more coherent*.
- At a broader level, there is a need to continue, strengthen and build upon recent innovations in the selection of leaders for environmental organizations. To produce credible and competent leadership, the selection process should be transparent

and rigorous. *The criteria should be a demonstrated track record of political as well as managerial competence.* In order to attract the best possible candidates, a wide net should be cast, both in terms of who might be considered and in terms of processes to identify eligible candidates (e.g., identification by states, by NGOs, by eminent individuals, by head-hunting agencies, through public discourse, etc.). While the process should not jeopardize the existing careers of potential candidates, it should include a process of wide review and consultation with multiple GEG stakeholders.

– *One practical way of attracting the best candidates and enhancing GEG coherence might be to appoint one individual to be the executive head of more than one related organization, especially multiple MEA secretariats on related issues.* This is not without precedent (UNEP and HABITAT have had common leadership) and may be logistically feasible even if the secretariats are not co-located. Importantly, this might force a degree of coherence within that issue cluster, create an incentive structure to seek environmental synergies and reduce unnecessary turf battles.

• ***Once selected, leaders of global environmental organizations should be given the independence and resources to lead their institutions with, and towards, excellence.***

– Member States (much like board members in a corporate setting) should seek clarity, direction and detailed plans from the leadership of international environmental organizations but, beyond that, should provide these leaders with the ability to implement their plans. This would include *the ability to recruit the best people to work with them, including bringing in a senior management team of their choice* with which they are comfortable and in whom they have confidence.

– Institutional leadership flows from the executive head, but is also a function of the senior management team within the organization. Heads of UNEP, MEA secretariats, and other international environmental agencies have the responsibility—and should have the authority—to *select the most competent and inspired management leadership within their organizations.*

Goal #2. Knowledge

Ultimately, the legitimacy of the GEG system comes from its performance (to be discussed later). Legitimacy also flows from the GEG system

being seen as a knowledge-based and a knowledge-producing system. The goal of such a system is to ensure that global environmental policy is based on sound science and meaningful inclusion of the legitimate environmental interests of all key stakeholders, including developing and industrialized countries and relevant non-state actors.

In order to reestablish science as the basis of global environmental policy, institutions that make up the GEG system—and particularly UNEP, which is at the core of this system—should be seen by all as being among the first place to look towards when one needs to get authoritative science. This, indeed, was one of the founding purposes of UNEP. It should remain an enduring goal of the emerging GEG system. UNEP, as an institution, lost its credibility when it allowed its technical competence to be eroded. It needs to regain this credibility. Some useful steps in this direction would include:

- ***UNEP should become a preeminent convener and catalyst of authoritative, cross-cutting and relevant science on issues related to the global environment.***
  - This does not mean that UNEP needs to turn itself into a research-only organization. However, it does mean that UNEP should be *catalyzing* the most cutting-edge scientific work on global environmental issues (as it sometimes has in the past). Technical competence and scientific prominence should be UNEP's key goals. Existing UNEP Collaborating Centres could play an important role in this process.
  - A first step in this direction would be *the creation of a highly-independent, high-profile and high-level office of "Chief Scientist" within UNEP, staffed with scientists of international repute who can conceive, coordinate, convene and catalyze an ongoing program of cutting-edge scientific research and enquiry*. Not only should the world see UNEP as a source of authoritative environmental science, but leading scientists should view UNEP as the scientific collaborator of choice. The role of the UNEP Chief Scientist would be to use UNEP's convening power and platform to galvanize leading scientists and scholars outside of the GEG system (including within academia, NGOs and the private sector) to undertake relevant research and to then coordinate and synthesize the results of such research for policy-makers.
  - As the principal environmental advisor to the UN Secretary General, the UNEP Executive Director should then be able to provide the UN system and the world with authoritative scien-

tific assessments of the state of the global environment, of ongoing policy initiatives (e.g., MEAs), and of unforeseen environmental challenges (e.g., the 2004 Asian Tsunami).

- ***Strengthen and rationalize knowledge cooperation within the GEG system.***
  - There is an urgent need to rationalize the number of scientific bodies within the GEG system, and particularly the subsidiary bodies for scientific and technical advice (SBSTAs) of MEAs, whose activities have proliferated in recent years. In practice, many of these SBSTAs have turned into politicized forums and are often attended by negotiators rather than scientists. The proliferation of SBSTAs adds to negotiation fatigue and balkanizes otherwise related issues. *There is an urgent need to integrate various SBSTAs, reduce their number but enhance their scientific profile, and depoliticize them*. The goal is to have a smaller number of more integrated SBSTAs that can cultivate integrated scientific discourse and build scientific capacity (especially in developing countries and at regional levels). Even where clustering and uncluttering may be difficult for MEA negotiations, the case for clustering and issue-integration at the SBSTA level is compelling for scientific issue-linkage reasons alone.
  - Furthermore, *knowledge production within the GEG system should be made more inclusive by ensuring fair representation of developing country experts within global processes*, and also by building developing country capacity for meaningful participation in such processes. *Non-state actors should also be provided the opportunity to contribute to global knowledge creation and knowledge sharing*. NGOs as well as the private sector often have access to information and insights not available to states and can—and have in the past—contribute to the identification of innovative solutions to complex environmental problems.
- ***Ensure the independence and authoritativeness of scientific assessments and research produced by various elements of the GEG system.***
  - Many international organizations (e.g., the World Bank, UNDP, World Health Organization, UNICEF, etc.) are known for producing timely, independent and cutting-edge policy research. UNEP, in particular, needs to emulate this model of *independent authoritative research*.

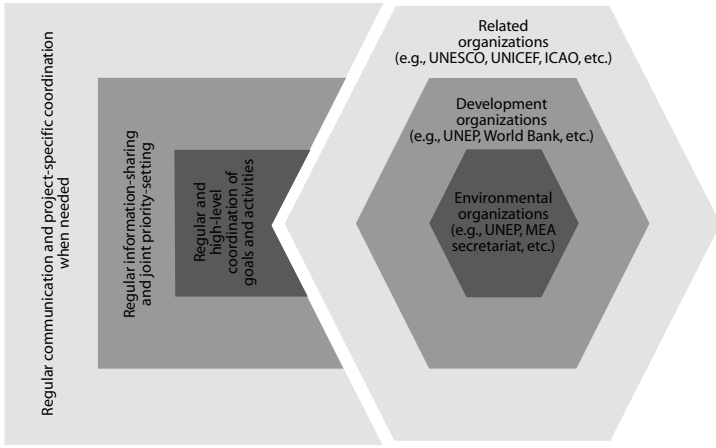
- As a first step, the *Global Environment Outlook* process should be restructured into an integrated assessment—modelled in format as well as process after the *Millennium Ecosystem Assessment*—to be facilitated by UNEP but produced by independent multi-sectoral experts to periodically review: (a) the current state; (b) the future challenges; and (c) the performance of existing and emerging policy initiatives related to the global environment.
- UNEP should also take a more active role and greater ownership of the numerous research initiatives that already carry its moniker (e.g., IPCC reports, the *Millennium Ecosystem Assessment*, *World Resources* reports, etc.). Additionally, it should seek closer collaboration with related UN reports, for example, the *Human Development Reports*.
- UNEP should also become the repository and producer of timely topical reports on existing and emerging environmental challenges, and should be the convener of choice for topical integrated assessments in other areas that are modelled after the IPCC. All of this can only happen if the independence of the processes is maintained, and the process of research generation and political discussions are kept separate.

Goal #3. Coherence

The never-ending search for system-wide coherence has been a perennial challenge for the GEG system. In many respects this is an impossible challenge. After all, environment touches everything and, therefore, all international organizations have a role to play. To expect any single organization, least of all an under-resourced organization such as UNEP, to "coordinate" the environmental activities of all organizations in the international system has been a recipe for frustration. Coherence is also a rather abused term in that it has come to mean different things to different people. We believe that coherence is, indeed, a key goal of the GEG system and the various organizations in the system should have a shared global environmental vision and should be seen to be moving in a common. *Coherence requires reasonable coordination and regular communication among organizations. However, it does not require a "super-organization" for the environment, nor does it require a central control mechanism to coordinate every environmental action of every organization in the international system.*

Important distinctions need to be made between at least three types of international organizations: (a) organizations whose primary and

principal focus is on the environment (e.g., UNEP, GEF, MEA secretariats, etc.); (b) organizations with broad mandates of development project implementation, including the environment as a focus area (e.g., UNDP, the World Bank, regional development banks, etc.); and (c) organizations whose activities are related to the environment, but for whom environment is not the principal focus (UNESCO, UNICEF, WFP, ICAO, etc.). Different levels of coordination are required for different organizations. In general, a high level of regular coordination of goals and activities is required among the first group; reasonable coordination with regular information-sharing and joint priority-setting is desired between the first and second groups of organizations; and the goal for all three groups should be regular communication leading to reasonable coordination on a project-specific basis.



In this section we highlight some recommendations to address the coherence challenge at these various levels, but especially in relation to facilitating meaningful coordination among international environmental organizations:

- ***The GMEF should be the principal high-level forum for political decision-making on strategic issues related to global environmental governance.***
  - There are currently too many "high-level" forums calling for the attention of key environmental decision-makers. Participation in many of these forums (for example, at various COPs) tends to be thin and is often less "high-level" than

expected. *The Global Ministerial Environmental Forum (GMEF) should become the principal regular forum for high-level political decision-making on issues related to GEG*. Ministerial involvement at environmental negotiations should be less frequent but more meaningful in that (a) it should be required only when there are important political decisions to be made; and (b) wherever feasible, economic and development ministers should also be included.

– The GMEF, because it includes ministers charged with all environmental issues, should take a more active role in reviewing the state of, and setting the direction for, global environmental governance, not only at UNEP but across all global environmental organizations as a whole. Therefore, MEA secretariats and other relevant organizations should be asked to present their progress (towards actual environmental improvements) at GMEF meetings.

• ***A strengthened UNEP should serve as the hub of a coherent GEG system.***

– *A strengthened UNEP should become the hub of a coherent GEG system with the UNEP Executive Director as the principal advisor to the UN Secretary General on all matters related with the environment*. There is no need for a "super-organization" for the environment. However, given its mandate, history and experience, UNEP should clearly remain the central organization for all matters related to the environment. In order to do so, UNEP will need to revert to its original focus of technical competence and away from more operational projects that are better implemented by other agencies.

– One step would be to upgrade UNEP into an "Agency," rather than a "Programme," with the concomitant ability to assess its own budget (more on UNEP funding below). This does not imply that all organizations have to somehow be placed "under" UNEP, nor should this entail serious reformatting of UNEP's existing structure. However, it does mean that *UNEP should be given the resources and the ability to "coordinate" the system that it is supposedly at the centre of (especially in terms of coordinating other environmental organizations)*. UNEP's coordination mandate should be realistically reassessed and clarified. Issues on which UNEP can become the lead system-wide agency in terms of coordination would include capacity-building, periodic reporting on the performance of the GEG system,

development and maintenance of a Financial Tracking System for the Environment, and the facilitation of independent and authoritative knowledge assessments (IPCC, Biodiversity Assessment, Millennium Ecosystem Assessment, etc.).

– UNEP must not be seen to be in competition with the very organizations it is supposed to be coordinating. *UNEP should focus on broad policy issues, capacity building, and knowledge generation. It should not be involved in managing projects*. Other agencies in the international system are much better equipped to manage development projects and UNEP should only serve in an advisory capacity on these.

• ***Efforts to combat MEA proliferation should be accelerated.***

– Better policy coherence requires better horizontal integration of GEG. First, there should be *a commitment to deal with new issues in the most appropriate existing forums rather than creating new instruments and institutions. Second, the experiments underway on MEA clustering (e.g., chemical treaties) should be supported, and other issue areas should be encouraged to follow suit*. This could include back-to-back meetings of related COPs; joint meetings of technical bodies (see above); joint or adjacent secretariats (where possible and including virtual co-location); finding permanent rather than rotating venues for meetings; appointing joint executive heads of multiple and related MEA secretariats (see above); etc. Both the duration and frequency of COPs could be streamlined by making the high-level segments less frequent (once every three years, for example) so that more focus can be placed on implementation and performance (this might even spur higher level participation in these forums that are currently too numerous and too frequent to command the attention of the most important decision-makers).

– Importantly, there is a need to *check the expansion of the mandates of MEA secretariats*. The role of the secretariats should be to facilitate the negotiation processes and they should not be distracted from this. For example, activities related to science, capacity building and conference services can be appropriately outsourced to other parts of the GEG system It should be clear that the autonomy of the legal agreements does not imply autonomy of the secretariats.

– *Donors could encourage MEA collaboration and clustering by providing a financial incentive (additional funding) for those*

who pursue it. This is especially pertinent since MEA clustering and collaboration can lead to significant cost savings.

– Experiments already underway on MEA clustering (e.g., chemical treaties), should be encouraged and other issue areas should be given incentives to follow suit. Where clustering is not possible or feasible in the immediate term, less frequent but more result-focused meetings of the COPs should be encouraged to combat negotiating fatigue, reduce costs and free up time for implementation.

– Finally, *the reporting requirements of various MEAs should be streamlined, clustered and focused on implementation*. Reports required from countries should be less frequent, more integrated and also focused on implementation. Additionally, *MEA secretariats should be required to periodically produce and present synthesis reports to the GMEF* highlighting how the implementation of the goals and targets of that particular MEA is progressing and what future implementation challenges are envisaged.

– The overall purpose of these recommendations is to *begin moving the system from its current negotiation orientation to an implementation and performance orientation* by making MEA negotiations more focused, less tiring and better integrated.

• ***The UN Environmental Management Group (EMG) should be restructured to meet the different coordination needs of different agencies.***

– The EMG was, and remains, a good idea but has never been able to generate the type of high-level participation that its design called for. It is unlikely to do so, partly because it is already too large and has too many disparate agencies, and largely because there is little clarity on the purpose of coordination. While all the agencies represented in the EMG have a stake in the global environment, they have very different stakes. *EMG should be strengthened in order to meet its mandate, it should have adequate resources and it should seek a clear vision of the purpose of system-wide coordination*. In essence, organizations in the system will move towards coordination only if the incentives for such coordination are real, and are clearly seen by all organizations.

– Structurally, this would include providing the EMG secretariat with the needed resources and staff, developing close working

relationships between EMG and other UN inter-agency processes and particularly with the United Nations Development Group, encouraging organizations other than UNEP to also take an active role in EMG governance, and to seek greater participation of non-UN agencies in EMG deliberations.

– Functionally, the EMG needs to be strengthened in ways that enable its member agencies to see tangible benefits from their participation in it. This will require the EMG to *develop flexible ways of working that can be tailored to the needs of different types of organizations*. EMG members whose principal focus is environmental should be brought together for more detailed coordination around their goals and activities; an issue management focus should be emphasized to facilitate better coordination between agencies working on similar or related issues; reliable channels for regular information sharing should be explored; and careful thought should be put into ensuring that member agencies do not see EMG participation as an unnecessary and unrewarding burden on their time and effort.

– Finally, *the overarching purpose of the EMG should be to build system-wide policy coherence*. One way to force such discussions is to task the EMG with reporting annually to the GMEF on how the environmental policy directions being pursued by member agencies add up to a coherent system-wide direction.

Goal #4. Performance

Although it is self-evident, it is worth repeating and reinforcing the fact that the ultimate purpose of the GEG system is to improve the global environmental condition. To achieve environmental performance goals, the institutions that make up the GEG system should also seek excellence in their own performance. This means that the institutions that make up the GEG system should be well-managed; they should have the resources they need and should use these resources efficiently; and they should be effective in implementation.

The challenge of performance boils down to the challenge of implementation. It, therefore, requires critical inputs not only from international institutions but also from Member States. Moreover, it requires looking at GEG vertically; from the global to the local levels. While much of the GEG debate has focused on streamlining the GEG system horizontally, an implementation and performance focus also demands that attention be paid to the vertical dimension. Some steps that can

spur a greater emphasis on institutional and environmental performance, include:

- ***Redirect GEG efforts toward investment that facilitates compliance with and implementation of global environmental policy.***
  - One goal of better global environmental governance is to assist countries, especially developing countries, in identifying their environmental priorities and to "feed" this information into national and international policy processes. This requires *a serious reevaluation of the capacity building being provided by various components of the GEG system*.
  - There are far *too many initiatives in building negotiating capacities and too few on building policy development and implementation capacities*. There is also obvious duplication in capacity building initiatives. More emphasis should be placed on building capacities for identifying environmental needs within country documents (e.g., Poverty Reduction Strategy Papers, United Nations Development Assistance Frameworks, etc.), the development of domestic policy instruments to support global policy agreements, and the implementation of global commitments at the regional, national and local levels.
  - This will require a more regional focus and presence, which can be developed by strengthening UNEP's regional offices, giving them the resources to fulfill their capacity development mandates, co-locating them with UN Regional Commissions and converting them into substantive support secretariats for Regional Ministerial Forums which, in turn, should be focused on policy implementation and compliance.
  - There is also *a need to encourage environmental jurisprudence and dispute resolution at all levels*. This does not require the creation of new environmental judicial infrastructures. Existing programs, such as the UNEP Judges Training Program can be strengthened as a way to promote the use of existing judicial bodies and instruments for environmental jurisprudence.
  - *The trend towards the creation of compliance committees and dispute resolution mechanisms within and across MEAs should be strengthened* and incentives provided to encourage the development of cluster-wide compliance and dispute resolution systems.
  - Indicators, targets and assessments should be used to gauge and monitor progress towards environmental performance.

Environmental organizations, including MEA secretariats, should be required to report on environmental performance to the GMEF.

– Finally, as discussed earlier, the many reports that Member States have to submit to various institutions (e.g., CSD, various MEA COPs) should be streamlined into *fewer, more integrated reports that focus mostly on implementation*. MEA secretariats should be required to periodically prepare and present implementation status reports to the GMEF highlighting how that particular MEA's goals and targets are being implemented and what future implementation challenges are emerging. The overall focus of reporting from the secretariats themselves should be on whether the goals and targets of the MEAs are being achieved and whether and how this is improving the state of the global environment.

• ***Invest in management improvements within environmental organizations, especially UNEP.***

– Member States are, at least partially, responsible for the weak management infrastructure at many international organizations, including international environmental organizations. UNEP, in particular, has been saddled with a huge and expanding mandate without the necessary financial and human resources. *The first step in improving UNEP's management performance is for Member States to provide it with a stable, predictable and adequate source of funding.*

– It has often been suggested that UNEP should be given the ability to assess its own budget. This may be useful, but not enough. A consortium of key donors—led by countries desirous of meaningful GEG reform—should commit to providing a semblance of stability and predictability to UNEP budget, at least for a period of around five years. Such a consortium of donors should take the lead in committing to (and encourage other countries to commit to) separate caches of long-term institutional funding and shorter-term issue funding. While the latter tends to be tied to the immediate political priorities of individual donors, the former is necessary if organizations are to plan a coherent budget based on enduring global policy priorities.

– To the extent possible, UNEP should also be encouraged to explore innovative sources of financing. While inadequate financing is one source of management inefficiencies, it is not the only source.

- For its part, *UNEP needs a major management overhaul, possibly beginning with an institutional management review and including a review of its hiring practices and budgetary and financial processes*. A key goal should be to strengthen human resources within UNEP. Hiring processes should be made transparent; personnel at all levels should be selected on the basis of demonstrated merit; leading professionals from academia, NGOs, and business should be encouraged to work at UNEP for short stints to instill fresh ideas and innovative approaches into the organization; and long-term UNEP staff should receive more management training, stronger performance incentives, and be subject to higher levels of accountability and performance review.
- Although these recommendations are directed specifically towards UNEP, they are relevant to and should also be applied to other environmental organizations.

• ***The resources available in the GEG system should be utilized more effectively for environmental improvement.***

- The GEG system clearly needs more resources if it is to make a serious difference in the state of global environmental quality. But it also needs to *use the resources that are available more efficiently and effectively*.
- For example, the many national communications and reports that are currently required by various MEAs, not only consume valuable human resources but each national report can cost around US$350,000–500,000 (an estimated 70,000 hours of consulting time are spent on producing these reports in a small industrialized country). *Streamlining and clustering MEA reports* not only makes eminent substantive sense, it can free up much needed human and financial resources that could then be diverted to implementation of the very same MEAs.
- An immediate step towards financial effectiveness would be to *create a Financial Tracking System that keeps count of the various multilateral and bilateral resources flowing through the GEG system*. Such a system could be maintained by UNEP but will require earnest inputs from the EMG and from donors. A transparent system will not only be able to highlight areas of financial need and of financial duplication but would also institute greater donor confidence and improved resource allocation.

– Finally, as with MEAs, *the proliferation of individual treaty funds should be checked, to the extent feasible*. While having a multiplicity of funding sources has its benefits, too much balkanization will make the pot in each fund smaller, will raise the cost of managing each fund, and will discourage issue synergies. Joint funds for related issues should be encouraged and the coverage of, and resources in, the GEF should be expanded.

Goal #5. Mainstreaming

One important measure of the success of global environmental policy is the extent to which environmental concerns are incorporated into other arenas of international policy and action. Indeed, the entire concept of sustainable development is a testimony to the desire, as well as the necessity, of doing so.

Significant headway has, in fact, been made in mainstreaming environmental concerns into other arenas of international policy and into non-environmental institutions. Civil society has also been brought into environmental decision-making processes and has played an important role in institutions for global environmental governance. However, much more can and needs to be done on both counts, especially as we move from the policy articulation phase into the policy implementation phase. Some steps that might enhance environmental mainstreaming include:

- ***The Commission on Sustainable Development (CSD) should revert to its original design intent and focus on integrating environment into development.***

  – The CSD was originally designed to ensure that the Rio promise of integrating environment and development was fulfilled and as a forum that evaluated the implementation of *Agenda 21*. It was also envisaged as a high-level forum that would bring economic and environmental decision-makers together. While the CSD has been successful as a regular forum for sustainable development discussions and brings together a wide array of civil society actors together with government delegates, it has not been successful in ensuring the implementation of *Agenda 21* or in bringing together economic and environmental ministers. *There is an urgent need to revitalize the CSD, to realign it to its original intent of mainstreaming environment and development decisions,* and to elevate it so that key development decision-makers participate in it.

- There is a need to return the CSD to its original purpose, i.e., to turn it into a forum where environmental and economic decision-makers meet. This is not happening now and there is the danger that it will become another "environmental" forum rather than retaining its "sustainable development emphasis" The CSD is already a part of the ECOSOC, which is the key arena for all discussions pertaining to development issues in the UN system and has the ability to influence the work of UN development agencies. *The goal of the CSD should be to influence the ECOSOC and, thereby, development agencies within the UN family*. This would reorient it towards the development discussions and turn it into the principal forum that brings development and environment concerns together in the context of sustainable development.

• ***Proactively prepare for the eventual incorporation of environmental concerns into new areas of international policy.***

- In recent years, *environmental concerns have increasingly found their way into other areas of international policy*. This process continues today and is likely to continue. Environmental issues are now squarely part of the current round of trade negotiations within the WTO. They are likely to be of significant concern in future negotiations on developing an international investment regime as the connections between environment and security are becoming increasingly evident and a subject of international discussions, and the implementation of the Millennium Development Goals (MDGs) has demonstrated that environmental priorities are an integral part of and can no longer be de-linked from broader development concerns.

- *Institutions of global environmental governance, and particularly UNEP, need to be proactive in identifying these existing and emerging connections and in setting the agenda for how these linkages are framed and discussed in international policy*. There is a particularly critical role for knowledge generation in this regard. A major focus on research and knowledge generation convened by UNEP should be on these emerging connections so that these discussions and possible policy options are framed through an environmental lens. Two areas where environmental research is critically important today relate to (a) trade and environment; and (b) the MDGs and environment.

- ***Expand the role of non-state actors in GEG through a more inclusive and more integrated Civil Society Forum to be held in conjunction with GMEF meetings.***
  - The Civil Society Forum, held in conjunction with GMEF meetings, should be made more inclusive in terms of the number and diversity of non-state actors who participate, and it should be integrated more fully into GMEF discussions. In format as well as participation, it should seek to emulate NGO and private sector involvement in annual CSD meetings. *The goal should be to make the Civil Society Forum a permanent networking forum where non-state actors can interact with each other and with governments to share experiences, innovations and ideas about improving the GEG system.*
  - The Civil Society Forum should provide ample space and opportunities for non-state actors—NGOs as well as private sector—to interact with governments, formally and informally. The Forum should be *an opportunity for non-state actors to report on their innovations and activities and also to seek reports from governments on the implementation of their GEG responsibilities*. There should also be formal opportunities for civil society representatives to directly present their views to GMEF meetings.

A Last Word

We have focused here on the most important steps that need to, and can, be taken in the short term. These, of course, only cover the most pressing and most immediate needs. There are a whole array of more elaborate steps that also need to be thought through. However, broader reform tends to be longer-term, politically challenging and is often dependent on structural changes in the larger international system. Such broader change is necessary, even critical. However, it must not be turned into an excuse for inaction that that which can be done in the short term.

We do not wish to undermine the importance of longer-term and larger-scale change. But we do wish to emphasize that the important and immediate steps that can and need to be taken do not need to wait for longer-term systemic reform. Indeed, these more immediate steps may well be necessary steps to those larger goals, and these might be instrumental in creating the framework conditions for longer-term systemic change.

To conclude, we believe that GEG reform cannot be restricted only to a few organizations in the GEG system. It needs to be systemic, even in the short term. That means, at the very least, that it must focus on the key environmental organizations in the system—and especially on the relationships between them. In the final analysis, all reform must be designed for—and ultimately evaluated by—the positive impact it has on actual environmental performance.

Annex

Rough Estimations of Monies Available to the Global Environmental Governance System

This table presents *very rough and preliminary* estimates of the monetary resources available to major components of the global environmental governance system. *These are meant to be representative rather than exhaustive*. The figures mentioned here are only the ones that are available publicly. Moreover, different figures are for different years; depending on the latest figures available. *The reader is alerted to these constraints and it is suggested that the table should only be used as a rough comparative measure of the orders of magnitude of the monies available and of how they are available to various institutions*. Much more research is needed on this subject and it is quite surprising (and frustrating) to note that even getting these broad numbers has been quite difficult.

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Intergovernmental Organizations		Source: 2003 World Resources 2002-2004: Decisions for the Earth: Balance, voice, and power. UNDP, UNEP, WB, WRI, page 152
UNEP	85.00	UNEP projects in 2000, but UNEP also managed about US$285m in GEF funds
UNDP	1,200.00	Environmental portfolio in 2000, efforts in capacity building and sustainable energy are not included
World Bank	5,000.00	Active portfolio in environmental projects in 2000
Subtotal	6,285.00	In year 2000

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Major funds		Source: Yearbook of International Co-operation on Environment and Development, The Fridtjof Nansen Institute, 2002/2003 otherwise noted.
GEF	561.10	Total GEF corporate budget was US$22.2m for 2001–02. The core budget for the GEF Secretariat was US$8.02m. At the second GEF Replenishment in 1998, nations committed US$2.75 billion. Total = GEF budget (biannual/2) + annual replenishment value (replenishment/5)
The Basel Convention Technical Cooperation Trust Fund	2.17	Trust Fund budget in 2001 was US$2,175,250
The Multilateral Fund of the Montreal Protocol on Substances that Deplete the Ozone Layer	149.87	Administrative budget of the Executive Committee and the Secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol US$32m for the period 1991–2002 (including staff contracts into 2003) annual estimate US$3.2m; Special funds: Multilateral Fund replenishment for 2000–2002 = US$440m, annual estimate US$146.67
The Global Mechanism of the UN Convention to Combat Desertification	1.85	Rough figure based on UNEP/ FAO/RC/COP.2/10 p.16 estimate for the 2004–05 biennium which equals US$3.7m for administration and operations
Subtotal	714.99	

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Regional Development Banks		Source: Annual Report to Congress on the Environment and the Multilateral Development Banks FY 2001 accessed at http://www.ustreas.gov/press/releases/reports/annual.pdf
African Development Bank	62.00	Sum of loans for environmental projects ($51m) and grants for environment-related technical assistance ($11m)
Asian Development Bank	1,200.00	Loans to 12 environmental projects
European Bank for Reconstruction and Development	211.00	Loans for nine approved environmental projects
Inter-American Development Bank	498.00	Sum of US$470m worth of loans for 10 environmental projects and US$28m for technical cooperation in environmental activities
North-American Development Bank	57.00	Grants for four environmental infrastructure projects
Subtotal	2,028.00	In year 2000

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Secretariat budgets		Source: Yearbook of International Co-operation on Environment and Development, 2002/2003 unless otherwise noted.
Climate Change Secretariat	18.53	Approved core budget = US$11.3m for 2001. Program budget = US$16.1m for 2002 (appr. COP-7); Contingency budget for conference servicing = US$5,661,800 for the years 2002–03; Special funds: Trust fund for participation in UNFCC (voluntary) income for 2001–2002 US$2.9m. and Trust fund for Supplementary Activities (voluntary) income for 2000–2001 US$5.9m. → Total (2001 estimate) = core budget (2001) + contingency budget (annual estimate) + special funds (annual estimate)
Ozone Secretariat	4.46	Administrative budget for the Convention = US$370,590 in 2001 Administrative budget for the Protocol US$4,099,385 in 2001
Secretariat of the Basel Convention	4.20	Trust Fund for the Implementation of the Basel Convention approved budget = US$4,201,854 in 2001
Rotterdam Convention on PIC	3.67	Estimate based on operational budget for 2005. Source: UNEP/ POPS/COP.1/INF/2, 14 February 2005
Stockholm Convention on POPs Interim Secretariat	3.50	Rough estimate based on what is required for activities is US$3.5 million per year. An alternative approach would be to estimate based on POPs Club fundraising

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Convention on the Conservation of Antarctic Marine Living Secretariat	1.87	Administrative core budget US$2.470m in 2001
International Whaling Commission	2.30	Annual actual budget UKP 1,291,521 in 2001. (this figure used in US$) Administrative core budget was UKP 1,104,300 in 2001
Secretariat of the Convention on Biological Diversity	13.15	General BY Trust Fund core budget = US$8.594m for 2001 COP appr Special Voluntary BE Trust Fund (supports activities) = US$2.547m for 2001; Special Voluntary BZ Trust Fund (supports participation) US$2.011m; very rough estimate because data on what was realized is not provided here
CMS Secretariat (Migratory Species)	1.45	Core budget of US$1,454,595 for 2001
CITES	5.95	Administrative core budget SFr. 7,594,800 in 2001
Ramsar Convention Bureau	2.43	Core budget SFr. 3,106,000 in 2001
Secretariat of the Convention to Combat Desertification	12.29	Core budget for 2000–01 was US$14m Special Trust Fund for Participation US$1.354m in 2001 Trust Fund for Supplementary Activities contributions for 2000–01 were US$6.8m; Bonn Fund (host contributions) for 2000–01 were US$900,577
Subtotal	73.80	

Sources of funding	$US millions per year (rough estimates)	Commentary, elaboration and sources of data
Some Major Environmental NGOs		Source: Yearbook of International Co-operation on Environment and Development, The Fridtjof Nansen Institute, 2002/2003 otherwise noted.
Greenpeace	191.37	Global income of Greenpeace worldwide EUR 157,730,000 in 2001 accessed at http://www.greenyearbook.org/ngo/greenpea.htm.
WWF International	224.96	Overall income SFr. 574.8m in 2000/01 = SFr 287.4 per annum
IUCN – The World Conservation Union	94.02	Budget SFr 120m in 2001
Earthwatch Institute	10.10	Budget in 2001
Friends of the Earth International	1.35	Budget EUR 1,110,000 in 2001
Subtotal	521.80	In 2001
TOTAL ESTIMATE	9,623.59	Approximate; million US$ per annum

Endnotes

1 Millenium Ecosystem Assessment, 2005.

2 See, Najam, 2005; Najam, 2005a.

3 See Biermann and Simonis, 1998; Najam, 2003; Esty, 2004; Ivanova, 2005; von Moltke, 2005; Knigge *et al*., 2005.

4 Global Environment Facility Web site: http://www.gefweb.org/Projects/Focal_Areas/focal_areas.html

5 Najam, 2002b.

6 Najam, 1999; WRI, *et al*.; 2003; Usui, 2004.

7 WRI *et al*., 2003: 152.

8 Pauwelyn, 2005.

9 Redgwell, 2005.

10 Elliot, 2005.

11 Bierman and Simonis, 1998.

12 Glenn and Gordon, 1999.

13 Esty, 1994.

14 Streck, 2001.

15 UN, 2002.

16 Whalley and Zissimos, 2001.

17 Kirton, 2005.

18 Najam, 2003.

19 UNEP, 2001.

20 Biermann, 2005.

21 Ivanova, 2005.

22 Tarasofsky, 2005.

23 Najam, 2003.

24 Von Moltke, 2005; Najam, 2005; Oberthur, 2005.

25 Andresen, 2001; United Nations University, 1999.

26 Knigge *et al*., 2005., Dodds, 2002; Najam, *et al.*, 2004.

27 Najam *et al*., 2004; Najam, 2004; Knigge *et al*., 2005.

28 Sanwal, 2004; Najam *et al*., 2004.

29 Oberthur and Gehring, 2005.

30 Najam, 2002.

31 Najam *et al*., 2004.

32 UN, 1997.

33 Nairobi Declaration. Available at: http://www.unep.org

34 United Nations, 1998.

35 Chambers, 2005: 28.

36 For links to documents of Cartagena Process see: http://www.unep.org/dpdl/IEG/Meetings_docs/index.asp.

37 For links to documents from meeting see: http://www.unep.org/dpdl/IEG/PDF/GCSSVIII_5_K0470587.pdf .

38 GA Resolution, 2005.

39 Weiss, 1999; Najam, 2003b.
40 For a list of MEAs used here see Knigge *et al.*, 2005; Roch and Perrez, 2005: 5-7.
41 French, 2002.
42 Le Prestre and Martimort-Asso, 2004; Knigge *et al.*, 2005.
43 Najam, 2000; IPCC, 2001.
44 Holst, 1999.
45 Chasek and Ramajani, 2003; Chasek, 2001.
46 Biodiversity Liaison Group, 2005.
47 Susskind, 1994.
48 Kingsbury, 1999; Treves, 1999.
49 Najam, 2000; Soroos 1999.
50 Some of these points raised also in Knigge *et al.*, 2005; Dodds *et al.*, 2002.
51 Najam *et al.*, 2004.
52 Haas, 1992.
53 Najam, 2002.
54 Dunoff, 1995; Weiss, 1999; Roch, 2003.
55 UNEP/POPS/INC.6/INF/18
56 UNEP/POPS/COP.1/INF/2
57 UNEP Chemicals, 2006.
58 *Earth Negotiations Bulletin*, 2005.
59 Weiss *et al.*, 2004; Crocker *et al.* (eds.), 1999; Hannum, 2001.
60 Najam, 2003; Von Moltke, 2001.
61 Ivanova, 2005: 32.
62 WRI, 2003.
63 Agarwal *et al.*, 1999: 363.
64 See UNEP offices at www.unep.org.
65 Chambers, 2005.
66 United Nations Conference on the Human Environment, held in Stockholm in June 1972, the General Assembly, in resolution 2997 (XXVII) of 15 December 1972.
67 Von Moltke, 2005.
68 Najam, 2003; Ivanova, 2005.
69 UNEP, 2000.
70 Bernstein, 2005.
71 Najam, 2003a.
72 Haas, 2004: 128.
73 Kille and Scully, 2003; Thakur *et al.*, 2005.
74 UNEP, 2001.
75 UNEP, 2001.
76 Chambers, 2005.
77 Environmental Management Group at www.unep.org.
78 Ivanova, 2005: 31.
79 UNEP, 2001.
80 UNEP, 2001.
81 UNEP Science Initiative at http://science.unep.org.

82 Weiss, 1998.
83 Ivanova, 2005: 31.
84 Millenium Ecosystem Assessment, 2005.
85 Definitions primarily based on Faure and Lefevere, 1999; Also see Najam, 1996.
86 Najam, 2006.
87 Najam, 2006.
88 Najam, 2004.
89 Zaelke *et al.* (eds.), 2005; Weiss and Jacobson (eds.), 2001.
90 Bodansky, 1999; Franck, 1995; Held and Koenig Archibugi (eds.), 2005.
91 Susskind, 1994; Weiss and Jacobson, (eds.), 2001; Najam, 1997.
92 Chayes and Chayes, 1995.
93 Ramakrishna and Jacobsen, 2003.
94 Vandeveer and Dabelko, 2001.
95 UNEP/GC.23/6/Add.1, 2005.
96 UNEP/WMO, 2003.
97 Tallberg, 2002.
98 Knox, 2004.
99 Gupta and Ringius, 2001.
100 Dunoff, 1995.
101 INECE, OECD Report, 2003.
102 Young, 2001; Miles, 2001; *Global Environmental Politics*, 2003.
103 Ramakrishna, 2003.
104 WRI *et al.*, 2003.
105 Velasques, 2002, p. 9.
106 Werksman, 2004.
107 UNEP/POPS/INC.6/INF/18, 2002.
108 Najam, 2002.
109 For learning from experience with financial mechanisms see UNEP/FAO/RC/COP.2/10, 2005.
110 Miles, 2005.
111 Toulmin and Bigg, 2004; Xiang and Meehan, 2005.
112 Streck, 2001; Boisson De Chazournes, 2005; Werksman, 2004.
113 GEF/C.20/4, 2002, Annex C.
114 UNDP, 2002 see especially Chapter 1.
115 See OCHA Web site at http://ocha.unog.ch/fts/help/whatis.asp.
116 Further discussion in RECIEL 14(3), 2005.
117 Taken from UNSG Millenium Report, Chapter VI of the Executive Summary.
118 World Trade Organization Secretariat.
119 Brack, 2000.
120 Brack and Branczik, 2004.
121 WRI *et al.*, 2003.
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124 Zarsky, 1997; Zarsky, 2000.

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140 WRI *et al.*, 2003: 71.
141 Gemmill and Bamidele-Izu, 2002.
142 Najam, 1999.
143 Porter and Van der Linde, 2005.
144 Global Compact website: www.globalcompact.org.
145 Usui, 2004.
146 WRI *et al.*, 2003: 119.
147 Usui, 2004.
148 WRI *et al.*, 2003: 123.
149 Gemmill and Bamidele-Izu, 2002.
150 Mori, 2004.
151 UN, 2005.
152 Najam, 1999a.
153 Piest, 2003.
154 Banuri and Najam, 2002.
155 Streck, 2002.
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Global Environmental Governance

A Reform Agenda

Global Environmental Governance (GEG) is the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection. Since environmental issues entered the international agenda in the early 1970s, global environmental politics and policies have been developing rapidly. The environmental governance system we have today reflects both the successes and failures of this development. It has become increasingly clear that the GEG system, as we know it, has outgrown its original design and intent.

The system's high maintenance needs, its internal redundancies and its inherent inefficiencies have combined to have the perverse effect of distracting from the most important GEG goal of all—improved environmental performance. The system needs reform not because it has "failed" but because it has outgrown its own original design. Much like children who outgrow their clothes as they mature, the GEG system needs to be rethought so that it can meet the challenges of its own growth, respond to future issues, and move from its current emphasis on awareness-raising and treaty creation to actual environmental action and implementation.

This book identifies a number of practical steps that can foster more efficient and effective global environmental governance, making better use of the resources available and designed in a way that will be more helpful to the implementation of international environmental agreements for developing as well as developed countries.

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