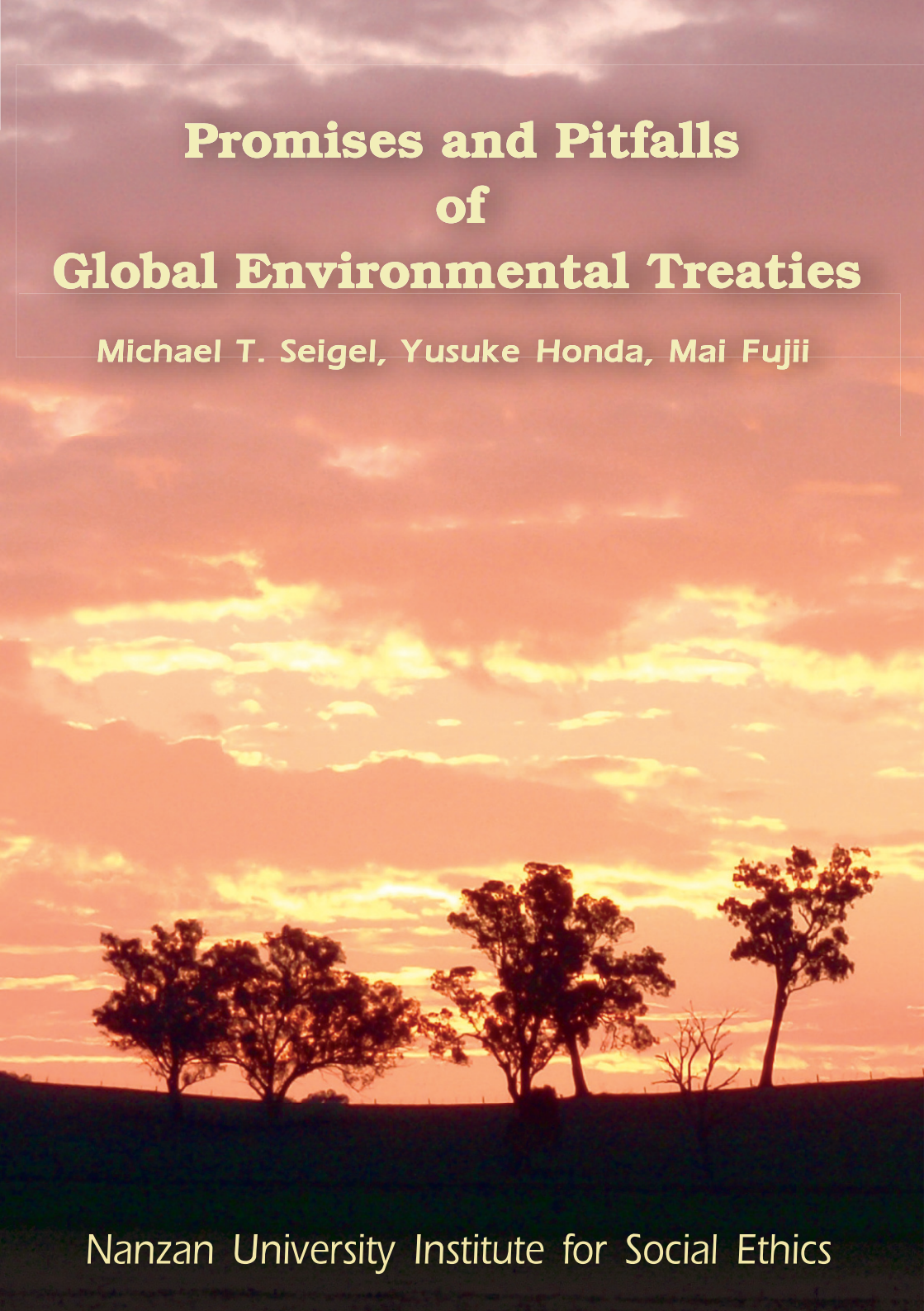
Promises and Pitfalls of Global Environmental Treaties

Michael T. Seigel, Yusuke Honda, Mai Fujii



Nanzan University Institute for Social Ethics

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THE PROMISES AND PITFALLS OF INTERNATIONAL ENVIRONMENTAL TREATIES

Michael T. Seigel, Yusuke Honda, Mai Fujii

Nanzan University Institute for Social Ethics

February, 2010

CONTENTS

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Preface

An international conference dealing with international environmental treaties was organized by the Nanzan University Institute for Social Ethics from September 15 to September 18, 2009. The conference theme was "International Environmental Treaties: Their Role, Possibilities, Risks and Limitations." The focus was the three conventions that came out of the 1992 Earth Summit, namely the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the Convention to Combat Desertification (CCD).

The perception behind the conference was that these treaties have not (at least up to the present) been an effective means of addressing the issues they are intended to address. Climate change, biodiversity loss and desertification are matters that are critical for sustainability, for human survival and for ecosystems, and yet they have continued to worsen unabated in spite of these conventions and the various strategies that have been employed for their implementation.

COP 15 (the fifteenth meeting of the Conference of the Parties) of the UNFCCC met in Copenhagen in December 2009—roughly three months after the Nanzan University conference. COP 16 will be held in Mexico from the end of November 2010. COP 10 of the CBD is scheduled to meet in Nagoya (Japan) in October 2010, and COP 10 of the CCD will be held in Changwon (Korea) in the autumn of 2011. These are critical meetings for all the conventions, and discussion at the conference focused in particular on the issues that they need to address.

Prior to the conference, a number of questions were posed to the participants as a means of stimulating preparatory reflection. These questions were:

1. *Given that the treaties are negotiated by governments of nation-states, with each government primarily concerned with the national self-interest of its own country, do the treaties really achieve a global perspective and do they succeed in promoting a global level of cooperation? Or are the perspective and the level of action too limited to the nation-state and too bound up with competitiveness between countries to really constitute a global approach?*
2. *In the process of governments negotiating treaties and determining methods of implementation in international forums, is there a risk of local communities and local levels of activity becoming disempowered? This is criti-*

cal, given that sustainability in the areas of biodiversity, land degradation and desertification, and even some aspects of climate change, is contingent on the way local people (particularly farmers and indigenous peoples living traditional lifestyles) relate to their immediate natural environment.

3. *Does the process by which the treaties are negotiated promote a tendency towards a minimalist approach—either because countries want to minimize their commitments, or because, given the difficulties of reaching consensus, an approach or an interpretation of the problem is adopted not because it accurately reflects or responds to the nature of the problem, but because it is more conducive to negotiation or because it makes the achievement of some kind of agreement more feasible?*
4. *Does the approach of the treaties result in certain crucial issues not being addressed? In other words, are there critical environmental situations that are not receiving the attention they need because they are not included in these treaties?*
5. *In the treatment of problems such as climate change, biodiversity, desertification and land degradation, does the approach of the treaties fail to address the interrelatedness of problems, and if so are there negative consequences that arise from this failure?*
6. *By focusing on climate change, loss of biodiversity, desertification and land degradation, the treaties focus on outcomes. Does this focus really make possible an effective response to the environmental crisis? Or is it necessary to focus more on causes, such as lifestyles and patterns of production and consumption?*

As the list of participants shows, the conference brought together a diverse group of people carefully selected for their expertise and for their ability to represent different perspectives and geographic regions. Participants came from Africa, Asia, Australia, the U.S, and Europe, and from a variety of academic backgrounds including philosophy, economics and anthropology. There were participants with expertise in the direct subject matters of the treaties, experts who have been deeply involved in the processes of the treaties and in the IPCC, and also participants from environmental NGOs.

The conference was designed to maximize opportunities for intense discussion and deliberation. Presentations were limited to twenty-five minutes and the time devoted to discussion was roughly twice that devoted to presentations. A formulating committee was established that took note of the main points of

discussion. This formulating committee made a summary of the discussion at the beginning of each session so that each period of discussion and deliberation would build on the previous ones. This gave the discussions a significant degree of coherence and a sense of progressive development.

The present pamphlet is based on the work of the formulating committee, aided by a review of the written materials distributed at the conference and the tape-recordings of the presentations and discussions. It was drawn up by Michael Seigel, the conference organizer, and then reworked together with the members of the formulating committee. The draft that resulted from this process was sent out to the participants for comments and revised once again in light of these comments.

There was no attempt to achieve a consensus of views at the conference and therefore this report is not a consensus document, nor is it anything of the nature of a position paper. Rather, it is an attempt to present the main insights of the conference in a way that is clear and relevant. The hope is that policy-makers, NGOs working in relevant fields and the general public will gain benefit from these insights and that the discussion achieved at the conference will shed light on the kind of orientation that will help to achieve effective decision-making for ecological sustainability. Given that the UN has declared 2010 the International Year of Biodiversity, it is hoped that this pamphlet will help to stimulate discussion in particular in regard to this issue, given that it is such a cross-cutting issue deeply related to climate change, desertification, land degradation and, in fact, all environmental issues.

While this pamphlet does not necessarily represent the views of any particular person on the list of participants, it is a representation of the contributions of the participants and it does present the overall thrust of the discussion at the conference. In the process of writing the pamphlet and consulting with the participants, many valuable suggestions were received, and the pamphlet is a result of the work of the many participants who collaborated in the process. Final responsibility for the pamphlet, however, rests with the authors.

Introduction

The three conventions that were the focus of the conference were all born from the Rio Earth Summit in 1992. They came into being at a time when the Montreal Protocol on Substances that Deplete the Ozone Layer had led to a high level of optimism about the effectiveness of international treaties as a strategy for responding to the environmental crisis. Eighteen years have now passed—certainly enough time to say whether or not that optimism was well placed. It is clear that it was not.

Undoubtedly there have been a number of achievements that can be attributed to the treaties. We have improved knowledge of the issues; there has been a considerable dissemination of best practices; there is substantially improved monitoring; national action programs have been elaborated; networks have been set up; and numerous projects have been undertaken.

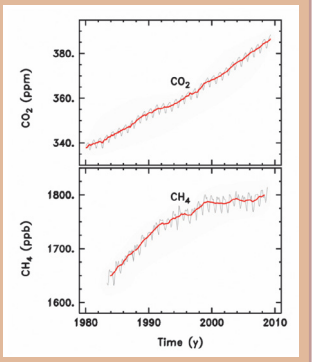
In spite of all these developments, the environmental situation itself has continued to worsen. Anthropogenic drivers continue to threaten the environment and human well-being. Changing climate is having negative impacts on ecosystems, agriculture and human health. The goal of limiting warming to not more than two degrees above the pre-industrial level is now close to impossible. Entrenched pollution continues to affect innocent people. The depletion of safe drinking water endangers the survival of people, particularly in marginalized and vulnerable communities. Loss of biological and wildlife species remains exponential. Land degradation and desertification are constantly gaining ground in many regions of the world, particularly in Africa where the few economic gains that some countries have managed to achieve are being thwarted.

Not only have the problems continued to worsen, but, as the lack of progress at the recent COP 15 in Copenhagen demonstrates, in the critical areas of public awareness and political will, progress since the Earth Summit has been limited. While perceptions that there is a problem have become mainstream, there has been only the faintest degree of perception in mainstream society that a substantial degree of social change will be necessary. While there are some signs of emerging political will, this seems to dissipate when changes in lifestyle have to be considered. In the developed countries the majority of people, including policy makers, seem unwilling to act until they are directly affected—as, for example, when Europe, particularly France, was hit by a heat wave or New Orleans was devastated by Hurricane Katrina.

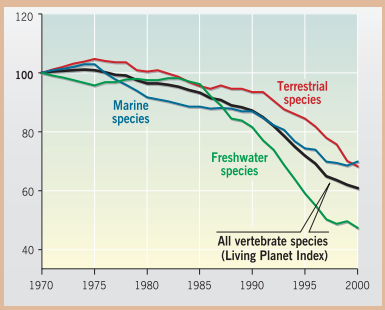
Because of the adaptive capacity of developed countries they are relatively protected from the direct impact of the problems. People in Africa, Bangladesh, and the small island developing countries of the Pacific, or the Inuit in the Arctic Region, experience climate change as part of their daily life and are

In spite of the conventions

With regard to climate change, *The Copenhagen Diagnosis*[1] indicates that: "The global rate of increase of fossil fuel CO_2 emissions has accelerated three-fold over the last 18 years, increasing from 1.0% per year in the 1990s to 3.4% per year between 2000-2008" (p. 11). The accompanying chart indicates emissions trends of carbon dioxide and methane. Since international negotiations have concentrated on carbon dioxide emissions, this is most important for assessing the effectiveness of the international process. Clearly, the rate of emissions continues to increase unabated.



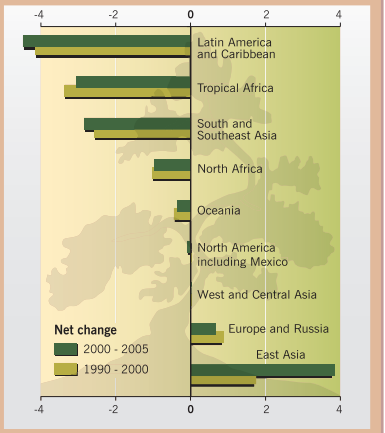
Carbon dioxide and methane emissions trends, 1980-2010
Source: *The Copenhagen Diagnosis: Updating the World on the Latest Climate Science*, p. 10.[1]



Trends in species populations worldwide.
Source: *Global Biodiversity Outlook 2*, p. 25

With regard to biodiversity, *Global Biodiversity Outlook 2*[1] indicates that: "Species are going extinct at rates 1,000 times the background rates typical of Earth's past" (p. iv). The chart on the left indicates that the rate of decline continues unabated. Freshwater species, for example, have dropped to about 50% of their 1970 level. *Global Biodiversity Outlook 2* points out that "we are currently responsible for the sixth major extinction event in the history of the Earth, and the greatest since the dinosaurs disappeared, 65 million years ago" (p. 10).

Forests are of major importance to all three conventions, yet, as the accompanying chart indicates, and as *Global Biodiversity Outlook 2* points out, "Deforestation ... continues at an alarmingly high rate. The loss of primary forest since 2000 has been estimated at 6 million hectares annually" (p. 2).



Annual net change in forest area (in millions of hectares). Source: *Global Biodiversity Outlook 2*, p. 23. Note that where the lighter colour represents a period of ten years, the darker colouring represents a period of only five years—indicating a pronounced increase in the rate of deforestation. The substantial increase in forested area in East Asia is "primarily due to large-scale afforestation reported by China" (See *Global Biodiversity Outlook 2*, p. 26).

[1] For publication details see p. 24

much more likely to be convinced of its reality and severity than people who can deal with heat by simply turning on an air-conditioner and with cold by turning on a heater.

Further, at least in developed countries, climate change gets vastly more media attention than the other issues, so the level of public awareness and political will in relation to these other issues remains low. Biodiversity, land degradation and desertification, however, are issues of extreme importance to all, and there is no reason to doubt that the situation is as critical in regard to these issues as it is in regard to climate change.

While desertification is a particularly serious issue for Africa, it is certainly not restricted to Africa. *The Millennium Ecosystem Assessment* indicates that: "Desertification occurs on all continents except Antarctica and affects the livelihoods of millions of people, including a large proportion of the poor in drylands. ... even by conservative estimates it ranks among today's greatest environmental challenges with serious local and global impacts" (p. 7). The above photograph shows a dried up irrigation reservoir in the Murray-Darling Basin in Australia—a clear sign of the severity of the drought that has affected this important food producing region.

As the conference discussed these matters, there were two ideas that were accepted as basic presumptions by the participants. They are mentioned here to avoid any risk of the intent of the conference or of this report being misunderstood or misconstrued:

1. While the conference discussed at length the need for improved scientific knowledge, there was a strong conviction that there is already enough scientific information available to provide a basis for action. The need for further scientific knowledge cannot be used as a reason for postponing action. In regard to a very large proportion of environmental issues, the level of certitude is already high enough to warrant action, and in many cases in which there remains a significant lack of certitude, the precautionary principle would suggest that action is still necessary.
2. Although the conference aimed at a critical stance towards the international process, it did so with absolutely no sense that the problems of climate change, biodiversity loss and desertification can be solved without such a process. These problems are global. They affect every region and every dimension of social, political, economic and cultural life. The international process is and will remain essential.

I. The Conventions and their Scientific Base

1. Disparity in the Scientific Base of the Conventions

There is a substantial degree of disparity in the amount and kind of scientific information that is made available both to decision-makers and to the general public in regard to the three treaties.

a. The UNFCCC and the IPCC

For the UNFCCC, scientific information and assessment is provided by the Intergovernmental Panel on Climate Change (IPCC). The IPCC is a scientific body that, according to the definition of its task on its homepage, "reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change."[1] It is made up of three working groups which assess the physical science basis (Working Group I), climate change impacts, adaptation, and vulnerability (Working Group II), and mitigation of climate change (Working Group III). The main aspect of the IPCC's work is an assessment report, the first of which was published in 1990. This report is made at intervals of between five and seven years. Additionally, the IPCC produces special reports, methodology reports, technical papers and supporting material, often in response to requests from the COP.

The IPCC draws on literally thousands of scientists from a wide variety of fields. The process operates on a consensus basis, which constitutes a substantial guarantee against extremism or unnecessary alarmism, and it is thoroughly peer-reviewed, which provides a guarantee of its objectivity. Though there are problems with this process that we will discuss later, the IPCC is recognized as having a great degree of authority and is treated as such by decision-makers.The publication of the reports attracts a great deal of media attention and therefore these reports also constitute a major opportunity for raising public awareness. (For our response to allegations that have been raised regarding the credibility and objectivity of the IPCC, see the textbox on pages 6-7).

b. The CBD

The Convention on Biological Diversity has the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). Like the IPCC, the SBSTTA does not generate scientific knowledge, but rather brings it together for policy makers.

However, it is argued by many experts that the SBSTTA does not carry out the same extent of compilation and assessment of information produced worldwide that is carried out by the IPCC, and it does not generate assessment reports on a regular basis as does the IPCC. It is, rather, a panel "made up of government representatives with expertise in relevant fields, as well as observers from non-Party governments,

[1] See IPCC homepage: http://www.ipcc.ch/organization/organization.htm

the scientific community, and other relevant organizations."[2] The Secretariat of the CBD has produced some very important documents, most particularly the *Global Biodiversity Outlook* (now in its third version). However this does not bring together the same degree of global research, does not include the same degree of impact assessment and analysis of approaches to mitigation, and does not have the same level of impact on policy makers, the media, or the general public as the IPCC reports.

c. The CCD

The Convention to Combat Desertification (CCD) also has its scientific body, called Committee on Science and Technology (CST), which, like the SBSTTA of the Convention on Biological Diversity, is composed of government representatives, in this case "government representatives competent in the fields of expertise relevant to combat (sic) desertification and mitigating the effects of drought."[3] These government representatives are assisted by a Group of Experts.

While the CST and the Group of Experts produce valuable papers on specific issues, these have neither the scope nor the impact of the IPCC reports, and they do not constitute a compilation and assessment of the available information in the way that the IPCC reports do. Compared with the IPCC, which is made up of about three thousand scientists, the Group of Experts for the CCD, by stipulation of COP 5 where it was established, "should not exceed 25 members."[4] The small number and the stipulation that this group should "use existing means of communication"[5] suggest a severe shortage of funds.

The relative paucity of scientific input into the CCD and the lack of monitoring assessments result in inadequacy both in the scientific basis and in the means to channel scientific information and analysis to policy-makers. African leaders had a particularly significant role in getting the CCD established. Unfortunately, it is prone to get very little attention from the vast majority of people in the developed world. For the most part, developed countries are affected only indirectly by desertification. Consequently, among the three conventions, it is the one of which people in the developed world are least aware.

2. Redressing the Imbalance

There are already moves in the UNEP to establish an intergovernmental panel, known as the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), to make scientific knowledge in the area of biodiversity

Continued on page 8.

[2] See CBD homepage: http://www.cbd.int/convention/bodies.shtml
[3] See CCD homepage: http://www.unccd.int/cop/cst/menu.php
[4] For details on the Group of Experts, see *Report of the Conference of the Parties on its Fifth Session, Held in Geneva from 1 to 12 October 2001*. Addendum Part Two: Action Taken by the Conference of the Parties at its Fifth Session, p. 47-48. http://www.unccd.int/php/document.php?ref=ICCD/COP(5)/11/Add.1
[5] *Report of the Conference of the Parties on its Fifth Session*, , Annex, ICCD/COP(5)/11/Add.1 (2001), para.9.

Responding to issues regarding the credibility of the IPCC

The workshop that was the basis for this pamphlet was held in September 2009. In the months since then, certain issues have emerged that have led to allegations regarding the credibility of the IPCC. In this pamphlet, while recognizing certain limitations, we have placed a significant emphasis on the role of the IPCC, treating it as a model for the scientific bodies of the other conventions, and even suggesting that it could have a role in producing assessment reports for biodiversity and desertification as well. Given the importance that we have given to the IPCC, it seemed necessary to take a look at these allegations. We have done this and for the reasons given below, we do not believe that they affect the fundamental credibility of the IPCC process, and far from altering the suggestions that we have made in this pamphlet, we believe that they have been made even more relevant.

1. "Climategate": Some argue that emails hacked from the Climatic Research Unit at the University of East Anglia show that data has been manipulated. Both a police investigation and an independent review by the university are underway. The IPCC report depends on a much broader range of information sources, and the East Anglia data is fully consistent with other sources. Thus, this does not, in any case, undermine the credibility of the IPCC process itself. Further, in regard to the most problematic phrase in the emails, "hiding the decline", the technical use of the word "decline" and what was really meant by the rather inopportune word "hiding" has already been explained.[1] These emails were among colleagues with no thought that they might ever be seen by the general public. Thus, they are written without any particular concern about how they might be misconstrued by others. While a final conclusion must wait for the results of the police investigation and the independent review, at present it seems clear that the incident does not constitute a manipulation or falsification of data as has been alleged by some.

2. Himalayan Glaciers: A paragraph in the IPCC Working Group II contribution to Assessmant Report 4 states:

> Glaciers in the Himalaya are receding faster than in any other part of the world and, if the present rate continues, the likelihood of them disappearing by the year 2035 and perhaps sooner is very high if the Earth keeps warming at the current rate. Its total area will likely shrink from the present 500,000 to 100,000 km^2 by the year 2035 (WWF, 2005).[2]

By the IPCC's own admission, this is inaccurate and was based on "poorly substantiated estimates of rate of recession and date for the disappearance of Himalayan glaciers" and constitutes a failure to apply properly "the clear and well-established standards of evidence, required by the IPCC procedures."[3] As the reference indicates, the source material here is a WWF report, which is not peer-reviewed. The WWF has also acknowledged the mistake

This is a failure of the process and points to the need for thoroughness in the application of IPCC procedures.

It would not be surprising if other issues were to arise. There have, for example, been suggestions of an error in the IPCC's description of the the amount of land in the Netherlands that is below sea level. Where so many scientists and so much material is involved, there is an inevitable risk of errors, but given the importance of the task, these problems must be dealt with and strategies adopted to avoid recurrence.

There appear to be two factors in particular that are behind these errors. One is the pressure to meet a deadline and the other is an inappropriate use of non-peer-reviewed literature (so-called "grey literature").

With regard to the pressure of a deadline, the need to meet publishing schedules is nothing new to scientists, but in the case of the IPCC reports, this pressure is increased enormously by the need to make information available to policy makers. Strategies are required to ensure that the pressure of deadlines does not result in slipshod work. In this pamphlet we advocate the publication of an interim report (see p. 11). The publication of such a report may reduce the need to get the new report out without delay and therefore reduce this pressure.

In this pamphlet, we have also suggested the need for a process to upgrade non-peer-reviewed literature to the level of peer-reviewed literature (see p. 14). This is necessary not only because there are areas where there is a paucity of peer-reviewed literature, but because, as is discussed in a textbox on p. 20, without this, there are important perspectives that will not be included.

Whatever else may be said, these incidents should not be seen as undermining the credibility of the vast amount of material in the IPCC reports for which the review process has been thoroughly followed, and intense scrutiny by sceptics and IPCC critics has failed to find errors. In other cases where allegations have been made regarding the work of the IPCC, such as charges that the IPCC "wrongly linked global warming to natural disasters", the charges have been effectively rebutted.[4]

The fact is that in regard to ecological issues, effective policy can only be achieved if it is based on sound science, and this means that scientific knowledge has to be brought together for the sake of policy-makers. The means for doing this will inevitably be something along the lines of the IPCC. Certainly, the work of the IPCC needs to be looked at critically (as do all contributions to policy-making), limitations need to be recognized and, where possible, corrected. But the process of making peer-reviewed research available to policy-makers is essential and therefore the IPCC, or something extremely similar to it, is also essential. If the IPCC did not exist, then it, or something very similar to it, would have to be created.

[1] CRU Statement, in *CRU Update 2,* 24 Nov 2009, https://www.uea.ac.uk/mac/comm/media/press/2009/nov/CRUupdate
[2] *IPCC Statement on the Melting of Himalayan Glaciers,* http://www.ipcc.ch/pdf/presentations/himalaya-statement-20january2010.pdf
[3] *Climate Change 2007: Working Group II: Impacts, Adaption and Vulnerability, 10.6.2 The Himalayan Glaciers.* http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch10s10-6-2.html
[4] *IPCC Statement on Trends in Disaster Losses*. www.ipcc.ch/pdf/presentations/statement_25_01_2010.pdf

available to policy-makers.[6] IPBES is to be broadly similar in function to the IPCC. We strongly support these moves.

In fact, the IPCC itself could adequately serve all three conventions. The scientists of the IPCC, particularly of Working Groups II and III, are not climatologists but experts in fields relevant to impact assessment, adaptation and mitigation. This same network of scientists could do reports on impacts, adaptation and mitigation in regard to biodiversity and desertification, just as they do for climate change in the IPCC assessment reports. The networks that the CBD and CCD already have, and the network of scientists involved in such projects as the *Millennium Ecosystem Assessment,* could produce the equivalent of the IPCC's Working Group I assessment report, and Working Groups II and III could examine the impacts and the means of adaptation and mitigation. This would therefore *not* require whole new organizations and would minimize the expense of any additional bureaucracy.

This should be carried out not only with regard to biodiversity but also with regard to land degradation and desertification (although, as is described in the textbox on the facing page, the scope of this latter report should be broadened). With regard to biodiversity, land degradation and desertification, both policy-makers and the general public need the kind of credible information and analysis that is achieved by the IPCC.

As already noted, in developed countries the climate change convention has gotten vastly more media attention than the other conventions. There are undoubtedly numerous reasons for this, but one is surely the fact that the issues of biodiversity and desertification lack the regular kind of scientific assessment that draws so much media attention to the climate change issue.

Additionally, with regard to biodiversity, there have been objections that there are numerous treaties dealing in one way or another with this—such as the Convention on International Trade in Endangered Species, the Convention on Migratory Species, the TRIPS (Trade Related Aspects of Intellectual Property Rights) Agreement and the Convention Establishing the World Intellectual Property Organization. The criticism is that since these agreements each tend to have their own scientific organization, there is too much duplication. A process equivalent to the IPCC would provide an opportunity to bring the work of these various groups together and create an enhanced basis for networking and collaboration.

3. Interrelatedness of Issues

The issues of climate change, biodiversity, land degradation and desertification are closely and mutually interrelated and are intricately tied up with other issues such as poverty and development. This interrelatedness may not be readily apparent in the developed countries, but it is quite apparent in the

[6] See IPBES homepage: http://www.ipbes.net/en/index.asp

developing countries. In fact, the poorer a country is, the more pronounced the interrelatedness will be.

Because of this interrelatedness, there needs to be close synergy not only between the three treaties but also between the treaties and other socio-economic and socio-political issues. This synergy is necessary at all levels—scientific analysis, policy-making and implementation. Programmes to respond, for example, to climate change should not be pushed forward without a thorough analysis of their consequences for development, biodiversity, desertification, poverty, etc. Nor should such programmes be devised without an analysis of the socio-economic, socio-political and socio-cultural factors (including consumption and production patterns

Desertification as part of a broader depletion of the biosphere

Desertification is a phenomenon that occurs in drylands, many of which are in developing countries. African countries played a key role in the genesis of the Convention to Combat Desertification and certainly many African countries are severely affected by drought and desertification—although these are also problems in other regions such as Australia and some parts of Asia. Except for those regions directly affected, however, there is not a great deal of public awareness of the problem or the Convention. Particularly for most people in developed countries, desertification is a problem that seems distant.

While desertification is restricted to dry areas, land degradation is taking place globally and in all ecosystems. However, even with regard to land degradation, there is very little awareness of the problem among the general public in most developed countries—presumably because of the relative smallness of the agriculture sector in these countries.

Desertification and land degradation, however, are only particular aspects of a broader decline in the biosphere. There are problems such as deforestation, the decline in the world's fish stocks, increases in anoxic regions in the oceans, and loss of farmland, grassland and forest through land conversion, urban expansion and other human activities. These factors also need to be monitored in an integral way at a global level and brought to the attention of decision-makers and of the general public. Where biodiversity loss may be seen as a qualitative decline in the biosphere, this area could be seen, in a certain sense, as a quantitative decline. It is equally as critical for sustainability and needs to be addressed at a global level. It is therefore a fitting area for an international convention, and one way to achieve this would be to incorporate it into the issue of desertification, which is a dimension of this kind of decline. Far from distracting attention from the issues of land degradation and desertification, including these other dimensions may well enhance the perception in developed countries that desertification and land degradation are in fact issues that are close to home.

The UN General Assembly calls for synergy between the conventions

On December 2009, the 64th UN General Assembly adopted Resolution 64/203 addressing issues related to the CBD, and calling for greater synergy between the conventions:

Noting the need for enhanced cooperation among the Convention on Biological Diversity, the United Nations Convention to Combat Desertification ..., and the United Nations Framework Convention on Climate Change (the 'Rio Conventions'),

... concerned by the negative impacts that loss of biodiversity, desertification, land degradation and climate change have on each other, and recognizing the potential benefits of complementarities in addressing these problems in a mutually supportive manner[1],

[the General Assembly] encourages continuing cooperation in order to promote complementarities among the secretariats while respecting their independent legal status."[2]

[1] A/RES/64/203, p. 2. Available at http://www.cbd.int/doc/un/un-cbd-resolution-en.pdf.
[2] Ibid., 18 (p. 5)

in the developed world) that have given rise to them.

Likewise, environmental considerations should be a part of development and poverty reduction strategies. Factors such as land, water, poverty, indigenous issues, etc., are linked in reality, and they need to be linked in analysis, policy-making and implementation at local, national and global levels. This can only be achieved if there is extensive inter-institutional consultation.

Not only among the general public but also among politicians and experts there is a serious failure to perceive the interrelatedness of these issues—or, if the perception does exist, there is a failure to integrate it into processes of analysis, policy making and implementation. It was argued at the conference that almost two decades after the Rio Earth Summit, we have yet to look scientifically at the relationship between the three conventions. It was pointed out that Jeffrey Sachs has said that he has never seen the word "biodiversity" in a poverty reduction strategy paper. Developing countries are asked by the IMF, the World Bank and other international bodies (including the Rio conventions) to elaborate Poverty Reduction Strategy Papers, National Adaptation Programs of Action, and various other national strategy plans, but because these are all carried out separately they become disjointed and largely ineffective. Overcoming this is crucial. Only when issues are understood in relation to one another can they be truly addressed.

In the previous section, the suggestion was made that the IPCC (most particularly Working Groups II and III) deal not only with climate change but also with biodiversity and desertification. If this is implemented, it will go a long way towards dealing with these issues in an integrated way, overcoming the tendency to take them in isolation from one another.

II. Limitations in the Science/Policy Interface

In this section we will look at the science/policy interface of all three conventions, but given the above recommendation that the IPCC address not only climate change but also biodiversity and desertification, we will take particular note of the strengths and weaknesses of the IPCC process on the grounds that, as the scientific base of the other treaties is advanced, they are likely to face the same difficulties.

The strength of the IPCC lies in the very process through which it operates. The panel itself does not do climate monitoring, field research or primary research. It assesses the research that is done globally. The fact that it deals with peer-reviewed research and has its own processes of extensive review give the panel credibility and authority. It does no more and no less than an assessment, and is therefore seen by governments as unthreatening and impartial. While this process is the strength of the IPCC, it also presents some limitations.

1. The Problem of Time Lag

Policy makers and the general public, for the most part, do not have the time and in most cases also not the aptitude or the basic knowledge of the sources to keep up with the latest research on climate change, and particularly not to filter out information that is overly alarmist or overly skeptical. They are therefore dependent on the assessment reports of the IPCC. However, the rigorous review process and the reliance on consensus that gives the IPCC report its credibility also means that there is a substantial time lag between the actual research and its eventual inclusion in an IPCC report. In that elapsed time, science will have inevitably moved on. The IPCC report is in fact a snapshot of the state of research at a certain cut-off date set some time before the report is published. Given that the gap between reports can be six and possibly even seven years, it can happen that policy and public opinion are guided by information and analysis that in some cases is out of date.

As we have already noted (see p. 3), this should not prevent the taking of concrete action. However strategies are needed to get around the problem without compromising the objectivity and credibility of the IPCC reports. One possibility that should be considered would be the publication of an interim report after three years that would make available the most up-to-date research, and make note of any new developments.

2. Overlap Between Policy-Making and Scientific Assessment

We have seen that the three conventions each have their own body of scientists that provide them with scientific knowledge and analysis—the IPCC for the UNFCCC, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) for the CBD, and the Committee on Science and Technology

The Copenhagen Diagnosis

A group of scientists associated with the IPCC have, in fact, produced something of the nature of an interim report, and they have been clearly motivated by the need we describe here. They call this report *The Copenhagen Diagnosis*, and describe their goal as being "to synthesize the most policy-relevant climate science published since the close-off of material for the last IPCC report."[1] Because this report is not an official report of the IPCC, it has not gone through the same process of negotiation with policy makers. This may mean that it will not get the same level of attention from governments and from media. However, since it has not gone through the waterinig down process that we refer to in the following pages, it has a value of its own.

[1] *The Copenhagen Diagnosis* homepage, http://copenhagen-diagnosis.com/

(CST) for the CCD. As we have seen, these last two include government representatives. Granted they are government representatives with expertise, but clearly this is not a simple process of scientists providing information and analysis to policy makers.

As an intergovernmental body, the IPCC also includes government representation, particularly in the review process and the IPCC plenary sessions, but it does have a greater level of independence than the scientific bodies for the other two conventions.

Thus, to varying degrees, in all three conventions, policy makers are already active in the process of formulating the scientific assessment that will provide a basis for their policy making. This is less true of the IPCC—not surprisingly,since the IPCC was formed before the UNFCCC and is independent of it—but it is true to some degree for all the conventions.

In the IPCC, it is particularly in the preparation of the *Summary for Policy Makers*—a document that is crucially important since it is the main source of information and assessment for policy makers—that government representatives have a role. In the approval process of this summary, scientists and government representatives together go through and approve the summary line by line. This means that the main document that is provided for policy makers is already influenced by them. The advantage of this is that governments cannot ignore or deny the content of the summary since they have been involved in the approval process.

The disadvantage, though, is that the science can be watered down. At the conference, an example of this was given. A sentence in the Final Government Draft originally read, "Roughly 20-30% of species are likely to be at high risk of irreversible extinction if global average temperature increase exceeds 1.5-2.5° C". In the final published version, following the approval meeting, this came to read, "Approximately 20-30% of plant and animal species assessed so far are likely to be at increased risk of extinction if increases in global average temperature exceed 1.5-2.5°C." The ad-

dition of the phrase "species assessed so far", the deletion of the word "irreversible", and the change from "at high risk" to "at increased risk" considerably weaken the statement.

It is most likely that more would be lost than gained in trying to remedy this situation, in that any attempt to eliminate policy makers from this stage would likely have the consequence of reducing the commitment of governments to work with the results. Nevertheless, at least a widespread recognition that this kind of watering down process takes place would seem necessary.

One of the implications of this is that, quite contrary to the charges of the climate change skeptics, and in spite of the impression to the contrary given by the errrors of the IPCC that have recently emerged (see pp. 6-7), the IPCC reports are more likely to understate than overstate the problem. This is a fact that should be more widely recognized, especially if, as recommended here, a similar approach is adopted for the issues of biodiversity, land degradation and desertification.

3. Risk of a Minimalist Approach

In the process of negotiation, reaching some kind of agreement tends to become a goal in itself. This is inevitable in that insofar as no agreement is achieved, no action will take place. The problem is that there is no inherent reason for believing that the strategies on which agreement can be reached in the negotiating process are necessarily the strategies most conducive to dealing with the ecological problems they are meant to address. There are simply too many other factors that affect the negotiating process. As negotiating governments are forced to compromise in order to reach an agreement, there is a high risk that a lowest common denominator will be sought that in fact involves a very minimalist approach—not only in the sense that the strategies adopted are likely to be the ones that conflict least with the national interest of the negotiating countries (particularly the more powerful negotiating countries), but also that the very interpretation of the problem promoted is likely to be a minimalist one.

We have seen one example of this minimalizing effect in the process of watering down described above. In the CBD, focusing on what are called hot spots of biodiversity clearly makes sense, but if this becomes too much of a focus it could lead to a failure to sufficiently deal with biodiversity in other areas, perhaps even leading to an implied permission to ignore biodiversity in other areas.

In regard to biodiversity, much of the negotiation becomes preoccupied with such matters as intellectual property rights, trade and financial mechanisms. This kind of focus is likely to arise both from the preoccupation of the negotiating countries with their own national self interest, and from the dynamics of the negotiating process itself. The question to be raised here is whether the dynamics of the negotiating process

and the preoccupation of countries with their own national self interest have the effect of discouraging an adequate focus on aspects of biodiversity that may be equally as important but are less compatible with the national self interest of negotiating countries or less suited to the negotiating process. It is widely recognized that the two major threats to biodiversity are habitat loss and invasive species. The problem of habitat loss in particular is extremely complex in that it is conditioned very much both by a growing human population and continuously expanding economy. It is so intertwined with other socio-economic issues that it may well be less compatible with the interests of the negotiating partners, and less conducive to being defined in terms that make it suitable for negotiation.

In negotiations on climate change, too, it is important to question whether the focus on emissions may be an example of this kind of minimalist approach—adopted because it is more conducive to concluding an agreement than because it is the best way to solve the problem. Narrowing of the focus in this way makes it extremely unlikely that the correlations and synergy with the other conventions that we have called for above will ever be achieved. Further, the focus on emissions is a focus on a particular consequence of our lifestyle and patterns of production and consumption. A greater focus on causes may be necessary.

4. A Broader Knowledge Base

In many cases, there may not be sufficient peer-reviewed research available for the kind of process that is carried out by the IPCC. This is particularly true in regard to biodiversity, land degradation and desertification, but even in the IPCC process it is true in regard to certain aspects of adaptation and mitigation, where often there is a paucity of literature to be assessed.

In these areas, there may be a need for fieldwork—something that is not currently part of the role of the IPCC. It may also be important to look at literature that appears in government reports, NGO reports, etc. This has been called "grey literature." It is not necessarily subject to rigorous review such as the peer review process characteristic of science literature. Yet much of the literature that appears on biodiversity, land degradation, desertification and adaptation to climate change appears not in science journals but in this grey literature. This kind of material must be incorporated without compromising objectivity and credibility. A rigorous process for evaluating this literature that raises it to the level of peer-reviewed work is therefore necessary.

Another aspect of developing a broader knowledge base is the integration of different styles of knowledge—for example, the knowledge of indigenous peoples and knowledge grounded in the day-to-day experience of farmers and others whose lifestyle involves intensive interaction with nature.

Both broader knowledge and broader participation in the process of information generation and analysis is necessary, but it is essential that this be carried out in a way that does not compromise objectivity and credibility. To achieve this, a vastly greater degree of communication across sciences will be required, particularly between natural scientists, social scientists, anthropologists and economists.

5. Difficulties Associated with the Consensus Process

The decision-making of these conventions is a very difficult process of over 190 nations operating essentially on a consensus basis. Achieving consensus in an inherently disparate grouping is in itself a difficult task. It is a process that encourages moderate rather than extreme decisions—even when more radical decisions are called for. And it is also a process that is vulnerable to being held back by the will of those who want the least to happen.

One way that has been suggested for dealing with this problem is to try to reach agreement in smaller groups. For example, given that the top 17 emitters (including the EU) are responsible for 80 per cent of carbon emissions, it has been suggested that negotiations just among these countries might be a more pragmatic approach.

The Major Economies Meeting set up by the Bush administration was an example of this kind of approach. This was widely rejected both because it was seen as being at odds with the UNFCCC and because it was to operate through voluntary means only. However, this initiative has been renewed by the Obama administration under the title "Major Economies Forum". More recently, there have been suggestions that the G20 should work together to achieve the kind of agreement that could not be achieved at Copenhagen.

There is a serious risk in this approach. While it is quite feasible that more creative ideas will come from smaller forums, there is a good deal of room for concern that these better off countries will cater to their own needs and pay insufficient attention to other countries and to the need for synergy. Certainly the approach of working in smaller groups may have some pragmatic advantages, but the risks involved must not be underestimated, nor should the need for a broader consensus approach be downplayed. If an approach is adopted that involves seeking agreement among a limited number of countries with similar interests or facing similar issues, then strategies must be put in place to assure that this will be fully integrated into the broader consensus process, with effective systems of transparency and dialogue set up to avoid the risk of forming a club that panders to its own interests to the exclusion of others.

III. Developing Countries and Local Communities

The role and place of developing countries in the negotiations is a matter that is frequently discussed—often with the implication that developing countries too must be willing to accept such burdens as emissions cuts, etc. But developing countries must be given a much greater role than just being asked to share in the burdens associated with implementation. With issues such as biodiversity, land degradation and desertification, with some issues that impact on climate change such as deforestation, land conversion, the release of methane from waste dumps and landfills, etc., and with many aspects of adaptation and mitigation in regard to climate change, the way people relate to their immediate environment is key. With regard to fossil fuel emissions, undoubtedly, the role of the wealthier countries is the most crucial. But with these other areas, in many cases, the way that people in developing countries—particularly the poorest of these countries, and very often the rural and indigenous communities in these countries—interact with (or are constrained by socio-economic conditions to interact with) their natural environment has a critical impact on sustainability.

For this reason, the impact that the conventions have on these countries and communities and the role they have in the convention process is of critical importance. Without adequate participation by developing countries, an effective response to the ecological crisis will not be possible. When people are not part of the decision-making process or have no say in setting the agenda, they are unlikely to be eager to accept the decisions made, they will be prone to mistrust, and there is a high risk that the decisions made will not be sufficiently

Abra Province, Philippines, December, 1988. Until 1975 this area was covered in forest, but logging deprived the indigenous peoples of much of the land they had been using for slash-and-burn farming, leaving them too little to carry out this method of agriculture sustainably. Pressure on the forests was increased both by population growth and by the fact that people now produced food not only for their own sustenance, but also as a means to participate in the market economy. The devastation of the forests apparent in the picture above is not a direct consequence of logging but of overly intensive slash-and-burn farming. Examples like this around the world demonstrate the interaction of multiple socio-economic factors in environmental destruction and the need for an integral and participatory approach to sustainability.

cognizant of their circumstances and therefore not suited to implementation in the given conditions of their socio-economic situation.

The participation of developing countries, then, must be much more than a matter of sharing in the responsibility of implementation. Participation of poorer countries, and of the poorer communities in these countries, is essential at the levels of analysing the problems and setting both long-term and short-term goals.

This means that avenues for participation by indigenous peoples, farming communities, etc., in decision-making processes must be enhanced. It also means that decisions must be made with sufficient understanding of the circumstances of the people who will be affected.

1. Differing Perspectives on Developing Countries

In very general terms, there are essentially two perspectives regarding the situation of developing countries.

One perspective sees the developing countries very much as victims. These countries are, for example, highly vulnerable to climate variability and climate change, which means that they are likely to suffer more from the consequences of global warming. This vulnerability is due to their location in regions highly prone to natural hazards, to their relatively dense populations, and to their weak economies, high levels of poverty and low adaptive capacity.

Those most seriously affected by climate change, therefore, are in most cases those lacking the resources for effective participation in the decision-making process. Given that generally they have contributed very little to the problem, this leads to the conclusion that they are victims in the whole process.

The other perspective seeks to treat the developing countries as both more responsible and more capable of being responsible for themselves. China, it is pointed out, is today the greatest emitter of greenhouse gases (i.e., as a country and not in per capita terms). Many other developing countries too have achieved significant economic growth and are not seen exclusively as victims in the environmental crisis.

Further, the perception of these countries as victims is seen by some, even within the countries themselves, as encouraging passivity and dependence, and as turning attention away from what they can really do for themselves. The fact that numerous countries, particularly in Asia and Latin America, have gone a long way towards extricating themselves from poverty is taken as indicating the potential that these countries have for dealing with their own problems.

However, the countries of the developing world should not be seen as a monolithic whole. There is a wide disparity within these countries. The fact that in recent years some developing countries have achieved a fairly high level of growth should not be allowed to obfuscate the difficulties that many

developing countries continue to face. Many remain highly dependent on the export of agricultural products, are stricken with ethnic tensions, and have extremely inadequate infrastructure—all factors that are in one way or another a legacy of the colonial era. In many of these countries, factors such as external debt, the imposition of structural adjustment programmes, and conflicts (sometimes exacerbated by outside forces in quest of resources), have further weakened the capacity of the state to govern. The worst case scenario, it was suggested at the conference, can be seen in Congo where so many countries intervene because of its rich resources.

Two photographs of the same location taken only two years apart, the first in 1987, and the second in 1989. It is an overview of a valley in Abra (Philippines), in the same region as that shown in the photogrpah on page 16. With the hills denuded of forest, when a typhoon came, the water rushed to the valley, sweeping away forest, farmland, houses, and even human life. Such incidents are both more frequent and more severe in developing countries than they are in developed countries.

The increasing gap within the so-called developing countries can be seen by the fact that the CDM (Clean Development Mechanism) portfolio of the Kyoto Protocol is dominated by China and India, while Africa has had practically no share.

To treat the problems as all internal or all external would be a mistake. We are dealing with a nexus of internal and external factors. Our starting point must be that, due to both internal and external factors, developing countries—particularly the poorer developing countries—are disadvantaged in the process of negotiating and implementing international environmental agreements. Given that the tensions between developed and developing countries frequently cause an impasse in negotiations, it is essential that the nature of this disadvantage and the way it affects the process of the conventions be addressed.

2. Disadvantages in Negotiation and Implementation

Negotiations are inevitably carried out between governments who see their main role as promoting the national interests of their respective countries. This may involve favouring particular industries or corporations. In the negotiation process, the relative influence of each country varies according to its relative strength or weakness. Some more powerful governments, in fact, attempt to shape the processes even of conventions they have not ratified. They do this through such strategies as warning against "over-regulation", holding out against the idea of compensation for Southern actors, and arguing for voluntary rather than binding agreements.

In this competitive context, poorer and weaker countries stand at a considerable disadvantage. Currently, rich countries dominate the key global economic structures such as the IMF, the World Bank, the G-8, the OECD and the WTO. Poor countries, either through lack of membership or through lack of capacity for effective representation and participation, have very little influence.

Developing countries generally, and the poorer developing countries in particular, have a limited range of technical, scientific, legal and economic expertise and consequently are necessarily dependent on northern scientists and institutions to tell them the extent and impacts of global warming and to lead the negotiations in areas that are intensely science-driven. The three IPCC Working Groups are dominated by U.S. and European scientists. Particularly poorer developing nations are not able to send their representatives and scientists to

Enhancing the role of developing countries

If the role of developing countries is to be enhanced not only at the levels of negotiation and implementation, but also at the levels of scientific analysis and agenda setting, then two strategies will be required.

1. There will have to be efforts to enhance the level of scientific education and practice within the developing countries. Among other things, this would mean making sure that peer-reviewed litertaure is made available in these countries, and ascertaining that sufficient funding and personnel are available.

2. There will have to be efforts to bring together the so-called grey literature, the non-peer-reviewed literature from these countries, and do the extra research to raise it to a peer-reviewed level.

Given the present inadequacy these countries experience in terms of access to funding, scientific information and staffing, a concerted effort to enhance their capacity in these areas is essential—not just as some kind of charity or development assistance towards the disadvantaged, but as a *sine qua non* both for an accurate understanding of the environmental crisis itself and for an effective strategy for dealing with it.

expensive intergovernmental meetings (preparatory meetings, ad hoc working groups, inter-sessional meetings, etc.) and this limits their participation in global environmental negotiations.

Even when they are able to send representatives to such meetings, they often lack sufficient knowledge of environmental science, international law, international environmental politics, etc. There are numerous factors that lie behind this. One is the phenomenon of "brain drain." Fully one in three trained Africans are said to live in a developed country. In addition to this there is the lack of funds available for education and research, and even inadequate availability of the information necessary for applying for funding.

Even when the poorer developing countries are able to participate in and even influence global environmental negotiations, many factors can impede effective implementation. There are, for example, treaties promoting technology transfer, but the treaties are between countries, and most of the technology is owned by the private sector, not the government. At the Bali meeting of the UNFCCC, developing countries did accept the basic idea that they would agree to emissions cuts if there was technological support from developed countries, but this is a factor that impedes that technological support.

Frequently, developing countries, and particularly the poorer developing countries, don't have the institutional capacity for implementation. Many African countries, not having the financial and technical capacity to control the importation of genetically modified foods and crops, have not been able to fully implement and regulate the Biosafety Protocol and other global environmental agreements. African countries' economic precariousness and heavy financial dependence on development cooperation partners are still the main obstacles to the implementation of sustainable development strategies and environmental initiatives.

Ultimately, the objective of international negotiations must include efforts to remedy both environmental problems and situations of poverty and inequality. While problems related to climate, biodiversity, land degradation and desertification need to be addressed, the starting point should be a comprehensive grasp of the whole situation. Responding to climate change, promoting and preserving biodiversity and combating land degradation and desertification must be accompanied by development and empowerment at the same time. Both nationally and internationally, a cross-sectoral approach is essential.

3. Indigenous Peoples and Local Communities

Developing countries are frequently countries whose borders were defined at the convenience of former colonial masters and without reference to the ethnic make-up of the population. In many cases, these countries are made up of numerous ethnic groups, often including indigenous peoples who are either still living traditional lifestyles or mix to

Some factors limiting the capacity for involvement of indigenous peoples

In spite of the fact that Article 8 (j) of the Convention on Biological Dicersity expressly includes Indigenous Peoples in the CBD, there are factors that impede this participation. The following are some examples.[1]

- The factors that hinder developing countries at the international level often hinder indigenous peoples at the national level: they often lack the funds and expertise necessary for participation and representation.
- In some cases, indigenous peoples have extremely egalitarian societies in which no person is entrusted with authority for the group. This can make any form of representation extremely difficult.
- The CBD seeks to protect the intellectual property rights of indigenous peoples, but under the principle of national sovereignty, control of biological diversity is granted to national governments, not to local populations.
- Indigenous peoples may be subject to discrimination and marginalization.
- Many of the above factors also apply to farming communities. Further, some environmentalists display a distrust of farmers and other people whose lifestyle and economic activity involve substantial interaction with the natural environment. Their practices can be seen as exploitative and as destructive of biodiversity. This distrust is not conducive to promoting participation and in most cases is an oversimplification by people who are not sufficiently attuned to the various factors affecting farmers and other local communities.

[1] *Convention on Biological Diveristy, Article 8. In-situ Conservation.* http://www.cbd.int/convention/articles.shtml?a=cbd-08

some degree traditional lifestyles with lifestyles that have arisen with the advent of westernization. Even when there is no particular form of discrimination, it is frequently difficult for governments to represent the diversity of their own people, and it is not uncommon for indigenous peoples and other minorities to feel that they are not represented by their governments.

In contrast to other international forums, the importance of indigenous knowledge and indigenous peoples is explicitly recognised in Article 8(j) of the CBD. Their participation in the political process is encouraged, and it is stated that they should be included in the process of benefit sharing. However, as is shown in the accompanying textbox, there are numerous factors that interfere with the effectiveness of this.

There is a serious need for the systematic integration of local and grassroots voices into decision-making processes at the national and at the global level. International conventions could feasibly provide a framework for encouraging a more adequate integration of local communities, both globally and nationally.

Conclusion

The outcome of this discussion creates a dilemma. That dilemma can be summed up in the following three points:

1. The environmental crisis is global. Its causes and its consequences reach into every region and every dimension of the world's socio-economic system. No country or region can deal with it in an isolated or totally self-reliant way. International co-operation is essential and therefore there is no alternative to carrying out international negotiations.
2. The environmental crisis requires an approach that is integral and comprehensive. Environmental issues such as climate change, biodiversity, land degradation, desertification, etc., have to be correlated with one another and also with other issues such as poverty, development, etc. Poorer countries, indigenous peoples, farming communities, etc., must have a voice and must be included in the earliest stages not only of negotiation but also of scientific analysis assessment and agenda setting.
3. The process of international negotiation works best with issues that are very specific. It is far less suited to dealing with issues that require an integral, interrelated, comprehensive approach. In order to achieve agreement, the tendency will inevitably be to define very specific problems and treat them in isolation, particularly when the negotiating partners are primarily concerned with their own interests.

Thus, there is something of a mismatch between the international process and the task that is set for it by the environmental crisis. While the original perception that gave rise to these conventions—the perception that negotiating international treaties is the way to go in responding to the environmental crisis—was certainly not misplaced, there need to be adjustments in the international negotiating process to make it more suited to the task.

1. The UNFCCC

In the follow-up to the Copenhagen Conference, *in addition to setting adequate and binding emissions reductions targets,* the UNFCCC should

a) Lay the groundwork for a system of interchange and collaboration with the other conventions so that the synergy we have spoken of can be achieved.
b) Begin a process to broaden the knowledge base of the convention in a way that draws in the information generated by government agencies, indigenous peoples, farming communities, NGOs, etc. (including those in developing countries), without compromising the objectivity and credibility of the knowledge base.
c) Establish means for greater representation of developing countries and particularly the poorer developing

countries at the earliest stages of problem analysis and agenda setting.

d) Begin the process of setting targets for negotiation that go beyond emissions reductions targets and other outcomes and address the causes that lie in the patterns of production and consumption. These targets must be worked out in dialogue with the other conventions.

2. The CBD

The CBD also, at its Nagoya meeting, should formalize as much as possible its relationship with the proposed Intergovernmental Platform on Biodiversity and Ecosystem Services and initiate a process of collaboration with the IPCC that would enable it to include the work of Working Groups II and III in the process. Like the UNFCCC, the CBD also needs to enhance the participation of developing countries, develop strategies for raising knowledge that derives from sources other than academic expertise to the same level of objectivity and credibility as peer-reviewed academic work, ascertain that the strategies that it adopts for the inclusion of indigenous peoples are adequate for this task, and set up a structure for communication and collaboration with the other conventions.

3 The CCD

The CCD, first of all, needs better funding, better press, and more attention from the developed world. Land degradation and desertification should not be seen as problems that exist only in those parts of the world where deserts are in fact forming or spreading. Rather they should be seen as very important aspects of a multidimensional degradation and despoliation of the biosphere—a phenomenon that includes the growth of anoxic regions in the oceans, deforestation, reduction in the primary production of biomass through photosynthesis, etc. It should therefore be seen as something that affects the whole world and that is at the same time an outcome of socioeconomic processes that involve the whole world.

In sum, the process of all three conventions must become more adapted to the interrelated nature of the problem. This does not mean that specific problems do not need to be treated in a specific way. There are already many international treaties for dealing with specific problems—treaties regarding trade in endangered species, intellectual property rights, etc. Where there are no such treaties, it is appropriate for the three Rio conventions to carry out specific negotiations to deal with specific problems. Negotiations therefore to reduce fossil fuel emissions remain appropriate for the UNFCCC even when this is done in a way that does not correlate this with other problems.

But dealing with specific problems through specific strategies in an isolated way, while it may be necessary, will never be an adequate approach to dealing with the highly interrelated nature of the environmental crisis. To deal with the problem comprehensively within the context of the present international architecture, this interrelatedness must be

addressed. The three Rio Conventions provide the most appropriate forum for addressing this interrelatedness. The architecture of the conventions themselves, however, has to be configured in a way that makes them conducive to this goal. Creating that architecture, then, would seem the most important step forward for these conventions.

Finally, the whole process needs to be guided, far more than it currently is, by the perception that climate change, loss of biodiveristy, land degradation and desertification are outcomes of human activity. Ultimately, there can be no real solution to the environmental crisis unless the human activity that gives rise to it is addressed. That means that attention must turn more and more from the outcomes to the causes—the patterns of consumption and production, the political and economic decision-making processes, the attitudes towards nature and towards other peoples, and those other factors in human society that have given rise to a society that seeks wealth and comfort at the expense of other peoples and of the environment. An accurate identification of the causes of the environmental crisis will be achieved only when the various ecological problems we face are seen in conjunction with one another and equally in relation to problems of poverty, development, inequality, etc. This perception will necessarily hinge on the participation of those least advantaged not only in the implementation of strategies to deal with the problems, but also in the process of understanding and assessing them, and setting the agenda for addressing them. Then and only then are we likely to begin to address the issues of lifestyle and of patterns of production and consumption (particularly in the developed countries) that, in the introduction to this pamphlet, we noted are of critical importance.

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- The environmental crisis is global. No country or region can deal with it in an isolated or totally self-reliant way. International cooperation and international negotiations are essential.
- The environmental crisis requires an integral and comprehensive approach. Environmental issues have to be correlated with one another and with issues such as poverty, development, etc.
- The process of international negotiation works best with issues that are very specific and is far less suited to dealing with issues that require an integral, interrelated, comprehensive approach.

Thus, there is a mismatch between the international process and the task that is set for it by the environmental crisis. To deal with this, there need to be:

- interchange and collaboration between the conventions
- a process to broaden the knowledge base by drawing on the work of governments, NGOs, indigenous peoples, farming communities, etc., and raising this to the level of peer-reviewed work.
- greater representation of developing countries and particularly the poorer developing countries at the earliest stages of problem analysis and agenda setting.

Ultimately, there can be no real solution to the environmental crisis unless the human activity that gives rise to it is addressed. That means that attention must turn more and more from the outcomes to the causes—patterns of consumption and production, political and economic decision-making processes, attitudes towards nature and towards other peoples, and other factors in human society that have given rise to a society that seeks wealth and comfort at the expense of other peoples and of the environment.

This will necessarily hinge on the participation of those least advantaged not only in the implementation of strategies to deal with the problems, but also in the process of understanding and assessing them, and setting the agenda for addressing them.