UNITED NATIONS ACTIVITIES

UN / 62nd GA

Final Report

by Elsa Tsioumani*

The main part of the sixty-second session of the General Assembly of the United Nations (UN) convened from 18 September to 21 December 2007, at the UN Headquarters, in New York. Following his election by the sixty-first session on 24 May 2007, the sixty-second session was chaired by Srgjan Kerim of the former Yugoslav Republic of Macedonia. As identified by its President, the priorities of the session included: climate change, financing for development, achievement of the Millennium Development Goals (MDGs), counter-terrorism, and the reform agenda, to renew the management, effectiveness and coherence of the UN.

Among the session's highlights, the Assembly adopted a resolution requesting the Secretary-General to compile a report on all UN activities in the area of climate change, in anticipation of the thematic debate to be held in February 2008. A three-day ministerial dialogue on financing for development laid the groundwork for the Review Conference on Financing for Development to be held in the second half of 2008. Another dialogue focused on inter-religious and intercultural understanding, for the first time in the history of the Assembly. A landmark three-day conference reviewed progress towards "A World Fit for Children", the Plan of Action to improve the lives of young people approved by the Assembly in 2002 and adopted a consensus declaration in which States pledged to realise promises by scaling up their efforts through resource allocation and political action, increased cooperation and more focused partnerships with the private sector. The Assembly also adopted the UN Comprehensive Strategy on Assistance and Support to Victims of Sexual Exploitation and Abuse by UN Staff and Related Personnel, as well as numerous resolutions on the recommendation of its Committees.

As a follow up to the report published in the previous issue of *Environmental Policy and Law* (Vol. 37, No. 6), this report provides an overview of the resolutions adopted on selected legal and environmental issues.[1]

Oceans and the Law of the Sea (Agenda item 77)

Oceans and the Law of the Sea

On 21 December 2007, by a recorded vote of 146 in favour to two against (Benin and Turkey, Benin later noting they had been in favour of the resolution) with three abstentions (Colombia, Libya and Venezuela) the Assembly adopted a 22-part resolution on oceans and the Convention on the Law of the Sea (document A/62/L.27, resolution 62/215).

The resolution covers the following items: implementation of the Convention and related agreements and instruments; capacity building; the Meeting of States Parties; peaceful settlement of disputes; the Area; effective functioning of the Authority and the Tribunal; the continental shelf and the work of the Commission; maritime safety and security, and flag State implementation; marine environment and marine resources; marine biodiversity; marine science; activities of the Division for Ocean Affairs and the Law of the Sea; and the sixty-third session of the General Assembly.

On implementation of the Convention and related agreements and instruments, the Assembly calls on States to harmonise, as a matter of priority, national legislation with the provisions of the Convention and, where applicable, relevant agreements and provisions.

15-year old Millicent Atieno Orondo, Youth Representative and Chairperson of the Child Participation Committee of Kenya, addresses a High-Level meeting of the sixty-second session of the GA on the follow-up to the Outcome of the Special Session on Children "A World Fit for Children +5 (WFFC+5)" Courtesy: UN

* Researcher, Democritus University of Thrace; Lawyer, Thessaloniki, Greece; and regular contributor to EPL.

0378-777X/08/$17.00 © 2008 IOS Press

It urges all States to cooperate in taking measures to protect and preserve objects of an archaeological and historical nature found at sea, and notes the effort made by UNESCO with respect to the preservation of underwater cultural heritage.

On capacity building, the Assembly calls upon donor agencies and international financial institutions to keep their programmes systematically under review to ensure the availability in all States, particularly in developing States, of the economic, legal, navigational, scientific and technical skills necessary for the full implementation of the Convention. It also encourages intensified efforts to build capacity for developing countries to improve hydrographic services and the production of nautical charts, as well as to strengthen capacity-building activities in the field of marine scientific research; and recognises the need to build the capacity of developing States to raise awareness of, and support implementation of, improved waste management practices.

On the Meeting of States Parties, the Assembly requests the Secretary-General to convene the eighteenth Meeting of States Parties to the Convention from 13 to 20 June 2008, in New York.

On the peaceful settlement of disputes, the Assembly underlines the important role and authority of the Tribunal concerning the interpretation or application of the Convention and the Agreement, and pays tribute to the important and long-standing role of the International Court of Justice.

On the Area, the Assembly notes the progress of the discussions on issues relating to the regulations for prospecting and exploration for polumetallic sulphides and cobalt-rich ferromanganese crusts in the Area, and reiterates the importance of the ongoing elaboration by the Authority of rules, regulations and procedures to ensure the effective protection of the marine environment, the protection and conservation of the natural resources of the Area, and the prevention of damage to its flora and fauna from harmful effects that may arise from activities in the Area.

On the effective functioning of the Authority and the Tribunal, the Assembly appeals to all States Parties to pay their assessed contributions in full and on time, and emphasises the importance of the Tribunal's rules and staff regulations promoting the recruitment of a geographically representative staff.

On the continental shelf and the work of the Commission, the Assembly encourages States Parties that are in a position to do so to make every effort to submit information to the Commission regarding the establishment of the outer limits of the continental shelf beyond 200 nautical miles. It notes that the anticipated heavy workload of the Commission places additional demands on its members and the Division and takes note of the decision of the seventeenth meeting of States Parties to the Convention to continue to address as a matter of priority issues related to the workload of the Commission. It also endorses the request by the meeting of States Parties to the Secretary-General to take timely measures before the twenty-first session of the Commission, to strengthen the capacity of the Division, within overall existing resource levels, and approves the convening by the Secretary-General of the twenty-first and twenty-second sessions of the Commission in New York, from 17 March to 18 April 2008 and from 11 August to 12 September 2008.

On maritime safety and security and flag State implementation, the Assembly encourages States to ratify or accede to international agreements addressing the safety and security of navigation, as well as maritime labour, and welcomes the adoption of the Work in Fishing Convention, 2007. It notes the progress in the implementation of the Action Plan for the Safety of Transport of Radioactive Material approved in March 2004, and also notes that cessation of the transport of radioactive materials through the regions of small island developing States is an ultimate desired goal of these States and other countries. It expresses deep concern about the continuous violent attacks on ships off the coast of Somalia, and welcomes initiatives to combat piracy and armed robbery. It also urges flag States without an effective maritime administration and appropriate legal frameworks to establish or enhance the necessary infrastructure, legislative and enforcement capabilities to ensure effective compliance with, and implementation and enforcement of, their responsibilities under international law.

On marine environment and marine resources, the Assembly emphasises the importance of the implementation of Part XII of the Convention in order to protect and preserve the marine environment and its living marine resources against pollution and physical degradation, and calls upon all States to cooperate and take measures consistent with the Convention for the protection and preservation of the marine environment. It notes the work of the Intergovernmental Panel on Climate Change, including the finding that the progressive acidification of oceans is expected to have negative impacts on marine shell-forming organisms and their dependent species, and in this regard encourages States to urgently pursue further research on ocean acidification. It further encourages States to enhance their scientific activity to better understand the effects of climate change on the marine environment and marine biodiversity and develop ways and means of adaptation, and calls upon them to enhance their efforts to reduce the emission of greenhouse gases. It welcomes the commencement of activities by the International Maritime Organization to investigate the development of international measures for minimising the translocation of invasive aquatic species through biofouling of ships; encourages States to jointly develop and promote contingency plans for responding to pollution incidents; and welcomes the activities of UNEP relating to marine debris, urging States to integrate the issue of marine debris into national strategies dealing with waste management. It reaffirms paragraph 119 of its resolution 61/222 regarding the ecosystem approach, and in this regard: notes that continued environmental degradation in many parts of the world and increasing competing demands require an urgent response and the setting of priorities for management interventions aimed at conserving ecosystem integrity; notes that ecosystem approaches to ocean management should be focused on managing human activities in order to maintain

0378-777X/08/$17.00 © 2008 IOS Press

and, where needed, restore ecosystem health to sustain goods and environmental services, provide social and economic benefits for food security, sustain livelihoods in support of international development goals, and conserve marine biodiversity; recalls that States should be guided in the application of ecosystem approaches by a number of existing instruments, in particular the Convention on the Law of the Sea and its implementing Agreements, as well as other commitments, such as those contained in the Convention on Biological Diversity (CBD) and the World Summit on Sustainable Development (WSSD) call for the application of an ecosystem approach by 2010; and encourages States to cooperate and coordinate their efforts and take measures to address impacts on marine ecosystems within and beyond areas of national jurisdiction, taking into account the integrity of the ecosystems concerned.

On marine biodiversity, the Assembly reaffirms its role relating to the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction, and reaffirms its request to the Secretary-General to convene a meeting of the *Ad Hoc* Open-ended Informal Working Group on marine biodiversity beyond areas of national jurisdiction in New York, from 28 April to 2 May 2008. It also notes the work of States and relevant intergovernmental organisations, including the CBD, in the assessment of scientific information on, and compilation of ecological criteria for the identification of, marine areas that require protection in the light of the objective of the WSSD to develop and facilitate the use of diverse approaches and tools such as the establishment of marine protected areas, including representative networks, by 2012.

On marine science, the Assembly calls upon States to improve understanding and knowledge of the oceans and the deep sea, including in particular the extent and vulnerability of deep sea biodiversity and ecosystems, by increasing their marine scientific research activities in accordance with the Convention; and stresses the importance of increasing the scientific understanding of the oceans/atmosphere interface.

On the regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects, the Assembly invites Member States, the Global Environment Facility and other interested parties to contribute financially to the "assessment of assessments", taking into account the workplan and budget approved by the *Ad Hoc* Steering Group.

On regional cooperation, the Assembly takes note of a number of initiatives at the regional level to further the implementation of the Convention.

On the open-ended informal consultative process on oceans and the law of the sea, the Assembly acknowledges the need to discuss the issue of marine genetic resources, notes the discussion on the relevant legal regime on marine genetic resources in areas beyond national jurisdiction and calls upon States to further consider this issue, and recognises the abundance and diversity of marine genetic resources and their value in terms of benefits, goods and services they can provide. It requests the Secretary-General to convene the ninth meeting of the process in New York, from 23 to 27 June 2008.

Sustainable Fisheries

On 18 December 2007, the Assembly adopted, without a vote, resolution 62/177 on sustainable fisheries (document A/62/L.24). The resolution includes sections on: achieving sustainable fisheries; implementation of the 1995 Agreement relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks; related fisheries instruments; illegal unreported and unregulated fishing; monitoring, control and surveillance, and compliance and enforcement; fishing overcapacity; large-scale pelagic drift-net fishing; fisheries by-catch and discards; subregional and regional cooperation; responsible fisheries in the marine ecosystem; capacity building; cooperation within the UN system; and the sixty-third session of the General Assembly.

General Assembly during a joint debate on the United Nations Convention of the Law of the Sea

Courtesy: UN

On achieving sustainable fisheries, the Assembly reaffirms the importance it attaches to the long-term conservation, management and sustainable use of the marine living resources of the world's oceans and seas and the obligations of States to cooperate to this end. It encourages States to give due priority to the implementation of the WSSD Plan of Implementation; emphasises the obligations of flag States to ensure compliance by vessels flying their flag with the conservation and management measures adopted; calls upon all States to apply the precautionary approach and an ecosystem approach to the conservation, management and exploitation of fish stocks; and encourages States to increase their reliance on scientific advice in developing, adopting and implementing conservation and management measures. It calls upon States to improve the implementation of and

0378-777X/08/$17.00 © 2008 IOS Press

compliance with existing measures that regulate shark fisheries, and requests the FAO to prepare a report containing a comprehensive analysis of the implementation of the FAO International Plan of Action for the Conservation and Management of Sharks.

On the implementation of the Fish Stocks Agreement, the Assembly calls upon States Parties to the Agreement to harmonise, as a matter of priority, their national legislation with the provisions of the Agreement and notes with satisfaction the adoption of procedures for high seas boarding and inspection by the Western and Central Pacific Fisheries Commission at its third annual meeting. It also requests the Secretary-General to convene in 2008 a seventh round of informal consultation of States Parties to the Agreement.

On illegal, unreported and unregulated (IUU) fishing, the Assembly emphasises its serious concern that IUU fishing remains one of the greatest threats to marine ecosystems and continues to have serious and major implications for the conservation and management of ocean resources. It urges States to exercise effective control over their nationals and vessels flying their flag, and to develop appropriate processes to assess the performance of States with respect to implementing the obligations regarding fishing vessels flying their flag set out in relevant international instruments. It encourages regional fisheries management organisations and arrangements to further coordinate measures for combating IUU fishing activities, and recognises the need for enhanced port State measures.

On issues of monitoring, control and surveillance, and compliance and enforcement, the Assembly calls upon States to adopt or strengthen implementation of comprehensive monitoring control and surveillance measures, and compliance and enforcement schemes, and urges States to develop and adopt effective measures to regulate trans-shipment, in particular at-sea trans-shipment.

On fishing overcapacity, the Assembly calls upon States to commit to urgently reducing the capacity of the world's fishing fleets to levels commensurate with the sustainability of fish stocks, and urges States to eliminate subsidies that contribute to IUU fishing and to fishing overcapacity.

On fisheries by-catch and discards, the Assembly urges States and regional fisheries management organisations and arrangements to take action to reduce or eliminate by-catch, catch by lost or abandoned gear, fish discards and post-harvest losses, and welcomes the recommendation of the FAO Committee on Fisheries that the FAO should develop best-practice guidelines to assist States and regional fisheries management organisations in implementing the International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries.

On subregional and regional cooperation, the Assembly urges coastal States and States fishing on the high seas, to pursue cooperation in relation to straddling fish stocks and highly migratory fish stocks, and takes note of recent efforts at the regional level to promote responsible fishing practices. It urges States to cooperate to develop best practice guidelines for regional fisheries management organisations, and encourages the development of regional guidelines for States to use in establishing sanctions for non-compliance by vessels flying their flag.

On responsible fisheries in the marine ecosystem, the Assembly encourages States to apply by 2010 the ecosystem approach, and to increase scientific research in accordance with international law on the marine ecosystem. It welcomes recent progress in regulating bottom fisheries, and commends the FAO for its decision to develop International Guidelines for the Management of Deep-Sea Fisheries in the High Seas. It encourages accelerated progress to establish criteria on the objectives and management of marine protected areas, and urges all States to implement the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.

On capacity building, the Assembly welcomes the work of the FAO in developing guidance on the strategies and measures required for the creation of an enabling environment for small-scale fisheries.

Sustainable Development (Agenda item 54)

Non-legally Binding Instrument on All Types of Forests[2]

On 17 December, the Assembly adopted, by consensus, resolution 62/98 on the non-legally binding instrument on all types of forests, as recommended by the Economic and Social Council. According to the resolution, the Assembly decides to adopt the non-legally binding instrument on all types of forests as contained in an annex to the resolution, and invites members of the governing bodies of the member organisations of the Collaborative Partnership on Forests to support its implementation. It invites voluntary financial contributions to the Trust Fund of the UN Forum on Forests, and decides that the Forum will review the effectiveness of the non-legally binding instrument as part of the overall review of the effectiveness of the international arrangement on forests.

The instrument includes sections on: purpose; principles; scope; global objectives on forests; national policies and measures; international cooperation and means of implementation; monitoring, assessment and reporting; and working modalities.

Implementation of Agenda 21, Programme for the Further Implementation of Agenda 21 and the Outcomes of the World Summit on Sustainable Development

On 19 December 2007, the Assembly adopted by consensus, resolution 62/189 on the implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development (WSSD). According to the resolution, the Assembly calls for the effective implementation of the commitments, programmes and time-bound targets adopted at the WSSD, and for the fulfilment of the provisions relating to the means of implementation as contained in the Johannesburg Plan of Implementation. It reaffirms the objective of strengthening the implementation of Agenda 21, including through the mobilisation of financial and technological resources, as well as capacity-building programmes, and the need to promote corporate

0378-777X/08/$17.00 © 2008 IOS Press

responsibility and accountability as envisaged by the Johannesburg Plan of Implementation. It also reaffirms the need to promote the development of micro-enterprises and small and medium-sized enterprises, including by means of training, education and skill enhancement, with a special focus on agro-industry as a provider of livelihoods for rural communities.

Follow-up to and Implementation of the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States

On 19 December 2007, the Assembly adopted, by consensus, resolution 62/191 on the Mauritius Strategy. According to the text, the Assembly welcomes the renewed commitment of the international community to the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, and urges governments and relevant organisations to take timely action for the effective implementation of and follow-up to the Mauritius Declaration and the Mauritius Strategy for Implementation. It calls on the international community to enhance support for the efforts of small island developing States to adapt to the adverse impacts of climate change and encourages the implementation of partnership initiatives. It requests the relevant agencies of the UN system to intensify efforts aimed at mainstreaming the Mauritius Strategy in their work programmes, and calls on the international community to enhance its support to the implementation of the CBD work programme on island biodiversity.

Protection of Global Climate for Present and Future Generations of Mankind

On 10 December 2007, the Assembly adopted, without a vote, resolution 62/86 recognising the serious risks posed to all countries by climate change, especially developing countries, small island and African States. According to the text, the Assembly calls upon States to work cooperatively towards achieving the ultimate objective of the UN Framework Convention on Climate Change, and urges all countries to take effective and concrete action and measures at all levels. It recognises the need to provide financial and technical resources, as well as capacity building, access to and transfer of technology, and reaffirms that efforts to address climate change in a manner that enhances the sustainable development and sustained economic growth of the developing countries and the eradication of poverty should be carried out through promoting the integration of the three components of sustainable development, namely, economic development, social development and environmental protection.

Convention on Biological Diversity

On 19 December 2007, the Assembly adopted, by consensus, resolution 62/194 on the Convention on Biological Diversity. According to the text, the Assembly encourages developed country Parties to contribute to the relevant trust funds of the Convention so as to enhance the full participation of developing-country Parties, and urges all Member States to fulfil their commitments to significantly reduce the rate of biodiversity loss by 2010. It urges CBD Parties to facilitate the transfer of technology for the effective implementation of the Convention, as well as to make every effort to complete negotiations on the international regime on access and benefit sharing before 2010. It also stresses the importance of private-sector engagement for implementation of the CBD objectives and the achievement of the 2010 target.

Report of the Twenty-fourth Session of the UNEP Governing Council

On 19 December 2007, the Assembly adopted, by consensus, resolution 62/195 on the report of the UNEP Governing Council on its Twenty-fourth session. According to the text, the Assembly takes note of the report and decides to declare the decade 2010–2020 as the UN Decade for Deserts and the Fight against Desertification. It stresses the need to further advance and fully implement the Bali Strategic Plan for Technology Support and Capacity-building, and recognises the progress made so far in the implementation of the Strategic Approach to International Chemicals Management. It also recognises the global challenges posed by mercury, and welcomes the continued efforts of UNEP in shifting emphasis from delivery of outputs to achievement of results. It recognises the need to strengthen the scientific base of UNEP, and reiterates the need for stable, adequate and predictable financial resources.

Consideration of Prevention of Transboundary Harm from Hazardous Activities and Allocation of Loss in the Case of Such Harm (Agenda item 84)

On 6 December 2007, the Assembly adopted, without a vote, resolution 62/68 on prevention of transboundary harm from hazardous activities and allocation of loss in the case of such harm. According to the text, the Assembly welcomes the conclusion of the work of the International Law Commission on the issue and its adoption of the respective draft articles and draft principles and commentaries on the subjects, and commends these articles and principles. It invites governments to submit comments on any future action, including in relation to the elaboration of a convention on the basis of the draft articles, as well as on any practice in relation to the application of the articles and principles.

The Rule of Law at the National and International Levels (Agenda item 86)

On 6 December 2007, the Assembly adopted, without a vote, resolution 62/70 on the rule of law. According to the text, the Assembly reiterates its request to the Secretary-General to prepare an inventory of the current activities of the various organs, bodies, offices and programmes within the UN system devoted to the promotion of the rule of law at the national and international levels for submission at its sixty-third session; and invites the International Court of Justice, the UN Commission on International Trade Law and the International Law Commission to comment on their current roles in promoting the rule of law.

0378-777X/08/$17.00 © 2008 IOS Press

Report of the International Law Commission on the Work of its Fifty-ninth Session (Agenda item 82)

On 6 December 2007, the Assembly adopted, without a vote, resolution 62/66 on the report of the International Law Commission. According to the text, the Assembly recommends that the Commission continue its work on the topics in its current programme; invites governments to provide information to the Commission regarding practice with regard to the topics "Expulsion of aliens" and "the obligation to extradite or prosecute", as well as regarding more contemporary practice on the topic "effects of armed conflicts on treaties"; and decides that the next session of the Commission will be held in two parts, from 5 May to 6 June and from 7 July to 8 August 2008, in Geneva.

Notes

1 The resolutions will be available at: http://www.un.org/ga/62/resolutions.shtml.

2 Following adoption of this Resolution, 30 States are informally discussing (outside the UN) a draft non-paper with a revision due out in March 2008, which includes a relatively complete draft of a binding instrument on sustainable forest management. It contains many strong provisions relating to compliance, certification and other matters. This suggests that the former controversy has not been resolved regarding whether a binding instrument is needed. (WEB)

UNEP

The Montevideo Programme

From 26–30 November, the United Nations Environment Programme convened a Consultative meeting of Government Officials and Experts on the Programme for Development and Periodic Review of Environmental Law (Montevideo Programme) at its headquarters in Nairobi. The meeting was partially based on the preparatory discussions of an earlier meeting of a panel of experts, held from 3–5 September, 2007 in Geneva.

The primary foci of the meeting were a general consideration of the experiences, lessons and progress under Montevideo Programme III[1] (MTV/3) and the initiation of formal discussions regarding "a way forward for the further implementation of Programme III and for preparation of a Montevideo Programme IV" (MTV/4) which will address the period up to the year 2020. The UNEP Consultative meeting was attended by experts representing 55 governments. In addition, seven prominent intergovernmental and non-governmental organisations were represented in the discussions.[2]

Following the UNEP Secretariat's brief report of the status of implementation of MTV/3, participants in the meeting expressed their general support for the work of UNEP in the field of environmental law, underlining the significantly important role that MTV/3 has had in providing strategic guidance to UNEP. Most intensively, they underscored the view that environmental law is the key to environmental governance and sustainable development.

Beyond this, the experts generally agreed that UNEP's role in the progressive development of international environmental law remained relevant and should continue.

One key issue, which has arisen in other international discussions, was contained in the view that UNEP's environmental law programme should focus on the implementation of existing environmental law, bearing in mind the Bali Strategic Plan,[3] instead of developing new international legal instruments. A contrasting view, also prevalent in the meeting, was that the Montevideo Programme, as a series of ten-year-at-a-time strategic guidance documents, should cover a wide range of issues so that it will be able to meet the requirements of Governments addressing both existing and emerging issues, noting also that the UNEP programme of work will eventually define the scope of delivering the work. Another challenge raised in this meeting was found in some statements that the UNEP environmental law programme should prioritise its work with more focus and clarity, without duplicating the activities of other organisations. Up to now, the Programme documents have identified issues and concerns, but left priorities to be determined at the application level.

Regarding the commencement of discussions on MTV/4, some experts suggested that the programme's structure should be modified. They suggested the preparation of a first, introductory chapter laying out its general objectives, including sustainability as a fundamental principle. Subsequent material, they recommended, should include:

- inter-sectoral issues, such as poverty reduction, changes in production and consumption patterns, public participation of minority groups;
- mainstreaming gender equity consideration;
- climate change, trade and the relationship between environmental law and the economy;

in addition to the issues addressed in previous programmes.

The earlier Geneva meeting had resulted in a draft text[4] on the future MTV/4, which was before the experts, who gave initial comments on the draft text, while noting the need to further examine the programme elements before determining their own policy positions. To better accommodate this, and avoid unattributed changes, the participants requested that a "marked up version" of the original text produced by the expert group showing differences between their text and MTV/3 be annexed to the report.[5]

Beyond this, many experts presented their views on the programme areas of MTV/3, which will continue to be relevant to UNEP's actions until 2010. In this connection, the participants noted that, in order to coincide with the cycle of the Medium Term Strategy of UNEP for 2010–2013 as well as the Governing Council's 2010–2011 programme of work (to be adopted at its twenty-fifth session in 2009) preparation of MTV/4 will be scheduled for Octo-

0378-777X/08/$17.00 © 2008 IOS Press

ber or November 2008, subject to the availability of extra-budgetary resources for that purpose. (WEB/ATL)

Notes

1 Programme III was adopted by the UNEP Governing Council in February 2001. A mid-term review of its implementation was undertaken in 2004 and the results submitted to the Governing Council at its twenty-third session in 2005. The Montevideo Programme III includes twenty components, organised under three major themes: Effectiveness of Environmental Law; Conservation and Management; and Relationship with Other Fields. The full text of Programme III can be found online at: http://www.unep.org/law/PDF/GC22_2_3_add2_Montevideo%20III.pdf.

2 The International Council of Environmental Law was represented by Donald Kaniaru.

3 See Selected Documents on pages 111–112.

4 The draft text of the future Programme IV, as a result of the meeting in Geneva has been listed as document: UNEP/Env.Law/MTV4/IG/1/2.

5 The report of the meeting including the annexed text of Programme III showing changes made has been listed as document: UNEP/Env.Law/MTV4/IG/1/4.

Mercury Pollution: Taking the First Steps

by Rebecca Paveley*

The first meeting of the *ad hoc* open ended working group (OEWG) to review and assess measures to address the global issue of mercury was held from 12–16 November 2007 in Bangkok, Thailand. More than 250 delegates representing governments, the UN, inter- and non-governmental organisations discussed extensively the options for controlling mercury: debating the merits of a new or existing legal instrument or voluntary measures. Despite lengthy debate, there were still some entrenched positions at the close of the week-long meeting and there will now be further intersessional work to examine the costs of the relative options.

Background

The working group was established by the 24th session of the UNEP governing council, back in February this year. This was tasked with assessing options for controlling mercury release and addressing the global challenges posed by mercury.

Mercury is a highly toxic metal, which is damaging to human health. Methylmercury and elemental mercury are poisonous to the human nervous system, causing irreversible damage. Exposure to mercury in a pregnant woman can adversely affect the unborn baby. People are largely exposed to mercury through fillings in teeth, at certain workplaces and through diet, particularly consumption of fish.

Release of Mercury

Mercury can be released through natural processes such as the weathering of rocks, but it is predominately released unintentionally through human activities such as mining, burning of fossil fuels, deforestation and waste incineration. It is also released through products containing mercury such as dental amalgam, electrical applications and medical instruments.

While mining of mercury is on the decline, more is expected to be released through fossil fuel power plants and waste incinerators. Less than 50% of mercury emissions are estimated to come from natural processes. UNEP believes the current price of gold may be increasing mercury pollution as it is used to extract ore from gold in mining operations.

Options for Control of Mercury

Chair John Roberts (UK) began the meeting by hoping that delegates would come to a common understanding by the end of the week on options and provide the Secretariat with options for further work. Just two meetings have been scheduled for the OEWG, with options for consideration to be put to UNEP GC at its 25th session in 2009.

But despite some shifting of opinion on the best option for the control of mercury, some entrenched positions remained. The United States remained strongly in favour of voluntary measures, arguing that negotiating conventions incurred high costs and took much time, when immediate action was needed. China was also hesitant about a legally binding instrument. But those preferring a legally binding instrument – including Norway, Switzerland and the African Group – cited the effectiveness of conventions over voluntary measures. Those in favour of this option concluded either a protocol to the Stockholm Convention or a free-standing convention were the best options.

Concerns over funding to address mercury were also raised; with some concluding that, as many developed countries were in favour of a legally binding instrument, this option may carry with it a better chance of being sustainably funded.

Other Issues

There was broad agreement for phasing out primary production of mercury, but there remained divergent views on the need to restrict and ban trade. Delegates also discussed issues around the storage of mercury and the demand for mercury in products.

They agreed on the need for intersessional work to inform the next meeting of the OEWG. The Secretariat was asked to study mercury demand; the costs and benefits of various potential response measures; available funding through the Global Environment Facility and SAICM (Strategic Approach to International Chemicals Management) and effective substitutes for products containing mercury. However this intersessional work is currently unfunded, so some delegates were concerned this workload could not be completed.

Delegates also expressed hope even more delegates – such as India and Pakistan, which were not present at this meeting – would participate at the next OEWG, which is tentatively planned for October 2008 in Nairobi, Kenya.

* Regular contributor to *Environmental Policy and Law*.

0378-777X/08/$17.00 © 2008 IOS Press

FAO / ITPGR

Funding Decisions are the Focus of Governing Body

by Elsa Tsioumani*

The second session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty or ITPGR) was held from 29 October to 2 November 2007, at the headquarters of the UN Food and Agriculture Organization (FAO) in Rome, Italy. Approximately 300 participants addressed a variety of topics, including: the financial rules of the Governing Body; the funding strategy; implementation of the Treaty's Multilateral System for access and benefit sharing; the Material Transfer Agreement for crops not included in Annex I of the Treaty and acquired prior to its entry into force; implementation of Article 6 (Sustainable use of plant genetic resources) and Article 9 (Farmers' rights); relationship between the Governing Body and the Commission on Genetic Resources for Food and Agriculture (CGRFA); and the work programme and budget for 2008/09.

Following a very successful first session (June 2006, Madrid, Spain), which witnessed the adoption of the standard Material Transfer Agreement, the backbone for the operation of the Multilateral System for access and benefit sharing, as well as the funding strategy, the second session faced the challenge of keeping the momentum by adopting specific steps for the implementation of the Treaty. These steps would particularly include rules to implement the funding strategy, agreement on the outstanding financial rules for the Governing Body, and adoption of procedures for compliance. Unfortunately the meeting did not manage to finalise these tasks: with regard to the funding strategy, the adoption of a set of rules for its operationalisation, prepared intersessionally by an advisory committee, as well as the re-establishment of the advisory committee in order to continue its intersessional work, is generally considered to be a substantive accomplishment and a sign of progress. Also on the positive side, the Governing Body adopted a resolution on farmers' rights which allows for work on the issue to continue. However, discussions on compliance were deferred to the next session, and no consensus was reached on the financial rules for the Governing Body; the issue thus remains pending.

This report will provide a brief overview of the Treaty's objectives and main provisions, and then focus on the decisions and resolutions adopted by the Governing Body at its second session, particularly those related to financial issues, farmers' rights and cooperation with the CGRFA.[1]

Introduction

The International Treaty on Plant Genetic Resources for Food and Agriculture[2] entered into force on 29 June 2004. It is the outcome of seven years of intergovernmental negotiations held under the auspices of the CGRFA, a body of the FAO.[3] These negotiations were based on the revision of the non-binding International Undertaking on Plant Genetic Resources for Food and Agriculture, which was adopted by the FAO Conference in 1983. The Undertaking sought to ensure that "plant genetic resources of economic and/or social interest, particularly for agriculture, will be explored, preserved, evaluated and made available for plant breeding and scientific purposes", based on the "universally accepted principle that plant genetic resources are a heritage of mankind and consequently should be available without restriction".[4] Following the adoption of the Convention on Biological Diversity (CBD), which is based on the principle of national sovereignty over genetic resources,[5] the FAO conference adopted Resolution 7/93, which requests the director-general to provide a forum for intergovernmental negotiations on: the revision of the international undertaking to be in harmony with the CBD; the issue of access, on mutually agreed terms, to plant genetic resources, including *ex situ* collections not addressed by the CBD; and the realisation of farmers' rights.

With 116 Parties to date, the ITPGR is a legally binding instrument that targets the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the CBD, for sustainable agriculture and food security.[6] It is considered to be a unique legal instrument, which links the agricultural, environmental, and trade sectors, touching upon issues of conservation of plant genetic resources, sustainable agriculture, food security, and intellectual property rights (IPRs).[7] Its scope is comprehensive and covers all plant genetic resources for food and agriculture.[8]

The Treaty aims to respond to the specificities of agricultural genetic resources, which differ from wild biodiversity and, for this reason, deserve special attention in the international debate on biodiversity. Value lies in the level of variety, not of species. Developed by farmers over millennia on the basis of constant exchanges, many of these varieties are currently at risk due to the industrialisation and intensification of agriculture. Still, the objective of feeding a growing world population requires the conservation of those varieties and, thus, international cooperation to continue exchanging those resources.

The core of the Treaty and its major novelty is a Multilateral System (MLS) of facilitated access, and fair and equitable benefit sharing,[9] which refers to a specified list of plant genetic resources, including 35 crop genera and 29 forage species considered to be vital for agricultural

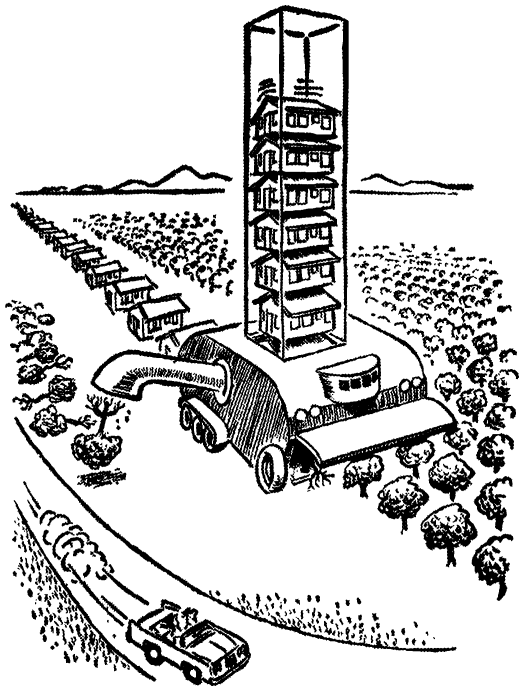
* Researcher, Democritus University of Thrace; Lawyer, Thessaloniki, Greece; and regular contributor to EPL.

0378-777X/08/$17.00 © 2008 IOS Press

research and food security.[10] The establishment of the MLS aims to facilitate access to, and exchange of, these valuable plant genetic resources, and to institutionalise the sharing of benefits arising from their use. The MLS has become operational through the use of a material transfer agreement (MTA),[11] adopted during the first session of the Governing Body,[12] which specifies the terms for access and the benefit-sharing provisions. Furthermore, the Treaty contains a provision recognising farmers' contribution to the conservation and development of plant genetic resources for food and agriculture as well as farmers' rights, including their traditional knowledge and their right to participate in benefit sharing and in national decision-making processes.[13]

Financial Issues and the Funding Strategy

As Parties' financial contributions during the intersessional period were low, putting both implementation at the national level and administrative functions at risk, the cluster of financial issues received a considerable degree of attention and proved to be at the heart of the meeting's agenda. This cluster covered three independent but interconnected items: the pending financial rules for the Governing Body; rules for the implementation of the funding strategy; and the work programme and budget for 2008/2009.



Victor Gruen "The Heart of our Cities" Courtesy: NZZ

The financial rules for the Governing Body were adopted at its first session; however, the issue of Parties' contributions remained outstanding. Although it is clear that these contributions will be voluntary, the first session ended with two bracketed options on this matter providing for: either voluntary contributions based on an indicative scale on the basis of the UN indicative scale; or voluntary contributions in general. A brief debate on the issue held in plenary during the second session did not result in any kind of solution, and the report of the meeting simply states that the Governing Body did not reach consensus and decided to revisit the issue at its third session. The debate revealed well established differences between developing countries and certain developed ones on the one side, favouring voluntary contributions based on an indicative scale, and other developed countries on the other side, preferring voluntary contributions without a scale. Furthermore, fearing a likely shortfall in voluntary contributions, various countries stressed that the FAO should increase its contribution to the Treaty's core administrative budget; such a decision though rests with the FAO Council and Conference.[14]

Adopted during the first session, the funding strategy remains a priority for many developing country Parties who wish to ensure funding for the Treaty's implementation in the short and medium term, before any substantial benefit-sharing payments can be expected through the MLS. The funding strategy states that potential sources of finance include financial resources provided by developed country Parties; financial resources resulting from benefit sharing; voluntary contributions; and financial resources provided through the FAO regular programme. Its initial priorities are the priority areas of the rolling Global Plan of Action, while financial resources arising from benefit sharing should be used to improve conservation and sustainable use of plant genetic resources.

Also at the first session, the Governing Body had established an *ad hoc* advisory committee of seven Party representatives, to draft priorities and procedures for the allocation of funds under the direct control of the Governing Body, and thus allow for the implementation of the funding strategy. This Committee met twice intersessionally and finalised three documents to be annexed to the funding strategy, for consideration by the second session of the Governing Body: priorities for the allocation of funds, and draft eligibility criteria and operational procedures with regard to the use of resources under the direct control of the Governing Body.

Deliberations on the item during the second session focused on the report of the Advisory Committee and proposed annexes to the funding strategy, which were well received by the majority of delegations, and adopted without substantive amendments. As adopted, the priorities suggest that the Governing Body shall take the Global Plan of Action as a framework, while the initial priorities include: information exchange, technology transfer and capacity building; managing and conserving PGRFA on-farm; and sustainable use of PGRFA. According to the adopted eligibility criteria, projects must: meet the objectives of the Treaty; fall within the funding priorities; benefit developing country Parties; and be presented through the Party concerned. The operational procedures contain principles, rules on the project cycle and a list of selection criteria.

Delegates also addressed a document prepared by the Secretariat, including a list of possible activities and measures for the implementation of the funding strategy (IT/GB-2/07/08). Following deliberations, the Governing Body agreed with the list of possible actions provided in the Secretariat document, in particular supporting Parties in taking measures to ensure effective allocation of re-

0378-777X/08/$17.00 © 2008 IOS Press

sources for the funding strategy. Furthermore, it decided to reconvene the Advisory Committee, in order to develop a strategic plan for funding strategy implementation.

During discussions on the funding strategy, the Global Crop Diversity Trust also received a considerable degree of attention. The Global Crop Diversity Trust is an independent international organisation, established by the FAO and the Consultative Group on International Agricultural Research, in order to ensure the conservation and availability of crop diversity for food security worldwide. It has entered into a relationship agreement with the ITPGR Governing Body, according to which the Trust is an essential element of the funding strategy with regard to *ex situ* conservation and PGRFA availability. During the second session, the Governing Body addressed the report of the Trust (IT/GB-2/07/10), which indicates that it has been largely successful in its fundraising activities and that it has raised approximately 40% of the total funds required to accomplish its mandated goal. Although no delegates questioned this success, some compared this success with the Treaty's slim budget and called for stronger policy guidance from the Governing Body.

The work programme and budget for 2008/09 (IT/GB-02/07/20) were mainly addressed in an open-ended budget committee, co-chaired by Amir Khawaja (Pakistan) and François Pythoud (Switzerland). Following lengthy negotiations, the budget was approved, while the Governing Body also expressed its concern at the limited level of contributions by the Parties to the previous budget. The new budget reflects a total of US$5,415,940 for the 2008/09 biennium with an FAO contribution of US$1,607,000, and a balance of US$3,808,940 to be funded by voluntary contributions. During the meeting, Spain announced its pledge to fund a set of capacity-building activities.

Farmers' Rights

Governing Body discussions on implementation of Article 9 (Farmers' rights) were preceded by an informal international consultation organised by Norway and Zambia, held in Lusaka, Zambia, from 18–20 September 2007. The consultation focused on exploring the concept of farmers' rights, farmers' contribution to the conservation and sustainable use of genetic resources, and the state of realisation of farmers' rights, including what the Governing Body can do to promote such realisation. Participants also discussed national implementation of farmers' rights, how stakeholders can join forces, and how resources can be pooled for this purpose; and developed an input paper, for consideration by the Governing Body at its second session.

The Governing Body discussed the input paper, and then focused on a draft resolution tabled by the Group of 77 and China (G-77/China), which requested the Secretary to compile Parties' views and experiences on implementation of farmers' rights for consideration by the Governing Body at its third session, and encouraged Parties to involve farmers' organisations in the preparation of their reports. Following a public debate and informal consultations, the resolution proposed by the G-77/China was revised and then adopted without further amendment, to: recall the contribution made by farmers and local and indigenous communities for the conservation and development of PGRFA; recall that responsibility for realising farmers' rights related to PGRFA rests with national governments; acknowledge "uncertainty" in many countries as to how farmers' rights can be implemented; and recognise that exchange of experiences and mutual assistance between parties can contribute to progress in implementing farmers' rights. Furthermore, according to the resolution, the Governing Body encourages Parties and relevant organisations to submit views and experiences on the implementation of farmers' rights as set out in Article 9 of the Treaty, involving, as appropriate, farmers' organisations and other stakeholders; requests the Secretariat to collect these views and experiences for consideration by the Governing Body at its third session, to promote the realisation of farmers' rights at the national level, and to disseminate relevant information through the Treaty website where appropriate; and commits to continue involving farmers' organisations in its work.

Relationship Between the Governing Body and the CGRFA

The Governing Body considered and adopted a draft joint statement of intent to establish an interface between the work of the Governing Body and the CGRFA. It also recognised the consistent and effective role that the CGRFA has played during and following the Treaty negotiations and expressed its appreciation to its retiring Secretary Clive Stannard. It requested all Parties to cooperate in updating *The State of the World's PGRFA*; stressed the need for close and effective cooperation with the CGRFA; and requested the two Secretariats to prepare a report identifying the repartition of their fields of intergovernmental work. The Governing Body further requested the ITPGR Secretary to work closely with the CGRFA Secretary.

The joint statement of intent, also to be adopted by CGRFA at its next session, outlines areas of cooperation between the ITPGR Governing Body and the CGRFA, including: participation of the Chairs of each body in the other body's sessions; maintaining contact among the Chairs and, as necessary, the Bureau; regular reports by the CGRFA Secretary to the Governing Body sessions; and consideration by the CGRFA of requests by the Governing Body on updating and implementing the Global Plan of Action. The areas of cooperation between the Secretariats include: regular meetings to seek synergy and efficiency and promote coherence; cooperation in the preparation and management of meetings; mutual consultation in the development of documents; coordination of fundraising activities; and coordination of their participation in relevant international meetings.

Future Work

The third session of the Governing Body will be held in the first quarter of 2009, in Tunisia. The third session is expected to continue deliberations on the funding strategy and adopt procedures on compliance, as well review the standard MTA. ➳

0378-777X/08/$17.00 © 2008 IOS Press

Notes

1 The official report of the meeting will be available at: http://www.planttreaty.org/meetings/gb2_en.htm. Detailed daily coverage, and a summary and analysis of the meeting by the Reporting Services of the International Institute for Sustainable Development – *Earth Negotiations Bulletin* are available at: http://www.iisd.ca/biodiv/itpgrgb2/. For an analysis of the Treaty, see Elsa Tsioumani, 2004, "International Treaty on Plant Genetic Resources for Food and Agriculture: Legal and Policy Questions from Adoption to Implementation", *Yearbook of International Environmental Law* vol. 15, pp. 119–144.

2 The text of the Treaty is available at: ftp://ftp.fao.org/ag/cgrfa/it/ITPGRe.pdf.

3 The Commission on Genetic Resources for Food and Agriculture was established in 1983. It currently has 168 member countries and the European Community.

4 International Undertaking, Article 1. The text of the Undertaking is available at: ftp://ext-ftp.fao.org/ag/cgrfa/iu/iutextE.pdf.

5 CBD Article 3.

6 ITPGR Article 1.

7 See H.D. Cooper, 2002, "The International Treaty on Plant Genetic Resources for Food and Agriculture" 11(1) R.E.C.I.E.L. 1–16, at 15; and P. Cullet, 2003, "The International Treaty on Plant Genetic Resources for Food and Agriculture", International Environmental Law Research Center Briefing Paper 2, available at: http://www.ielrc.org/content/f0302.htm.

8 ITPGR Article 3.

9 ITPGR Articles 10–13.

10 ITPGR Annex I.

11 ITPGR Article 12.4.

12 See E. Tsioumani, 2006, "ITPGR 1st GB: Moving towards Implementation", *Environmental Policy and Law*, 36/3–4, pp. 131–134.

13 ITPGR Article 9.

14 Following the FAO Council and Conference held in November 2007, the FAO contribution to the Core Administrative Budget of the Treaty for the biennium 2008/2009 will be US$1,607,000, slightly increased from the 2006/2007 agreed contribution of US$1,124,000.

ITLOS

The President before the UN General Assembly

by Ximena Hinrichs Oyarce*

On 10 December 2007, the President of the International Tribunal for the Law of the Sea, Judge Rüdiger Wolfrum, addressed the plenary of the sixty-second session of the United Nations General Assembly on the occasion of its annual examination of the item "Oceans and the law of the sea".[1] As is the practice, the President reported on the organisational and judicial developments which have taken place with respect to the Tribunal over the course of the past year.

President Wolfrum stated that 2007 had been a significant judicial year for the Tribunal, with two judgments delivered in urgent proceedings regarding prompt release of vessels – one in the *"Hoshinmaru" Case* and the other in the *"Tomimaru" Case* – and an order rendered by the Special Chamber in the *Case between Chile and the European Community concerning the Conservation and Sustainable Exploitation of Swordfish Stocks* concerning the postponement of time-limits (see box). After stating that "[i]n two cases, the Tribunal assisted the parties in resolving their differences" and "[i]n another case, recourse to the Tribunal enabled the parties to reach a provisional arrangement regarding their dispute", the President noted the Tribunal's continued and significant contribution to the settlement of disputes by peaceful means in accordance with Part XV of the Convention.

Swordfish (*Xiphias gladius*) skeleton at the National Museum of Natural History, Washington, DC Courtesy: Wikipedia

Following submission of this article, Gao Zhiguo (China) was elected as new member of the International Tribunal for the Law of the Sea on 30 January 2008 to fill the vacancy created by the resignation of Judge Xu Guangjian (China). (WEB)

The President went on to highlight the Tribunal's significant contribution to the development of environmental law in respect of provisional measures cases submitted to it under article 290, paragraph 5, of the 1982 United Nations Convention on the Law of the Sea, and which were the subject of subsequent proceedings before Annex VII arbitral tribunals. In respect of these provisional measures cases, the President cited from a commentator that "it is clear that in all three cases the main substantive contribution came not from the Annex VII tribunal, supposedly there to determine the merits, but rather from ITLOS, exercising its incidental jurisdiction".[2]

Focussing on the advantages of permanent tribunals over arbitration, the President indicated that "the Tribunal, as a permanent institution, has the advantage of ensuring consistency in the development of a coherent corpus of jurisprudence" and that the "harmonization of international jurisprudence may be achieved only through permanent courts and tribunals." In this respect, the President reminded delegates of the States' choice of dispute settlement under article 287 of the Convention. He also referred to the option open to parties to have a dispute heard before an *ad hoc* special chamber of the Tribunal.

The President also welcomed the formation of the Chamber for Maritime Delimitation Disputes in 2007 as a

* Legal Officer, International Tribunal for the Law of the Sea. The opinions contained in this article are expressed by the author in her personal capacity and do not reflect the views of the Tribunal.

0378-777X/08/$17.00 © 2008 IOS Press

The *"Hoshinmaru"* and the *"Tomimaru"* Cases

Two new cases were submitted to the Tribunal in 2007: the *"Hoshinmaru" Case*[1] and the *"Tomimaru" Case*.[2] Both concerned an application for the release of a fishing vessel under article 292 of the United Nations Convention on the Law of the Sea of 1982 in connection with an alleged violation of article 73, paragraph 2, of the Convention.[3] What was unusual about these cases is that they were filed simultaneously on 6 July 2007, and involved the same parties, Japan (applicant) against the Russian Federation (respondent). The judgments in both cases were issued swiftly, in accordance with the strict time-limits fixed in the Rules of the Tribunal for prompt release proceedings. The two judgments were delivered on 6 August 2007, only 31 days after they were filed. Both were adopted unanimously.[4]

The *"Hoshinmaru" Case*

This case concerned the release of the vessel *Hoshinmaru*, flying the flag of Japan, and of 17 members of its crew. The Russian Federation had provided the *Hoshinmaru* with a licence for fishing trout and salmon, including sockeye salmon and chum salmon, in three areas of the Russian exclusive economic zone from 15 May until 31 July 2007. The *Hoshinmaru* was fishing in one of those areas when it was boarded by a Russian inspection team on 1 June 2007. After being detained, the vessel was escorted to the port of Petropavlovsk-Kamchatskii for the purpose of judicial proceedings. The alleged offence related to the inaccurate reporting of the species caught and, in particular, the declaration of 20 tons of raw sockeye salmon as the cheaper chum salmon, in violation of Russian fisheries laws. Subsequent to the filing of the application by Japan, the Russian Federation set the bond at 25,000,000 roubles, which it lowered during the hearing to 22,000,000 roubles.

In its judgment, the Tribunal found that it had jurisdiction to entertain the application and that the application was admissible. A crucial issue was to determine whether the bond set by the Russian Federation for the release of the vessel was reasonable. In this regard, consistent with its jurisprudence, the Tribunal applied the various factors relevant for determining a reasonable bond which it had identified in previous judgments to the "*Hoshinmaru*" *Case*. These are the gravity of the alleged offences, the penalties imposed or imposable under the laws of the detaining State, the value of the detained vessel and its cargo, and the amount and form of the bond imposed by the detaining State. In this case, the Tribunal added that the amount of the bond should be "proportionate" to the gravity of the alleged offences. The Tribunal considered the bond of 22,000,000 roubles set by the Russian Federation not to be reasonable because it was based on the maximum penalties which could be applied and calculated on the basis of the confiscation of the vessel. Therefore, the Tribunal fixed the bond for the release of the vessel at 10,000,000 roubles, which is somewhat higher than the security proposed by Japan (8,000,000 roubles). Although the *"Hoshinmaru" Case* did not entail fishing without a licence, the Tribunal observed that the offence committed by the master was not a minor one as "monitoring of catches, including accurate reporting, is one of the most essential means of managing living resources". One day after the payment of the bond by Japan, the *Hoshinmaru* and its crew were released, a mere ten days after the delivery of the Tribunal's decision.

The *"Tomimaru" Case*

The *"Tomimaru"* was also a fishing vessel flying the flag of Japan. Its licence authorised it to fish a certain amount of walleye pollack and herring from 1 October to 31 December 2006, in a particular area of the Russian exclusive economic zone. On 31 October 2006, the vessel was boarded by a Russian patrol boat. As a result of the inspection, about 20 tons of walleye pollack not listed in the logbook and a portion of catch not included in the licence were discovered. Domestic proceedings were instituted and, on 28 December 2006, the Petropavlovsk-Kamchatskii City Court, after deciding that the shipowner had violated the terms and conditions of the fishing licence, imposed a fine on the shipowner and ordered the confiscation of the vessel. This decision was upheld on appeal. Nonetheless, a procedure before the Supreme Court of the Russian Federation was still pending at the time of filing of the application with the Tribunal. After the closure of the hearing, the Russian Federation informed the Tribunal that the Supreme Court had dismissed the complaint regarding the confiscation of the vessel.

In this case, the Tribunal had first to deal with the question whether confiscation of a vessel by the domestic forum might have an impact on the nationality of the vessel. In answering this question, the Tribunal noted that the confiscation of a vessel does not result *per se* in an automatic change of the flag or in its loss. On the second question whether confiscation renders an application for the prompt release without object, the Tribunal observed that:

article 73 of the Convention makes no reference to confiscation of vessels. The Tribunal is aware that many States have provided for measures of confiscation of fishing vessels in their legislation with respect to the management and conservation of marine living resources.

After noting that a decision to confiscate eliminates the provisional character of the detention of the vessel rendering the procedure for its prompt release without object, the Tribunal observed that confiscation decided in unjustified haste would jeopardise the implementation of article 292 of the Convention and that a decision to confiscate a vessel does not prevent the Tribunal from considering an application for prompt release while proceedings are still before the domestic courts. The Tribunal concluded, however, that Japan's application was without object (moot) and that it was therefore not required to give a decision thereon.

Notes

1 The "Hoshinmaru" Case, (Japan v. Russian Federation), Prompt Release, para. 99 of the judgment.

2 The "Tomimaru" Case, (Japan v. Russian Federation), Prompt Release, para. 72 of the judgment.

3 According to article 73, paragraph 2, of the Convention, "arrested vessels and their crews shall be promptly released upon the posting of a reasonable bond or other security". Under article 292, paragraph 1, of the Convention, when it is alleged that the detaining State has not complied with the provisions of the Convention for the prompt release of a vessel or its crew upon the posting of a reasonable bond or other financial security, failing agreement within 10 days from the time of detention, the question of release can be submitted to the Tribunal.

4 The texts of the Tribunal's judgments are available on the Tribunal's website: http://www.itlos.org.

standing chamber of the Tribunal which "may be seen as the expression of the Tribunal's interest in delimitation matters", observing that a maritime delimitation dispute "could include issues which are closely linked or are ancillary to maritime delimitation, such as issues of sovereignty over islands or land territory."

The President went on to report on four regional workshops concerning the settlement of disputes relating to the law of the sea held in Dakar, Libreville, Jamaica and Singapore, which had been attended by representatives of 66 States. He also referred to the capacity-building programmes organised at the Tribunal's premises for students and young governmental officials, namely, the internship programme with the assistance of the Korean International Cooperation Agency, the Nippon Foundation/ITLOS training programme, and the Summer Academy of the International Foundation for the Law of the Sea.

Notes

1 The text of the statement is available on the Tribunal's website: http://www.itlos.org.

2 J.G. Merrills, 2007, "The Mosaic of International Dispute Settlement Procedures: Complementary or Contradictory?", *NILR*, LIV, pp. 361–393, at p. 381.

0378-777X/08/$17.00 © 2008 IOS Press

UNFCCC

High Politics, High Theatrics in Bali

by Joanna Depledge*

Climate change negotiations are not for the faint-hearted. Round-the-clock talks and exhausting last-minute finales are almost *de rigueur* for delegates to meetings under the UN Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. The high drama of the 2007 Bali Climate Change Conference, however, was exceptional even by those expectations. As the final 36-hour day unfolded, the world's airwaves were filled with extraordinary scenes of India rejecting a proposed President's text, China accusing organisers of a stitch-up, the Executive Secretary losing his composure, the UN Secretary-General and Indonesian President making an unscheduled last-ditch appeal, the US delegation provoking jeers when it opposed the final text put to plenary and, finally, applause erupting as the USA announced it would join the consensus.

The main outcome of these theatrics was the "Bali Action Plan", which launches negotiations under the UNFCCC on new obligations for both developed and developing countries – the "Convention track". These will take place within the newly-formed Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-Convention), with a deadline of December 2009, when the Conference of the Parties meets in Copenhagen. Parties also set a 2009 deadline for the ongoing negotiations on the next set of targets for developed country Parties under the Kyoto Protocol – the "Protocol track" – currently taking place in another Ad Hoc Working Group (AWG-Protocol).[1] Although there is no formal linkage between the two tracks, both now have the same deadline, and the implications are clear: the newly-launched negotiations cover everyone. When Parties meet in Copenhagen in 2009, it will be to define new provisions for all Parties, including developing countries and the USA.

The Bali Climate Change Conference took place from 3–15 December 2007 in the Indonesian resort of Nusa Dua, finishing over 24 hours after its scheduled close (a record, even for the notoriously unpunctual climate change negotiations). The sessional period covered the 13th Conference of the Parties (COP-13) to the UNFCCC and the third Conference of the Parties serving as the meeting of the Parties (CMP3) to the Kyoto Protocol, along with sessions of the two subsidiary bodies, the AWG-Protocol, and other constituted bodies of the regime, notably the Executive Board of the Clean Development Mechanism (CDM) and the Protocol's Compliance Committee. This complex institutional web of formal meetings was, as usual, complemented by a jamboree of special events organised by NGOs, IGOs and delegations, both inside and outside the conference halls. Star appearances from the UN Secretary-General, Nobel Laureate Al Gore, and various heads of state, including newly-elected Australian Prime Minister Kevin Rudd, kept the Bali Conference firmly in the media spotlight.

Prelude to Bali

The basic agenda for Bali had been set two years previously, at COP-11/CMP1 in Montreal in 2005 (see EPL, 36/1, pp. 14–19). Here, following the Protocol's entry into force, there were attempts to launch a comprehensive negotiating round involving all Parties on next steps after the Protocol's first commitment period (2008–2012). Governments did agree to begin talks on the next round of targets for developed countries under the Protocol, fulfilling the terms of the treaty, which required such negotiations to begin in 2005. These negotiations, however, covered neither developing countries, nor developed countries that were not Kyoto Protocol Parties, notably the USA. All that delegates could agree in this respect was to conduct a two-year "dialogue on long-term cooperative action" under the Convention, but only on the explicit condition that this would *not* lead to negotiations on new commitments for anyone. Negotiations on the "Protocol track" proceeded under the AWG-Protocol, but the Protocol Parties were quite clearly not going to agree new targets for themselves without more concrete signs of movement from the USA and developing countries. On the "Convention track", the two-year dialogue prompted useful and lively discussions, but with negotiations explicitly ruled out, it could never amount to more than a talking-shop. In essence, the regime was placed in a two-year holding bay, with Bali providing the next procedural opportunity to launch comprehensive negotiations.

This two-year hiatus, however, coincided with a series of important developments on the broader international scene, intensifying in the run-up to Bali. In early 2007, the Intergovernmental Panel on Climate Change (IPCC) published its Fourth Assessment Report, with ever stronger and more precise warnings of the reality and dangers of human-induced climate change. The IPCC's work was given the highest possible accolade, when it was awarded the Nobel Peace Prize later in the year, sharing a platform with Al Gore. In March 2007, the EU set a unilateral target to cut its greenhouse gas emissions by 20% by 2020 compared to 1990 levels. It challenged other developed countries by proposing a larger 30% cut by 2020, and a 60–80% cut by 2050, as part of an international deal. In June 2007, leaders attending the G-8 Summit at Heiligendamm (Germany) endorsed the United Nations

* PhD, Sutasoma Research Fellow, Lucy Cavendish College Cambridge University, UK. Regular contributor to *Environmental Policy & Law*.

0378-777X/08/$17.00 © 2008 IOS Press

as the "appropriate forum" for negotiations on future action on climate change, and agreed on 2009 as a deadline;[2] this marked a huge breakthrough with regards to the USA. The Bush Administration subsequently announced a series of meetings of so-called "Major Economies"[3] to discuss climate change and energy security, ostensibly as part of a process that would feed into the UN negotiations. The incoming UN Secretary-General Ban Ki-Moon made climate change a top priority, embarking on a series of bilateral meetings around the world. These culminated in a high-level UN event on climate change in September that provided a platform for strong statements from heads of state and ministers. Climate change was also taken up, for the first time, in the UN Security Council. The icing on the cake for Kyoto supporters was the Australian general election on the eve of Bali, which saw a change of government away from the Kyoto-sceptic John Howard. One of the new Prime Minister's first actions was to ratify the Kyoto Protocol, definitively isolating the USA.

The period 2005–2007 saw additional, more incremental, developments, including the snowballing of climate change initiatives among states, municipalities and businesses in the USA, along with the launch of the pilot phase of the EU Emissions Trading Scheme. The CDM also expanded apace, with the number of certified emission reductions (CERs) generated passing the billion mark just after Bali. Inevitably, the news was not all positive. High oil prices, for example, prompted oil companies to resurrect plans to exploit carbon-intensive oil sands, notably in Canada, whose federal government was distinctly less supportive of the Kyoto Protocol than its predecessor in 2005.

Overall, however, the diplomatic world in late 2007 was much more favourably inclined to strike a historic deal on climate change than it had been in 2005, and even in 2006. Delegates came to Bali sharing a broad understanding that they would launch comprehensive negotiations of some kind, which would culminate in 2009 (although China insisted for a time on 2010). Pinning down this broad understanding, however, required two weeks of intense negotiation, and the marathon last night and day for which Bali will be remembered. In essence, there were three sticking points: how to involve developing countries; how to involve the USA; and defining (or not) the level of ambition for the negotiations.

The "Developing Country Paragraph"

It was the involvement of developing countries, and the US position on that issue, that delayed a deal until the final moment had all but passed. This came as no surprise. Reaching agreement, even in principle, that developing countries should take on obligations beyond those in the Convention was little less than the "holy grail" of the climate change regime. At COP-1 in 1995, the Berlin Mandate that launched negotiations on what became the Kyoto Protocol stated that "no new commitments" would be defined for developing countries. This was the price paid by developed countries to win the support of a majority "green group" of developing countries (led by India), against objections by oil exporters such as Saudi Arabia to any further negotiations. The mantra of "no new commitments for developing countries" stuck fast during the Kyoto Protocol negotiations, despite rather clumsy efforts by some developed countries, including the EU, to sidestep it. Even after the adoption of the Kyoto Protocol, future obligations for developing countries continued to be a "taboo topic" in the formal negotiations, with the G-77 strongly resistant to attempts to open discussions.

Courtesy: IISD

After a fortnight of talks in Bali, the issue was boiled down to one paragraph in the draft action plan, which defined the nature of obligations to be negotiated for developing countries (the equivalent paragraph on the nature of obligations for developed countries had been agreed in principle). A ministerial meeting on the last night broke

0378-777X/08/$17.00 © 2008 IOS Press

up around 2.30am with two alternatives left on the table: one championed by the USA, one by the developing countries (the EU appeared to be amenable to either). The Indonesian Presidency was reportedly charged with consulting bilaterally to try to resolve the impasse. It obviously failed to reach a compromise, as the single text later presented to plenary was rejected by India on the grounds that it reflected only the US position.

Following two suspensions of the negotiations, when China angrily objected that developing country ministers were still in high-level consultations elsewhere, the final struggle over the paragraph was played out in open plenary. The text before delegates read that the forthcoming negotiations would address: "Measurable, verifiable and reportable nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building" (formatting added). The text proposed by India, later endorsed by the full G-77, read: "Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, verifiable and reportable manner" (formatting added). This would mean that not only the "mitigation actions" would be "measurable, verifiable and reportable", but also the "technology, financing and capacity-building". As often happens, opening up the text in plenary prompted additional proposed amendments, notably from smaller developing countries, who wanted their special circumstances explicitly taken into consideration.

The US response, however, marked a turning point, when it announced it could not accept the Indian proposal, claiming developing countries had agreed to go further in earlier talks. Not for the first time in the climate change regime, the USA was booed and, again not for the first time, its oppositional stance had the (unintended) effect of galvanising others into unity and consensus. Brazil, South Africa and other developing countries issued impassioned retorts, including the now famous exhortation from Papua New Guinea to "lead or get out of the way". A short time later, Paula Dobriansky, head of the US delegation, took the floor once again to announce that her delegation was heartened by the interventions of developing countries, and could now join the consensus and accept the Indian proposal. This apparent change of mind, along with a helpful intervention by South Africa, defused other proposed amendments, and the Bali Action Plan was adopted, with the developing country text stated above. History had been made.

Why did developing countries finally agree to move on from the Berlin Mandate and accept the principle that they would take on new obligations? There are several related reasons. Most fundamentally, developing countries, like everyone else, have become increasingly aware of the reality of climate change, its impacts, and the undeniable contribution of major developing country emitters, not least through the work of the IPCC and the various international processes discussed above. Importantly, the entry into force of the Kyoto Protocol and policy changes in the industrialised world – despite meagre achievements in actually cutting emissions – has demonstrated a degree of leadership on the part of most developed countries in tackling climate change. The leap of faith taken in Montreal in 2005 by the Kyoto Parties, whereby they launched negotiations on new commitments for themselves with only a whisper of movement on the part of the developing countries, must have been critical in demonstrating leadership and goodwill to the G-77. The impressive achievements of the CDM have also been important in demonstrating that greater engagement with the climate change regime could bring benefits, as well as obligations, to developing countries. Early agreement in Bali on operationalising the Adaptation Fund, and progress on incentives to tackle deforestation, no doubt also contributed to a determination to move forwards (see below).

Crucially, the deal was only struck because of stronger language on financial, technological and capacity-building support. Developing countries have consistently insisted that any new obligations for themselves should be matched by concurrent support from donor countries. Such insistence is entirely in line with the Convention itself, which states that "The extent to which developing country Parties will effectively implement their commitments … will depend on the effective implementation by developed country Parties of their commitments … [on] financial resources and transfer of technology".[4] The requirement in the agreed text that both the developing country "actions" and the "support" should be equally "measurable, verifiable and reportable" simply extends this Convention provision to the new negotiating round. In addition, the Bali Action Plan includes further sections calling on the forthcoming negotiations to consider enhanced action for technology development, financing, and support for adaptation, a key concern for developing countries. How this support will be operationalised will form a key pillar of the forthcoming negotiations. Developing countries have long complained that developed countries have not met even their existing financial and technological commitments, and have been far too vague in their reporting on these matters.

Why did the USA apparently change its mind over the developing country paragraph? Media commentators were quick to claim that the delegation was humbled by the strong protests it received in plenary, notably the intervention by Papua New Guinea. While the delegation could not be unmoved by the wave of condemnation, it is unlikely that this would have swayed the USA, which is no stranger to unpopularity in the climate change regime. A more likely explanation is that the delegation had to consult with higher authorities in Washington by telephone (where it was the middle of the night) before being able to agree the text. Interventions from developing countries, notably South Africa, also reportedly reassured the US delegation that the phrasing in the paragraph meant that "mitigation actions" would still be subject to the "measurable, verifiable, and reportable" requirement, and not just the "support".

The Bali Conference had barely ended, however, before Washington began expressing concern over the out-

0378-777X/08/$17.00 © 2008 IOS Press

come. One of the main problems for the USA is that the Bali Action Plan does not subject major developing country emitters to the same types of obligations as the USA and other developed countries. Instead, the Action Plan maintains the traditional categories of developed/developing countries, with a separate paragraph for each. For developed countries, the forthcoming negotiations will be addressing "nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objections…". By contrast, for developing countries, only "nationally appropriate mitigation *actions*", and not commitments, will be negotiated. Maintaining "clear blue sky" between the nature of developed and developing country obligations was central to developing country demands. Significantly, this means that the notion of developing country *commitments* is still absent from the climate change regime. What this means in practice remains to be decided.

In line with its focus on major emitters, the USA, and others, had wanted to include some kind of differentiation between developing countries in the text. This, however, was not accepted by developing countries, who have traditionally insisted on remaining united as a group. Quite clearly, however, it will not be possible to negotiate "actions" that uniformly apply across all developing countries; China and Namibia cannot logically assume the same kind of obligations. The term "nationally appropriate" reflects this recognition. The finale of the negotiations also revealed growing anxiety among least developed countries (LDCs) that lack of explicit differentiation or recognition of their circumstances may lead to overly onerous obligations for them. Although their fears were allayed sufficiently for them to accept the text, it is clear that the forthcoming negotiations will need to quickly establish ways of addressing the special circumstances of poorer developing countries. This should not be too difficult, given that LDCs already have a degree of special status under the regime, including exemption from reporting deadlines, a special consultative group and, thanks to a decision taken in Bali, exemption from the levy applied to CDM projects. Exempting LDCs from new "actions", except perhaps for specially tailored incentives, should be one of the first steps of the AWG-Convention.

Although the Bali Action Plan maintains the traditional north/south divide,[5] it does include a noteworthy break from past language, by referring to "developed" and "developing" countries, rather than the Convention categories of "Annex I" and "non-Annex I" Parties. This hints at a possible future move away from these categories, which have proved increasingly unsatisfactory in the face of a more diverse world than that in 1992 when the Convention was adopted. Tortuous attempts by Kazakhstan to join Annex I, and Belarus to be inscribed in the Protocol's Annex B, have illustrated that the annexes and related procedures serve to discourage, rather than encourage, countries wanting to join them. Under the more flexible terminology of the Bali Action Plan, it may well be that some countries considering themselves to be developed, notably members of the Organisation for Economic Cooperation and Development (OECD) such as Mexico and South Korea, could take on obligations under the developed country paragraph – rather than that on developing countries – without facing the existing procedural obstacles.

Involving the USA: the "Developed Country Paragraph"

Engaging the USA in negotiations on the next round of commitments under the climate change regime was the second major success clocked up in Bali. Admittedly, the main breakthrough had already taken place at the G-8 in Heiligendamm (see above). US acceptance of the Bali Action Plan formalised this breakthrough, but was nonetheless a critically important move that could not be taken for granted. The USA was pushed harder than ever before in Bali. With Australian ratification of the Protocol, the USA lost its last remaining ally for its anti-Kyoto position. EU leaders were more forthright than in the past in standing up to the USA, with open threats from Germany, France and others to boycott President Bush's next Major Economies meeting if the USA blocked a positive outcome. It seems that, with a few exceptions, the rest of the world simply lost patience with the untenable US position. Canada emerged as the closest to the USA. It supported its neighbour, for example, in advocating equal language on developed and developing countries, provoking accusations from its domestic NGO constituency that it was seeking to sabotage the negotiations.

Although the paragraph on developed country obligations in the Bali Action Plan refers to "all developed country Parties", in practice it currently only applies to the USA, and also Turkey (although, as noted above, it is possible that other countries would decide to define themselves as "developed"). All other 37 developed countries are Parties to the Kyoto Protocol, and will therefore be negotiating new quantified targets for themselves under the Protocol track. In recognition of this, the Bali Action Plan requires the "comparability of efforts" among developed countries (albeit "taking into account differences in their national circumstances"), a provision inserted to make sure that the USA under the Convention track is not subject to much more lenient obligations than its peers under the Protocol track.

The Bali Action Plan does not specifically require negotiations to result in quantified targets, akin to those in the Kyoto Protocol. The USA succeeded in keeping the language looser than this, with reference only to "*actions or* commitments, *including* quantified emission limitation and reduction objectives". Other paragraphs in the Bali Action Plan also refer to possible "sectoral approaches and sector-specific outcomes", along with market-based approaches. Nonetheless, the reference to "quantified emission limitation and reduction objectives" (QELROs) – using exactly the same language as that in the Berlin Mandate that led to the adoption of the Kyoto Protocol – represents significant movement indeed on the part of the USA. Although QELROs are only given as an option, it will now be very difficult for the US to oppose the concept of "commitments" or "quantified" targets in the AWG-Convention. It will also be very difficult for the USA to argue, as it did even on the last night in Bali, that

0378-777X/08/$17.00 © 2008 IOS Press

countries should simply be allowed to voluntarily determine their own national targets.

No one, however, should be under any illusion that ensuring the "comparability of efforts" between the USA and Kyoto Parties will be an easy task. Even sympathetic US commentators are already dampening down expectations of a major reversal in position following the 2008 US elections, pointing out that the strongest legislative proposals on greenhouse gases currently under consideration in US Congress require only a return to 1990 emission levels. The US attitude towards climate change may be evolving in many ways at the grassroots, but a dramatic change of heart at the level of the federal government, akin to that in Australia, is unlikely. From a practical point of view, there is also the problem that the US Administration that will take decisions in Copenhagen will not actually be in place until early 2009.

Level of Ambition

The third axis of dispute that dominated talks throughout the two-week session, and up to the last night, concerned the level of ambition for the forthcoming negotiations. Some Parties, notably the EU, wanted the Bali Action Plan – along with similar text debated under the Protocol track in the AWG-Protocol – to reference an indicative range of emission cuts presented in the IPCC's Fourth Assessment Report. The IPCC report states that, in order to achieve stabilisation of atmospheric emissions at 450ppm, the lowest end of the range considered by the IPCC, developed countries would need to cut their emissions by 25–40% below 1990 levels by 2020. Moreover, global emissions will need to peak in the next 10–15 years, then fall well below 2000 levels by the middle of the century, if stabilisation at 450ppm is to be achieved.

The reference to 25–40% cuts was quickly picked up by the media, prompting Executive Secretary Yvo de Boer to issue a clarification that it was an *indicative range* that was being discussed, not mandatory targets. Nonetheless, the USA, supported by Canada and Japan, refused to include any reference to these figures in the Bali Action Plan, not even in the preamble. Senior US negotiator Harlan Watson was quoted as saying that "… once numbers appear in the text, it prejudges the outcome and will tend to drive the negotiations in one direction". In the end, the figures were excluded, but a footnote was added to the preambular text on the "urgency to address climate change" referencing the relevant page numbers of the IPCC report.

Although the USA and its allies were widely lambasted for refusing to accept inclusion of the IPCC figures in the text, the issue was always a red herring. Despite strong posturing, it is unlikely that the EU ever really expected to win on this point, but instead used it as a negotiating card that could be given up in return for other concessions. Given that, up until very recently, the US had refused the very idea of internationally defined emission targets, it was hardly likely to accept referencing such a strong range of cuts, even on an indicative basis. The inclusion of the footnote should, in itself, be seen as an achievement.

The Kyoto Protocol Parties, however, did include explicit reference to the same data in conclusions on the work of the AWG-Protocol, despite opposition until the last moment from the Russian Federation and Canada. The legal effect of such conclusions is, admittedly, far less than that of a COP decision like the Bali Action Plan. Nonetheless, the difference in ambition in the AWG-Protocol underlines how out-of-step the Convention and Protocol tracks currently are. Without US participation, the EU and developing countries were able to impose their position on the Protocol track, despite misgivings from Japan and Australia, as well as Russia and Canada. But with US participation in the Convention track, the political weight fell in the other direction, and the data could not be included.

Adaptation Fund

Launching negotiations on the future of the climate change regime was not the only item on the Bali agenda; far from it. Among the myriad of other issues on the table, three were of particular importance. First, delegates were able to agree, by the close of the first week, on the operationalisation of the Adaptation Fund under the Kyoto Protocol. This Fund was set up to channel a share of the proceeds levied on CDM projects towards helping vulnerable developing countries adapt to climate change. The Fund, however, was not yet operational, because of longstanding disagreement over how it would run, specifically, which organisation would manage it. Although the Global Environment Facility (GEF) was the only realistic option, developing countries were loathe to simply accept the GEF – currently acting as the financial mechanism of the Convention – on existing terms. With the USA silent on debates relating to the Kyoto Protocol, this was mostly a negotiation between the EU and developing countries – and, to some extent, the GEF itself, whose rather pushy attitude won few friends among developing countries. To everyone's surprise, agreement was reached within a week in Bali to designate a new "Adaptation Board" as the operating entity of the Fund, with the GEF providing secretariat services and the World Bank serving as trustee. The Adaptation Board will be composed of 16 members drawn from a cross-section of Parties, along the lines (although not the precise composition) of the successful CDM Executive Board. The Adaptation Board will help to ensure that the GEF complies with guidance from the CMP, and Parties will be able to access the Adaptation Fund directly, without going through the GEF's implementing agencies. Such a perfect compromise reflects the growing levels of trust between the EU and developing countries on this issue over the past year, resulting in part from productive confidence-building dialogues outside the formal arena, and the desire of all to reach an agreement.

Technology Transfer

The exact opposite could be said of the second key issue, technology transfer. Debate started off on a bad note. Developing countries scored an apparent procedural coup when the COP agreed to consider the issue not only in the

0378-777X/08/$17.00 © 2008 IOS Press

Subsidiary Body for Scientific and Technological Advice (SBSTA), but also in the more political Subsidiary Body for Implementation (SBI). Developed countries were taken aback, however, at the opening of the SBI, apparently having not fully understood the COP's decision to add technology transfer to the SBI agenda. Transcripts of proceedings had to be hurriedly circulated before developed countries bowed to the inevitable, and accepted discussion in both subsidiary bodies. The confusion, however, did not contribute to a productive atmosphere. After acrimonious debate, negotiations broke down, largely because of opposition from the USA to performance indicators and a dedicated technology-transfer fund. Technology transfer has always been a "Cinderella issue" in the climate change regime. Developing countries, notably China, have consistently emphasised its importance, while developed countries have insisted that technology transfer is essentially an issue for the private sector, and is largely out of their hands. Although donor country opposition to a dedicated fund was not surprising, it is sobering that it was precisely those countries – notably the USA – pushing so hard for a technology-based approach to climate change that opposed progress on the issue under the Convention.

In the end, it was clear that negotiations on technology transfer were too important to be allowed to collapse. They were revived under the COP, and agreement was eventually reached. A framework for action was adopted, including a request to the GEF to elaborate a strategic framework on technology transfer, an extension of the existing Expert Group on Technology Transfer, and a mandate to develop performance indicators. Technology also features prominently in the Bali Action Plan. It remains to be seen whether developed countries are finally taking developing country views on technology transfer seriously, or whether the latter's immediate concerns were simply placated in the interests of political expediency.

REDD

Bali spawned yet another new acronym to add to the climate change lexicon – REDD: Reducing Emissions from Deforestation and forest Degradation in developing countries. This is an issue that has shot up in importance over the past few years, in a similar way to carbon capture and storage. Tackling deforestation in developing countries has long been recognised as a promising avenue for mitigating climate change. Up until recently, however, it was not on the agenda of the climate change regime, for a variety of reasons. Some large, forested nations, notably Brazil, have traditionally resisted perceived attempts by the international community to oversee the exploitation of their national resources. More fundamentally, data uncertainties, baseline problems, and the obvious enormous scope for fraud when dealing with some of the most remote geographical areas in the world, have made countries hesitate to actually grant emission credits for reducing deforestation. Tackling deforestation was thus excluded from the Kyoto Protocol. The issue was recently revived, however, by Papua New Guinea and other forested nations. This is increasingly being seen as a win-win option, illustrating the growing sophistication of developing country positions on climate change. Bali saw another step forwards, with agreement on a work programme, including "positive incentives" for tackling deforestation and degradation, along with a green light to establish demonstration projects. The Bali Action Plan also identifies "positive incentives" as an option to be further developed, and this is likely to become a very important element in the work of the AWG-Convention.

Looking Ahead

In conclusion, there is no doubt that Bali was a success. It re-engaged the USA in negotiations on the future of the climate change regime, and broke the stranglehold of the Berlin Mandate by deciding to negotiate new actions for developing countries. Both the USA and the G-77 showed flexibility that would have been unthinkable just a year earlier. It is impossible to overestimate, however, the difficulty of the task that now lies ahead. It is not just a question of politics, but of sheer practical, intellectual and procedural logistics. Despite the mass of proposals from think-tanks on options for the future of the climate change regime, no one has really any idea of what the Copenhagen agreement will look like. The main obstacle will not be the USA, China, Saudi Arabia, or any other delegation, but the massive scope of the agenda, and the overwhelming complexity of the process. Out of all the many proposals that will come to the table, the prize is likely to go to the simplest solution. One thing is certain. However difficult the negotiations were in Bali, they will seem like a teddy-bears' picnic compared to what Copenhagen has in store.

The AWG-Convention will hold its first session, and the AWG-Protocol its fifth session, in March/April 2008. The COP and CMP will next meet in December 2008, in Poznan, Poland.

Notes

1 Known in full as the "Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol".
2 Described in EPL 37/5.
3 Including meetings with Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, South Korea, South Africa, United Kingdom, the EU, the EC and the UN.
4 Article 4.7.
5 Discussed in Selected Documents on pages 111–112.

Other Relevant Resources

- The fourth synthesis report of the IPCC is now available in German, published under the auspices of the Parliamentary State Secretary, Michael Müller and Head of the German Delegation, Ursula Fuentes.
- The Secretary General of OECD, during his speech at the Conference expressed, "We must find a way to share the burden of costs of climate change action that takes into account the level of economic development of nations. We need to create a sound economic footing for the post-Kyoto framework."
- The World Meteorological Organization reported on 13 December that the decade from 1998–2007 was the warmest on record.
- The Secretary General of the UN presented the report "Overview of United Nations activities in relation to climate change" on 10 January. The report has been filed as document A/62/644.
- The European Parliament adopted a resolution on the "Outcome of the Bali Conference on Climate Change" on 31 January. The resolution is filed as document P6_TA(2008)0032. (WEB/ATL)

0378-777X/08/$17.00 © 2008 IOS Press

A Global Response to Climate Change

by Mohamed El-Ashry and Dilip Ahuja*

Introduction

Addressing climate change is one of humanity's most pressing and difficult environmental challenges, requiring urgent and concerted action. It is a complex, long-term problem, two centuries in the making. It is ubiquitous – there are few human activities that do not contribute to it. Its effects are already being felt and will only worsen, seriously affecting the way of life in all countries, damaging fragile ecosystems, and threatening global security through migratory pressures and resource conflicts. Postponing mitigation action increases both the damage it will cause and the costs that will have to be incurred. While piecemeal efforts help, the scale of response required for an ultimate solution is so large that widespread collective action is essential.

Climate change, its causes, and its adverse impacts are closely linked to economic development, the alleviation of poverty, and energy security. All countries have a legitimate right to economic development, but that need not conflict with strategies to address climate change. While solutions to the climate change problem require harmonisation of economic growth and poverty alleviation with ambitious emissions reductions, they also present tremendous opportunities for innovation and technological development, especially in the energy field. In addition, providing clean energy to the two billion people currently without access to modern energy services would contribute to poverty alleviation and achieving the Millennium Development Goals.

Adaptation to climate impacts must be considered as an integral element of development and poverty alleviation efforts. Least developed countries and small island states, having contributed the least to climate change, are the most vulnerable to its effects. Failure to adapt will increase the economic and human impacts of extreme events and set back poverty alleviation efforts. Therefore, future efforts to deal with climate change must address adaptation as well as mitigation.

Scientists believe that a temperature rise above 2°–2.4°C risks serious and intolerable impacts. With rising temperatures, the Intergovernmental Panel on Climate Change (IPCC) predicts that the frequency of heat waves, droughts and heavy rainfall events will very likely increase, adversely affecting agriculture, forests, water resources, industry, human health and settlements. Developing countries, where greater poverty and vulnerability limit the capacity to act, will be the most seriously harmed, particularly their poorer segments.

Avoiding such a future requires global greenhouse emissions to peak in the next 10–15 years, followed by substantial reductions of at least 60% by 2050 compared to 1990. This formidable task requires unprecedented international cooperation and collective action. The costs of taking action now – according to the Stern Review – are smaller than the much heavier penalties of postponing action.

Since climate change is a long-term problem, it cannot be addressed successfully through short-term, country-based actions alone. A future global agreement, negotiated under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) must have a long-term target to "stabilize the concentration of greenhouse gases at a level that would prevent dangerous interference with the climate system".

Global Leadership for Climate Action

The Global Leadership for Climate Action (GLCA) was established in January, 2007 to address two objectives – to mobilise political will and invigorate negotiations towards a post-2012 agreement, and to develop a framework for such an agreement addressing the difficult issues hampering negotiations. It is a collaborative effort of the Club of Madrid and the UN Foundation. It consists of 25 members from 20 different countries, 13 former heads of state and government, and 12 leaders from business, inter-governmental organisations, and civil society.

On September 8, 2007, in Berlin, GLCA agreed upon A Framework for a Post-2012 Agreement on Climate Change. The following highlights the "framework" and its recommendations.

Comprehensive Agreement

Given the scale of response required, a new global climate change agreement must be comprehensive and negotiated under the auspices of UNFCCC. That is, it should include all countries, all sectors, all sources and sinks, and mitigation as well as adaptation. A comprehensive emissions-based agreement sends a clear signal to the market; and offers countries the flexibility to implement emissions reduction strategies that are most appropriate to their national circumstances.

Smaller, targeted agreements, for example, on industrial sectors, energy efficiency, renewable energy, and technology cooperation, offer the potential of early action by countries that are not ready to accept emissions limits. They should be encouraged and incorporated in a comprehensive climate change agreement. The objective should be to make the smaller targeted agreements mutually supportive and complementary to the comprehensive agreement. GLCA proposes four inter-connected pathways for future negotiations:

1. Mitigation – targets, timetables, and market-based mechanisms;
2. adaptation;
3. technology development and cooperation; and
4. finance.

* Mohamed El-Ashry is the former Chairman and CEO of the Global Environmental Facility, which he led from 1991 to 2002, and is currently a Senior Fellow at the UN Foundation. Dilip Ahuja, Senior Policy Advisor at the UN Foundation, on leave from the National Institute of Advanced Studies, Bangalore, India.

0378-777X/08/$17.00 © 2008 IOS Press

Mitigation

A new agreement will be successful only if it is perceived by all participating countries to be equitable. Requiring all countries to achieve the same percentage reduction in emissions in the next commitment period would be unfair. Developed countries should take the lead in global emissions reduction, given their historic responsibility and capability to act.

To date, the most ambitious targets have been declared by the European Union (EU) – reducing GHG emissions by 20% from 1990 levels by 2020. The EU would agree to a 30% target by 2020 if other developed countries commited themselves to comparable emission reductions and if the more advanced developing countries adequately contributed in accordance with their respective responsibilities and capabilities. Canada, the EU, and Japan have decided to work towards a goal to at least halve *global* emissions by 2050. This, most G-8 countries promised to consider seriously.

In the USA, the state of California has embarked upon an ambitious plan to cut its greenhouse gas emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. Other US states are taking similar steps. Businesses also have made strong commitments to reducing their emissions and are now in the vanguard of those calling for strong and long-term actions by governments; they require clear stable policy frameworks on which to base their investment decisions.

In this connection:

- *The GLCA recommends that all countries should commit to reduce collectively global emissions by at least 60% below the 1990 level by 2050.*[1]

However, anthropogenic interventions to avoid the most adverse and possibly irreversible impacts of climate change can no longer be achieved by developed countries acting alone. Even an 80% reduction of greenhouse gas emissions in all developed countries by 2050 would not achieve this objective without emissions reductions by developing countries. But not all developing countries are alike – some are rapidly industrialising, and some are least developed. Their engagement should be differentiated by their responsibilities and capabilities.

The energy intensity (used here as a proxy for emissions intensity) of all countries has been declining over the past 20 years at an average annual rate of 1.25%. Taken separately, non-OECD countries' energy intensity has also been declining, at a rate of about 1.42% per year. However, some part of this decline has been the high rate of growth in developing economies, meaning that even a growth in energy usage would result in a smaller percentage of the total. Because their economies are growing at much faster rates, total emissions from some developing countries are increasing rapidly. Greater reductions in energy intensity would moderate this growth in emissions while enabling developing countries to continue to pursue their sustainable development objectives. In this connection, China has set a goal of reducing energy consumption per unit of GDP by 20% between 2006 and 2010, an average annual rate of 4%. Technological choices available to developing countries are much greater today than a decade or two ago. These choices present new opportunities for growth in jobs and in the economy.

The recommendations made by GLCA regarding immediate targets are:

- *As a first step, developed countries should reduce their collective emissions by 30% by 2020;*
- *Rapidly industrializing countries should commit to reduce their energy intensity by 30% by 2020 and agree to emissions reduction targets afterwards; and*
- *Other developing countries should commit to energy intensity targets differentiated by their responsibilities and capabilities.*

Targeted Agreements on Energy Efficiency and Renewable Energy

Energy security and climate security are intertwined and should be addressed simultaneously. Renewable energy and energy efficiency can contribute to such a strategy. Both are win-win propositions for all countries. The technical and economic potentials of improving energy efficiency are enormous. Increased efficiency, long recognised as the cheapest, cleanest source of energy, has not been pursued by countries as aggressively as new supply in spite of experience showing the large opportunities for gains. Improving the efficiency of appliances and buildings can help moderate global climate change while contributing to a more sustainable future. In addition, technological innovations can cost-effectively reduce the risk of large-scale impacts of electricity supply disruptions. GLCA agreed on the following:

- *Long-term policies, measurable and verifiable targets, should be adopted by all countries to increase substantially the use of renewable energy and to promote greater efficiency in energy production and use. In addition, global standards for end-use efficiency should be developed and adopted.*

Carbon Sinks

Land-use changes, mainly deforestation, account for more than one-fifth of global emissions, greater than from the global transport or industrial sectors. With increasing emphasis on growing biofuels for transport, pressure to convert remaining forests will increase. The history of climate negotiations points to the need to include greenhouse gas sinks in any agreement. Difficulties in monitoring and verifying both above-ground and below-ground stocks of carbon need to be overcome with improved science and measurement methods. Additional research can elucidate the capacity of different forests in sequestering carbon.

Reducing deforestation presents an opportunity to reduce cost-effectively the accumulation of atmospheric carbon dioxide, thus slowing the rate of climate change. Strategies to reduce deforestation have additional benefits – the conservation of biodiversity, the provision of ecosystem goods and services, especially water resources, and the improvement of livelihoods for neighbouring communities. The issue of avoided deforestation in tropical and equatorial countries is a contentious one. Because of the size of the forest resource, credits for avoided deforesta-

0378-777X/08/$17.00 © 2008 IOS Press

tion must be coupled with sharply reduced emissions targets or they could destabilise carbon markets.

- *In order to capture the many co-benefits, the GLCA recommends a full range of interventions including conservation, afforestation, reforestation, avoided deforestation and forest degradation to create and maintain biological sinks of carbon.*

Market-based Mechanisms

As the Stern Review said, "Establishing a carbon price, through tax, trading or regulation, is an essential foundation for climate-change policy". GLCA agreed with most economists that the preferred mechanism is a system of harmonised universal carbon taxes, which could reduce emissions and generate financial resources. It is up to national governments to decide what to do with the revenues, including, for example, the development of clean energy sources and adaptation to climate change. Carbon taxes are easier to implement than cap-and-trade schemes and are economically efficient.

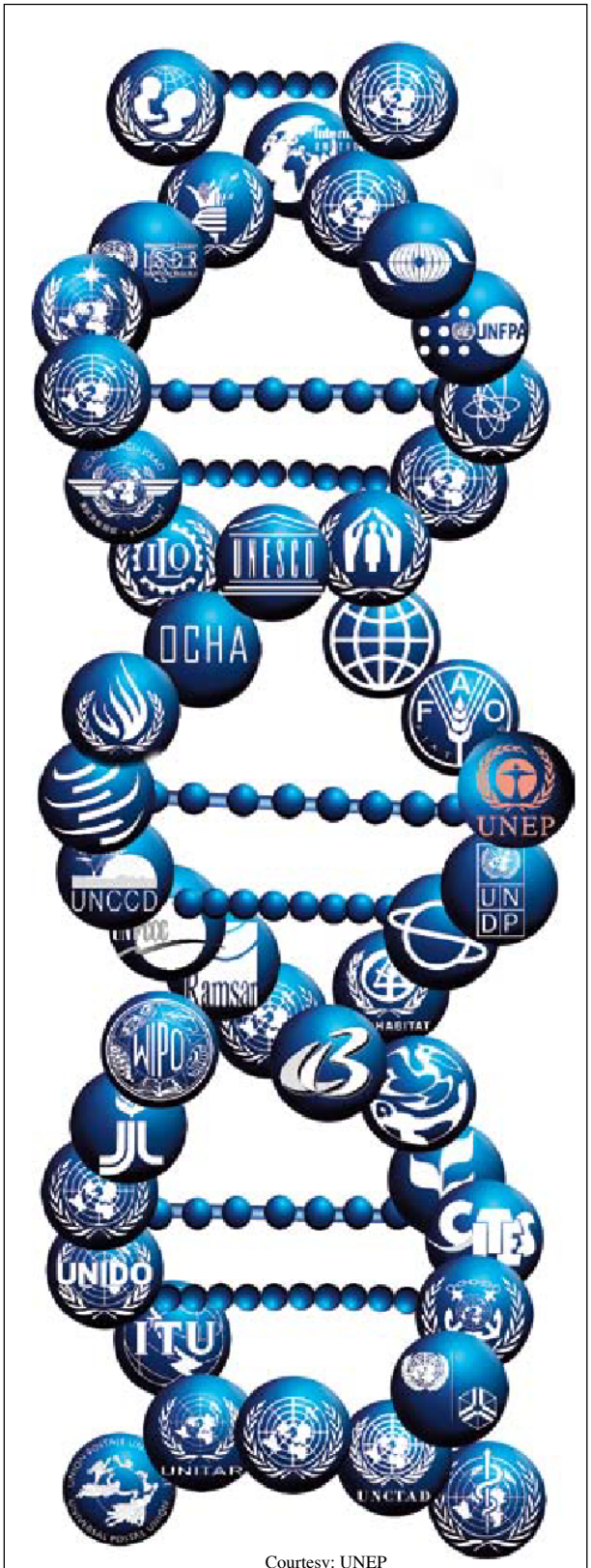
Cap-and-trade schemes are generally welcomed by industry, as they tend to reduce the cost of complying with targets. The cap is generally set at a level below the national allowance because small sources and those difficult to monitor are excluded. But without binding targets and a clear policy framework, a formal system cannot function. Tradable allowance systems can target either upstream sources (*i.e.*, fossil producers and importers) if they are based on carbon content, or downstream if they focus on end uses and emissions. If tradable allowances are issued at no cost, the problem is one of distributing initial allowances among recipients. If the allowances are sold or auctioned, these schemes can raise revenue that can be used for other purposes.

Markets should be organised so as to have a reasonable hope of achieving the policy goal of carbon reductions. The concerns associated with cap-and-trade schemes are four-fold: transaction costs, market manipulation, leakage and monitoring. Transaction costs can be minimised by having transparent and non-burdensome rules; the power to manipulate markets can be minimised by opening the market to more players (brokers, traders, *etc.*) besides those who need the allowances and by linking markets; leakage can be minimised by limiting the scheme to only those countries that have targets; and the burden of monitoring can be minimised by capping upstream sources.

- *The GLCA recommends a price on carbon set through a system of harmonized, universal carbon taxes, but recognizes that many in industry prefer a cap-and-trade system. For a well functioning cap-and-trade system, carbon markets need to be financially linked. In general, emissions allowances should be auctioned, thus raising resources that can be allocated by national governments for other purposes.*

Adaptation

Substantially reducing global emissions of greenhouse gases will not avoid the serious impacts of climate change, which will affect all countries to different degrees with the poor in developing countries being the most vulnerable and the least able to adapt. Strong mitigation measures are needed to minimise the cost of adaptation; without them, adaptation may be impossible in some countries. Least developed countries lack the information, in-



Courtesy: UNEP

0378-777X/08/$17.00 © 2008 IOS Press

stitutions, and the financial resources needed to assess their vulnerabilities and to adapt.

Adaptation is not simply a matter of designing projects or putting together lists of measures to reduce the impacts of climate change. A national policy response would increase resilience to climate vulnerability and should be anchored in a country's framework for sustainable development and integrated in its poverty-reduction strategies. Responses to climate change need to encompass several levels including access to clean energy for vulnerable populations, crop and farm-level adaptations, national level agricultural and supporting policies and investments.

Businesses and international financial institutions also need to integrate climate change into their activities and make their investments less susceptible to climate change. International technical and financial assistance should be strengthened and made more coherent in order to respond at the requisite scale to the needs of least developed countries.

Future agricultural systems will have to be more resilient to a variety of stresses to cope with the consequences of climate change. Technologies for adaptation (for example, salt- and drought-resistant crop cultivars) need to be developed and disseminated widely. New centres should be established in developing countries for this purpose, especially by the CGIAR in Africa.

Because the costs of adaptation were thought to provide largely local benefits, were difficult to distinguish from "regular" development, were suspected to be large, and smacked of compensation awarded for damages, developed countries have been reluctant to agree to substantial amount of funds for adaptation. Nevertheless, since climate change will impede development efforts, increase risks to public health, frustrate poverty alleviation programmes, and exacerbate migrations from waterlogged, water-scarce or food-scarce regions, there is an important role for official development assistance in financing adaptation measures, including human and institutional capacity building, and in reducing the vulnerability of agriculture, forests and water resources. Effective adaptation will require broader planning capacity in all relevant departments in developing countries. Local scientists should be supported in monitoring of, and research on, climate impacts on various sectors in their own countries. GLCA recommended that:

- *Financial support should be provided for vulnerability assessments, enhancing resilience to climate impacts, access to information and best practices, building human and institutional capacity, and making public and private investments in developing countries less susceptible to climate change. Centres for Adaptation in Agriculture should be established, particularly by the CGIAR in Africa.*

Technology Development and Cooperation

If the world continues on its current energy path, dominated by fossil fuels, energy-related CO_2 emissions in 2050 will be two and a half times their current levels. According to the International Energy Agency, these emissions can be returned to their current levels by 2050 through a combination of the following actions undertaken in all countries:

1. Strong energy efficiency gains in transport, industry and buildings sectors;
2. Increasing decarbonization of the electric power generation sector through increased deployment of renewables, natural gas, nuclear and coal with CO_2 capture and storage; and
3. Increased use of biofuels for road transport.

However, reducing global emissions by at least 60% at acceptable costs will require a technology revolution, at least as large as those in space and telecommunications, to make clean energy technologies more efficient and affordable. Technologies such as solar, wind, biofuels, hydrogen, energy efficiency, and carbon capture and storage need additional breakthroughs that will only be made possible by public funds. Unfortunately, investments in both public- and private-sector energy research and development programmes have been declining for the last two decades. These declines need to be halted and reversed.

- *GLCA concurs with the Stern Review to double the aggregate amount of public funds devoted to energy R&D to US$20 billion per year.*

Innovative public-private partnerships are required to encourage the private sector to invest more in post-R&D phases of energy technologies. The deployment phase often requires considerably more resources than the R&D phase. The private sector is best equipped to make incremental improvements in the later phases that reduce costs. For technologies that are already commercial, the private sector again can best tailor on-going R&D to the market's needs. However, governments need to offer predictable policy frameworks to support deployment in their countries. Similarly, market-based mechanisms are good at identifying the cheapest mitigation opportunities amongst existing options, and spurring innovations that have immediate cost reductions, but are less helpful in the development of new low-emission technologies.

- *In order to tackle climate change at the requisite scale, clean energy technologies should be made available to and utilized by all countries. All developing countries, especially rapidly industrializing countries, should have access to clean energy technologies on preferential terms. The barriers that hamper the dissemination of such technologies in developing countries, such as intellectual property rights and competitive rules, should be overcome.*

Consultative Group on Clean Energy Research

The formation of a Consultative Group on Clean Energy Research (CGCER), as suggested by the International Task Force on Global Public Goods, could facilitate international collaboration on the development of low-cost, low-carbon technologies and the exchange of information about clean energy technologies. Initially, the CGCER could be established as a virtual institution, linking centres of excellence in developed and developing countries. A CGCER could support such research; act as a catalyst for South-South cooperation, and pay for patents or licens-

0378-777X/08/$17.00 © 2008 IOS Press

ing fees to enable cleaner technologies to be deployed in the South. To encourage collaboration on a "clean technology revolution", GLCA recommends:

- *The formation of a "Consultative Group on Clean Energy Research" as part of a global climate agreement. Innovation targets to bring new technologies to market, as well as incentives for meeting them, should also be considered.*

Finance

Both public and private finance are essential for adaptation, and technology transfer to developing countries and to implement successfully any comprehensive and long-term strategy to combat climate change. Climate-friendly investments need to be multiplied through national and international frameworks, and the current international carbon market needs to be enhanced in order to scale up private flows. However, external funding must be additional to national resources obtained through domestic savings and taxation. Governments have an obligation to establish a supportive framework for investment. Local capital markets should facilitate long-term investments in adaptation measures. Carbon taxes or the auctioning of allowances can also raise resources that can be used for other purposes.

Reform the Clean Development Mechanism

The Clean Development Mechanism (CDM) was created under the Kyoto Protocol to support low-carbon investments in developing countries. For the developed countries, the purpose of the CDM is to lower the cost of emission reductions and provide an element of flexibility in carrying out national obligations. For developing countries, the CDM's purpose is to promote sustainable development and contribute to the stabilisation of greenhouse gases. The CDM has encountered administrative and technical hurdles. Initial projects have been limited to a few countries and a few gases and have been plagued by bureaucratic procedures, and with little contribution to sustainable development. These weaknesses arise because the CDM was created as a project-based instrument; however, the CDM Executive Board recently approved the inclusion of "programmes of activities".

To promote policy reform, underwrite technology development, and stimulate investment flows at a transformational scale, an additional market mechanism must take a sectoral approach. The distinction between a sectoral approach and project-based or programmatic approach is that a developing country could set sector-wide baselines for carbon-intensive sectors (such as power, cement, steel, aluminium) at levels that coincide with its economic interest while meeting commitments to reduce the energy intensity of its growth.

- *The CDM should be reformed in order to deliver its full potential, and in the post-2012 regime an additional market mechanism should support sectoral approaches capable of transforming whole sectors of rapidly industrializing countries at a speed and scale commensurate with the global challenge of emission reductions.*

Public finance also has an important role, especially in demonstrating new approaches for building human and institutional capacity, and for mitigation and adaptation in developing countries. However, the existing funding sources for these purposes are too small for the scale of assistance required.

The global costs of adequately addressing the risk of climate change, according to the Stern Review, are of the order of 1% of annual gross world product. Some of that investment will come from redirecting existing flows, and some will be additional. Some funds will be required for increased assistance to developing countries for the adoption of energy efficiency and clean energy technologies, and for avoided deforestation. Funds will be required for greening power sectors, for adaptation, and for increased R&D and deployment in all countries, especially for those technologies that are technically viable but not financially competitive.

Sustainable development is not possible without making energy systems more sustainable. Rapidly industrialising countries need to grow in a climate-friendly manner. The infrastructure created in power plants and energy-intensive industries is long-lived. However, the current costs of cleaner and more efficient technologies are higher (as much as US$100 million for an average 1 GW coal-fired power plant). It is important to all countries that clean energy technologies are made as widely available as possible. Most of the resources for energy development (close to 60%) are raised locally within developing countries. The IEA estimates that the energy sector requires about US$400 billion per year in developing countries. Estimates vary that between US$20–34 billion a year is required to "green" energy sectors in developing countries.

A New US$50 Billion per Year Climate Fund

The average net public financial flows from all developed countries (including loans) amounted to about US$58 billion per year between 1996 and 2005, or about 0.23% of GDP, of which about US$7 billion per year was for energy. GLCA estimated that about $50 billion per year will be needed for activities in developing countries in support of a comprehensive climate change agreement. A fund of that magnitude would require innovative finance, structure and governance. Since commitments and actions to meet a 60% reduction by 2050 will have to be undertaken in phases, the first phase of such funding could initially be about $10 billion per year.

The source of funding could be a combination of public finance (increases in ODA) and the carbon market, especially the auctioning of emissions allowances. The average level of ODA (0.23%) during the last decade is only one-third of the 0.7% commitment promised in Monterrey five years ago. An ultimate level of annual funding of US$50 billion, if derived entirely from public sources, would represent less than a doubling of current ODA. However, a significant portion of the funding could be met by flows from carbon finance.

- *A climate fund of additional resources, starting at US$10 billion and growing to US$50 billion per year,*

0378-777X/08/$17.00 © 2008 IOS Press

should be established to support climate change activities in developing countries and should include both public and private resources. It should have an innovative structure, and transparent and inclusive governance.

Concluding Remarks

As we embark upon a more comprehensive and inclusive agreement, we need to build on the experience gained from Kyoto, particularly in international emissions trading. We also need to build on the experience of cities, states, communities, businesses and individuals who have voluntarily undertaken important steps to address climate change. As they have shown, determined action presents substantial opportunities for economic growth and job creation, based on the development and deployment of clean energy technologies. In addition, public advocacy and information programmes can play an important role in enhancing awareness of the impacts of personal behaviour and lifestyle. Above all, we need to build trust between North and South and establish an equitable basis and new modalities for genuine international cooperation to address the linked challenges of energy and climate security. For an issue this important to the future of the planet, there must be no more broken promises.

Note

1 This quote, and all subsequent italicised quotes in this article, are taken from GLCA, 2007, A Framework for a post-2012 Agreement on Climate Change.

From Bali to Copenhagen: Towards an Endgame?

by Alex Evans*

For many climate change negotiators, 2007 ended on a high – amid jubilation about Australia's return to the Kyoto fold, and the Bali summit's dramatic last minute agreement on a road map for negotiations between now and 2009 about what should happen after the end of Kyoto's first commitment period in 2012.

With the start of 2008, the more sober reality has sunk in: that while the Bali agreement was a real achievement, it was also – in the end – no more than 'talks about talks'. The real work of agreeing a comprehensive global solution to climate change has not yet begun. So what might an endgame for limiting warming to two degrees Celsius look like?

Start with the yardstick that the Intergovernmental Panel on Climate Change set for policy makers in the Fourth Assessment Report's synthesis paper, published just before the Bali conference. The IPCC's conclusion was that if policy makers want to limit warming to between 2 degrees Celsius (the EU's stated goal) and 2.4 degrees Celsius, then:

1. Carbon dioxide levels need to be stabilised between 350 and 400 parts per million – they are currently at 370ppm; and
2. CO_2 *equivalent* levels (for *all* greenhouse gases rather than just CO_2, in other words), must be stabilised at between 445 and 490 parts per million. Current levels are 455ppm.

What do these target ranges imply in terms of emissions? The short answer: global reductions that are much more demanding than most countries – including Europe – are yet willing to let on.

The last IPCC assessment report used, for the first time, "coupled" computer models of the climate, which unlike the older "uncoupled" versions, take ocean sinks into account – resulting in greater accuracy. These newer models find that to keep concentrations within the ranges mentioned above, global emissions of close to zero are likely to be needed by 2050.

This is a much more ambitious target than the global cut of around 50% by 2050 often cited by EU leaders. And it would imply a global cut by 2020 of *at least* 40% – and much more than that for developed countries, assuming that the framework agreed is equitable.

This, then, is the benchmark for policy efforts if pledges about limiting warming to two degrees C are to be taken at face value. What then are the prospects for achieving it?

In the post-Bali environment, there is essentially a new "Quad" group of leading players, like the one that used to prevail on trade – but with a rather different membership. This time, the four members are the EU, which supports binding targets for developed countries; China, which refuses to countenance binding targets for developing countries, but is beginning to engage in debate about reducing its emissions; India, also opposed to binding targets for developing countries but generally perceived as more hardline than China in opposing additional calls for action by developing countries; and the USA, together with Canada and Japan. In the run-up to the Bali summit, the US-led group opposed *all* binding targets, but by the end of the summit their argument had shifted to being that if developed countries were to take on binding targets, then developing countries should also do so.

However, as I argued in *The Post-Kyoto Bidding War*, a paper published in October 2007 by the Centre on International Cooperation,[1] on one issue there is consensus.

* Senior Policy Associate at the Center on International Cooperation at New York University.

0378-777X/08/$17.00 © 2008 IOS Press

No-one – not the EU, not the USA and its allies, not China, not India – is calling for a binding ceiling on greenhouse-gas levels in the air (a "stabilisation target" in the jargon), that then leads to the definition of a "safe global emissions budget".

It is in many ways a surprising omission. After all, it is hard to see how the goal of the 1992 UN Climate Convention – stabilising greenhouse gas concentrations at a safe level – will be achieved unless that safe level is first *quantified*. So how can this strange consensus on no stabilisation target in the next commitment period be explained?

It is straightforward to see why the USA would be opposed to such a target. The current US Administration does not regard climate change as an urgent problem. Why then would it raise the political stakes by initiating discussion of a global emissions budget likely to result in targets much more exacting than those agreed under Kyoto?

But for Europe, China and India, the political reasoning is more subtle, and has to do with the central fact that it is axiomatic that a stabilisation target cannot be discussed without discussing binding targets for developing countries. How else, after all, can there be a global emissions budget?

While many EU policy makers privately believe developing country targets to be essential, they also judge that there is insufficient political space to allow such a discussion – and hence remain silent.

China and India agree. For both countries – and many other developing states – the idea of discussing binding targets without some prior guarantee of equitable treatment, that safeguards their right to develop, is simply too hazardous to consider. Without iron-clad assurances on space to develop their economies, the risk in their view is that they will be railroaded into a target that will prevent them from growing their economies and eliminating extreme poverty.

This, then, is the impasse at which the Quad found itself before Bali; and it is where it finds itself now. Without some way of unlocking the politics of developing country targets, then greenhouse gas concentrations cannot be stabilised: it's that simple. Yet so difficult, so hazardous, so politically toxic is this discussion, that the one Quad member calling for developing country targets is the USA – apparently in a bid to try to stymie the negotiations.

However, as I also argued in October last year, there is a potential way through the impasse – as German Chancellor Angela Merkel appears already to have identified. Over the past few months, Mrs Merkel has begun to speak regularly about the need for a global framework based on the concept of convergence towards equal *per capita* rights to the atmosphere.

According to briefings to the media by German officials, this idea results from conversations between Merkel and Indian prime minister Manmohan Singh at the 2007 G-8 summit in Heiligendamm, where Singh reportedly stated that convergence to *per capita* equity would be the price for Indian participation in a future deal.

If this is the case, then it opens up the possibility of a real discussion between developed and developing countries about the principles that might underpin a future global

Courtesy: Das Parlament

0378-777X/08/$17.00 © 2008 IOS Press

"grand bargain" on climate change. Convergence, after all, is – at least on paper – a means of operationalising the long-discussed principle of "common but differentiated responsibilities" within the scientifically sound context of a safe global emissions budget.

Under a process of convergence, countries' emission rights within a global emissions budget would move from their current shares – where emissions are proportionate to wealth – to a new allocation proportionate instead to *population*. This process would take place over a negotiated timescale of anything from one to a hundred years.

How then would such an approach map out against the positions of the Quad countries mentioned above?

For **India**, first of all, a global framework based on stabilisation and convergence makes obvious sense. Indian emissions in 2004 were 1.02 tonnes of carbon dioxide (CO_2) per person, while the global average was 4.18 tonnes. Even if Indian emissions grow rapidly, it will still be years before her *per capita* emissions exceed the global average. Because of that, a global emissions trading scheme based on convergence to equal *per capita* levels would be highly profitable for India. (The same basic dynamic is also true for Brazil, although to a slightly lesser extent.)

For **Europe** – assuming that member states and the Commission line up behind Mrs Merkel's proposal – the approach could be attractive because it matches up with Europe's analysis of the urgency of tackling climate change: it is based on a stabilisation target. If Europe wants to deliver its proposed limit of 2 degrees of warming, this is one way – and perhaps the only way – of doing it.

For the **USA**, admittedly, convergence to equal *per capita* emission rights is unlikely to represent its preferred vision for future climate policy – even in a scenario in which a Democrat administration governs from 2009.

But it should be borne in mind that the current Administration's ideal outcome would be binding targets for no-one – a vision that failed to find much support at Bali. If the USA is now falling back to a position of binding targets for developing as well as developed countries, then this raises the question of how the USA *would* propose to share out emission entitlements in a way consistent with the principle of common but differentiated responsibilities, if not through convergence. By moving to a position of advocating developing as well as developed country targets, in other words, the USA moves to a position in which the rest of the world can ask to see its hand of cards on the question of allocations.

Finally, there is **China** – where the political calculation is least clear-cut of all. China's 2004 CO_2 emissions were some 3.65 tonnes per person – much closer than India to the world *per capita* average (though still a long way from the American level of 19.73 tonnes per person). According to International Energy Agency estimates, China's *per capita* emissions level could exceed the global average by as soon as this year.

When this change takes place, it will represent a major watershed in international climate policy. Whereas for India, participation in a global deal based on *per capita* convergence makes sense for reasons of profitability alone, the same will – from next year – not hold true for China.

In this sense, whether China should support a stabilisation ceiling – and the targets for developing countries that it would inevitably entail – depends entirely on how urgent China perceives climate change to be, and how badly it wants the world to agree a solution to the problem.

If China thinks that climate-driven damages are likely to be sufficiently serious and detrimental to Chinese interests to warrant solving the problem sooner rather than later – by setting a stabilisation target, in other words – then that will necessitate the development of a Chinese view on how the resulting "global emissions budget" should be shared out.

What does this analysis boil down to? In a nutshell, four conclusions:

1. If Europe is serious about limiting warming to two degrees C, then it has no time to waste in starting discussions about a stabilisation target. If it wants a stabilisation target, then it needs binding targets for developing countries, in the context of a global emissions budget. And convergence to equal *per capita* emission rights is the only approach so far proposed by any EU member state for sharing out such a global emissions budget. The Commission and other member states should therefore either set out an alternative approach for sharing out a global emissions budget, or get behind Germany's convergence-based proposal.
2. Europe's most obvious ally in this enterprise would be India – assuming, again, that Europe is willing to shift up a gear and talk in terms of *per capita* convergence. As mentioned earlier, an approach based on convergence is likely to be highly profitable for India, making the political calculus of this alliance straightforward.
3. The USA is likely to oppose a convergence-based approach. But if Europe calls for this approach, then it can at least maximise political momentum, retain the initiative, and call America's bluff on the issue of developing country targets. If the USA opposes convergence as the principle for sharing out a global emissions budget, it will need to set out what allocation mechanism it favours instead – and the main debate in climate policy will finally be underway in earnest.
4. Finally, the great unknown: China. Unlike India, Chinese support for a global framework based on a stabilisation target and *per capita* convergence does not make sense for reasons of profitability alone. Europe therefore needs to engage intensively with China, above all to underline that *if* China thinks climate change is serious, then it depends on a stabilisation target, and a global emissions budget with binding targets for all. The question of what view China comes to on how such an emissions budget should be shared out is likely to be one of the most topical and important questions involved in its "peaceful rise".

Note

1 Available to download at http://www.cic.nyu.edu/internationalsecurity/docs/PostKyotobiddingwar.pdf.

0378-777X/08/$17.00 © 2008 IOS Press

CBD

Will Bonn give Birth to a Global Stakeholder Alliance?

by Ahmed Djoghlaf*

In the early nineteenth century, the German composer, Felix Mendelssohn observed that "the essence of 'beautiful' is unity in variety". While Mendelssohn was more likely speaking about orchestral music than biological diversity, his remark captures one of the most fundamental and vital, yet vulnerable, aspects of the natural world: the interconnectedness of its different species and ecosystems makes it unique, special and irreplaceable.

Life on Earth is without doubt irreplaceable. However, this web of life is under threat. According to the Millennium Ecosystem Assessment,[1] pressure from human activities on the natural functioning of the planet has reached such an extent that the ability of ecosystems to meet the needs of future generations is now seriously – perhaps irreversibly – jeopardised.

Human impacts on the natural functions of our planet have never been as destructive as they have been over the last half-century. The result has been an unparalleled loss of biodiversity. It is estimated that humans have increased species-extinction rates by as much as 1,000 times the typical historical background rates that can be inferred from fossil records.

The fourth edition of the Global Environment Outlook (GEO-4),[2] issued last year by the United Nations Environment Programme (UNEP), serves as another important reminder that biodiversity decline and loss of ecosystem services continue to be major global threats to future development and that there is an urgent need to step up efforts to protect life on Earth. The loss of biological resources has serious consequences for the billions of people around the world who depend on nature for their well-being.

We are facing a tremendous challenge, compounded by climate change. The Fourth IPCC Assessment Report, released last year, predicts that, as a result of climate change, up to 30% of all known species are likely to be at increased risk of extinction before the end of this century.

At the 2002 Johannesburg World Summit on Sustainable Development, Heads of State and Government from around the world committed their countries to significantly reducing the rate of biodiversity loss by 2010 ("the 2010 biodiversity target"). Now, two years after the eighth meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP-8) in Curitiba, Brazil, which marked the beginning of the enhanced implementation phase of the CBD and just two years before 2010, the Convention finds itself at a crossroads. The ninth meeting of the Conference of the Parties to the Convention, to be held in Bonn in May 2008, will take place at a time of unprecedented environmental challenges, as well as exceptional public and political awareness of the importance of taking action to protect our environment. The meeting offers a unique opportunity to build on the momentum achieved to date and be a pivotal point in the history of the Convention.

Recently, addressing the United Nations General Assembly following her appointment as Special Envoy of the Secretary-General on Climate Change, Gro Harlem Brundtland stated:

> *It is irresponsible, reckless and deeply immoral to question the seriousness of the situation. The time for diagnosis is over and the time for action is now.*

She stressed the importance of 2007 as a year when the wheels have to be set in motion. The call for action to find a solution to "the tragedy of the commons", as Gro Harlem Bruntland called it 20 years ago in her seminal report, *Our Common Future,* is being heard for climate change.

Several steps have been taken. Early this year, and for the first time in its history, the United Nations Security Council devoted a special meeting to addressing the issue of climate change and security. Three special envoys of the Secretary-General have been appointed. A summit of the General Assembly of the United Nations exclusively devoted to climate change with the participation of 70 Heads of State and Government was convened in New York in September last year. Again in 2007, the Nobel Peace Prize was awarded to Al Gore, the former Vice-President of the United States of America, and to the Intergovernmental Panel on Climate Change (IPCC). In doing so, the Norwegian Nobel Committee has once again recognised the environmental dimension of peace and security.

The security implications of environmental degradation were recognised by the Committee in 2004, when, for the first time, it awarded the Nobel Peace Prize to an environmentalist – Professor Wangari Maathai. On that historic occasion, Ole Danbolt Mjøs, the Chairman of the Nobel Committee, noted that:

> *"This year, the Norwegian Nobel Committee has evidently broadened its definition of peace still further. Environmental protection has become yet another path to peace".*

Carrying this forward, in accepting the Nobel Peace Prize, Professor Wangari Maathai stated that:

> *"There can be no peace without equitable development, and there can be no development without sustainable management of the environment in a demo-*

* Dr Ahmed Djoghlaf is Executive Secretary of the Convention on Biological Diversity.

0378-777X/08/$17.00 © 2008 IOS Press

cratic and peaceful space. I hope that this prize will help many people see the link between peace, development and environment".

To a great extent, sustainable development is the new name for peace and security. Nobel Laureate Maathai has tirelessly worked to highlight the link between peace and the environment, stating that:

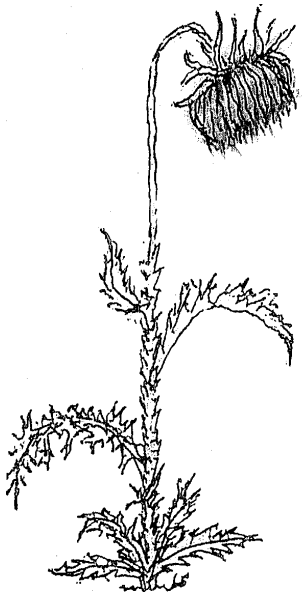
"In a few decades, the relationship between the environment, resources and conflict may seem almost as obvious as the connection we see today between human rights, democracy and peace".

It is encouraging to note that world leaders are seeing this link. At a conference on climate change held in Berlin in October 2007, the Foreign Minister of Germany, Frank-Walter Steinmeier said that:

"There is a 'cold war' at the North Pole that we have to prevent. Climate change is a threat to worldwide peace and security".

Just as climate change is a security issue, so too is the biodiversity crisis. It is for this reason that the international community celebrated the International Day for Biological Diversity on 22 May 2007 under the theme "Biodiversity and Climate Change". In his message addressed to the international community on this occasion, Ban Ki-moon, the Secretary-General of the United Nations stated that "the conservation and sustainable use of biodiversity is an essential element of any strategy to adapt to climate change". At the Heiligendamm Summit in Germany in June 2007,[3] for the first time in the history of the G-8, Heads of State and Government emphasised the crucial importance of the conservation and sustainable use of biodiversity as an indispensable basis for the provision of vital ecosystem services and the long-term provision of natural resources for the global economy. They further acknowledged the "Potsdam Initiative – Biological Diversity 2010"[4] presented at the G-8 Environment Ministers' meeting in March 2007, and expressed the will to increase efforts to achieve their agreed goal of significantly reducing the rate of biodiversity loss by 2010. Great importance has to be attached to the fact that the United States participated in this process. As they are otherwise not yet a Party to the Convention on Biological Diversity, their engagement in this initiative will make a major contribution in achieving the 2010 target and the success of the enhanced phase of implementation of the Convention.

This historical achievement would not have been possible without the unique leadership of the Chancellor Angela Merkel, Sigmar Gabriel, the German Federal Environment Minister, and the people of Germany.



Carduus nutans Courtesy: Loki Schmidt

The protection of nature is part of Germany identity, culture and heritage. The UNESCO-endorsed Biosphere Reserve, Schorfheide-Chorin, protects not only a large variety of ecosystems but also lands of historical, cultural and national importance. It is therefore not surprising that a representative survey[5] of the population on environmental awareness in Germany commissioned in 2004 by the Ministry of the Environment found that 90% of respondents consider it very or quite important to prevent species extinction and to ensure nature conservation. About 290 million people visit nature parks, national parks and biosphere reserves in Germany. Forty-two per cent of Germans who take holidays in their own country rate the experience of nature as particularly important. According to the survey, nature and landscape help to strengthen regional identity and shape a sense of home.

It is therefore not surprising that the 48,000 animal species and approximately 14,400 fungi species and 9,500 plant species found in Germany are protected by 97 nature parks, 14 national parks and 14 biosphere reserves. Over 13% of the total land area of the country and 41% of the marine areas of Germany, comprising 5,000 sites, are covered by the European Natura 2000 network.[6] Following re-unification in 1990, Germany gave itself and the world a wonderful gift of five national parks, six biosphere reserves and three nature parks – which were described as "*das Tafelsilber der deutschen Einheit*" ("The crown jewels of a united Germany") by Klaus Töpfer, then Germany's Environment Minister. National parks and protected areas are truly the crown jewels of any country, providing not only natural beauty, but important ecological services, such as water and air purification.

Another unique example of biodiversity conservation in Germany is the long swathe of land that once constituted the border between East and West Germany. While impassable and unusable by humans for decades, this land became a refuge for flora and fauna and allowed the natural world to flourish – one that encompasses almost every type of German landscape from coastal lowlands to low mountain regions, including currently endangered habitats. Yet Germany has not stopped at its national borders. This "Green Belt" has now formed the backbone of a project to create a trans-European "Green Belt" that will stretch from the Adriatic to the Barents Sea, across 22 countries. This European Green Belt furthers not only the work of the CBD, but also that of Natura 2000 and other European biodiversity initiatives.

Germany has been a leader in environmental initiatives throughout the years. The country has worked at all levels to raise the profile of biological diversity and awareness of its importance. The inclusion of a biodiversity section in the Heiligendamm Declaration adopted by the G-8 is a major contribution. The leaders took note also of the

0378-777X/08/$17.00 © 2008 IOS Press

Potsdam Initiative. In March 2006, Germany convened a meeting of the Ministers of the Environment of the G-8 as well as Brazil, China, India, Mexico and South Africa. Known as the G-8+5 initiative, this is a major and unique development in the Convention process and reflects unprecedented political will to respond to the urgent need to save life on Earth through the establishment of an enhanced North-South partnership.

In addition to its contribution in advancing the biodiversity agenda through the Potsdam Initiative and the Heiligendamm Summit, Germany took the initiative of establishing in December 2006 the "Triple Presidency of the European Union" with Portugal and Slovenia. The three countries committed themselves, together with the European Commission, to cooperate closely during the 18-month period covering their respective terms as EU President to ensure consistency in the preparation of the ninth meeting of the Conference of the Parties to the CBD in order to make it an important milestone in the global biodiversity agenda. This has never happened before for any multilateral environmental conference. A precedent has thus been established which will guide the preparation of future meetings of the Conference of the Parties.

Moreover, Germany's leadership, as the host country of the Bonn Biodiversity Summit, is crucial to achieving the 2010 biodiversity target. At the Gothenburg Summit in 2001, the Heads of State and Government of the member States of the European Union committed themselves to stop the loss of biodiversity by 2010. At the World Summit on Sustainable Development, held in 2002 in Johannesburg, 110 Heads of State and Government committed themselves to substantially reduce the rate of loss of biodiversity by 2010.

Germany has demonstrated its commitment to achieving this strategic target by including it as part of its national biodiversity strategy. The adoption in December 2007 of Germany's national biodiversity strategy is yet another demonstration of Germany's strong commitment to the three objectives of the Convention.[7] As evidenced by the proceedings of the First National Biodiversity Forum, held in Berlin on 5–6 December 2007, with the participation of more than 250 experts, the German national biodiversity strategy is a model by its content as well as its approach. The strategy contains a concrete vision, action areas, flagship projects and concrete measures on innovation and employment, as well as combating poverty and promoting justice. It also acts on the implications of the Millennium Ecosystem Assessment to Germany. The strategy will be further elaborated through the convening of seven thematic regional forums involving all 16 Länder, to be held in Hanover, Munich, Lübbenau, Essen, Schwerin, Stuttgart and Frankfurt. This too has never happened before.

The country's dedication to the objectives of the CBD and the 2010 target is also reflected in its various activities and initiatives leading up to the ninth meeting of the Conference of the Parties. For example, in December 2006, Germany convened an international biodiversity expert group to brainstorm and shape the agenda of the meeting – the first time such a consultative process has been used. On the occasion of the celebration of the International Day for Biodiversity, on 22 May 2007, Sigmar Gabriel, the German Federal Environment Minister launched a "National Campaign for Biodiversity". With the support of the "Nature Alliance", a group of celebrities from politics, non-governmental organisations, business, the media, the scientific community and culture, this innovative campaign's aim is to promote increasing public awareness of the value and benefits of biodiversity and of the upcoming meeting. Moreover, the involvement and active engagement of German civil society in the preparation of the Bonn Biodiversity Summit is unprecedented. One hundred days before the meeting of the Conference of the Parties, an international Civil Society Forum for the meeting will be convened in Berlin on 7–8 February 2008, another approach that has never happened before.

Increasing public awareness of the issues goes hand in hand with including any and all stakeholders in the push to significantly reduce loss of biodiversity. In fact, some of the most pivotal stakeholders are ones that previously were not fully considered in the biodiversity discussion – they are the city dwellers. In 2007, for the first time in history, the world's urban population exceeded its rural population. Half of humanity now lives in towns and cities, and it is projected that by 2030, this figure will increase to two thirds. The growing urban world represents one of the most dramatic changes experienced by humanity in recent history and the impact is expected to have far reaching implications. Unfortunately, as urban areas expand to accommodate this increase, they encroach on natural habitats and green spaces, contributing to environmental degradation generally, and loss of biodiversity specifically. In addition to "taking over" land for their physical expansion, cities indirectly encourage land conversion to agricultural activities in order to meet the needs of growing urban populations. Although cities occupy only 2.8% of the Earth's surface, urban dwellers use 75% of the planet's natural resources.[8]

As the cities will determine the fate of the remaining biodiversity of our planet, there is a strong view that the battle for life on Earth will be won or lost in the cities. The wealth of urban biodiversity is illustrated in the book *Wild Urban Woodlands: New Perspectives for Urban Forestry*.[9] For example, Berlin is home to the biggest population of nightingales and Munich has as many butterfly species as are to be found in the best natural reserves.

Prof. Reichholf in his book *Stadtnatur – Eine neue Heimat für Tiere und Pflanzen* has demonstrated that land-use changes in rural areas have elevated cities into centres of refuge for plant and animal biodiversity. Based on the conviction that "local authorities move the world", 34 representatives of cities met and adopted in March 2007, the Curitiba Declaration on Cities and Biodiversity. As a follow-up to this first-ever Mayors Conference on "Cities and Biodiversity: Achieving the 2010 Biodiversity Target", the City of Bonn will convene a municipal conference on the margins of the ninth meeting of the Conference of the Parties to the CBD. The meeting will bring together local decision makers from all parts of the world

0378-777X/08/$17.00 © 2008 IOS Press

who have made exceptional efforts to protect urban biodiversity. They will share their experiences and initiatives with a view to promoting best practices and disseminating lessons learned. The Mayors' message will be conveyed to ministers attending the High-level Segment of the Conference of the Parties and will be a valuable input to the negotiation process. This is yet another unprecedented new development.

Another important dimension of the ninth meeting of the Conference of the Parties will be the active participation of the business community. In addressing the New York business community early last year, Secretary-General Ban Ki-moon stated that: "The United Nations and business need each other". Stressing that business, trade and investment are "essential pillars of peace and prosperity", Ban Ki-moon confirmed that the United Nations must engage more fully with non-State actors in order to bring about a prosperous, more secure and peaceful world. In today's interdependent world, business and the United Nations share common goals of "building and supporting strong economies and communities, providing opportunities for people to pursue a livelihood, and ensuring that everyone can live in dignity". The Secretary General's words are also relevant to the implementation of the three objectives of the CBD.

All businesses, irrespective of their size, location or sector of activity, ultimately depend on biodiversity. While different businesses have different direct and indirect impacts on biodiversity, they also possess biodiversity-relevant knowledge, valuable technical resources and managerial skills. In fact, wise management of biodiversity is seen, more and more, as relevant to a company's bottom-line performance. Corporate, social and ecological responsibilities are no longer catchwords, but serve increasingly as indicators for a company's overall assessment. As a result of this increased recognition, a major stakeholder conference on business and biodiversity took place in Lisbon, in November 2007. As part of the European Union initiative "Building Better Partnerships: linking Business to Biodiversity" and under the auspices of Portugal on behalf of the "Triple EU Presidency", this conference provided an exceptional opportunity for representatives of business, member States, NGOs and the European Commission to identify areas of mutual interest for cooperation in relation to the linkages between Business and Biodiversity. The "Message from Lisbon on Business and Biodiversity" adopted by the 500 participants, including 162 representatives of the business community will be transmitted to the High-level Segment of the Bonn Biodiversity Summit. It reflects not only the great commitment of the business community, but clearly underlines that there is "a strong business case for biodiversity, including the competitive advantage gained from conserving biodiversity and using biological resources in a sustainable way and recognizing that competitive markets also have an enormous potential to mobilize private resources and stimulate innovation".[10] As part of this initiative, the German Leadership Initiative was launched with the support of more than twenty major German companies. This, too, has never happened before.

Furthermore, the ninth meeting of the Conference of the Parties in Bonn will create a persuasive precedence with respect to the participation of Heads of State and Government. For the first time, the High-level Segment will also include a component with contributions from the German Federal Chancellor, the Secretary General of the United Nations and with Heads of State and Government representing the "Triple COP Presidency", namely Brazil as the host of COP-8, Germany as the host of COP-9 and Japan as the country offering to host COP-10 in Nagoya in 2010. This is another first.

The Heads of State and Government component of the High-level Segment of the ninth meeting of the Conference of the Parties in Bonn will offer a unique opportunity to step up efforts for achieving the target set by Heads of State and Government at the World Summit on Sustainable Development in Johannesburg in 2002. This target aims not only to substantially reduce by 2010 the loss of biodiversity, but also responds to the call for action to negotiate, within the framework of the CBD, an international regime to promote access to genetic resources and safeguard the fair and equitable sharing of benefits arising out of their utilisation. In fact, the Ad Hoc Working Group on Access and Benefit sharing was mandated by the Conference of the Parties at its eighth meeting to complete its work on the elaboration and negotiation of the international regime at the earliest possible time before the tenth meeting of the Conference of the Parties in 2010. Thus, the Bonn Biodiversity Summit will be a major step towards the finalisation of the negotiation on the international regime on access and benefit sharing, which will be crucial for operationalising the third objective of the Convention. Conservation of biological resources goes hand in hand with its sustainable use as well as the fair and equitable sharing of its benefits.

According to the fourth edition of the Global Environment Outlook, the unprecedented loss of biodiversity occurs because current policies and economic systems do not incorporate the values of biodiversity effectively in either political or market systems, and many policies that are already in place are yet to be fully implemented. We cannot protect what we do not know, and we cannot protect what we do not value. It is for this reason that Germany suggested, as part of the Potsdam Initiative, the idea of a Stern-like report for biodiversity. The intention would be to undertake a "process of analysing the global economic benefit of biological diversity, the costs of the loss of biodiversity and the failure to take protective measures versus the cost of effective conservation."[11]

The European Commission is supporting this initiative with the preparatory work for the study and launched, in November 2007, a six-week-long Internet-based call for evidence on the economics of biodiversity loss.[12] This review will be conducted in two phases. The expected results of the first phase – running up to the ninth meeting of the Conference of the Parties – include: a review of relevant scientific and economic knowledge highlighting key issues; case-studies providing indications of the range of costs and benefits associated with the loss of biodiversity and the decline of ecosystem services; and elements for development

0378-777X/08/$17.00 © 2008 IOS Press

of a methodological approach. The result of the first phase will be presented to the Bonn Biodiversity Summit.

It is a simple truth that the three objectives of the Convention will be achieved only when the value of biodiversity, including its non-monetary components and the ecosystem services generated, is well understood by the public at large and fully integrated into decision making at all scales and in all economic and social sectors. This requires integrating biodiversity and ecosystem-services considerations into land-use policy and planning, into agricultural, forestry, fisheries and tourism policies, and into trade and development cooperation policies. Indeed, it requires a paradigm shift – the environmental issue is no longer a "soft" issue, but has to be at the top of the global political and economic agenda.

The Bonn Biodiversity Summit represents a unique opportunity to enable the community of States to recognise the full value of biodiversity – not only its intrinsic worth, but its instrumental value for the world's economy, the daily lives and well-being of people all over the globe. Germany has taken the lead to ensure that the upcoming Conference of the Parties be considered as a landmark event in the renewed effort of the international community to address major environmental challenges, such as the present drastic loss of biodiversity. Indeed the High-level Segment of the Bonn meeting has been organised to facilitate active engagement of all stakeholders and encourage them to make firm commitments. Another first.

The Life Web Initiative for a Global Campaign on Protected Areas, to be launched at the initiative of Germany and its partners at the Bonn meeting is a case in point. Because protected areas are considered "safety-nets" for life on Earth, this first ever initiative aims to match voluntary commitments by States to designate new protected areas with the respective commitment of donors for dedicated financing for these areas.

Therefore the Bonn Biodiversity Summit in May 2008 is not just another meeting but the beginning of a new chapter in the life of the CBD and a new era of doing business differently when it comes to the relationship between man and nature.

In offering to host the ninth meeting of the Convention, Germany has decided not only to offer the necessary conference facilities but to lead by example and to provide leadership to the world. In my capacity as the Executive Secretary of the CBD it is my sincere hope that the Bonn Biodiversity Summit, in May 2008, will be the birthplace of a universal and global "Nature Alliance" for the implementation of the three objectives of the Convention with the full and active engagement of all stakeholders.

In doing so, I hope that the participants in the Conference of the Parties will be guided by the words of Michael Succow, a German conservationist: "Our task is to consider and plan for a sustainable management of all land and sea so that they carry as much as possible of the world's genetic and ecological riches through the pressures of the next century into what we must all hope will be a stable and sustainable world beyond".[13]

Notes

1 For more information see http://www.millenniumassessment.org/en/index.aspx.

2 For more information see http://www.unep.org/geo/geo4/media/.

3 Reported in EPL 37/5.

4 The Potsdam Initiative comprises a list of ten activities with the aim of implementing initiatives that will ultimately help reduce the loss of biodiversity. See the annex to the Chair's conclusions of the G-8 Environment Ministers' Meeting, Potsdam, 15–17 March 2007 at: http://www.bmu.de/files/pdfs/allgemein/application/pdf/g8_potsdam_chair_conclusions_03_07.pdf.

5 See National Strategy on Biological Diversity of Germany, Chapter A4.

6 *Ibid*.

7 See Article 1 of the Convention on Biological Diversity: "…the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding".

8 UNEP, Urban Environment Unit: http://www.unep.org/urban_environment/issues/biodiversity.asp.

9 Ingo Kowarik and Stefan Korner (eds), 2005, *Wild Urban Woodlands: New Perspectives for Urban Forestry*. Berlin: Springer. An abridged version can be found at http://books.google.com/books?hl=en&id=eAfXuTL5XsgC&dq=ingo+kowarik&printsec=frontcover&source=web&ots=xxXY1Q6LAF&sig=hFkFa2FD6wAbhBpM8kNoBL2YjNk.

10 See Message from Lisbon on Business and Biodiversity at http://countdown2010.net/business (as at 27 November 2007).

11 See annex of the Chair's conclusion of the G-8 Environment Ministers' Meeting, Potsdam, 15–17 March 2007 (http://www.bmu.de/files/pdfs/allgemein/application/pdf/g8_potsdam_chair_conclusions_03_07.pdf).

12 See http://ec.europa.eu/environment/nature/call_evidence.htm (as at 27 November 2007).

13 See http://www.rightlivelihood.org/succow.html.

Toward the International Regime on Access and Benefit Sharing
– Progress "by Inches" –

In its sixth meeting in January, the CBD's Working Group on Access and Benefit-sharing (WGABS) began to take the first concrete steps toward the development of the international ABS regime. After relatively little movement in its first four meetings, the Working Group's last two meetings – now under the leadership of permanent chairs Timothy Hodges (Canada) and Fernando Casas (Colombia) – evidence a new approach which has finally begun to show results.

The issue of "Access and Benefit-sharing" (ABS) has been one of the slowest developing elements of the Convention. Originally created as the "*quid pro quo*" of the Convention on Biological Diversity (CBD),[1] the ABS concept is designed to require users of "genetic resources" to share the benefits that they receive from the utilisation of those resources with the country from which the genetic resources were originally taken. For this purpose, "users" includes a variety of stakeholders – *i.e.*, researchers, collectors and commercial entities which research and develop products involving the genetic information of wild and agricultural species. The benefits to be shared include research results, commercial profits and other benefits.[2]

0378-777X/08/$17.00 © 2008 IOS Press

In the 16 years since the CBD's adoption, progress on ABS has been very limited, owing in part to the fact that the Convention did not explain how this sharing was to be done, or even precisely what it means by "genetic resources". As a consequence, few countries have taken any measures to comply with Article 15 of the Convention, which specifies the primary ABS commitments.[3] *No* country has met *all* of Article 15's requirements.[4] Over time, many developing countries began to call for international action to mandate implementation of the ABS commitments. A Conference of Parties (COP) to the CBD, in 2002, resulted in a non-binding instrument – the *Bonn Guidelines on Access and Benefit-sharing*[5] – which was well received by some CBD Parties (mostly developed countries) and generally viewed as unsatisfactory by others (including many of the developing countries that are most active on this issue).

In 2002, the World Summit for Sustainable Development recognised the growing controversy, calling specifically for the negotiation of the "international regime".[6] Formal discussions began relatively soon after that declaration, in two successive CBD COP meetings, at least one meeting of the CBD's subsidiary body (SBSTTA), a meeting setting the CBD's multi-year programme of work, and six meetings to date of the WGABS.[7]

Throughout these meetings, the controversy boiled at a relatively unspecific level. Discussions rarely got beyond the basic questions of what it means to "negotiate an international regime", whether that regime would cover both access and benefit sharing, whether it will result in a formal instrument or not, and other primary questions. In many cases, output documents included very broad statements, primarily constituting restatements of the provisions of the CBD and Bonn Guidelines. Even in this inchoate form, these instruments were controversial, with many parties refusing to use any such instrument as a starting point for negotiations. The Fifth Meeting of the WGABS – the first under the new chairmanship – took a different approach, enabling a more complete and organised presentation of issues and concerns. To underscore the difference from previous meetings, the chairs chose not to bother with the completion of a new report of the meeting, viewing the fifth meeting as a preliminary information-sharing that would enable the parties to go home and develop negotiating positions for WGABS-6, at which the first overall outline of the new regime would be formally negotiated.

Progress in January

The sixth meeting of the WGABS provided evidence that forward motion might be possible under the new approach. Although discussions of the objectives and scope of the negotiations and ultimate regime continued to be mired in inchoate language and unspecific terminology (taken directly from the CBD and Bonn Guidelines with no attempt to clarify the language that made those instruments unworkable), work on the "elements of the regime" was extremely productive.

Working from (generally) the same document set that was used in WGABS-5, the negotiators' proposals on specific elements or components of the ABS regime began to bring the discussion down to a more practical and objective level. In particular, the European Union broke ranks with the rest of most developed countries, by indicating that it would be willing to discuss a formally comprehensive legislative-style system for ABS. Its proposals included a specific willingness to consider basic provisions for ABS compliance, including a definition of "misappropriation of genetic resources" as a basis for enforcement in user countries. Another element of the EU's new position was inclusion of compliance with the provider country's basic ABS law within the concept of misappropriation. Up to now, most developed countries have felt that ABS would be addressed entirely through contract law, and have dismissed the issue of non-compliance by users who have not bothered to seek a contract with the country that provided the genetic resources.

The EU's position also included the use of a "certificate" regarding either the source of the genetic resource, their origin, the legal provenance of their acquisition, or the user's compliance with provider-country law. Representatives of the EU said that they recognised that the current discussions are not yet specific enough to determine whether there is a need for a certificate or what should be certified. They specifically stated that they believe that many developing countries will not agree to any regime that does not include a certificate, so they specify that no matter how the regime is ultimately designed, it must include a certificate as an integral element. This general position was supported in the negotiations, where a few developing countries (especially Peru, which had sponsored an international meeting on the certificate concept[8]) emphasised the need for a certificate, without stating how it might actually be used or integrated into the regime. This "certificate" position is also upheld by some developed countries, which have stated that there is no need to identify a use for such a regime, but simply to create it as a voluntary or mandatory instrument.

The EU's position also included a number of positions which more directly align with other developed countries' positions. A number of these constitute rather clear incursions into the sovereign rights of the provider country. For example, it has specified a number of areas in which the international regime should develop "minimum standards" – including a specific call for minimum standards for "access legislation". While these proposals are balanced by calls for minimum standards on benefit-sharing and compliance, they raised a rather immediate opposition from a number of developing countries.

Another such proposal stated that each provider country should grant access "without discrimination" between domestic and foreign users. This provision was less intensively discussed, but offers a larger potential inroad into national sovereignty. In essence, it would require countries to grant foreign users access, in any case in which the country intends to allow its own citizens to use such resources. In essence, this provision would vastly extend the international trade concept of non-discrimination, which calls on countries to open their borders to products from other countries, but has *never* been extended to re-

0378-777X/08/$17.00 © 2008 IOS Press

quire countries to "sell" their resources to any foreign purchasers or investors who might wish to obtain them or be willing to offer a higher price. It is possible that this provision will become more controversial in future negotiations.

The EU's position statement led to a much more concrete discussion of ABS than has previously been undertaken. Although negotiators were not able to agree on the inclusion or nature of very many of these points, the discussion of them began the process of clarifying the general approach of the future negotiations.

One of the most important outcomes of these discussions was the introduction of "give and take" concepts into the discussion. As particular elements of the European proposal were discussed and challenged by developing countries, EU negotiators pointed out that their overall proposal was designed as a "package" by which users will obtain greater certainty and other desired elements, in exchange for user countries' commitment to impose clearer and more intensive requirements on their users, and to create enforcement mechanisms. Up to this meeting, the concept of such a *quid pro quo* had been generally absent within the discussions. Developing countries generally focused on presenting demands, and developed countries on opposing those same demands. The EU proposal creates the potential for a multi-issue discussion which may better enable a final result.

Matters not yet Reached

The WGABS-6 negotiations were both long and contentious, despite the fact that they were only designed to identify a list of "factors to be considered or included" in the regime. The negotiators were specifically told that they need not discuss the content of any element or whether a particular element would be "binding" or not. Despite this instruction, their discussions incorporated an element of distrust relating to the use of outputs of the meeting. The source of this distrust was stated by several delegations in relation to previous meetings, in which, for example, a document may have been adopted in one meeting, then reopened completely in the next. On the other side, several delegations noted that a prior meeting had agreed to annex a document which had not been agreed to in the meeting report. Later, some parties stated that the annexing of the document should be interpreted as its adoption or as evidence of agreement of all parties to use that document as the starting point of negotiations. Ultimately, the result of this distrust was a need for a relatively pedestrian approach under which many statements are included regarding what is and is not agreed, and even then discussions of each point are approached as if there is a fear that they will later be seen as final.

At the end of the meeting, an outline and organisation of what must be created is at least generally adopted. This outline has not begun the actual difficult process of trying to determine which items are "genetic resources", which activities will actually be regulated as "utilization of genetic resources", which benefits must be shared, and how such sharing will occur. As noted in detail by other authors, these questions are almost completely open at present, with many different views regarding all of these issues. Of all of these points, the only one which has been partially discussed in this and previous meetings was the question of whether "genetic resources" includes "derivatives" or not. Unfortunately, discussion of this issue has been hampered by the fact that there are a number of different specialised uses of the term "derivative" which might be relevant to ABS, all of which are different. For example, the term is used as a "term of art" in the fields of conservation (the term "products and derivatives" is regularly used in CITES negotiations and regulations), intellectual property, trade and agriculture, in addition to general scientific usage in biology and chemistry and very general and unspecific usages in normal conversation. In addition, it is possible that the terms used in translation to the various UN languages are also different in some respects. It has been relatively obvious throughout the ABS discussions that the parties using this term in negotiations are each relying on their own conception of its meaning. In WGABS-6, for the first time, more than one party noted this possible miscommunication and called for clarification of the term. Despite this realisation, discussions of the "derivative question" continued unabated without any attempt to clarify them.

Another rather important range of questions that have not been considered by the negotiations as yet are the problems of practical implementation. Currently, discussions continue to revolve around the need for affirmative enforcement of ABS requirements. These concepts are severely limited, due to several factors. There are many such issues that must be clarified by the regime negotiations.[9] A few examples include:

(1) the fact that it is normally impossible to externally determine whether a particular genetic resource has been utilised or whether a particular product utilises a genetic resource. The activities comprising such use occur for the most part in private laboratories. Even if inspection of these facilities were possible, it would be extremely costly, and would require testing of virtually every item found in the laboratory or facility.
(2) The fact that, even if it is shown that a particular product uses a particular genetic resource, it will normally be impossible to determine the specific provider country from which that resource was obtained.
(3) Even if the particular source is known, it may be legally and practically difficult to determine unequivocally whether the use of that resource constitutes a violation of the law of the provider country.

The fact that the basic framework of elements for the international regime is still being intensively argued suggests that these various technical perplexities have little chance of being discussed at all before, at earliest, the eighth meeting of the Group (currently expected in 2009 or later). It seems unlikely that solutions to these issues can be found in one meeting.

Next Steps

The current mandate for WGABS is "to finish its work as soon as possible before the tenth Meeting of the CBD

0378-777X/08/$17.00 © 2008 IOS Press

Conference of Parties", which is expected to be held in 2010 in Japan. This suggests three possible outcomes:

- COP-9 will revise the Working Group's mandate to clarify that it can keep working until a document or documents are ready for adoption by the COP.
- The Working Group will not be able to meet the COP-10 deadline, may be either extended or may lead to some other outcome or process.
- The Working Group's "work" will be defined as elaborating the issues for negotiation, rather than completion of a framework. In this case, COP-10 will have to convene an international negotiating committee to finalise whatever instrument is to be developed.

At present, the WGABS continues to be optimistic about its ability to take action. To this end, however, it proposes that the COP authorise "two, three, four… or more" meetings in the intersessional period between COPs 9 and 10.

The next milestone in the ABS process will be the CBD COP-9 (in Bonn this May), which will decide whether any alteration is needed in the Working Group's mandate, and specifically will set the schedule for its coming meetings. Although this decision would seem to be relatively clear, it is hardly possible to predict whether more intensive discussions will be undertaken under this heading. In COP-8, although the mandate and schedule of the Working Group was the only issue specifically on the table, it spawned a need for contact group discussions that could not be concluded in less than the full two weeks.[10] (TRY)

Notes

1 Rio, 1992.

2 A rather large body of articles have expounded and multiply reiterated both the objectives of the regime and the particular requirements imposed in this connection under Article 15 of the CBD.

3 This issue has been canvassed most completely in Cabrera and López, *Addressing the Problems of Access: Protecting Sources, While Giving Users Certainty* (IUCN Environmental Policy and Law Paper 67/1).

4 See generally Tvedt and Young, *Beyond Access: Exploring Implementation of the Fair and Equitable Sharing Commitment in the CBD* (IUCN Environmental Policy and Law Paper 67/2).

5 Annexed to CBD COP Decision VI/24 (UNEP/CBD/COP/6/24), available online at http://www.cbd.int.

6 WSSD, Johannesburg Plan of Implementation Article 42 (o).

7 Tvedt and Young, *supra* at pp. 2–4.

8 Meeting of the Group of Technical Experts on an Internationally Recognised Certificate of Origin/ Source/ Legal Provenance, 22–25 January 2007, Lima, Peru.

9 See, *e.g.*, Young, "Analytical Study on Administrative and Judicial Remedies Available in Countries with Users under Their Jurisdiction and in International Agreements" one of the documents presented in this meeting (UNEP/CBD/WGABS-5/Inf/5).

10 See EPL 36/2 at p. 81.

UN / OHRLLS

Least Developed Countries and Small Island States

by Cheick Sidi Diarra*

Introduction

The current debate on environmental sustainability is dominated by the challenge of climate change. The holding of the first-ever debate on the subject by the United Nations Security Council in April 2007 and by the largest-ever high-level meeting of United Nations Member States in September 2007 underscores the emergence of climate change as a major concern of the international community. The focus of the debate is not so much whether human activity is a major contributor to climate change. Rather, it is what response is needed – and is acceptable to countries – to control climate change and to mitigate its negative effects.

Unfortunately, this question is not often looked at from the point of view of the poorest and most vulnerable countries. As the horse trading gets underway for a new regime to replace the current commitments under the Kyoto Protocol which will expire in 2012, the paradox could be that the needs of the most vulnerable countries, which contribute least to global warming, and have the least capacity to deal with its adverse effects, are not met by new international arrangements.

Global warming is a global phenomenon but as the United Nations Secretary-General, Ban Ki-moon, observed in an article in the *International Herald Tribune* on 4 June 2007, it affects us all differently: "Wealthy nations possess the resources and know-how to adapt. An African farmer, losing crops or herds to drought and dust storms, or a Tuvalu islander worried his village might soon be under water, is infinitely more vulnerable. It is a familiar divide: rich-poor, North-South."

The United Nations classifies 50 countries, representing "the poorest and weakest segment of the international community", as Least Developed Countries. Thirty-four of the Least Developed Countries are found in Africa, 15 in Asia and the Pacific, and one – Haiti – in Latin America and the Caribbean. The defining characteristics of these countries are extreme poverty, weak institutions and limited skills. The United Nations also identifies 38 countries and 14 territories as Small Island Developing States. The biggest handicaps of the Small Island Developing States are limited physical size and relative remoteness. These characteristics make the Least Developed Countries and Small Island Developing States particularly vulnerable to natural hazards. Twelve Small Island Developing States are also Least Developed Countries, putting them in a situation of extreme vulnerability to climate change. ➳

* United Nations Under-Secretary-General and High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, recently appointed also as Special Advisor on Africa.

0378-777X/08/$17.00 © 2008 IOS Press

The latest reports of the Intergovernmental Panel on Climate Change (IPCC) established by the United Nations in 1998 to evaluate the risk of climate change, have shown that the poor countries and small islands will bear the brunt of the negative consequences of climate change. According to the IPCC, the mega-deltas of Asia and Africa are the most threatened by sea-level rise, while Africa is the most vulnerable to climate variability.[1] These regions practically cover all the Least Developed Countries and the Small Island Developing States. That the Least Developed Countries and Small Island Developing States face the greatest danger from climate change is all the more ironical when one considers that the two groups contribute merely 0.02% to the world's carbon dioxide emissions, a major contributor to global warming.[2]

It should be noted, however, that the challenge of environmental sustainability in the Least Developed Countries and Small Island Developing States goes beyond climate change. There are many other environmental challenges, mostly linked to poverty, that pose a major threat to the sustainable development of these countries. Water pollution, soil degradation, growth of slums and loss of biodiversity are all major environmental challenges which will only be exacerbated by climate change.

Least Developed Countries

The consequences of climate change for the Least Developed Countries in Africa and Asia include flooding of low-lying coastal areas, increased water scarcity, decline in agricultural output and fisheries resources, and loss of biological resources.

Projected sea-level rise will affect coastal and low-lying areas with large populations, including parts of Gambia, Senegal and Tanzania in Africa and Bangladesh, Myanmar and Cambodia in Asia. Higher sea levels will worsen the flood impacts of large rivers such as the Niger with negative consequences for Mali and Niger. The melting of snow, coupled with the intensification of the monsoon would cause flood disasters in the Himalayan catchments, affecting countries such as Bangladesh and Nepal.[3] The damage to infrastructure and settlements, not to mention loss of lives, could be of major proportions in these regions. Sea-level rise and increases in water temperature will also do damage to mangroves and coral reefs as well as to fisheries from which millions of poor people derive their livelihoods, directly or indirectly. In parts of Africa, there are more areas susceptible to malaria, for example, as a result of warmer temperatures in areas where it was previous too cold for malaria-spreading mosquitoes to survive.

In Africa, where 34 of the 50 Least Developed Countries are located, climate change will worsen the already prevalent problem of shortage of water. Climate variability will severely affect agricultural production on which the overwhelming majority of the population, as much as 80% in some countries, depends for its livelihood. According to the IPCC, yields from rain-fed agriculture in Africa could be reduced by as much as 50% by 2020.[4] Water shortages and the decrease in land suitable for agriculture would cause other social and political disruptions, including forced migration and conflict. The cost of adaptation to these environmental changes, the IPCC estimates, could amount to 5–10% of the Gross Domestic Product of these countries. This would further divert scarce resources from activities to reduce poverty.

Small Islands

In both a literal and figurative sense, small islands, because of their size and location, are at the "frontline" of climate change. They are particularly vulnerable to hurricanes and flooding, which can have very devastating effects as hurricane Ivan showed in 2004. The hurricane destroyed about 80% of Grenada, causing losses of more than US$ 800 million, not to mention the loss of lives. Other islands in the Caribbean region were also affected. These kinds of disaster will only increase with climate change. As the IPCC has warned, sea-level rise is expected to aggravate flooding, storm surges, and coastal erosion, damaging infrastructure, settlements and other facilities that support the livelihood of island communities.[5]

With a limited landmass, seeking refuge in another part of the country is hardly an option for small islands. Indeed, there is a risk of some islands getting completely submerged by the rising sea level. Unfortunately, there are not international mechanisms to protect the populations of the small islands from such eventualities. It has been left to individual small islands to make bilateral arrangements to address this potential risk. For example, Tuvalu has an agreement with New Zealand to take in its population in case of such a catastrophe. Vital as such arrangements are, a more comprehensive and global approach is needed.

Small islands also face challenges of erosion of beaches, coral bleaching, a decline in fisheries and fresh water availability, and loss of their unique biodiversity as a result of climate change. Not only do these have a direct impact on the livelihoods of island communities, but they also threaten the islands' entire economies which are based on these resources and are heavily reliant on tourism.

Other Environmental Challenges

Both Least Developed Countries and Small Island Developing States face other serious environmental challenges not necessarily linked to climate change. The main culprit is poverty. In the Least Developed Countries, 370 million people, nearly half the population of 770 million, live on less than one dollar a day. High poverty levels force people to engage in practices that are harmful to the environment. Cutting down forests, whether for farmland, energy or income-generating activities, has turned many previously lush areas in the Least Developed Countries into wastelands. Land is degraded due to practices like overgrazing. Thirty-six out of the 41 Least Developed Countries for which data are available suffer from moderate to severe human-induced land degradation.[6] Slums are a major environmental hazard in many urban areas, giving rise to pollution and disease.

In the Least Developed Countries, the main source of energy is wood fuel which not only contributes to deforestation and, ultimately, desertification, but also causes air pollution. Burning wood and charcoal fills the homes of the poor with toxic smoke, posing major health prob-

0378-777X/08/$17.00 © 2008 IOS Press

lems. Over two million people die every year from breathing the cocktail of toxic chemicals given off by wood fuel.[7] Indoor air pollution is one of the world's top ten causes of premature death.[8] A lot of time that could be devoted to other productive activities is wasted foraging for wood and doing work manually, not to mention the effects of ill-health. All this holds back development efforts both at the household and national levels. It also reinforces gender inequalities, as women are disproportionately affected.

As populations grow, these problems will become even more acute for the vulnerable countries. Although they account for only 12% of the world's population today, the Least Developed Countries will absorb a quarter of the world's increase in population between now and 2015. The population of the Least Developed Countries will grow much faster than that of the rest of the world during the next 40 years. Without economic development keeping pace, the challenges of poverty and environmental degradation will only get worse. The situation is further compounded by the lack of resources, as well as the technical and institutional capacity to manage the environment.

Many Small Island Developing States also have a problem of high population growth rates, which threatens their fragile ecosystems. They lack the resources and technical capacity for the efficient management of waste, fresh water resources, biodiversity and other tourism resources. These challenges constrain the prospects for sustainable development in these countries.

Framework for Action

An agenda for promoting the environmental sustainability of the Least Developed Countries and Small Island Developing States is outlined in their respective programmes of action. The programmes of action provide a framework for international cooperation between the vulnerable countries and their development partners to address the daunting environmental challenges.

One of the seven commitments under the Programme of Action for the Least Developed Countries adopted by the international community in 2001 in Brussels specifically deals with reducing environmental vulnerability and protecting the environment. Among other measures, it asks the Least Developed Countries to develop and implement strategies for sustainable development in order to reverse trends in the loss of environmental resources; to enhance capacity for formulating and implementing environmental policies; and to strengthen disaster mitigation mechanisms, and national early warning systems. Development partners are expected to provide financial and technical support to the Least Developed Countries to implement these measures.

Under the United Nations Framework Convention on Climate Change, a fund to provide assistance to Least Developed Countries in preparing national adaptation programmes of action was established. However, as of October 2007, only 22 of the 50 Least Developed Countries had completed the preparation of such plans.[9] The rest are expected to complete them by the end of 2008.

The Programme of Action for the Sustainable Development of Small Island Developing States adopted in Barbados in 1994 and renewed in Mauritius in 2005 requires the small island countries, with the support of the international community, to develop and implement national adaptation strategies, improve capacity to prevent and respond to environmental disasters, improve management of waste, water and biodiversity resources and promote the sustainable development of tourism. In this context, a number of national and regional initiatives are being undertaken to enhance the response of small islands to the challenges of climate change. Notable among them is the launch of the Caribbean Catastrophe Risk Insurance Facility in February 2007. The facility is a pool of resources which would be immediately available to small islands in the region for reconstruction in case of an environmental disaster. At the first pledging conference for the fund, US$47 million was raised. A similar facility is being considered for the small islands in the Pacific region.

Conclusions

Environmental vulnerability is one of the greatest constraints to reducing poverty, achieving the Millennium Development Goals and sustainable development in the Least Developed Countries and the Small Island Developing States. While some of the environmental hazards, such as global warming, are largely outside the control of these countries, there are other environmental challenges that can be effectively addressed at national and regional levels. The main obstacles to implementing the necessary measures to promote environmental sustainability are lack of adequate resources and technical capacity in the respective countries. The fulfilment of commitments made by the international community under the programmes of action for Least Developed Countries and for Small Island Developing States is therefore critical. In addition to governments and international organisations, broader partnerships, including partnerships with civil society, the private sector and research institutions, are needed to promote environmental sustainability in the Least Developed Countries and Small Island Developing States. Finally, for it to have global credibility, the debate on climate change should maintain a focus on the poorest and most vulnerable countries.

Notes

1 Intergovernmental Panel on Climate Change, Fourth Assessment Report, *Climate Change 2007: Climate Change Impacts, Adaptation and Vulnerability, Summary for Policy Makers*, at 9–10. (Report is available at http://www.ipcc.ch/SPM6avr07.pdf).

2 United Nations, *The Impact of Climate Change on the Least Developed Countries and Small Island Developing States*, June 2007, at 11.

3 Intergovernmental Panel on Climate Change, *Climate Change 2001: Impacts, Adaptation and Vulnerability*, at 515–516 and 579.

4 Intergovernmental Panel on Climate Change, *supra*, note 1, at 13.

5 Intergovernmental Panel on Climate Change, *supra*, note 1, at 15.

6 Report of the Secretary-General on the Implementation of the Programme of Action for the Least Developed Countries for the Decade 2001–2010, A/62/79, May 2007, paragraph 59.

7 United Nations Environment Programme, "Energy at a glance", (http://www.unep.org/OurPlanet/imgversn/123/glance.html).

8 Junfeng (Jim) Zhang and Kirk R Smith, 2003, "Indoor Air Pollution: A Global Health Concern", *British Medical Bulletin* 68: 211.

9 The 22 are Bangladesh, Bhutan, Burundi, Cambodia, Comoros, Djibouti, Eritrea, Haiti, Kiribati, Lesotho, Madagascar, Malawi, Mauritania, Niger, Democratic Republic of Congo, Rwanda, Samoa, Senegal, Sudan, Tanzania, Tuvalu and Zambia. The national adaptation programmes of action can be accessed at http://unfcc.int/national_reports/napa/items/2719.php.

0378-777X/08/$17.00 © 2008 IOS Press