

# Environmental Governance

In 2009, efforts to advance international environmental governance focused on defining the key objectives and functions of an improved UN architecture to address global environmental change.



The coming together of multiple stakeholders seeking solutions to environmental problems. About 15 000 representatives from governments, non-governmental organizations, and media participated in the UN Climate Change Conference in Copenhagen.

*Credit: Bob Strong*

## INTRODUCTION

2009 was marked by the convergence of several global crises. Around the world, societies suffered the far-reaching consequences of financial and economic turmoil, fluctuating food prices and shortages, and energy market insecurity. Policy-makers put together immense economic stimulus packages. The financial, food, and energy crises did not unfold in isolation from other environmental and social challenges. They are linked in many ways to continuing biodiversity loss, ecosystem degradation, and climate change. Consequently, these crises have exacerbated existing challenges to meeting the Millennium Development Goals (UN 2009).

2009 witnessed an acceleration of inter-governmental efforts to reform the UN's system of international environmental governance (IEG). UNEP's Governing Council established a Consultative Group of Ministers or High-Level Representatives on International Environmental Governance, which has discussed the core objectives and corresponding functions of IEG in the context of the UN system.

The year will also be remembered for international efforts to create a new agreement to address climate change, which has become a quintessential long-term policy and governance issue (Giddens 2009, Hovi and others 2009, Walker and others 2009, Beck 2008).

Numerous developments in 2009 underlined the potential of regional environmental governance to help meet global environmental goals. Delegates to several multilateral environmental agreement (MEA) meetings negotiated ways to decentralize environmental governance, for example in regard to chemicals and waste management (UNEP POPs 2009). Regional initiatives were also highlighted in the context of water governance and sustainable forest management (McAlpine 2009).

Private sector involvement in various aspects of governance was also high on the international political agenda in 2009, especially following the financial crisis, which made acute demands on public finance. Public-private partnerships have experienced sustained growth, accompanied by considerable success, and some important lessons have been learned.

## REFORMING THE ARCHITECTURE OF INTERNATIONAL ENVIRONMENTAL GOVERNANCE

The term 'governance' has been defined in many different ways, which vary according to the scope and locus of decision-making power (ECOSOC 2006). In recent times, many governance functions influencing individual and collective behaviour have been performed beyond the exclusive remit of governments. Accordingly, there has been a move to a definition under which "governance, at whatever level of social organization it may take place, refers to conducting the public's business—to the constellation of authoritative rules, institutions, and practices by means of which any collectivity manages its affairs" (Ruggie 2004). The most important actors in the process of IEG include national governments; intergovernmental organizations such as the UN and its specialized bodies; civil society groups; private sector associations; and a variety of partnerships

between public, private, and civil society actors. The key institutions and mechanisms through which IEG is carried out include a multitude of intergovernmental, non-state, and public-private processes and initiatives that vary in format, structure, and membership.

In 2009, important deliberations centred on reforming the UN's overall system of international environmental governance. This process, which began almost a decade ago, became increasingly pressing with the momentum gathering on the road to the United Nations Climate Change Conference (COP15) in Copenhagen, negotiations of the fifth replenishment of the Global Environment Facility (GEF) in 2010, and the commencement of the preparatory process for the UN Conference on Sustainable Development to be held in Brazil in 2012.

The diverse and complex impacts of climate change highlight the importance of other related environmental and social areas, including water management, biodiversity conservation, and forest and land management. Climate change was a central concern in various MEA meetings and other gatherings in 2009 (**Box 1**). The linkages between various environmental issues emphasize the importance of developing integrated approaches to address climate change in the context of sustainable development, and in accordance with the principle of common but differentiated responsibilities and respective capabilities (CSD 2009a).

In 2009, climate change negotiations and IEG reform were linked when French President Nicolas Sarkozy and German Chancellor Angela Merkel wrote to the UN Secretary-General to outline their positions ahead of a climate change summit in New York. To reach an "effective and fair" agreement in Copenhagen, they stated that "a new institutional architecture will need to be set up to foster the development of international environmental law. Environmental governance must be overhauled. We must make use of the momentum provided by Copenhagen to make further progress towards the creation of a World Environmental Organization" (Merkel and Sarkozy 2009). Leaders of many developing countries agree. Kenyan President Mwai Kibaki, for example, has urged African leaders to support the upgrading

of UNEP into a World Environment Organization based in Nairobi, a call that was echoed in a resolution adopted at the 18th Session of the African Caribbean and Pacific-European Union Joint Parliamentary Assembly, as well as at the Glion Forum on Global Environmental Governance, which brought together academics, practitioners, and all five successive UNEP Executive Directors (ACP-EU JPA 2009, GEGP 2009).

Calls to establish and adequately fund such an organization are not new (Biermann and others 2009a, Walker and others 2009, Runge 2001, Biermann 2000, Esty 1994). An important element of IEG reform concerns the definition of the objectives and functions of the UN's work on IEG and the status to be given the environment in the context of sustainable development. Another widely discussed aspect is the extent of coherence of international environmental governance. Experts and practitioners almost universally regard the current extent of overlap, duplication, and fragmentation as a negative quality, a view echoed in the UN Joint Implementation Unit's 2008 Review of International Environmental Governance (Biermann and others 2009a, Oberthür 2009, JIU 2008). In his statement to the 2009 UNEP Governing Council/Global Ministerial Environment Forum (GC/GMEF), Marthinus van Schalkwyk, the South African Minister of Environmental Affairs and Tourism, referred to "burgeoning fragmentation and duplication in an overburdened system" as a key obstacle to the integration of environmental concerns into macro-economic policy-making, as well as an issue of "critical importance" to developing countries (Van Schalkwyk 2009). At the same time, some argue that the existing diversified system may contribute to stability, foster experimentation, promote learning, and facilitate the formation of coalitions of the willing by offering alternative venues for dialogue and action (Ansell and Balsiger 2009, Ostrom 2009, Galaz and others 2008, Dietz and others 2003).

### **International environmental governance in the UN system**

The Joint Inspection Unit's 2008 report is one of the more recent comprehensive analyses highlighting weaknesses in international environmental governance due to institutional

## **Box 1: Interlinkages between climate change and other environmental issues in 2009**

### **Water**

At the 5th World Water Forum, the UN Under-Secretary-General for Economic and Social Affairs suggested that strategic actions on "bridging divides for water", the meeting's theme, include engaging with other policy communities on the nexus between water challenges and climate change, and accelerating progress on climate change adaptation (Zukang 2009).

### **Biodiversity**

In his statement to the UN General Assembly, the Executive Secretary of the Convention on Biological Diversity (CBD) stated that "if climate change is a problem, biodiversity is part of the solution" and that "forests, wetlands, peatlands, and oceans are part of the climate-change solution" (CBD 2009b).

### **Forests**

In his welcoming address to the Eighth Session of the UN Forum on Forests, the Chair pointed out that unprecedented significance is being attached to the work of the Forum due to "growing recognition of the role of forests in the climate change negotiations" (Purnama 2009).

### **Desertification**

At the Ninth Meeting of the Parties to the UN Convention to Combat Desertification (UNCCD), the UN Secretary-General emphasized that desertification, land degradation, and drought exacerbate poverty and vulnerability to climate change (IISD 2009a).

### **Ozone**

Deliberations at the Twenty-first Meeting of the Parties to the Montreal Protocol centred on the proposed, but rejected, phase-down of hydrofluorocarbons (HFCs), some of which have high global warming potential although they are not ozone depleting substances (IISD 2009b).

### **Chemicals and waste**

In October 2009, Parties to the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the Aarhus Convention) adopted the Kiev Protocol on Pollutant Release and Transfer Registers. This Protocol requires private sector firms to declare releases to the environment and transfers off-site of 86 pollutants, including greenhouse gases. It also requires that this information be made accessible to the public (UNECE 2009).

### **International environmental governance**

The President's summary of the Ministerial consultations during the Twenty-fifth Session of the UNEP Governing Council/Global Ministerial Environment Forum stated that "for the first time in many years there is a chance to make headway on international environmental governance through climate change negotiations" (UNEP 2009a).

fragmentation and lack of a holistic approach to environmental issues and sustainable development (JIU 2008). This report, which is being considered by the UN General Assembly and the UNEP GC/GMEF, is also critical of the management framework for failing to ensure that environmental considerations and MEA compliance are integrated into development strategies. Although expressed in particularly strong terms, this review is one of several reports prepared over the years on IEG building on the Options Paper of the Co-Chairs of the General Assembly's Informal Consultations on IEG (UNGA 2007), which was established as a follow-up process to the 2005 World Summit outcome document (UNGA 2005).

In 2009, the international community continued to seek a breakthrough on IEG reform. The UNEP Governing Council established the Consultative Group of Ministers or High-Level Representatives on International Environmental Governance to present a set of options for improving international environmental governance (UNEP 2009b, UNEP 2009c). At meetings in Belgrade in June and Rome in October, the Consultative Group identified a set of options for the UN's environmental

portfolio. The Group will report back at the Eleventh Special Session of the GC/GMEF in February 2010 in Bali, Indonesia. The outcomes of the Special Session on IEG are expected to feed into the General Assembly process aimed at facilitating reform of international environmental governance.

At the first meeting of the Consultative Group of Ministers or High-Level Representatives on International Environmental Governance in June 2009, held in Belgrade, the Co-chairs' summary reflected discussions that "any IEG reform should be based on the principle that form should follow function; that consultations on functions should lead to a discussion on forms that could range from incremental changes to other broader institutional reforms; that the IEG debate should be addressed in the broader context of environmental sustainability and sustainable development; that developing a set of options for improving IEG should follow from a fresh examination of multiple challenges and emerging opportunities; that incremental changes to IEG can be considered alongside other more fundamental reforms; and that the work of the

Consultative Group should continue to be political in nature" (UNEP 2009d).

Proposals for IEG reform have addressed both incremental and broader reform. An example of the latter is the suggestion to create a global umbrella organization. Short of creating a World (or United Nations) Environment Organization capable of bringing all MEAs under a common institutional roof, some governance researchers have argued for less ambitious and more politically feasible clustering approaches (Oberthür 2009, Von Moltke 2001). The development of legally binding agreements has been the mainstay of international environmental governance, yet the growing number of these agreements and the observed lack of coordination between them have been the basis of many criticisms of IEG (Biermann and others 2009b). Proliferation of multilateral environmental agreements was singled out by President Sarkozy at the 17th Ambassadors Conference in Paris in August (Sarkozy 2009). It was also discussed at the June 2008 Commonwealth Heads of Government Meeting on Reform of International Institutions (Commonwealth Secretariat 2009). Although



Ministers and other high-level representatives attending the first meeting of the Consultative Group of Ministers or High-Level Representatives on International Environmental Governance, held on 27-28 June 2009 in Belgrade, Serbia. A second meeting of the Consultative Group took place on 26-29 October in Rome, Italy.

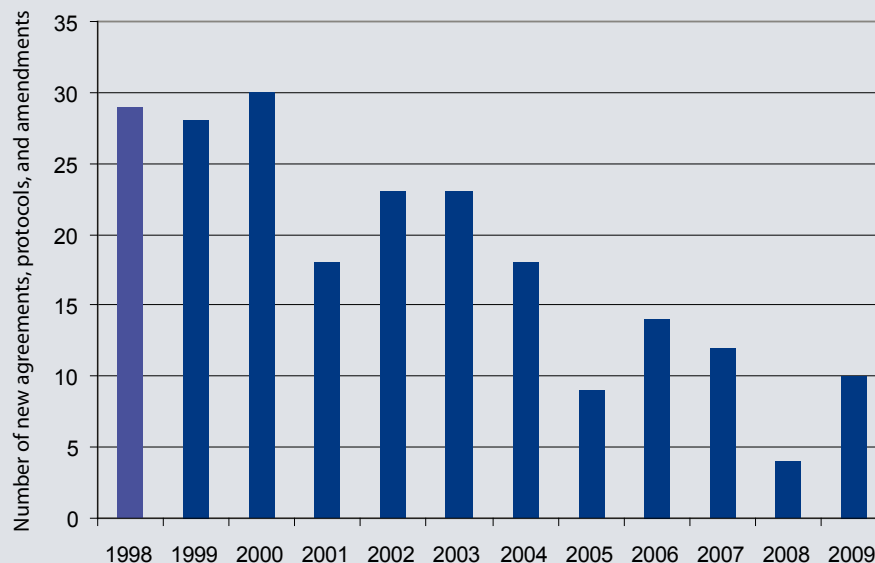
*Credit: Serbian Ministry of Environmental and Spatial Planning*

the annual increase in new agreements, protocols, and amendments has slowed down over the last decade or so (**Figure 1**), there is nevertheless evidence of increasing multiplicity and possibly fragmentation. A notable example of MEA clustering in 2009 occurred in the area of international chemicals and waste management. In early 2009, the signatories of three global conventions on chemicals and waste agreed to consolidate their common functions and enhance cooperation and coordination at the administrative and programmatic levels. The synergies process of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and the Stockholm Convention on Persistent Organic Pollutants has been hailed as a prominent example of IEG reform (UNEP POPs 2009).

Experience with this clustering approach is expected to be reported at the Eleventh Special Session of the UNEP GC/GMEF in Bali in 2010. Progress has already been made in many areas, including joint delivery of technical assistance, joint representation at meetings, production of joint awareness materials, and establishment of a joint clearing-house mechanism (UNEP 2009g). As a sign of political support for the synergies process, the first Extraordinary Meeting of the Conference of the Parties to the three Conventions will be held back-to-back with the Special Session of the GC/GMEF in Bali.

Heading into the International Year of Biodiversity, insights gained from the synergies process will be valuable to the COPs of the six biodiversity-related conventions (Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora, Convention on the Conservation of Migratory Species of Wild Animals, International Treaty on Plant Genetic Resources for Food and Agriculture, Convention on Wetlands (popularly known as the Ramsar Convention) and the World Heritage Convention) as well as, among others, the Biodiversity Liaison Group, which has worked since 2004 to enhance coherence and cooperation in the implementation of the biodiversity-related conventions (CBD 2009a).

**Figure 1: Number of new multilateral environmental agreements, protocols, and amendments 1998-2009**



Between 1998 and 2009, there were a total of 218 new multilateral environmental agreements, protocols, and amendments.

Source: Mitchell (2009)

Scholars and practitioners alike cite fragmentation, overlap, and duplication among the main reasons for reforming the UN's system of international environmental governance (UNEP 2009c, Ivanova and Roy 2007, UNGA 2007, Biermann and Bauer 2005, Esty 2003, Charnovitz 2002, Runge 2001). At the first meeting of the Consultative Group of Ministers or High-Level Representatives on International Environmental Governance, delegates emphasized that "in addressing threats to food, energy and water security and grappling with the impacts of climate change, states are currently dealing with an array of United Nations agencies, financial institutions and mechanisms, private sector interests and civil society organizations" (UNEP 2009d). According to information on 18 MEAs compiled by the International Institute for Sustainable Development, between 1992 and 2007 there were 540 meetings, which resulted in more than 5 000 resolutions or decisions (UNEP 2009f).

Institutional overlap and fragmentation, as indicated above, are widely regarded as detrimental to efficient and effective governance.

The President's summary of the Twenty-fifth Session of the UNEP GC/GMEF pointed out that "incoherence and complexity in the international environmental governance system can lead to high transaction costs, discouraging in some cases participation in the system by developing countries and countries with economies in transition" (UNEP 2009a).

### Environmental policy integration

Integration of the environmental, economic, and social dimensions of sustainability has been a key theme of the international response to the financial, food, and energy crises. High-level statements emerging from the ongoing IEG reform process have repeatedly stressed that reform should take place in the broader context of sustainable development. Proposals to integrate environmental concerns into economic recovery and socio-economic development have more generally converged around the Green New Deal elaborated by Edward Barbier and other economists and by UNEP's Green Economy Initiative. The Global Green New

Deal recommends, among other things, that a significant portion of the estimated US\$3.1 trillion in economic stimulus packages be spent on energy efficiency in buildings, renewable energy technologies, sustainable transport technologies, the planet's ecosystems, and sustainable agriculture (Barbier 2010, UNEP 2009e).

Environmental policy integration is not a new concept, but the financial and climate crises have prompted scientists and others to review what has been achieved to date (Mickwitz and others 2009). At the national level, environmental policy integration can be achieved using a variety of policy instruments:

- *Communicative instruments*, such as environmental and sustainable development strategies, requirements for sectoral strategies, performance reporting, external and independent performance reviews, and inclusion of environmental goals in the national constitution;
- *Organizational instruments*, such as combining departments, green cabinets, environmental units within sectoral departments, and independent working groups; and
- *Procedural instruments*, such as veto or obligatory consultation rights for environmental departments, green budgeting, and environmental impact assessment.

An analysis of the 30 countries of the Organisation for Economic Co-operation and Development (OECD) found that most of them had introduced *communicative instruments* and many had created new organizations. However, few of these countries had developed new *procedural instruments* (Jacob and others 2008).

Environmental policy integration is of concern to both developed and developing countries. A recent review of the status of environmental policy integration in Central Asia found that inter-ministerial working groups are common, that sectoral ministries have set up specialized environmental units, and that some energy and transport policies have been subject to an environmental assessment. Nevertheless, there is still a culture of limited inter-ministerial cooperation (OECD 2009a).

What is the state of environmental policy integration at the global level? Using the same classification of policy instruments reveals a considerable diversity of instruments in use (Biermann and others 2009a). *Communicative instruments* include MEAs that require signatories to introduce relevant provisions into national legal frameworks. Moreover, various international gatherings throughout the year conclude with some sort of policy statement. There are also numerous *organizational instruments* at the international level, including the UN's Environment Management Group (EMG) at the interagency level and meetings of the G8 Environment Ministers at the intergovernmental level. An example of a *procedural instrument* at the global level is the statement endorsed by the UN System Chief Executives Board for Coordination (CEB) at its October 2007 session on moving towards a climate-neutral United Nations, and the work under the EMG supported by UNEP's Sustainable UN Facility to implement the Board's statement and promote sustainable management practices in the UN more broadly (UN 2007).

A *procedural instrument* that received increasing attention in 2009 relates to the mainstreaming of climate change adaptation in official development assistance (ODA) (Persson 2009). The important role of adaptation to climate change as an element of ODA was highlighted in several major policy guidelines published in 2008 and 2009 by the OECD, the World Bank, and the Partnership for European Environmental Research (PEER) (Mani and others 2009, Mickwitz and others 2009,

OECD 2009b). Numerous research initiatives, including the EU-funded project on Adaptation and Mitigation Strategies: Supporting European Climate Policy (ADAM), have assessed the extent to which climate change adaptation has been integrated into development assistance. ADAM concluded in July 2009, and its findings suggest that adaptation is a strongly cross-sectoral issue suitable for a mainstreaming approach, even if the extent and multidimensional character of adaptation calls for more sector-specific definitions. ADAM also found that attention to climate change adaptation in ODA projects and country strategies has been weak so far (ADAM 2009).

A recent PEER report analysed the extent of climate policy integration in Denmark, Finland, Germany, the Netherlands, Spain, and the United Kingdom (Mickwitz and others 2009). This report defines climate policy integration as "the incorporation of the aims of climate change mitigation and adaptation into all stages of policy-making in other environmental and non-environmental policy sectors, complemented by an attempt to aggregate expected consequences for climate change mitigation and adaptation into an overall evaluation of policy, and a commitment to minimize contradictions between climate policies and other policies" (Mickwitz and others 2009). The criteria used by the authors to evaluate the extent of climate policy integration are summarized in **Box 2**. The first criterion, 'Inclusion', is a prerequisite. A minimum level of integration is necessary to proceed with the analysis. The other criteria help assess the

### Box 2: Criteria for assessing the extent of climate policy integration

CRITERION	KEY QUESTION
Inclusion	To what extent are direct, as well as indirect, climate change mitigation and adaptation impacts covered?
Consistency	Have the contradictions between the aims related to climate change mitigation and adaptation and other policy goals been assessed, and have there been efforts to minimize revealed contradictions?
Weighting	Have the relative priorities of climate change mitigation and adaptation impacts compared to other policy aims been decided, and if not, are there procedures for determining the relative priorities?
Reporting	Are there clearly stated evaluation and reporting requirements for climate change mitigation and adaptation impacts with deadlines ex ante, and have such evaluations and reporting happened ex post? Have indicators been defined, followed up, and used?
Resources	Is internal as well as external know-how about climate change mitigation and adaptation impacts available and used, and are resources provided?

Source: Mickwitz and others (2009)

degree to which climate change concerns are integrated into other policy sectors, such as transport or agriculture (horizontal integration), and at government levels (vertical integration). The PEER report found that while climate change is now widely recognized in strategies and programmes, there is an urgent need to intensify the incorporation of climate policy integration into specific policy instruments such as spatial planning and governmental budgeting (Mickwitz and others 2009).

### REGIONAL ENVIRONMENTAL GOVERNANCE

The term 'region' can refer to a geographic area as small as a transboundary wetland or as vast as an entire continent. Regional economic integration organizations such as the EU provide many examples of regional environmental governance. In these cases, regions are defined as groups of states. Similarly, regional positions

in intergovernmental negotiations are typically associated with groups of states.

Some environmental problems, such as climate change or depletion of the ozone layer, have been framed as global issues in need of global approaches. Others, like transboundary water management, have long been addressed through regional cooperation. Regional environmental arrangements, such as the river basin commissions for the Rhine or Danube, have a long history. Regional agreements like the regional conventions to protect the mountain areas of the Alps and the Carpathians have made significant progress in placing environmental concerns in a larger sustainable development context.

Governance experts and professionals have noted the advantages and disadvantages of regional approaches. Regional initiatives, which benefit from greater familiarity among the participants, could complement global agreements to meet region-specific needs. However, they could also undermine the effectiveness of global environmental policy by increasing administrative complexity and reducing the efficiency of economic instruments. To date, little empirical work has addressed trade-offs between regional and global architectures, but regional initiatives such as the Regional Seas Programme have been found to make important contributions to the 2002 World Summit on Sustainable Development (WSSD) global marine targets for coastal ecosystems (Sherman and Hempel 2009).

In 2009, developments in multilateral environmental negotiations on climate change, forestry, desertification, chemicals, and waste management highlighted the importance of cooperative activities at the regional level (**Box 3**). Even in the eminently global governance area of climate change, some elements are discussed from a regional perspective. For example, a UN Department of Social and Economic Affairs (UN DESA) briefing note in 2009 emphasized the potential benefits of regional mechanisms with respect to the efficient and equitable transfer of mitigation and adaptation technologies (Vera 2009). Regional mechanisms that facilitate the pooling of resources and the development of economies of scale, it argued, can help strike a politically feasible balance between what

global arrangements are able to offer and what developing countries need.

### Ecoregional governance and transboundary waters management

One understanding of regions is based on their common ecological and biophysical features. Widely recognized ecoregions include river basins and mountain ranges. The practice of governance based on ecoregions is still in its infancy, although examples exist around the world (Balsiger and VanDeveer, in press). Regional cooperation on transboundary river basins is a notable example. In this context, in March 2009, Heads of State at the 5th World Water Forum in Istanbul affirmed their political will to take rapid action, bearing in mind that dialog and cooperation on transboundary waters between neighbours are key elements of success (Zukang 2009). Some 279 river basins straddle international boundaries (Bakker 2009). Transboundary river basins cover 45.3 per cent of the planet's land surface, affect about 40 per cent of the world population, and account for approximately 60 per cent of river flow (Wolf and others 1999) (**Figure 2**).

Climate change has reinforced the growing importance of transboundary waters management in governance. Spatial variations in the impacts of climate change draw attention to ecoregions, especially coastal areas (Dinar 2009, EEA 2009, WWAP 2009). In new guidelines on integrated water management, the United Nations Educational, Scientific and Cultural Organization (UNESCO) states that basin level approaches have become increasingly important as the impacts of climate change are realized through the qualitative and quantitative responses of the hydrological cycle, which in turn directly affect river basins (UNESCO 2009).

Widespread political support for transboundary waters management is somewhat tempered by scientific findings concerning the challenges of elaborating basin-level approaches and the environmental benefits these approaches can generate. A recent review of 506 international water treaties and 86 associated organizations found that the majority of international river basin institutions are limited in membership and scope (Dombrowsky 2008). Prevailing levels of water

#### Box 3: Regional dimensions of environmental governance

##### Climate change

The significance of regional scale climate change projections for policy-making was recognized in the IPCC's decision to include a regional focus in its upcoming Fifth Assessment Report. The Fifth Assessment Report will also look at subregions and cross-regional hotspots such as the Mediterranean and mega-deltas (IISSD 2009c).

##### Desertification

At the Ninth Conference of the Parties to the UN Convention to Combat Desertification, delegates made progress towards the establishment of Regional Coordination Mechanisms. Even though the corresponding decision fell short of referring to "regional offices," in part because developed countries are concerned that such decentralization could set a precedent for other conventions, this was a breakthrough (UNCCD 2009).

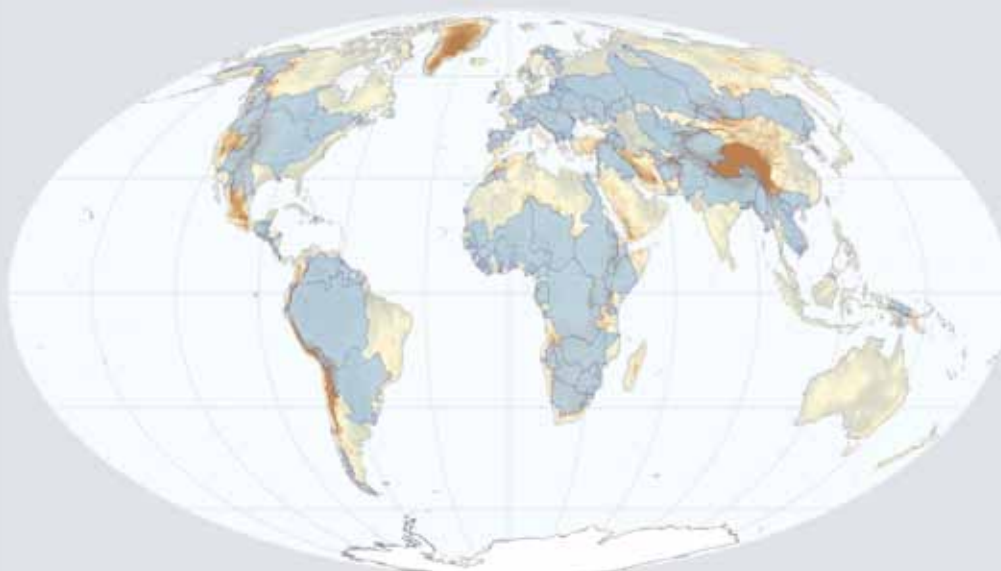
##### Chemicals and waste

At its fourth meeting, the Conference of the Parties to the Stockholm Convention on Persistent Organic Pollutants endorsed eight institutions that will serve as regional and subregional centres for capacity-building and transfer of technology (UNEP POPs 2009).

##### Forestry

In the lead-up to the 13th World Forestry Congress, a pre-Congress workshop emphasized that regional level cooperation translates policy into practice and moves sustainable forest management forward (McAlpine 2009).

**Figure 2:** Transboundary river basins



Updated map of the world's international river basins, based on Wolf and others (1999).

Source: *Transboundary Freshwater Dispute Database* (2010)

scarcity have been identified as one determining factor. An empirical analysis of 74 cases where rivers are shared by two states revealed that the probability of cooperation, measured in terms of international water agreements, is higher when scarcity is moderate than when it is very low or very high (Dinar 2009). This implies that when scarcity exceeds a certain threshold, cooperation may need to be encouraged by outside actors (see the chapter on Disasters and Conflicts).

In assessing the effectiveness of regional water governance, scholars in this field increasingly focus on performance rather than compliance. Compliance is the extent to which parties to an agreement meet the terms of the agreement, whereas performance is the degree to which an agreement's goals are actually reached. Parties may comply with requirements to establish new institutions and to formulate action plans, but perform poorly in reducing water pollution or flood risk. A case study of the Central Asian Naryn/Syr Darya basin, for example, shows that while compliance with a previously negotiated agreement

on water releases from the Toktogul reservoir has been high, performance over time in terms of run-off has been very low and highly variable from a sustainable resource management point of view (Bernauer and Siegfried 2008).

### **GOVERNANCE BEYOND GOVERNMENT**

Governance is overwhelmingly associated with the work of governments. Yet during the last two decades, the governmental mode of governance has been complimented by modes of governance in which non-governmental organizations and the private sector are key partners. This trend is illustrated by the sustained growth of private sector standards such as certification, and of public-private partnerships, at the local to the global level (Adger and Jordan 2009, Andonova and others 2009, Treib and others 2007).

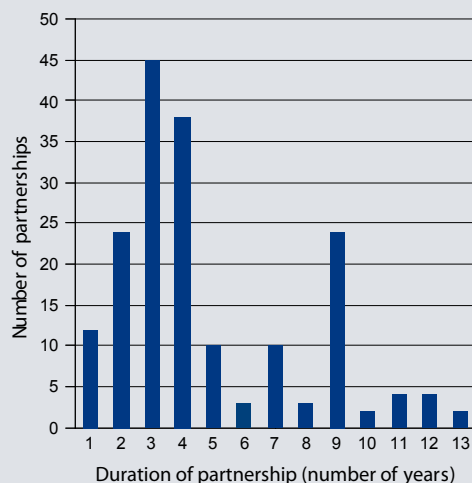
Although governments remain the most common and authoritative source of governing activity today, non-governmental organizations and the private sector have developed a plethora of initiatives that contribute to meeting public

goals such as environmental protection and sustainable development in policy formulation and implementation (O'Neill 2009). Some examples of extensive public-private partnerships are seen in forestry, such as third-party certification and labelling and power-sharing within stakeholder bodies (Chan and Pattberg 2008).

The hundreds of public-private partnerships established in the wake of the 2002 WSSD reflect the growth of private sector participation in governance activities (**Box 4**). The latest UN Secretary-General's report on partnerships for sustainable development states that "through the pooling of knowledge, skills and resources, [...] collaborative initiatives are working to find innovative solutions to sustainable development challenges and to develop knowledge networks to contribute to an environment of informed decision-making" (UN 2008). Newly created partnerships included the Global Partnership on Nutrient Management, the Global Partnership for Agriculture, Food Security and Nutrition, and the Partnership for Action on Computing Equipment, a multi-stakeholder partnership for environmentally sound management of used and end-of-life computer equipment. Although there are numerous scholarly case studies of specific partnerships and their activities, systematic information about their effectiveness and aggregate impact on the environment has yet to emerge. A new overview has found that knowledge of the effectiveness of public-private partnerships in policy formulation is limited and that the effectiveness of such partnerships in policy implementation is mixed (Schäferhoff and others 2009).

The use of market-based instruments as a tool to influence behaviour by means of price and other economic signals, in combination with public-private partnerships has helped attract many advocacy and business coalitions whose interests transcend national borders. The complexity of policy coordination vertically (local-national-regional-international), and coordination across sectors and jurisdictions have also created more points of access to policy processes. In addition, the Kyoto flexibility mechanisms, which emphasize market-based instruments, have furnished significant opportunities for participation by non-state actors, including both NGOs and the private

#### Box 4: Partnerships for sustainable development



International partnerships for sustainable development bring together public, private, and non-governmental actors, yet they often emerge from intergovernmental processes. The Partnership for Action on Computing Equipment (PACE), one of the most recent initiatives, offers a case in point. The decision to launch PACE was made by delegates to the ninth meeting of the Conference of the Parties to the Basel Convention in June 2008.

This partnership was launched in recognition of the urgent need for environmentally sound management, refurbishment, recycling, and disposal of used and end-of-life computing equipment. In March 2009, a multi-stakeholder working group comprising 58 representatives of personal computer manufacturers, recyclers, international organizations, academia, environmental groups, and governments agreed on the partnership's scope of work, terms of reference, financial arrangements, and structure.

PACE has initiated work to develop guidelines, awareness raising material, and pilot projects to enhance the environmentally sound management of computing equipment. Thirty-four project partners from developing countries and countries with economies in transition have already indicated an interest in working on pilot schemes to divert end-of-life computing equipment from environmentally unsound landfills, open-pit burning, and harmful recycling operations to environmentally sound and efficient recycling operations, in a manner that is sustainable and mindful of the health and welfare of people working in the informal sector.

Source: CSD (2009b)

sector (Andonova and others 2009, Pattberg and Stripple 2008).

Market-based instruments can also help increase transparency, strengthen legitimacy, and foster broader public interest (Bartle 2009, Bled 2009, Guesnerie and Tulkens 2009, Lövbrand and others 2009). For example, Decision VIII/17 on private sector engagement, adopted by the Conference of the Parties to the CBD in 2006, seeks to raise the private sector's awareness of good practices, reporting, and certification, involve private sector actors in CBD meetings and related meetings at the national level, and ensure compliance with the Convention's objectives and implementation of its targets. A recent analysis of the Decision's impact concludes that private sector participation can indeed help strengthen the CBD's legitimacy and contribute essential business skills (Bled 2009). To ensure further positive development, it suggests involving the financial sector and carefully integrating and balancing business expertise with the social and practical experience of other stakeholders.

One of the most significant areas of private sector involvement in environmental governance is carbon emissions trading (Stern 2007). In 2007 alone, there was an estimated US\$64 billion turnover in international carbon markets, up from US\$30 billion the year before. At present, the largest partnership is the pan-European Emission Trading Scheme (ETS) launched in 2005. In 2008, the EU ETS was worth US\$94 billion in terms of revenue (Frost & Sullivan 2009, Capoor and Ambrosi 2008, Hepburn 2007).

Carbon emissions trading and other market-based environmental governance instruments have received some criticism (Newell 2008). The EU's Emission Trading Scheme, despite serving as a model for similar schemes elsewhere (Skjærseth and Wettstad 2009), had early problems with permit over-allocation and there have been reports of widespread value-added tax fraud. Some scientists, along with Parties to the Kyoto Protocol, have expressed concern about the lack of additionality in many Clean Development Mechanism (CDM) projects and what they perceive as a focus on inexpensive emissions reductions at the expense of sustainable development benefits for the host countries (Flåm 2009, Paulsson

2009, Schneider 2009, Skjærseth and Wettstad 2009). Critics have also claimed that demands for efficiency in emissions trading schemes can sideline considerations of equity, thereby exaggerating inequalities by favouring those with better access to information and resources (Baldwin 2008, Vormedal 2008).

An expanded role for the private sector in different international environmental governance activities has been sought in other areas, such as strategic planning and funding. For example, the GEF Earth Fund Board, a private sector advisory group launched in 2008, met in April 2009 to provide strategic guidance to the GEF. In addition to providing the GEF with input for decision-making, it is expected to help mobilize as much as US\$150 million during its first round of financing (IISD 2009d). Regarding climate change, public finance mechanisms are being considered to scale up private sector investments and raise US\$530 billion per year in the form of additional investment, which is estimated to be required in order to avoid adverse impacts of climate change (UNEP 2009h).

#### LOOKING AHEAD

The convergence of several environmental, financial, and social crises, together with international efforts to reform the UN's IEG system, made 2009 a significant year for international environmental governance. The UNEP Ministerial Consultations in 2009, and the discussions of the Consultative Group of Ministers or High-Level Representatives on IEG established by UNEP's Governing Council, highlighted the urgency of IEG reform. Trends on the regional level, and involvement of the private sector, underlined that international environmental governance encompasses both multiple scales of action and multiple types of actors. Parties to several MEAs took steps to create or strengthen regional governance infrastructures; transboundary management moved up the political agenda; and new public-private partnerships and market-based instruments, especially in climate politics, allowed for more non-state involvement and investments.

The outcome of the Copenhagen conference revealed just how enormous the challenge of

forging a global agreement on climate change has become. Even though no legally binding targets emerged, many countries made a commitment for the first time to decouple emissions from economic growth. The Conference of the Parties “took note” of the Copenhagen Accord, which confirms countries’ willingness to limit global temperature rise to less than 2°C above pre-industrial levels, outlines support for technology transfer and capacity building for developing economies, and provides financial assistance for climate change adaptation and mitigation. Additional resources of US\$30 billion, covering the period 2010-2012, will be available immediately, with developed countries supporting a “goal of mobilizing jointly US\$100 billion a year by 2020 to address the needs of developing countries.” The Accord also specifies the need to recognize reduced emissions from deforestation and forest degradation (REDD+) through the immediate establishment of a mechanism to enable the mobilization of financial resources from developed countries. While the Accord does not require countries to work on a new agreement, negotiations are certain to continue in 2010.

During 2010, the International Year of Biodiversity, global attention will be focused on the 2010 Biodiversity Target, which aims to achieve a significant reduction of the current rate of biodiversity loss at the global, regional, and national levels as a contribution to poverty alleviation and to benefit all life on Earth. It is unlikely that the target will be met (Gilbert 2009). The 10th Conference of the Parties to the Convention on Biological Diversity will focus on the development of a post 2010 framework. This meeting will be held in Nagoya, Japan, immediately following the 5th Meeting of the Parties to the Cartagena Protocol on Biosafety, where delegates will continue negotiations on a legally binding treaty on liability and redress.

Several important developments, assessments, and events in 2010 will be concerned with regional environmental governance. Parties to the Conventions on chemicals and waste, and desertification will take further steps to establish regional mechanisms, probing the limits of MEA decentralization. Regional policy-makers will also look to the IPCC, whose Fifth Assessment



Several generations of environmental leaders, including all five successive Executive Directors of UNEP, took part in the Global Environmental Governance Forum: Reflecting on the Past, Moving into the Future, held on 28 June-2 July 2009 in Glion, Switzerland. From left to right: The Executive Director of UNEP Achim Steiner, and former Executive Directors of UNEP Maurice Strong, Mostafa Tolba, Elizabeth Dowdeswell, and Klaus Töpfer.

*Credit: Global Environmental Governance Project ([www.environmentalgovernance.org](http://www.environmentalgovernance.org))*

Report is to include a regional focus. Finally, key events such as the Sixth Ministerial Conference on Environment and Development in Asia and the Pacific will generate regional perspectives in regard to pressing issues on the global environmental agenda, including green growth and climate change governance.

The IEG reform process will be a key topic during deliberations at the Eleventh Special Session of the UNEP GC/GMEF. The Consultative Group will present a set of options concerning the core objectives and functions identified for the UN's IEG work, and concrete options for incremental reforms, as well as options for moving forward with broader institutional reform. The work of the UNEP Governing Council, and the Consultative Group, on

international environmental governance could help inform preparations for the UN Conference on Sustainable Development in Brazil in 2012, which will mark the 20th anniversary of the UN Conference on Environment and Development in Rio de Janeiro (UNGA 2008).

# Calendar of events 2009



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## FEBRUARY

**16-20 February** Governments at Twenty-fifth Session of UNEP Governing Council/ Global Ministerial Environment Forum approve launch of intergovernmental negotiations for legally binding treaty on mercury and establishment of a Consultative Group of Ministers or High-Level Representatives on International Environmental Governance.

**23-27 February** Group of Friends of the Co-Chairs on Liability and Redress under the Cartagena Protocol on Biosafety meeting in Mexico City produces first draft of a supplementary protocol. It includes a binding provision on civil liability for damage resulting from transboundary movements of living modified organisms.

## MARCH

**16-22 March** UN Under-Secretary-General for Economic and Social Affairs, Sha Zukang, encourages 5th World Water Forum participants to pursue dialog with other policy communities on links between water and climate change, accelerate progress on climate change adaptation, and support human and institutional capacity with adequate financing.



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## APRIL

**6 April** European Council adopts climate-energy legislation to achieve overall EU target of 20 per cent reduction in greenhouse gas emissions, 20 per cent increase in renewable energy use, and 20 per cent energy savings by 2020.

**20 April-1 May** Delegates to Eighth Session of UN Forum on Forests adopt resolution on forests in a changing environment, including forests and climate change, enhanced cooperation and cross-sectoral coordination, and regional and subregional inputs. A decision on financing for sustainable forest management is postponed.

**21 April** Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat welcomes Bosnia and Herzegovina as the 175th Party to the agreement.

## MAY

**4-8 May** More than 800 participants representing over 149 governments, intergovernmental and non-governmental organizations, and UN agencies attend the fourth COP of the Stockholm Convention on Persistent Organic Pollutants, where nine new chemicals are added to the Convention's annexes.

**4-15 May** At Seventeenth Session of UN Commission on Sustainable Development (CSD), Secretary-General Ban Ki-moon tells participants that sustainable agriculture can contribute to climate change mitigation. Delegates adopt policy recommendations, and discuss how CSD can better support international sectoral governance.

## JUNE

**1-5 June** Delegates to Third Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture, the world's first operational multilateral system of access and benefit-sharing, urge improvement of Treaty's financial situation.

**16-19 June** At Second Session of Global Platform for Disaster Risk Reduction (DRR), the Chair's summary stresses that DRR is increasingly driven by local leadership in developing countries, and that it should be included in climate change negotiations in Copenhagen in December.

**24-26 June** Political leaders at UN Conference on the World Financial and Economic Crisis and Its Impact on Development emphasize that global green initiatives should address sustainable development and environmental challenges and opportunities, including climate change mitigation and adaptation, financing, and technology transfer to developing countries.

**28 June-2 July** All five successive UNEP Executive Directors attend Global Environmental Governance Forum in Gllon, Switzerland, where 80 participants from 26 countries discuss UNEP's past, present, and future, key functions in international environmental governance, and options for reform.



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## JULY

**8-10 July** In L'Aquila, Italy, the G8 Summit's Joint Statement on Global Food Security says effective food security actions should be combined with adaptation and mitigation measures in regard to climate change and sustainable management of water, land, soil, and other natural resources, including protection of biodiversity.

## AUGUST

**31 August-4 September** At World Climate Conference-3 in Geneva, high-level policy-makers from more than 150 countries establish Global Framework for Climate Services to strengthen production, availability, delivery, and application of science-based climate prediction and services.

## SEPTEMBER

**24-25 September** Political leaders of the world's 20 largest economies, gathered at the Pittsburgh G-20 summit, commit to phase out fossil fuel subsidies over the medium term while providing targeted support to help the poorest.



CREDIT: SAMANTHA APPLETON

**21 September-2 October** Delegates to Ninth Conference of the Parties to UN Convention to Combat Desertification (UNCCD) call for strengthening the effectiveness and efficiency of regional coordination mechanisms to facilitate implementation of the Convention.

## OCTOBER

**5-9 October** At Second Ad Hoc Intergovernmental and Multi-stakeholder Meeting on an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), most participants express support for a new mechanism to carry out assessments and generate and disseminate policy-relevant advice.

**7-9 October** More than 2 000 participants from over 73 countries travel to León, Mexico, for Global Renewable Energy Forum, organized to strengthen inter-regional cooperation and encourage innovative multi-stakeholder partnerships for scaling up renewable energy in Latin America and elsewhere.

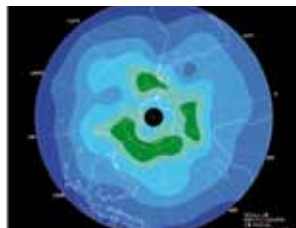
**26-29 October** Consultative Group of Ministers or High-Level Representatives on International Environmental Governance (IEG) discusses IEG objectives and functions in the context of the UN system. Ministerial participants consider both incremental and broader institutional reform: IEG reform is to be placed in the broader context of sustainability and sustainable development.

**26-29 October** Delegates at Thirty-first Session of the Intergovernmental Panel on Climate Change (IPCC) agree on scope, timing, and chapter outlines of Fifth Assessment Report (AR5), to be finalized in 2013-2014. They decide that regional assessments will be central to AR5 and that the IPCC will aim to ensure the policy relevance of the report.

**30 October** Two initiatives on financing sustainable forest management launched at Special Session of UN Forum on Forests: an intergovernmental process to analyse all forms of forest financing, and a separate facilitative process to help countries mobilize funding from all sources.

## NOVEMBER

**4-8 November** Twenty-first Meeting of the Parties to the Montreal Protocol results in 30 decisions. A proposal to amend the Protocol to include hydrofluorocarbons (HFCs), some of which have high global warming potential, is unsuccessful.



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**2-6 November** Barcelona Climate Change Talks close just 30 days before COP15 of the United Nations Framework Convention on Climate Change begins in Copenhagen. The eyes of the world are on the climate change negotiators, but expectations are increasingly played down.

## DECEMBER

**7-18 December** Countries attending the UN Climate Change Conference in Copenhagen agree to "take note" of the Copenhagen Accord. For the first time in the history of climate change cooperation, developing countries including Brazil, China, Indonesia, Mexico, and South Africa outline intentions to decouple emissions from economic growth.



CREDIT: R. SPIEY

Sources: Please go to the knowledge database at [www.unep.org/yearbook/2010](http://www.unep.org/yearbook/2010)

# Calendar of upcoming events 2010

## JANUARY

**6-7 January** Participants at Second Curitiba Meeting on Cities and Biodiversity to draft Convention on Biological Diversity (CBD) Plan of Action on Urban Biodiversity and to prepare the 2010 City Biodiversity Summit. Meeting preceded by festivities inaugurating International Year of Biodiversity.

**20-23 January** 8th World General Assembly of the International Network of Basin Organizations to meet in Dakar, Senegal. Its theme is 'Adapting to the consequences of climate change in the basins: tools for action.'

## FEBRUARY

**8-12 February** Participants at Second Meeting of Group of Friends of the Co-Chairs on Liability and Redress under the Cartagena Protocol on Biosafety will further negotiate liability and redress rules for damage resulting from transboundary movements of living modified organisms.

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WORLD BANK



**22-24 February** First Extraordinary Meeting of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions to be held back-to-back with the UNEP GC/ GMEF Special Session. There is high-level political support for enhancing cooperation and coordination among the three chemicals and waste conventions.

**24-26 February** Meeting in Bali, Eleventh Special Session of UNEP Governing Council/Global Ministerial Environment Forum (UNEP GC/ GMEF) to consider recommendations of Consultative Group of Ministers or High-Level Representatives on International Environmental Governance. The green economy, and biodiversity and ecosystems are also on the agenda.

## MARCH

**13-25 March** Decisions at Fifteenth Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to address high-profile species including the African elephant, tiger, and polar bear. Other proposals concern trade controls for coral and shark species.

**22 March** Theme of World Water Day on 22 March is 'Communicating Water Quality Challenges and Opportunities.' This event seeks to raise the profile of water quality at the political level, so that it is considered alongside water quantity.

CREDIT: DOMINIC SANSOON/WORLD BANK



## APRIL

**21-23 April** Business, government, NGO, and media leaders to meet at Business for the Environment (B4E) Global Summit in Seoul, Republic of Korea. An annual event co-hosted by UNEP, the UN Global Compact, and WWF, B4E promotes dialog and business-driven action towards a global green economy.

## MAY

**3-14 May** Eighteenth Session of UN Commission on Sustainable Development to consider sustainable consumption and production (SCP) patterns, focusing on the Marrakech Process, a global activity that supports elaboration of a ten-year framework of programmes on SCP.

**10-21 May** International Year of Biodiversity to be celebrated at Fourteenth Meeting of CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). Scientific and technical issues of relevance to the 2010 Biodiversity Target are on the agenda.

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**24-28 May** Fourth Global Environment Facility (GEF) Assembly to meet in Punta del Este, Uruguay, shortly before the GEF-5 replenishment period begins on 1 July.

**31 May-11 June** Period designated as first sessional period of the UN Framework Convention on Climate Change (UNFCCC).

SOURCE: ERIC VALENTIN



## JUNE

**5 June** World Environment Day. The purpose of this annual event is to stimulate worldwide awareness of the environment and enhance political attention and action.

**7-11 June** First Session of Intergovernmental Negotiating Committee to Prepare a Global Legally Binding Instrument on Mercury to meet in Stockholm. This is expected to be the first of five intergovernmental negotiating committee meetings held to produce a legally binding instrument on mercury.

**26-27 June** G20 summit in Canada to mark transition from G8 summits. Brazil, China, India, the Republic of Korea, and other countries will take permanent seats alongside the G8.

## AUGUST

**30 August-3 September** Workshop on Forest Governance, Decentralization and Reducing Emissions from Deforestation and Degradation (REDD) in Latin America.

CREDIT: ERIC VALENTIN



## OCTOBER

**11-15 October** Delegates to 5th meeting of Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP 5) in Nagoya, Japan, to consider outcome of the negotiations of the Ad Hoc Open Ended Working Group of Legal and Technical Experts on Liability and Redress.

**18-29 October** Landmark Tenth Conference of the Parties to the UN Convention on Biological Diversity to review progress towards 2010 Biodiversity Target of significantly reducing rate of biodiversity loss, and consider international regime on Access and Benefit-Sharing.

CREDIT: MARTON BALINT/UNEP



**25-29 October** Twenty-second Meeting of the Parties to the Montreal Protocol in Nairobi, Kenya (dates to be confirmed).

## NOVEMBER

**29 November-10 December** Sixteenth Conference of the Parties to UN Framework Convention on Climate Change (COP16) in Mexico to be held along with the Sixth Meeting of the Parties to the Kyoto Protocol (CMP 6) (dates to be confirmed).

CREDIT: BARBARA KESSLER



## DECEMBER

**11-12 December** International Year of Forests to be launched in Kanazawa, Japan. UN Forum on Forests serves as focal point for the UN International Year of Forests 2011, in collaboration with governments and other partners.

CREDIT: YUKO YONEDA



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