



Towards a mechanism for green development

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2nd expert workshop on a green development mechanism

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¹ This background document has been drafted to stimulate discussion at the Bali workshop. The views expressed are only those of the authors and do not necessarily reflect the views of the GDM 2010 Initiative Steering Committee or the Government of the Netherlands which has generously provided financial support for the Initiative.

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"Our lives depend on biological diversity... We stand to lose a wide variety of environmental goods and services that we take for granted. The consequences for economies and people will be profound. Especially for the world's poorest people. Especially for the Millennium Development Goals... We need new vision. And new efforts. Business as usual is not an option."

Ban Ki Moon
UN Secretary General
02 January 2010²

² Video broadcast. See: <http://www.cbd.int/2010/multimedia/>.

Welcome

We are delighted that you have accepted our invitation to join us in Bali to attend the 2nd expert workshop on a green development mechanism (gdm). We are looking forward to a very full, but informal, exchange of views to inform the gdm debate, as we move towards the 10th Conference of the Parties of the CBD in Nagoya, Japan, in October.

This workshop document aims to provide some background to guide our discussions during the meeting. We have chosen to arrange the material in line with each workshop session in order to help the busy reader focus on the issues relevant to individual topics for discussion. And, in each session, we have highlighted some key questions that might be addressed. But both the analysis and the questions are simply designed to stimulate debate; we welcome alternative ideas at all times.

Nor, indeed, is the proposed agenda set in stone. If we need to adapt it to address issues that come up in the course of our debate, we can do so, subject, always, to the usual constraints that time imposes.

To put our workshop into context, discussions about a gdm began to take off at a side event during the CBD COP9 in Bonn, Germany, in May 2008. Subsequently, the 1st expert workshop on a gdm took place in February 2009 in Amsterdam. It concluded that “there is a clear need for an international mechanism that will help to generate trans-boundary payments to compensate hosts of biodiversity for their opportunity costs of conservation” and that “there is a clear mandate for a role for the CBD in the development and future implementation of a gdm.”

Further consultations on a gdm were held at the Third Business and 2010 Biodiversity Challenge Conference (November 2009, Jakarta) which concluded that “mainstreaming biodiversity into business needs to be enhanced through voluntary corporate actions as well as market-oriented enabling policies and approaches such as the green development mechanism.” The gdm was also explored in some depth at the International Workshop on Innovative Financial Mechanisms (January 2010, Bonn) where there was general consensus subject to further analytical work that a new international mechanism could serve as a means of generating additional resources for green development.

The objective of the 2nd expert workshop on the gdm is to learn from the experiences of developing countries; to understand their needs; to make appropriate suggestions regarding the modalities of a gdm in a developing country context; and to recommend elements for a gdm decision by WGR13 in Nairobi in May and COP10 in Nagoya in October. In this respect, the outcomes of our workshop will be also be shared with delegates to the 11th session of the UNEP Governing Council/Global Ministerial Environment Forum on the 24th of February at 12:00 in a side event in the Greenroom.

Agenda

Monday, 22 February 2010

Morning

- 07:30-08:30 Breakfast
- 08:30-08:45 **Welcome and introductions**
- 08:45-10:00 **Session 1: Biodiversity, TEEB and the GEI**
- Keynote address and roundtable discussion
- 10:00-10:30 Coffee break
- 10:30-12:30 **Session 2: Priorities for green development financing**
- Moderated panel discussion
- 12:30-13:30 **Session 3: The sustainable development dimension of a gdm**
- Lunchtime discussion

Afternoon

- 13:30-14:00 Poster session of lunch discussions
- 14:00-16:00 **Session 4: A gdm, GEF, LifeWeb and CBD financing**
- Presentation and roundtable discussion
- 16:00-16:30 Coffee break
- 16:30-18:00 **Session 5: A gdm, CDM, the 'Green Climate Fund' and REDD-plus**
- Presentation and roundtable discussion
- 19:00-21:00 Dinner & cultural event

Tuesday, 23 February 2010

Morning

- 07:30-08:30 Breakfast
- 08:30-08:45 **Recap of the first day**
- 08:45-10:00 **Session 6: The principles of a gdm and verification of impacts**
- Presentation and roundtable discussion
- 10:00-10:30 Coffee break
- 10:30-12:30 **Session 7: Mobilising innovative funding for a gdm**
- Presentation and moderated panel discussion
- 12:30-13:30 **Session 8: Modalities and governance of a gdm**
- Lunchtime discussion

Afternoon

- 13:30-14:00 Poster session of lunch discussions
- 14:00-15:00 **Session 9: Emerging conclusions**
- Roundtable discussion
- 15:00-16:30 Coffee break and drafting
- 16:30-18:00 **Session 10: Recommendations and key messages**
- Moderated discussion on next steps including WGRI3 and COP10
- 19:00-21:00 Dinner

SESSION 1: Biodiversity, TEEB and the GEI

Format: Keynote address and roundtable discussion
Reference: <http://www.tebweb.org>
<http://www.unep.org/greeneconomy>

This session will set the stage for our discussion on a green development mechanism in the broader context - understanding the critical linkages between economic systems and ecological systems and new efforts to harmonise these linkages to bring about a transformation to a green economy.

Regarding the linkages between economy and ecology, the main objectives of The Economics of Ecosystems and Biodiversity (TEEB) study are “to draw attention to the global economic benefits of biodiversity” and “to highlight the growing costs of biodiversity loss and ecosystem degradation.” Its various reports address critical issues such as the conceptual link between economics and ecology, the relationship between biodiversity conservation and ecosystem services, financial instruments and market-based tools for policy makers and biodiversity risks and opportunities facing business.

By bringing together the key research and analyses to date on the economics of biodiversity and ecosystem services, the TEEB report provides invaluable information and insights regarding the rationale for a gdm and how it might take shape under the CBD.

The TEEB study also provides critical inputs in the Green Economy Initiative (GEI) which was established in October 2008 as a response to the global financial crisis and ensuing world economic downturn. GEI is sponsored by UNEP with the support of many other international bodies including the CBD, the ILO, UNCTAD and the WTO, as well as national governments.

The GEI is designed to help governments ‘green’ their economies through policy reforms, and investment strategies, in sectors such as clean technologies, renewable energies, water services green transportation, waste management, and sustainable policies in agriculture and forestry. Its overall aim is to deliver better returns on natural, human, and economic investments, address climate change concerns, while using less natural resources, and reducing social disparities.

The spirit of the GEI is closely aligned to the objectives of the CBD and the aims of a gdm and hence this workshop is being held immediately prior to the 11th Session of the UNEP Governing Council/Global Ministerial Environment Forum. The keynote address will offer an insight into the wider context in which biodiversity concerns are being addressed, and enable participants to discuss synergies between innovative financial mechanisms to support the CBD and other global economic initiatives.

SESSION 2: Priorities for green development financing

Format: Moderated panel discussion
References: Annex 1: The causes of biodiversity
Other sources are footnoted in this section

In this session, the aim is to focus, more generally, on the priorities for green development funding in the light of the evidence of alarming biodiversity degradation and loss. Later on, session 7 will consider the financing gap for addressing biodiversity and ecosystem services challenges, and discuss possible innovative financing instruments under a gdm.

While no single measure can fully capture the pace, and extent, of biodiversity loss, numerous scientific studies point to a rate of biodiversity decline which is unsustainable. For example, the 2005 Millennium Ecosystem Assessment (MEA) reported that the current rate of species loss is up to 1000 times higher than that experienced, at an average rate, over the earth's history. Land conversion has caused a 40% decline in the world's forest reserves. Mangrove forests, once covering more than 200,000 Km of coastline, have suffered losses of up to 86% in certain locations and continue to disappear at a rate of 1-2% per year. 20% of the world's coral reefs have been effectively destroyed, with a further 24% considered at risk of imminent collapse.³ Further compelling evidence of the continuing loss of biodiversity is to be released in the Global Biodiversity Outlook 3 (GBO-3) which is currently under review and will be officially launched in May 2010.⁴

The evidence also suggests that current efforts to conserve biodiversity are at best slowing, rather than reversing, the global erosion of biodiversity. The IUCN Red List⁵ suggests that 25% of mammals and 12% of birds are Critically Endangered or Vulnerable to Extinction, in addition to 22% of conifers and 32% of amphibians. It is thus unlikely that the goal of achieving "a significant reduction in the current rate of biodiversity loss by 2010", as agreed by Leaders at the 2002 World Summit on Sustainable Development, will be met. (In this respect, it may also be useful to explore the relevance of a gdm to the current discussions of setting a post-2010 biodiversity target.⁶)

Biodiversity is not evenly spread throughout the world either in terms of species diversity or ecosystem values. Diversity is most concentrated around the Equator, particularly in moist tropical forests. These cover 7% of the world's surface, but may account for around 90% of the world's total species.

³ For more information on the Millennium Ecosystem Assessment, see: <http://www.maweb.org/>.

⁴ For more information on GBO3, see: <http://www.cbd.int/gbo3/>.

⁵ The IUCN Red List is another excellent source of information on the current status of biodiversity. See: <http://www.iucnredlist.org/>.

⁶ See the Aichi-Nagoya International E-Conference on the post 2010 Biodiversity Target (ANIEC 2010): <http://www.cbd.int/aniec2010/>.

The majority of the world's remaining biodiversity is thus located in developing countries, a factor which has important policy implications.

The recently released report on The Economics of Ecosystems and Biodiversity (TEEB) for National and International Policy Makers⁷ (also known as the D1 report) provides a succinct overview of the extent of biodiversity loss which we are currently experiencing, as well as the likelihood of continuing loss in the future. This section summarises some of the main observations in Chapter 1 of this report.

The loss of biodiversity - or what the TEEB report refers to as "our natural capital" - is occurring across the planet:

"Damage to global ecosystem services and biodiversity is acute and accelerating. In the last century we have lost 35% of mangroves, 40% of forests, and 50% of wetlands. 60% of ecosystem services have been degraded in fifty years. Species loss is 100 to 1,000 times that in geological times and will get worse with climate change. 80% of the world's fisheries are fully- or over-exploited. Critical thresholds are being passed: for example, coral reefs risk collapse if CO² emissions are not urgently reduced." (Page 2)

The report highlights particular challenges in all the major ecosystems as follows:

- Forests: "...forests have completely disappeared in 25 countries... about 12 million hectares are lost to deforestation each year... global net loss of forest area between 2000 - 2005 was 7.3 million hectares/year..." (page 8)
- Natural and semi-natural grasslands: "...3.2 million hectares are currently degraded every year... over 50% of flooded grasslands and savannahs and tropical and sub-tropical grasslands and savannahs, and nearly 30% of montane grasslands and shrub lands, have been destroyed..." (page 8)
- Agricultural land: "Significant local risks are generated by loss of agricultural production or productivity..." (page 9)
- Freshwater systems: "All continents unsustainably exploit freshwater resources... Water withdrawals from rivers and lakes for irrigation, urban uses, and industrial applications doubled between 1960 and 2000... construction of dams and other structures along rivers have moderately or strongly affected flows in 60% of the world's large river systems..." (page 10)

⁷ For more information on the TEEB report for policy makers, see: <http://www.teebweb.org/ForPolicymakers/tabid/1019/language/en-US/Default.aspx>.

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- Wetlands: “...Since 1900, the world has lost around 50% of its wetlands... since 1980, 20% of mangrove area (3.6 million hectares) has been lost... but some countries have lost up to 80% through conversion for aquaculture, overexploitation and storms...” (page 10)
- Tropical coral reefs: “...20% of reefs have been destroyed... 30% have been seriously damaged... 58% of the world’s reefs are potentially threatened by human activities at the global scale...” (page 10)
- Marine systems: “...since industrial fishing began, the total mass of commercially exploited marine species has been reduced by 90% in much of the world...” (page 11)
- Species and genetic diversity: “...nearly a quarter (22%) of the world’s mammal species and a third (32%) of amphibian species are known to be globally threatened or extinct... 12% of the world’s bird species are under threat...” (page 12)

And, worryingly, the future does not look any better:

“The assessments are unanimous that significant biodiversity loss will continue under all considered policy scenarios, with the rate of loss projected to accelerate and exceed that of the last century.” (Page 13)

The evidence presented in the TEEB report supports the case for a green development mechanism (gdm).

Questions that might be addressed in this session include:

1. What are your own national priorities that require international support?
2. Should international support for ‘green development’ be directed towards conservation, or sustainable use, or benefit sharing? (i.e., the 3 objectives of the CBD)?
3. Are there particular habitats, or ecosystem services, that are under particular strain in your region? Is the critical challenge or opportunity conserving what’s left or restoring what’s lost?
4. How do we ensure development outcomes - e.g., restoring ecosystem services or investing in biodiversity businesses - from gdm financing?

SESSION 3: The sustainable development dimension of a gdm

Format: Lunchtime discussion
References: <http://www.undp.org/mdg/basics.shtml>
Annex 1: The causes of biodiversity loss
Other sources are footnoted in this section

The aim of this lunchtime discussion is to identify the linkages between biodiversity, ecosystem services, and sustainable development. In the subsequent report back ‘poster session’ we hope to generate ideas on ways in which meeting today’s myriad of biodiversity challenges can also contribute towards meeting the MDG goals, and achieving social justice.

Hilary Benn, the UK’s Environment Secretary (and formerly the International Development Secretary) commented recently that 1 billion people in the world depend on fish as their principal source of protein.⁸ Yet, according to the FAO, half of the world’s marine fisheries stocks are already fully exploited. This underlines the deep-seated linkage between the needs to protect ecosystems and alleviate poverty. Indeed this fundamental relationship is explicitly recognised in the Millennium Development Goals (MDGs), which represent the world’s current response to global poverty and inequality.⁹ MDG7 calls for the need to “ensure environmental sustainability” with specific targets relating to the imperatives of reducing biodiversity loss; and of reducing the proportion of the world’s population who do not have access to safe drinking water (specifically, a 50% reduction, by 2010).

The biodiversity conservation/poverty reduction nexus is, however, complex, and has several strands. The most direct linkage relates to the very large number of poor, and often marginalised, populations whose livelihoods are jeopardised by the destruction of ecosystems that result from the conversion of land for large-scale commercial gain. Habitat destruction, or degradation, can have devastating effects on water availability, and quality; agricultural productivity, and; on the supply of traditional sources of food and energy (e.g. fuel wood).

One recent study in Haiti¹⁰ demonstrated how the almost total destruction of the island’s forests has led to very serious land erosion, leading to a decline in arable land by 40%, and a decline in rainfall by 40%. When the rain does come, the hillsides can no longer retain, or filter, the water leading to devastating floods. The resultant decline in agricultural output has made poverty alleviation impossible (MDG1), while the deterioration in water quality has severely affected health, including a significant rise in the incidence of children suffering parasitic intestinal disease (MDGs 4, 5 and 6).

⁸ Interview, BBC Radio 4 Today Programme, 14 December, 2009, quoting Millennium Ecosystem Assessment, 2005

⁹ For more information on the MDGs, see: <http://www.un.org/millenniumgoals/>.

¹⁰ Amor, D and Christensen, N (2008) Environmental Degradation and Poverty a Vicious Cycle: Haiti, cited in TEEB Interim Report.

While this may be an extreme example of the vicious cycle of environmental degradation leading to extreme poverty, the literature provides many other similar stories, whether it is the damage to coastal populations caused by loss of mangrove habitats, or the loss of non-timber forest products or ecosystem services for local communities due to forest degradation.

Extreme poverty is also, in itself, a barrier to sustainable habitat management and ecosystem protection. There is little point in bemoaning the historical loss of rainforests or the depletion of marine life. If environmental damage has inhibited efforts to meet the MDGs, it is also vital to recognise that coherent development strategies provide the most robust means of retarding, or reversing, such damage. If the critical challenge is, as set out in Annex 1 of this paper, the need to incentivise communities not to destroy, or over-exploit, biodiverse-rich habitats and ecosystems, then delivering alternative sustainable development strategies is vital. So, while developing countries have a responsibility to mainstream biodiversity conservation into National Poverty Reduction Development Strategies (NPRDSs), developed countries, whose citizens are the main beneficiaries of biodiversity protection, have a clear incentive to ensure that combating biodiversity loss is given due weight in their own development assistance priorities.

This requires, inter alia, strategies aimed at offering target populations alternative forms of income generation; increasing the productivity of land already under cultivation (or used for animal grazing); and the provision of education and technical assistance to help communities understand the holistic value of their own ecosystems and on how to preserve local ecosystem services. It will be important that such strategies are community based, and integrate a strong gender element given the pivotal role of women, in many societies, as both guardians of food production and gatherers of fuel wood. There are, of course, many current examples of best practice in both bilateral, and multilateral, assistance programmes.

But there is also a tendency amongst some donors to argue that, important as it is, biodiversity conservation does not contribute, in a directly visible sense, towards poverty elimination. This is myopic. As the interim TEEB report¹¹ released in 2008 has shown, there are very strong, albeit indirect, links between habitat preservation and the achievement of almost all the MDGs. Apart from the undeniable role that ecosystems play in ensuring food security (MDG1), the provision of safe water (which for rural communities in developing countries is invariably a product of efficient ecosystem management) is a vital enabler to the attainment of MDG4 (reduced child mortality), MDG5 (improvement in maternal health), and MDG6 (reduction in the prevalence of endemic diseases). The relevance of MDG3 (gender equality) has already been mentioned.

¹¹ The Economics of Ecosystems and Biodiversity Interim Report, see: <http://www.teebweb.org/InformationMaterial/TEEBReports/tabid/1278/language/en-US/Default.aspx>.

Another example is the role that well-managed ecosystem can play in conserving biodiversity, mitigating climate change and supporting local communities. A recent background paper¹² for a conference on disaster risk reduction noted:

“There is growing consensus that environmental degradation, poverty and disaster risk remain interlinked and share common consequences for human security and well-being. Disaster events erode hard-earned development gains and contribute to natural resource degradation, while pre-existing social, economic, political and environmental problems often influence the magnitude of disaster impacts.

The role of ecosystem services is therefore increasingly valued for reducing disaster risks and protecting livelihoods. Healthy ecosystems provide natural defences to human communities by regulating hazards, while degraded ecosystems can increase exposure and reduce community resilience.”

There is, however, concern amongst some development practitioners and developing country governments that strategies to preserve biodiversity will “crowd out” weak and vulnerable communities unable to compete with the introduction of new, more demanding, product certification standards designed to protect ecosystems. Indeed, in some quarters, this is reflected in suspicion that standards to promote sustainable use of natural resources represent an attempt by industrialised countries to impose trade protectionism through the back door.

Such concerns are understandable, and legitimate, but risk leading to the perverse conclusion that “business as usual is best”. A more appropriate response is to recognise this issue, which has an important equity dimension, and put in place development strategies that help suppliers to meet the challenge of higher standards. Indeed a central aim of a gdm would be to generate resources to enable developing countries increase productivity. In this respect, there is a synergy between the gdm initiative and the “Aid for Trade” agenda which the World Trade Organisation (WTO) is actively promoting.

In conclusion, it is worth recalling the definition of sustainable development as enshrined in *Our Common Future*, the Brundtland Commission Report. It says:

“Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”

¹² Investing in ecosystems management for sustainable livelihoods and disaster reduction: Challenges and solutions (June 2009), see: <http://www.preventionweb.net/globalplatform/2009/programme/special-events/v.php?id=42>.

These sentiments are as relevant today, arguably more so, than when they were first expressed over 20 years ago.

Questions that might be addressed in this session include:

1. Are ecosystem services and biodiversity concerns given appropriate priority in National Poverty Reduction Development Strategies?
2. Does the political will exist to conserve biodiversity in ways that ensure development outcomes, especially for the very poor?
3. How responsive is the donor community to requests for assistance in this field?
4. To what extent do existing multilateral initiatives which address biodiversity issues also give prominence to the development challenge?
5. How can we best harness public/private partnerships and the private sector to address biodiversity challenges in a development context?

SESSION 4: A gdm, GEF, LifeWeb and CBD financing

Format: Presentation and roundtable discussion
References: Sources are footnoted in this section

This session will consider the relevance of 2 existing funding initiatives under the Convention on Biological Diversity - the GEF and LifeWeb - to a gdm, and explore possible synergies with these as well as other existing sources of CBD financing.

The **Global Environment Facility (GEF)** is the major source of multilateral funding for the environment, including biodiversity. Established in 1991 just before the 1992 Rio Summit where the Conventions on Biodiversity, Climate Change and Desertification were launched, the GEF has played a key role in transferring funds from developed countries to less development countries for national, and regional, environmental projects. Today, the GEF describes itself as follows:

“The Global Environment Facility (GEF) unites 179 member governments – in partnership with international institutions, nongovernmental organizations, and the private sector – to address global environmental issues. An independent financial organization, the GEF provides grants to developing countries and countries with economies in transition for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. These projects benefit the global environment, linking local, national, and global environmental challenges and promoting sustainable livelihoods.”¹³

Compared to a gdm, which is intended to focus specifically on biodiversity, the GEF clearly has a much broader scope in the environmental issues it addresses. As highlighted in the quote above, in addition to biodiversity, the GEF also support projects in the areas of climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. Also, in addition to being the official financial mechanism for the CBD, the GEF is also the official financial mechanism for the UN Framework Convention on Climate Change (UNFCCC), the Stockholm Convention on Persistent Organic Pollutants (POPS), and the UN Convention to Combat Desertification (UNCCD). And it has a partnership with the Montreal Protocol of the Vienna Convention on Ozone Layer Depleting Substances for economies in transition. Nevertheless, where there are potential biodiversity benefits from GEF projects focused on other environmental issues, a gdm might find some opportunities for collaboration.

The GEF also has a particular methodology for allocating finance to environmental projects: it “funds the ‘incremental’ or additional costs

¹³ For more on the GEF, see: http://www.gefweb.org/interior_right.aspx?id=50.

associated with transforming a project with national benefits into one with global environmental benefits.”¹⁴ A gdm, on the other hand, could ensure that ‘non-incremental’ costs of biodiversity projects - such as core support needed at the national level - are also supported. Likewise, while the GEF provides grants to deliver global environmental benefits, a gdm could invest in projects which explicitly deliver local, national or regional biodiversity benefits. These benefits could also include development impacts. Finally, while the GEF provides grants to projects, a gdm could also support the ongoing revenue requirements of biodiversity institutions and programmes - such as protected area authorities or watershed management systems - to conserve biodiversity and maintain ecosystem services. Such flexibility would enable a gdm to complement the GEF’s approach to funding.

Traditionally, the source of funding for the GEF has been limited to contributions from developed country member governments. Currently, negotiations are underway with donor governments for a 5th replenishment of the GEF for a proposed amount of \$4.5 billion to \$6.5 billion. It is hoped that this replenishment will be finalised early in 2010 as the 4th replenishment runs out midyear.¹⁵

A gdm could be structured to complement the recently established private sector partnership initiative of the GEF known as the Earth Fund.¹⁶ Originally conceived as a public-private partnership (PPP) initiative, the first pilot project of the Earth Fund has been set up in partnership with the International Finance Corporation (IFC). It is described as follows:

“The GEF Earth Fund (pilot project) was established with separate trust fund arrangements to promote projects, technologies and business models that will contribute to the protection of the global environment and promote thereby environmentally sound and sustainable economic development. This pilot project allows the GEF to demonstrate ways to more systematically engage with the private sector in order to reach beyond its traditional boundaries (in a number of ways), foster innovation and open new markets, and demonstrate the potential for strategic partnerships to achieve greater scale of investment than generally achievable through working with the private sector on individual projects through the normal GEF project cycle.”

The GEF plans to increase the size and broaden the scope of the Earth Fund. In their ‘Revised GEF-5 Programming Document’,¹⁷ prepared for the November 2009 meeting on the 5th replenishment, the GEF Secretariat has proposed “that resources be earmarked for an expanded and recapitalized Earth Fund in GEF-5, with the aim of leveraging additional resources from the private

¹⁴ For more on incremental costs, see: <http://www.gefweb.org/interior.aspx?id=80>.

¹⁵ For more on the 5th replenishment, see: http://www.gefweb.org/interior_right.aspx?id=48.

¹⁶ For more on the Earth Fund, see: http://www.gefweb.org/interior_right.aspx?id=120.

¹⁷ GEF/R.5/22 (October 30, 2009).

sector.” The document further explains that they expect the private sector will be interested in co-financing GEF projects:

“The GEF Earth Fund is not a purely commercial vehicle. This is consistent with the GEF Instrument which provides for grant and concessional funding... A key to the success of the Earth Fund is attracting investment partners at the Platform level who are not seeking a full commercial rate of return on their investments... Attracting such investors is not considered to be difficult in the context of the concessional funding being offered by the Earth Fund...” (Page 69)

Roughly \$100 million of the 5th replenishment is to be earmarked to the Earth Fund, which in turn would fund up to 10 ‘platforms’ for investments based on public-private partnerships. With respect to biodiversity, these platforms could include the following:

- “Promoting business participation in sustainable forest management (SFM) initiatives...”
- Deploying market-based instruments for biodiversity protection and the provision of ecosystem services in developing countries. This may include initiatives under the Business, Biodiversity and Offsets Program (BBOP) which generates measurable conservation outcomes through biodiversity offsets associated with extractive industry project development...
- Combining development and conservation by means of a nature-based ‘BioDevelopment Fund,’ a concept to promote the utilization of the emerging tools of genomics, proteonomics and even biomimetic applications to tap into the massive biodevelopment potential of the global protected areas system...
- Engaging in carbon finance activities through the Earth Fund where this will complement other programs...” (page 70)

LifeWeb, on the other hand, is a new financial mechanism in support of the CBD whose “goal is to increase funding for the creation and management of protected areas, as powerful tools to address climate change, strengthen ecosystems, and sustain livelihoods.”¹⁸ The LifeWeb Initiative was launched in May 2008 at the CBD’s 9th Conference of the Parties (COP9) held in Bonn. LifeWeb’s activities include:

- “Providing a clearing-house of protected area funding needs;
- Connecting recipient expressions of interest with interested donors;

¹⁸ For more information on LifeWeb, see: <http://www.cbd.int/lifeweb/>.

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- Co-convening donor coordination meetings in support of comprehensive national protected area strategies;
- Encouraging and recognising donor support for protected area solutions.”

LifeWeb is now fully operational with a new website listing donors, recipients, matches as well as a pipeline of potential investments. Though its committed donors include the governments of Finland, Germany and Spain, LifeWeb’s match-making efforts are already generating new interest from the private sector.¹⁹

In addition to the GEF and LifeWeb, there are other intergovernmental, bilateral and NGO mechanism which either directly or indirectly support the objectives of the CBD. One such example, of particular relevance to biodiversity business, is Verde Ventures.²⁰ An initiative of Conservation International, Verde Ventures “provides support for small- and medium-sized businesses that contribute to healthy ecosystems and human well-being.”

Discussion might usefully touch upon the following questions:

1. Could a gdm support the GEF and its Earth Fund as a platform for scaling up market-based biodiversity financing building on the Fund’s public-private partnerships approach - notably by going beyond the GEF’s mandate to finance the incremental costs of projects to deliver global environmental benefits?
2. Could a gdm collaborate with LifeWeb to generate market-based support for biodiversity projects, programmes and institutions, particularly with respect to protected areas?
3. Are there other CBD-related funding mechanisms which should be considered in designing a new international mechanism for green development?

¹⁹ In November 2009, LifeWeb organised a meeting in Jakarta between the co-authors of this document and the proponents of a project on ‘Ecological Mangrove Rehabilitation, Sustainable Livelihoods Adaptive Collaborative Management and Carbon Finance in Critical Mangrove Systems in Indonesia’ to explore opportunities for funding from the Danone Fund for Nature.

²⁰ See: <http://www.conservation.org/sites/verdeventures/Pages/partnerlanding.aspx>.

SESSION 5: A gdm, the CDM, the ‘Green Climate Fund’ and REDD-plus

Format: Presentation and roundtable discussion
References: Sources are footnoted in this section

This session will consider the relevance of 2 further initiatives - the CDM and Copenhagen Green Climate Fund - and explore possible synergies.

The **Clean Development Mechanism (CDM)** is one of the three market-based, flexible mechanisms established under the Kyoto Protocol of the UNFCCC to facilitate the reduction of greenhouse gas emissions from developed countries (Annex I Parties) through financing carbon offsets in developing countries.²¹ The CDM website provides a succinct explanation of how it operates:

“The CDM allows emission-reduction (or emission removal) projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO₂. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol.

The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction limitation targets.

The projects must qualify through a rigorous and public registration and issuance process designed to ensure real, measurable and verifiable emission reductions that are additional to what would have occurred without the project. The mechanism is overseen by the CDM Executive Board, answerable ultimately to the countries that have ratified the Kyoto Protocol.

In order to be considered for registration, a project must first be approved by the Designated National Authorities (DNA).

Operational since the beginning of 2006, the mechanism has already registered more than 1,000 projects and is anticipated to produce CERs amounting to more than 2.7 billion tonnes of CO₂ equivalent in the first commitment period of the Kyoto Protocol, 2008-2012.

The mechanism is seen by many as a trailblazer. It is the first global, environmental investment and credit scheme of its kind, providing standardized emissions offset instrument, CERs.”

²¹ For more information on the CDM, see: <http://cdm.unfccc.int/about/index.html>.

Though the recent UNFCCC COP15 which took place in December 2009 in Copenhagen ended with a non-binding statement - the Copenhagen Accord²² - this statement maintained a commitment to the “emission reductions initiated by the Kyoto Protocol” and “existing and further guidance adopted by the Conference of the Parties” which by implication appears to be a commitment for a continuation of the CDM beyond 2012.

Hence, a gdm could benefit from exploring both insights from the establishment of the CDM, and opportunities for possible collaboration in the future. Despite some weaknesses, including a perception of a rather heavy bureaucracy, the CDM has succeeded in generating significant new private sector finance for environmental projects.

There are some basic similarities between the CDM and a gdm including:

- Both focus on a specific environmental issue - climate change or biodiversity;
- Both include a sustainable development objective alongside an environmental objective;
- Both focus on securing private sector finance through international market-based mechanisms, and;
- Both require metrics, methodologies, and monitoring, to verify or certify environmental performance.

There are, of course, also fundamental differences between a CDM and a gdm which are, to a large degree, determined by the very different environmental challenges of climate change and biodiversity. This can be seen in the concepts, and the objectives, of the UNFCCC and the CBD which differ substantively, making the design of a gdm much more challenging than simply setting up a CDM-like system for biodiversity. As these differences are critical, it is useful to contrast the key concepts, and objectives, of the two Conventions. The following table presents the actual text from the Conventions:

²² See: http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf.

Towards a mechanism for green development

UNFCCC	CBD
Article 2: Objective	Article 1: Objectives
The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.	The objectives of this Convention, to be pursued in accordance with its relevant provisions, are 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.
Article 1: Definitions	Article 2: Use of Terms
" Climate change " means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.	" Biological diversity " means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
" Emissions " means the release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.	" Sustainable use " means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.
" Adverse effects of climate change " means changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare.	" In-situ conservation " means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.

The CDM focuses on a single objective - the stabilisation of greenhouse gases in the atmosphere, through offsetting emissions in developed countries by sequestration in developing countries. As noted above, this has been operationalized by the establishment of a regulated international trading scheme for CER credits - "each of which is equivalent to one tonne of CO₂." A gdm, on the other hand, would have to focus on an interrelated trinity of objectives - biodiversity conservation, sustainable use of biological resources and equitable benefit sharing.²³

²³ Regarding the third objective of the CBD, under a gdm this could either strictly focus on the equitable sharing of benefits arising out of the utilisation of genetic resources or, as it common today within the CBD community, it could focus more broadly on the equitable

Hence, setting up a regulated international market-based scheme for biodiversity will require addressing three interrelated objectives with respect to the ecological complexes of life on Earth. Even if we focus only on the first objective to conserve biodiversity, it is not easy to conceptualise a CDM-like scheme which would enable international trading in so-called 'biodiversity conservation credits' each of which be equivalent to a 'tonne' of biodiversity.²⁴

Furthermore, a gdm could differ from a CDM in that a gdm would generate private sector revenues to ensure a net positive impact on biodiversity, through the conservation or restoration of ecological complexes, or through the sustainable and ethical use of biological resource. Hence a gdm could perhaps focus as much on the business opportunities from biodiversity conservation as it would on the business risks from biodiversity loss. A more thorough understanding of how the private sector has responded to the CDM - as a means to mitigate environmental risk or as a means to enhance environmental opportunity - particularly in the context of strategic corporate social responsibility could provide guidance on designing a gdm embraced by the business community.

Yet another critical difference between a gdm, and the CDM, is the role that development could play. Though CDM certified projects take place in developing countries, and must be approved the Designated National Authorities (DNA) of these countries, it is not at all clear that they are actually contributing to sustainable development. By way of example, one study²⁵ published in 2007 of 16 CDM projects concludes as follows:

“While a large part (72%) of the total portfolio’s expected Certified Emission Reductions (CERs) is likely to represent real and measurable emission reductions, less than 1% is likely to contribute significantly to sustainable development in the host country. According to our analysis, there are currently no UNFCCC registered CDM projects that are likely to fulfil the Kyoto Protocol’s twofold objective of simultaneously delivering greenhouse gas (GHG) emission reduction and contributing to sustainable development.” (page1)

A gdm, on the other hand, with its emphasis on ensuring the biological resources are used sustainably, and equitably, is likely to have a much more significant opportunity to support biodiversity projects which also deliver net positive development impacts. These could range from responsible wild

sharing of benefits arising out of the sustainable use of biological resources; the latter of which would enable more opportunities for development impacts from gdm funding activities.

²⁴ The complexity of this challenge is evidenced in the excellent and extensive efforts of the Business and Biodiversity Offset Program (BBOP) to develop and operationalize the concept of biodiversity offsets. See: <http://bbop.forest-trends.org/>.

²⁵ Sutter, C & Parreño, JC (2007) Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? *Climatic Change* 84:75-90. See: http://www.cleanairnet.org/caiasia/1412/articles-72508_resource_1.pdf.

harvesting and sustainable farming, to ecotourism in protected areas and maintaining critical ecosystem services for the poor such as watersheds and non-timber forest products.

The **Copenhagen Green Climate Fund**, on the other hand, was established under the **Copenhagen Accord** (December 2009). This called for “substantial finance to reduce emission from deforestation and forest degradation (REDD-plus)” to be made available under a new “Copenhagen Green Climate Fund” which is to be established as “an operating entity of the financial mechanism of the Convention.” This Fund will be supported by a commitment from developing countries to “mobilizing jointly US\$ 100 billion a year by 2020 to address the needs of developing countries” of which REDD-plus projects will receive a substantive level of support. In short, REDD-plus now looks to become a major part of the UNFCCC programme of work.

With respect to a gdm, **REDD-plus** (also written as REDD+) is particularly interesting because it links a critical ecosystem service - carbon storage - to biodiversity conservation. The useful ‘Little REDD+ Book’²⁶ explains as follows:

“REDD is primarily about *emissions reductions*. The Bali Action Plan decided at the Conference of the Parties (COP) at its thirteenth session states that a comprehensive approach to mitigate climate change should include:

‘Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.’

More recently, the ‘+’ in REDD+ has drawn increasing attention towards the activities related to the conservation and enhancement of carbon stocks. A future REDD mechanism has the potential to deliver much more. REDD could simultaneously address climate change and rural poverty, while conserving biodiversity and sustaining vital ecosystem services.” (page14)

The opportunity to increase support for biodiversity conservation through REDD-plus activities has, most recently, been recognised by the TEEB study. A whole section of Chapter 5 of the TEEB for National and International Policy Makers is devoted to REDD-plus.²⁷ This section explores the possibilities for designing REDD projects with biodiversity co-benefits explaining that:

²⁶ Parker, C et al, (2009) The Little REDD+ Book. Oxford: Global Canopy Foundation. See: http://www.theredddesk.org/sites/default/files/lrb_en.pdf.

²⁷ See Section 5.2 International PES: REDD and beyond of the TEEB D1 report for policy makers at: <http://www.teebweb.org/ForPolicymakers/tabid/1019/language/en-US/Default.aspx>.

“A well-designed REDD mechanism that delivers real, measurable and long-term emission reductions from deforestation and forest degradation is expected to have significant positive impacts on biodiversity since a decline in deforestation and degradation implies a decline in habitat destruction, landscape fragmentation and biodiversity loss...

A REDD-Plus mechanism could have additional positive impacts on biodiversity if achieved through appropriate restoration of degraded forest ecosystems and landscapes. Afforestation and reforestation (A/R) activities can provide incentives to regenerate forests in deforested areas and increase connectivity between forest habitats.”
(Page 25)

Following the recognition that REDD-plus received in the Copenhagen Accord, it can be expected that, at the very least, voluntary efforts to implement REDD-plus project will accelerate. As noted in the TEEB study, this could include projects financed by the World Bank Forest Carbon Partnership Facility (FCPF), the UN-REDD Programme, or through the voluntary carbon market. Regarding the latter, the TEEB study explains that the Climate, Community and Biodiversity Alliance (CCBA):

“has established voluntary standards for forestry projects, including REDD demonstration activities. The criteria relevant to biodiversity are: 1) net positive biodiversity impacts; 2) offsite biodiversity impacts; and 3) biodiversity impact monitoring. Projects are audited by independent third party certifiers and each project is subject to a 21 day public comment period.”

Such REDD-plus developments in the voluntary market are particularly relevant for the design of a gdm as they provide insights into how market-based responses to climate change can be linked to responses to biodiversity loss within forest ecosystems. In this respect, a gdm could in part serve as a mechanism for private sector financing of biodiversity conservation and restoration projects which store carbon and maintains other ecosystem services in various ecosystems - and does not just support carbon storage in tropical forests - the primary focus of REDD-plus.

On the basis of these two initiatives (of which one is still embryonic) discussion might focus on the following issues:

1. How applicable is the CDM model to the design of a gdm. What are the potential problems? Its “trading” modus operandi? The challenge of metrics? Are their positive elements and lessons learned to be built on?
2. Could the work undertaken to develop a financial mechanism for REDD-plus activities provide insights and even pilot projects for the development of a more extensive gdm which links biodiversity conservation to ecosystem services and sustainable development?

SESSION 6: The principles of a gdm and verification of impacts

Format: Presentation and roundtable discussion
References: Sources are footnoted in this section

As we move towards considering the nature, and mechanics, of a new international initiative to mobilise resources to conserve biodiversity, and protect ecosystems, it may be helpful to forge a consensus on a number of guiding principles.²⁸ The following are suggested working principles for a new green development mechanism:

1. A green development mechanism (gdm) will promote the objectives of the Convention on Biological Diversity (CBD).
2. A gdm will recognise both the value of biodiversity as a public good, and its contribution to the livelihoods of people, particularly amongst the poorest sections of society.
3. A gdm will complement, and support, existing national, regional and international efforts to address biodiversity loss and promote sustainable development.
4. A gdm will complement other international efforts to address related challenges such as the need to tackle climate change and meet the Millennium Development Goals (MDGs).
5. A gdm will seek to mobilise new and additional financial resources from the beneficiaries (demanders) of biodiversity to the guardians (suppliers) of biodiversity so as to incentivise biodiversity conservation and contribute to poverty alleviation.
6. A gdm should be funded on the basis that consumption of biodiversity benefits carries a responsibility to ensure that the global needs of biodiversity conservation are addressed.
7. A gdm will operate in a flexible manner, recognising that biodiversity protection requires a range of interventions, including the possibility of certifying voluntary private sector actions, to address individual challenges.
8. A gdm will reward biodiversity suppliers on the basis of measurable performance against standards which reflect accepted best practice in the relevant field of activity.

²⁸ Earlier drafts of such a set of principles were presented by Joshua Bishop of IUCN at the 2009 OECD Workshop on Innovative International Financing. See: http://www.oecd.org/document/42/0,3343,en_2649_34309_43311082_1_1_1_1,00&&en-USS_01DBC.html.

9. A gdm will operate in a cost-effective manner, ensuring that transaction costs are commensurate with benefits. A gdm will operate in a cost-effective manner, ensuring that transaction costs are commensurate with benefits.
10. Monitoring and verification of initiatives and projects funded by the gdm will be exercised by competent experts in the relevant field, including representatives of the corporate and civil society sectors.

In terms of **verification**, It follows from the principles discussed in mentioned above that payments from a gdm must meet certain criteria. Simply put, the 'g' requires that money spent has a green - i.e. biodiversity - impact.²⁹ The 'd' requires that spending also has a sustainable development impact. The 'm' reflects the reality that the governance structure will need to be multi-stakeholder in nature.

Regarding criteria for gdm payments, TEEB³⁰ provides a helpful definition of Payment for Ecosystem Services (PES) as follows:

“a voluntary transaction where a well defined ecosystem service (or land use likely to secure that service) is ‘bought’ by an ecosystem buyer from an ecosystem supplier provided if, and only if, the ecosystem provider secures the ecosystem service provision.”

This definition immediately introduces the principle of conditionality. Implicit in the PES concept is the notion that payments should only reward good stewardship of biodiversity that goes above, and beyond, what would be required by local law and customary practice. This is important because it underlines the principle that payments are designed to correct market failure and induce net positive behaviour (i.e. biodiversity conservation) that is at variance with what might be expected in the absence of intervention. The TEEB definition is equally applicable to sustainable management of biodiversity resources if such activities incur additional costs not recoverable in the market place.

As mentioned above, the real challenge for policymakers is how to measure the value of an incremental improvement in biodiversity: the metrics problem. This challenge poses two difficulties. First, it is likely to limit the potential for ‘trade’ between biodiversity suppliers and consumers. Second, even in a static situation, where no such trade is considered, the lack of relative values for individual elements of biodiversity makes prioritisation, in terms of investment decisions, problematic. Nonetheless, much work is underway to address this issue, but is unlikely to satisfactorily resolve the questions in the short term.

²⁹ For an early example of an innovative ‘green’ investment scheme set up by the Government of the Netherlands, see: <http://www.senternovem.nl/greenfundsscheme/>.

³⁰ TEEB for National and International Policymakers, Ch.5.p6.

One way round this problem is to use extant standards and codes of conduct which exist for many types of biodiversity resource, and industries. Prime examples of such standards are those applied by the Forestry (FSC) and Marine (MSC) Stewardship Councils, but there are many more. For example, the World Business Council for Sustainable Development (WBCSD) provides advice to industry on how to address biodiversity issues³¹.

Discussion might usefully focus on the following issues:

1. Is there a broad consensus on the principles for a gdm set out above?
2. Are policy makers prepared to use existing standards and best practice as a guide to the eligibility of projects for support, or should the discussion focus on the search for some common standard?
3. If the CBD COP10 adopts a new post-2010 target with milestones and indicators, should a gdm use this as a basis for its standard?

³¹ See: www.wbcd.org.

SESSION 7: Mobilising innovative funding through a gdm

Format: Presentation and moderated panel discussion
References: Annex 2: Possible financial modalities for a gdm
Other sources are footnoted in this section

The aim of this session is to identify possible, and feasible, sources of financing for a gdm.

There has been considerable debate, in recent years, about the features, and modalities, of a gdm to address biodiversity loss. These issues were discussed first at an international experts meeting which took place in February 2009 in Amsterdam.³² They were also considered at the CBD Third Business and the 2010: Biodiversity Challenge Conference, (Jakarta, 30 November-2 December 2009)³³. Most recently, they were further analysed at an informal CBD International Workshop on Innovative Financial Mechanisms, which took place in Bonn, on 27-29 January 2010.³⁴

The wide range of options for generating financial resources for a gdm can broadly be divided into two generic types. Those that essentially depend on a **direct transfer of resources**, whether it be from the public, or private, sector; and those where any such transfer is contingent upon the creation, and success, of some form of **market-place in which trade usually takes place** (cf carbon markets).

Annex 2 provides details of a number of schemes:

- **Transfer payment schemes**
 - Taxation schemes
 - Tax incentive schemes/ Green investment Funds
 - Biodiversity offsets with international support
 - Greening commodity imports
- **Market-based schemes**
 - Biodiversity cap and trade
 - Biodiversity footprint taxation

As we move towards COP10 (Nagoya, October 2010), it will be important that policy makers begin to reach some consensus on 3 key issues:

- Should an international initiative to generate additional resources for biodiversity be payment transfer in nature, or market-based?
- Should the arrangement seek to tap official or private sector resources?

³² See: <http://gdm.earthmind.net> and www.landecon.cam.ac.uk/cleed/gdm.htm.

³³ See: <http://www.cbd.int/financial/business3/>

³⁴ See: <http://www.cbd.int/financial/> (UNEP/CBD/WS-IFM/1/4, available from 19 February)

- Should the system be voluntary or obligatory?

Payment or market-based? The consensus that emerged from the Bonn workshop was that a market-based approach was over ambitious in the short-term. This is not to deny that a market-based system might be feasible in the future, but recognises that there are, at present, a number of methodological issues that need to be resolved. There was also recognition that any system that requires international agreement on burden sharing (e.g. over the allocation of tradable certificates) was likely to prove politically challenging (note the UNFCCC Copenhagen Conference in December 2009).

Public funds or private sector resources? Given the multiplicity of officially supported initiatives (e.g. GEF, etc.), it seems unlikely that governments would be prepared to commit additional public funding to a new “vertical” official fund. But this assumption needs to be tested. An alternative way forward is to persuade governments to put up public funds as “seed” financing to underpin any new initiative. The other issue that needs to be addressed is the willingness of the private corporate sector to contribute to a new initiative. There is considerable evidence that an increasing number of private sector companies now do wish to be seen as part of the biodiversity solution, rather than being regarded as part of the biodiversity problem. But, again the views of participants are invited.

Voluntary or obligatory? This question arises irrespective of whether any new initiative depends on official, or private, funding. There is, for example, a long tradition of **governments** being able to make extra-budgetary, voluntary, contributions to individual international organisations for specific purposes, over and above their assessed mandatory contributions. Views within the **private sector** on this issue are divided: some feel strongly that any new requirements placed on the private sector should be purely voluntary in nature. Others argue that such new requirements should be compulsory so that all competitors benefit from a “level playing field.”

Discussion might usefully focus on the following questions:

1. What is politically feasible and operationally workable with respect to the financial modalities of a gdm?
2. Could a gdm have flexibility with respect to financing modalities so as to undertake what is feasible and workable now and to adapt new modalities at a later date?
3. What are the most promising financial modalities in the short term?

SESSION 8: Modalities and governance of a gdm

Format: Lunchtime discussion

References: Notes from the Bonn workshop: <http://gdm.earthmind.net/2010-01-bonn/>

The aim of this lunch time discussion is to identify what role a gdm might play, and the modalities, and governance structure, which would serve it best.

A governance system, whether it is national, or international, needs to be based on the principles of legitimacy, credibility, and transparency. It needs to be seen to be effective, equitable, and enduring.

The design of any international **green governance** arrangement will depend on the nature of the financing instrument(s) agreed upon by international policy makers. If a Kyoto-like cap and trade system for biodiversity is agreed, then a governance arrangement, like the CDM, would need to be structured to facilitate financial flows for biodiversity through a regulated trading scheme; this implies an arrangement which is predominantly official in nature. On the other hand, if the international community opt for a more flexible approach which allows for a variety of biodiversity contributions, payments on a voluntary basis from the private sector, the governance arrangements are likely to have a much more, inclusive, multi - stakeholder, character: one that brings together governments, civic society, and the corporate sector.

The agreed governance arrangement could, like the GEF, be hosted by a multilateral agency. Or, if there were a willing multinational bank committed to greening the economy, it could perhaps as well be managed by such a private sector bank. Alternatively, it could be hosted by an internationally-respected NGO committed to championing biodiversity (and the development dimension that is likely to be a key feature of any new biodiversity financing initiative). The arrangement would, above all, need to have strong linkages to existing biodiversity and development related financial institutions, such as the GEF and LifeWeb.

If legitimacy requires that any new institutional structure is representative of the key stakeholders, credibility requires that it has the authority to establish transparent processes, and verify compliance effectively. Under its Articles of Association (Terms of Reference), it will need to have the capacity to:

- Establish standards;
- Set evaluation criteria;
- Monitor performance; and
- Sanction non-compliance.

These capabilities will need to be developed in a manner which govern both the behaviour of the suppliers of biodiversity and ecosystem services - who are, potentially, the beneficiaries of any new international financing

instrument - and the demanders - or consumers - who are likely to be the major contributors to any new initiative. This requirement contributes to an assurance that both suppliers, and demanders, are fully committed to the principle that any new arrangement must deliver a net positive biodiversity (and development) impact.

The extent to which the general considerations outlined above apply in practice depends, to a large extent, on what role policy makers see for a gdm. The Bonn Workshop identified three possible roles for the gdm or a combination of some of these roles:

- Clearing House
- Funding Agency
- Broker

A Clearing House implies a fairly limited role for a gdm. It would, somewhat like LifeWeb, simply connect those who wanted to invest in biodiversity - on a voluntary basis - with those seeking support. Its role in setting standards, verifying performance, and so on would be equally limited since such responsibilities are likely to remain at the national level. It could, of course, be vested with some of these powers if that was agreed by COP.

A Funding Agency implies a more robust gdm; one that is entrusted with sound stewardship of the funds it receives, with a consequential responsibility to put in place coherent protocols to guide investment decisions; standards against which eligibility for funding will be judged; and subsequently monitored. And transparent criteria against which performance will be evaluated.

As Broker, the role of the gdm would become more complex. The CDM offers a model of its *modus operandi*. However the gdm is only likely to assume this role if it is decided that funding should be generated by some market-based, trading, scheme.

Participants' views would be welcome; some questions to consider are:

1. What are your views on the models described above? Could a gdm have multiple models?
2. What are your views on possible governance arrangements?
3. If the principle of a multi-stakeholder governance structure would seem appropriate, whatever role is envisaged for a gdm, how might this be set up?

SESSION 9: Emerging conclusions

Format: Roundtable discussion
Reference: Your notes!

Participants will be invited to comment on the main issues discussed during the workshop, and identify conclusions that should be reflected in the Final Report.

Session 1: Biodiversity, TEEB and the GEI
Session 2: Priorities for green development financing
Session 3: The sustainable development dimension of a gdm
Session 4: A gdm, GEF, LifeWeb and CBD financing
Session 5: A gdm, CDM, the 'Green Climate Fund' and REDD plus
Session 6: The principles of a gdm and verification of impacts
Session 7: Mobilising innovative funding through a gdm
Session 8: Modalities and governance of a gdm

SESSION 10: Recommendations and key messages

Format: Roundtable discussion
References: Your notes!

Participants will be invited to comment on a draft of workshop recommendations that will be reflected in the Final Report. It is also hoped that some key public messages can be endorsed.

Bali → **Nairobi** → **Nagoya**
UNEP GC11 SBSTTA14 COP10
WGRI3

Annex 1: The causes of biodiversity loss

Biodiversity loss arises from destruction of or damage to habitats and ecosystems, often as part of human economic activities. Other causes include overexploitation of resources, pollution, and the impact of climate change. The value and socio-economic importance, of biodiversity and ecosystem services are almost never captured in economic and development policies, investment decisions and consumption patterns. At the local level, the full societal cost of degrading biodiversity stocks is rarely borne exclusively by the parties involved. These effects result from the fundamental problem associated with *the failure of markets to deal with externalities*.

Ecosystem services - and the underlying biodiversity - are essentially public goods. As such, those who exploit them rarely pay the true economic value of the resource consumed leading to the inevitable consequence that private economic activity may ignore the wider public interest (for example, the private returns accruing from land conversion may be heavily outweighed by the public benefits lost); or that the quest for short term gain may be detrimental to the sustained supply of benefits that accrue over time (the most glaring example is over-exploitation of fisheries stocks).

The exception to the systematic undervaluation of ecosystem services is where an economic agent's business needs depend directly on biodiversity. Nature-based tourism is the most obvious example, but other commercial sectors, including agriculture and the pharmaceutical industries, have all begun to understand that biodiversity maintenance can reduce costs and improve profitability. Even some fisheries developers have begun to understand the importance of sustained stock management.

Biodiversity conservation implies opportunity costs at the local, and/or national, level. Since much of the world's biodiversity exists in **developing countries**, the onus of preserving biodiversity falls, potentially, to societies least able to bear such costs. It is thus no surprise that the Preamble to the Convention on Biological Diversity (CBD) recognises that developing countries will need assistance in fulfilling their obligations under the Convention.

Indeed, it is the shortcomings of national institutions - both economic and political - to conserve biodiversity and maintain ecosystem services which prompted the adoption of the CBD and the need for "new and additional financial resources"³⁵ to enable developing countries to meet the objectives of the CBD in the context of poverty alleviation and sustainable development. A gdm could potentially generate resources from the private sector to support these obligations and in so doing help to reduce biodiversity loss.

³⁵ From the CBD Article 20 on Financial Resources; see: <http://www.cbd.int/convention/articles.shtml?a=cbd-20>.

Annex 2: Possible financial modalities for a gdm

As mentioned in the main paper there has been considerable debate, in recent years, about the features, and modalities, of a gdm to address biodiversity loss. The wide range of options for generating financial resources for a gdm can broadly be divided into two generic types. Those that essentially depend on a **direct transfer of resources**, whether it be from the public, or private, sector; and those where any such transfer is contingent upon the creation, and success, of some form of **market-place in which trade usually takes place** (cf carbon markets).

Direct transfer schemes

1. Taxation systems

It has been suggested that governments, acting alone on their own initiative, or as a result of an international agreement, could levy a tax on a good or service to generate funds for biodiversity conservation. The list of possible targets is wide, but would probably need to exclude those goods, or services, already subject to a form of VAT. Candidates for such taxation include airlines, GMOs, advertising, armaments, and the “Tobin” tax on financial transactions.

The system would be relatively easy to administer, and the proceeds could be directed towards international payments for ecosystem services (IPES). However, industrialised governments may be unwilling to levy taxes for an international cause (on top of increasing disbursements of Overseas Development Assistance) at a time when they are already under enormous pressure to cut fiscal deficits.

2. (Tax) incentive schemes

These might be more attractive to governments, in that they essentially provide vehicles through which the private sector can be incentivised to voluntarily contribute to funding biodiversity protection through specific investment funds. Many such green investment schemes are directed, primarily, to climate change certificate trading. However the Netherlands government has pioneered the use of this vehicle to promote investment, specifically, in green projects: the creation of the “**Green Funds Scheme**”, which offers tax concessions to those who invest in the Fund³⁶

3. Biodiversity offsets with international support

There are a multitude of national schemes, which seek to conserve biodiversity by requiring developers to ‘offset’ the damage they cause to

³⁶ See: http://www.senternovem.nl/greenfundsscheme/finance/tax_benefits.asp

ecosystems, through economic exploitation of biodiverse-rich habitats. A gdm could support such schemes by acting as an international clearing house, exercising a range of roles at graduated levels of ambition such as:

- Serving as a register of national schemes in order to provide information to potential developers on offset in individual states;
- Providing a source of start-up funding, and technical advice, to support new national offset schemes in developing countries; and
- Acting as a clearing house for the international recognition of offset credits: this would require agreement on standards and verification methods, and, as such, would be more complex and more difficult to agree: and, of course, this would go beyond a simple transfer system, into one based on a market.

A variant of this scheme could be a concept known as **Offset Plus**. This would not seek to create an international market place to “trade” offsets. Rather it would reinforce the principle that offsets are most effective if they occur as near to the location of the damaged habitat as possible: i.e. at regional, or possibly, national level. But, since it is often impossible to offset biodiversity loss completely, an Offset Plus transaction would allow a private sector company to contribute - in addition to any national offset requirements it had to meet - to an **international fund supporting biodiversity restoration**.

4. Greening commodity imports

Another vehicle to address biodiversity degradation resulting from economic exploitation is the concept of ‘greening’ imports, particularly of those commodities whose biodiversity footprint is regarded as high (e.g. timber, palm oil, soy, beef, and fish). It might, for example be agreed that imports which were not sourced from “sustainable” sources would face a higher tariff, the proceeds of which would be directed to supporting such producers to upgrade their supply chains in order to meet higher standards.

Alternatively, importers of sustainably- produced products in developed countries would acquire ‘green certificates,’ the supply of which would come from those who met agreed certified standards of sustainable production. (Imports already covered by recognised standards, e.g. FSC for timber, would probably be exempt).the idea here is that responsible importers would be willing - or required - to pay (compensate) those suppliers who produced responsibly

A more ambitious variant of the scheme would allow certificates to be earned by a wide range of project-based conservation activities in developing countries. This, however, immediately confronts the continuing challenge of agreeing a set of metrics to value the relative impacts of a wide range of interventions across different locations and ecosystem types.

Such a system could be made obligatory if developed countries were to accept that a proportion of their imports of the prescribed products had to be sourced through the acquisition of Certificates. However, World Trade Organisation rules, in particular the Most-favoured Nation (MFN) principle, almost certainly preclude this arrangement being introduced on a legally-binding basis. No such constraints, however, would apply if the system was operated on a voluntary basis.

Schemes based on market mechanisms

5. Biodiversity cap and trade

Inspired by the rapid growth in the carbon markets, it is argued that a similar model could be applied to induce biodiversity conservation. The system is premised on an agreed aggregate level of global conservation, with states accepting responsibility for individual quotas of that aggregate target: such burden sharing arrangements would have to be agreed, but the presumption is that obligations (represented by tradable Certificates) are agreed such that developed countries are initially in deficit (given that they have already converted the majority of their natural habitat). Countries, primarily developing economies, with large areas of unconverted land would be in credit, and would thus have surpluses of Certificates to sell.³⁷ The trading mechanism, overseen by a gdm, would facilitate the purchase of Certificates by those with shortages of protected land to those with surplus land to protect, thus generating a flow of funding from developed to developing regions. This system has obvious synergies with, and might complement, existing climate change initiatives.

This arrangement has a number of attractions: if it were agreed, it has the potential to generate significant, on-going, financial transfers for biodiversity protection. In an ideal world, it should promote conservation where the opportunity costs are lowest. The development of “exchange rates” between different types of biodiversity credits/allowances would promote the protection of the most highly-prized components of biodiversity.

However, the challenges inherent in securing agreement on the specific *modus operandi* of this system are very significant. The success of the carbon trade market stems, in part, from the relative homogeneity of the commodity: the volume of carbon emissions, and their reduction or capture, is amenable to reasonably simple measurement. By contrast, the relative value of different types of biodiversity conservation is subject to considerable conjecture, and often intense debate. Thus, even if the political will exists to enable governments to agree to the adoption of a cap and trade mechanism to address biodiversity concerns, agreement on precise exchange rates

³⁷ A possible drawback of this scheme is that a number of developing economies may arguably be in deficit in terms of their biodiversity footprint.

defining the relative importance of individual species, or ecosystems (the ‘metrics’ problem), could prove highly elusive.

Furthermore, since the responsibility for obligations (and the need to trade credits/allowances) rests, primarily, with governments, it is by no means guaranteed that the resources transferred to biodiversity suppliers will truly be ‘new and additional.’

6. Biodiversity footprint taxation

Under this proposal, governments would agree on a principle of *biodiversity footprint taxation*. The agreed size of the footprint of developed countries would impose a commitment to transfer resources to invest in conservation, and/or reduce their footprint, e.g. through the import of ‘certified’ commodities.

An important element of this system is the close linkage between commodity consumption and biodiversity loss. Since consumption will inevitably continue the arrangement has potential to ensure a continuous financing mechanism. However, at a time of global economic recession, the prospects of persuading governments to accept additional fiscal obligations may be limited. And, like the *greening of imports* idea, some of the features of this mechanism may be incompatible with WTO rules.

Also this mechanism, like the one above, assumes that governments will take the lead in mobilising resources to conserve biodiversity, even if, ultimately, the costs of resource mobilisation are transferred to the private sector and consumers in the form of taxes or charges. This is a rational approach if one accepts that the biodiversity challenge reflects a ‘market failure’ which governments are often best placed to correct. However, a market-based gdm may as well be able to provide new opportunities for financing biodiversity beyond in addition to traditional tax and spend approaches.

Notes

These pages are provided for your workshop notes.

Towards a mechanism for green development

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