



Towards a business case for the GDM

A discussion paper on a pilot phase of the Green Development Mechanism¹

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¹ The purpose of this discussion paper is to stimulate discussion and debate on the development of a GDM from a private sector perspective. (Draft as of 25 November 2009)

“All that is necessary for evil to triumph is for good men to do nothing.”
Edmund Burke

1. Why is biodiversity important?

Biodiversity is “life on earth”. It is vital for human life and prosperity: all economies, and all businesses, depend, directly, or indirectly, on biodiversity and its component resources. A growing body of research provides strong evidence that biological diversity: increases economic productivity in a range of sectors; enhances the direct non-use benefits of nature; reduces ecological and health risks; and reduces resilience in the face of shocks, not least climatic, the frequency of which are increasing. These considerations are not only of direct importance for today’s global population, but also for future generations.

Yet there is alarming evidence of biodiversity degradation, and loss. 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 Millennium Ecosystem Assessment (2002) 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.²

And the evidence suggests that current efforts to conserve biodiversity are slowing, rather than reversing, the global erosion of biodiversity. The IUCN Red List 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. Biodiversity is not evenly spread throughout the world. 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. The majority of the world’s remaining biodiversity is thus located in developing countries, a factor which has important policy implications.³

² For more information on the Millennium Ecosystem Assessment, see:
<http://www.maweb.org/>.

³ The IUCN Red List is another excellent source of information on the current status of biodiversity. See: <http://www.iucnredlist.org/>.

Biodiversity loss gives rise to losses in ecosystem functioning and to reductions in the resilience of ecosystems. Biodiversity is also important in providing direct economic benefits to individual communities. For example, diverse forests supply genetic information which is important to both the agriculture and pharmaceutical industries. Tourism is an industry which, in certain locations, is highly dependent on biodiversity sustainability.

Importantly, biodiversity loss impacts at the local, national and global level. The economic value of biodiversity at the **local** level may be small in proportion to global values, but may be extremely important to local populations, often amongst the poorest, dependent on biodiversity as a source of food and other vital consumables.

At the **national** level, biodiversity loss may impact, directly and indirectly, on sustainable water management, land stewardship, and the food chain. Of course, some adverse consequences of biodiversity damage may be amenable to amelioration through regulatory intervention or through a market-based approach.

At the **global** level, benefits of biodiversity include the value of genetic information, contributions to strategies to reduce global warming, and other important non-use values (and *existence values*), such as the preservation of individual species. In addition, the maintenance of the resilience of ecosystem represents a global public good that is fundamental to life.

2. Causes of biodiversity loss

Biodiversity loss arises from destruction of or damage to, habitats and ecosystems, often to satisfy human economic activities. Other causes include overexploitation, pollution, and the impact of climate change. The value and socio-economic importance, of biodiversity and ecosystem services are often not captured in economic and development policies, investment decisions and consumption patterns. The exception 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 fisheries, agriculture and the pharmaceutical industries, have all realised that biodiversity can reduce costs and improve profitability.

But, invariably, the full societal cost of reducing biodiversity is not borne exclusively by the parties involved. This gives rise to the fundamental problem associated with **externalities**. Biodiversity is a global public good, while biodiversity conservation has opportunity costs at the local, or national, level. Since much of the world's biodiversity exists in **developing countries**, the onus of preserving biodiversity fails, potentially, to societies least able to bear the 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.

3. Existing efforts to combat biodiversity loss

There is a very wide spectrum of activities, and initiatives, designed to prevent, or retard, biodiversity loss. At the **national** level, these typically include the creation of Protected Areas; the requirement to “offset” the destruction of biodiverse-rich habitats with re-provisioning elsewhere; and a host of other legal and voluntary instruments to conserve nature. These efforts often represent a partnership between the state, the corporate sector, and civil society groups. There are, equally, numerous interventions at **regional** level which seek to address cross- border biodiversity concerns.

At the **international** level, both the **Global Environmental Facility (GEF)** and the Kyoto Protocol’s **Clean Development Mechanism (CDM)** make important contributions towards limiting biodiversity loss. But the impact of these schemes is constrained by the fact that financial support may be time-limited in nature, giving rise to issues of sustainability.

Notwithstanding these efforts, there is overwhelming evidence more needs to be done if the present rate of biodiversity loss is to be reversed. In particular, three issues need to be addressed:

- **Coverage:** existing strategies are far from exhaustive in their application - marine conservation is a prime example;
- **Resources:** even in developed economies, research suggests that many official policies and activities are under-funded. In developing countries the funding gap is acute;
- **The development dimension:** many current strategies focus on restrictive measures to achieve conservation. While this is understandable, such policies may fail to secure the full ownership of local communities directly affected.

Thus there is a growing consensus in favour of a **green development mechanism (GDM)** which can generate sufficient long-term resource streams to induce biodiversity owners to forego exploitation of biodiversity-rich habitats in favour of long-term conservation.

4. Towards a GDM

There has been considerable debate, in recent years, about the features, and modalities, of such a global mechanism to address biodiversity loss. The models most commonly advocated can be summarised as follows:⁴

⁴ These models emerged from a consultative process which included an experts meeting in February 2009 in Amsterdam. See: <http://gdm.earthmind.net>.

4.1 Offsets with international support

There is a multitude of national schemes which seek to conserve biodiversity by requiring developers to “offset” the damage caused to ecosystems through economic exploitation of biodiverse-rich habitats. Financing for biodiversity conservation within this mechanism comes from those who wish to exploit land in restricted zones: those wishing to convert such land must pay for the relaxation of development restrictions by purchasing offset credits generated by those who have invested in conservation programmes in other locations. The GDM could support such schemes by acting as an international clearing house, exercising a range of roles at graduated levels of ambition:

- serving as a register of national schemes in order to provide information to potential developers on offset/credit markets 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 trade in offset credits: this would require agreement on standards and verification methods, and, as such, would be more complex and more difficult to agree.

4.2 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, meat, fisheries, etc). Importers of such 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 be exempt).

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 immediately confronts the intractable challenge of agreeing a set of metrics to value the relative impacts of a wide range of interventions across different locations and ecosystem types.

This 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 MFN principle, almost certainly preclude this arrangement being introduced on a legally-binding basis. No such constraints would apply if the system was operated on a voluntary basis. And the philosophy underpinning this concept is certainly worth incorporating into any new global mechanism.

4.3 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 sell⁵. The trading mechanism, overseen by the 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 certificates 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 States to agree to the adoption of a *cap and trade* mechanism to address biodiversity concerns, agreement on precise *exchange rates* 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 certificates) rests, primarily, with governments, it is by no means guaranteed that the resources transferred to biodiversity suppliers will truly be “new and additional”.

⁵ A drawback of this scheme is that a number of emerging economies may arguably be in deficit in terms of their biodiversity footprint.

4.4 Biodiversity footprint taxation

Under this proposal, governments would agree the 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 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 States 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.

Several of the mechanisms discussed above are premised on the implicit assumption that the state will take the lead in mobilising resources to conserve biodiversity, even if, ultimately, the costs involved are transferred to the private sector and consumers. 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, an exclusive focus on the role of national governments risks overlooking the dynamic contribution that the corporate sector, and consumers, may be willing to make to preserve biodiversity.

5. Mobilising the private sector

The private sector has, for many years, been active in biodiversity conservation. There have been 3 key drivers:

- **The profit motive:** ecotourism is perhaps the clearest example, but other industries e.g. the pharmaceutical, agriculture and fisheries, have all understood the importance of biodiversity conservation;
- **Corporate social responsibility:** pressure from shareholders, and other key stakeholders, in particular, governments and local communities, has induced many companies to engage constructively on biodiversity conservation issues; and
- **Consumer demand:** growing public awareness, and concern, about environmental issues is also driving the corporate sector towards a more considered approach to supply chains. Indeed many enterprises have actively pursued eco-labelling as a means of attracting new customers.

These influences on corporate behaviour will, almost certainly, continue, and intensify, in the future. And enlightened corporate players are likely to view

them as opportunities rather than threats: and thus welcome an internationally recognised scheme which gives them a transparent system in which they can demonstrate their commitment to the biodiversity agenda.

Such a scheme could both recognise existing best practice, and reward companies who were prepared to contribute financial resources towards funding new initiatives, independent of the firm's own supply chain. Where a supplier, or retailer, could demonstrate that a particular product had been produced to an agreed benchmark of biodiversity sustainability, s/he would be entitled to labelTM that product accordingly. In cases where a company donates untied finance, such contributions would allow the company to enjoy the use of a special emblem/logoTM for public relations purposes.

In this respect, the GDM could fulfil 3 key functions:

- Act as depository for contributions, and award funding: this might take the form of start-up grants in support of loan/equity funding from elsewhere or investments in biodiversity business or support to the management of protected areas and sustainable landscapes;
- Co-ordinate the setting of best practice standards to serve as benchmarks against which biodiversity responsibility is to be measured: crucially at this stage, these standards will not be universal, but specific to the specific field, or activity involved; and
- Verify, and enforce, standards: through the issue, or withdrawal of permissions to use product labels and the logo.

6. The possibility of a pilot phase

In an ideal world with sufficient political will backed up by robust methodologies for monitoring and evaluating biodiversity impacts and biodiversity performance, we probably should be advocating an international agreement to establish a CDM-like cap and trade regulatory framework for biodiversity which might also include an international biodiversity footprint taxation scheme. This would enable a global market for biodiversity credits and ensure international funding for critical ecosystem services.

However, it is unlikely that there is sufficient political will in the short term to set up such a trading mechanism for biodiversity. Further, there remains much work ahead of us to develop the capacity to quantify biodiversity impacts and performance measurement necessary for a trading scheme. Under the CDM, and the emerging voluntary carbon markets, it is now possible to trade tonnes of carbon, but in the near term we are unlikely to be able to establish markets to trade hectares of nature.

The response to these political and scientific challenges should not tempt us to do nothing, but rather we should consider what could be accomplished in the short term to mobilise resources to reduce the loss the biodiversity and, in so doing, to learn by experience. Specifically, between now and the 10th Conference of the Parties of the Convention on Biological Diversity (Nagoya, Japan, October 2010), can we design a pilot phase of the GDM which will be acceptable to key stakeholders - including the private sector and developing countries - and ultimately be endorsed by the Parties at COP10?

Such a pilot phase would need to secure resources primarily from the private sector: Western governments are reluctant to provide any new and additional financial resources, not least given fiscal pressures resulting from the current global economic downturn. But if resources are to come - voluntarily in a pilot phase - from the private sector, the GDM must be structured in such a way that it motivates private actors to contribute to the GDM.

In short, is it possible to develop a structure for a pilot GDM which would gain the backing of both the private sector and States (as Parties to the CBD), particularly with respect to capitalising the mechanism? What follows is preliminary thinking about how a GDM, on a pilot basis, might be constructed as an international voluntary funding mechanism for biodiversity conservation.

7. Spending the money

It is invariably easier to think about how to spend money than how to make it. So how might a GDM spend any money it receives?

Simply put, the “G” requires that money spent has a Green - i.e. biodiversity - impact. The “D” requires that this spending also has a Development impact. The “M” reflects the reality that the governance structure would, almost certainly, need to be Multi-stakeholder in nature.

Regarding biodiversity impacts, the GDM could fund projects which have a biodiversity management strategy and adopt top-class processes and practices to ensure a net positive biodiversity impact. In the context of the CBD, this would require that the project addresses, as appropriate, the three biodiversity objectives of the Convention.

Regarding the developmental impacts, the GDM should only fund projects whose biodiversity and business plans also have a tangible development impact reflecting the spirit of the Convention which explicitly recognizes “that economic and social development and poverty eradication are the first and overriding priorities of developing countries.” This means that the sustainable uses of biological resources, and the equitable sharing of the economic and social benefits arising out of these uses in a project’s biodiversity plan, should have clear development impacts.

By way of comparison, the CDM does not fund projects, but rather certifies projects funded under a regulated market that have clear carbon impacts - measurable in tonnes of carbon reduction or sequestration - and associated development impacts. Because carbon is commoditised under the CDM it can be traded. Because biodiversity commitments cannot be commoditised (at least not yet), under a pilot phase of the GDM it is not trade, but rather “responsibility and commitment” that would serve as the basis for a funding mechanism.

Because the GDM also explicitly links biodiversity conservation and development, and is not dependant on the trading of carbon, the GDM may provide substantive new opportunities, through the sustainable and equitable use of biological resources for development, which the CDM is unable to do. This is vital for many of the poorer countries, and especially their rural communities.

Finally, should GDM-eligible projects be for-profit ventures, not-for-profit initiatives, or both? This may depend, as discussed below, on the source of funds for the GDM. But the overriding principle should surely be that any initiative is potentially eligible, as long as it generates net positive biodiversity and development impacts.

For-profit GDM projects are likely to include small and medium biodiversity businesses, operating in rural landscapes of developing countries such as ecotourism and organic/sustainable farming. Not-for-profit GDM projects might be Protected Areas, or landscape projects which explicitly address sustainable livelihoods in rural communities.

Irrespectively of whether a project is for-profit or not-for-profit, it would need to be “top-class” with respect to the use of biodiversity and development impact assessments, management plans, measurement methodologies, monitoring procedures and reporting practices. In short, the GDM would aim to fund projects which deliver net biodiversity and development impacts, and monitor and report on their efforts to do so.

8. Getting the money

If the GDM is established, on a pilot basis, as an international voluntary funding mechanism, who would fund it, why would they fund it, and how would they fund it?

The starting point is the desire of a contributor/investor to demonstrate as great a commitment to biodiversity responsibility as one would expect from a recipient of GDM funding. So funds from a GDM could be generated from companies, or more directly, from specific projects, which indicate a commitment to deliver net biodiversity and development impacts and who are prepared to monitor and report on their efforts to do so. There is considerable evidence that many companies are already ready to do this. But,

at present they face two disincentives: either they get little formal recognition for their efforts; or they are confronted with such a wide choice of different schemes that they might buy into, with the result that the transaction costs of giving support become prohibitive. The creation of the GDM could resolve the recognition problem, without diminishing the role of individual “greening” standards: because, in verification terms, the GDM would look to existing best practice in each field - e.g. by commodity sector, habitat conservation, etc.

The company - or project - whether a private venture such as an LNG facility, or a public venture such as a large dam - would probably have to be large scale and operating in a sensitive landscape in order to consider biodiversity a material risk requiring addressing through a biodiversity assessment, strategy and management plan. Importantly, this would imply that, unlike the CDM which only offsets emissions from developed countries, the GDM could potentially also ‘offset’ the biodiversity impacts of projects in developing countries. Thus the GDM would facilitate both south-south financing as well as north-south financing.

The appeal to the private sector of this approach is that, perhaps for the first time, responsible biodiversity strategies will be recognised and rewarded. If a project, or a company, is accepted as GDM-eligible, the GDM would in effect be offering a 3rd party independent verification of its biodiversity policies and practices. This is important in both reputational - and commercial - terms given the increasingly environmental concerns amongst consumers in many parts of the world.

The GDM would, in practical terms, verify or perhaps even certify that a contributing project or company is biodiversity responsible. Importantly, in so doing, the GDM would also provide a way in which this project or company would “offset” its residual biodiversity impact by contributing to a mechanism which invests in reducing biodiversity loss through restoration and sustainable use projects elsewhere. Because of our limited understanding of the resilience of ecological processes and wild species, there will almost always be a risk that a project or firm’s residual biodiversity impact is positive and hence there will be an incentive to fund an “offset” through the GDM.

Thus, as a biodiversity responsibility mechanism, the GDM would motivate projects and companies to contribute funds in two ways: first, the GDM would verify biodiversity responsibility and second, the GDM would enable an “offset” of residual biodiversity impacts. Critically during the pilot phase, this “offset” would be indirect as the source of funds for the GDM would need to be delinked from the use of funds. However, as the GDM learns by doing, the pilot phase could build capacity to link international payments to actual biodiversity performance on the part of both the contributors and the recipients of funds which might eventually lead to the establishment of a biodiversity cap and trade scheme.

Finally, how would a project or company fund the GDM? Should the funding arrangements vary along the lifecycle? And what would be the basis for determining the level of funding?

First, clearly individual stages of the life of a project or company have different types of biodiversity risk. They also have varying funding modalities which affect both the volume and flows of cash. In the construction phase, there will be significant biodiversity risks and impacts, as well as significant cash from the capital raised to develop the project. During the operations phase, both biodiversity risks and impacts will change - e.g. they may be longer term threats to ecosystems, rather than shorter term conversions of natural landscapes. And during the operations phase, cash will be generated from recurrent revenues rather than initial capital injections. Finally, during the decommissioning phase, there may be a new set of biodiversity risks and financing arrangements.

A challenge facing the development of the GDM is to establish the modalities for projects or companies to contribute across their lifecycles. These, of course, need to be linked to the verification of biodiversity responsibility along the lifecycle. Guidance from the private sector will be especially welcome on this topic.

The second issue is to determine the basis for establishing the level of funding. At least three options - based on the principles of public finance - are available: all should pay equally, all should pay based on the benefits received, and all should pay based on the ability to pay.

The easiest option to administer would be a "head tax" payment i.e. the same for all contributors. This would resemble a membership fee to join a "GDM club". But this payment would be delinked from biodiversity impact or performance, and it would also have no reference to the scale of operations and cash flow. Hence, under this approach, the only way to increase funding to the GDM would be to increase the number of contributors.

The ideal option would be a "benefits principle tax", in which the contributors would pay on the basis of benefits received. However, as previously discussed, without internationally accepted metrics for biodiversity impacts and performance, it is not yet possible to quantify the "offsets" which a GDM could broker. Of course, as our capacity to quantify biodiversity impacts and performance evolves, the GDM could then well evolve into supporting biodiversity offset trades which, through the market, would determine the prices for these benefits.

The most practical option for a pilot phase might be to base the level of contribution on the ability to pay. GDM-approved projects, and companies, would contribute a percentage of their capital investment, or post-tax profits to the GDM. This option would enable the GDM to raise more funds from large scale projects - which probably are more likely to have residual biodiversity

impacts - and also enable smaller projects to participate by contributing smaller amounts.

Guidance from the private sector on the basis for establishing the level of funding would also be welcome. Further, if an ability-to-pay approach is adopted, then it will also be important to balance the percentage of income to be contributed at a level which would make the GDM a meaningful international voluntary funding mechanism and, at the same time, motivate a significant number of projects and companies to seek GDM verification - and recognition - of their biodiversity responsibility.

9. Managing the money

Setting up the GDM as a funding mechanism along the lines outlined would require establishing an internationally-recognised financial structure to manage the funds. The international approval could come from the support of the Parties to the CBD at their 10th meeting in October 2010 in Nagoya, Japan. Thus, over coming months the GDM 2010 Initiative will engage in policy dialogues and stakeholder consultations to explore the opportunities to secure support from the worldwide corporate community, and from State Parties to the CBD.

How the GDM will be governed, and where it will be located, are also material to this process of dialogue and consultation. It is clear that the GDM will need to have the capacity to assess the biodiversity responsibility of contributors; and the performance of recipients of funds. Thus the GDM will need to combine biodiversity acumen with banking acumen.

The GDM, like the GEF, could be hosted by a multilateral agency. Or, if there were a willing multinational bank committed to greening the economy, it could be managed by such a private sector bank. Or it could be hosted by an internationally respected non-governmental conservation organisation, committed to maintaining the GDM's biodiversity integrity. Alternatively, it could be hosted by an international development organisation, dedicated to maintaining the GDM's development credentials. Whatever its institutional status, it will need a multi-stakeholder governance structure reflecting its private sector, biodiversity, development, and political dimensions.

10. Learning by doing

The overriding rationale for establishing a pilot phase of the GDM as an international voluntary funding mechanism is that it will enable the global community to learn by doing through encouraging the private sector to show leadership - in a real spirit of real partnership - in new market-oriented schemes to conserve biodiversity.