Ensuring biodiversity in a sustainable future: lessons from evaluations

Briefing Note
October 13, 2010

About the Evaluation Cooperation Group

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Introduction

1. The Global Biodiversity Outlook 3, published in May 2010, concludes that the 2010 biodiversity target to significantly reduce biodiversity loss has not been met. It provides sobering numbers on the on-going mass extinction, mostly due to loss of habitat due to encroaching human populations. New threats have appeared: climate change may lead to new waves of extinction, for example in non-migratory species that cannot escape new conditions. Persistent organic pollutants cause additional problems, for example through weakening reproductive cycles. Global trade and migration has also led to a new threat to environmental health: invasive species increasingly endanger the survival of indigenous and endemic species. These issues point to the increasing inter-connectedness of the current global environmental problems, as well as the strong linkage to development and poverty alleviation issues, and the huge economic losses associated with deteriorating ecosystems.

2. This brief note aims to inform the discussions on how to ensure biological diversity, given its vital role in providing us with a safe and enriching environment, in which poverty and disease can be reduced. The Evaluation Cooperation Group (ECG) of the International Financial Institutions (IFIs), together with others (the evaluation offices of the Global Environment Facility (GEF), UNDP and FAO) has drawn lessons from independent evaluations on what may be done to improve the efforts of the global community, and first and foremost the efforts of the International Financial Institutions and the United Nations.

The International Context

3. Much of the downward spiral of biodiversity loss is due to market failure: the failure of markets to price the potential loss of a species, or to price the dangers and opportunities of climate change, but also market forces that increase the possibility of extinction, such as over-fishing in the world’s oceans, which in economic terms has been identified as a new example of the tragedy of the commons. These market failures lead to over-exploitation of the environment, because the negative externalities are not incorporated in pricing mechanisms, and they lead to inaction to improve this situation, because positive externalities that would emerge from improvements are to the benefit of everyone and cannot easily be captured by market forces. Where markets have been regulated or prohibited, illegal trade has become a danger, as has recently been highlighted when discussing the future of tigers in Asia.

4. With the exception of increased funding at the GEF for biodiversity issues, funding in other IFIs seems to have gone down. For example, indications are that numbers of projects directly targeting biodiversity issues have declined in the World Bank and some other IFIs, as well as in donor funding for the broader biodiversity agenda, perhaps due to competing demands and an increased emphasis on climate change. On the positive side, the World Bank has prioritized recent initiatives such as the Forest Carbon Partnership facility and the Global Tiger Initiative that aim to bring attention and funding to ecosystem and species conservation. The Tiger Initiative, strongly supported by the World Bank President, is broadening up as an alliance of governments, IFIs and civil society and could signal a return of biodiversity priorities. Similar initiatives are now taken in other IFIs: for example, the African Development Bank aims to mobilize substantial finance through the Africa Green Fund to address the hard-hitting effects of climate change in the region.

ECG Briefing Note, October 13, 2010  Ensuring biodiversity in a sustainable future: lessons from evaluations 1
Lessons on Protected Areas
5. More than 10 percent of the Earth's surface was targeted to become a protected area for the conservation and sustainable use of ecosystems, genetic resources and species. This target has been achieved: currently 12 percent of the surface of the Earth is protected. Governments have been willing to designate parts of their territories as protected area. They have been supported in this effort through international cooperation, mainly through the Global Environment Facility, with strong involvement of the International Financial Institutions and the UN. Furthermore, international non-governmental organizations and bilateral donors have played crucial roles in providing additional support.

6. However, given the continuation of species losses outside protected areas, this investment in 12 percent of the Earth’s surface does not stem the tide of overall biodiversity loss. The 12 percent surface currently being protected is distributed unevenly across the world’s ecological regions and does not recognize crucial differences between terrestrial and aquatic ecosystems. In general marine and inland water systems lack sufficient protection, although improvements can be noted.

7. Evaluations find that protected areas in tropical forests are effective in reducing deforestation and thus biodiversity loss. Protected areas that allow sustainable use by locals are more effective than areas that do not allow this. Rigorous quasi-experimental studies in Thailand and Costa Rica have shown that local communities have benefitted from improved natural resources management and that incomes have grown near protected areas. They also show that income inequality has increased in communities, which means that not everybody is benefitting to the same degree. Case studies in Africa, Asia and Latin America confirm this finding but also point to additional problems for indigenous people to profit from nature conservation. Where indigenous people were included, protected areas reduced deforestation rates by two percentage points per year.

Country Level Lessons
8. Successful approaches to improve the health of ecosystems and support biodiversity are shown to be rooted in governmental action: either in regulating markets, or ensuring safeguards in investments, or in preventing illegal trade in or over-exploitation of natural resources. Governments create enabling environments in which other actors, including local communities and the private sector, can improve their interaction with the environment to create sustainable development. Following up on the obligations of the Convention for Biological Diversity many countries have shown progress toward incorporating biodiversity concerns in their national policies, priorities and frameworks.

9. However, creating an enabling environment is not sufficient in itself. Although there is increasing knowledge on what works and what doesn’t, there is still more insight to be gained on how local communities could improve their livelihoods in the short run whilst securing the longer term security and well-being that a healthy environment will bring them. For this reason, experimentation and demonstration continue to demand attention, for example on systems of payments for environmental services, on creating markets for carbon sequestration, and on community management of natural resources. Once successful approaches have been identified – and evaluative evidence of these
successes can be found in all continents – these can be up-scaled to national implementation, investment on a larger scale and permanent and sustainable market changes.

10. **Payments for Environmental Service** programs that target priority conservation areas can provide a more durable platform to induce biodiversity-friendly land management. The principle is that those who benefit from environmental services should pay for them, and those who generate these services should be compensated. Large programs have demonstrated the feasibility of the approach. However, these programs were found to be disproportionately targeted on lands with little risk of deforestation. The effects of payment schemes have also been tested on the adoption of conservation practices in the agricultural setting, in particular on cattle farms, in Colombia, Costa Rica, and Nicaragua.

11. **Successful designs** of interventions included recognition of the long time horizon that is needed to address the health of ecosystems and securing continued biodiversity. Typically interventions are set up for five years or less, whereas restoring the health of an ecosystem can take up to two decades or longer. Interventions that ensured local ownership, continued government support, and ongoing funding after project closure managed to ensure continued progress toward impact after the intervention ended, as is shown in the Cape Floral region in South Africa. Information, insight and knowledge of what is happening are also critical. The three main elements can be summed up as follows:

   a) **Stakeholder ownership and support.** To carry forward project results after completion, local stakeholders and communities must have ownership of the process.

   b) **Effective and sustainable financial mechanisms.** These include a range of approaches, such as trust funds, payments for maintaining services, and markets for certified products.

   c) **Adequate information flows.** These include research, inventories and baselines, monitoring and evaluation, and public communications programs. Effective information sharing also contributes to building awareness and disseminating experiences.

**The Need for Mainstreaming**

12. Successful efforts at improving management of natural resources have often focused on protected areas. The challenge is to mainstream biodiversity in economic development and poverty alleviation policies, programs and interventions. This mainstreaming is difficult because of continued perceptions that economic development and poverty alleviation need to precede environmental protection, or that environmental protection would be detrimental to economic development and poverty alleviation. Evaluative evidence and research increasingly show that a healthy natural resource base must be maintained to sustain the gains in development and poverty alleviation. The major challenge in mainstreaming biodiversity is to identify win-win situations, where sustainable economic and social development is based on sound management of ecosystems while ensuring continued biodiversity.

13. However, in many IFIs and UN agencies and programs mainstreaming is currently restricted to “do no harm” efforts through safeguarding and compliance policies. Where biodiversity issues have been identified in project design, these safeguarding policies have often led to changes in design that have led to positive outcomes for biodiversity. This will not result in the necessary investments in win-win
possibilities. Improved monitoring of biodiversity impacts could help to better make the case. Evaluations find that most IFIs and UN agencies continue to depend on the GEF for funding of their biodiversity interventions. Mainstreaming requires them to ensure that their own funds also become available for improving the health of ecosystems and for biodiversity conservation.

**Toward Better Results**

14. What makes sustainable management of biodiversity difficult is the ever changing nature of any given set of **environmental, sociopolitical, and economic circumstances** in a geographic area. Many interventions fail to take these into account and do not lead to further progress toward impact. The “Management Effectiveness Tracking Tool” as adopted by the GEF, the World Bank and WWF can help governments and agencies to better identify these circumstances and address them.

15. **Complex issues may benefit from a programmatic approach.** A phased approach can be designed to build capacity, test approaches, and reduce risk. The design should consider the sequencing of interventions. Institutional, legal, and governance reform is a complex and long term process. A realistic timetable for undertaking institutional reforms, resolving constraints, and changing policy and legal frameworks should be adopted, whilst recognizing the urgency of the issues to be solved.

16. **Education and awareness campaigns are important to gain support for project activities and minimize conflicts with vested interest groups.** Transparency and pro-active communication of intended project objectives and activities is essential to gaining support for government plans and strategies. For biodiversity projects involving many diverse stakeholders, the need to consult with the public is especially important.

**Conclusion**

17. There is evaluative evidence that **efforts and interventions** to sustain biodiversity are **working and do have positive impacts** on ecosystems, genetic resources and species. Yet the downward spiral continues, because the interventions do not reach the scale which would change the overall trend. This is not just an issue of **insufficient funding**, but also one of **compliance** with existing laws and regulations, and of mainstreaming biodiversity issues in development and poverty alleviation. Furthermore, **market solutions** need to be found which would enable the private sector to contribute toward improving biodiversity and the health of ecosystems without suffering too heavy an economic price for this – and **local communities** need to be involved in the sustainable management of their environments.

18. The Evaluation Cooperation Group argues for a **renewed emphasis on and clear support for biodiversity.** The main lesson from many evaluations is that neither the International Financial Institutions nor the UN agencies have woken up to the urgency of the situation, and they have not integrated biodiversity and environmental issues into their strategies and implementation. This situation must be turned around quickly through **scaling up** of positive examples of biodiversity conservation and **mainstreaming** conservation and sustainable use of ecosystems, genetic resources and species.