Achieving the Goals of the Convention on Biological Diversity: National Biodiversity Strategies and Action Plans

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The Convention on Biological Diversity

In 2012, the Convention on Biological Diversity (CBD) will celebrate the twentieth year since its provisions were agreed on and since the treaty was opened for signature at the 1992 Earth Summit in Rio de Janeiro. The CBD entered into force in 1993 and has 193 Contracting Parties now (192 countries and the European Union). Unlike previous biodiversity-related international treaties focused on specific species (e.g., migratory or threatened) or ecosystems (e.g., transboundary or regional), the CBD represented a new generation of environmental treaties that acknowledge that their objectives can only be met by concerted global efforts.

The individual efforts of a country will not by themselves be capable of reducing the loss of biological diversity at a global level—something that, if is to be achieved, can only come through the concerted efforts of all countries. However, each country's biological diversity is different, as are its political, economic, and social conditions. How a country contributes to meeting the objectives of the CBD will thus depend on effective national implementation actions designed in the light of its national circumstances and its scientific, administrative, and executive capabilities. The CBD is a framework to guide the development and implementation of such national strategies to achieve its three overall objectives: the conservation of biological diversity, the sustainable use of the components of biodiversity, and the fair and equitable sharing of the benefits arising from the utilisation of genetic resources.

The majority of the provisions of the CBD are qualified by Parties' national circumstances. Thus for example, the Convention's ecosystem programmes of work (e.g., on inland water biodiversity or agricultural biodiversity) or programmes on cross-cutting issues (e.g., economics, trade and incentive measures, or protected areas) will be implemented in accordance with the specific situation of each country. Only two provisions are unqualified. These are the requirements that all Parties develop a national biodiversity strategy and action plan (NBSAP) and that all parties submit periodic reports to the Conference of the Parties (COP) on the measures they have taken to implement the provisions of the convention and the effectiveness of these measures.

The COP has decided that NBSAPs are thus the primary vehicle for the implementation of the CBD and the achievement of its objectives.

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National Biodiversity Strategies and Action Plans

The United Nations University Institute of Advanced Studies recently completed an assessment of NBSAPs.[1] This was made available to the Tenth Meeting of the Conference of the Parties (COP-10) held in Nagoya, Japan, in October 2010, which would evaluate the status of implementation of the convention and the outcomes of its first Strategic Plan (2002-2010) and adopt a new Strategic Plan for the period 2011-2020.

The assessment was born out of a growing feeling that since 1994, the COP had devoted its energies to an intense and necessary programme of negotiation and adoption of decisions, programmes of work, guidelines, calls for cooperation, and harmonisation with other relevant processes that, taken together, constituted a compendium of accumulated and by now, it can be assumed, comprehensive guidance to Parties on how they could and should proceed with national implementation of the CBD.

What was less clear was how countries were in fact using this guidance and what their real experience was of attempting to meet their national commitments under the convention in their real-life circumstances and in the face of multiple constraints.

The intention is clear. Parties are to: develop NBSAPs; develop mainstream policies and programmes designed to ensure the conservation and sustainable use of biodiversity within relevant sectors of public administration and economic activity; and periodically report on the steps they have taken and the effectiveness of these to the COP.

When the idea for this study was born, the Millennium Ecosystem Assessment (MA), which is the first scientific attempt to describe and evaluate on a global scale the full range of services people derive from nature, had been recently published.[2] The MA had identified three major problems associated with our management of the world's ecosystems that were already causing significant harm to some people, particularly the poor, and which unless addressed would diminish the long-term benefits we derive from ecosystems:

- Some 60 percent of the ecosystem services examined are being degraded or used unsustainably, and available evidence has demonstrated that this loss and degradation is substantial and growing.
- Established but incomplete evidence suggest that changes being made in ecosystems will increase the likelihood of non-linear changes in ecosystems.
- The harmful effects of the degradation of ecosystem services are being borne disproportionately by the poor, contributing to growing inequities and disparities across groups of people, sometimes the principal factor causing poverty and social conflict.

Four years later, as our research was drawing to a close, the publication of the third edition of the Global Biodiversity Outlook (GBO-3)[3] confirmed that the target agreed on by the world's governments in 2002—"to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional, and national level as a contribution to poverty alleviation and to the benefit of all life on Earth"—had not been met.

The GBO-3 reaffirms the fact that biodiversity underpins the functioning of ecosystems which provide a wide range of services to human societies and that its continued loss therefore has major implications for current and future human wellbeing. It confirms that there is a high risk of dramatic biodiversity loss and an accompanying degradation of a broad range of ecosystem services if ecosystems are pushed beyond certain thresholds or tipping points. The poor would face the earliest and most severe impacts of such changes, but ultimately all societies and communities would suffer.

Our Assessment of National Biodiversity Strategies and Action Plans

By September 2010, 171 countries (89 percent of the total number of CBD parties) had adopted their NBSAPs or equivalent instruments and a further 13 had begun the process of doing so.[4] The large number of NBSAPs is in itself an achievement and indispensable step on the road to implementation. NBSAPs have generated important results in many countries, including a better understanding of biodiversity, its value, and what is required to address threats to it. Legal gaps in implementation have been filled, the coverage of protected areas has been considerably extended, and in many countries better protection of endangered species has been introduced. Recently, the fourth national reports and a series of regional and sub-regional capacity workshops on implementing NBSAPs and mainstreaming biodiversity have provided new information and insights on the wealth of action for biodiversity taking place throughout the world. This encompasses both action for the conservation of biodiversity and action related to mainstreaming biodiversity within sectoral and cross-sectoral activities at both national and subnational levels. This is an indication of another positive trend in CBD implementation.

In spite of these achievements and positive trends, our general conclusion matches that of earlier assessments that NBSAPs have not attenuated the main drivers of biodiversity loss. The Global Biodiversity Outlook confirms the continuing decline of biodiversity in all three of its main components—genes, species, and ecosystems. It argues that "action to implement the CBD has not been taken on a sufficient scale to address the pressures on biodiversity in most places" and "there has been insufficient integration of biodiversity issues into broader policies, strategies, and programmes, and the underlying drivers of biodiversity loss have not been addressed significantly."

Our assessment suggests that, taken together, existing NBSAPs will not be capable of changing this global picture by meeting the objectives of the CBD or the strategic goals and targets of the new Strategic Plan. However, the outlook is not completely bleak; at least 184 countries have taken steps towards implementing the CBD, including countries whose NBSAPs are comprehensive, strategic, and feasible. The challenge, to which the energies of CBD Parties should be directed as a matter of urgency, is to ensure as soon as possible that all NBSAPs are comprehensive, strategic, and being implemented. At the moment, although it is true that the political attention paid to biodiversity and its importance for sustainable development is growing in many countries and that biodiversity concerns are increasingly integrated into national development policies, it seems this is rarely due to NBSAPs.

The inability of NBSAPs to influence mainstream development outcomes can be largely attributed to weaknesses in the process of their development. Many processes were often more technical than political, and did not manage to sufficiently influence policy beyond the remit of the national agency directly responsible for biodiversity. The need for mainstreaming across sectors is generally recognised in NBSAPs but often in general and aspirational terms, with little direction on how this mainstreaming is actually going to take place. Coordination structures may formally exist, but often with limited political and cross-sectoral ownership, as well as with limited ownership at the subnational level. Many NBSAPs are overly ambitious and prescriptive whilst at the same time lacking a strategy for financing their implementation. They often appear to have been addressed to external funding agencies rather than national decision makers.

However, the development process is not the only factor determining whether implementation will be successful. A number of countries have conducted excellent processes with extensive stakeholder involvement and well-structured NBSAPs but are still faced with implementation constraints, mostly in the forms of inadequate institutional, technical, and financial capacity.

On the positive side, many countries have learned from the shortcomings of the first-generation NBSAPs. Although fewer than a third of NBSAPs have been revised, second-generation NBSAPs are generally very different from the first in terms of: greater stakeholder involvement in their preparation, approval at a higher political level, focus on mainstreaming, alignment with other relevant plans and policies, monitoring tools, and strategies for communication and financing. However, it is striking that, despite recent strong calls to set time-bound and measurable national biodiversity targets and the many COP decisions to this effect, very few new NBSAPs do include such targets. While some of the new NBSAPs are starting to demonstrate results, it is still too early to assess the impact of second-generation NBSAPs on the status of biodiversity and the main drivers of biodiversity loss.

Many NBSAPs are quite comprehensive in scope, and their preparation has in itself been a major achievement for the country. Nearly all countries have applied a participatory process, and according to reports of those involved, the preparation of NBSAPs has been important in creating awareness on biodiversity issues. Regional workshops have revealed a lot of concrete activities and innovative thinking, generated to some extent from NBSAPs, not only in the conservation community but also on a broader scale across sectors.

Our assessment has revealed clear differ-

ences between the older and newer NBSAPs. Second-generation NBSAPs—including both revised and new NBSAPs—have a stronger emphasis on mainstreaming and are far more strategic and action-oriented. Notably, they include a higher degree of self-reliance when compared to many first-generation NBSAPs, which often presuppose external funding for implementation.

A large majority of countries have applied a participatory approach to NBSAP prepara-tions. However, key stakeholder categories, such as women's organisations, local and indigenous communities, and the private sector, appear to have participated less frequently in national processes. Second-generation NBSAPs have typically been prepared through a broader, longer, and more structured preparatory process, often also including provincial and local levels.

The momentum that was built up during these participatory preparatory processes seems to have been quickly lost in many countries. Most countries have created some kinds of national coordination structure, but these typically involve fewer stakeholders than in the preparatory processes. It also seems that many NBSAP coordination structures are not functioning well, if at all, and there is a clear connection between the limited degree of implementation and the lack of efficient coordination mechanisms.

The level of endorsement, and thereby owner-ship of the NBSAP at the government level, is also critical to its success. It appears that most first-generation NBSAPs were approved at the level of the minister responsible for the national CBD focal point or below. Many of the second-generation NBSAPs have been adopted at the level of the head of state or cabinet while some have been adopted by the parliament.

National biodiversity strategies and action planss have generated important results in many countries, including a better understanding of biodiversity, its value, and what is required to address threats to it.

Developing and implementing the NBSAP has helped countries improve their biodiversity knowledge and identify the main causes of biodiversity loss and the response measures needed to combat the loss. At the same time, it has led many countries to become aware of huge gaps in their knowledge. Therefore, improvement of the knowledge base features is a key objective in many NBSAPs.

There is uneven focus on the three CBD objec-tives in NBSAPs. Conservation gains most attention, especially with regard to protected areas. Sustainable use often appears in vague and general terms. Measures for access to genetic resources and the equitable sharing of benefits arising out of their use of genetic resources are absent from most NBSAPs.

Most NBSAPs place a strong emphasis on planning at the national level, and only a minority explicitly acknowledge the benefits of subnational BSAPs. Those countries where subnational BSAPs have been developed tend to be large countries with a federal or other decentralised structure. Even in countries that clearly acknowledge local co-responsibility for biodiversity planning, the actual commu-nication of the NBSAP to the subnational authorities and the empowerment of these to act have often been unsuccessful due to weak local institutional capacity.

Many COP decisions and in particular the different thematic programmes of work are used only rarely as points of reference in the

NBSAPs, if even referred to at all. Many of the thematic and cross-cutting programmes of work and other decisions were adopted after the majority of NBSAPs were prepared, but even so it is striking how little they seem to influence national biodiversity planning.

Future Directions

There is a general consensus that the CBD should focus more on implementation than has been the case until now. Substantial resources have been put into policy development in the forms of negotiation, the adoption and revision of decisions, work programmes, and guide-lines. The view is increasingly expressed that the convention now needs to move beyond the stage of refining its guidance and focus on delivering tangible results on the ground. Indeed, when countries were asked in the fourth national reports to describe implemen-tation outcomes, they tended to report the development of new plans, programmes, and strategies rather than concrete action to meet their commitments under the convention.

However, the action needed to halt the loss of biodiversity will have to seriously address the root causes of biodiversity, and addressing root causes instead of just treating symptoms is a complex cross-sectoral issue that requires a political and economic planning process with compromises and trade-offs. This planning process is envisaged in Article 6 of the CBD, but in most countries this did not take place or took place with only limited success in the first phase of the life of the convention.

Strategic Plan for Biodiversity 2011-2020

A new strategic plan for the post-2010 period with measurable targets will provide a framework for a new phase of national biodiversity planning that can address the issues that have not been properly addressed so far. A number of recently prepared NBSAPs have already begun to pave the way. This is not a question of delivering yet another "document", but of establishing an ongoing, cyclical, participatory process with regular reviews.

In Nagoya, October 2010, COP-10 adopted a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, for the 2011-2020 period.[5] This new plan will be the overarching framework on biodiversity, not only for the biodiversity-related conventions but the entire United Nations system. The COP agreed that this overarching international framework should be translated into national biodiversity strategies and action plans within two years.

The rationale for the new plan is that biological diversity underpins ecosystem functioning and the provision of ecosystem services is essential for human wellbeing. It provides for food security, human health, and the provision of clean air and water; it contributes to local livelihoods and economic development, and is essential for the achievement of the Millennium Development Goals, including poverty reduction. The conclusions of the GBO-3 have contributed to the formulation of these elements though its analysis of future biodiversity scenarios and reviews of possible actions that might be taken to reduce future loss.

The vision for the new Strategic Plan is: "Living in Harmony with Nature", whereby 2050, biodiversity is valued, conserved, restored, and wisely used, maintaining ecosystem services, sustaining a healthy plant, and delivering benefits essential for all people."

Its mission is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life and contributing to human wellbeing and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used, and benefits arising out of the utilisation of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values are mainstreamed, appropriate policies are effectively implemented, and decision making is based on sound science and the precautionary approach."

The new plan consists of five strategic goals, including 20 Aichi Biodiversity Targets:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- Reduce the direct pressures on biodiversity and promote sustainable use.
- Improve the status of biodiversity by safeguarding ecosystems, species, and genetic diversity.
- Enhance the benefits to cover all biodiversity and ecosystem services.
- Enhance implementation through participatory planning, knowledge management, and capacity building.

The 20 headline Aichi Biodiversity Targets for 2015 or 2020 are organised under the five strategic goals. The goals and targets comprise both aspirations for achievements at the global level and a flexible framework for the establishment of national or regional targets. Parties are invited to set their own targets within this flexible framework, taking into account national needs and priorities while also bearing in mind national contributions to the achievement of the global targets, and report thereon to the Eleventh Meeting of the Conference of the Parties. Parties are also invited to incorporate this information in their NBSAPs.

Cities and biodiversity

COP-10 also endorsed a Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity[6] intended to support Parties, their partners, and local authorities in implementing the Strategic Plan for Biodiversity 2011-2020. The Plan of Action was developed through a four-year-long wide-ranging consultation process with Parties, cities, local authorities, and other organisations cooperating through the Global Partnership on Cities and Biodiversity and culminating with the Aichi/Nagoya City Biodiversity Summit held on the margins of COP-10.

The objectives of the Plan of Action include: increasing the engagement of subnational governments and local authorities in the successful implementation of NBSAPS, the Strategic Plan for Biodiversity 2011-2020, the 2020 target, and the programmes of work under the CBD; and improving regional and global coordination and the exchange of lessons learnt about the ways and means to encourage and support local authorities to manage biodiversity sustainably, provide ecosystem services to citizens, and incorporate biodiversity concerns into urban planning and development.

The CBD Secretariat and the Stockholm Resilience Centre are coordinating the first edition of the Global City and Biodiversity Outlook (CBO-1),[7] to be submitted to the second Summit on Cities and Biodiversity that will be held in Hyderabad, India, in October 2012. CBO-1 will consist of a global assessment of the links between urbanisation, biodiversity, and ecosystem services. It will also present the status of biodiversity in urban areas, highlighting best practices and lessons learnt about urbanisation and biodiversity. A synthesis report will be presented at Rio+20 and submitted to the World Cities' Summit in Singapore, in June 2012.

A self-assessment tool to assist implementation of the Plan of Action is the City Biodiversity Index developed at the suggestion of Singapore and designed to assist cities in the monitoring of cities' biodiversity conservation efforts over time (See pages 78 to 87 by Lena Chan and Muslim Anshari).

Local authority engagement in the strategic plan for biodiversity

The conservation and sustainable use of biodiversity, and the reduction of the rates of its loss, cannot be achieved solely through central government planning and programmes. Meeting the internationally agreed goals and

target and avoiding dangerous tipping points, if they are to be achieved, requires the active commitment and engagement of cities and local authorities (districts, counties, municipalities, cities, towns, communes, etc.) and of subnational authorities (states, provinces, etc.). The status and trends of biodiversity are to a large degree the outcomes of locally taken decisions and actions.

The CBD COP has repeatedly issued clear guidance that national governments, in developing, implementing, and revising national biodiversity strategies, need to establish a transparent and participative process for them involving all stakeholders, including cities and local authorities.

Cities and local authorities should thus be proactive in identifying and making contact with the national body responsible for biodiversity planning. They should ensure they participate fully in the national biodiversity strategy. At the same time, cities and local authorities should study the CBD's ecosystem programmes and the programmes of the other biodiversity-related conventions[8] and consider how they can develop and implement local biodiversity strategies using the guidance relevant to their local ecosystems and species and based on the ecosystem approach.[9]

Cities and local authorities can integrate biodiversity considerations into their infrastructure investments and procurement policies. They can work in partnership with neighbouring authorities to develop conservation corridors and sustainable land use mosaics.

Cities and local authorities are usually better-positioned than national bodies to deliver locally appropriate education and public awareness training on biodiversity. Local protected area and green space management bodies, herbaria and botanic gardens, universities and research centres, local planning departments, and other local institutions will contain valuable knowledge and expertise relevant to local biodiversity planning, to biodiversity monitoring and assessment, and to promoting education and public awareness of biodiversity.

Local level biodiversity planning and implementation is as important as national-level action, if not more so.

The Urban Challenge

A recent estimate reveals that the area directly impacted by new urban infrastructure within the next 40 years would roughly cover an area the size of Mongolia, with obvious impacts on natural habitat and the wildlife that depend on it. Consequently, urban growth will impact the provision of many ecosystem services and the benefits humans derive from nature, while the demands of cities will reshape most rural landscapes in the coming decades. Without adequate consideration by policy makers of the implications of the coming urbanisation, many of the goals of the CBD as well as the MDGs for providing clean water for consumption and sanitation, and the UNFCC goals for mitigating and adapting to climate change, are unlikely to be met. A sustainable urbanisation will be necessary for achieving goals of a more sustainable planet.

City parks and green spaces have long been recognised for their recreational and cultural values. They are increasingly recognised for their contributions to mental and physical health.[10] The framework of the Strategic Plan for Biodiversity, intended to drastically reduce the rate of loss of biodiversity and the risk of reaching tipping points with their attendant risks to human security and wellbeing, constitutes a call to action to city planners and administrators of green spaces. As well as enhancing recreational, cultural, and human health values, urban parks and landscapes can play a vital role in meeting global biodiversity targets over the coming decade by prioritising native vegetation species over exotic ones, by maintaining and enhancing the ecological integrity of green spaces, watersheds, estuaries, and shorelines, and by taking up the challenge of playing an even greater role in public education and awareness raising of the essential environmental services underpinned by biodiversity and the local and global dangers of losing these services. ⓒⓖ

1 Prip, Christian, Tony Gross, Sam Johnston, and Marjo Vierros. 2010. *Biodiversity Planning: an assessment of national biodiversity strategies and action plans.* Yokohama, Japan: United Nations University Institute of Advanced Studies. Available for download at: *http://www.ias.unu.edu/sub_page.aspx?catID=97&ddlID=1406.*

2 See: *http://www.millenniumassessment.org.*

3 Available at: *http://www.cbd.int/gbo.*

4 For more details, see: *http://www.cbd.int/nbsap.*

5 Decision X/2: *http://www.cbd.int/decisions/cop/?m=cop-10.* See also: *http://www.cbd.int/sp.*

6 Decision X/22: *http://www.cbd.int/decisions/cop/?m=cop-10.* See also: *http://www.cbd.int/authorities.*

7 See: *http://www.cbd.int/authorities/cbo1.shtml.*

8 The Convention on Migratory Species (CMS), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the World Heritage Convention, the Convention on Wetlands (Ramsar Convention) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

9 See *http://www.cbd.int/ecosystem.*

10 For research findings from a UK context, see the work of iCES (interdisciplinary Centre for Environment and Society) at the University of Essex: "Evidence now shows that there is a positive relationship between exposure to nature and mental and physical health. […] Such evidence, though, has yet to influence substantially the planning of urban and rural environments, priorities for public health, social care, education and criminal justice programmes, and recommendations for development of sustainable lifestyles." From: *http://www.greenexercise.org/Research_Findings.html.*