Setting National Biodiversity Targets, making use of the CBD's Framework for the 2010 Biodiversity Target

Module B-4

Version 1 – July 2007

Contents

Introduction to the Module

1.   What is the purpose of targets?

2.   What are the CBD 2010 Biodiversity Targets?

3.   How can the CBD 2010 Biodiversity Targets be adapted at the National Level?

4.   Why should the Targets be incorporated into NBSAPs?

5.   How can the 2010 Targets be incorporated into NBSAPs?

6.   How can progress towards the targets be monitored?

Summary

Annex I   The CBD Framework of Goals and Sub-Targets and Relevent Global Indicators

List of Acronyms

Introduction to the module

What you will learn in this module

This module discusses the importance of targets as tools for moving from policy to measurable, on-the-ground results toward reducing the rate of loss of biodiversity. It provides a brief history of target development in the context of the CBD, and goes on to explain some of the ways in which countries can develop their own national targets within the framework of CBD's global 2010 targets. The module briefly discusses ways to monitor progress towards targets, including through the use of indicators.

Further guidance and information regarding "targets", "monitoring", and "indicators" are available through the Convention website: www.biodiv.org

1. What is the purpose of targets?

Targets within the CBD were established out of a desire to move from the policy decisions of the Conference of the Parties to measurable real-world results. It is not enough that the CBD, and the decisions of the Conference of the Parties, contain priority actions for Parties and organization for the conservation and sustainable use of biodiversity and for the equitable sharing of benefits, if those actions are not making a difference in the on-going loss of biodiversity globally. The targets are, in essence, an effort to move, not only from words to action, but from action to measurable results.

There is a growing trend of target-setting, which includes important global targets such as those in the **Johannesburg Plan of Implementation** and the **UN Millennium Development Goals**.

The characteristics of good targets are that they are **measurable, time-bound and outcome-oriented**. As such, they define a desirable state for biodiversity (ecosystems, species or genetic diversity) or for any other desired outcome from the convention (eg: sharing of benefits) that is to be achieved in a certain time period. They may also refer to concrete actions that have been completed by a certain date, such as the establishment of protected areas or the elimination of pathways for introduction of invasive alien species. The outcome of these actions will be a measurable improvement towards the objectives of the Convention.

By establishing targets, countries make a longer-term commitment to biodiversity, and recognize its value to human well-being. The targets have an important function in inspiring a programme for change and its associated measures. They provide a focus of concerted action not only by governments, but by all relevant actors and stakeholders. The targets also bring **accountability** to conservation and sustainable use of biodiversity. In the case of global targets, all countries of the world are collectively accountable for reaching them. National targets, and their achievement, are the responsibility of the individual country.

2.   What are the 2010 Biodiversity Targets?

In 2002, the CBD Conference of the Parties adopted a Strategic Plan for the Convention, which contained an ambitious target

> *"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".*

This target became known as the "**2010 Biodiversity Target**" and it has become a central focus for many of the actions - national, regional and international - taken in recent years to implement the CBD. The target's international significance was further acknowledged by its endorsement by the World Summit on Sustainable Development and its incorporation into Goal 7 of the Millennium Development Goals.

The CBD 2010 target is an overarching, inspirational target, and in 2004, the Convention developed a **provisional framework of goals and targets** consisting of a number of more specific goals and sub-targets organized under seven focal areas.

A few examples of the sub-targets are:
- At least 10% of each of the world's ecological regions effectively conserved (sub-target 1.1)
- Status of threatened species improved (Sub-target 2.2)
- Rate of loss and degradation of natural habitats decreased. (Target 5.1)
- Pathways for major potential alien invasive species controlled (Target 6.1).
- Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained (Target 8.2).
- All access to genetic resources is in line with the Convention on Biological Diversity and its relevant provisions (Target 10.1)

The full framework is provided in Annex 1.

The 2010 target was not the only target adopted by the COP in 2002. At the same sixth meeting, the COP also adopted the **Global Strategy for Plant Conservation** (GSPC), which contains 16 outcome-oriented global targets for the year 2010. These targets are aimed at halting the current and continuing loss of plant diversity. The GSPC represents a pilot strategy, which, for the first time introduced specific outcome-oriented targets to the CBD. These targets served as a model to the 2010 target framework that was later developed to support the global 2010 target. Moreover, because the Strategy refers to plants – a relatively well-described subset of biodiversity – quantitative targets could be set in most cases.

Other important CBD targets are those established under the Programe of Work on Protected Areas.

Detailed texts of these targets are available at www.biodiv.org.

3. How can national targets based on the CBD 2010 targets be developed?

National targets based on the CBD 2010 targets can:
- Be flexible, and thus adapted to national circumstances
- Use quantitative elements
- Be achievable and realistic
- Be developed using a participatory process

The targets are **not meant to be a one-size-fits-all solution** but demonstrate areas of global concern where action at national level may be required. They leave the flexibility for each country to define the specific contribution it is willing and capable to make to achieve the targets globally. Just because a global target appears on a list, does not necessarily mean that this particular target is appropriate for a given country.

A country may not necessarily need to set national targets corresponding to each and every target in the 2010 framework. Each country's unique circumstances include specific types of biodiversity, in varying states of health and under differing pressures. Each has its own management regimes, and socio-economic and financial situations.

In adapting the global targets to the more specific circumstances of a particular country it may be possible to develop **quantitative elements** to the targets. Whenever it is meaningful to identify specify quantified targets, this is to be preferred, as it facilitates measuring of progress, and allows the target to be progressively adjusted in the light of experience.

Box 1
EXAMPLE: National targets established by Brazil using the CBD Framework
The targets were developed by the Brazilian National Biodiversity Committee (CONABIO) in December 2006. The Specificity of the national situation allowed the identification of targets that are much more specific and focused than the global framework. Only a few examples are given here:

CBD Global Target	Brazilian National Target
At least 10% of each of the world's ecological regions effectively conserved (sub-target 1.1)	At least 30% of the Amazon Biome and 10% in the other biomes and in the marine and coastal zone effectively conserved through Conservation Units of the National System of Conservation Units
Status of threatened species improved (Sub-target 2.2)	100% of threatened species effectively conserved in protected areas
Rate of loss and degradation of natural habitats decreased. (Target 5.1)	Reduce the rate of deforestation by 100% in the Atlantic Forest Biome, 75% in the Amazon Biome and 50% in the other biomes
Biological resources that support sustainable	Significant increase in activities to support on

livelihoods, local food security and health care, especially of poor people maintained (Target 8.2)	farm conservation of the componanets of agricultural biodiversity that guarantee the maintenance of sustainable livelihoods, local food security and health care, especially of local communities and indigenous peoples.
Source: The full set of Brazilian targets are available at: http://www.mma.gov.br/index.php?ido=conteudo.monta&idEstrutura=72&idMenu=2337	

The global CBD 2010 targets are ambitious, but achievable under specific circumstances or given locations. In some circumstances they may even be exceeded. Each country will need to **assess its national conditions** to consider what is appropriate and achievable. In some cases, a given target may already have been reached. In other cases, it might not be possible to reach a global target by 2010, but substantial progress towards it could be made. In that case, a lower, or less ambitious target might be chosen initially, with the understanding that it becomes a stepping stone towards a longer-term goal. It is left to the country to decide what it realistically can do by the year 2010 given the national status of its biodiversity, societal circumstances and available resources. Longer term planning beyond 2010 is also encouraged.

In **setting national targets in response to the 2010 target framework**, the following questions are among the ones that need to be considered:

- What are the national/local conservation objectives to be achieved?
- What activities will need to be undertaken to reach those objectives?
- Who will implement the activities needed to reach the targets?
- Who will be impacted and who will benefit (audience and social equity)?
- What kinds of tools, or a mix of tools, will be used to implement the activities?
- Where will the actions be taken (for example, choosing from available options those areas that will be protected)?

As explained in the subsequent sections of this module, these questions will need to be addressed when integrating the targets into NBSAPs.

The process of target development on the national level needs to be a **participatory** one, and mirror the process undertaken to develop NBSAPs, as outlined in Module 1. Ideally, all stakeholders, including policy makers, the scientific community, managers, representatives of various sectors impacting biodiversity, and indigenous and local communities will collaborate to develop a common vision of expected short, medium and longer-term outcomes.

Box 2

Some examples of integrating targets into NBSAPs

Cuba has incorporated targets into their NSBAP effective for 2005-2010. In addition, they have incorporated targets into their national protected areas strategy.

Lebanon has incorporated target 2.1 into its NBSAP addendum of 2005 and partially addressed it in Protected Areas Goals and Strategies developed by the Ministry of Environment.

In Australia, the National Objectives and Targets for Biodiversity Conservation 2001-2005 (NOTs) were written to augment the National Strategy. They set objectives and targets for ten priority outcomes for the Australian, State and Territory governments to collectively achieve.

The Netherlands has already implicitly incorporated targets into national policy documents. However, several national targets aim at realization beyond the year 2010.

In addition to the NBSAP, the Philippines has also incorporated targets into "Philippine Biodiversity Conservation Priorities", "Medium Term Philippine Development Plan", "Strategic Agriculture and Fisheries Development Zones of the Department of Agriculture's AFMA" and "NAP to combat desertification, land degradation, drought, and poverty (2004-2010)".

Source: CBD 3rd National Reports

4. Why do the targets need to be incorporated into NBSAPs?

National biodiversity strategies and action plans are designed to define the national goals and targets to be achieved and include a plan for their implementation. Thus, once national targets are agreed upon and adopted, they should be incorporated into the NBSAP. This will provide an opportunity to add into the NBSAP any new activities that may be required to reach the targets.

Targets are only meaningful if progress towards their achievement can be monitored. Because of this, the setting of targets needs to go hand in hand with complementary monitoring programmes, which should be included in the NBSAP. A complete biodiversity management system would include the following components:

- A set of goals and targets representing desired outcomes
- A number of priority activities that need to be implemented to reach the goals and targets
- A monitoring programme focusing on the extent that activities have been carried out and /or the degree to which the desired results have been achieved. Ideally this should include indicators.
- An adaptive management component that will feed back information allowing the effectiveness of activities to be improved
- A review mechanism that includes periodic reporting on progress in each area

Unfortunately there is no such thing as perfect scientific knowledge. Management, even under the most data rich circumstances, always takes place in the context of uncertainty. Therefore, the selected targets and associated activities should be kept under review and adjusted in the light of experience. The public, as well as managers, scientists and policy makers should be involved in critiquing the effectiveness of management strategy. The evaluation process should allow managers to assess the extent to which conservation objectives have been met, and make periodic shifts in the focus of the management technique by applying knowledge gained from past experiences. Most management actions, however, need to be in place for a reasonable period of time to be effective or enable assessment of their effectiveness.

5. How can Targets be incorporated into NBSAPs?

Targets can be incorporated into NBSAPs in the following ways:
- During NBSAP revision
- To augment an existing NBSAP

In addition, targets can be incorporated into sectoral and other related strategies.

Most NBSAPs were developed before the global (and national) targets were adopted, and the **integration of targets into NBSAPs is easiest to undertake in conjunction with NBSAP revision**. The revision will provide an opportunity to re-organize the goals, targets and activities in a hierarchical manner, and will also provide an opportunity to add into the NBSAP any new activities that may be required to reach the targets.

If a country does not wish to undertake a complete NBSAP revision, but would still like to provide for the inclusion of targets, it is also possible to **add the targets to augment an existing NBSAP** (through, for example, an addendum). In this case, if the NBSAP does not already contain the necessary activities to reach the selected targets, the annex should also specify the additional necessary activities. It may be necessary to create a matrix or undertake a mapping exercise, to show how the existing activities in NBSAPs contribute to each target.

In many cases countries have integrated national biodiversity targets into **sectoral and other related strategies and policy documents** (for example protected areas strategies, climate change strategies, forest policies, sustainable development strategies or nature conservation strategies). Sometimes the targets have been integrated into these strategies prior to their integration to NBSAPs. This type of integration provides for the mainstreaming of biodiversity into national sectoral and development policies, and is therefore encouraged.

Box 3

Some examples of integrating targets into NBSAPs

- Cuba has incorporated targets into their NSBAP effective for 2005-2010. In addition, they have incorporated targets into their national protected areas strategy.
- Lebanon has incorporated target 2.1 into its NBSAP addendum of 2005 and partially addressed it in Protected Areas Goals and Strategies developed by the Ministry of Environment.
- In Australia, the National Objectives and Targets for Biodiversity Conservation 2001-2005 (NOTs) were written to augment the National Strategy. They set objectives and targets for ten priority outcomes for the Australian, State and Territory governments to collectively achieve.
- The Netherlands has already implicitly incorporated targets into national policy documents. However, several national targets aim at realization beyond the year 2010.
- In addition to the NBSAP, the Philippines has also incorporated targets into "Philippine Biodiversity Conservation Priorities", "Medium Term Philippine Development Plan", "Strategic Agriculture and Fisheries Development Zones of the Department of Agriculture's AFMA" and "NAP to combat desertification, land degradation, drought, and poverty (2004-2010)".

Source: CBD 3rd National Reports

6. How can progress towards the targets be monitored?

As noted above, the setting of targets needs to be accompanied with complementary monitoring programmes, which may include **indicators**. Biodiversity indicators, when used to assess national or global trends, build a bridge between the fields of policy-making and science. Policy makers set the targets and measurable objectives, while scientists determine relevant variables of biodiversity, monitor current state and develop models to make projections of future biodiversity status. A good monitoring programme will be able to provide answers to management-relevant questions in a timely manner, and in a language that is understandable to decision-makers.

Biodiversity indicators are information tools, summarizing data on complex environmental issues to indicate the overall status and trends of biodiversity. They provide an indication of how close we are to achievement of defined outcomes, goals, and objectives. They can also highlight key issues to be addressed through policy interventions and other actions. Results from monitoring are typically communicated to managers, decision makers and relevant stakeholders and serve as a basis for review and refinement of the goals and targets and relevant activities.

The CBD has identified a set of outcome-oriented indicators to measure progress towards the 2010 target. These indicators also serve as a means to communicate progress at the global level towards the 2010 target. Data on the global level is available for all of the adopted 2010 indicators, and a lead organization has been identified to work with each indicator. The indicators were used in the CBD's flagship publication: *Global Biodiversity Outlook 2* (GBO 2) available at www.biodiv.org/gbo2

At the national level, most countries have had **ongoing monitoring programmes** on biodiversity-relevant issues, even before the Convention was negotiated and entered into force. These monitoring programmes may include forest inventories, monitoring of water and air quality, monitoring of marine ecosystems and/or of rare and endangered species. These national monitoring programmes may already contain indicators.

Starting with the information already collected on the national level, and the indicators already available, a country should progressively develop its ability to measure progress towards national-level targets selected in the context of the 2010 targets. While the data and indicators available for this purpose initially may be less than perfect, they can be improved over time.

The existing set of indicators used in the national monitoring programme may be augmented with selected indicators adapted from the CBD global framework. Assistance towards this end is available from the UNEP GEF and UNEP World Conservation Monitoring Centre (UNEP-WCMC) 2010 Biodiversity Indicators Partnership project (see box 4).

Box 4

The 2010 Biodiversity Indicators Partnership

The 2010 Indicator Partnership project will coordinate the delivery and communication of the suite of indicators measuring progress towards the 2010 target. The project aims to ensure that the wide range of agencies and organizations already working in the area of indicator development can collaborate more effectively to deliver these global indicators. Specifically, the project has eight major components as follows:

1. **Partnership coordination and project management** amongst project partners, stakeholders and steering and advisory committee.
2. **Meeting user needs**, including identifying potential users, their needs and designing/re-designing the products to meet those needs.
3. **Delivering individual indicators** by appropriate stakeholders for each indicator, paying attention to basic quality standards and data collection and management.
4. **Developing products** using indicators based on user needs and communications strategy, including analysis of combinations of indicators and the whole indicator package.
5. **Peer review** of the full suite of indicators, and the products and messages being delivered using the indicators.
6. **Relate the 2010 indicators to other targets and indicators** developed and delivered by international conventions and processes.
7. **Build links to national and regional contributions and needs** by building on existing experience to make national datasets available for global 2010 indicators, to provide guidelines on national and regional applications of the global indicators, and to review experiences and scalability.
8. **Develop a sustainability strategy** to ensure delivery of indicators beyond 2010.

Further information about the project is available at http://www.twentyten.net/.

Summary

This module has reviewed the history and importance of targets as means for improved implementation of the CBD. It has suggested some strategies for national target development, including examples of how certain countries have selected national targets based on the global 2010 targets. The module has also discussed the importance of monitoring progress towards the selected targets, including through national indicator programmes, and provided case studies of some countries' approaches towards indicator development.

DISCUSSION QUESTIONS

- Does your country have any experiences in developing targets, in particular targets based on the global 2010 targets?
- If yes, did you adopt quantitative targets?
- How were the targets selected?
- What kind of national and local monitoring programmes are in place to monitor status and trends in biodiversity, and in particular progress towards national targets?
- Does the national monitoring programme use indicators?

THE CBD FRAMEWORK OF GOALS AND SUB-TARGETS AND RELEVANT GLOBAL INDICATORS

Goals and targets	Relevant indicators
Protect the components of biodiversity	
Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes	
Sub-Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.	• Coverage of protected areas • Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected species
Sub-Target 1.2: Areas of particular importance to biodiversity protected	• Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected species • Coverage of protected areas
Goal 2. Promote the conservation of species diversity	
Sub-Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.	• Trends in abundance and distribution of selected species • Change in status of threatened species
Sub-Target 2.2: Status of threatened species improved.	• Change in status of threatened species • Trends in abundance and distribution of selected species • Coverage of protected areas
Goal 3. Promote the conservation of genetic diversity	
Sub-Target 3.1: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.	• Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance • *Biodiversity used in food and medicine (indicator under development)* • Trends in abundance and distribution of selected species
Promote sustainable use	
Goal 4. Promote sustainable use and consumption.	

Goals and targets	Relevant indicators
Sub-Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity.	• Area of forest, agricultural and aquaculture ecosystems under sustainable management • *Proportion of products derived from sustainable sources (indicator under development)* • Trends in abundance and distribution of selected species • Marine trophic index • Nitrogen deposition • Water quality in aquatic ecosystems
Sub-Target 4.2. Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced.	• Ecological footprint and related concepts
Sub-Target 4.3: No species of wild flora or fauna endangered by international trade.	• Change in status of threatened species
Address threats to biodiversity	
Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.	
Sub-Target 5.1. Rate of loss and degradation of natural habitats decreased.	• Trends in extent of selected biomes, ecosystems and habitats • Trends in abundance and distribution of selected species • Marine trophic index
Goal 6. Control threats from invasive alien species	
Sub-Target 6.1. Pathways for major potential alien invasive species controlled.	• Trends in invasive alien species
Sub-Target 6. 2. Management plans in place for major alien species that threaten ecosystems, habitats or species.	• Trends in invasive alien species
Goal 7. Address challenges to biodiversity from climate change, and pollution	
Sub-Target 7.1. Maintain and enhance resilience of the components of biodiversity to adapt to climate change.	• Connectivity/fragmentation of ecosystems
Sub-Target 7.2. Reduce pollution and its impacts on biodiversity.	• Nitrogen deposition • Water quality in aquatic ecosystems
Maintain goods and services from biodiversity to support human well-being	
Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods	
Sub-Target 8.1. Capacity of ecosystems to deliver goods and services maintained.	• *Biodiversity used in food and medicine (indicator under development)* • Water quality in aquatic ecosystems • Marine trophic index • Incidence of Human-induced ecosystem failure

Goals and targets	Relevant indicators
Sub-Target 8.2. Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained.	• Health and well-being of communities who depend directly on local ecosystem goods and services • *Biodiversity used in food and medicine*
Protect traditional knowledge, innovations and practices	
Goal 9 Maintain socio-cultural diversity of indigenous and local communities	
Sub-Target 9.1. Protect traditional knowledge, innovations and practices.	• Status and trends of linguistic diversity and numbers of speakers of indigenous languages • *Additional indicators to be developed*
Sub-Target 9.2. Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit-sharing.	*Indicator to be developed*
Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources	
Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources	
Sub-Target 10.1. All access to genetic resources is in line with the Convention on Biological Diversity and its relevant provisions.	*Indicator to be developed*
Sub-Target 10.2. Benefits arising from the commercial and other utilization of genetic resources shared in a fair and equitable way with the countries providing such resources in line with the Convention on Biological Diversity and its relevant provisions	*Indicator to be developed*
Ensure provision of adequate resources	
Goal 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention	
Sub-Target 11.1. New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.	• Official development assistance provided in support of the Convention
Sub-Target 11.2. Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.	*Indicator to be developed*

List of Acronyms

CBD	Convention on Biological Diversity
COP	Conference of the Parties (to the CBD)
GBO2	Global Biodiversity Outlook 2
GSPC	Global Strategy for Plant Conservation
NBSAP	National Biodiversity Strategy and Action Plan
UNEP	United Nations Environment Programme