



Convention on
Biological Diversity

**Updating National Biodiversity Strategies and Action Plans
in line with the Strategic Plan for Biodiversity 2011-2020
and the Aichi Biodiversity Targets**

Training Package (Version 2.1)

Module 4

**Setting National Biodiversity Targets in line with the
Framework of the
Strategic Plan for Biodiversity 2011-2020,
including Aichi Biodiversity Targets**



About this series

This module forms part of a training package on the updating and revision of national biodiversity strategies and action plans (NBSAPs) in line with the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. The package is intended for national focal points of the Convention on Biological Diversity, those responsible for updating and implementing NBSAPs and other biodiversity planners, including those responsible for other biodiversity-related conventions. They are being used in the ongoing second series of regional and sub-regional capacity building workshops on revising and updating NBSAPs. Each module is available on the CBD Secretariat's website (<http://www.cbd.int/nbsap/training/>). The module and its contents may be freely used for non-commercial purposes, provided the source is acknowledged. The secretariat would appreciate receiving a copy of material prepared using these modules.

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Introduction

Targets are goals and objectives towards which action is aimed. In the context of the CBD, targets were established in order to move from COP policy decisions to measurable real world results. Targets help us do this by:

- ✓ Inspiring programs for change,
- ✓ Providing a focus for concerted action,
- ✓ Measuring and reporting on progress in conservation at national and global levels
- ✓ Establishing accountability in the conservation and sustainable use of biodiversity, and
- ✓ Communicating status and trends of biodiversity to policy makers and the public.

There can be many types of targets, with many types of indicators. While some targets define a desirable state for biodiversity that is to be achieved in a certain period, others refer to concrete actions that are to be undertaken by a certain date, such as the establishment of protected areas, the reduction of overfishing, or the elimination of pathways for introduction of invasive alien species.

A set of **twenty “Aichi Biodiversity Targets”** was recently adopted under the Convention on Biological Diversity setting the agenda for the next ten years. **Parties have committed to establishing national targets within this framework, and to report thereon to COP 11 (2012)**, with the aim of contributing to a cumulative effort on the part of all Parties to fulfill the mission, and to reach the goals of the Strategic Plan for Biodiversity 2011-2020.

This module discusses the importance of targets as tools for moving from policy to measurable, on-the-ground results in reducing the rate of loss of biodiversity. It provides a brief history of target development in the context of the CBD, and presents the Strategic Plan for Biodiversity 2011-2020, and the twenty Aichi Biodiversity Targets. In the second section, the module explains some of the ways in which countries can develop their own national targets within the global framework. The module discusses some of the different types of targets that can be used and gives numerous examples. Finally, it briefly discusses ways to monitor progress towards targets, including through the use of indicators.

1. Global Biodiversity Targets

In 2002, the CBD Conference of the Parties adopted a Strategic Plan for the Convention, which contained the ambitious 2010 Biodiversity 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”. The target’s international significance was acknowledged by its endorsement by the World Summit on Sustainable Development, the United Nations General Assembly, and its incorporation into Goal 7 of the Millennium Development Goals. In 2004 the Convention developed a provisional framework¹ for quantifying

¹ Further refined at COP-8 (2006), Decision VIII/15.

and measuring progress toward the 2010 biodiversity target. The framework consisted of a number of more specific goals, sub-targets, and indicators organized under seven focal areas².

The third edition of the Global Biodiversity Outlook, released in 2010, announced that the 2010 Biodiversity Target was not met at a global level. Actions have not gone far enough, and they have often been undermined by conflicting policies, a lack of resources, and incentives that fail to take biodiversity into account. Nevertheless, the target has inspired many actions taken in recent years to implement the CBD at sub-national, national, regional and international levels, many of them with significant and measurable results.

The continued need to pursue the objectives of the Convention, and the renewed urgency prompted by our perilous proximity to ecosystem “tipping points” have given rise to a revised Strategic Plan for the Convention (2011-2020), and a new set of 20 headline targets for 2020, organized under five strategic goals. The goals and targets comprise both: (i) aspirations for achievement at the global level; and (ii) a flexible framework for the establishment of national or regional targets. They are transcribed in Box 1.

Box 1 Strategic Goals of the Strategic Plan for Biodiversity 2011-2020, and the Aichi Biodiversity Targets³

Strategic goal A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.

Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic goal B. Reduce the direct pressures on biodiversity and promote sustainable use

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

² Other important CBD targets adopted by COP in 2002 include the Global Strategy for Plant Conservation (GSPC) and the targets established under the Program of Work on Protected Areas. Detailed texts of these targets are available at www.cbd.int.

³ Decision X/2 of the Conference of the Parties

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Strategic goal D: Enhance the benefits to all from biodiversity and ecosystem services

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

2. Setting National Biodiversity Targets

2.1 Adapting the Global Biodiversity Targets to the National Level

In response to the establishment of the 2010 global framework of goals and targets, many countries adopted or developed national biodiversity targets for 2010 and beyond, while developing or updating their NBSAPs (or equivalent instruments), or as a complement to them. (Box 2 gives several examples of national biodiversity targets.)

Box 2 Examples of National Biodiversity Targets

- By 2015, modernize agriculture to an ecologically acceptable level (Benin)
- By 2010, 100% reduction in the rate of deforestation in the Atlantic Forest biome, 75% in the Amazonian biome, and 50% in other biomes (Brazil).
- Number of community-based fisheries increased from 264 in 2000 to 589 in 2015 (Cambodia - MDGs)
- By 2012, 1% of EEZ (17% territorial waters) in management categories, increasing to 2% by 2015 (Costa Rica)
- Quebec committed to protecting 12% of its territory by 2015 (Canada)
- 10 million Europeans actively engaged in biodiversity conservation by 2010 and 15 million by 2015 (EU)
- By 2012, 50% of endangered species will be conserved (Japan)
- Forest cover will be increased from 20% to 23% and annual wood consumption reduced by 30%, and soil erosion by 24%. (Rwanda - Economic Development and Poverty Reduction Strategy 2008-2012).

Source: Fourth National Reports and other materials published by Parties⁴

Through COP's decision adopting the revised Strategic Plan of the Convention, Parties have committed to establishing their own targets and indicators in accordance with their national situations, priorities, and capacities, and to report thereon to COP 11 (in 2012). A number of support and guidance mechanisms from intergovernmental and other organizations as well as funding through the GEF may help Parties to fulfill this commitment. National targets should be set with a view to contributing to a cumulative effort on the part of all other Parties, to fulfill the mission, and to reach the goals of the Strategic Plan. Box 3 explains how Brazil's national protected area and deforestation reduction targets contributed to the global 2010 targets.

Box 3 Brazil's Protected Area Coverage and Deforestation Targets

Brazil's targets on protected area coverage and on deforestation are good examples of national targets contributing to global targets.

CBD Global 2010 Target	Brazilian National 2010 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

⁴ A more extensive list of national biodiversity targets can be found in www.cbd.int/doc/meetings/sp/em...01/.../em-stratplan-01-sp-prep-03-en.doc

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
<p>With regard to protected area coverage, Brazil increased its coverage by 5% between 2003 and 2009, leading to the protection of 27.8% of national terrestrial and marine areas in 2009 (1). The Amazon accounts for 32% of the Tropical and Subtropical Moist Broadleaf Forests biome that is protected in the Neotropics (2), meaning that Brazil has met, or come very close to meeting its national target of 30% for this biome. Having done so, Brazil accounts for some 75% of the global increase of protected area coverage (in all biomes - estimated at 0.13% per year since 2003); and has made a substantial contribution towards the progress made globally towards target 1.1 of the 2010 global biodiversity targets.</p> <p>With regard to the deforestation target, Brazil has made strong progress in reducing deforestation by 47.5% in past 12 months, which means an 80% drop in forest loss since its 2004 peak (3). Although data is not yet available to assess if Brazil has met its national deforestation reduction targets, the country has undoubtedly contributed to the progress made globally towards target 5.1 of the 2010 global biodiversity targets.</p> <p>Sources:</p> <p>1) http://unstats.un.org/unsd/mdg/SeriesDetail.aspx?srid=616</p> <p>2) Jenkins and Joppa, Expansion of the global terrestrial protected area system. <i>Biological Conservation</i>. Oct 2009. Vol.142, #10, pp 2166-'74.</p> <p>3) Regalado. Brazil says rate of deforestation in Amazon continues to plunge. <i>Science</i>. Sept. 2010. Vol. 329, pp 1270-'71</p>	

Adapting the global framework of goals and targets to the national level does not necessarily imply creating national targets equivalent to each of the 20 global targets. Clearly, all of the global targets will not necessarily be appropriate for each country and its unique circumstances (which can include specific types of biodiversity, in varying states of health and under differing pressures, management regimes, and socio-economic and financial situations). If national targets already exist, a first step could be to examine these in relation to the 20 global targets. Efforts should be made to adapt the global targets, but if these are not relevant, or if another target is more relevant, important, or urgent in the country, then alternative targets should be established that work toward the goals of the Strategic Plan.

Essentially, adapting the global framework to the national level means devising national targets that work toward each of the 5 strategic goals of the Strategic Plan:

- A. **Address the underlying causes** of biodiversity loss by mainstreaming biodiversity across government and society
- B. **Reduce the direct pressures** on biodiversity and promote sustainable use
- C. To **improve the status of biodiversity** by safeguarding ecosystems, species and genetic diversity
- D. **Enhance the benefits to all** from biodiversity and ecosystem services
- E. **Enhance implementation** through participatory planning, knowledge management and capacity building

Each of these five goals are relevant to all Parties, and the national biodiversity planning committee should ensure that national targets are devised for each of them.

The global 2020 biodiversity targets are ambitious, but achievable. Their achievement is essential if significant and devastating losses to biodiversity are to be avoided in the course of this century. However there is no prescription as to how ambitious national targets should be. In some cases, a given global target may already have been reached, or even exceeded in the country. Some countries may choose to establish more ambitious targets than the global ones (Box 3 above explains Brazil's establishment of protected area and deforestation reduction targets). In other cases, it might only be possible to make progress towards (but not meet) a global target by 2020. In that case, a lower, or less ambitious national target might be chosen initially, with the understanding that it becomes a stepping-stone towards a longer-term goal. It cannot be stressed enough that national targets should reflect national biodiversity components, and national situations, priorities, aspirations and capacities.

2.2 Establishing National Targets within NBSAPs

Being Parties' main vehicle for arriving at a strategy and plan for implementing the Convention, the NBSAP is an ideal place to incorporate national goals and targets, and to present a plan of how they will be met and a set of indicators that will allow this to be measured and communicated. In its decision adopting the updated Strategic Plan of the Convention, COP has asked Parties to develop national targets (by 2012) and to integrate these into their NBSAPs, which it has requested that Parties update and revise in line with the new Strategic Plan, and have adopted as a policy instrument by 2012 or 2014). **There is thus an opportunity now for Parties to begin their national target setting process as an early step toward the 2015 revised-and-adopted-NBSAP deadline.**

Some Parties will have recently updated their NBSAPs. In these cases the work they must do in time for the 2012 deadline is to establish national targets that correspond both to national goals and priorities set in the recent NBSAP, and to the five global strategic goals. This may involve revising and or adjusting previously established targets and/or the addition into the action plan (or a modification) of selected activities aimed at reaching the new targets. Once this is done, the NBSAP may be forwarded for adoption as a policy instrument in line with Target 17 of the Strategic Plan for Biodiversity 2011-2020.

In cases where updating the NBSAP has not taken place recently, it is suggested that those responsible for the NBSAP initiate the process, integrating target setting as part of the process of establishing the goals and objectives of the NBSAP and the ways in which they will be achieved. Figure 1 recalls the recommended process for developing and/or updating an NBSAP from Module 1. Target setting should be part of the step of "developing a strategy", of the cyclical process. It will draw heavily on the information compiled in the national biodiversity assessment and on the knowledge and experience of experts and stakeholders).

In both cases, it is particularly important to ensure that the national biodiversity assessment includes information on:

- **The actual possibility (rather than simply the desirability) of reducing losses of biodiversity components.** This will help in establishing realistic targets.

- The ways in which different **policy instruments** might work to reduce the loss of biodiversity. This will help in linking action items to the targets established.

Those active in developing the NBSAP and setting national targets should be sure to examine the three sets of goals and targets that COP has adopted – the framework of goals and targets established in the updated Strategic Plan, the targets of the Global Strategy for Plant Conservation, and the targets of the Programme of Work on Protected Areas – and agree on which of these goals and targets are relevant and feasible in light of the country’s specific circumstances.

Country circumstances include the type and extent of different biomes present in the country; the existence of a protected area system; the range of economically and socially important ecosystems, species and habitats; existing knowledge of the status and trends of key components of national biodiversity; and other factors. The list will be specific to the country and those involved will need to proactively identify the important issues and the opportunities for making the process of setting national targets as relevant and comprehensive as possible.

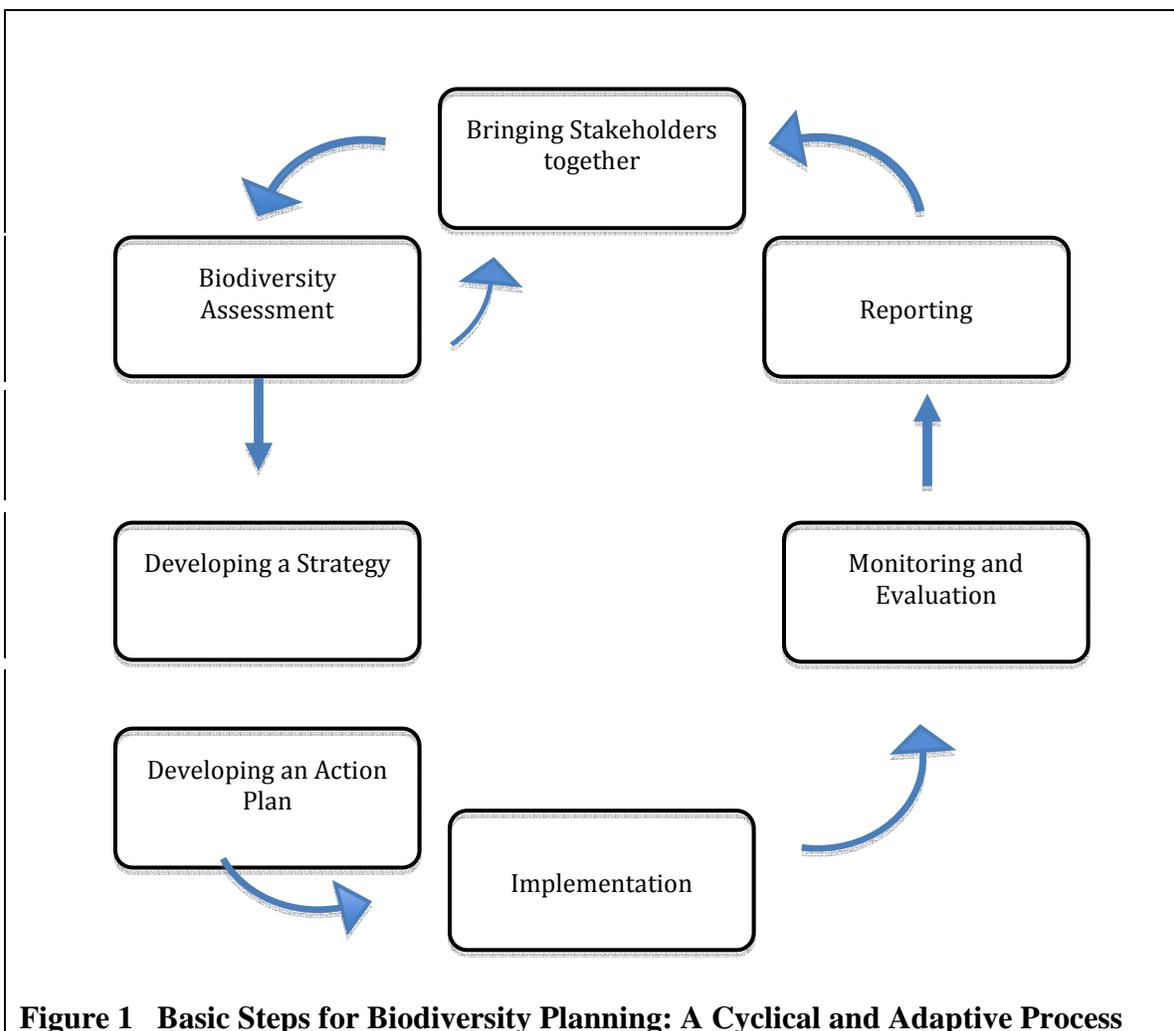


Figure 1 Basic Steps for Biodiversity Planning: A Cyclical and Adaptive Process

As discussed in Module 2, the process for revising an NBSAP follows the process as recommended for developing an NBSAP

Source: WRI 1995 National Biodiversity Planning: Guidelines Based on Early Experiences around the World (adapted)

The **establishment of national biodiversity targets will require the gathering and /or consultation of stakeholders and experts** (presumably already identified in previous NBSAP processes) in order to draw on their expertise and experience, and importantly to ensure their buy-in to the targets set. As with the goals and objectives of the NBSAP, targets should be set in a participatory process involving all stakeholders. Box 4 explains Brazil's experience in setting national biodiversity targets.

Box 4 Brazil's Experience Setting National Biodiversity Goals and Targets

In 2006, Brazil adopted a full suite of 51 national biodiversity targets corresponding to the global 2010 targets and those of the Global Strategy for Plant Conservation. The CBD framework served not as a restriction, but as a reference in developing the targets. The objective was to identify targets that would be challenging yet feasible to achieve and would take into account the country's realities.

As a first step existing data was gathered. This included information from ongoing monitoring and from several biodiversity related databases (such as the protected area databases, genebanks and the access and benefit sharing database). New data was also gathered such as vegetation cover and land use maps for all the biomes in the country, the updated official list of threatened species of fauna and flora, and an assessment of alien invasive species already established in the country. In addition to this data, the steering committee made public calls to contract research on current status, trends and forecast for each biome and for the whole country.

Once this data was gathered, a National Biodiversity Targets Seminar was organized with 20-30 experts. The seminar consisted of a series of roundtables addressing pressures on Brazilian biodiversity, the state of biodiversity components, and the responses for conservation, sustainable use and benefit sharing.

Each expert was asked to provide to the extent possible the following information:

- Sources of information available in Brazil (their geographic and temporal coverage, data quality and limitations);
- Status (quantified) of the theme/parameter in Brazil in 2002 (baseline), biome by biome and total;
- Average annual increment/reduction of the theme/parameter in Brazil at the turn of the millennium (baseline), biome by biome and total;
- Probable/possible targets for the theme/parameter in Brazil in 2010 under three scenarios (pessimistic, intermediary/business-as-usual and optimistic), considering the global target adopted by the CBD for the theme/parameter.

On the basis of this workshop the National Biodiversity Commission (CONABIO) adopted a set of 51 national biodiversity targets for 2010 including 14 targets for conservation, 13 targets for sustainable use, 7 targets for impact mitigation, 8 targets for access and benefit sharing, 3 targets for research, 3 targets for education and information and 3 targets for financing and technology transfer.

Source: [Presentation by Bráulio Ferreira de Souza Dias, Director of Biodiversity Conservation, Ministry of Environment of Brazil at the Workshop on National/Regional Targets and Indicators and Their Integration in NBSAPs. FAO, Rome, Italy, 16 February 2008.](#)

2.3 Establishing Biodiversity Targets in Sectoral and Cross-Sectoral Strategies

National biodiversity targets can also be integrated into sectoral and cross-sectoral strategies and planning processes (e.g. protected area strategies, climate change strategies, forest policies, sustainable development strategies, natural resource management strategies, national development and poverty reduction policies and strategies, national accounts, economic sectors and spatial planning processes). Such targets respond to strategic goals A and B on addressing the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society and reducing the direct pressures on biodiversity and promoting sustainable use (for more information and guidance on mainstreaming please consult Module 3).

Integration of biodiversity targets in sectoral and cross-sectoral strategies will require some degree of buy-in on the part of sectoral and cross-sectoral actors. However working towards the establishment of such targets can also be seen as a means to motivate sectoral actors to work together (integrating biodiversity concerns into their sector) towards conservation, sustainable use and benefit sharing. Boxes 5-7 give examples of national biodiversity targets integrated into sectoral and/or cross-sectoral plans in Finland, the Netherlands, and Cambodia.

Box 5 Finland's sustainable forest management targets

Finland's National Forest Programme 2015 aims to make Finland a world pioneer in sustainable forest management by 2015. The Forest Biodiversity Action programme for Southern Finland 2008-2016 (METSO) supplements the National Forest Programme in objectives concerning ecological sustainability. This programme aims to halt degradation of forest habitats and species, and stabilise a favourable trend in Southern Finland's forest biodiversity by 2016. The METSO Programme targets both state-owned and private lands. However, as over 75 % of forests are privately owned in the southern parts of the country where the need for biodiversity conservation is the most acute, the funds of the METSO-programme (180 million Euros) are mainly channeled to private forests owners, forest companies, municipalities and congregations.

The wide-ranging Programme includes 14 action points, the most fundamental of which aim to enhance Southern Finland's network of protected areas, and to safeguard forest biodiversity in privately-owned forests across the region. The government aims to have:

- A total of 96,000 ha of areas voluntarily offered by landowners established as private nature reserves or acquired by the State by 2016.
- The total area of sites where biodiversity is safeguarded in privately owned forests increased by 82,000-173,000 hectares by 2016. These sites include 400-800 habitat management projects.
- The extension of protected areas of significance for biodiversity in State-owned lands by a total area of 10,000 ha over the period 2008-2010, in connection with natural resource planning processes.

Thus, together, the two main action points of the program aim to protect over 200,000 hectares of ecologically valuable forests by establishing permanent conservation areas and making fixed-term (10 to 20 years) conservation contracts with land-owners. Reaching this target would double the conservation area in Southern Finland.

Sources: [Finland Ministry of Agriculture and Forestry web site, METSO Programme](#)
[Interim assessment of the METSO Forest Biodiversity Programme for Southern Finland](#)

Box 6 Biodiversity Relevant Targets in the Netherlands's Policy on Trade Chains

Recognizing that demand for natural resources and raw materials in the Netherlands leaves a large ecological footprint, not only within the nation's territory, but also in other countries, the Dutch government aims to increase the sustainability of the wood, agricultural raw materials (soya, palm oil, fish meal and biomass) and peat trade chains, as well as the mining, energy, tourism, and financial sectors. The programme has established three targets in this respect:

- ✓ In the long term, all raw materials from natural resources or from nature that are used in the Netherlands – whether they are obtained in the Netherlands or abroad – must be produced sustainably.
- ✓ From 2010 on, the central government of the Netherlands will purchase only wood that has been produced sustainably. The Dutch government will also strive to ensure that at least 50% of the wood on the Dutch market is produced sustainably by 2011.
- ✓ No later than 2011, the government of the Netherlands will conclude agreements with the business community on the transition required to manage biodiversity sustainably in the wood, palm oil, soya and peat production economic chains.

With regard to the energy sector, the Netherlands intends to be on course toward the European target of at least 10% of energy consumption coming from biofuels by 2020. However its biomass policy will reflect ongoing debates and a critical review of sustainability criteria for biofuels with the goal that moving to meet this target does not cause negative social, economic and ecological consequences. The Dutch government will specifically explore opportunities for developing countries in the rapidly growing international markets for sustainably produced biomass and biofuels.

Source: The Netherlands's Second NBSAP: "Biodiversity works: for nature, for people, forever"

Box 7 Biodiversity Relevant Targets Integrated into Cambodia's Millennium Development Goals and National Strategic Development Plan 2006-2010

Cambodia has set 14 clear targets to be achieved by 2015 into its MDG7. These include:

- Maintaining forest coverage at the 2000 level of 60% of total land area through 2010 and 2015.
- Maintaining the surface of 23 protected areas at the 1993 level of 3.3 million ha through 2015.
- Maintaining the surface of 6 new forest-protected areas at the present level of 1.35 million ha through 2015.
- The number of community-based fisheries will be increased from 264 in 2000 to 589 in 2015.
- By 2010, comprehensive and ecologically representative national and regional systems of terrestrial protected areas will be completed, and that of marine protected areas by 2012.
- At least 840 ha of coral and 9,000 ha of sea-grass will be under sustainable management by 2016.
- By 2012 20% of the nation's forests will be managed by local communities.
- The fuel wood dependency of households will be reduced from 92% of 1993 to 52% in 2015 and 61% by 2010.

Source: Cambodia's 4th National Report

2.4 Determining What Type of Targets to Use

When it comes to establishing a target, there are several choices to make. There can be many different types of targets, and choosing the appropriate form for each target can be difficult. The following characteristics of targets may be helpful in making these decisions:

National, sectoral, and/or area-based?

This refers to the particular areas and sectors affected by the target. This will define who is responsible for implementing actions towards achieving the target (ie targets that apply to a particular ecosystem throughout the country – eg marine and coastal areas, forests...., targets that apply to a specific ecosystem – eg. A specific coastal area, watershed, desert etc./ or targets that apply to a particular activity such as agriculture, forestry, fishing, etc.). It will also determine who will be benefited and impacted by action to achieve the target.

Examples

National: By 2018, reduce the use of phytosanitary products by 50% (and as soon as this is technically possible). (France - 2018 Ecophyto Plan).

Sectoral/cross-sectoral: The Czech Republic's State Environment Policy has an objective of increasing the share of organic farming out of agricultural land areas to at least 10% by 2010.

Area based: By 2012, Korea will designate its Demilitarized Zone (DMZ) as a UNESCO Biosphere Reserve.

Outcome- oriented or enabling?

The aim of the target can either be to affect the status of a particular biodiversity component, or that of a particular driver (outcome-oriented e.g. 20% reduction in deforestation, 100% of threatened species protected...), or it can aim at the setting in place of mechanisms that will enable the protection and sustainable use of biodiversity (enabling e.g. the establishment of a biodiversity monitoring system, the passing of biodiversity conservation legislation, the creation of research institutes, or the conducting of research etc.)

Examples

Enabling: Costa Rica has an institutional framework for the supervision and evaluation of the national system of protected areas and is applying this tool in monitoring the effectiveness of management for 40% of the protected areas by 2010, and 75% of protected areas by 2012.

Outcome oriented: By 2012, China's forest coverage will be increased to 20% of the country's total land area. (National 11th Five-Year Plan 2008-2012).

Quantitative, or qualitative?

This will depend on the specific subject of the target being set. Qualitative targets are useful as motivational and inspirational tools, and for instances where it is difficult to establish indicators that have a clear and measurable relationship with the subject of the target. However quantitative targets are preferable in cases where effective indicators do exist or there is a degree of confidence that they can be developed (see section 4 of this module). Quantitative targets facilitate measuring progress, and allow the target to be progressively adjusted in the light of experience.

Targets that aim at the completion of a task (often enabling ones) are neither quantitative nor qualitative. In these cases, if the target task is not completed, the target is not met, and it may be

difficult then to measure and demonstrate any progress that may have been made towards its achievement.

Examples

Quantitative: By 2012, forest and tree cover will be increased to 33% (from 23.39% presently). (India)

Qualitative: To reduce and stop the rate of biodiversity degradation and extinction at national, regional and local levels within 2003-2020, along with rehabilitation and sustainable use efforts. (Biodiversity Management Action Plan). Indonesia

Completion of task: By 2012, create 10 marine natural parks (France)

Long, medium, or short term?

It is usually preferable to set a time frame within which targets are expected to be met. This allows planners and stakeholders to monitor and evaluate progress and/or to adjust the quantitative aspect of the target as progress is made. For example a deforestation target can aim to reduce deforestation by x% by a certain year (short term), by y% by a later date (medium term), and by z% by an even later date (long term). Most enabling targets should be short and/or medium-term targets.

Examples

Long: Japan's third National Biodiversity Strategy and Action Plan (2007) sets out a "Centennial Plan", a forward-looking hundred-year vision for ecosystem restoration, biodiversity conservation, and sustainable use in the context of major demographic and climate change.

Medium-Long: To increase the country's afforestation to 30% in 2020 and to 33% in 2050. (Poland- National Forest Policy)

There is no one recipe for making the above decisions, as a lot will depend on national circumstances and on the biomes, biodiversity components, economic activities and sectors and actors involved. Ideally, a set of national targets would combine several forms of targets appropriate to national circumstances.

Regardless of the types of targets used, and of the particular combination thereof, **a set of national goals and targets should have the following characteristics:**

- ✓ **Aim to reduce as much as possible the rate of loss of national (and global) biodiversity,** and/or to reduce one of the direct or indirect drivers of biodiversity loss.
- ✓ **Cover the main biodiversity issues in the country**
- ✓ **Address all three levels of biodiversity** (ecosystem, species, genetic)
- ✓ **Address the three objectives of the Convention** (conservation, sustainable use, and benefit sharing)
- ✓ **Be specific and measurable**
- ✓ **Be feasible:** There is nothing to be gained by setting unattainable targets as failure may result in a loss of credibility in, and support for, biodiversity planning.

- ✓ **Be intricately tied to the NBSAP (or equivalent instrument(s)),** their goals and objectives, and their policy measures and actions to implement the Convention.
- ✓ **Preferably be organized in a format similar to (or that allows cross-referencing with) the goals and targets adopted by the CBD COP** (i.e. those of the targets of the updated Strategic Plan, the Global Strategy for Plant Conservation and/or the Programme of Work on Protected Areas) in order to facilitate the review of progress achieved in meeting the global targets.
- ✓ **Be developed using a participatory, multi-stakeholder process**
- ✓ **Be limited in number.** While each Party should have at least 5-10 targets (one or two for each strategic goal), 100 targets are far too many to keep track of.

3. Monitoring Progress Towards Targets

National targets and associated activities should be kept under review and adjusted in the light of experience and new knowledge. The public, as well as managers, scientists and policy makers should be involved in critiquing the effectiveness of both the NBSAP and the targets. The monitoring and evaluation process should be part of the NBSAP process and should allow for an assessment of the extent to which conservation objectives have been met, and for adjustments to be made in approaches, tools, and targets.

The setting of targets needs to be accompanied with complementary monitoring programmes, which may include **indicators**. 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.

Biodiversity indicators, when used to assess national or global trends, build a bridge between 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.

The CBD has identified a set of outcome-oriented indicators to measure progress towards the 2010 target. For example the Marine Trophic Index and Water quality of freshwater ecosystems are used to measure ecosystem integrity and ecosystem goods and services, the area of forest, agricultural and aquaculture ecosystems under sustainable use is used to measure sustainable use, and the status and trends of linguistic diversity and numbers of speakers of indigenous languages is used to indicate the status of traditional knowledge, innovations and practices.

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 most of the adopted 2010 indicators, and a lead organization has been identified to work with each indicator.

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 Strategic Plan for Biodiversity 2011-2020, including the Aichi Targets. (Box 8 provides the example of the UK's biodiversity indicators). 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.

Box 8 The UK's Biodiversity Indicators

The UK uses a series of eighteen biodiversity indicators in order to monitor changes in various aspects of biodiversity and progress toward the achievement of its 2010 biodiversity targets. These indicators are aligned with the six focal areas used by the Convention on Biological Diversity (CBD) and the European Biodiversity Indicators. They include, for example: trends in the populations of wild birds and butterflies, plant diversity and the status of priority species and habitats. Both long term and short term change are reported: Short term change is measured in relation to the assessment for the year 2000, or the closest date for which data are available; and long term change is measured in relation to the earliest date for which data are available, provided this precedes 1996. A third measure shows recent and emerging trends over the last year.

The short term and long term status of each indicator is illustrated using a traffic light system that shows the nature of the change as follows:

A green or red traffic light is only applied when there is sufficient confidence that the change is 'significant' and not simply a product of random fluctuations. An amber traffic light is applied where the indicator value has not changed by more than 3% from an average value calculated for the base year.

These headline indicators are providing important evidence for biodiversity related decision making. They are also a useful way for the government to communicate complex biodiversity data - used to develop policies and actions to conserve biodiversity- and the outcomes of these policies and actions, to a wide audience.

Source: [England Biodiversity Strategy Indicators: Assessment of Change](#)

Conclusion

This Module has given an overview of the use and development of national targets in the context of the CBD. It is important to reiterate here that apart from being key to biodiversity planning, the establishment of and reporting on targets, along with the use of indicators, are very important and potentially powerful communication tools both for rallying public support and for 'making the case' for conservation and sustainable use to decision-makers. The module explains how targets can be established in conjunction with, and as part of, the NBSAP updating process, and provides examples of national targets established in sectoral and cross-sectoral policies. The module also

gives some guidance on the types of targets, and the types of questions that emerge when setting biodiversity targets. While the goals and targets of the Strategic Plan for Biodiversity 2011-2020 provide a framework for national targets, the latter must reflect national circumstances.

