# DRAFT

## The Global Strategy for Plant Conservation

## Training module

## How to include GSPC targets in National Biodiversity Strategies and Action Plans

April 2012

# Contents

## About this module

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. This module is particularly relevant for focal points of the Global Strategy for Plant Conservation (GSPC).

This module explains the background to the GSPC and describes the plant conservation targets that have been adopted for 2020. The module provides information on who is involved in GSPC implementation (the relevant stakeholders) and gives examples and case studies of how the GSPC is being implemented at the national level. The module also shows the linkages between the GSPC targets and the Aichi Biodiversity Targets and provides advice and guidance on incorporating GSPC targets into revised and updated NBSAPs.

The module is available on the GSPC website (www.plants2020.net) and its contents may be freely used for non-commercial purposes, providing the source is acknowledged.

This is not an official document of the Convention on Biological Diversity.

## 1. What is the Global Strategy for Plant Conservation

The Global Strategy for Plant Conservation (GSPC) is a cross-cutting programme of the Convention on Biological Diversity.

In 2010, the Conference of the Parties to the CBD, by decision X/17, adopted the Updated Global Strategy for Plant Conservation 2011-2020. The Strategy aims to halt the continuing loss of plant diversity and to secure a positive, sustainable future where human activities support the diversity of plant life and where in turn the diversity of plants support and improve our livelihoods and well-being.

The GSPC includes 16 outcome-oriented global targets set for 2020 (Box 1), and provides a framework to facilitate harmony between existing initiatives aimed at plant conservation, to identify gaps where new initiatives are required and to promote the mobilization of the necessary resources.

**The vision of the GSPC is:**

"Without plants, there is no life. The functioning of the planet, and our survival, depends on plants. The Strategy seeks to halt the continuing loss of plant diversity."

**The mission of the GSPC is:**

"The Global Strategy for Plant Conservation is a catalyst for working together at all levels - local, national, regional and global - to understand, conserve and use sustainably the world's immense wealth of plant diversity whilst promoting awareness and building the necessary capacities for its implementation."

### 1.2 Guidance for Parties on implementation

In Decision X/17, the Conference of the Parties:

- Decided to pursue the implementation of the GSPC as part of the broader framework of the Strategic Plan for Biodiversity 2011-2020.
- Emphasised that the global targets for 2011–2020 should be viewed as a **flexible framework** within which national and/or regional targets may be developed, according

to national priorities and capacities, and taking into account differences in plant diversity between countries.

- Invited Parties and other governments to **develop or update** national and regional targets as appropriate and, where appropriate, incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans and to **align the further implementation of the GSPC with national and/or regional efforts to implement the Strategic Plan for Biodiversity**.

**Box 1. The GSPC targets**

| | |
|---|---|
| **Objective I:** | **Plant diversity is well understood, documented and recognized** |
| Target 1: | An online flora of all known plants. |
| Target 2: | An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action. |
| Target 3: | Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared. |
| **Objective II:** | **Plant diversity is urgently and effectively conserved** |
| Target 4: | At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration. |
| Target 5: | At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity. |
| Target 6: | At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity. |
| Target 7: | At least 75 per cent of known threatened plant species conserved in situ. |
| Target 8: | At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes. |
| Target 9: | 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge. |
| Target 10: | Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded. |

**Objective III. Plant diversity is used in a sustainable and equitable manner**

Target 11: No species of wild flora endangered by international trade.

Target 12: All wild harvested plant-based products sourced sustainably.

Target 13: Indigenous and local knowledge innovations and practices associated with plant resources, maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care.

**Objective IV: Education and awareness about plant diversity, its role in sustainable livelihoods and importance to all life on earth is promoted**

Target 14: The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes.

**Objective V: The capacities and public engagement necessary to implement the Strategy have been developed**

Target 15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy.

Target 16: Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy.

## 2. Identifying the stakeholders

The GSPC targets are wide-ranging and broad-based. Their implementation requires action at both the species and the habitat level. The targets address the conservation of all plants, including wild species, crop plants, forest trees etc. There are also targets for supporting actions including education, public awareness and capacity building.

To achieve the targets of the GSPC, a wide range of stakeholders across a range of sectors, need to be engaged. These stakeholders will generally include representatives from Ministries of the Environment, Agriculture and Forestry, but other groups must also be considered. For example, education is key to ensuring the sustainability of conservation actions. Therefore representatives of the Ministry of Education might be considered important stakeholders. Botanic gardens are also important players, but may be missed if considered to be part of the

leisure and tourism sector rather than the environment sector. It is important to also engage with environmental NGOs and indigenous and local communities as these groups are often influential and active in local grass-roots conservation projects.

Table 1 provides a list of some of the stakeholders that might be considered relevant to each of the 16 targets. This list is indicative rather than exhaustive. Each country will need to identify their relevant stakeholders according to their national situation.

**Table 1: Possible stakeholders for each target of the GSPC**

| Target | Likely stakeholders |
|---|---|
| 1 | Herbaria, Botanic gardens, Bioinfomatics specialists, GBIF Focal Point, Universities with taxonomy departments, National Flora Societies |
| 2 | Herbaria, Botanic gardens, Conservation specialists, Universities, Research Institutes, National Red List Authority, IUCN Specialist Groups |
| 3 | Universities, Research institutes, Botanic gardens, Indigenous and local communities |
| 4 | Protected area managers, Ecologists, Community Based Organizations(CBOs) |
| 5 | Protected area managers, Universities, Research Institutes, Botanic gardens, Indigenous and local communities, Environmental NGOs, CBOs |
| 6 | Farmers and land owners, Agri-business sector, Forest managers, Logging companies, CBOs, Women's associations |
| 7 | Protected area managers, Botanic gardens, National flora societies, Universities |
| 8 | Botanic gardens, Seed banks, Universities, Research institutes, CBOs |
| 9 | Plant genetic resource institutes, Seed banks, Agricultural research institutes, Plant breeders, Universities, indigenous and local communities, Women's Associations, Traditional healers, Farmer's associations |
| 10 | Protected area managers, Quarantine agencies, Horticultural trade, Research institutes, Universities |
| 11 | National CITES authority, Customs officials, medicinal plant traders, plant product (timber etc.) importers/exporters, horticultural trade. |
| 12 | Local and indigenous communities, plant product importers /exporters, medicinal plant and horticultural trade, Women's associations, Traditional healers |
| 13 | Local and indigenous communities, Universities, Women's associations |
| 14 | Botanic gardens, Teachers, Environmental NGOs, Communication specialists, Universities, Media groups, CBOs |
| 15 | Universities, Schools, Research Institutes |
| 16 | All stakeholders |

The first step in developing a national response to the GSPC is to identify the relevant the stakeholders and engage them in a dialogue. Many activities are already going on in most countries that contribute to the GSPC. These are not always recognised and accounted for in national CBD reporting. A stakeholder consultation will allow these activities to be identified and an inventory of on-going activities compiled. This process will also allow a community group to be developed around national plant conservation activities.

## 3. Implementation of the GSPC at national level

Since the adoption of the GSPC in 2002, countries have responded in various ways. In general these responses can be grouped into three different approaches:

1. Countries have developed a National Plant Conservation Strategy with a set of national targets, more or less mirroring the global targets. Examples of such an approach are provided by China, Malaysia, Mexico, Philippines, Seychelles, UK.

2. Countries have reviewed progress at the national level against the 16 GSPC targets, without identifying specific national targets. South Africa provides a good example of this approach

3. Countries have incorporated GSPC targets into National Biodiversity Strategies and Action Plans, but have not developed a specific national response to the GSPC.

### 3.1 Carrying out a national GSPC audit

Having identified the relevant stakeholders in national GSPC implementation, the next step is to carry out an audit of on-going activities. This will allow a clear picture to be developed of the current state of progress towards each of the GSPC targets in your country. It is important to remember that you will not be starting from scratch. There are likely to be significant activities already on-going in your country that contribute to many of the GSPC targets. However, these may not previously have been well identified or included in national CBD reporting.

A set of questions that could form the basis of developing a national GSPC audit are provided in Table 2 below. The whole range of relevant stakeholders should be engaged in providing answers to these questions.

**Table 2: Developing a national GSPC audit**

| For each of the following questions, it is important to know if the information exists and if the necessary tools are in place to continue to gather, monitor and update this information | |
|---|---|
| **Question 1**: | Is there a national flora and a national plant Red List? |
| **Question 2**: | Is information available on the status of threatened plants in conservation programmes – *in situ* / *ex situ*? |
| **Question 3**: | Is there a national inventory of protected areas? |
| **Question 4**: | Are protected areas working for the conservation of threatened plant species? |
| **Question 5**: | What actions are being taken to monitor and control invasive species? |
| **Question 6**: | Are plant resources being used sustainably? How do we monitor this? |
| **Question 7**: | Are linkages between the environment, forestry and agriculture sectors in place? How do we share information between these sectors for reporting purposes? |
| **Question 8**: | Is indigenous knowledge on plants being protected? |
| **Question 9**: | How is information on the importance of plants incorporated into education and public awareness programmes? |

The process of finding answers to these questions will help to build up a good understanding of the progress being made at the national level towards meeting the targets of the GSPC. It will also allow gaps in knowledge, capacity and tools to be identified.

## 3.2 Examples of national implementation

**<u>The UK example</u>**

In 2004, the UK published the first national response to the GSPC - '*Plant Diversity Challenge'* which set out objectives and targets for plant conservation in the UK. Addressing the 16 targets defined in the GSPC, *Plant Diversity Challenge* clearly identified the actions that would be required in the UK to meet the challenges posed by the global targets. In developing its response, the UK noted that much work was already going on that contributed to the delivery

of the targets, for example through the UK Biodiversity Action Plan. The report was prepared following an extensive two-stage consultation process involving many different stakeholders.

In 2006, a UK conference reviewed the progress that had been made in implementing *Plant Diversity Challenge*. This conference noted that good success was being achieved in areas where the plant conservation community and its networks were leading actions. Good progress was being made in areas such as plant checklists, Red listing, the identification of Important Plant Areas and *ex situ* conservation. However, those targets that required action across environment and policy sectors were not as successful.

The conference concluded that: "*the importance and value of the GSPC as a tool for galvanizing conservation efforts and driving the conservation agenda forwards, must have a higher profile amongst politicians, policy makers and the general public. Embedding the GSPC objectives in strategic plans and decision making at national, regional and local level is the only way to implement effective plant conservation at a significant enough level to make a real difference*."

Ref: Plant Diversity Challenge, 3 years, 16 targets, 1 Challenge: Progress in the UK towards the Global Strategy for Plant Conservation. 2007. JNCC, Peterborough, UK.

*Other examples to be developed.*

## 4. The Strategic Plan for Biodiversity and the Aichi Targets

At its tenth meeting (2010), COP adopted the Strategic Plan for Biodiversity 2011-2020, and the Aichi Biodiversity Targets. The purpose of the revised Strategic Plan is to promote effective implementation of the Convention through a strategic approach comprising **a shared vision, a mission and strategic goals and targets** that will inspire broad based action by all Parties and stakeholders. It will provide a framework for the establishment of national and regional targets and for enhancing the coherence in the implementation of the provisions of the Convention and the decisions of the COP.

The vision of this Strategic Plan is a world of "**Living in harmony with nature**" where

> By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.

The Strategic Plan is organized into five strategic goals under which are 20 headline targets (the Aichi Targets) for 2020. The goals and targets comprise both: (i) aspirations for achievement at the global level; and (ii) a flexible framework for the establishment of national targets.

The five Strategic Goals are:

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. 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

In decision X/2 adopting the Strategic Plan for Biodiversity 2011-2020, COP10 has urged Parties to:

- Review, and as appropriate **update and revise their NBSAP's** in line with the Strategic plan….;
- Use the revised and updated NBSAPs as effective instruments for the **integration of biodiversity targets** into national development and poverty reduction policies and strategies, national accounting….
- **Develop national and regional targets**, using the Strategic Plan and its Aichi targets, as a flexible framework …
- **Monitor and review** the implementation of their NBSAPs in accordance with the Strategic plan and their national targets….
- **Support the updating of NBSAPs as** effective instruments to promote the implementation of the Strategic Plan and the **mainstreaming of biodiversity** at the national level.

## 5. Linkages between the GSPC targets and the Aichi targets

Making clear links between the GSPC targets and the 20 targets of the Strategic Plan for Biodiversity is essential if the GSPC targets are to be incorporated into updated and revised NBSAPs.

Firstly it may be useful to think about how the GSPC targets can contribute to the achievement of the 5 Strategic Goals of the Strategic Plan. It should be noted that some GSPC targets may contribute to more than one of the Strategic Goals.

**Goal A**:

*Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society*

**Relevant GSPC targets: Targets 11, 12 and 14**

GSPC targets 11 and 12 address the sustainable use of plant diversity by all sectors of society, while Target 14 aims to raise awareness of the importance of plant diversity and need for its conservation.

**Goal B:**

*Reduce the direct pressures on biodiversity and promote sustainable use*

**Relevant GSPC targets: Targets 4, 5, 6, 10, 11 and 12**

Targets 4, 5, 6 and 10 focus on reducing the pressures on biodiversity caused by habitat loss, agriculture and invasive species. Targets 11 and 12 promote the sustainable use of plant diversity.

**Goal C:**

*Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*

**Relevant GSPC targets: Targets 4, 5, 7, 8 and 9**

Targets 4 and 5 focus on the protection of ecosystems. Targets 7, and 8 are aimed at species-level conservation, while target 9 addresses the conservation of plant genetic diversity.

**Goal D:**

*Enhance the benefits to all from biodiversity and ecosystem services*

**Relevant GSPC targets: Targets 4 and 5**

Targets 4 and 5 contribute to this goal through the conservation and restoration of ecosystems.

**Goal E:**

*Enhance implementation through participatory planning, knowledge management and capacity building*

**Relevant GSPC targets: Targets 1, 2, 3, 13, 15 and 16**

Targets 1, 2, 3 and 13 focus on the generation, maintenance and sharing of knowledge, understanding and information about plant diversity, with Target 13 having a specific focus on local and indigenous knowledge. Targets 15 and 16 address the need for capacity building and networking for enhanced plant diversity conservation.

## 6. Linking to the NBSAP process

In relation to the implementation of the updated GSPC, COP decision X/17:

> Invited Parties and other governments to **develop or update national and regional targets as appropriate** and, where appropriate, incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans and to **align the further implementation of the GSPC with national and/or regional efforts to implement the Strategic Plan for Biodiversity.**

At COP10, Parties committed to revising their NBSAPs in accordance with the Strategic Plan for Biodiversity 2011-2020. They also committed to develop national targets that support the achievement of the Strategic Plan and its 20 targets.

This period of updating NBSAPs therefore provides an ideal opportunity for the plant conservation targets adopted at COP10 to be incorporated into national strategies and for the GSPC targets to be used to guide and inform the development of national biodiversity targets.

More information about the development and updating of NBSAPs is provided by the CBD in other training modules in this series. Important points to note here are that:

- An NBSAP serves the function of helping to mobilise and organise the relevant national stakeholders to identify, prioritise, and materialise action to implement the CBD in their country and to mainstream biodiversity concerns into their sectoral and cross-sectoral planning.
- Developing, updating and implementing the NBSAP is an iterative and cyclic process involving a wide range of stakeholders.
- The organisations and individuals working for plant conservation are important stakeholders in the development and implementation of NBSAPs.

Table 3 indicates the linkages between the 16 targets of the GSPC and the 20 targets of the Strategic Plan for Biodiversity. This provides a framework for identifying opportunities for incorporating plant conservation targets into broader biodiversity targets.

**Table 3: Links between the 16 GSPC targets and the 20 Aichi targets of the Strategic Plan for Biodiversity 2011-2020**

| **UPDATED GSPC target 2011-2020** | **Relevant target(s) from the Strategic Plan for biodiversity 2011-2020** |
|---|---|
| T1: An online flora of all known plants | T19: 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 |
| T2: An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action | T19: 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 |
| T3: Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared | T19: 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 |
| T4: At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration | T5: 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 |

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| T4 (contd.) | T11: By 2020, at least 17 per cent of terrestrial and inland water areas, 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<br><br>T15: 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 |
| T5: At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity | T11: By 2020, at least 17 per cent of terrestrial and inland water areas, 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 |
| T6: At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity | T7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity |
| T7: At least 75 per cent of known threatened plant species conserved *in situ* | T12: 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 |
| T8: At least 75 per cent of threatened plant species in *ex situ* collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes | T12: 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 |

| | |
|---|---|
| T9: 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge | T13: 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 |
| T10: Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded | T9: 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 |
| T11: No species of wild flora endangered by international trade | T4: 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<br><br>T6: 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 |
| T12: All wild harvested plant-based products sources sustainably | T4: 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<br><br>T6: 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 |

| | |
|---|---|
| T13: Indigenous and local knowledge innovations and practices associated with plant resources maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care | T18: 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 |
| T14: The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes | T1: 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 |
| T15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy | T20: 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 |
| T16: Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy | T17: 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 |