

# **The Strategic Plan for Biodiversity 2011/2020 and indicators for tracking implementation progress**

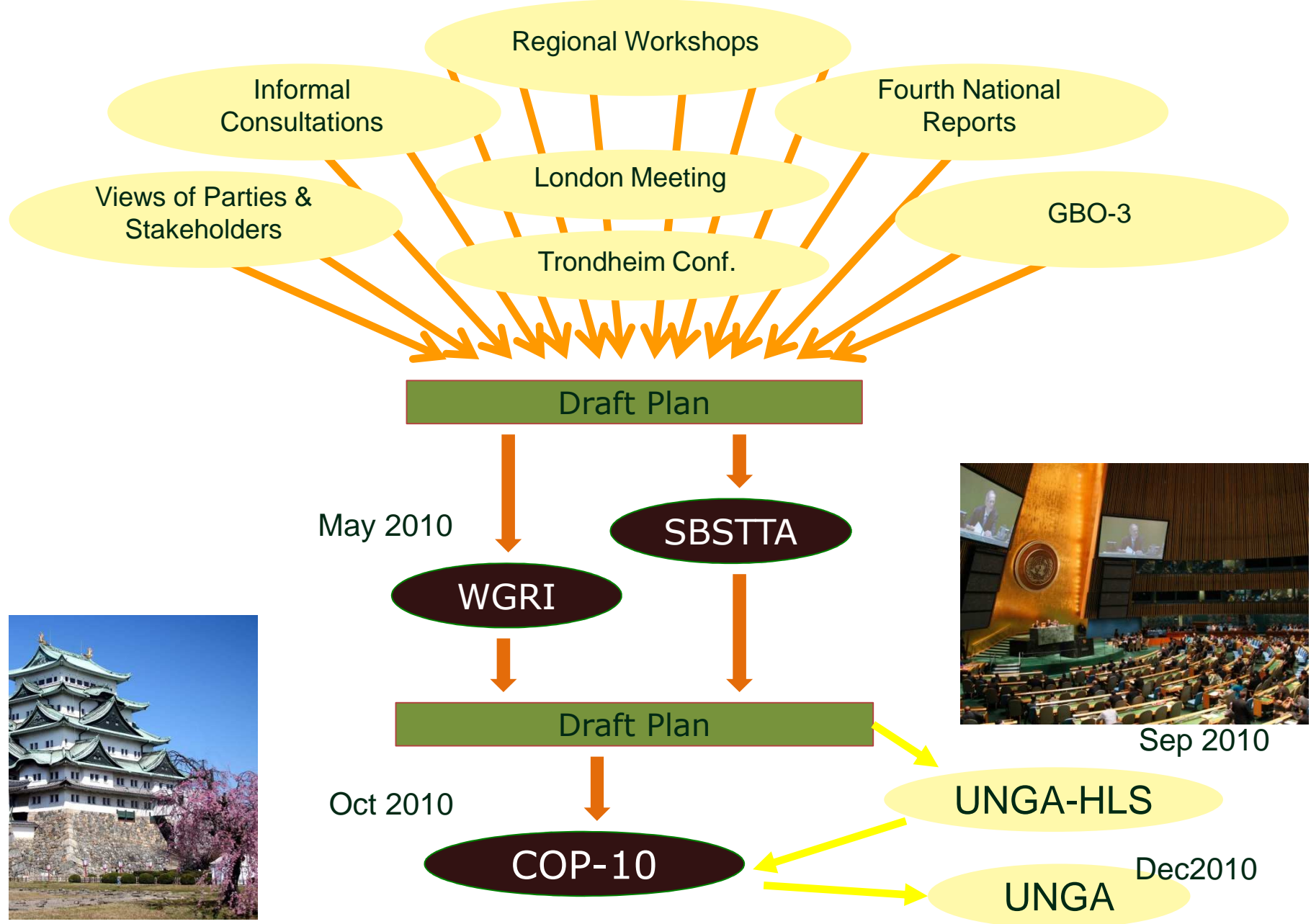
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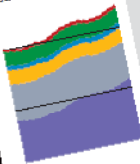


# An inclusive preparatory process



Secretariat of the  
Convention on  
Biological Diversity

CBD Technical Series No. 53



# BIODIVERSITY INDICATORS & THE 2010 BIODIVERSITY TARGET:

Outputs, experiences and  
lessons learnt from the  
2010 Biodiversity Indicators  
Partnership



More progress on indicators implementation status and a progress that crosses bioterror modification (10)

Abstract and metadata are available as supporting  
material on Science Online



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10.21203/science.1382177

## Global Biodiversity: Indicators of Recent Declines

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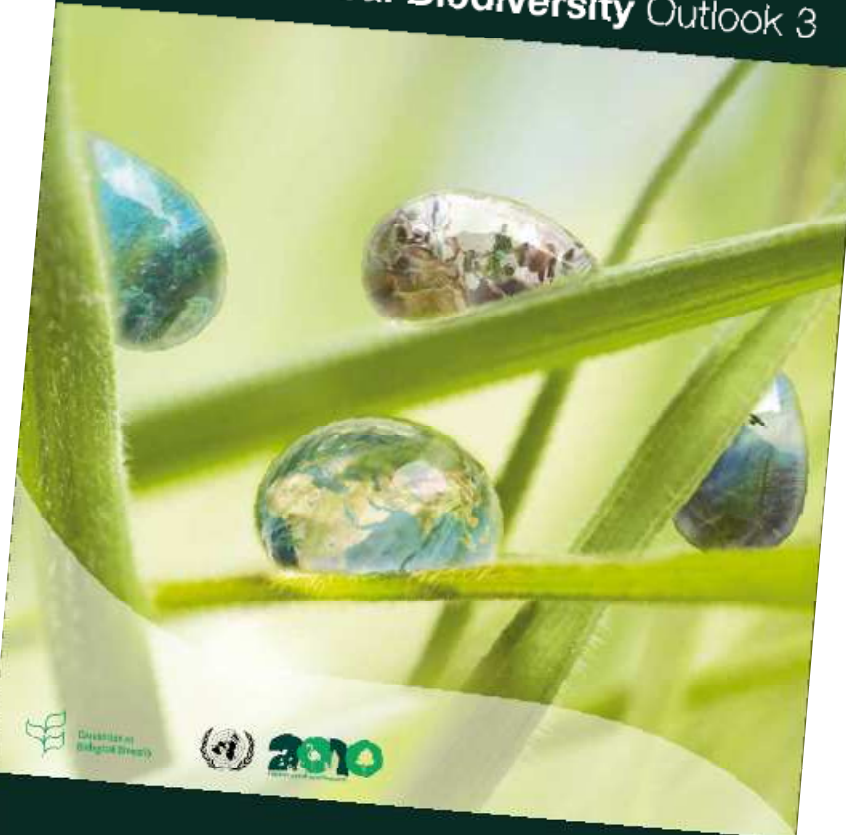
In 2002, world leaders committed, through the Convention on Biological Diversity, to achieve a significant reduction in the rate of biodiversity loss by 2010. We compiled 51 indicators to report on progress toward this target. Most indicators of the state of biodiversity lowering species' population trends, extinction risk, habitat extent and condition, and community composition) showed declines, with no significant recent reduction in rate, whereas indicators of pressures (including resource consumption, invasive alien species, nitrogen pollution, exploitation, and climate change impacts) showed increases. Despite some local successes in increasing responses, including extent and biodiversity coverage of protected areas, major forest management policy responses to invasive alien species, and biodiversity-related the rate of biodiversity loss does not appear to be slowing.

(\*) world leaders committed, through the Convention on Biological Diversity (CBD), to achieve by 2010 a significant reduction of the rate of biodiversity loss (1), and this "2010 target" has been incorporated into the United Nations Millennium Development Goals in recognition of the impact of biodiversity loss on human wellbeing (2). The CBD created a

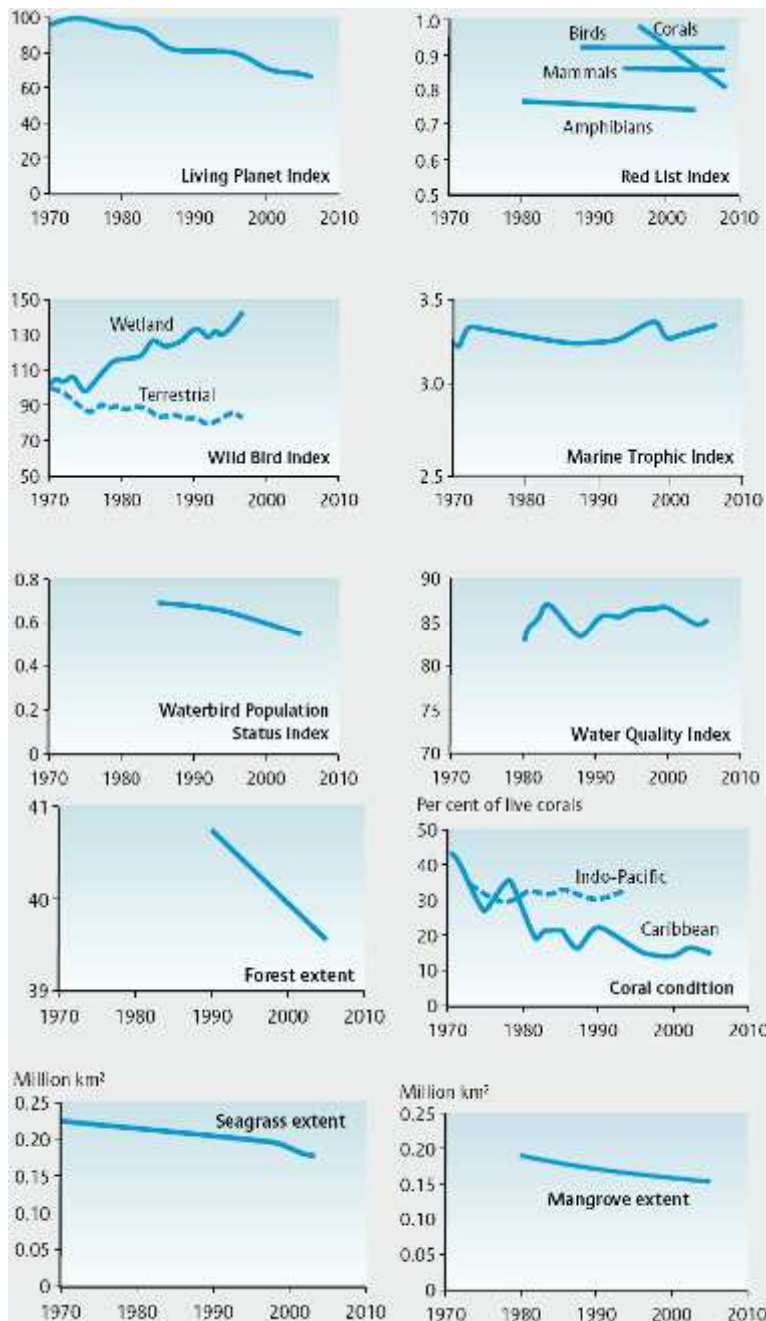
framework of indicators to measure biodiversity loss at the level of genes, populations, species, and ecosystems (3, 4). Although a majority have been published individually (5), hitherto they have not been synthesized to provide an integrated overview. Despite suggestions that the target is unlikely to be (6, 6), or has not been (4, 6, 6), we use data empirically using a broad suite of biodiversity indicators.

To evaluate achievement of the 2010 target, we determined the trend, and timing and direction of significant reductions in trend for individual indicators (1) and (2) calculated aggregate indicators relating to the state of biodiversity, progress toward the target, and management responses, and the state of forests (ecosystem services) that we derived from biodiversity, using the best available sources. To include aggregate indicators, we first scaled each of 24 indicators (out of 51) the first year with data from 1970) around (only eight indicators had earlier trends) and calculated annual proportional change from this first year. Then we used a generalized additive modeling framework (3, 12, 13) and determined significant reductions (12). Although absolute values are difficult to interpret because they aggregate different elements of biodiversity, this approach permits a synthetic interpretation of state of aggregate indicators.

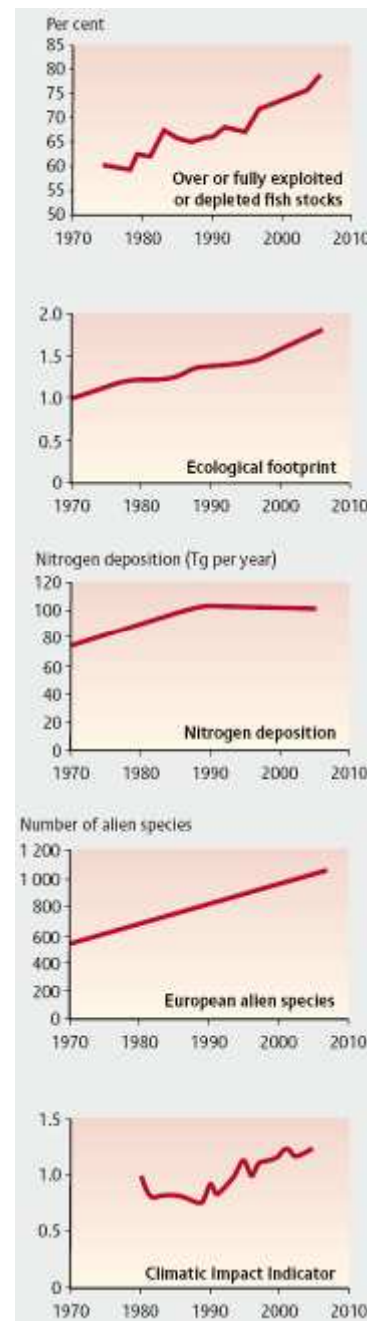
## Global Biodiversity Outlook 3



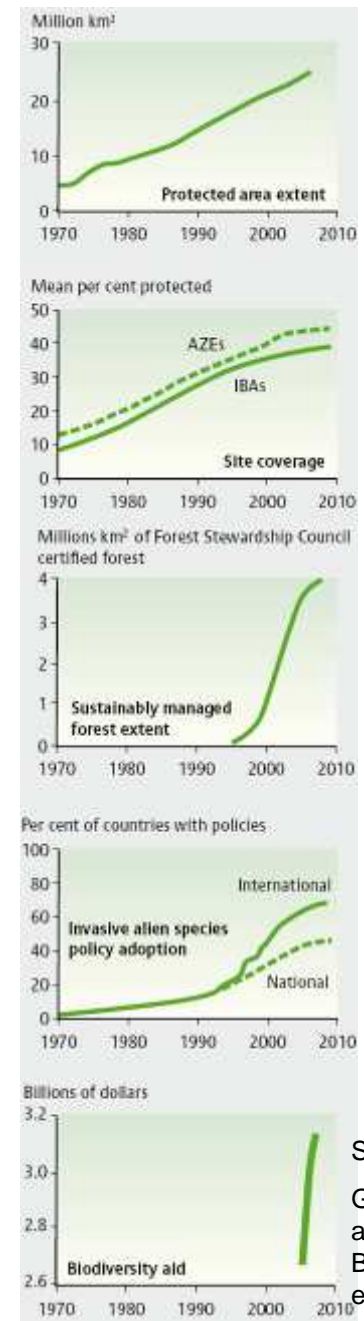
# State



# Pressure



# Response



Source:  
GBO-3,  
after  
Butchart  
et al 2010

# Strategic Plan for Biodiversity 2011-2020

**Framework** for **all** biodiversity-related Conventions and other stakeholders.

**Vision:** *Living in harmony with nature.* By **2050**, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.

**Mission** Take **effective and urgent** action to halt the loss of biodiversity in order to ensure that by **2020** ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication.

## 20 Aichi Biodiversity Targets

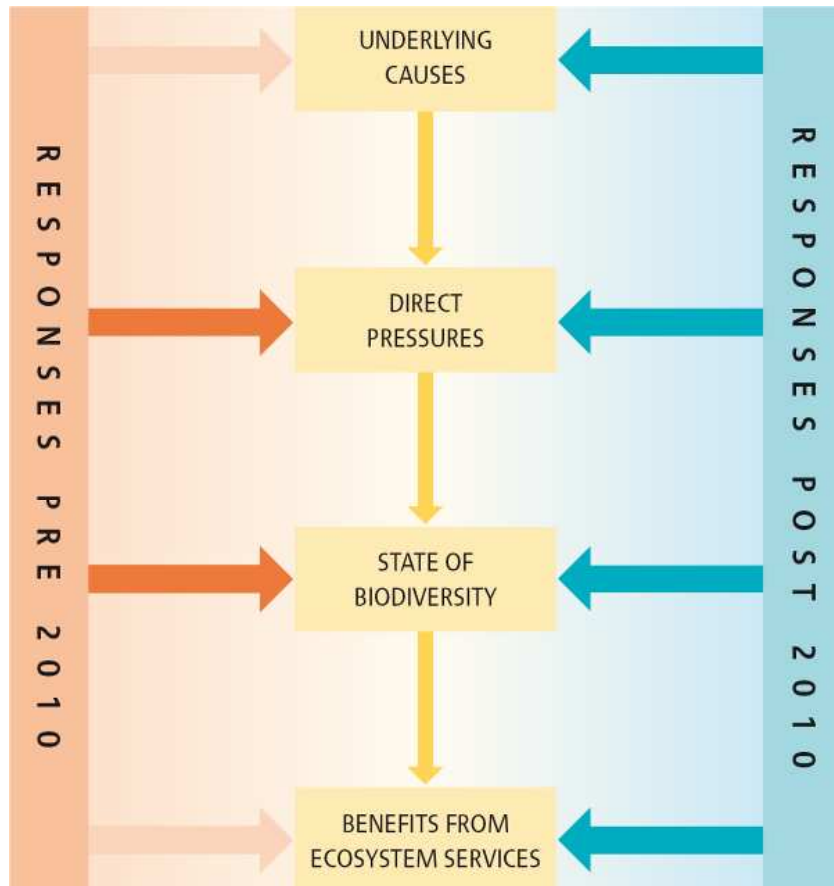
### Implementation mechanisms



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# Strategic Goals



- A. Address the **underlying causes** of biodiversity loss (mainstreaming)
- A. Reduce the **direct pressures** and promote sustainable use
- A. **Directly safeguard** ecosystems, species and genetic diversity
- B. Enhance the **benefits** to all from biodiversity and ecosystem services



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



# Aichi Nagoya Targets

## **Strategic goal A. Address the underlying causes of biodiversity loss**

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

Target 2: By 2020, biodiversity values are integrated into national and local development and poverty reduction strategies and planning processes and national accounts ...

Target 3: By 2020, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed .....

Target 4: By 2020, Governments, business and stakeholders have plans for sustainable production and consumption and keep the impacts resource use 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 stocks managed and harvested sustainably, so that overfishing is avoided .....

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

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 are conserved through systems of protected areas.....

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 is maintained,

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

Target 14: By 2020, ecosystems that provide essential services, including services are restored and safeguarded,

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,

Target 16: By 2015, the Nagoya Protocol on Access and Benefits Sharing is in force and operational

## **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 NBSAP.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities and their customary use, are respected.

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, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources,, should increase substantially .

# Framework for assessing progress towards the 2010 target

Focal Areas	Goals	21 Targets	Indicators
PROTECT THE COMPONENTS OF BIODIVERSITY	1		
	2		
	3		
SUSTAINABLE USE	4		
ADDRESS THREATS TO BIODIVERSITY	5		
	6		
	7		
ECOSYSTEM SERVICES	8		
TRADITIONAL KNOWLEDGE	9		
ACCESS AND BENEFIT-SHARING	10		
RESOURCES FOR CBD	11		



# COP 10 Commitments by Parties

- To **develop national targets** and report to COP-11;
- To **review, update revise NBSAPs** and report to COP-11 and/or COP12;
- To use **NBSAPs as effective instruments** for mainstreaming biodiversity;
- To **share data, develop indicators and measures**, and undertake regular and timely assessments of biodiversity and ecosystem services;
- To **monitor and review implementation** of NBSAPs;
- Recognise that adequate **financial resources and transfer of technology are** critical to enable implementation.



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# ToR for Indicators AHTEG (decision X/7)

- Advice on the **further development of indicators** already agreed through decisions VII/30 and VIII/15;
- **Suggest additional indicators** that have been, or could be, developed, where necessary, to constitute a coherent framework designed to assess progress towards targets of the Strategic Plan for Biodiversity 2011-2020;
- Develop **further guidance** and propose options for the establishment of mechanisms to support Parties in their efforts **to develop national indicators**;
- Provide **advice on the strengthening of linkages** between global and national indicator development and reporting.



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# Outcomes of AHTEG

**Indicator framework** consisting of:

- **12 Headline** indicators addressing the issues of the 20 Aichi targets (broad themes)
- **22 Operational** indicators that are ready for use globally (Category **A**)
- **Additional** indicators that should be developed at global level as a priority (Category **B**)
- A **larger number** of indicators for consideration at sub-global (i.e. national, state, province, sub-regional) level (Category **C**)



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**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.

**Trends in extent, condition and vulnerability of ecosystems, biomes and habitats (H)**

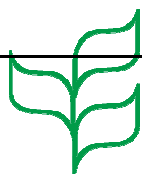
- Extinction risk trends of habitat dependent species in each major habitat type (A)
- Trends in extent of selected biomes, ecosystems and habitats (A) (decision VII/30 and VIII/15)
- Trends in proportion of degraded/threatened habitats (B)
- Trends in fragmentation of natural habitats (B) (decision VII/30 and VIII/15)
- *Trends in condition and vulnerability of ecosystems (C)*
- *Trends in the proportion of natural habitats converted (C)*

**Trends in pressures from unsustainable agriculture, forestry, fisheries and aquaculture (H)**

- *Trends in primary productivity (C)*
- *Trends in proportion of land affected by desertification (C) (also used by UNCCD)*

**Trends in pressures from habitat conversion, pollution, invasive species, climate change, overexploitation and underlying drivers (H)**

- Population trends of habitat dependent species in each major habitat type (A)



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Global Workshop (Brasilia, March 2012)

🌱 > Convention > Strategic Plan 2011-2020 > Indicators

Key Elements

Aichi Biodiversity Targets

Implementation

Indicators

Meetings and Documents

Briefing Sessions

Notifications

Inputs for revising and updating the Strategic Plan 2002-2010

**UN Decade on Biodiversity**

## Strategic Plan Indicators

In [recommendation XV/1](#) the Subsidiary Body on Scientific, Technical and Technological Advice took note of an indicative list of indicators identified by the [Ad Hoc Technical Expert Group \(AHTEG\) on Indicators for the Strategic Plan for Biodiversity 2011 - 2020](#). The indicators identified by the AHTEG have been compiled in the database below to facilitate their use. Indicators for the Strategic Plan for Biodiversity 2011-2020 will be further discussed during the [eleventh meeting of the Conference of the Parties](#).

SBSTTA welcomed this database in [recommendation XV/1](#) and requests that it be further developed, maintained, and periodically updated, with a view to maximizing its usefulness to Parties and other stakeholders, in collaboration with the [Biodiversity Indicators Partnership](#) and other relevant partners.

Please note that the wordings of the Strategic Goals and of the Aichi Biodiversity Targets have been shortened for reasons of readability. The official wording can be found in [decision X/2](#).

We would be grateful to receive any comments or ideas for how the database could be improved. Please send any comments to [secretariat@cbd.int](mailto:secretariat@cbd.int).

Strategic Goal

<All> ▼

Aichi Biodiversity Targets

<All> ▼

Communication question

<All> ▼

Headline indicator

<All> ▼

Indicator development status

<All> ▼

Indicator sensitivity

<All> ▼

Indicator scale

<All> ▼

Indicator scientific robustness

<All> ▼

# SBSTTA-15 recommendations (1)

- COP11 to **take note** of the indicative list of indicators;
- Recognition that Aichi Biodiversity Targets and proposed indicator framework provide a flexible basis for Parties which **can** be adapted, taking into account different national circumstances and capabilities;
- Parties **urged** to prioritize the application at the national level of those indicators that are ready for use at the global level where feasible and appropriate;



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# SBSTTA-15 recommendations (2)

- Parties **urged** to consider using the flexible framework and the indicative list of indicators in their updated national biodiversity strategies and action plans and in reporting, including through the 5NR;
- Parties **encouraged** to contribute to, update, verify and maintain relevant national data in **regional and global data sets** as a contribution to optimize and coordinate the production of indicators for monitoring and reporting at various scales and to promote the public availability of the data;



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# SBSTTA-15 recommendations (3)

- COP to **recognize** the need to **strengthen technical and institutional capacities** and to **mobilize adequate financial resources** for the development and application of indicators;
- COP to **request** the Executive Secretary, in collaboration with the **Biodiversity Indicators Partnership**, regional centres of excellence, and others, to:
  - Compile technical guidance materials for capacity-building;
  - Include capacity-building on the indicators framework in regional workshops.



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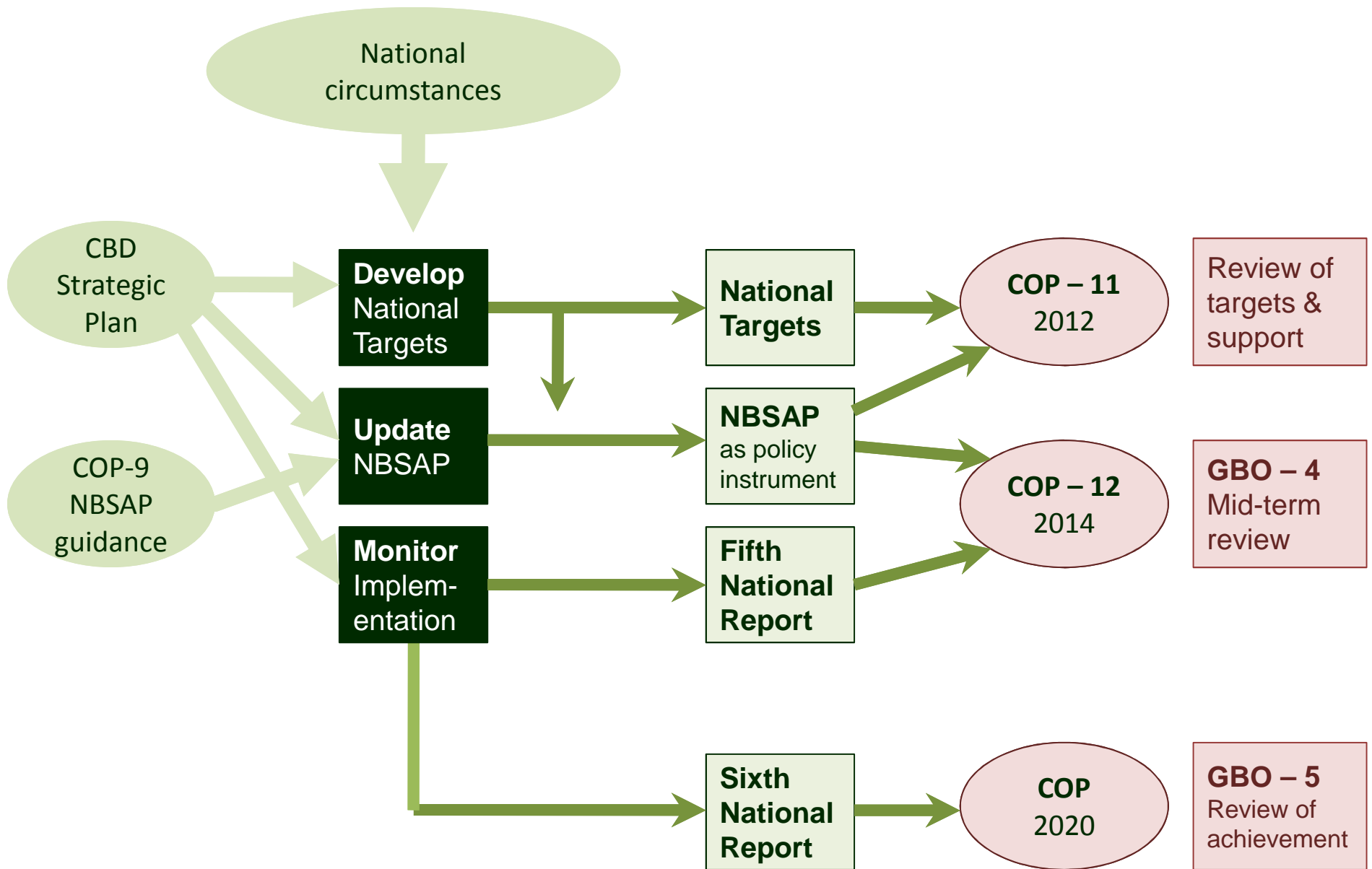
# SBSTTA-15 recommendation (4)

- COP to request the Executive Secretary to:
  - Further develop and maintain the online database on indicators <http://www.cbd.int/sp/indicators/>;
  - Assist Parties, especially those with limited resources and capacities and/or not yet using systematically produced indicators in their official reports and, at their request, to initially establish and apply a **few simple, cost-effective and easily applicable** indicators for priority issues;
  - plus more....



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# Updating and Implementing NBSAPs

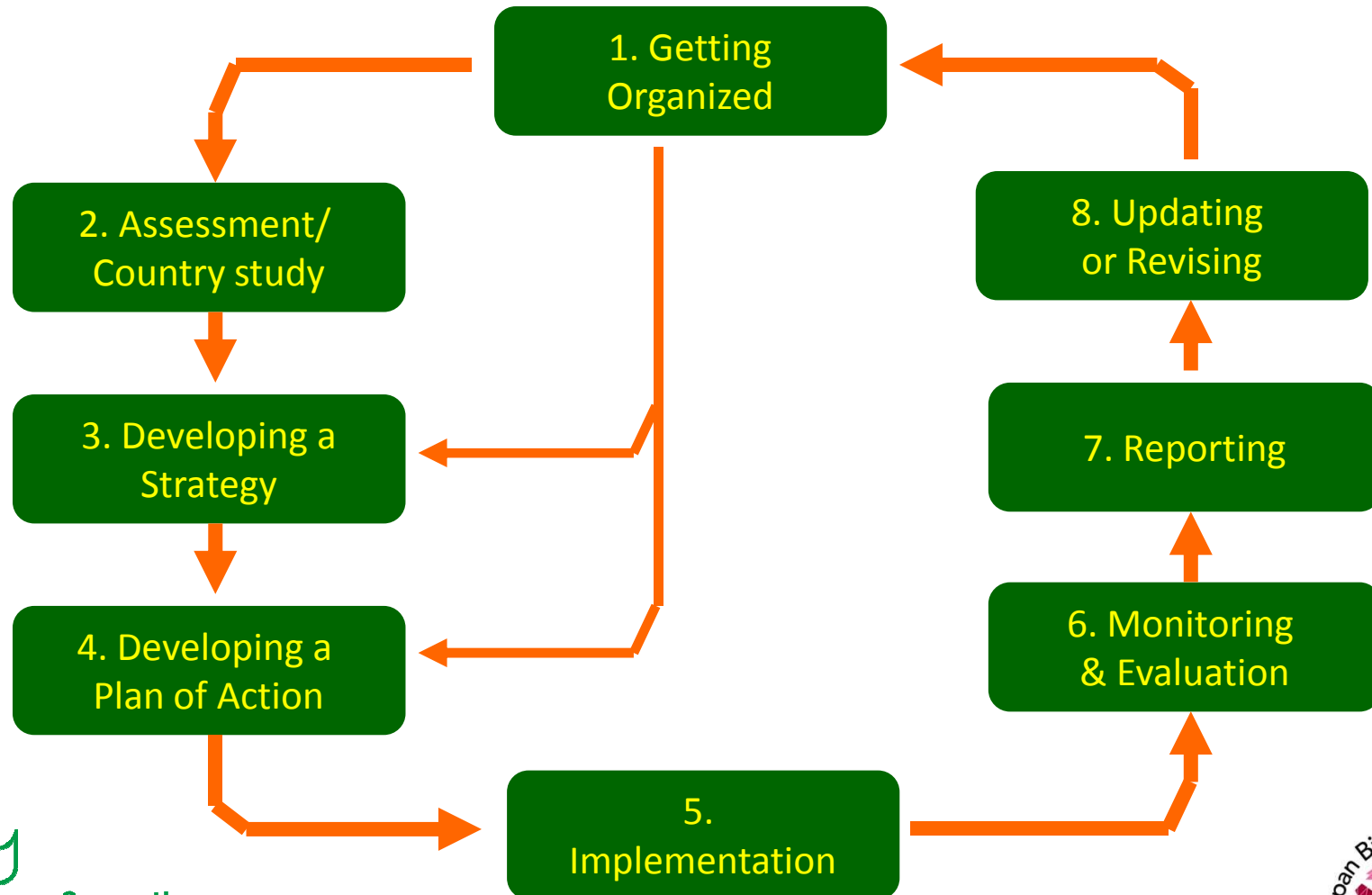
## A quick review of national progress in South Asia



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# Steps in the Biodiversity Planning Process



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Cluster	Component
I Preparation	1. Rapid stocktaking and review of relevant plans, policies and reports
	2. Identifying stakeholders; consultations; and awareness
	3. Supplementary studies (eg. the causes and consequences of biodiversity loss highlighting the value of biodiversity and ecosystem services and their contribution to Human well-being)
II. Setting national priorities and targets	4. Setting national targets, principles, & main priorities of the strategy though national consultation
III. Developing the strategy and action plan	5. Developing the strategy and actions to implement the agreed targets though national consultations
	6. Addressing the application and implementation of the NBSAP at sub-national levels through consultations with sub-national and local authorities
	7. Sectoral integration including mainstreaming into development, poverty reduction and climate change plans through sectoral consultations
IV. Development of Implementation plans and related	9. Developing a plan for capacity development for NBSAP implementation.
	10. Conducting a Technology needs assessment alternative: developing a plan for increasing technical capacity.
	11. Developing a communication and outreach strategy for the NBSAP.
	12. Developing a plan for resource mobilization for NBSAP implementation
V. Institutional, monitoring, reporting and exchange	13. Establishing/ strengthening of national coordination structures
	14. CHM development.
	15. Development of indicators and monitoring approach
	16. Fifth national reports
VI. Adoption by the government	17. Adoption

Main Section	Chapter or Sub-section
<b>I Introduction</b> (setting the scene and providing the rationale)	1. Values of biodiversity and ecosystem services in the country and their contribution to Human well-being
	2. Causes and consequences of biodiversity loss
	3. Constitutional, legal and institutional framework
	4. Lessons learned from the earlier NBSAP(s) and the process of developing the updated NBSAP.
<b>II National Biodiversity Strategy</b>	5. Long term vision
	6. Principles governing the strategy
	7. Main goals or priority areas
	8. National Targets (SMART)
<b>III. National Biodiversity Action Plan</b>	9. National actions to achieve the strategy, with milestones
	10. Application of the NBSAP to sub-national entities
	11. Sectoral Action - mainstreaming into development, poverty reduction and climate change plans
<b>IV. Implementation plans</b>	12. Plan for capacity development for NBSAP implementation, including a technology needs assessment
	13. Communication and outreach strategy for the NBSAP.
	14. Plan for resource mobilization for NBSAP implementation
<b>V. Institutional, monitoring and reporting.</b>	15. National Coordination Structures
	16. Clearing House Mechanism
	17. Monitoring and Evaluation