



Quick guide to the Aichi Biodiversity Targets Knowledge improved, shared and applied

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.

All countries need information to identify threats to biodiversity and determine priorities for conservation and sustainable use. While nearly all Parties report that they are taking actions related to monitoring and research, most also indicate that the absence or difficulty in accessing relevant information is an obstacle to the implementation of the goals of the Convention.

Explanation of the Target

The overall purpose of this target is to increase **knowledge**, the **science base** and **technologies** relating to biodiversity. This target should be regarded as a general commitment to increase the amount and quality of biodiversity relevant information and technologies as well as to make better use of it in decision making as well as to share it as widely as possible. It specifically calls for information on:

- The **values** of biodiversity – Biodiversity has multiple values owing to the different ecosystem services it provides. The types of values include economic, social and environmental values, many of which are poorly recognized and/or understood. While some values can be expressed in monetary terms many cannot.
- The **functioning** of biodiversity – Species provide a variety of functions within an ecosystems. These help to maintain relatively stable ecosystems as well as to provide the services upon which people depend. Our understanding of the role and function of species within ecosystems is poorly understood and needs to be improved, particularly if we are to avoid crossing ecosystem tipping points.
- The **status and trends** of biodiversity – Most of the information we have on biodiversity relates to its status and trends. However there are major gaps in this information with many ecosystems and species having little to no information. Status and trends information is particularly important as it allows for patterns of change to be identified as well as to determine if our responses to biodiversity loss are having any effect.
- The **consequences of biodiversity** loss – While it is widely recognized that we are losing biodiversity at an unprecedented rate we have relatively little information on the consequences of its loss. Much of the information we have is based on anecdotal evidence. Increasing understanding of the consequences of biodiversity loss will be crucial in creating momentum for its conservation.

The overall purpose of this target is to increase the amount and quality of information and tools at the disposal of policy makers and the general public. Specifically, information, technologies and the science base need to be:

- **Improved** – While the amount of information on biodiversity has increased greatly in recent years there are still major gaps in understanding which need to be filled, such as those related to taxonomy. Similarly much of the information which is currently available is often incomplete and/or in need of updating.
- **Widely shared and transferred** – Information and technologies relating to biodiversity should be made more accessible and shared, subject to national legislation, so that it can be put to better use. Much of the information which is available is not effectively used as it is difficult to access.
- **Applied** – There is a need to make better use of biodiversity information in decision making. While there are gaps, the information which is currently available should be used to inform policy decisions.



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Aichi Biodiversity Target 19

Implications for setting national targets

Actions taken towards this target will greatly facilitate the implementation of the Strategic Plan and the fulfillment of the other 19 Aichi Biodiversity Targets by encouraging new research, the development of new technologies and improved monitoring. Such actions will strengthen the policy-science interface and will contribute to the fulfillment of the other elements of the Strategic Plan. Reaching this target will require substantial investment in global and national biodiversity observation networks, implementation of the Global Taxonomy Initiative, and further investment in research, including modeling and participatory research. Improvements are also needed in the science-policy interface. With regards to the sharing of technologies related to biodiversity, this should be consistent with Article 16 of the Convention.

Guiding questions for setting national targets

- **What biodiversity information is available on the country?** Who has the information? What are the major gaps? What information would be crucial to have?
- **What programmes are in place to generate information on biodiversity in the country?** How effective have these been? How could their effectiveness be improved?
- **What mechanisms are in place in the country to share biodiversity information and technologies?** How effective have these been? How could information be shared more effectively? What have been the limitations in sharing information?
- **How is biodiversity information being used to support policy decision in the country?** How effective has this been? How could biodiversity information be put to better use?
- **What are the opportunities and constraints in improving biodiversity information and technologies and sharing them?** Consider potential ecological, economic, and social costs and benefits of improving, generating and sharing information and technology. How may these justify higher or lower figures for a national target than for the global target?
- **Who are the stakeholders that may be affected?** How can they be involved and their needs addressed? What are the trade-offs to consider?
- **What additional resources (financial, human and technical) will be required to reach the national target that is set?** How can additional funds be raised? What are possible funding sources?

Note that, given the particular national circumstances, national targets may be more specific and more precise than the global target. Further national targets should be ambitious but realistic and be supportive of the Strategic Plan by moving beyond business as usual.

Actions and milestones

The Convention's cross cutting issue on Identification, Monitoring, Indicators and Assessments can provide a starting point for work towards this target. Similarly the Global Taxonomy Initiative is also relevant to this target. For knowledge that is already available, access could be improved through the further development of the clearing-house mechanism at national and global levels. Relevant information includes biodiversity-related data as well as tools and methodologies for biodiversity conservation, sustainable use and benefit sharing, and case-studies of their use. Further efforts are also needed, at multiple scales, to improve biodiversity-related knowledge and reduce uncertainties around the relationship between biodiversity change, ecosystem services and impacts on human well-being. The further development and enhancement of biodiversity monitoring and observation systems could also contribute to the attainment of this goal.

Possible indicators

- Number of maintained species inventories being used to implement the Convention
- Trends in coverage of comprehensive policy-relevant sub-global assessments including related capacity building and knowledge transfer, plus trends in uptake into policy

Resources

- Cross Cutting Issue on Identification, Monitoring, Indicators and Assessments - www.cbd.int/indicators/
- Global Taxonomy Initiative - www.cbd.int/gti/
- Technical Series No. 58 - www.cbd.int/doc/publications/cbd-ts-58-en.pdf
- CBD Technical Series No. 53 - www.cbd.int/doc/publications/cbd-ts-53-en.pdf
- CBD Technical Series No. 32 - <http://www.cbd.int/doc/publications/cbd-ts-32.pdf>