

## Quick guide to the

# **Aichi Biodiversity Targets**

# Invasive alien species prevented and controlled

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.

Invasive alien species are one of the main direct drivers of biodiversity loss at the global level. In some ecosystems, such as many island ecosystems, invasive alien species are the leading cause of biodiversity decline. Invasive alien species primarily affect biodiversity by preying on native species or competing with them for resources. In addition to their environmental impacts, invasive alien species can pose a threat to food security, human health and economic development. Increasing travel, trade, and tourism have facilitated the movement of species beyond natural bio-geographical barriers by creating new pathways for their introduction. With increasing globalization, the occurrence of invasive alien species is likely to increase unless additional measures are taken.

## **Explanation of the Target**

This target focuses on two types of actions, the control or eradication of invasive alien species and the management of their introduction pathways. Specifically, meeting this target globally will require that:

- Invasive alien species are identified Broadly invasive alien species are those which have been introduced and/or spread outside their natural ranges and as a result threaten biological diversity. Any organism can become invasive; the phenomenon is not limited by taxonomic group and can occur in all types of ecosystems. While a small percentage of introduced species become invasive, the negative impacts can be extensive. In most countries there are likely to be several different invasive alien species present therefore, in order to effectively address this threat, such species must first be identified.
- Pathways are identified Pathways, also referred to as vectors, are the means by which alien species are introduced to new environments. Depending on the ecosystem there are likely to be a number of different pathways for the introduction of alien species. Common pathways include shipping (ballast water, boat hulls and shipping containers), the accidental or intentional introduction of species from agricultural or aquaculture activities and the escape of species introduced to a new environment. However major pathways will vary between countries and will need to be identified in order to be effectively addressed.
- The **prioritization** of invasive alien species and pathways In most countries there are likely to be several invasive alien species established as well as multiple pathways for the introduction of additional invasive alien species. Given the limited resources that exist to address this threat and the timeframe for the implementation of the Strategic Plan, governments will need to prioritize the pathways and invasive alien species they wish to address.
- The **control** or **eradication** of invasive alien species Once an invasive alien species has been identified and prioritized, countries will need to determine if they wish to control or eradicate it. Whether an invasive alien species is eradicated or controlled will depend on a number of factors including the species being considered, the ecosystem it is impacting, and the magnitude of its impacts.
- Measures are in place to manage pathways to prevent their introduction and establishment Once the pathways for the introduction of invasive alien species have been identified and prioritized, actions will need to be taken to prevent the risk of new alien species becoming established.

## Implications for setting national targets

There are a number of international agreements and processes which address invasive alien species including the International Convention for the Control and Management of Ships' Ballast Water and Sediments as well as work initiated by the International Plant Protection Convention, the International Organization for Animal Health (OIE), and the World Trade Organization's Committee on the Agreement for the Application of Sanitary and Phytosanitary Measures and its Standards









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and Trade Development Facility. These different processes could be built upon when taking actions to meet this target. Similarly any national targets adopted in support of this Aichi Biodiversity Target have the potential to create synergies between the Convention on Biological Diversity and these other international processes.

## **Guiding questions for setting national targets**

- What invasive alien species are currently in the country? What ecosystems are they affecting and how? Which species are having the greatest impact? Are they affecting human health, food production and/or the economy?
- What invasive alien species control or eradication programmes are underway in the country? How effective have these been? How could their effectiveness be improved? What lessons have been learned from their implementation? What additional species should be controlled or eradicated?
- What are the main pathways for the introduction of invasive alien species in the country? What border control and quarantine measures are in place? What measures are in place to assess and monitor the risks of introduction? How effective have these been? How could their effectiveness be improved? What programmes or initiatives could be further built on?
- 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?
- What are the opportunities and constraints for controlling or eradicating invasive alien species and managing their pathways? How may these justify a higher or lower national target compared to the global target?

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 programme of work on invasive alien species is the most relevant to this target. However, given the particularly acute impact of invasive alien species on island ecosystems, the programme of work on island biodiversity is also relevant.

The first action that countries may wish to take is the identification and prioritization of invasive alien species and their introduction pathways. Given the multiple pathways for invasive species introductions and that multiple alien species are already present in most countries it will be necessary to prioritize management, control and eradication efforts to those species and pathways which will have the greatest impact on biodiversity and/or which are the most resource effective to address. Preventing the introduction of an invasive alien species is more cost effective then eradicating it once it has become established. Conducting a risk analysis prior to the introduction of an alien species as well as enhancing border controls and quarantine as well as early warning mechanisms, rapid response measures and management plans are the types of actions that could be taken to help prevent the establishment of alien species. Invasive alien species can be managed, controlled or eradicated through the use of physical, chemical or biological means. In most cases a combination of methods will likely be required and the most effective control or eradication method will depend on the type of invasive alien species and the ecosystem in which it is found.

### Possible indicators

- Trends in number of invasive alien species
- Trends in invasive alien species pathways management
- Trends in the impact of invasive alien species on extinction risk trends
- Trends in incidence of wildlife diseases caused by invasive alien species
- Trends in the economic impacts of selected invasive alien species
- Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species

### Resources

- Programme of Work on Invasive Alien Species www.cbd.int/invasive/
- •Global Invasive Species Database www.issg.org/database/welcome/
- •IUCN's Invasive Species Specialist Group www.issg.org/
- What is the current amount of biodiversity financing available in the country? What percentage of this funding comes from national budgets? What percentage comes from other sources?
- •What are the main sources of biodiversity financing in the country? What are possible additional funding sources?



