

Goal 15

Target number: 15.8

Indicator Number and Name: 15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species

Agency: IUCN

Has work for the development of this indicator begun? Yes

Who are the entities, including national and international experts, directly involved and consulted in developing the methodology/and or data collection tools?

- International Union for Conservation of Nature (IUCN)
- IUCN Invasive Species Specialist Group
- Biodiversity Indicators Partnership
- Convention on Biological Diversity
- University of Auckland, New Zealand
- Monash University, Australia
- Institute for Environmental Protection and Research (ISPRA), Italy
- IUCN World Commission on Environmental Law.

What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?

National Statistical Systems, via relevant government departments, will be involved in the development of the methodology through their engagement in the mechanisms listed above. Thus, they will serve as be sources of data and information.

Please briefly describe the process of developing the methodology for the indicator

This is an existing indicator (McGeoch et al. 2010) that measures the adoption of national legislation relevant to the prevention or control of invasive alien species. It is in the process of being expanded to incorporate an element reflecting “adequate resourcing”. This indicator was first calculated in 2010, dating back to the 1950s, but there has not yet been a global update since then. Plans are to update this baseline, enhance it and make it available for global, regional and national use.

The indicator measures the management response to alien invasive species globally, by tracking invasive alien species legislation for control and prevention at national and international levels. The more countries with invasive alien species and biosecurity -related legislation, the greater the global commitment to controlling the threat to biodiversity from invasive alien species. The larger the number of invasive alien species -relevant international policies, and the greater the level of national commitment to these, the greater the global commitment to controlling invasive alien species. The more international agreements a country is party to, the more strongly committed the country is to controlling invasive alien species.

Ten multinational environment-related agreements were used to quantify trends in the adoption of invasive alien species -related policy. National legislation related to the prevention, management and control of invasive alien species was recorded including year of enactment, type of legislation (prevention, management etc.), and the data analysed to calculate the indicator.

The global trend in policy response has been positive for the few last decades and, since the publication of GBO3, the adoption of policies against invasive alien species has significantly increased. As reported in 2010, 55% of the 191 countries (in 2010) that are Party to the Convention on Biological Diversity (CBD) have overarching national legislation to prevent, control and/or limit the spread and impact of invasive alien species, and most CBD Parties were signatory to at least one of ten other multilateral agreements that cover invasive alien species in some form. Among these countries, 8% are signatory to all 10 international agreements (McGeoch et al. 2010).

For example, the Council of Europe has been developing and adopting codes of conduct addressing some key pathways (e.g. horticulture, botanic gardens, zoos, hunting, or fishing) of invasive alien species. Moreover, once the European regulation on invasive alien species is fully adopted, it will have major implications for neighbouring countries, but also at a world scale, as the European institution is a major partner for global trade.

The projection of the current trend of adoption of national policies on invasive alien species projects a non-significant increase by 2020, with a slowing of the rate of increase in the proportion of countries adopting such legislation. The adoption of national and international policies on invasive alien species is a first step to combatting the spread of invasive alien species.

This indicator is utilised for assessing progress towards Aichi Biodiversity Target 9 of the Strategic Plan for Biodiversity 2011-2020: “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” (CBD 2014, Tittensor et al. 2014), and was used as an indicator towards the CBD’s 2010 Target (Butchart et al. 2010). The indicator is maintained by the IUCN Species Survival Commission’s Invasive Species Specialist Group and collaborators.

The indicator is also relevant to a number of other Goals and Targets including SDG Targets 2.4, 3.d, 6.6, 14.2, and 15.5.

Caveats include the fact that the adoption of legislation does not necessarily indicate the existence of regulations or policy to implement the legislation or how successful such implementation has been on the ground. There still remains a need for further indicator refinement to make this link clearer. In addition, legislation does not necessarily capture all efforts against invasive alien species that are happening at the national level.

The methodology being used for the further development of this indicator is based on the approach used in the development of the indicator “*Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species*” developed within the Biodiversity Indicators Partnership framework in 2010. For computing ‘adequate resourcing’ by the countries, the team in consultation with international experts is identifying proxies that can be used to generate the information required to measure adequate resourcing by countries to manage the threat of invasive alien species.

These metadata are based on <http://www.bipindicators.net/iaslegislationadoption>, supplemented by the references listed below.

BUTCHART, S. H. M. et al. (2010). Global biodiversity: indicators of recent declines. *Science* 328: 1164–1168. Available from <http://www.sciencemag.org/content/328/5982/1164.short>.

CBD (2014). Global Biodiversity Outlook 4. Convention on Biological Diversity, Montréal, Canada. Available from <https://www.cbd.int/gbo4/>.

MCGEOCH, M.A., et al. (2010). Global indicators of alien species invasion: threats, biodiversity impacts and responses. *Diversity and Distributions* 16: 95-108.

TITTENSOR, D. et al. (2014). A mid-term analysis of progress towards international biodiversity targets. Science 346: 241–244. Available from <http://www.sciencemag.org/content/346/6206/241.short>.

Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology.

This will not require new international standards.

However, the indicator is based on existing, precisely defined concepts and terms. Specifically, an alien species is a species introduced by humans – either intentionally or accidentally – outside of its natural past or present distribution, however not all alien species have negative impacts, and it is estimated that between 5% and 20% of all alien species become problematic. It is these species that are termed ‘invasive alien species’. Thus, an invasive alien species (IAS) is a species that is established outside of its natural past or present distribution, whose introduction and/or spread threaten biological diversity.

When do you expect the methodological work on this indicator to be completed?

End 2016

Are data and metadata already being collected from the National Statistical System for one or more components of this indicator?

Yes

If yes, please describe:

National Statistical System portal is being used to link to national resources for country statistics and legislation. Specifically, data for this indicator are produced by identifying any national legislation relevant to controlling invasive alien species for each country (currently implemented for 196 Parties to the Convention on Biological Diversity). Legislation is considered relevant to the prevention of alien species introductions or to control of invasive alien species if it applied to multiple taxonomic groups and was not exclusively intended to protect agriculture. If two separate sets of legislation within a country cover plants and animals, the date of the more recent legislation is used. Invasive alien species -related legislation is implemented through national Ministries of the Environment and a variety of other ministries and agencies. Thus national accession into relevant multinational environment-related agreements serves as the underlying data for this indicator. The indicator is derived from national accession into relevant multinational environment-related agreements, and so there are no differences between global and national figures.

How do you plan to collect the data?

Data and information is being collated through comprehensive Literature searches, accessing national websites, databases such as ECOLEX, Country profiles on the CBD Website, InforMEA website; consultation with country experts. All data and information is subjected to a verification process once it is structured.

If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here.

The Indicator team has developed a template for the collection of the various components of data, that will facilitate analysis. All information recorded is referenced and source information stored in folders for future reference

With what frequency is data expected to be collected?

Every 2 years.

Is there a process of data validation by countries in place or planned for this indicator?

Yes

If yes, please briefly describe:

The Indicator team has access to a network of country editors (invasive alien species experts) who are supporting the development of verified inventories of introduced and invasive species. This network of country editors is being used to verify country data and information.

(As of 3 March 2017)