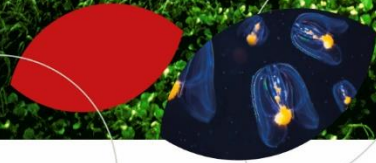


Assessment Report on Invasive Alien Species and their Control

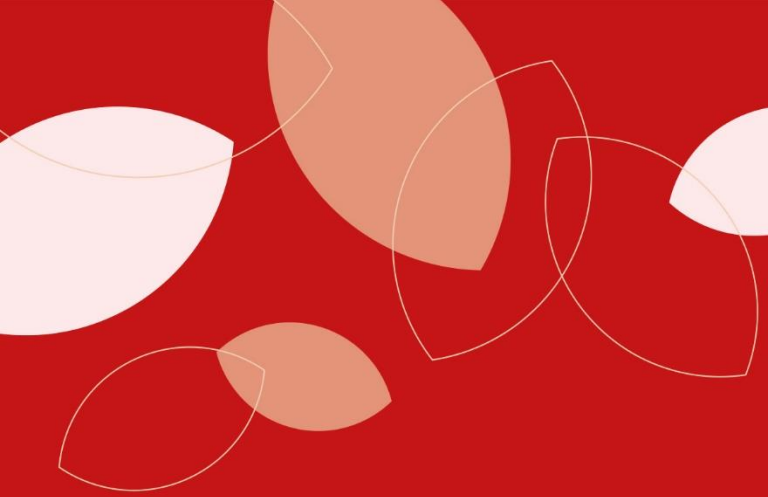
www.ipbes.net

The Intergovernmental Science-Policy Platform on Biodiversity & Ecosystem Services



#InvasiveAlienSpecies Assessment





1

- What are invasive alien species?

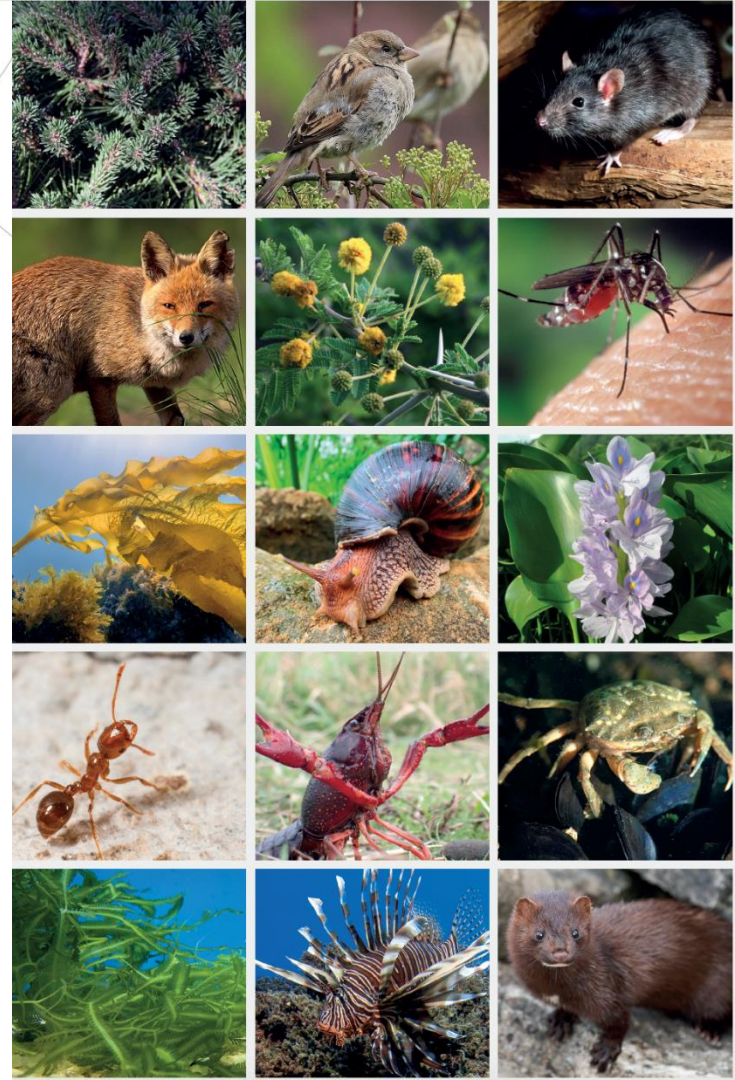


Invasive alien species are one of the 5 major drivers of biodiversity loss

Alien species are animals, plants, and other organisms that have been introduced by human activities to new regions

Invasive alien species are a subset of alien species, known to have established and spread with negative impacts on nature. Many invasive alien species also have impacts on people

#InvasiveAlienSpecies Assessment





2



Findings of the report



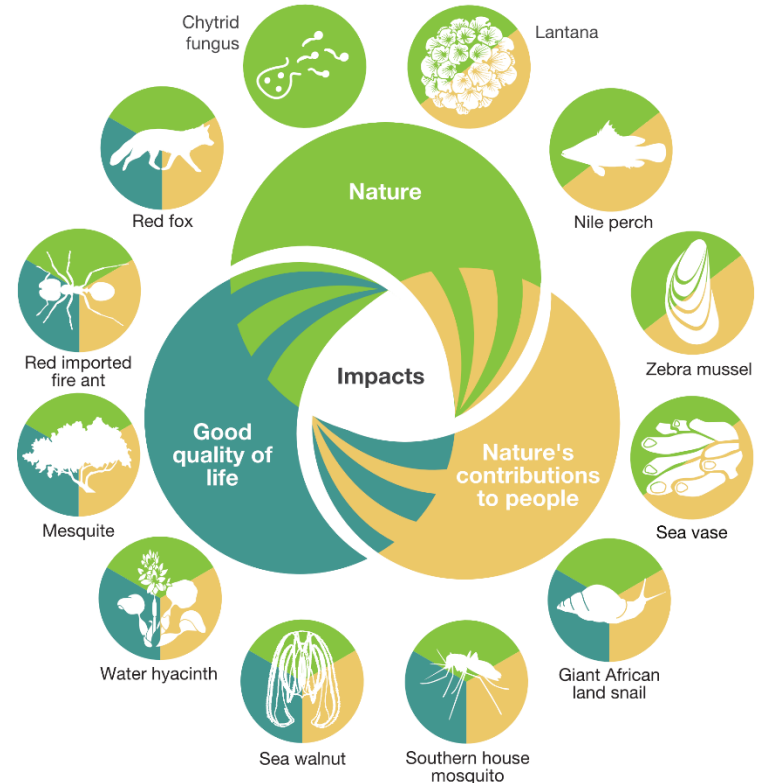
People and nature are threatened by invasive alien species in all regions of Earth

37,000 established alien species have been introduced by human activities worldwide

200 new alien species every year

3,500 invasive alien species, with negative impacts on nature, and also on people

More than 2,300 invasive alien species are found on lands of Indigenous Peoples across all regions of Earth



How do invasive alien species impact nature and people?

Mechanisms of impacts include changes in ecosystems, predation and herbivory, and competition with native species.

Economies, food security, water security, human health and cultural identities are profoundly and negatively affected by invasive alien species.

People with the greatest direct dependence on nature, including Indigenous Peoples and local communities, may be disproportionately affected by invasive alien species.

Example: *Spodoptera frugiperda* (fall armyworm) increased labour and pesticide costs in North Sumatra, Indonesia.

#InvasiveAlienSpecies Assessment



A few numbers on impacts

60%

of **global species extinctions** have been caused, solely or alongside other drivers, by invasive alien species

>\$423
billion

is the estimated **global annual costs** of biological invasions in 2019.

85%

of impacts on **nature and good quality of life** are **negative**

80%

of impacts on **nature's contributions to people** are **negative**

Focus on the Asia-Pacific region

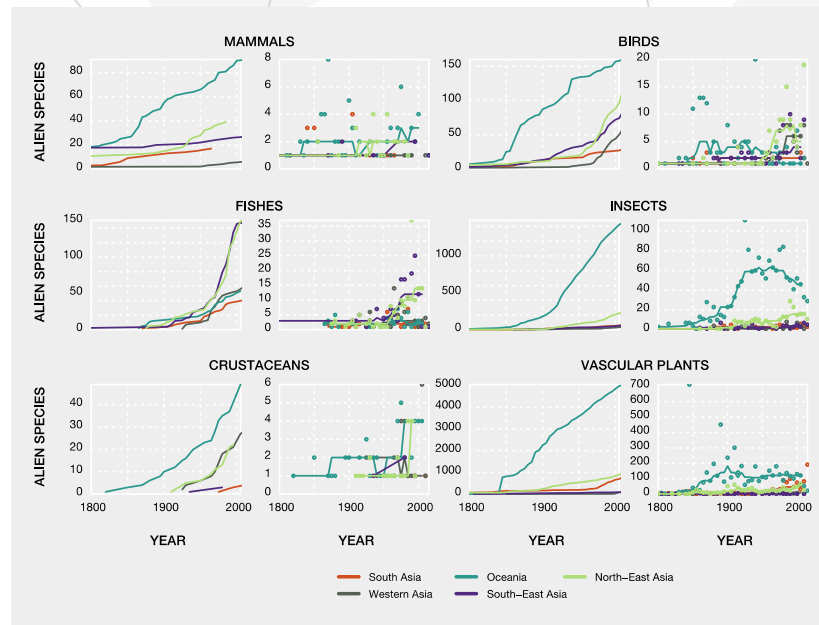
The numbers of alien animal species increased continuously for all taxonomic groups and all subregions of the Asia-Pacific region, and likely to continue in the future

Asia has the highest number of established alien mammals

One quarter of documented impacts from invasive alien species have been reported in the Asia-Pacific region, with the highest number of impacts on health

Extinction hotspots, where invasive alien species are documented as the main cause, are mainly located in the Asia-Pacific region (73 per cent)

Data on alien plants, invertebrates, microorganisms, fungi and marine and freshwater species are scarce in the Asia-Pacific region



Current policies have been insufficient in managing biological invasions and preventing and controlling invasive alien species

Although most countries (80%) have targets for the management of biological invasions within their national biodiversity strategies and action plans

83% of countries do not have national legislation or regulations directed specifically toward the prevention and control of invasive alien species

Nearly half of all countries (45%) do not invest in management of invasive alien species

There is an inadequate policy implementation due to limited capacity and resourcing

#InvasiveAlienSpecies Assessment



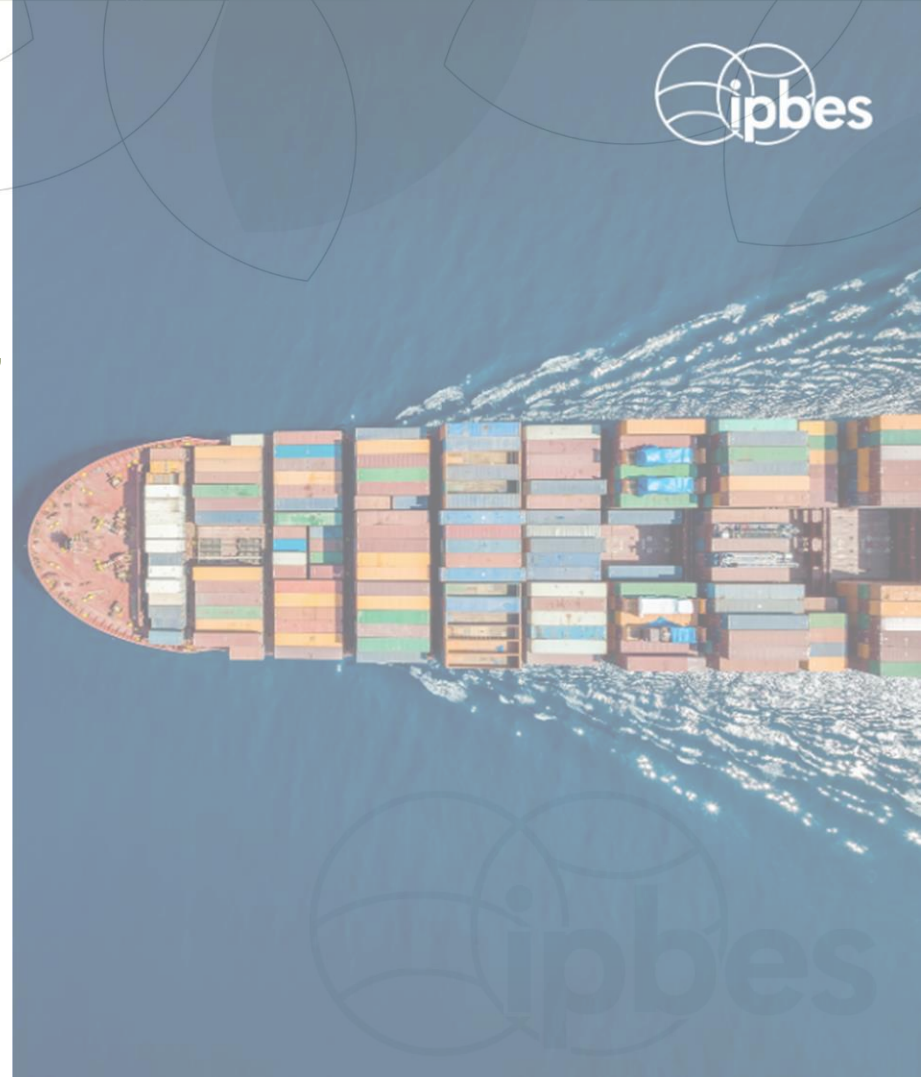
People at the heart of the problem...

Many human activities facilitate the transport, introduction, establishment and spread of invasive alien species

If things remain unchanged, by 2050 the total number of alien species globally is expected to be about one-third higher than in 2005.

Other drivers of change such demographic, economic, and land- and sea-use change are increasing and can amplify the threats and impacts of invasive alien species

Climate change will also be a major cause of future increases in the risk of invasive alien species



... People at the heart of the solution

Biological invasions and their adverse impacts can be prevented and mitigated through effective management

Prevention and preparedness are the most cost-effective options

Eradication, containment and control can also be effective options in some contexts

Example from Asia: an adaptive integrated management approach built on strong regulatory controls on timber movement and silvicultural, insecticidal and semiochemical trapping has limited the rapid spread of *Dendroctonus valens* (red turpentine beetle) and further impact on the native pine trees in China

#InvasiveAlienSpecies Assessment



Challenges in managing biological invasions

Differences in perception, including conflicting interests and values, of the importance and urgency of the threat of invasive alien species, coupled with lack of awareness of the need for a collective and coordinated response, as well as gaps in data and knowledge, can hinder the management of invasive alien species.

Scarcity of resources, capacity and capability are hurdles to successful management of biological invasions, especially in Asia

The management of invasive alien species can, in some cases, raise multiple ethical debates about animal welfare and rights



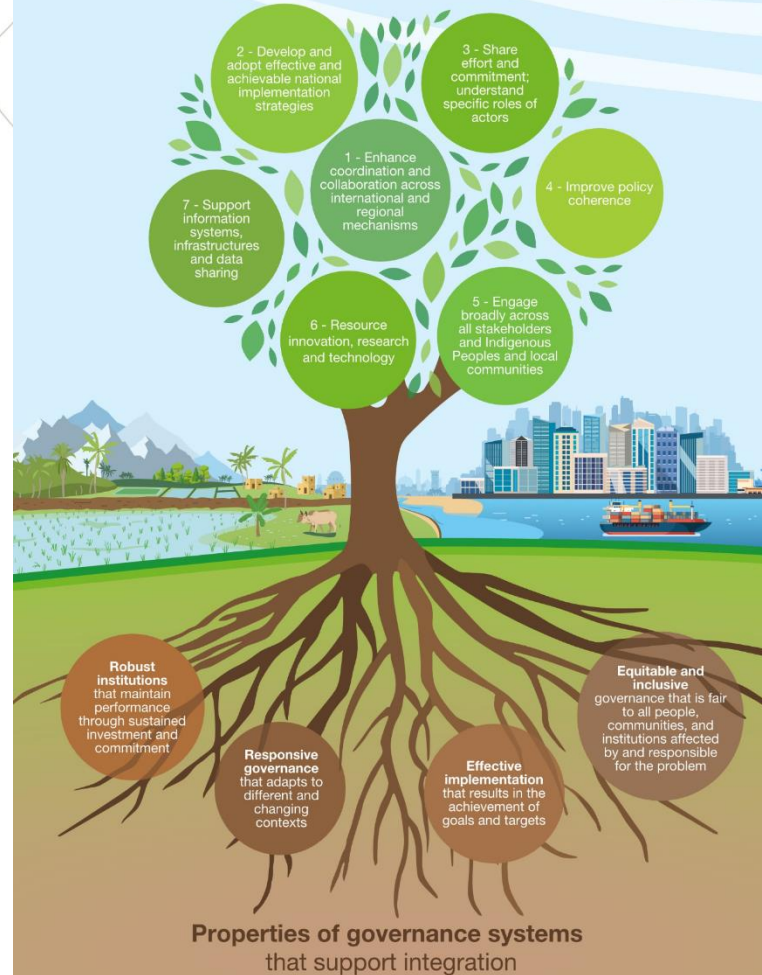
Ambitious progress in biological invasion management can be achieved with integrated governance

In December 2023, Governments have agreed to

“Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands” Kunming-Montreal Global Biodiversity Framework, Target 6.

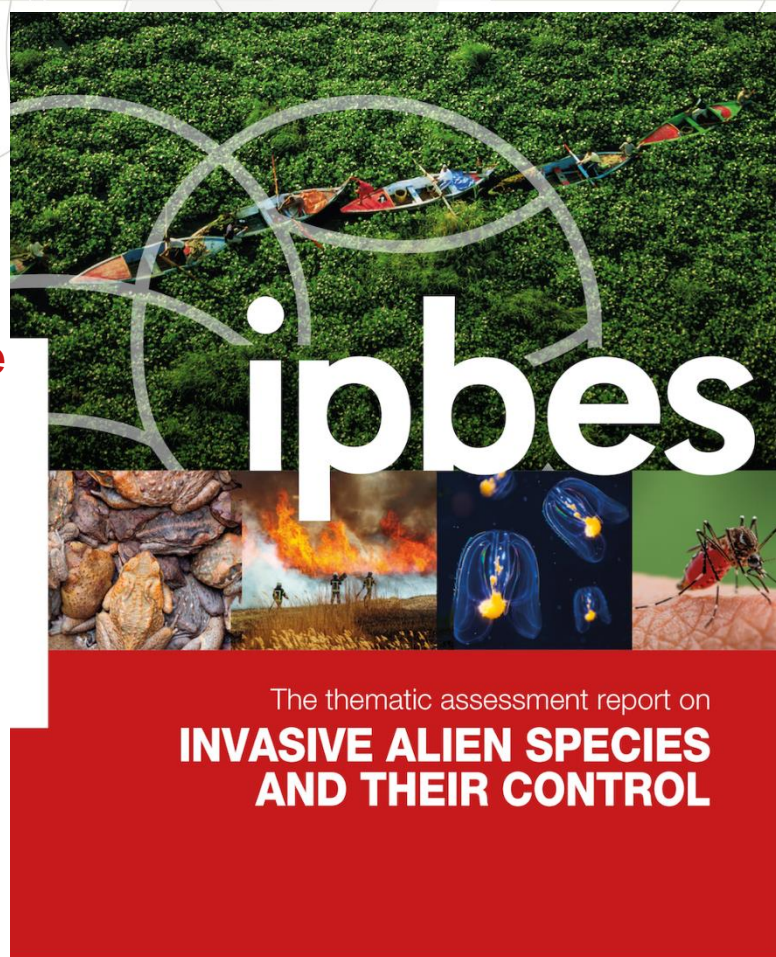
#InvasiveAlienSpecies Assessment

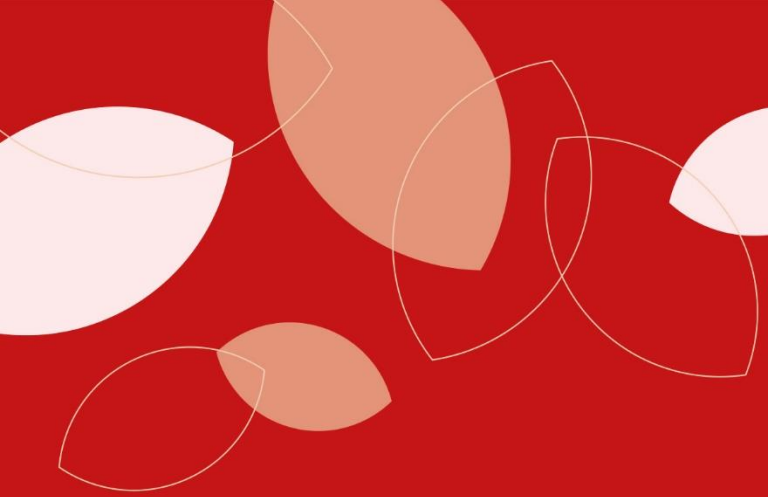
Strategic actions to achieve integrated governance of biological invasions



There is compelling evidence for immediate and sustained action

With sufficient resources and long-term commitment, preventing and controlling invasive alien species are attainable goals that will yield significant long-term benefits for people and nature.





3



Expected impacts of the Report





The invasive alien species Assessment is the first comprehensive global report on invasive alien species and their control

It provides the best-available evidence, critical analysis and options for governments, civil society, Indigenous Peoples and local communities, the private sector and all those seeking to address the issue of biological invasions

#InvasiveAlienSpecies Assessment



The findings of the invasive alien species assessment are expected to contribute to achieving international targets on biological invasions:

- Target 6 of the Kunming-Montreal Global Biodiversity Framework**
- Support implementation of the Sustainable Development Goals of the 2030 Agenda for Sustainable Development, especially Goal 15**



Photo by IISD/ENB

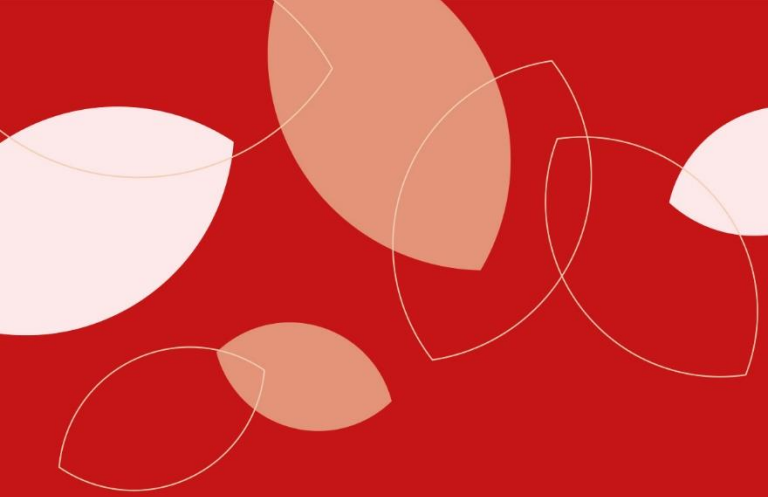


#InvasiveAlienSpecies Assessment

Thank you!

¡Gracias!

Merci!



4



Assessment process



Developed over 4 years

3 Authors meetings (Tsukuba, online & Aarhus)

2 External reviews

1 Additional review by governments

Produced by a multidisciplinary team of 86 experts and many contributing authors

Over 13,000 documents reviewed in depth

Various values and knowledge systems considered, drawing on scientific and grey literature, and information from indigenous and local knowledge

Engagement with Indigenous and local knowledge

3 dialogue workshops (Montreal and online),

a call for contributions, and

collaboration with ILK experts and holders within the expert team and as contributing authors

#InvasiveAlienSpecies Assessment



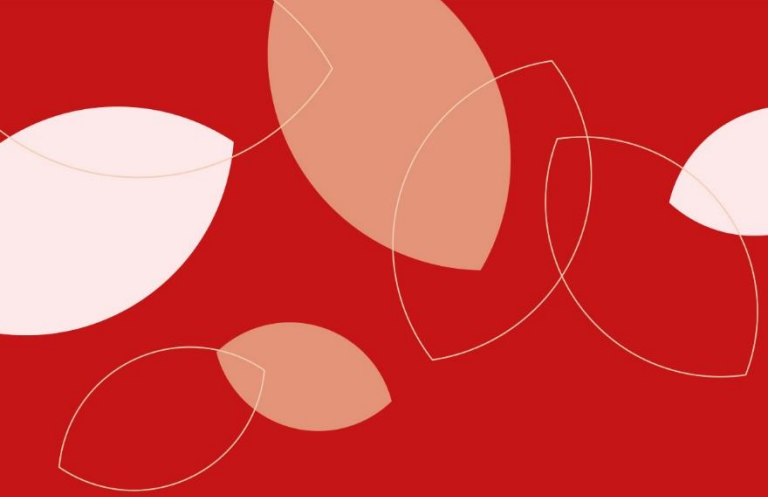
Produced by a multidisciplinary team of 86 experts and many contributing authors

86 nominated experts from 47 countries, encompassing all regions and many disciplines

About 200 contributing authors

Supported by a management committee
Technical support unit based in Japan (Institute for Global Environmental Strategies, IGES)



The logo for the Intergovernmental Panel on Biodiversity and Ecosystem Services (ipbes). It features the word "ipbes" in a lowercase, sans-serif font. The letters "i" and "p" are partially enclosed by two overlapping circles. The circles are light orange, and the text is a darker shade of orange.