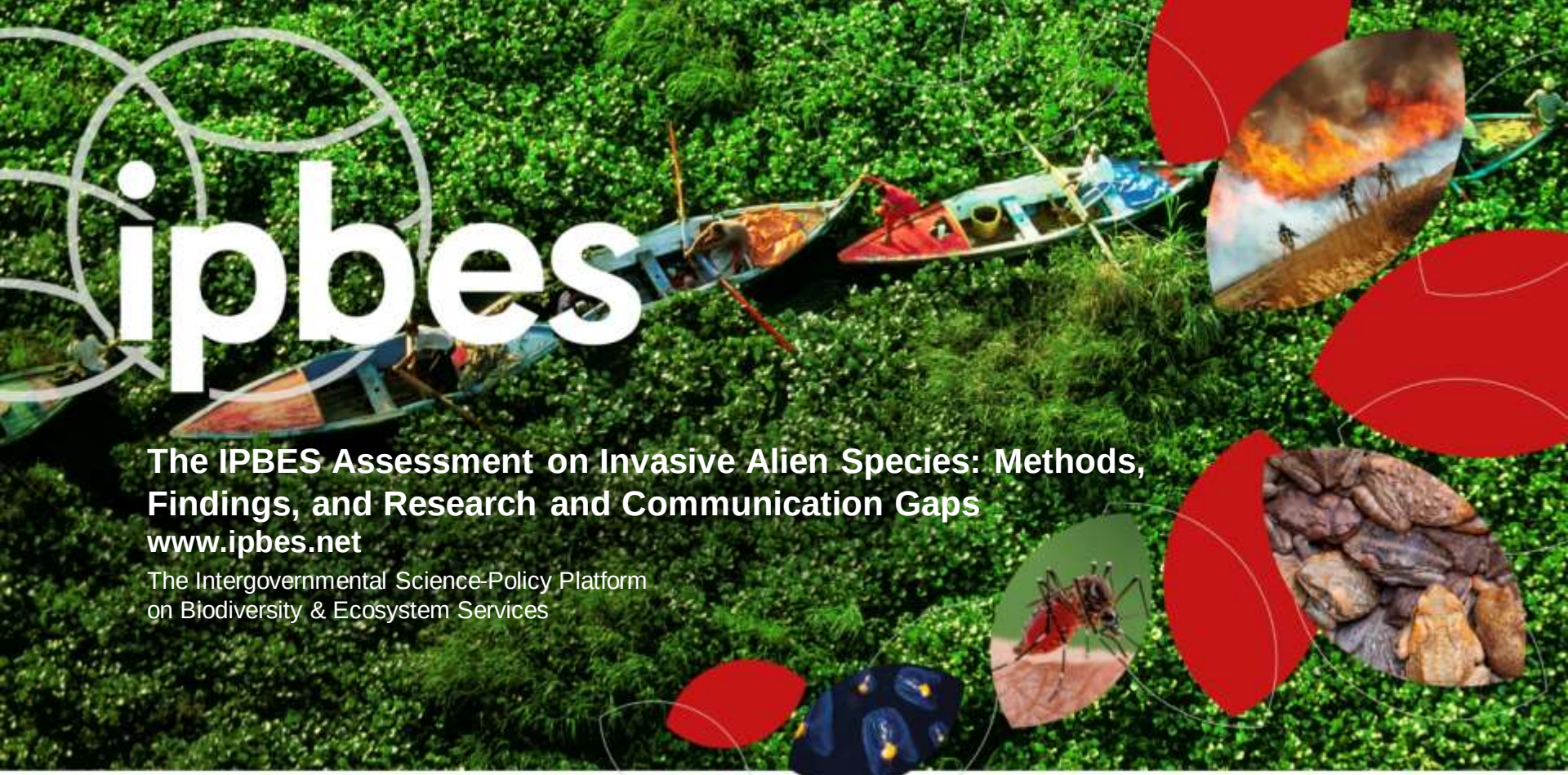


The IPBES Assessment on Invasive Alien Species: Methods, Findings, and Research and Communication Gaps

www.ipbes.net

The Intergovernmental Science-Policy Platform
on Biodiversity & Ecosystem Services

#InvasiveAlienSpecies Assessment

UN environment programme

unesco

Food and Agriculture Organization of the United Nations

UNDP

The IPBES IAS Assessment

Developed over 4 years (2019-2023)
3 Authors meetings (Tsukuba, online, & Aarhus)
2 External reviews (60,000 comments)
1 Additional review by governments

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:

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, extensive literature review

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)

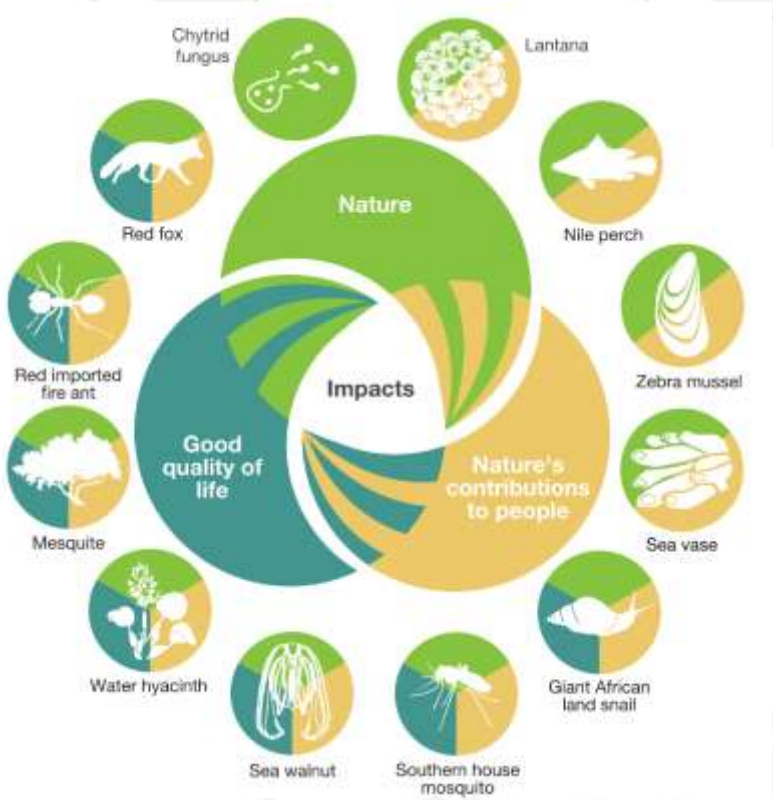
People and nature are threatened by invasive alien species in all regions of Earth

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

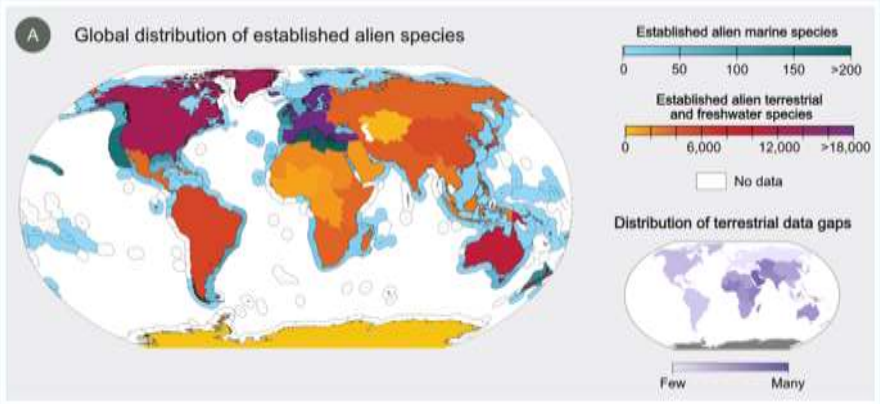
More than 2,300 invasive alien species are found on lands of Indigenous Peoples across all regions of Earth



Invasive alien species are a global threat

Impacts from invasive alien species are reported in the Americas (34%), Europe and Central Asia (31%) and Asia-Pacific (25%), with fewer reported in Africa (7%)

Some areas, despite being protected for nature conservation or being remote, are also vulnerable to the negative impacts of invasive alien species.



75% of negative impacts are reported from the terrestrial realm, especially temperate and boreal forests and woodlands and cultivated areas

14% from the freshwater realm, especially from inland surface waters/waterbodies

10% from the marine realm, especially from shelf ecosystems

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

- Invasive alien species can add to marginalization and inequity, including, in some contexts, gender- and age-differentiated impacts

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

- Invasive alien species negatively affect the autonomy, rights and cultural identities of Indigenous Peoples and local communities through the loss of traditional livelihoods and knowledge, reduced mobility and access to land, and increased labour to manage the invasive alien species

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

Invasive alien species and other drivers of change have complex interactions

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; IAS will also be a driver of climate change

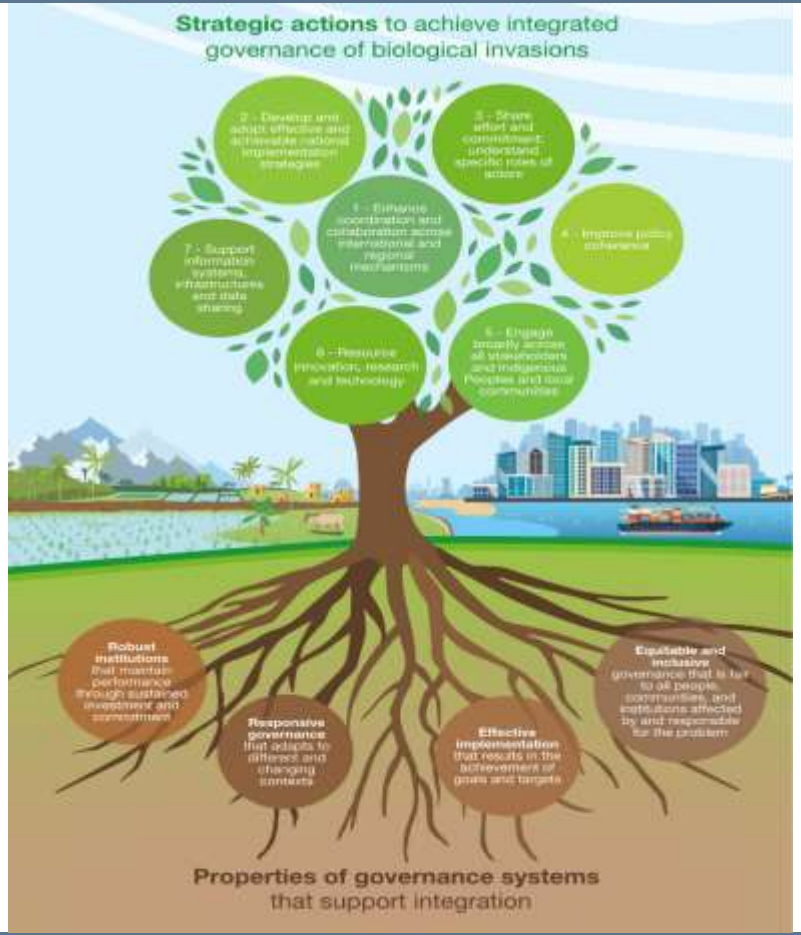
Prevention and preparedness are the most cost-effective options

- Prevention can be achieved through pathway management, including strictly enforced import controls, pre-border, border and post-border biosecurity, and measures to address escape from confinement.

- Prevention is particularly important on islands, and it is also critical in marine and connected water systems, where most attempts at eradicating or containing invasive alien species have mostly failed.

- Sustained and adequate funding, capacity building, technical and scientific cooperation and transfer of technology, monitoring, quarantine and inspection facilities are necessary for effective prevention measures.

“The Kunming-Montreal Global Biodiversity Framework provides an opportunity for national governments to develop or update aspirational, ambitious and realistic approaches to prevent and control invasive alien species.”


Strategic actions to achieve integrated governance of biological invasions
2 - Develop and adopt effective and achievable national implementation strategies
3 - Share effort and commitment; understand specific roles of actors
1 - Enhance coordination and collaboration across international and regional mechanisms
4 - Improve policy coherence
7 - Support information systems, infrastructures and data sharing
8 - Resource innovation, research and technology
5 - Engage broadly across all stakeholders and Indigenous Peoples and local communities
Robust institutions that maintain performance through sustained investment and commitment
Responsive governance that adapts to different and changing contexts
Effective implementation that results in the achievement of goals and targets
Equitable and inclusive governance that is fair to all people, communities, and institutions affected by and responsible for the problem
Properties of governance systems that support integration


Effective management of Invasive Alien Species
Strategic actions
Enhance coordination and collaboration across international and regional mechanisms
Develop and adopt effective and achievable national implementation strategies
Improve policy coherence
Share effort and commitment; understand specific roles of actors
Engage broadly across all stakeholders and Indigenous Peoples and local communities
Resource innovation, research and technology
Support information systems, infrastructures and data sharing
Stages, levels and scales
Across stages of biological invasion
From individuals to ecosystems
Across temporal and spatial scales
Across levels of governance
Management actions
Border bio-security
Preparedness
Risk analysis, prioritisation, and decision making
Surveillance and monitoring
Chemical, physical and biological controls
Adaptive management including access to modern tools and enhancing capacity to deploy them
Outcomes
Ambitious progress in biological invasion management
Prevention and control of invasive alien species with significant long-term benefits for people and nature
Increased effectiveness of policies and actions designed to respond to other drivers including climate change and land- and sea-use

KM-D1

…. integrated governance can limit the global problem of invasive alien species throughout the biological invasion process and at local, national and regional scales. Strategic actions include:
enhancing coordination and collaboration across international and regional mechanisms; developing and adopting effective and achievable national strategies; sharing efforts and commitment and understanding the specific role of all actors; improving policy coherence; broad engagement across all stakeholders and Indigenous Peoples and local communities; resourcing innovation, research and technology; and supporting information systems, infrastructures and data sharing.

KM-D2

The threat of invasive alien species could be reduced with closer collaboration and coordination across sectors and countries to support the management of biological invasions.

International, national and local agencies involved in developing policies for the environment, agriculture, aquaculture, fishing, forestry, horticulture, border control, shipping (including biofouling), tourism, trade (including online trade in animals, plants, and other organisms), community and regional development (including infrastructure), transportation and the health sector can all play a role in developing a coherent approach

KM-D3

Implementation-focused ***national biodiversity strategies and action plans*** can help to spur strategic actions and establish the properties of the governance systems required for the successful prevention and control of invasive alien species and the management of biological invasions, and work towards delivering Target 6.
Coordinated efforts to strengthen national regulatory instruments are also priorities, including those for online trading and the creation of appropriate policies for the development and use of environmentally sound technologies, as well as making available data and information accessible. Market-based instruments such as tax relief and subsidization can be used to incentivize action and spur relevant investment…

KM-D4

Awareness of the risks of biological invasions will contribute to the effective delivery of several of the Sustainable Development Goals, especially those addressing the conservation of marine biodiversity (Goal 14) and terrestrial biodiversity (Goal 15, including but not restricted to Target 15.8), food security (Goal 2), sustainable economic growth (Goal 8) and sustainable cities (Goal 11), as well as climate change (Goal 13) and health and wellbeing (Goal 3). Existing collaborative and multisectoral approaches (e.g., One Health) could provide frameworks for cross-disciplinary thinking and could contribute to the management of biological invasions.

KM-D5

Open and interoperable information systems will improve the coordination and effectiveness of the management of biological invasions, within and across countries. By delivering current data to relevant actors, information systems can facilitate the prioritization of actions and allow for early detection and rapid response. Information systems can also support improved governance and help develop indicators of biological invasions, which in turn feed into policy support tools. Collaboration between biological invasion experts and across knowledge systems in all regions, and enhancement of research capacity where needed, can improve data and information availability and the understanding of the context-specific features of biological invasions and their impacts.

”Sharing efforts and commitment, understanding the specific roles of all actors and encouraging engagement across sectors on prevention, control and environmental liability are integral to the effective management of biological invasions.”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Thank you!
Shukran
Merci!
Jazeelan
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#InvasiveAlienSpecies Assessment