

2024 Blue Planet Prize Commemorative Lectures

生物多様性及び生態系サービスに関する政府間科学

-政策プラットフォーム (IPBES) (アン・ラリゴーデリー事務局長)

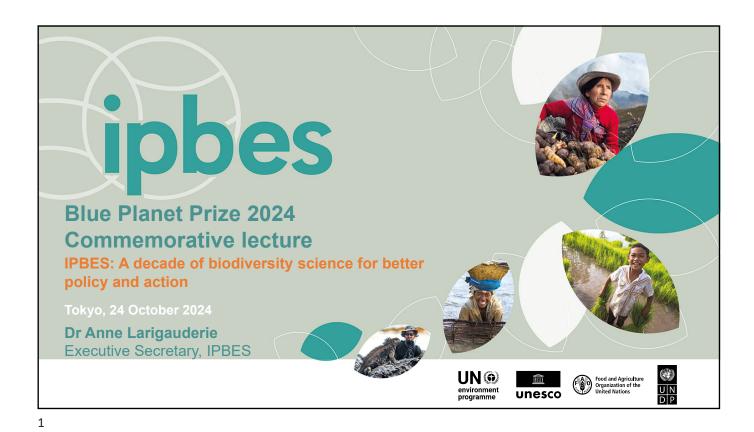
講演スライド集

生物多様性科学の10年間 ーより良い政策と行動のために

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (Dr. Anne Larigauderie)

Slides for the Lecture

IPBES: A Decade of Biodiversity Science for Better Policy and Action



Why does biodiversity matter?

Photo credit: Prof. Andrew Hendry McGill University



Science and policy for climate and biodiversity **Climate Biodiversity** Intergovernmental Panel on 1988 Climate Change (IPCC) 1992 **UN Framework Convention on** Convention on Biological Diversity (CBD) (Rio Earth Climate Change (UNFCCC) Summit) 2005 Millennium Ecosystem Assessment Intergovernmental Platform on Biodiversity 2012

and Ecosystem Services (IPBES)

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A bit of history

Intergovernmental Platform on Biodiversity and Ecosystem Services

- IPBES was established in 2012 as an independent intergovernmental body currently 147 members (Governments)
- Its mission is:

To strengthen knowledge foundations <u>for better policy through science</u>, for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development

Secretariat hosted by Germany, in Bonn.







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What does IPBES do?

- IPBES provides, in response to requests from Governments and other stakeholders, assessments of scientific knowledge regarding biodiversity, its contributions to people, and options for responses.
- The work of IPBES is guided by several operating principles:

to provide policy-relevant information, but not policy-prescriptive advice

to ensure credibility, relevance and legitimacy through peer review to take an interdisciplinary and multidisciplinary approach

to address terrestrial, marine and inland water biodiversity and ecosystem services and their interactions

to recognize and respect the contribution of indigenous and local knowledge

to recognize the need for gender equity in all relevant aspects of its work

to recognize the need for the full participation of developing countries

to integrate capacity-building into all relevant aspects of its work

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What does an IPBES assessment look like?

- An assessment is:
 - A critical evaluation of the state of knowledge by selected experts, who interact with G overnments and peers in a sequential process to ensure legitimacy, relevance and credibility.
- An assessment is composed of:
 - Chapters
 - Sum mary forpolicymakers (includes key messages with degree of confidence)

Example of a keymessage:

'M ore than 37,000 established alien species, including more than 3,500 invasive alien species with docum ented in pacts, have been recorded worldwide (wellestablished)".



How is an IPBES assessment prepared?

- Key steps:
 - Scoping phase (chapters' outline)
 - Conduct of the assessment (several rounds of external review)
 - Consideration by Plenary (approval of summary for policymakers)
 - Outreach













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Implementing the IPBES approach to working with Indigenous and local knowledge

- Before: Launch of calls for contributions on Indigenous and local knowledge
- During: Host dialogue workshops with Indigenous and local communities
- After: Produce materials and webinars for Indigenous Peoples and local communities, on relevant messages from completed assessments
- Technical support unit hosted by UNESCO (Paris)







Building capacity within IPBES: the IPBES fellowship programme

- Aims at developing the capacities of early career scientists (the fellows) in undertaking assessments
- Has trained 129 fellows from all backgrounds and disciplines (including 75 alumni) from over 60 countries
- Training and mentoring programme
- Technical support unit hosted by the Norwegian Environmental Agency (Trondheim)

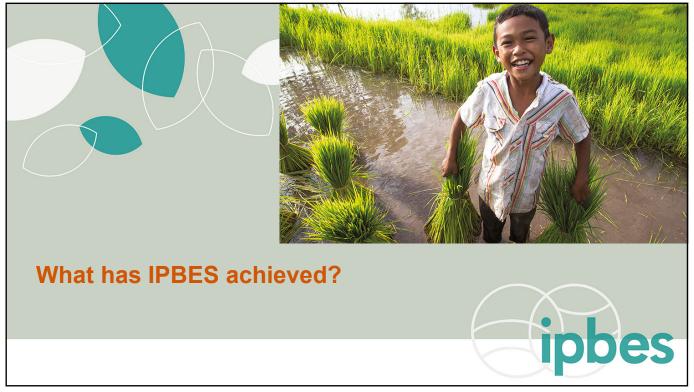








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The IPBES Global Assessment of Biodiversity and Ecosystem Services (2019)

The IPBES Global Assessment of biodiversity and ecosystem services (2019)

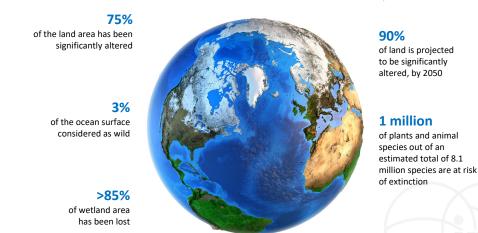
- 3 years
- 500 scientists
- 15,000 references
- 20,000 individual comments received



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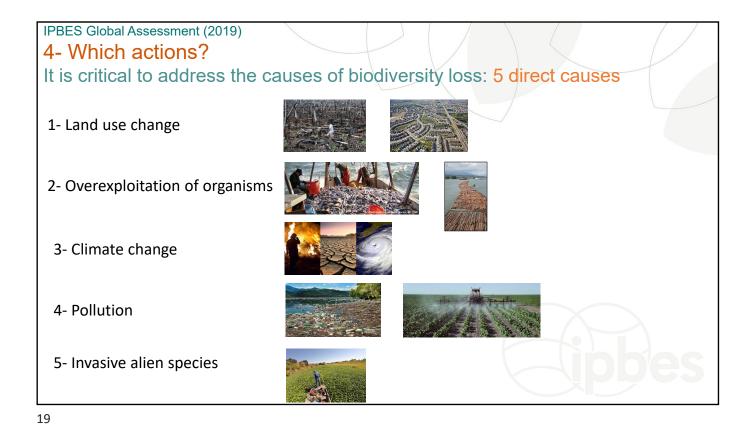
IPBES Global Assessment (2019)

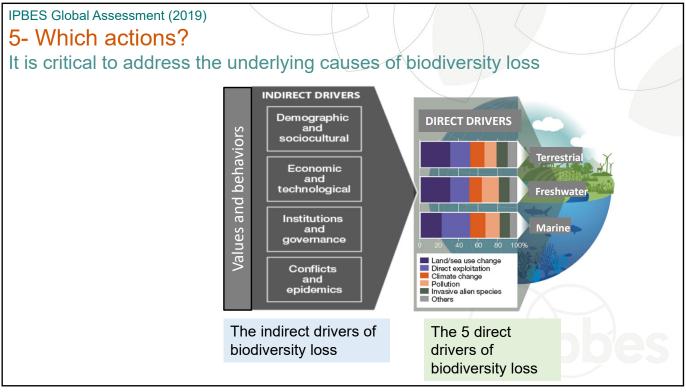
1- Nature is deteriorating at a rate and scale unprecedented in human history because of human activities











IPBES Global Assessment (2019)

6- Which actions?

Expand and effectively manage protected areas on land and at sea

- Protect 30% of land & sea areas (Global Biodiversity Framework CBD COP 15)
 - · Support and expand protected areas which are:
 - · Ecologically representative
 - · Effectively managed
 - Well connected (to take into account climate change)
- Protecting land and seas is not enough: biodiversity needs to be integrated in all economic sectors











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IPBES Global Assessment (2019)

7- Which actions?

Integrate biodiversity to agriculture and fisheries policies

- Transforming agriculture and food systems
 - Promote agroecological practices (less pesticides and fertilizers, protect pollinators, promote genetic diversity and conserve soil biodiversity)
 - Promote healthier diets (less animal proteins)
 - Reduce food waste
- Transforming fisheries and promoting ocean biodiversity
 - · Rebuild overfished stocks
 - Eliminate illegal fishing
 - · Halt harmful subsidies which promote overfishing
 - Reduce use of fertilizers on land (dead zones)













IPBES Global Assessment (2019)

8- Which actions?

Integrate biodiversity to economic and financial systems

- Removing harmful subsidies (pesticides, fossil fuels)
- Explore alternative methods of economic accounting (e.g., natural capital accounting)
- Improve market-based instruments (e.g., voluntary certification, biodiversity offsetting)
- Create and improve supply-chain models that reduce the impact on nature













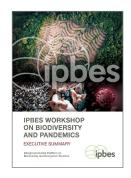
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IPBES workshop report on biodiversity and pandemics (2020)

1-We can escape the era of pandemics, but it will require a major shift from reaction to prevention

- Pandemics emerge from microbes found in nature, mostly on animals;
- Microbes can spill over from infected animals into people when people are brought into contact with infected animals because of human driven activities (large scale);
- There are as many as 1.7 million undiscovered viruses circulating in the wild right now. Between 631,000 and 827,000 can infect us.



https://ipbes.net/pandemics

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IPBES workshop report on biodiversity and pandemics (2020)

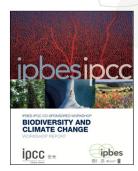
2-We can escape the era of pandemics, but it will require a major shift from reaction to prevention

- Act on the direct drivers of emergence (deforestation, wildlife trade)
- Detect hotspots of emergence (to avoid land use projects in those areas)
- Build bridges among medical, veterinarian, forestry and conservation communities ("One Health approach")
- Integrate biodiversity considerations into health policies



The IPBES-IPCC workshop report on biodiversity and climate change (2021) Biodiversity loss and climate change are interconnected and mutually reinforcing: they can only be solved if addressed together

- 1- Climate change is already strongly modifying biodiversity and its contributions to people
- 2- There are solutions which benefit to both climate change and biodiversity (Nature based solutions)
 - Protecting, restoring and sustainably managing ecosystems
- 3- However, some climate mitigation and adaptation measures can have negative impacts on biodiversity
 - · Massive deployment of bioenergy crops
 - · Large scale planting of trees



To download:

https://ipbes.net/ https://doi.org/10.5281/ zenodo.4659158

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A few examples of IPBES impact (out of >550)

Global examples

- Kunming-Montreal Global Biodiversity Framework (CBD-COP 15, 2022)
- G20 Commitment to Biodiversity (2019)
- G7 Commitments (2019; 2020; 2021 & 2022; 2023)

Global Biodiversity Framework

World Economic Forum Global Risks Reports list biodiversity in top 5 risks for businesses (2020-2024)

Japanese examples

- IPBES Global Assessment informs "Transition Strategies toward Nature Positive Economy" by Japanese Government (Ministries of Environment; Agriculture, Forestry and Fisheries; Economy, Trade and Industry; Land, Infrastructure, Transport and Tourism) (2024)
- Japan's Environment Ministry, as host of G7, convenes an international webinar on Invasive Alien Species, based on IPBES Invasive Species Assessment (2023)
- Japanese researchers apply IPBES Nature Futures Framework to rural landscape study in Northeastern Japan to explore desirable futures (2023)
- IPBES work informs Japan's 2nd (2016) and 3rd National Biodiversity Outlook (2021)
- Japanese Vice Minister of Environment uses IPBES Asia-Pacific & Global Assessment findings in address to Tokyo Seafood Sustainability Symposium (2019)

Please see our impact tracking database "TRACK": www.ipbes.net/impact-tracking-view

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Coming up at IPBES 11 (Windhoek, Namibia, Dec. 2024)

Nexus assessment

 Assess past, present and possible future trends in the interlinkages among biodiversity, water, food, health and climate (nexus elements) to inform policies and actions.

Transformative change assessment

 Assess the determinants of transformative change, how it occurs, which obstacles it may face, and which practical options for concrete action to foster, accelerate and maintain transformative change toward visions, scenarios and pathways of a sustainable world.

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Work has already started on the following:

Business and biodiversity assessment (2025)

 This methodological assessment will classify the impacts and dependences of business on biodiversity and nature's contribution to people, evaluate measurement techniques, and offer options for action.

Monitoring assessment (2026)

 This <u>methodological</u> assessment will evaluate gaps in data, capacity and resources to collect, analyse data at national and global scale, and will provide options to strengthen the monitoring capacity worldwide.

Second IPBES Global Assessment (2028)







