

IPBES

An Introduction and Opportunities for Engagement

Claire Brown and Jerry Harrison

Principal Technical Specialists

Ecosystem Assessment and Policy Support

Global Biodiversity Agenda

A series of webinars for Proteus Partners sharing information and insights into the latest trends and developments in biodiversity and ecosystem services policy, initiatives, data and tools.



proteus

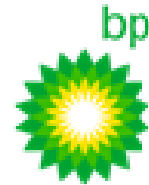
A collaboration to make available
global information on biodiversity

Partnership with 13 extractive
industry members

www.proteuspartners.org



BHP



ExxonMobil



RioTinto



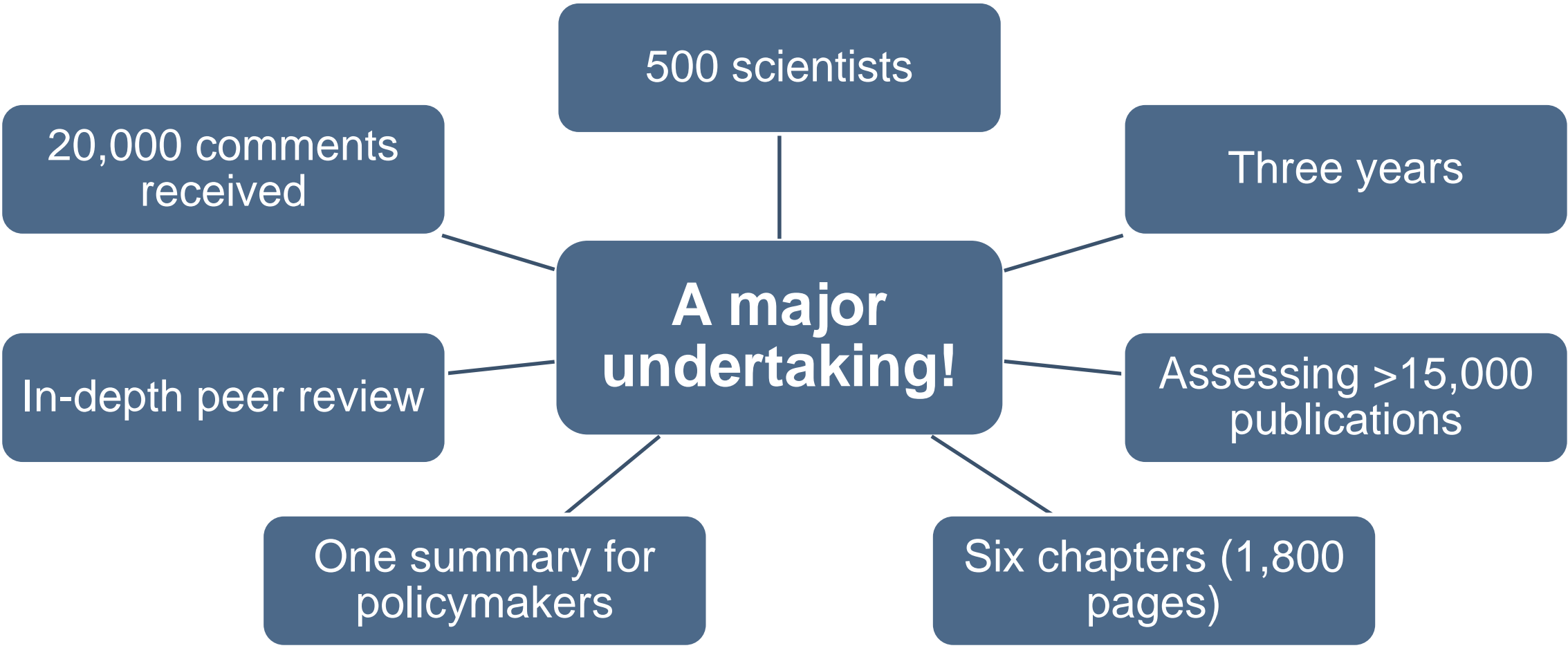
IPBES

- What we learned from the Global Assessment
 - What is IPBES and why is it relevant to business?
 - Achievements and Successes
 - IPBES to 2030
 - Opportunities for engagement
-



Global Assessment

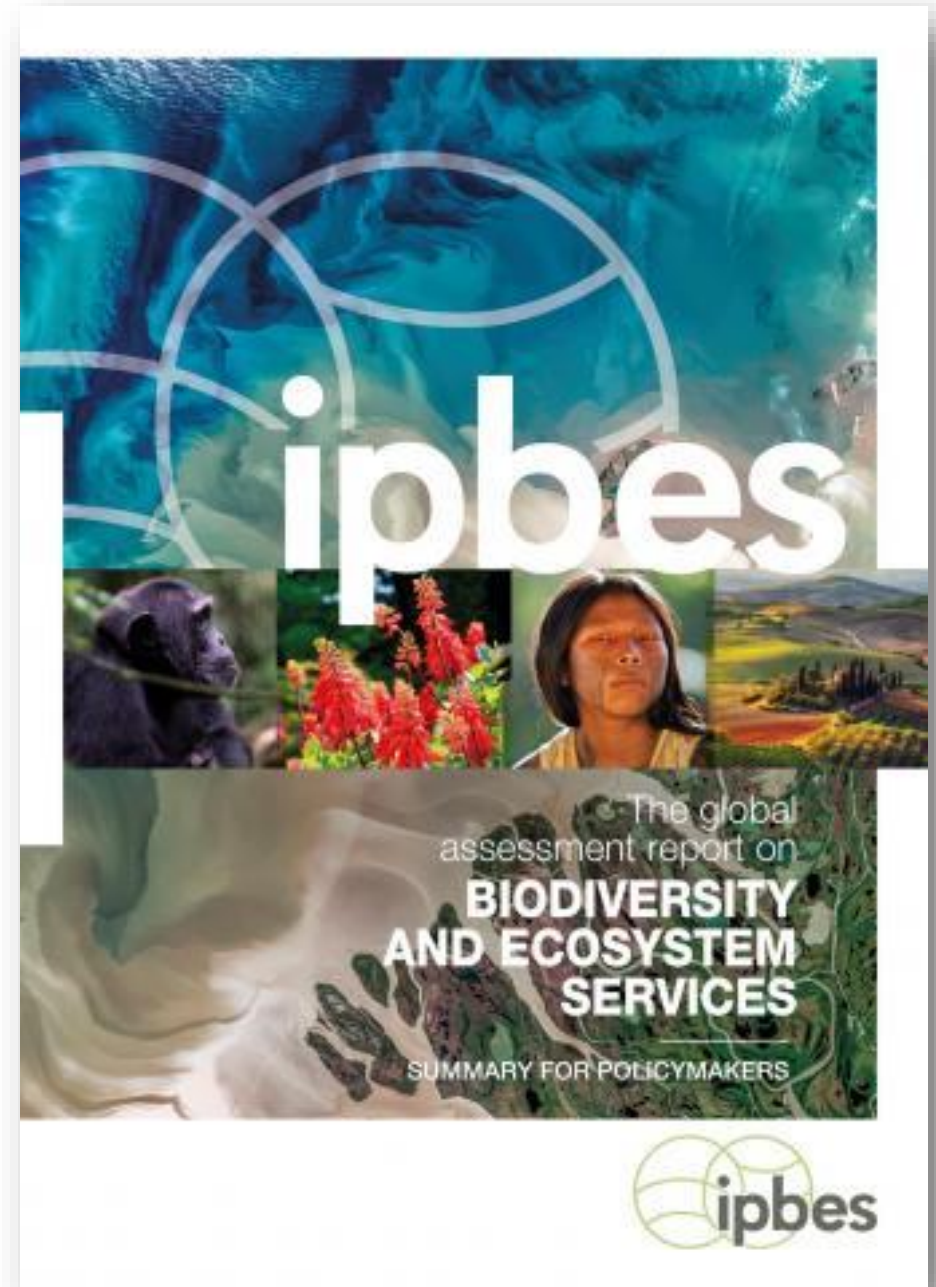
The IPBES Global Assessment on biodiversity and ecosystem services



What we learned from the Global Assessment

Four Key Message Themes

- Nature and its vital contribution to people
- Direct and indirect drivers of change
- Goals for conserving and sustainably using nature and achieving sustainability
- Nature can be conserved, restored and used sustainably



What we learned from the Global Assessment

Nature and its vital contributions to people are deteriorating worldwide - at a rate and scale unprecedented in human history

- **75%** of the **land** surface is significantly altered by human actions
- **>85%** of **wetlands** have been lost
- Only **13%** of **oceans** can still be viewed as wilderness



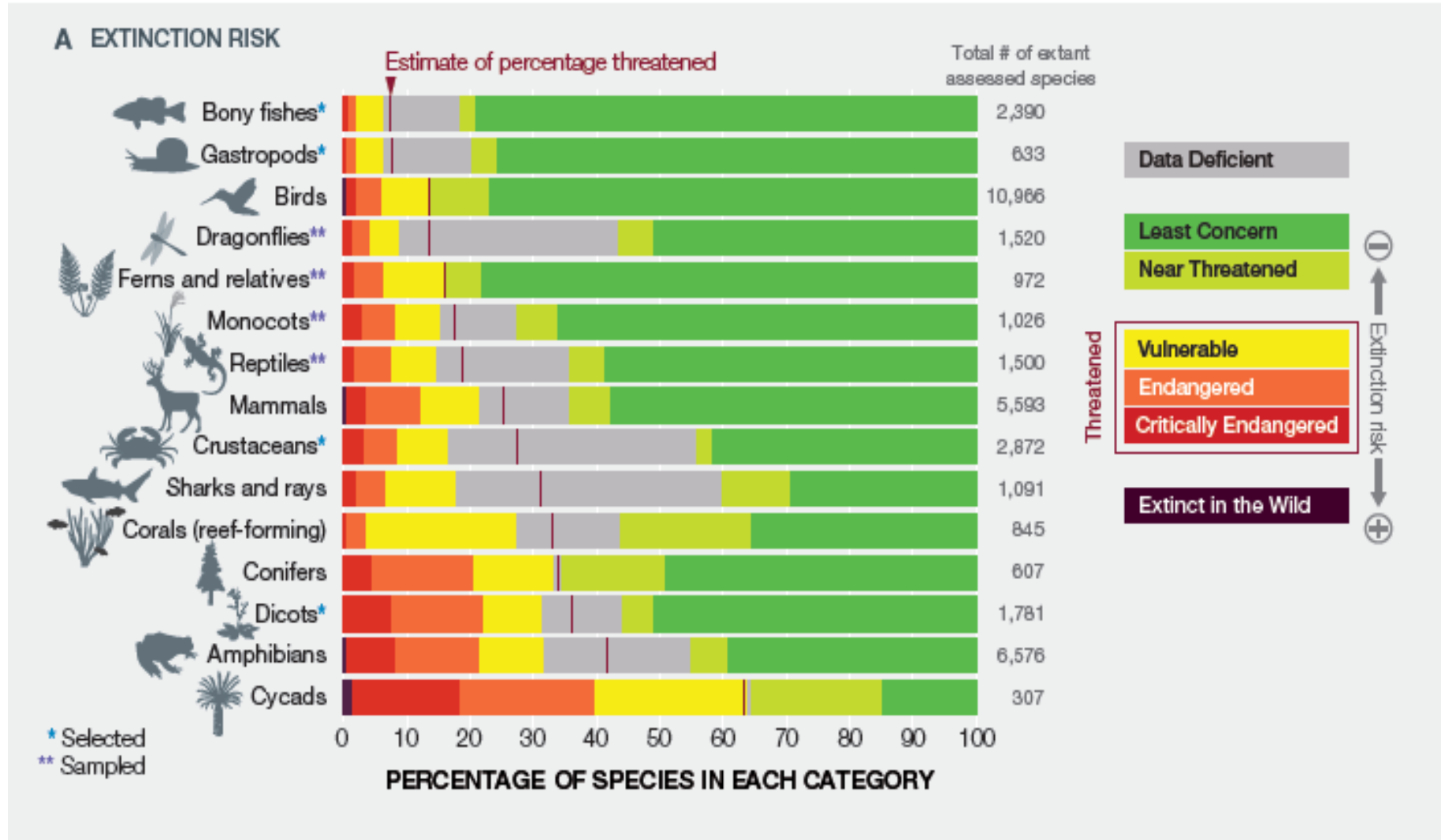
Nature and its vital contributions to people

Global trends in the capacity of nature to sustain contributions to good quality of life from 1970 to the present, which show a decline for 14 of the 18 categories of nature's contributions to people analysed.



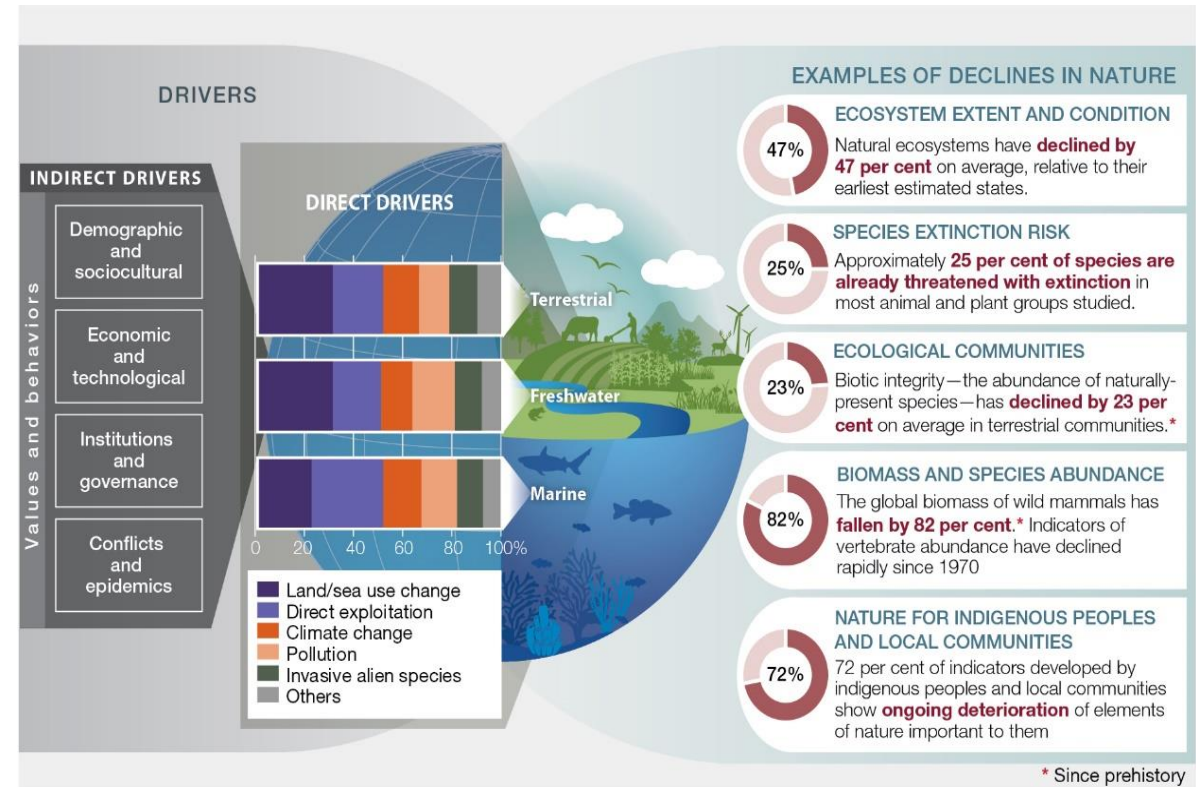
What we learned from the Global Assessment

1 million animal and plant species threatened with extinction (out of an estimated total of 8 million)



Humanity is a dominant global influence on life

Underpinning the proximate causes of deterioration in nature are the root causes, or indirect drivers of change.



Human derived drivers of change



Invasive alien species



Land/sea use change

Drivers

Direct exploitation



Climate change

Pollution



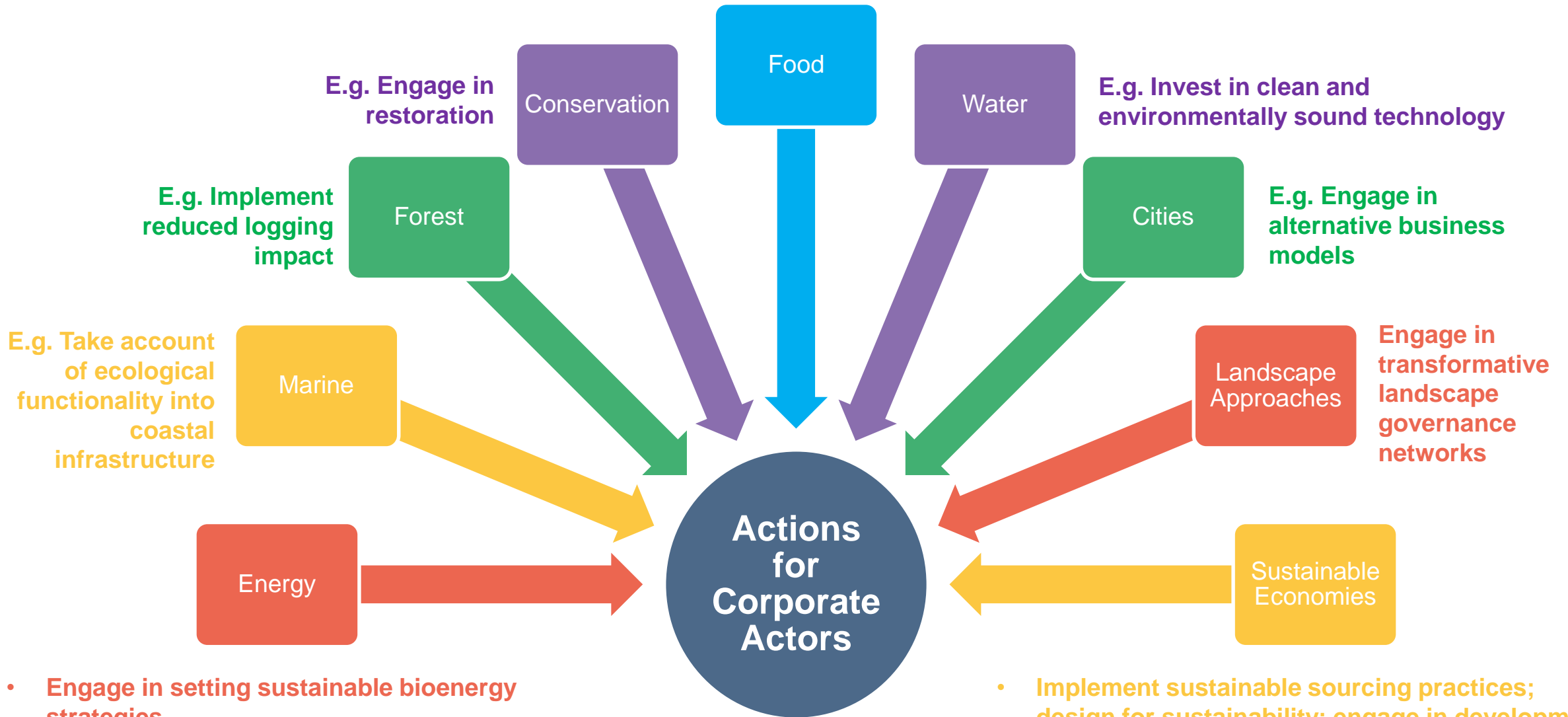
What we learned from the Global Assessment

Interventions and principles

- Precautionary approach
 - Managing for social and environmental resilience
 - Restoration
 - Strengthening environmental laws and policies
-



E.g. Contribute to ecological intensification



- Engage in setting sustainable bioenergy strategies.
- Promote sustainable infrastructure practices.
- Strengthen biodiversity compensation policies.
- Promote innovative financing for sustainable infrastructure.

- Implement sustainable sourcing practices; design for sustainability; engage in development of product labelling; apply life cycle assessment; contribute to circular economy.
- Engage in corporate social responsibility.
- Engage in reform models of economic growth.

It is not too late to act

Some general principles

Promote interconnections between sectoral policies (e.g. agriculture, fisheries, tourism, energy, etc.)
in other words **cross-sectoral, integrated management at multiple levels**

Examples:

- **Food production and conservation goals:** complementary and interdependent.
- **Sustainable fisheries:** integrated management on land, in freshwater and oceans.
- **Land-based climate change mitigation:** attention to trade-offs.
- **Nature-based solutions in cities:** crucial for global sustainability.

Enable participation of a large diversity of actors (e.g. local communities)

The IPBES Global Assessment on biodiversity and ecosystem services

IPBES 7

- Hosted by France at UNESCO, 29 Apr-4 May 2019
- 150 Governments represented, amongst 800 participants
- 45 hours of negotiation

Part of an important sequence toward 2020

- G7 (hosted by France; focus on biodiversity for 1st time at G7; Charter on Biodiversity)
- Scientific basis for the post-2020 biodiversity framework (COP 15, Nov. 2020)



The reach of the Global Assessment

"All the News That's Fit to Print"

The New York Times

VOL. CLXVIII... No. 58,320 NEW YORK, TUESDAY, MAY 7, 2019

Wildlife Facing Extinction Risk All Over Globe

U.N. Says Humans Are Eroding Ecosystems

By BRAD PLUMER

WASHINGTON — Humans are transforming Earth's natural landscapes so dramatically that as many as one million plants and animal species are now at risk of extinction, posing a dire threat to ecosystems that people all over the world depend on for their survival, a new United Nations assessment has concluded.

The 1,500-page report, compiled by hundreds of international experts and based on thousands of scientific studies, is the most exhaustive look yet at the decline in biodiversity across the globe and the dangers that creates for human civilization. A summary of its findings, which was approved by representatives from the United States and 131 other countries, was released Monday in Paris. The full report is set to be published this year.

Its conclusions are stark. In most major land habitats, from the savannas of Africa to the rain forests of South America, the average abundance of native plant and animal life has fallen by 20 percent or more, mainly over the past century. With the human population passing seven billion, activities like farming, logging, poaching, fishing and mining are altering the natural world at a rate unprecedented in human history.

CLOCKWISE FROM TOP LEFT: 2019 KARIBUNGA NGORONGORONG PRIDE — GETTY IMAGES; BRUNO KELLO METERA, SHINY ANDERSON/LAIF — GETTY IMAGES; ERGAN FURKAN/REUTERS; HENRIK PETERLIN

A 1,500-page report warns that activities such as poaching and logging, coupled with climate change, have put as many as a million plant and animal species at risk of extinction — and have endangered food security and clean water in rich and poor countries alike.

Le Monde

UN MILLION D'ESPÈCES MENACÉES DE DISPARITION

IL N'EST PAS TROP TARD POUR AGIR...

► Le rythme d'extinction des espèces s'accroît dans le monde, menaçant désormais un million d'entre elles, avertissent les scientifiques

► Parmi elles, 500 000 espèces terrestres sont d'ores et déjà considérées comme des « morts ambulants », car leurs territoires s'amenuisent

► L'homme est le principal responsable de cette extinction de masse, en raison de la destruction et de la surexploitation des milieux naturels

► Les experts mettent en cause un modèle de consommation insoutenable et appellent un « changement en profondeur »

ÉDITORIAL L'HUMANITÉ FACE À SES RESPONSABILITÉS

The Guardian

Tuesday 7 May 2019 £1.60 for subscribers

Humanity facing 'urgent threat' from loss of Earth's natural life

Landmark UN report says a million species at risk of extinction

Paris — A landmark report says that as many as one million plants and animals are now at risk of extinction, posing a dire threat to ecosystems that people all over the world depend on for their survival, a new United Nations assessment has concluded.

The 1,500-page report, compiled by hundreds of international experts and based on thousands of scientific studies, is the most exhaustive look yet at the decline in biodiversity across the globe and the dangers that creates for human civilization. A summary of its findings, which was approved by representatives from the United States and 131 other countries, was released Monday in Paris. The full report is set to be published this year.

Its conclusions are stark. In most major land habitats, from the savannas of Africa to the rain forests of South America, the average abundance of native plant and animal life has fallen by 20 percent or more, mainly over the past century. With the human population passing seven billion, activities like farming, logging, poaching, fishing and mining are altering the natural world at a rate unprecedented in human history.

adn

BOGOTÁ

Diario Gratuito

MARTES 7 DE MAYO DE 2019

Año 10. Número 2507 ISSN 2145-4108

facebook.com/diarioadn @adncolombia

Riesgo de extinción, amenaza mundial

● Página 8

As Washington Accuses Iran, Relations Hit a Trump-Era Low

Tax Returns and Barr Subpoena Fuel Latest Clash on Capitol Hill

The Boston Globe

TUESDAY, MAY 7, 2019

A million species face peril, UN says

By David Abel

Stocks of the iconic cod have collapsed. So has the lobster fishery south of Cape Cod. Maple trees are producing less sugar, wetlands such as the Great Marsh are eroding, and invasive species are on the march.

CHANGE IN NEW ENGLAND:

- BIODIVERSITY** Shifting habitats
- LOBSTER FISHERIES** Less sugar produced
- MAPLE TREES** Eroding from rising seas
- SALTWATER WETLANDS** Invasive species
- N.E. COTTONTAIL** Asian longhorn beetle
- N.E. COTTONTAIL** Loss of habitat

United Nations report has found that the loss of plant and animal species around the world will increase drastically in the coming years, at times as much as 100 percent.

CLIMATE, Page A7

The Washington Post

Extinctions put humans at grave risk, report warns

BY DARRYL FEARS

One million plant and animal species are on the verge of extinction, with alarming implications for human survival, according to a United Nations report released Monday.

The landmark report by seven lead authors from universities around the world goes further than previous studies by directly linking the loss of species to human activity. It also shows how those losses are undermining food and water security, as well as human health.

More plants and animals are threatened with extinction now than at any other period in human history, it concludes.

SEE EXTINCTION ON A6

20 minutes

Mardi 7 mai 2019 <https://www.washingtonpost.com>

nature

International journal of science

editorial

ara

ara.cat

ARABIA: THE WILDLIFE SHOW FOR THE 21ST CENTURY

ARABIA: THE WILDLIFE SHOW FOR THE 21ST CENTURY

ARABIA: THE WILDLIFE SHOW FOR THE 21ST CENTURY

SOS NATURA

L'ONU alerta que un milió d'espècies estan en perill d'extinció per l'acció dels humans

LE FIGARO

LE FIGARO ENTREPRENEUR

BIENNALE DE VENISE

LE RENNEZ-VOUS MONDIAL DE L'ART CONTEMPORAIN

LES PERSONNES

PREMIER MINISTRE

LE FIGARO

Un million d'espèces menacées: peut-on encore les sauver?

Le rapport remis par le groupe d'experts de l'ONU sur la biodiversité réuni à Paris souligne l'urgence de la situation. Les solutions existent, mais le temps presse.

ARCHIVO /ADN

Rana Dorada, bajo cuidado

Biodiversity centre stage

The IPBES global assessment has brought biodiversity prominently to the attention of policymakers and the public, and researchers should seize this critical opportunity to engender change towards sustainability.

The reach of the Global Assessment

FOLHA DE S.PAULO

DESDE 1921 ★★ ★ UM JORNAL A SERVIÇO DO BRASIL

ANO 99 • Nº 32.906

TERÇA-FEIRA, 7 DE MAIO DE 2019

EDIÇÃO NACIONAL • CONCLUÍDA ÀS 21H18

Um milhão de espécies estão em risco de extinção

Novo e abrangente panorama publicado pelas Nações Unidas concluiu que há pelo menos 1 milhão de espécies de animais e plantas em risco de extinção no mundo. O relatório, compilado por especialistas internacionais e baseado em milhares de estudos científicos, é o mais completo até o momento quanto ao declínio da biodiversidade. **Ambiente B4**



Tatu-bola, típico do cerrado brasileiro, é uma das espécies ameaçadas de extinção Associação Caatinga/Divulgação

-20%

é o quanto regrediu em cem anos a abundância de vida animal e vegetal

EL ESPECTADOR

“Un millón de especies del mundo están en peligro de extinción”: Ipbes

Medio Ambiente 6 May 2019 - 11:39 PM

Por: - Redacción Vivir

EL PAÍS

EL PERIÓDICO GLOBAL

Algunas de las especies en peligro de extinción

18 fotos

El informe de la Plataforma Intergubernamental sobre la Biodiversidad y los Servicios Ecosistémicos (IPBES) alerta sobre la posible desaparición de un millón de especies animales y vegetales en las próximas décadas si no se toman medidas efectivas, urgentes y decisivas

EL PAÍS

7 MAY 2019 - 13:29 CEST

Ir a noticia Un millón de especies, amenazadas de extinción a un ritmo sin precedentes



EL UNIVERSAL

Humanos, amenaza para las especies

07/05/2019 | 04:09 | Inder Bugarín / Corresponsal

⌕ ⌕ ✉

Hay un millón en peligro de extinción, advierte la ONU; anfibios, el grupo que está en mayor riesgo, según reporte

Me gusta 4,3 mil

Seguir a @El_Universal_Mx



Bruselas.— La tasa de exterminio de poblaciones de plantas y animales, a causa de la actividad humana, nunca antes había sido tan elevada y acelerada como en nuestros días, advierte un informe elaborado por la Plataforma Intergubernamental en Biodiversidad y Servicios de los Ecosistemas (IPBES, por sus siglas en inglés).

LA NACION



ECOLOGÍA

El mundo, al límite: hay un millón de especies en peligro



TN8 Nicaragua @canaltn8 · May 6

#Mundo | En este texto sin precedentes publicado el lunes, el grupo de expertos de la ONU sobre biodiversidad (IPBES) plantea un panorama sombrío para el futuro del ser humano.



ONU alerta sobre la sexta extinción masiva: un millón de especies en peli... El informe en el que trabajaron 450 expertos durante tres años identifica a los cinco principales responsables.

tn8.tv

veja

Um milhão de espécies estão ameaçadas pela ação humana, aponta relatório

Novo estudo compilado pela ONU alerta para necessidade de 'mudança transformadora' na forma como o homem interage com a natureza

What is IBPES and why is it relevant to Business?

IPBES

Objective to:

*strengthen the science-policy interface
for biodiversity and ecosystem
services for the conservation and
sustainable use of biodiversity, long-
term human well-being and
sustainable development*



The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

- Established by governments in 2012.
- An independent intergovernmental body with 134 member governments.
- Operates under an agreed set of rules and operating principles which are intended to promote relevance, legitimacy and credibility.
- Aims to do for biodiversity what the Intergovernmental Panel on Climate Change (IPCC) does for climate change.



Four functions of IPBES

1. Promoting and undertaking **“assessments”** covering:

- thematic or methodological issues; and/or
- specific geographical areas.

2. Delivering **policy support** through:

- identifying and facilitating access to policy-relevant tools and methodologies; and
- ensuring uptake of IPBES deliverables by policy makers.

3. Carrying out and promoting **capacity-building activities**, to:

- Increase the level and value of engagement in IPBES and its outcomes; and
- strengthen national science-policy capacities.

4. Facilitating **access to knowledge and knowledge generation**, which:

- increases access to resources needed for IPBES deliverables; and
- seeks to address gaps identified in carrying out IPBES assessments

IPBES Achievements and Successes

Achievements and Successes of IPBES

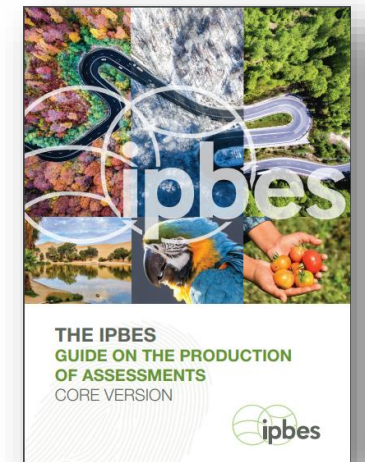
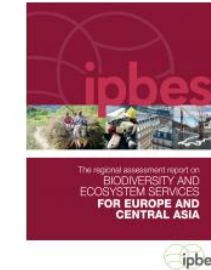
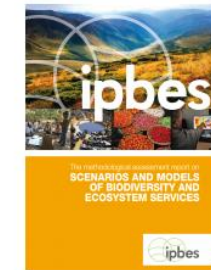
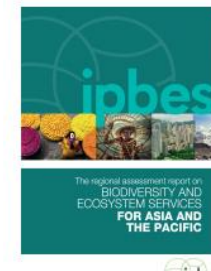
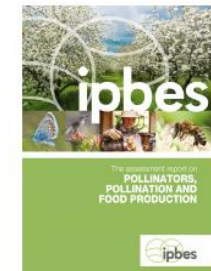
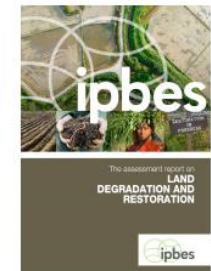
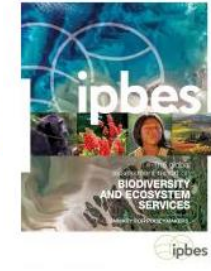
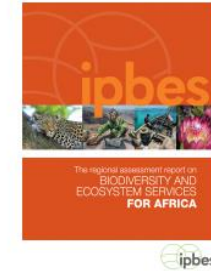
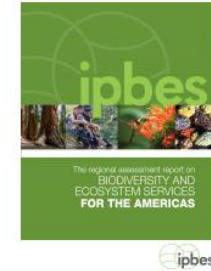
Completed eight assessments

Established innovative approaches for

- conceptual framework
- Recognizing and working with indigenous and local knowledge
- Capacity-building
- Addressing knowledge gaps
- Developing assessments

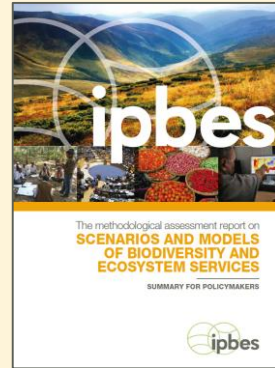
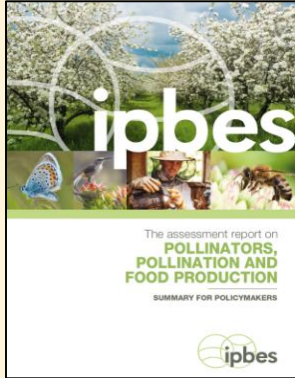
Engaging the wider community

- 134 Governments as Members
- 100% user-driven
- over 1,500 scientists and other knowledge holders involved since 2014

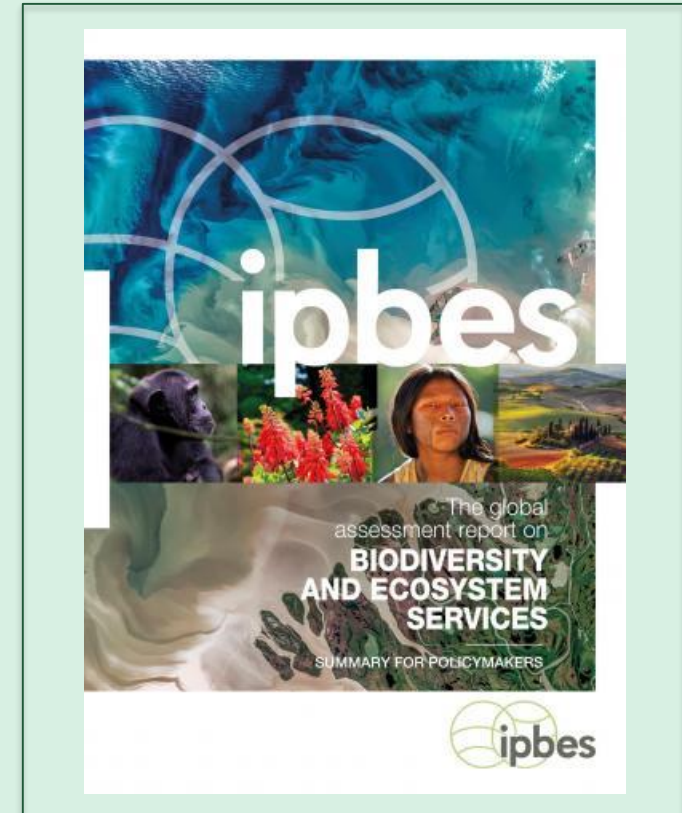


Establishing the knowledge base

2016

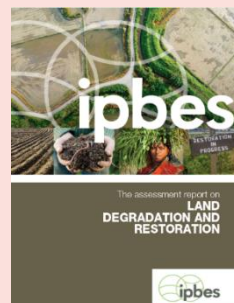
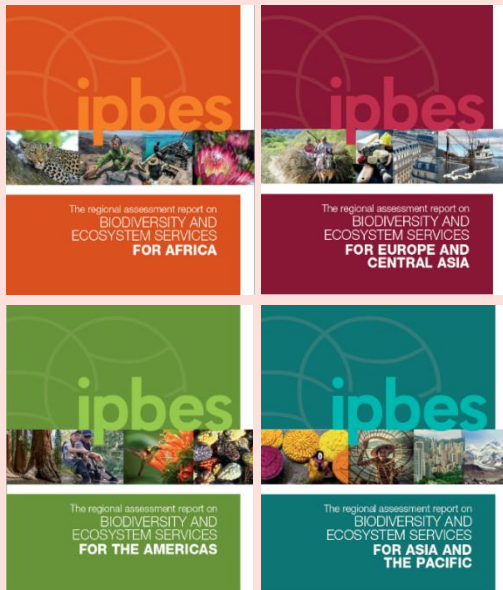


2019



- 35,000 scientific publications analyzed
- 50,000 peer review comments received

2018



Establishing the knowledge base

Assessment on values (IPBES 9 / 2022)

- 1st external review: first order draft (29 July – 22 September 2019)
- 2nd external review: second order draft of chapters and first draft of Summary for Policy Makers (January - March 2021)



Assessment of the sustainable use of wild species (IPBES 9 / 2022)

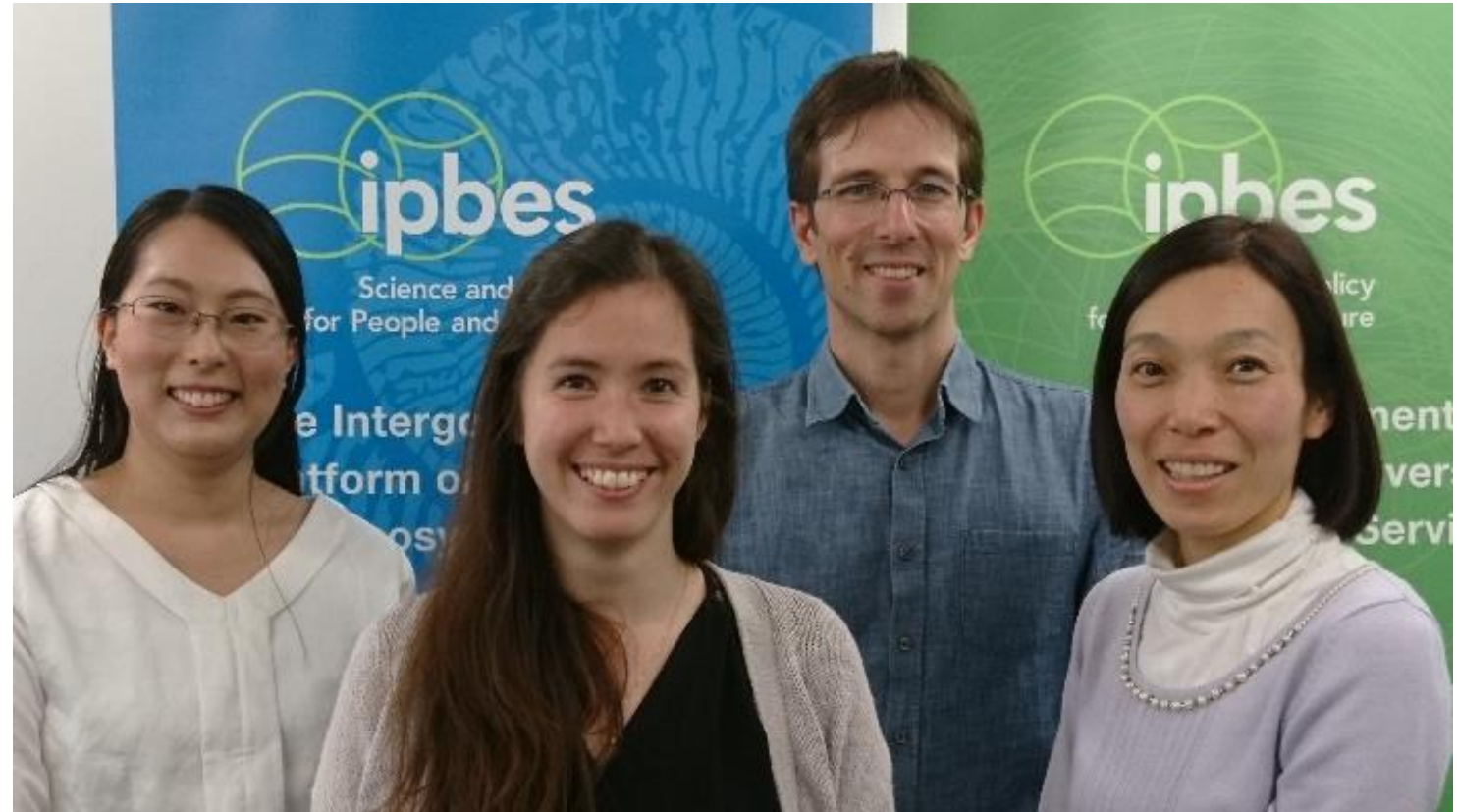
- 1st external review (27 August – 20 October 2019)
- 2nd external review (August - October 2020)



Establishing the knowledge base

Assessment of invasive alien species (IPBES 10 / 2023)

- 1st external review: first order draft (3rd quarter 2020)
- 2nd external review: second order draft of chapters and first draft of SPM (2nd quarter 2021)



TSU for the assessment of invasive alien species:, at the Institute for Global Environmental Strategies (IGES), Tokyo, Japan.

Capacity Building

- Fellowship Programme
 - Consultation and capacity-building workshop
-



Fellowship Programme Key Statistics

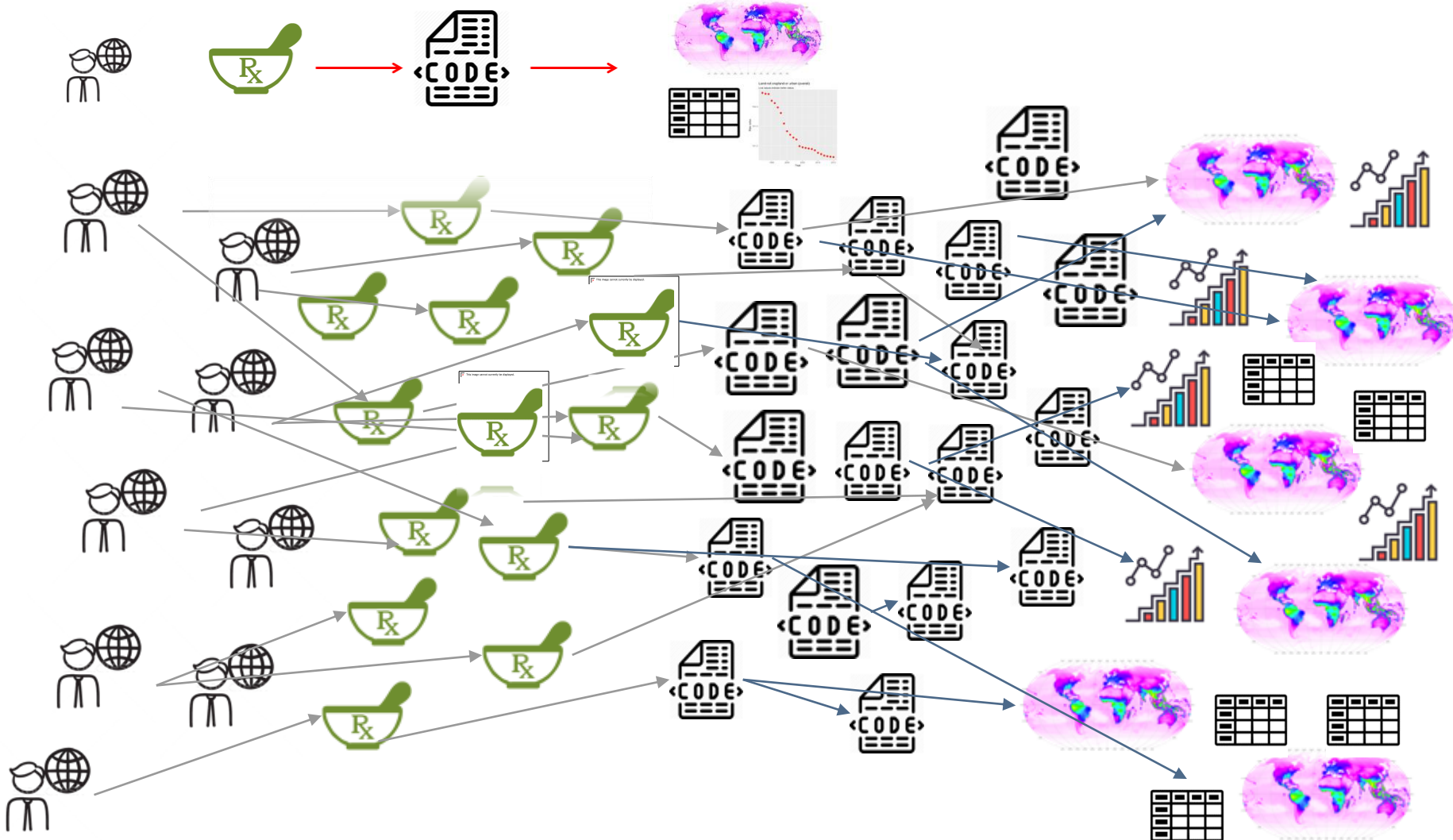
Fellows: 93, # Nationalities: 57, Mean age: 33, Education level: PhD



Consultation and capacity-building workshop

Global assessment management committee, assessment expert team, and national focal points from 48 countries

A data management policy for IPBES knowledge products



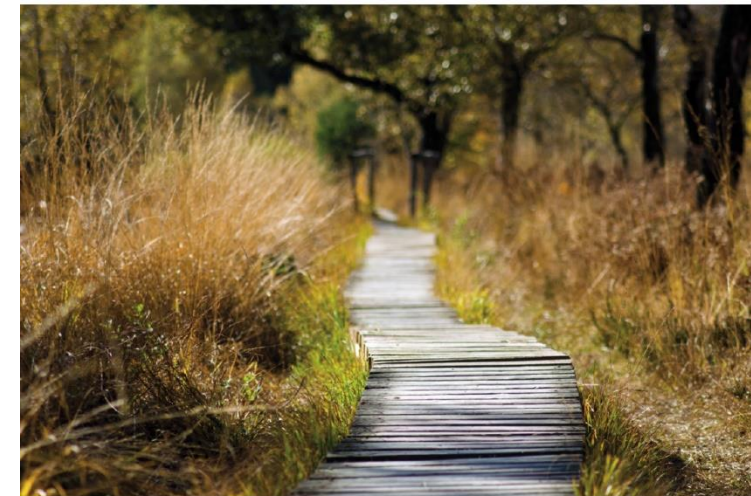
Catalysing knowledge generation: The methodological assessment of Scenarios and models as an example

1. The Belmont Forum and BiodivERsA have joined forces to implement the joint programme “BiodivScen”, for supporting international research efforts in the development of scenarios of biodiversity and ecosystem services.
2. The joint international call (co-funded by EU - ERA-NET COFUND) for research proposals on scenarios of biodiversity and ecosystem services/implementing a research programme on IPBES-identified gaps - together by the Belmont Forum and BiodivERsA (in 2017) - **which accounted for the recommendations made by the IPBES methodological assessment.**
3. This programme mobilized 26 funding agencies from 23 countries (EU & non-EU) for a total of **28 million €** in cash
4. **Fill in a knowledge gap and feedback into future assessments!**



Belmont Forum - BiodivERsA
2017-2018 Call for proposals

Scenarios of Biodiversity and Ecosystem services



Indigenous and local knowledge

- Online call for contributions (363 contributions from over 60 countries, and over 1200 bibliographic resources for Global Assessment)
 - Library (now more than 2500 entries) and roster (300+ names)
 - Free, Prior and Informed Consent
 - Sharing the results and outreach
 - Catalysing new research
-



Indigenous and local knowledge

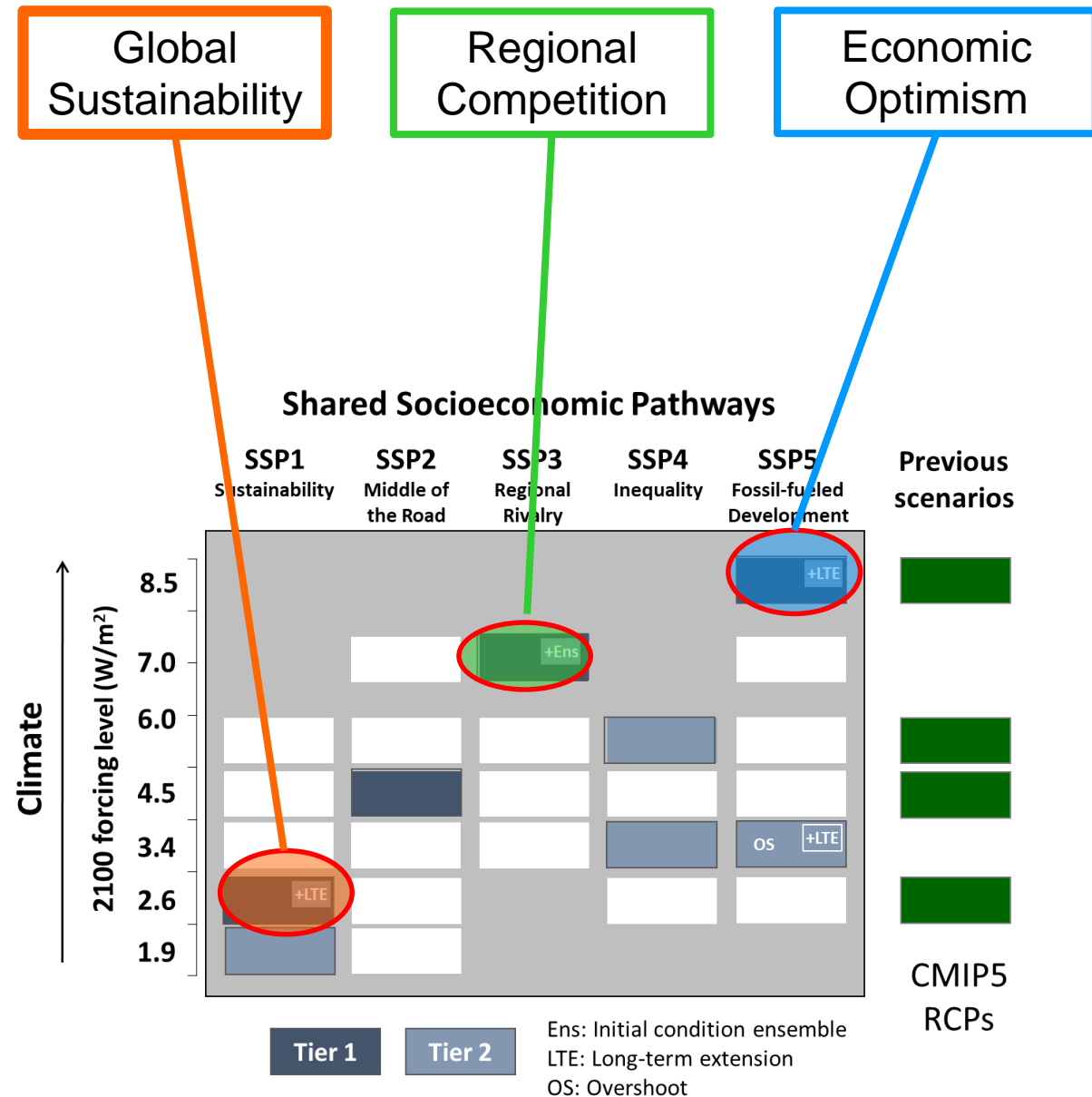
Dialogues and events form an important component

- UN Permanent Forum on Indigenous Issues 16 and 17 (2017 & 2018, New York, USA)
- Society of Ethnobiology (2017, Montreal, Canada)
- Human rights and Conservation (2017, Eldoret, Kenya)
- CBD SBSTTA 21 and 8(j) 10th meeting (2017, Montreal, Canada)
- Conservation and Livelihoods CCRN/IUCN (2018, Halifax, Canada)
- Arctic Dialogue (2018 Helsinki, Finland, 2018)
- ISE16 Congress, Belem+30 (2018, Belem, Brazil)



The BES SIM Scenarios

- Aim: consistent global scenario analysis for biodiversity and ecosystem services
- Cooperation of 11 biodiversity modelling groups and 5 ecosystem services modelling groups



Policy support tools and methodologies

Policy support gateway



Policy support tools and methodologies

Policy support tools and methodologies are approaches and techniques based on science and other knowledge systems, including indigenous and local knowledge, that can inform, assist and enhance relevant decisions, policy-making and implementation at the local, national, regional and international levels to protect nature, thereby promoting nature's contribution to people and a good quality of life.



INSTRUMENTS



TOOLS



CASE STUDIES



TRAINING

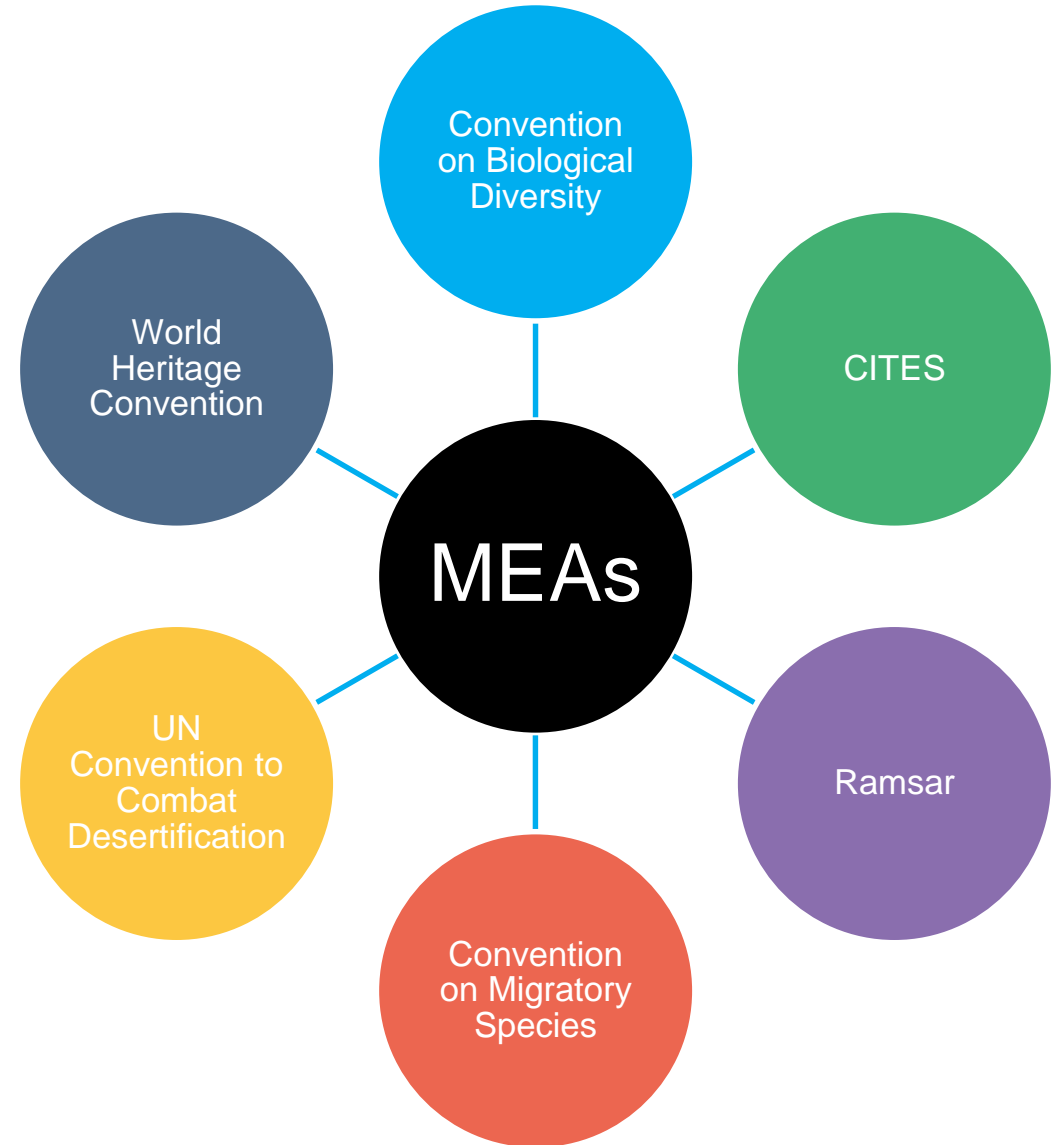


ASSESSMENT

IPBES to 2030

The new IPBES work programme

- ‘Rolling’ programme (topics may be added)
 - Entirely based on requests from Governments, multilateral environmental agreements (MEAs), and many other stakeholders
 - Includes assessments and many other activities
 - Inform transformative change
-



IPBES Topics

Topic 1: Understanding the importance of biodiversity in achieving the 2030 Agenda for Sustainable Development.

This will look at the interlinkages (nexus) among biodiversity, water, food and health and climate change, with a view to informing the development of policies and actions.



IPBES Topics

Topic 2: Understanding the underlying causes of biodiversity loss and determinants of transformative change to achieve the 2050 vision for biodiversity.

This will aim at understanding and identifying factors in human society at individual and collective levels, including behavioural, social, cultural, economic, institutional, technical and technological dimensions, that can be leveraged to bring about transformative change in favour of biodiversity.



IPBES Topics

Topic 3: Measuring business impact and dependence on biodiversity and nature's contributions to people.

This will categorize the ways in which businesses depend on, and impact, biodiversity and nature's contributions to people; and work on criteria and indicators for measuring dependence and impact.



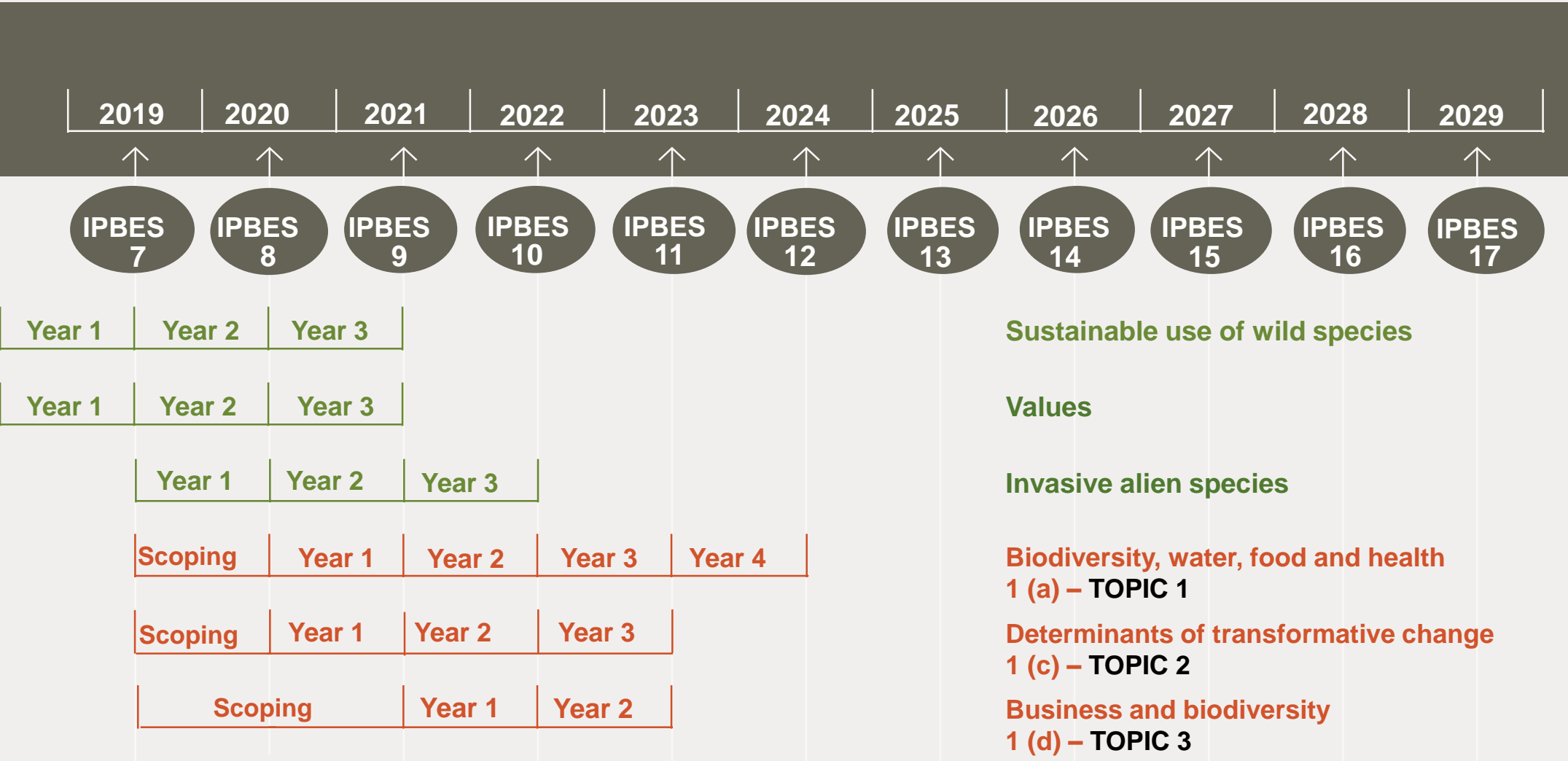
IPBES work programme

- Objective 1: assessing knowledge
- Objective 2: building capacity
- Objective 3: strengthening the knowledge foundations
- Objective 4: supporting policy
- Objective 5: communicating and engaging
- Objective 6: improving the effectiveness of the Platform

Overall objective of IPBES					
To strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development					
Policy framework of the rolling work programme up to 2030					
The 2030 Agenda for Sustainable Development, including the Sustainable Development Goals, the biodiversity-related conventions and other biodiversity and ecosystem services processes					
INITIAL PRIORITY TOPICS of the work programme	TOPIC 1	TOPIC 2	TOPIC 3	Supporting the achievement of the overall objective of IPBES	
OBJECTIVES of the work programme	Understanding the importance of biodiversity in achieving the 2030 Agenda for Sustainable Development	Understanding the underlying causes of biodiversity loss and determinants of transformative change and options for achieving the 2050 Vision for Biodiversity	Measuring business impact and dependence on biodiversity and nature's contributions to people		
OBJECTIVE 1 Assessing knowledge	Deliverable 1 (a): Assessing interlinkages among biodiversity, water, food and health (thematic assessment) Deliverable 1 (b): Assessing the interlinkages between biodiversity and climate change (technical paper)	Deliverable 1 (c): Assessing the underlying causes of biodiversity loss and the determinants of transformative change and options for achieving the 2050 Vision for Biodiversity (thematic assessment)	Deliverable 1 (d): Assessing the impact and dependence of business on biodiversity and nature's contributions to people (fast-track methodological assessment)		
OBJECTIVE 2 Building capacity	(a) Enhanced learning and engagement	(*)	(*)	(*)	(*)
	(b) Facilitated access to expertise and information	(*)	(*)	(*)	(*)
	(c) Strengthened national and regional capacities	(*)	(*)	(*)	(*)
OBJECTIVE 3 Strengthening the knowledge foundations	(a) Advanced work on knowledge and data	(*)	(*)	(*)	(*)
	(b) Enhanced recognition of and work with indigenous and local knowledge systems	(*)	(*)	(*)	(*)
OBJECTIVE 4 Supporting policy	(a) Advanced work on policy instruments, policy support tools and methodologies	(*)	(*)	(*)	(*)
	(b) Advanced work on scenarios and models of biodiversity and ecosystem functions and services	(*)	(*)	(*)	(*)
	(c) Advanced work on multiple values	(*)	(*)	(*)	(*)
OBJECTIVE 5 Communicating and engaging	(a) Strengthened communication				
	(b) Strengthened engagement of Governments				
	(c) Strengthened engagement of stakeholders				
OBJECTIVE 6 Improving the effectiveness of the Platform	(a) Periodic review of the effectiveness of IPBES				
	(b) Review of the IPBES conceptual framework				
	(c) Improving the effectiveness of the assessment process				

(*) Specific deliverables to be developed by task forces

Snapshot of ongoing and future IPBES Assessments



Current scoping process

Ongoing process for the nexus and transformative change assessments

- Calls for nomination of scoping experts open from 5 August to 15 October 2019
- Pre-scoping online conferences to seek input for the scoping process:
 - 30 September – 2 October 2019: nexus assessment
 - 9-11 October 2019: transformative change assessment
- Scoping meetings:
 - 24-17 March 2020: nexus assessment
 - 21-24 April 2020: transformative change assessment
- External review of draft scoping reports
- Scoping reports considered by IPBES 8 (Feb 2021)

Opportunities to Engage

Opportunities to engage

- Review and comment on scoping documents of assessments currently being scoped (nexus and transformative change)
- For the **business and biodiversity methodological assessment**:
 - participate in the pre-scoping online conference
 - nominate experts to participate in the formal scoping process/meeting
 - nominate experts to participate as authors in full assessment
 - provide comments during the external review periods
- Look at the many products available from the first work programme, and consider where and how they might be relevant
- Communicate your uptake activities to the IPBES Secretariat

Discussion

Claire Brown

Principal Technical Specialist, Ecosystem Assessments

claire.brown@unep-wcmc.org

Jerry Harrison

Principal Technical Specialist, Conventions and Policy Support

jerry.harrison@unep-wcmc.org

unep-wcmc.org

Facebook: @unepwcmc

Twitter: @unepwcmc

Linkedin: UNEP-WCMC

Youtube: UNEP-WCMC Communications

UNEP-WCMC

UNEP-WCMC is a global Centre of excellence on biodiversity. The Centre operates as a collaboration between the UN Environment Programme and the UK-registered charity WCMC. Together we are confronting the global crisis facing nature.



Logistics

- **Frequency:** Quarterly
 - **Scheduling:** AM & PM sessions
 - **Rules:** Chatham House rule for discussion, but presentation is recorded
 - **Topics:** Your suggestions are welcome
-



Credits and Selected References

Bee orchid © UNEP-WCMC Stephanie Foote
UNEP-WCMC Office in Cambridge © UNEP-WCMC
Moorhen © UNEP-WCMC Stephanie Foote

The IPBES policy support gateway can be found at:
<https://ipbes.net/policy-support>

The IPBES Global Assessment summary for policymakers is available from: <https://ipbes.net/global-assessment>



UN 
**environment
programme**

WCMC
40 years