

ISAP 2019

Communication for science-based decision making (IPBES messages)

Dr. Albert van Jaarsveld

IIASA Director General and Chief Executive Officer

July 2019

IIASA

- international research institute
- multidisciplinary research aimed at policy making
- <u>global and universal</u> challenges



Context



The World Economic Forum Global Risks Report for 2019 features, *inter alia*, biodiversity loss and ecosystem collapse. Attention of business and political leaders is now focusing on these issues, and the links and feedbacks between them.

This means there is a vital need for clear, unambiguous advice on the status of, and drivers that change the status of biodiversity and ecosystem services and importantly options and solutions to address these challenges in an integrated way to achieve sustainable development.



Insight Report

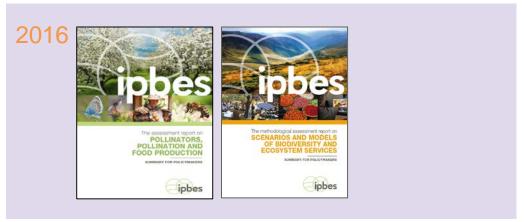
The Global Risks Report 2019 14th Edition

In partnership with Marsh & McLennan Companies and Zurich Insurance Group

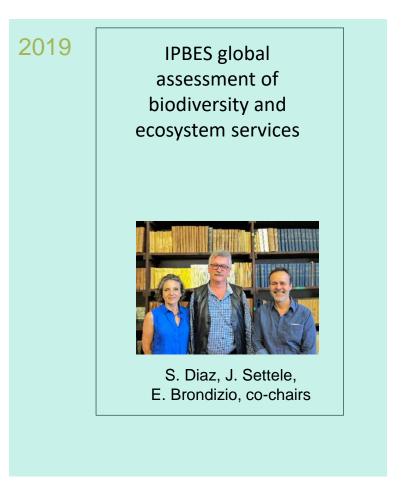


The IPBES assessments



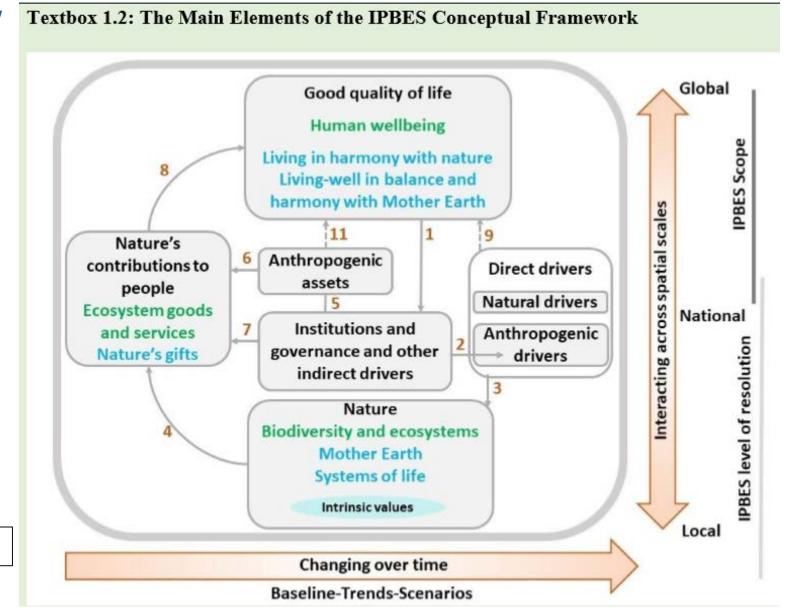


2018 ipbes





Achieving a "good quality of life" in balance with "nature" and "nature's contribution to people" is the goal of IPBES. IPBES is not just about biodiversity and ecosystems







Life on Earth is deteriorating fast worldwide.

Virtually all indicators of the global state of nature are decreasing:

biomes, ecosystems, species, varieties and breeds

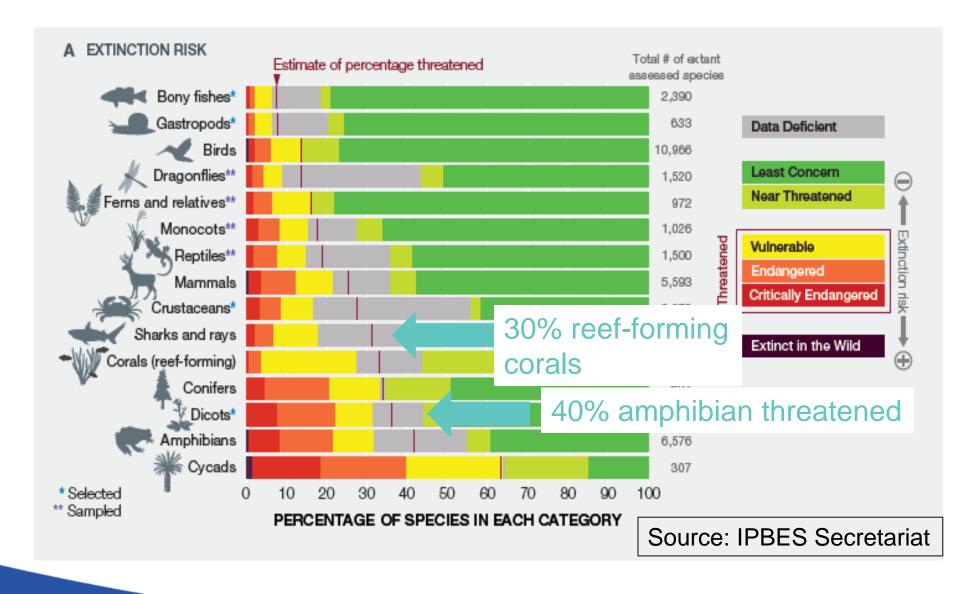


Nature is being degraded at a rate and scale unprecedented in human history

- 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

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





Nature's contributions to people are deteriorating worldwide (except food, energy and raw



REND

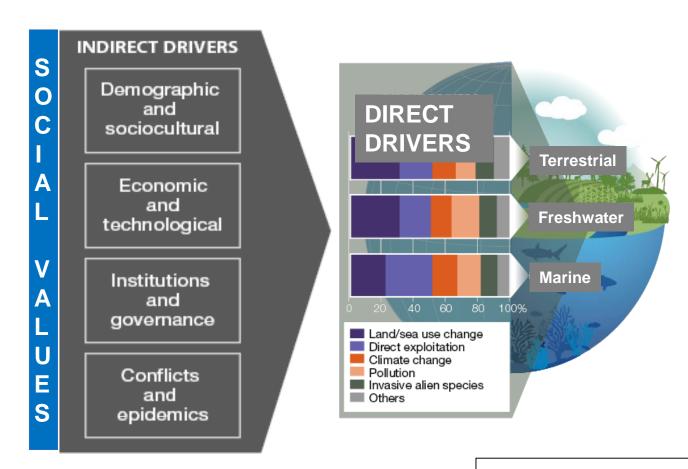
50-year global trend Across Nature's contributions to people regions Decrease ← No change → Increase 1 Habitat creation & maintenance Consistent 2 Pollination & dispersal of seeds Consistent 3 Regulation of air quality Variable 4 Regulation of climate Variable 5 Regulation of ocean acidification Variable 6 Regulation of freshwater quantity Variable 7 Regulation of freshwater quality Consistent 8 Regulation of soils Variable 9 Regulation of hazards & extreme events Variable 10 Regulation of organisms Consistent 11 Energy Variable 12 Food & feed Variable 13 Materials & assistance Variable 14 Medicinal, biochemical, & genetic resources Consistent 15 Learning & inspiration Consistent Consistent 16 Physical & psychological experiences 17 Supporting identities Consistent 18 Maintenance of options Consistent

Source: IPBES Secretariat

materials)



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







Aichi Biodiversity Targets

Sustainable Development Goals





















































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We have dramatically reconfigured the fabric of life of the planet.

The world is becoming much more interconnected, yet increasingly unequal.

Proposed actions



- 1. Food, water, energy, health, human well-being, climate responses, nature conservation must be achieved in a synergistic manner (systems perspective)
- 2. Rapid implementation of existing instruments and bold decisions for transformative change implementation
- 3. Urgent and concerted to address direct drivers and the root causes (indirect drivers) of nature deterioration
- 4. Knowledge, innovations and practices, institutions and values of indigenous peoples and local communities and their <u>inclusion and participation</u> in environmental matters
- 5. Global financial and economic systems that build a global sustainable economy (growth paradigm overcome)
- Many <u>societal responses</u> and successful examples, rapid transformative change is already happening in many sectors.

12, dat

Six Major Transformations (TWI2050.org)



Digital revolution

Artificial intelligence, big data, biotech, nanotech, autonomous systems



Decent housing, mobility, sustainable infrastructure, pollution

Food, biosphere & water

Sustainable intensification biodiversity, forests, oceans, healthy diets, nutrients



Human capacity
& demography

Education, health, ageing, labor markets, gender, inequalities

Prosperity
Social Inclusion
Sustainability

TWI2050 The World in 2050 www.twi2050.org & production

Resource use, circular economy, sufficiency, pollution

Energy access, efficiency, electrification, decent services





Thank you

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www.iiasa.ac.at or inf@iiasa.ac.at

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