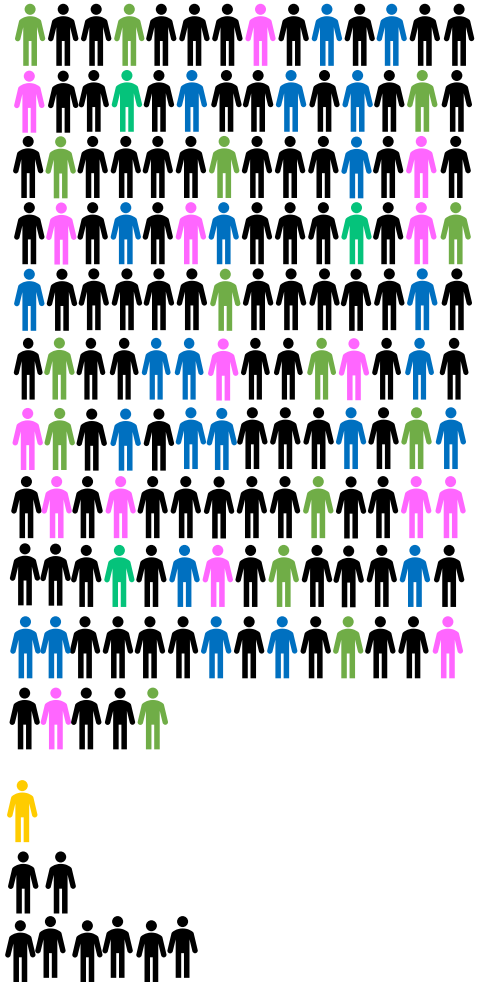
Global Assessment

- What is the status of and trends in nature and in indirect and direct drivers of change?
- How does nature contribute to the achievement of Global Goals?
- What are the plausible futures for nature and for a good quality of life between now and 2050?
- What pathways and policy intervention scenarios can lead to sustainable futures?
- What are the opportunities and challenges, as well as options available to decision makers relating to nature and its contributions to good quality of life?

The Author Team



145 experts:

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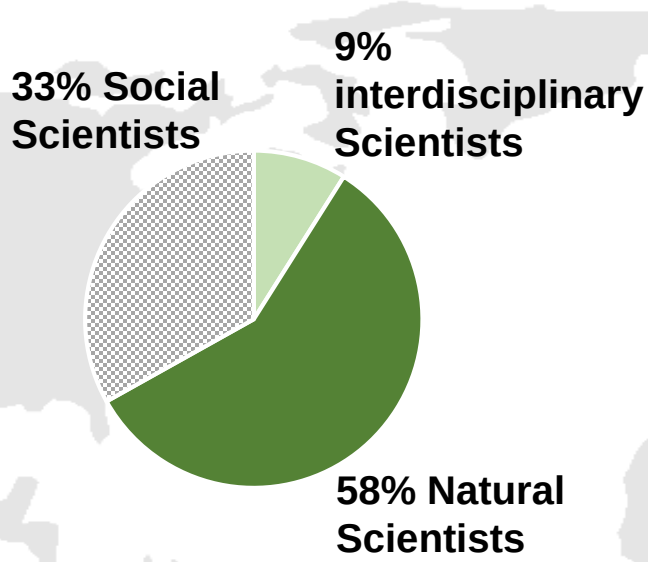
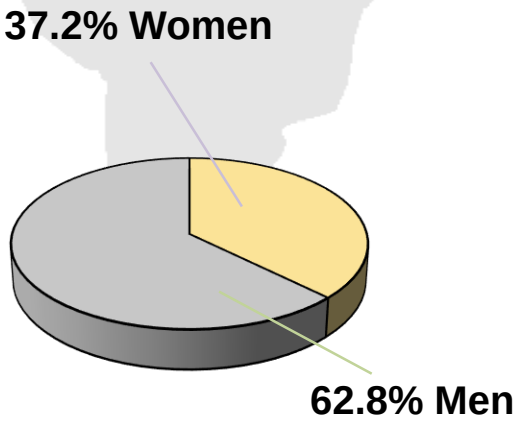




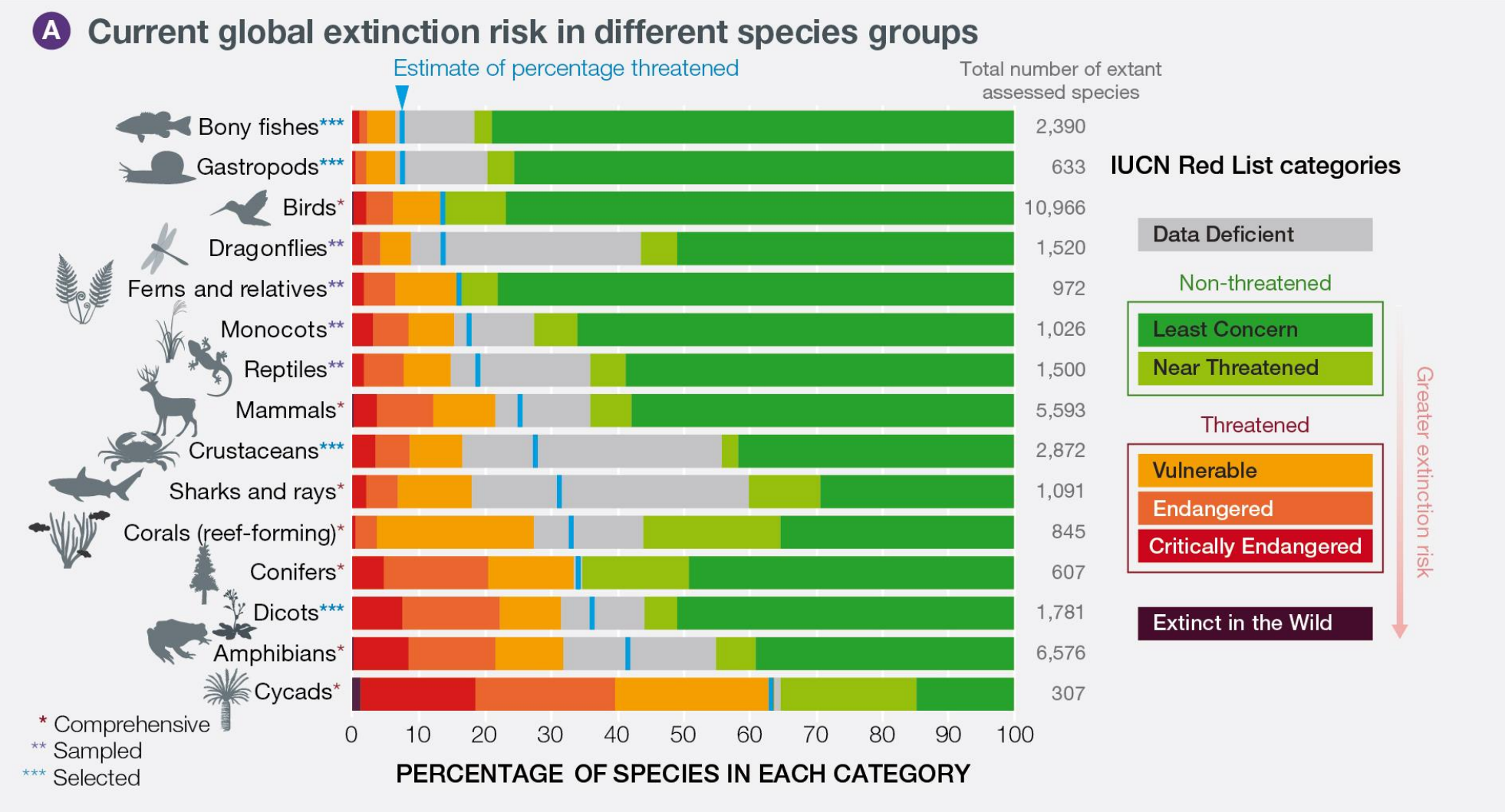
~156,000 Hours of Voluntary Hours = ~17 years

Life on Earth is deteriorating fast worldwide.

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

biomes, ecosystems, species, varieties and breeds

More species of plants and animals are threanted with extinction now than at any other time in human history



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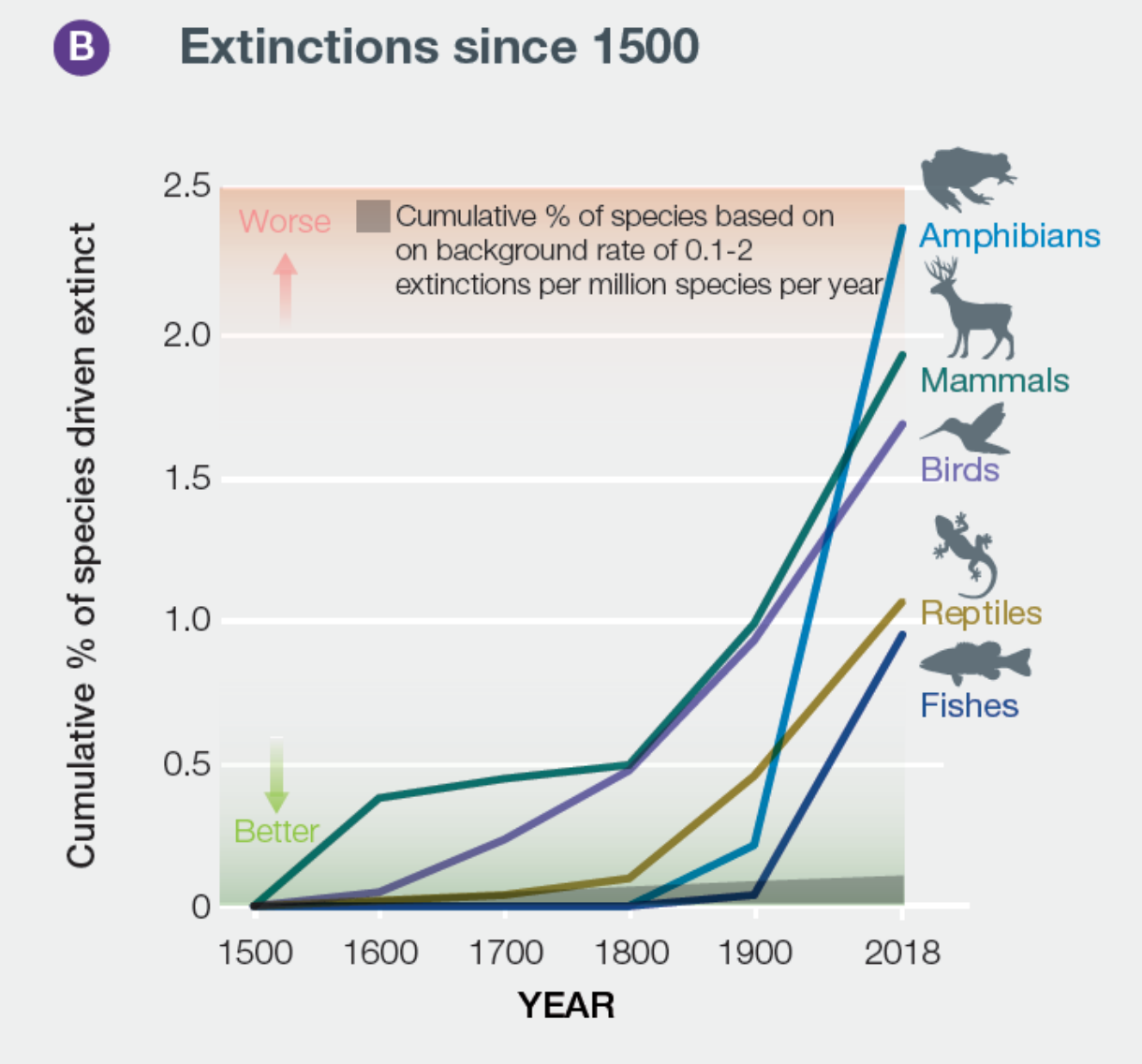
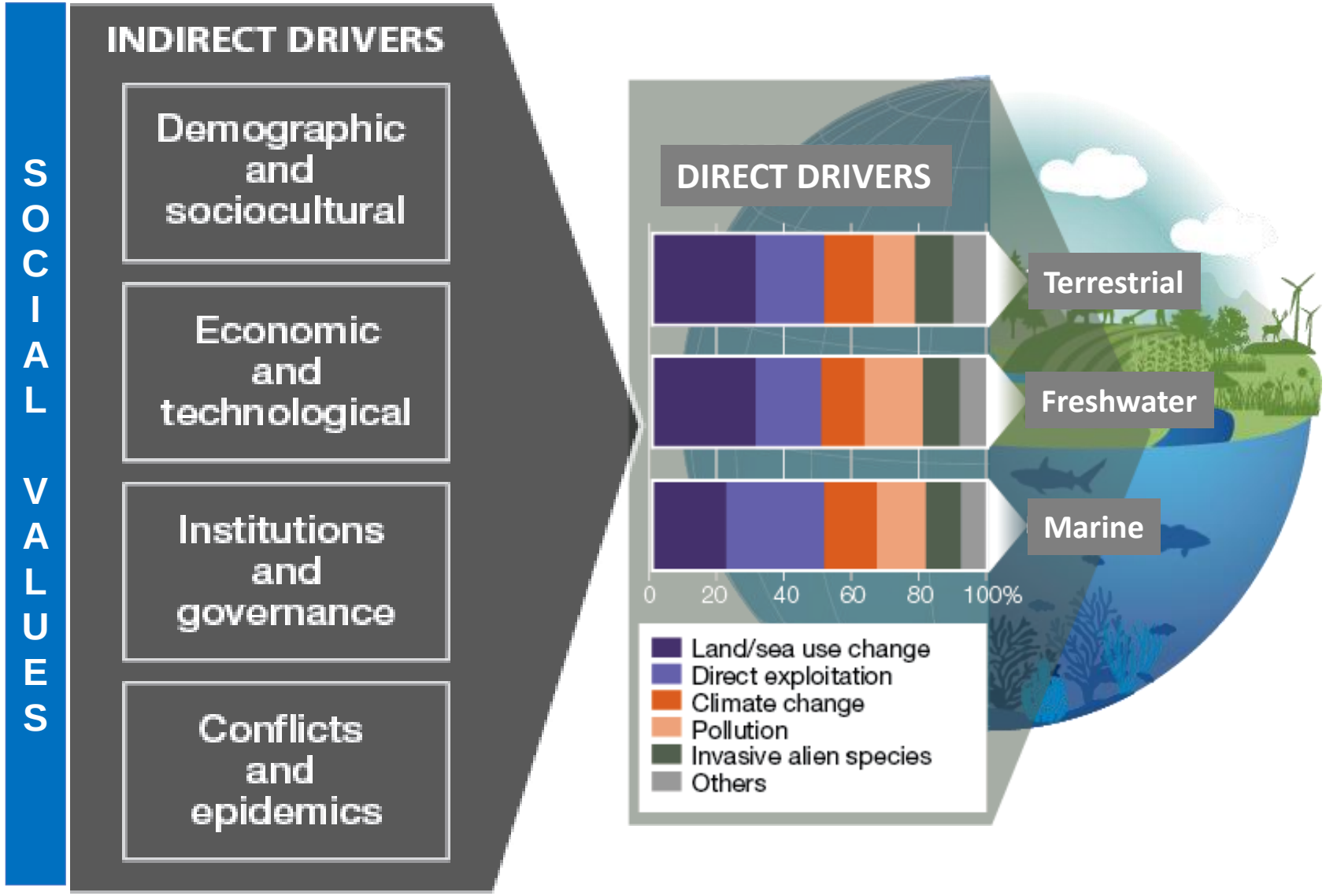
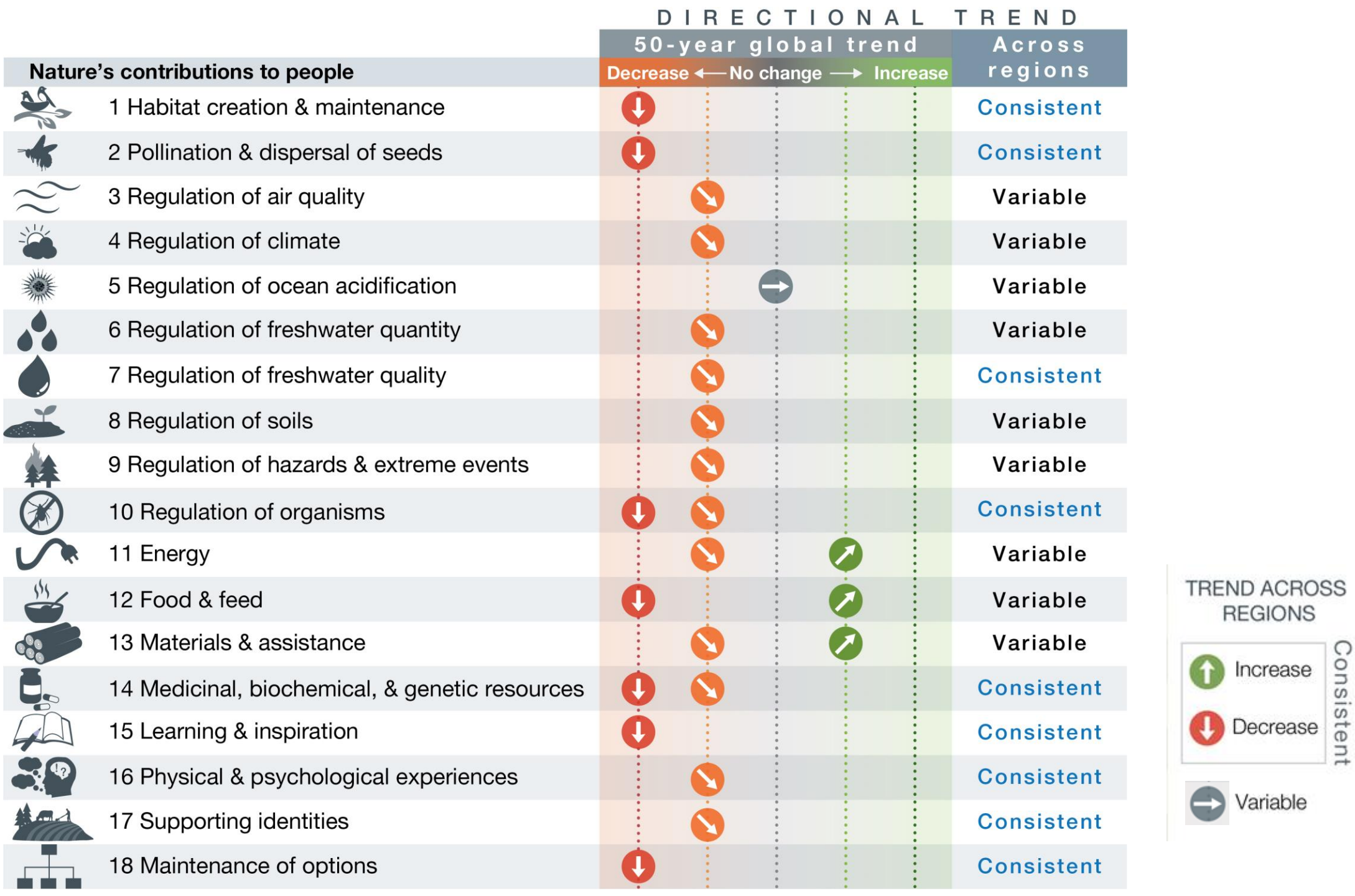


Underpinning the proximate causes of deterioration in nature are the root causes, or indirect drivers of change.



Most of the assessed categories of **nature‘s vital contributions to people** are **declining** globally since the 1970s

Only the production of food, energy and raw materials has increased


DIRECTIONAL TREND
50-year global trend
Decrease
No change
Increase
Across regions
Nature's contributions to people
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
16 Physical & psychological experiences
Consistent
17 Supporting identities
Consistent
18 Maintenance of options
Consistent
TREND ACROSS REGIONS
Increase
Decrease
Consistent
Variable

Aichi Biodiversity Targets

Sustainable Development Goals

Progress towards the Aichi Biodiversity Targets

Goal	Target (abbreviated)	Progress towards elements of each target			
		Poor	Moderate	Good	Unknown
Drivers	1 Awareness		~ ~		
	2 Planning & accounting	✗	~ ~		
	3 Incentives	✗ ✗			
	4 Production & consumption	✗ ✗			
Pressures	5 Habitat loss	✗ ✗			
	6 Fisheries	✗ ✗			?
	7 Agriculture & forestry	✗ ✗	~		
	8 Pollution	✗ ✗			
	9 Invasive alien species	✗ ✗		✓	?
	10 Coral reefs etc	✗ ✗			
Status	11 Protected & conserved areas		~ ~ ~ ~	✓ ✓	
	12 Extinctions prevented	✗ ✗			
	13 Genetic diversity		~ ~ ~ ~		?
Benefits	14 Ecosystem services	✗			?
	15 Ecosystem restoration				? ?
	16 Access & benefit sharing		~	✓	
Implementation	17 Strategies & action plans		~ ~	✓	
	18 Indigenous & local knowledge		~		? ?
	19 Biodiversity science		~		?
	20 Financial resources		~		

Progress towards the UN Sustainable Development Goals

Selected Sustainable Development Goals	Recent status and trends in aspects of nature and nature's contributions to people that support progress towards target *			Uncertain relationship
	Poor/Declining support	Partial support	Unknown	
1 NO POVERTY — No poverty	↓ ↓			U U
2 ZERO HUNGER — Zero hunger	↓	→ → →		
3 GOOD HEALTH AND WELL-BEIN — Good health and well-being			? ?	U U
6 CLEAN WATER AND SANITATIO — Clean water and sanitation	↓ ↓ ↓	→		
11 SUSTAINABLE C AND COMMUNIT — Sustainable cities and communities	↓ ↓ ↓ ↓	→		
13 CLIMATE ACTION — Climate action	↓	→	? ? ?	
14 LIFE BELOW WATER — Life below water	↓ ↓ ↓ ↓	→ → →		
15 LIFE ON LAND — Life on land	↓ ↓ ↓ ↓ ↓ ↓	→ → → → →		

* There were no targets that were scored as good/positive status and trends

Plausible futures

SCENARIOS

Economic optimism

- rapid economic growth
- low regulation

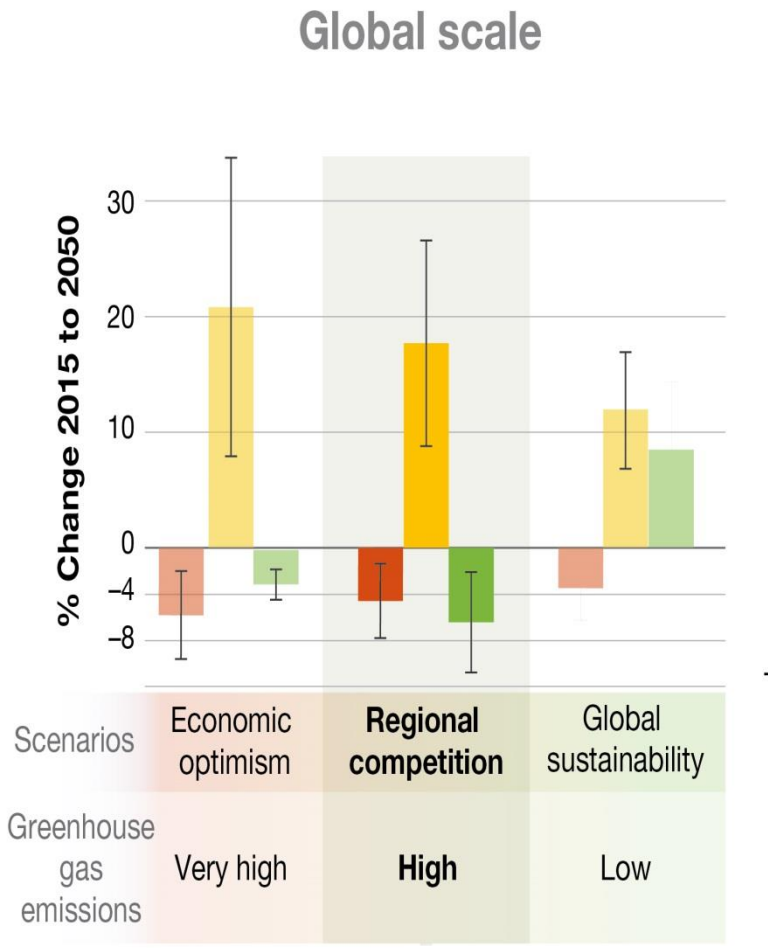
Regional competition

- strong trade and other barriers
- growing gap between rich and poor

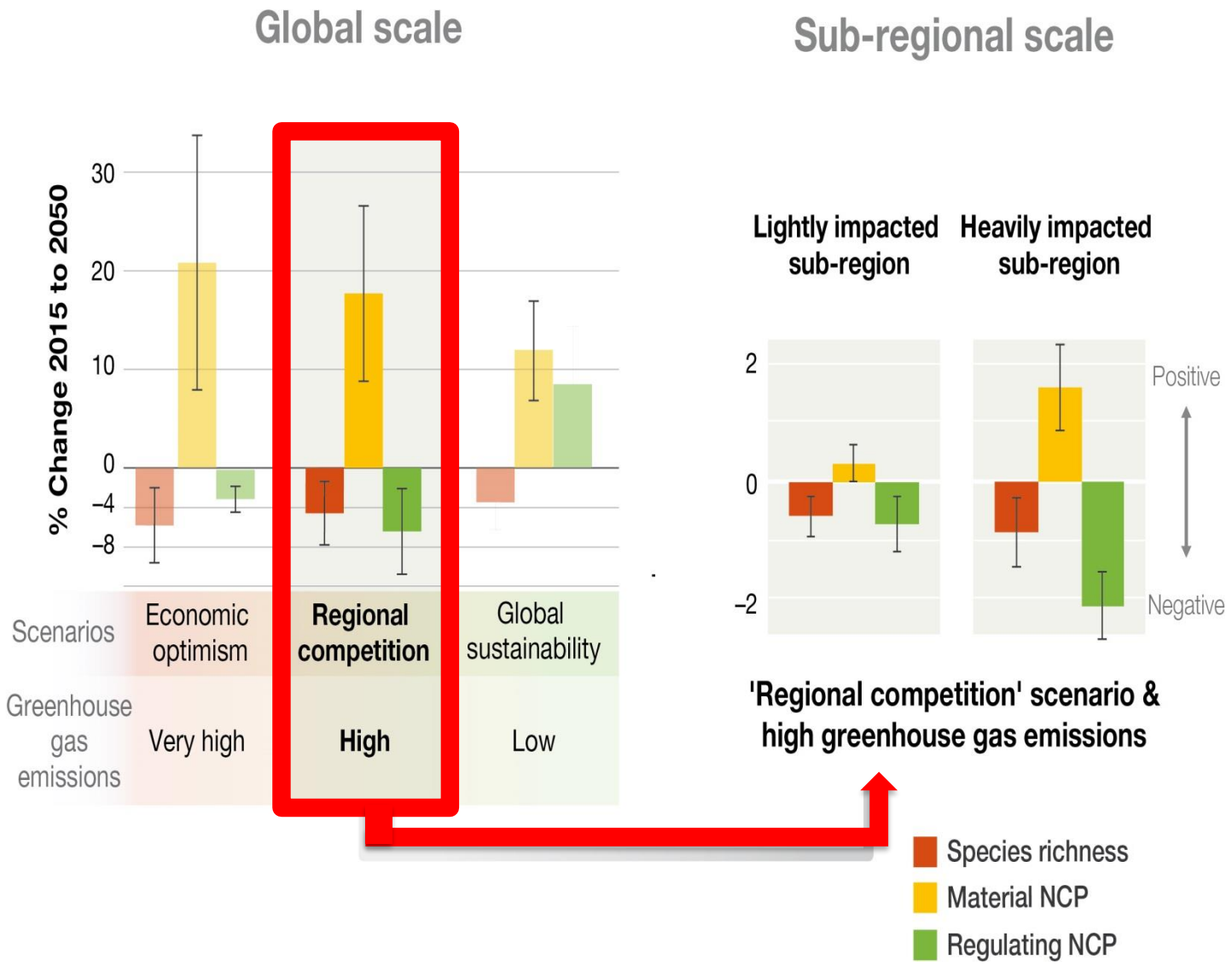
Global sustainability

- Proactive environmental policy
- Sustainable production and consumption

Projected changes in biodiversity and nature's material and regulating benefits, due to climate & land use change by 2050



Projected changes in biodiversity and nature's material and regulating benefits, due to climate & land use change by 2050



Other plausible scenarios, which include transformative change, are compatible with the 2030 sustainability objectives and the 2050 Vision for Biodiversity.

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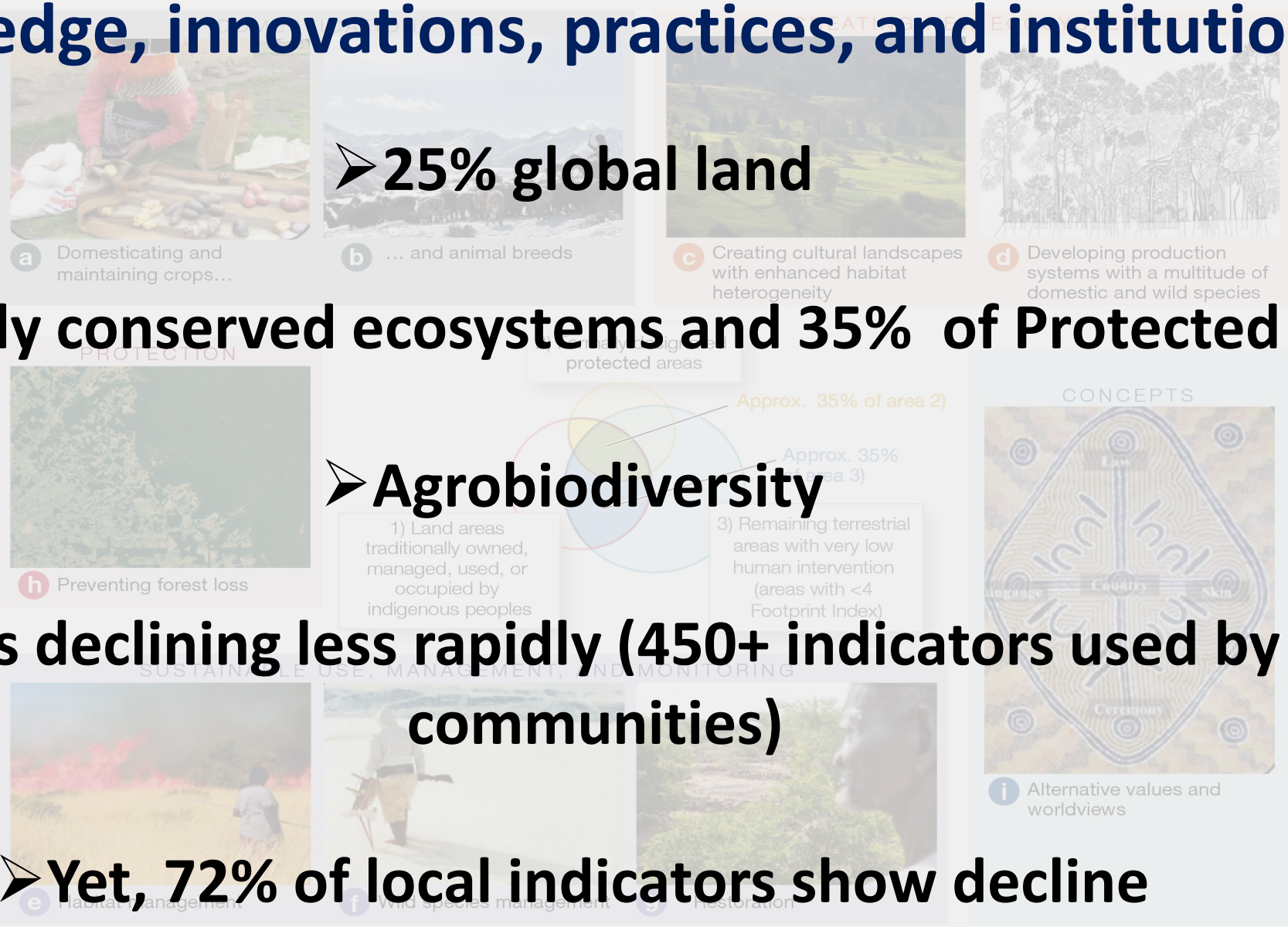
Contributions of Indigenous Peoples and Local Communities: knowledge, innovations, practices, and institutions

- 25% global land
- 35% highly conserved ecosystems and 35% of Protected Areas
- Agrobiodiversity
- Nature is declining less rapidly (450+ indicators used by local communities)
- Yet, 72% of local indicators show decline



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

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

Confronting the challenge of meeting international societal and environmental goals for the next decades

Key components for transformation

Challenges related to climate change, nature deterioration and achieving a good quality of life for all are interconnected.

And, they need to be addressed synergistically, from local to global levels.

Food, **water**, **energy**, **health**, human **well-being** for all, mitigating and adapting to **climate change**, and **conserving** nature can be achieved together in sustainable pathways.

Need for rapid implementation of existing instruments and bold decisions for transformative change.

Knowledge and tools available

…

implementation!

Meeting global societal goals through urgent and concerted efforts addressing the direct drivers and especially the root causes (indirect drivers) of nature deterioration.

Governance	Align governance systems, both in the public sector (across admin levels for instance) but also across sectors
Economic systems	Responsability, whole chain from production to consumption
Equity	Inequalities are real, incoporate them actively in the planning and implementation
Cross-sectoral planning	We kave better knowledge and tools
Incentives	Eliminate harmful subsidies, incentive positive externalities
Narratives	Individual level: wasteful consumption does not equal quality of life or status
Societal values	Environmental degradatiom, social inequalities are not inevitable outcomes of economic growth

Subset of solutions

Cross-Sectoral, Integrated Management at Multiple Levels

→ 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

Recognizing the knowledge, innovations and practices, institutions and values of indigenous peoples and local communities and their inclusion and participation in environmental governance.

Enhances their quality of life, as well as nature conservation and sustainable use, relevant to broader society.

A key constituent of sustainable pathways is the evolution of global financial and economic systems to build a global sustainable economy.

One that steers away from the current limited paradigm of economic growth.

Many societal responses and successful examples, rapid transformative change is already happening in many sectors.

Bold actions and commitment from local to global levels urgently needed.