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#IPBES7
THE IPBES GLOBAL ASSESSMENT
UN environment
United Nations Environment Programme
United Nations Educational, Scientific and Cultural Organization
Food and Agriculture Organization of the United Nations
UNDP
Empowered lives. Resilient nations.

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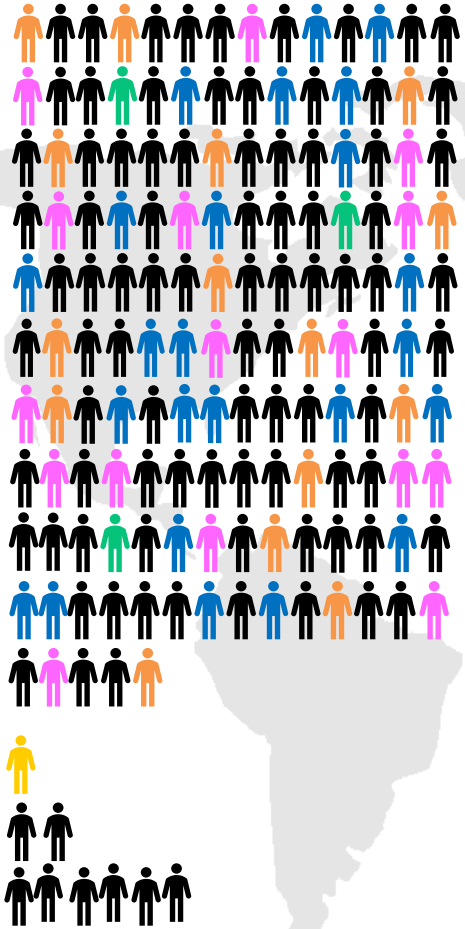

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24 coordinating lead authors
87 lead authors
310 contributing authors
15 review editors
16 fellows

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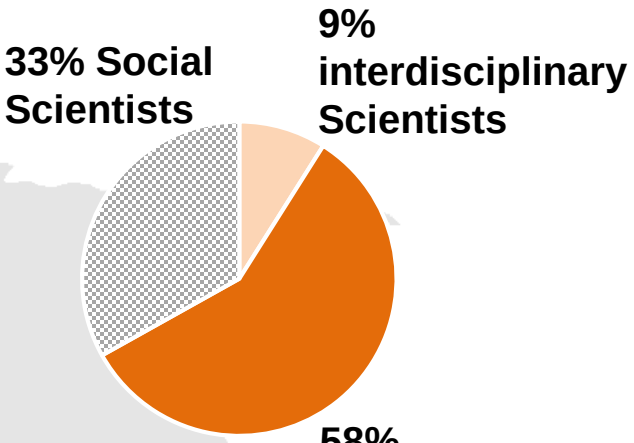
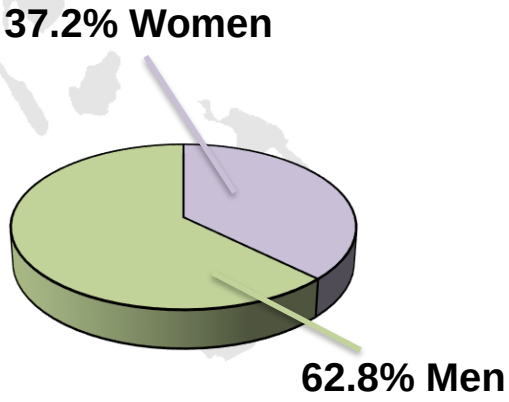




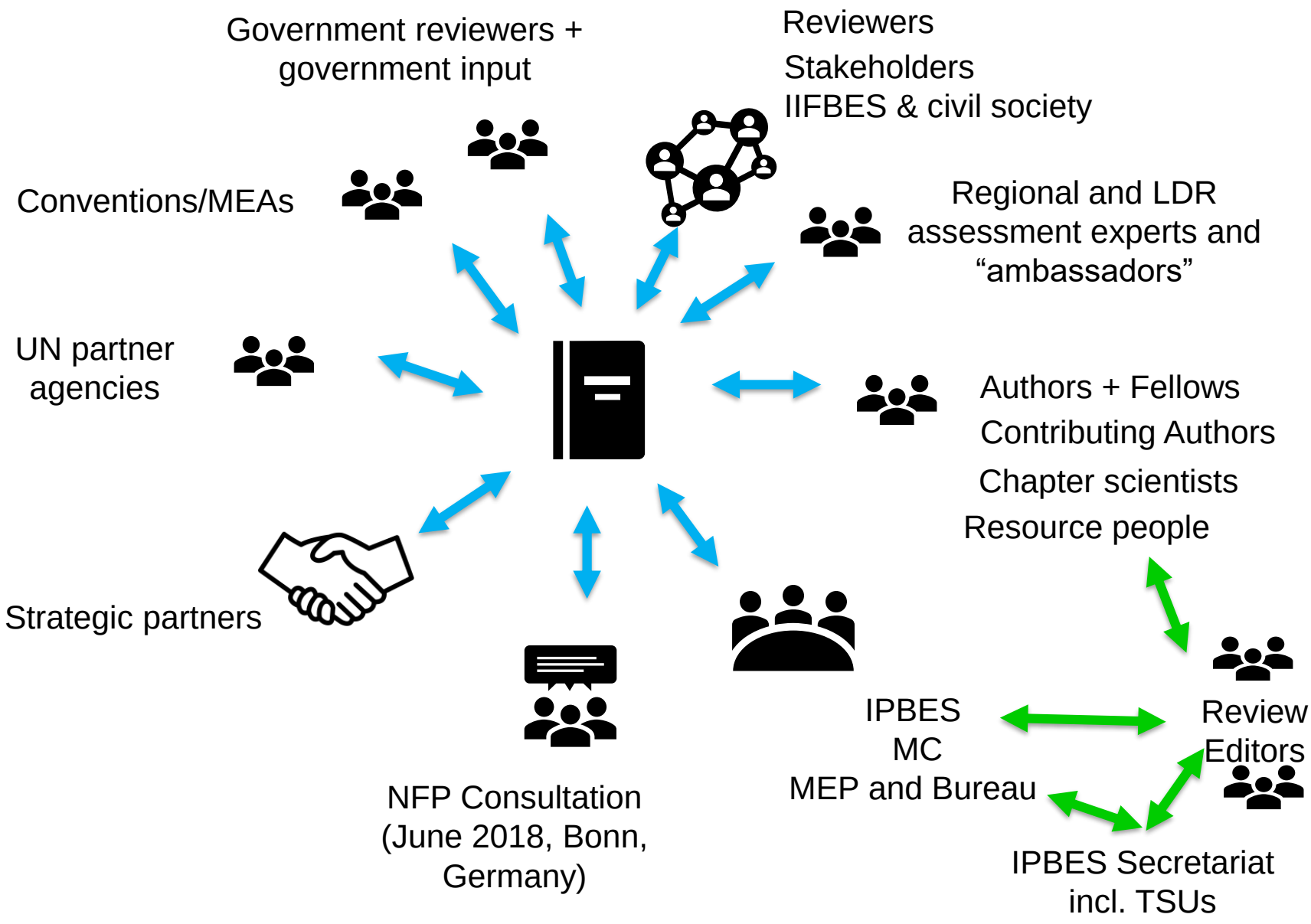
Supported by:
The Global TSU
6 Chapter scientists
1 resource person

Other supporting TSUs:
Indigenous and local Knowledge, Scenarios, Values, Knowledge & Data, Capacity Building

Management Committee

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

A co-produced Summary for Policymakers



Hien Ngo

Max Gueze

Eduardo Brondízio

Sandra Díaz

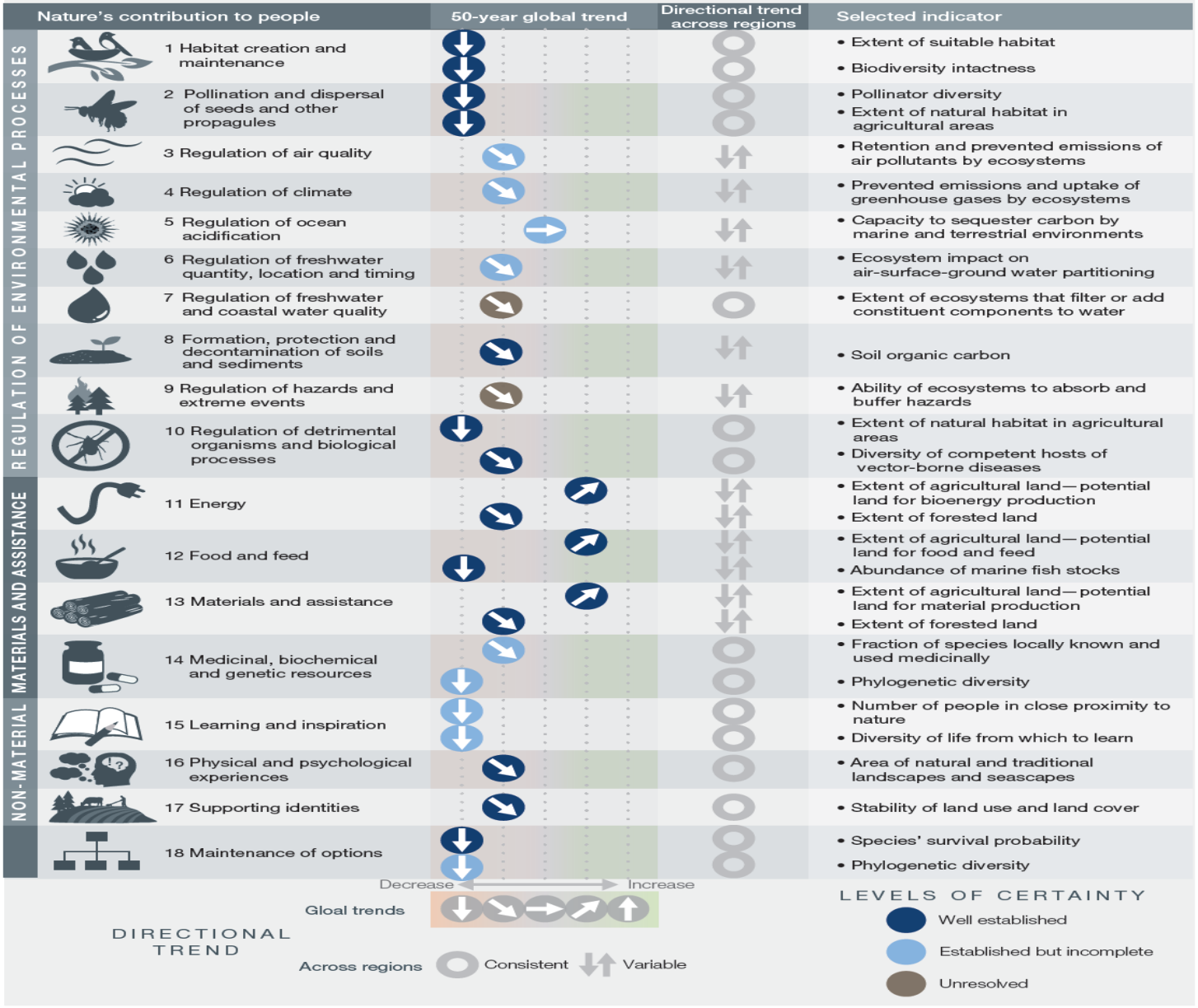
Josef Settele

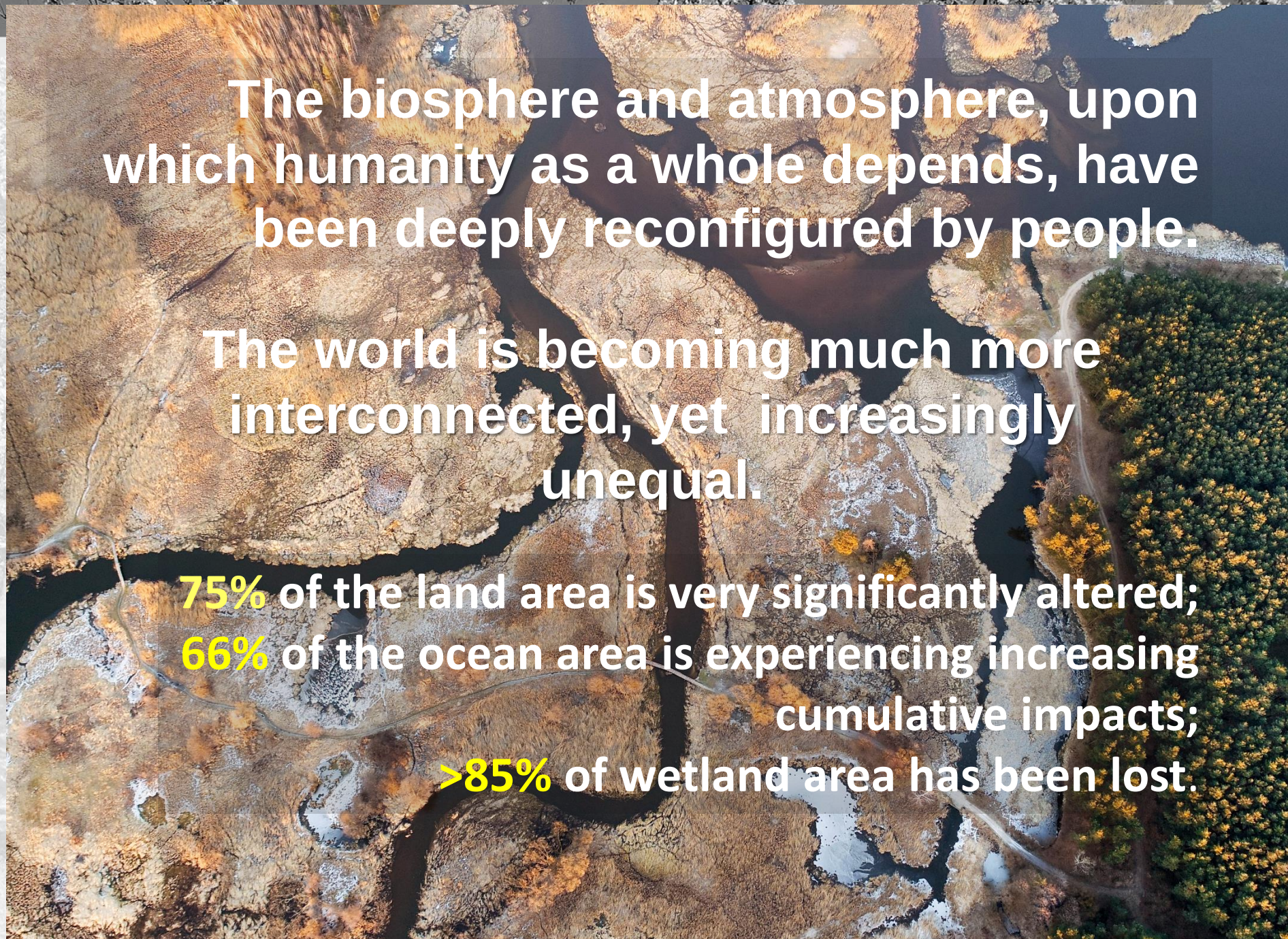
Nature underpins and sustains human quality of life

More food, energy and materials than ever before are now being supplied to people across distant regions, but

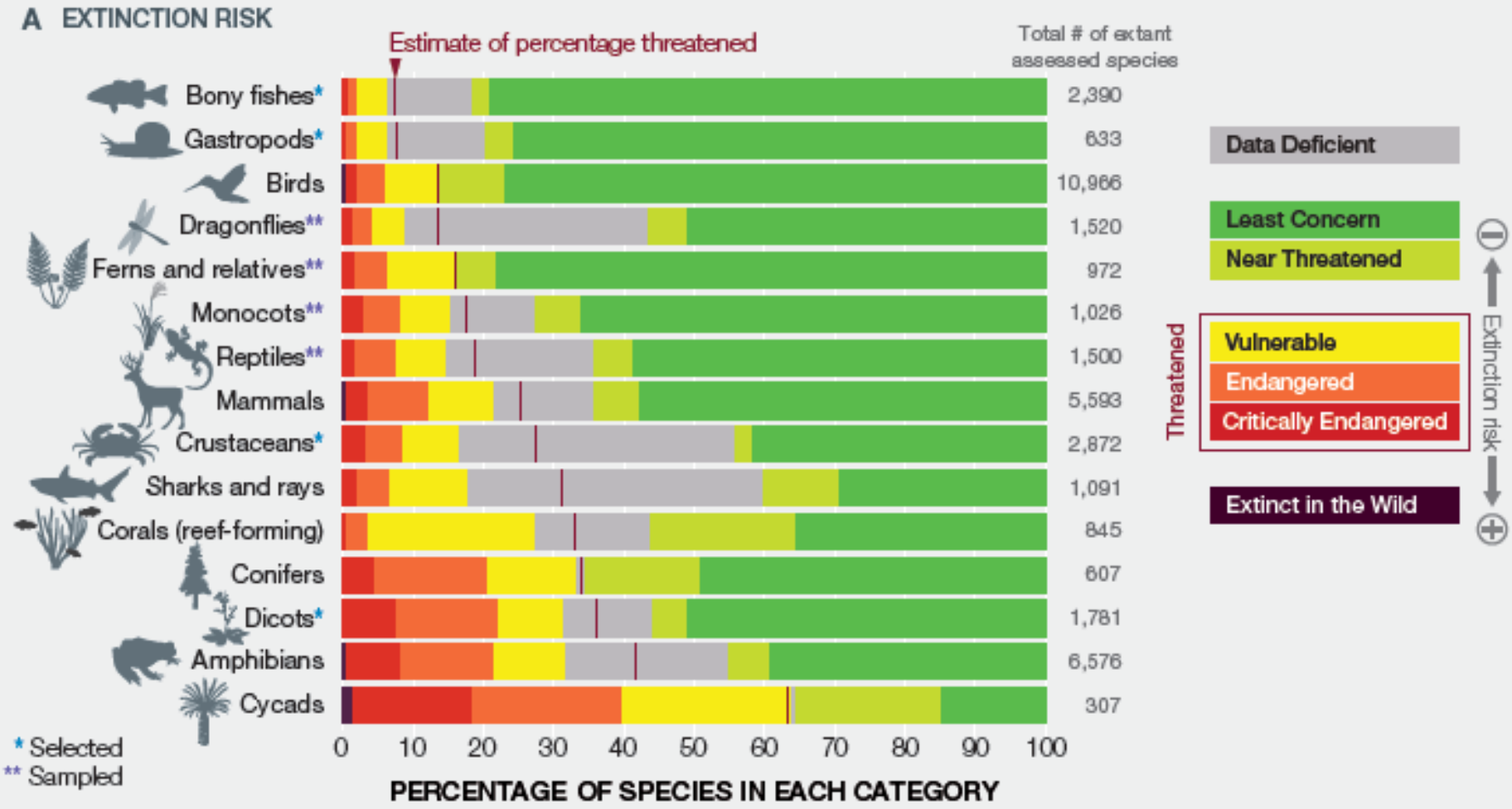
nature and its vital regulating and non-material contributions to people are deteriorating worldwide

Global trends in nature's contributions to people since 1970



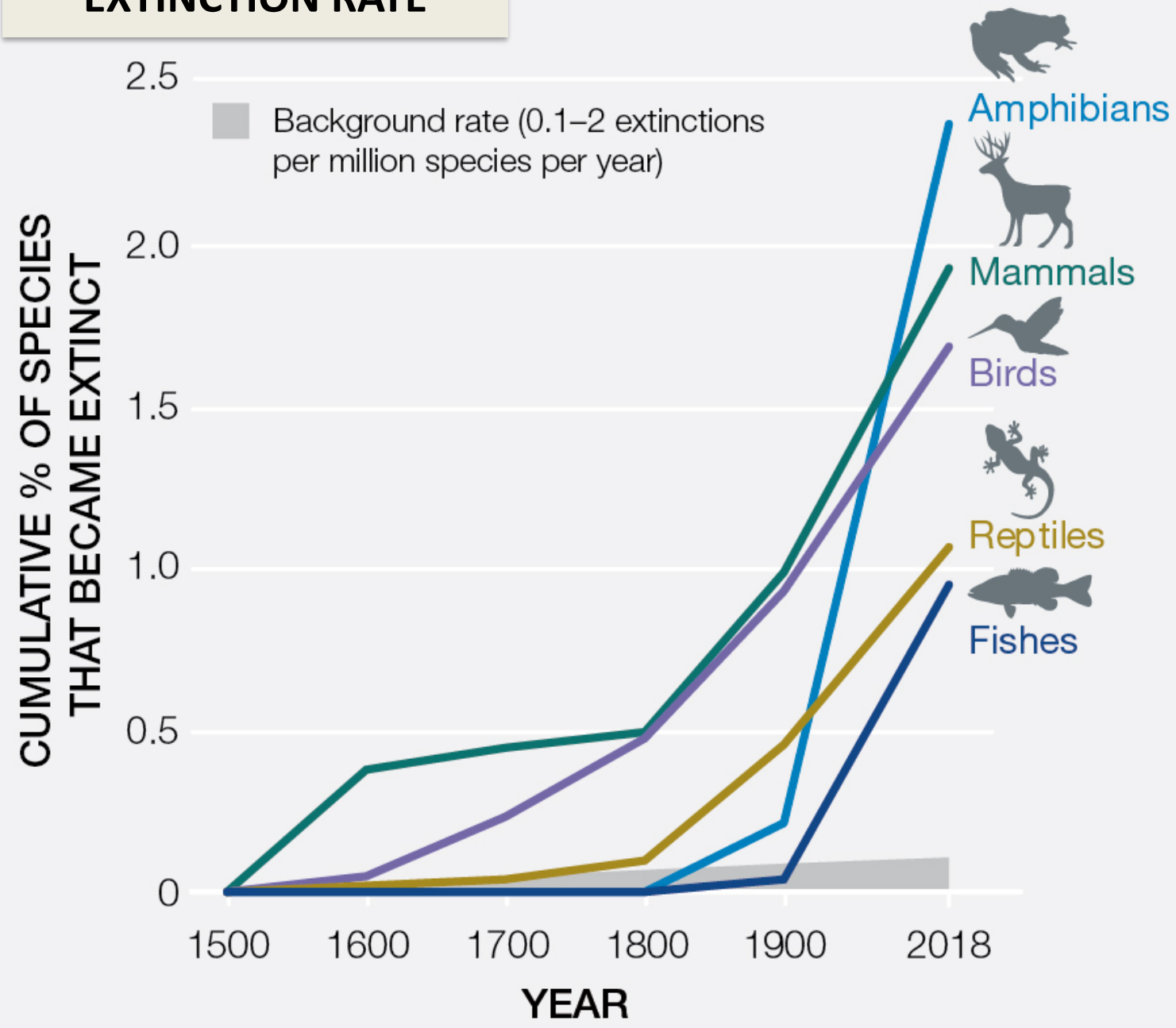

The biosphere and atmosphere, upon which humanity as a whole depends, have been deeply reconfigured by people.
The world is becoming much more interconnected, yet increasingly unequal.
75% of the land area is very significantly altered;
66% of the ocean area is experiencing increasing cumulative impacts;
>85% of wetland area has been lost.

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



One million species are at risk of extinction (assumes a total of 8.1 million species – 2.6 million plants and animal and 5 million insects)

EXTINCTION RATE



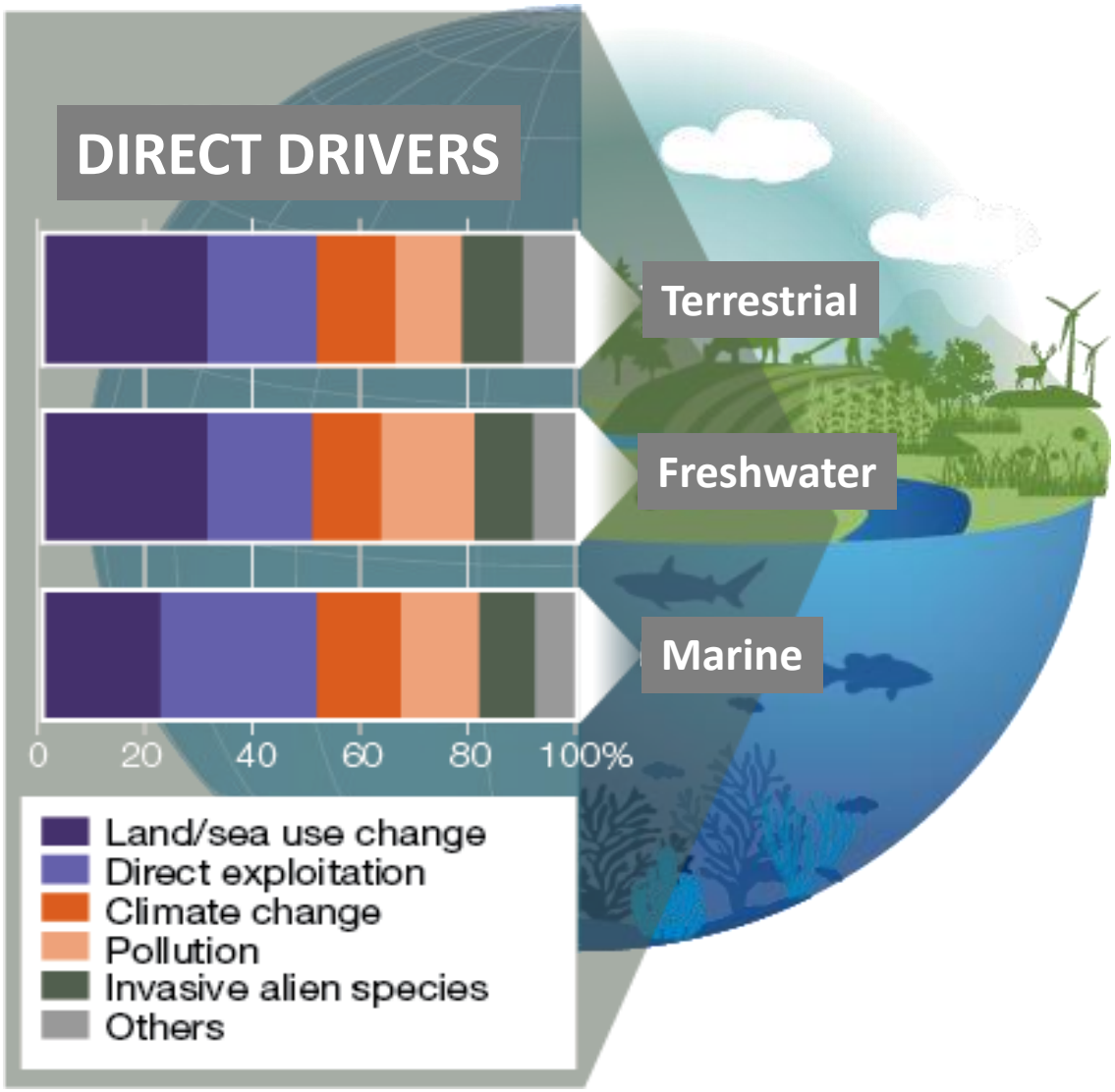
The number of local varieties and breeds of domesticated plants and animals has decreased sharply

Proportion of the world's mammal and bird breeds by risk status category

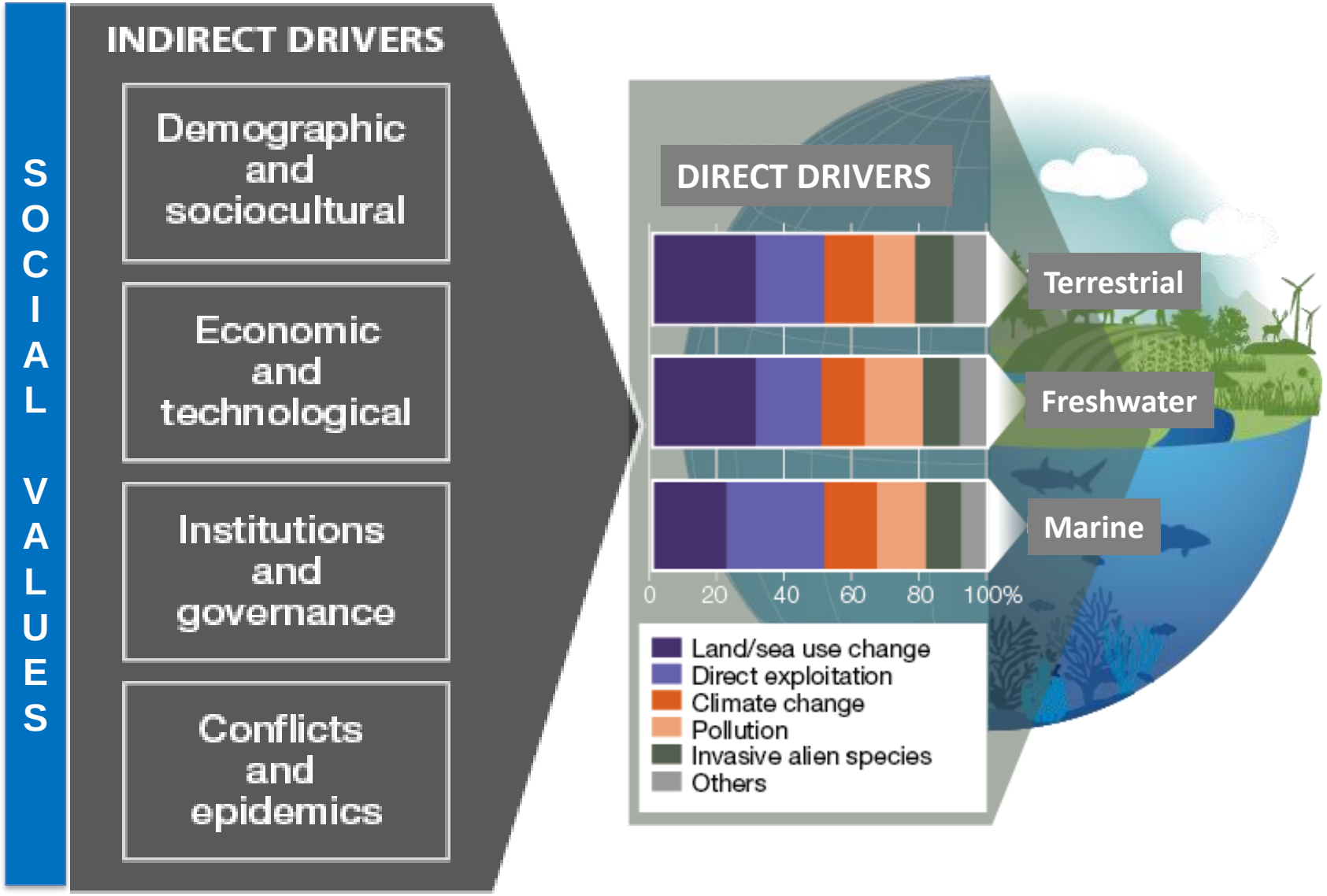
Photocredit Daniel M. Cáceres

Image: https://www.quora.com/What-is-the-breed-name-of-the-Indian-Desi-cow

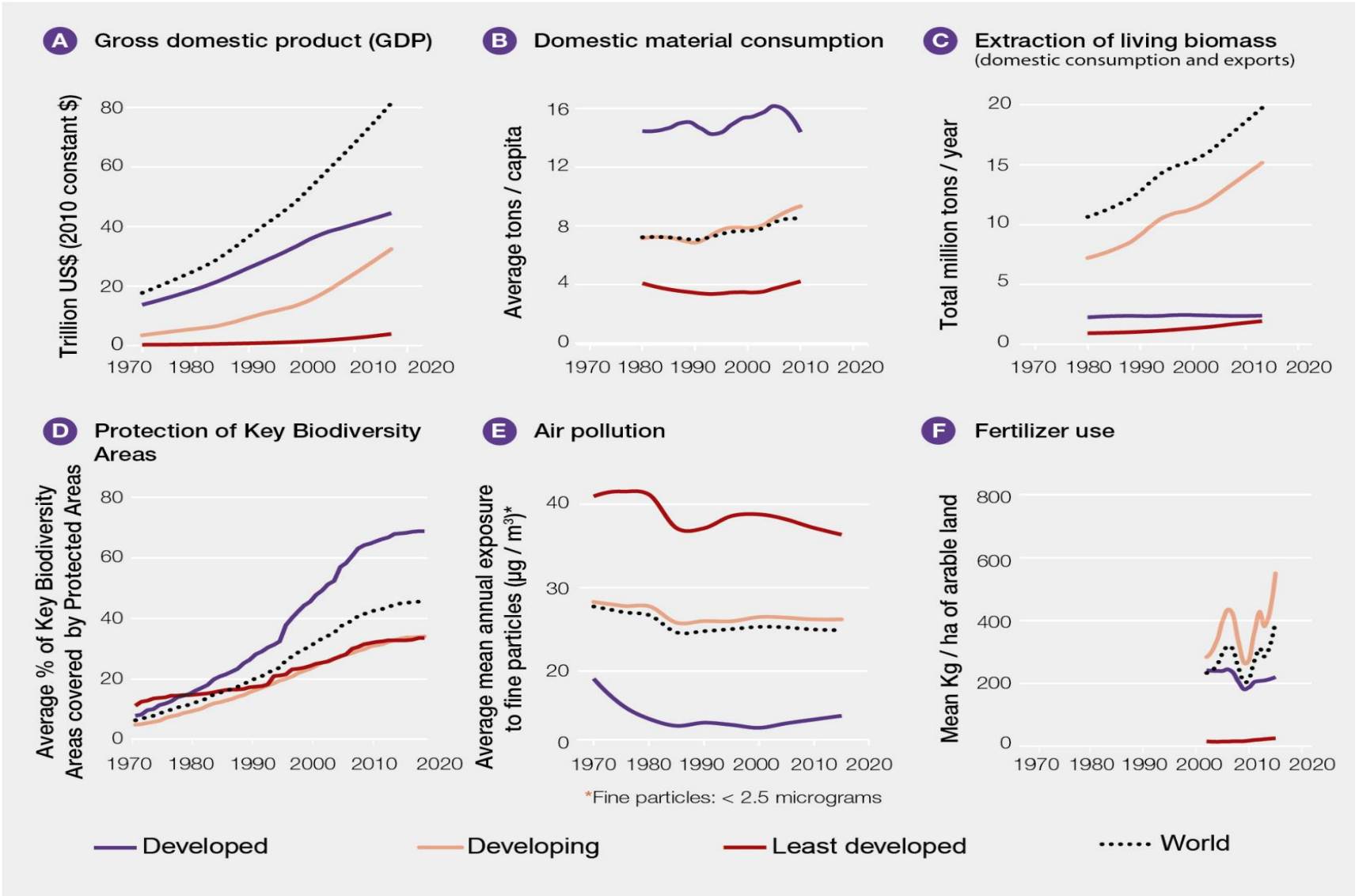
Drivers of change have accelerated during the past 50 years to levels unprecedented in human history



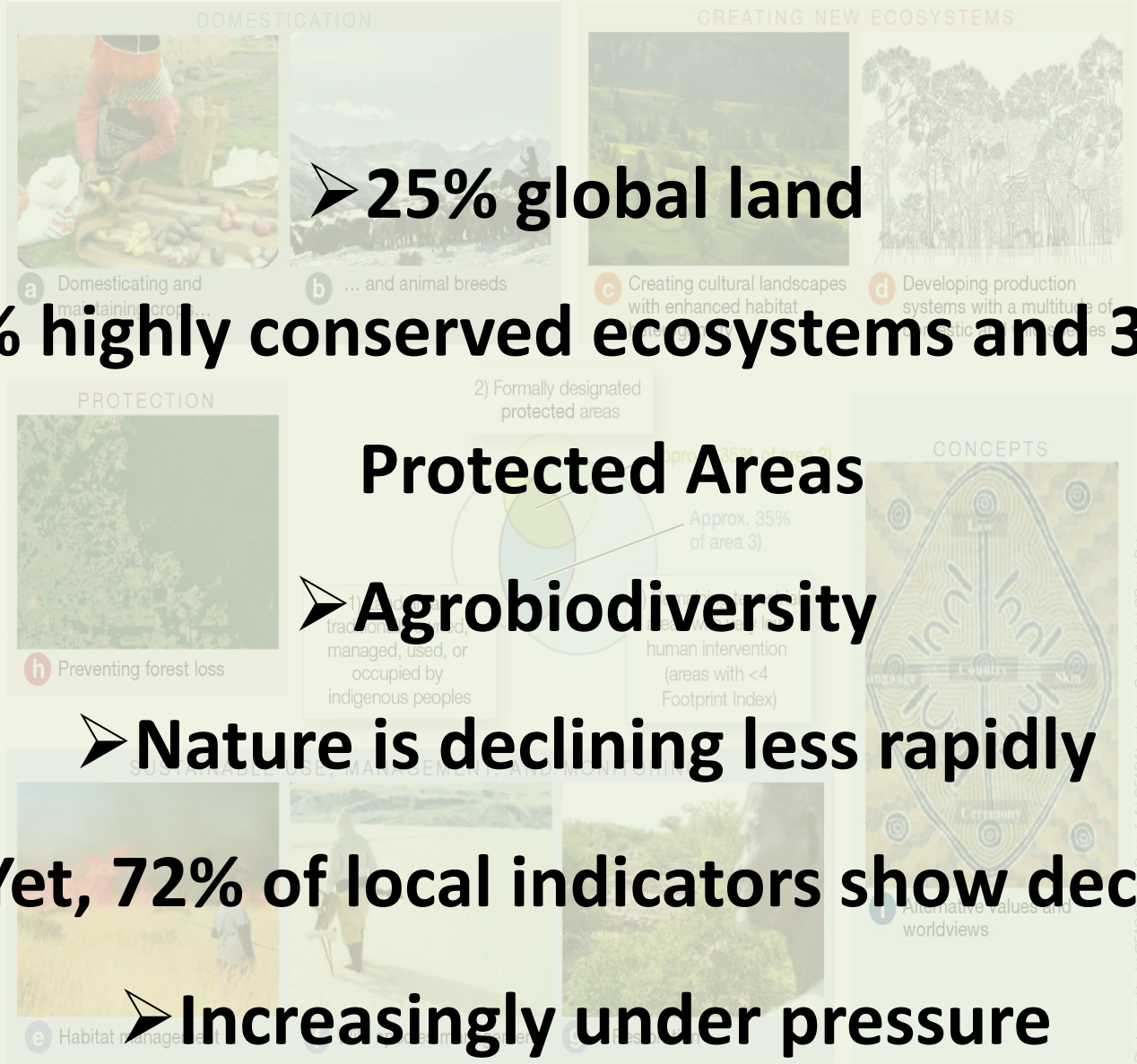
Underpinning the proximate causes of deterioration in nature are the root causes, or indirect drivers of change.



Global trends and regional asymmetries in development, production and consumption: 4-fold increase in global economy (A), 10-fold increase in global trade, and an increasing spatial segregation between production and consumption



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
- Yet, 72% of local indicators show decline
- Increasingly under pressure

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		~		

While progress looks good for target 11 (protected areas) it hides the fact that important biodiversity is not within the current protected area system, many of the protected areas are not well managed, and the design of the protected areas does not take the implications of climate change into account

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

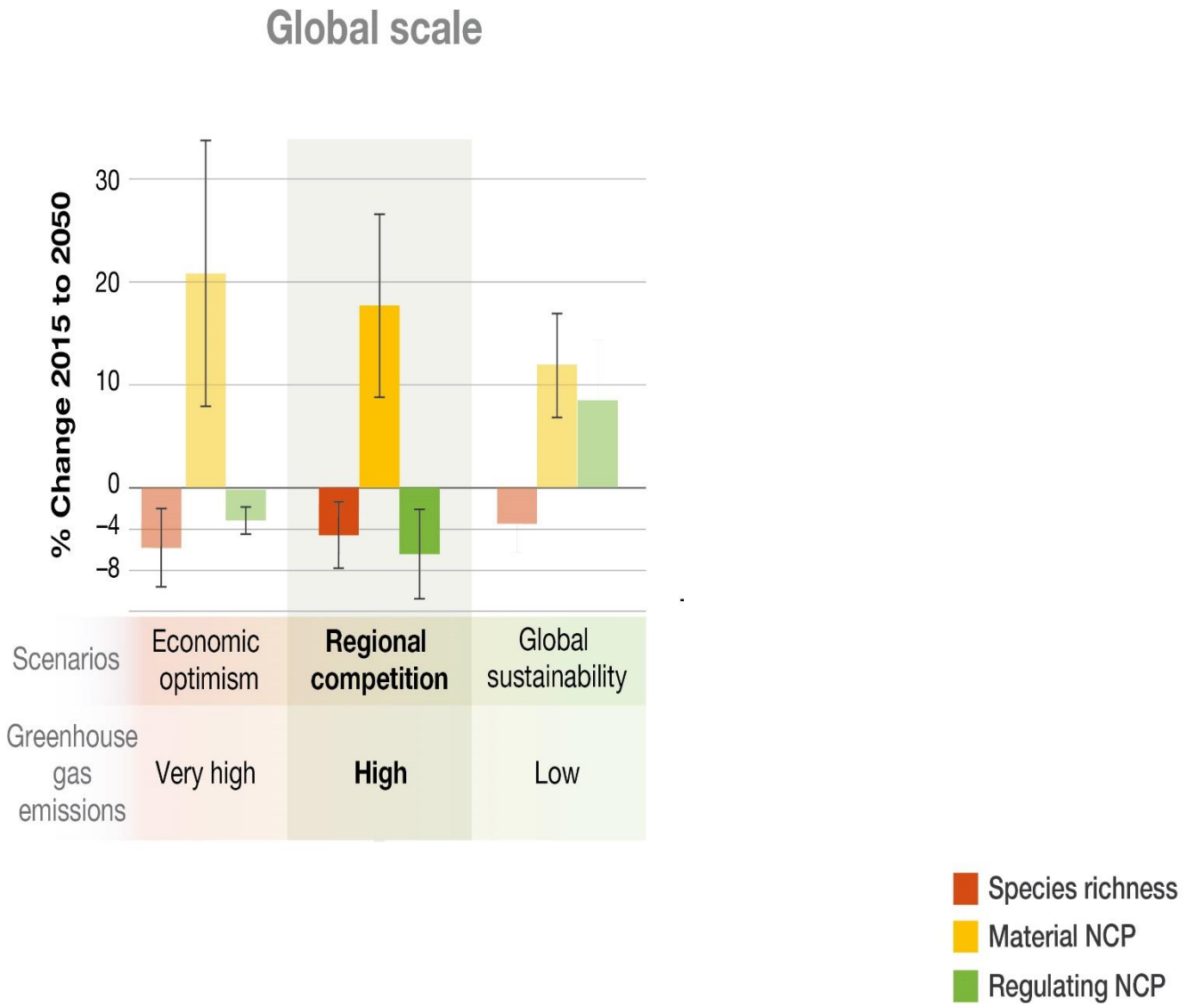
Regional competition

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

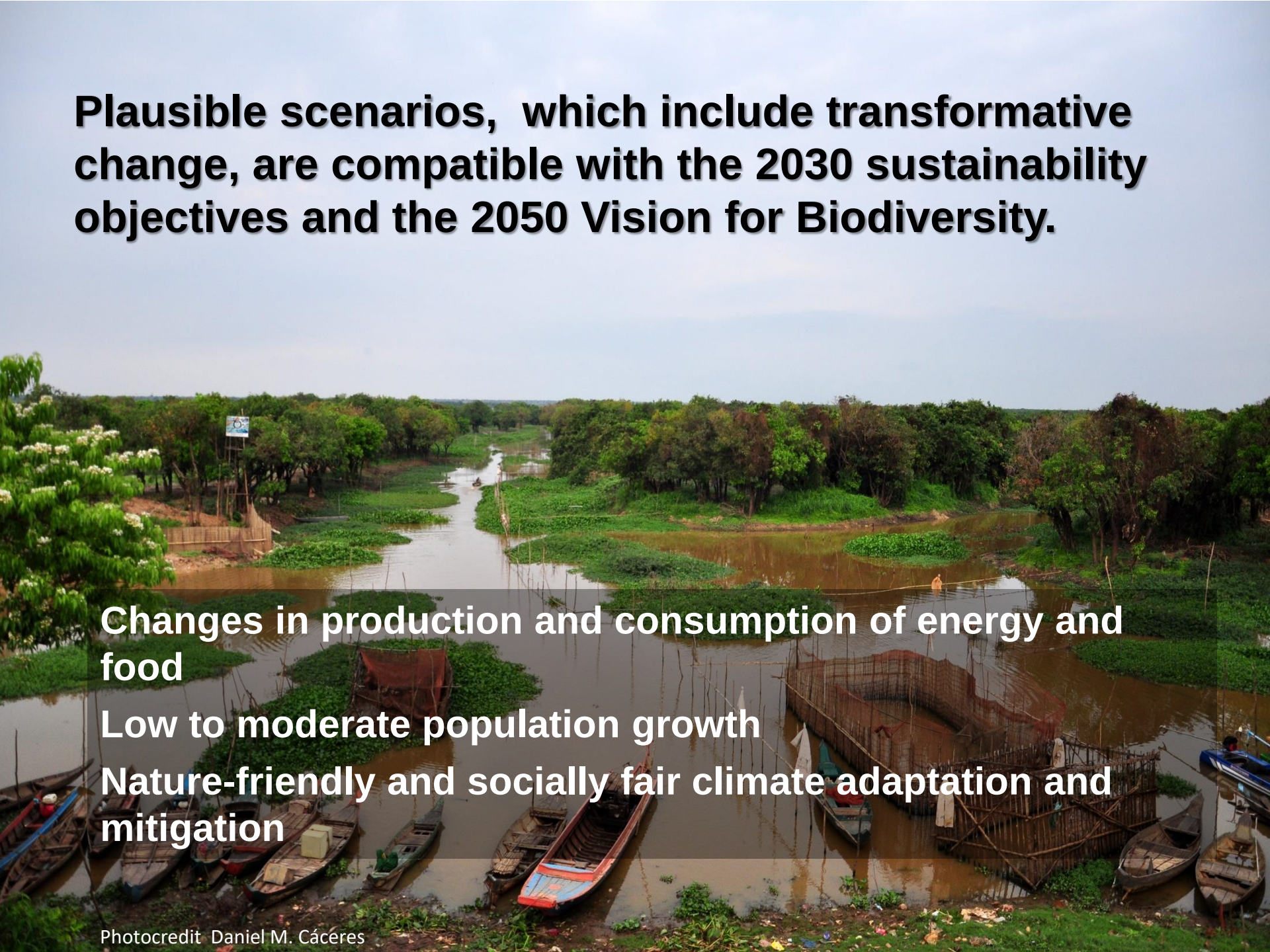
Global sustainability

- 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



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



- Changes in production and consumption of energy and food
- Low to moderate population growth
- Nature-friendly and socially fair climate adaptation and mitigation

Photocredit Daniel M. Cáceres

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

Key components for transformation

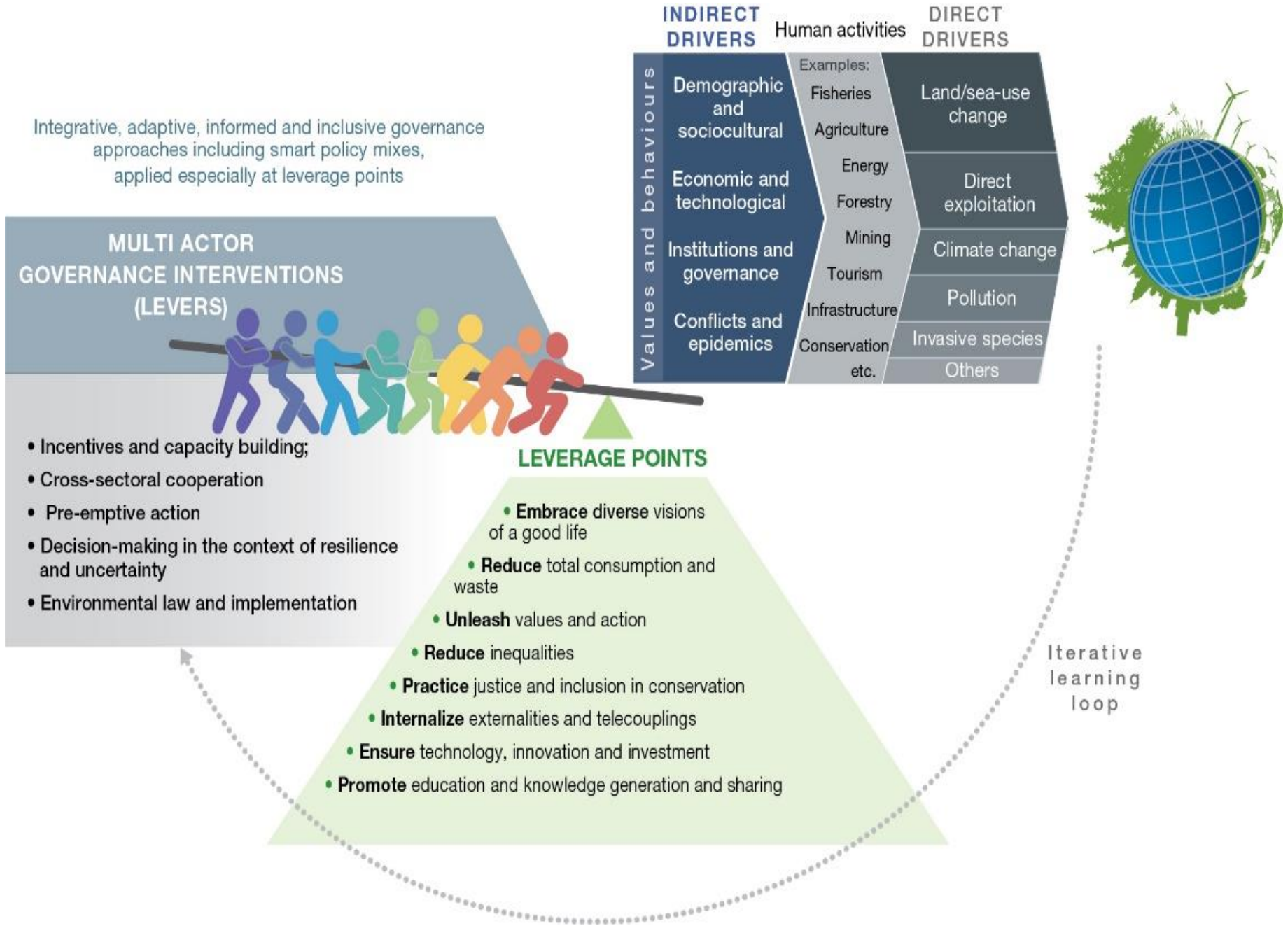
Options for the futures we want

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

Knowledge and tools available, they simply need better deployment and implementation

Many societal responses and successful examples of rapid transformative change are already happening in many sectors, but just not at the scale needed to match that of the crisis.

Dolpo woman sheperd in high pasture and agriculture areas in Nepal . Photocredit Yildiz Aumeeruddy-Thomas


INDIRECT DRIVERS
Human activities
DIRECT DRIVERS
Values and behaviours
Demographic and sociocultural
Economic and technological
Institutions and governance
Conflicts and epidemics
Examples:
Fisheries
Agriculture
Energy
Forestry
Mining
Tourism
Infrastructure
Conservation etc.
Land/sea-use change
Direct exploitation
Climate change
Pollution
Invasive species
Others
Integrative, adaptive, informed and inclusive governance approaches including smart policy mixes, applied especially at leverage points
MULTI ACTOR GOVERNANCE INTERVENTIONS (LEVERS)
• Incentives and capacity building;
• Cross-sectoral cooperation
• Pre-emptive action
• Decision-making in the context of resilience and uncertainty
• Environmental law and implementation
LEVERAGE POINTS
• Embrace diverse visions of a good life
• Reduce total consumption and waste
• Unleash values and action
• Reduce inequalities
• Practice justice and inclusion in conservation
• Internalize externalities and telecouplings
• Ensure technology, innovation and investment
• Promote education and knowledge generation and sharing
Iterative learning loop

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

Therefore they need to be addressed synergistically, from local to global levels, but also recognizing that there may be trade-offs

- **Nature-based solutions, e.g., reforestation with native vegetation and restoration can have multiple benefits**
- **Large scale afforestation and bioenergy will lead to the loss of biodiversity and undermine food and water security if native vegetation is replaced by monoculture crops**

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

- **Governance – inclusive, polycentric**
- **Economic systems – an evolution and complementary to GDP**
- **Equity**
- **Cross-sectoral planning**
- **Incentives**
- **Social narrative and values**

Cross-Sectoral, Integrated Management at Multiple Levels

→ Food production and conservation goals: complementary and interdependent (e.g., use agro-ecological practices, reduce food waste)

→Sustainable fisheries: integrated management on land, in freshwater and oceans

→ Land-based climate change mitigation: attention to trade-offs (especially with large-scale afforestation and bioenergy)

→Nature-based solutions in cities: crucial for global sustainability

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

- Incorporate natural capital into national accounting systems
- Recognize both market, non-market and social values in decision-making
- Eliminate harmful agricultural, energy and transportation subsidies
- Incentives for sustainable production and consumption
- Internalize extranalities

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.

Implications for GEF Biodiversity Programs

The GEF biodiversity program incorporates the types of activities identified by the IPBES Global Assessment response options, specifically:

- **The impact programs: food systems, land use and restoration impact program, which addresses efficient and effective food chains, removing deforestation from supply chains, and expands restoration of degraded lands; sustainable forest management in key biomes (Amazon, Congo and Dryland landscapes); and sustainable cities**

- **the emphasis on mainstreaming (e.g., removing perverse subsidies); natural capital accounting and the circular economy; prevention of known threatened species; sustainable use of genetic resources; and sustainable fisheries**

Protected area projects are most likely to succeed if IPLCs are involved, climate change is considered, and with effective and monitorable management systems

IPBES-7 approved scoping of a nexus assessment (biodiversity, food/agriculture, water, health and climate change) and an assessment of transformational change, including the efficacy of response options

In Conclusion

- Trends worrying (loss of species, degradation of ecosystems, loss of ecosystem services) and clearly unsustainable

- A call for action – transformational change:
  - Tackle the roots causes of nature's deterioration – direct and indirect drivers
  - Address climate change and loss of biodiversity together (recognizing sysnergies and trade-offs)
  - Replicate and scale successful policies and projects
  - Coordinate and integrate cross sectoral actions
  - Evolve economic and financial systems
  - Ensure inclusive governance structures (inc IPLCs)

- GEF can play a key role in promoting action


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