UN environment programme

Making Peace with Nature

A scientific blueprint to tackle the climate, biodiversity and pollution emergencies

UNEP's 'Synthesis Report'

Norwegian Ministry of Climate and Environment

This project is co-funded by the European Union and the Norwegian Ministry for Climate and Environment

Commemorating 50 years of international environmental governance

A synthesis of findings from some 25 major global assessments, including IPCC, IPBES, GEO and IRP

Prepared by more than 50 leading experts from nearly 30 countries familiar with the major assessments

Based on the work of thousands of experts and the many governments involved in the assessments

The environmental challenges have grown in number and severity since the Stockholm Conference in 1972

A blueprint for different actors on tackling the climate, biodiversity and pollution emergencies

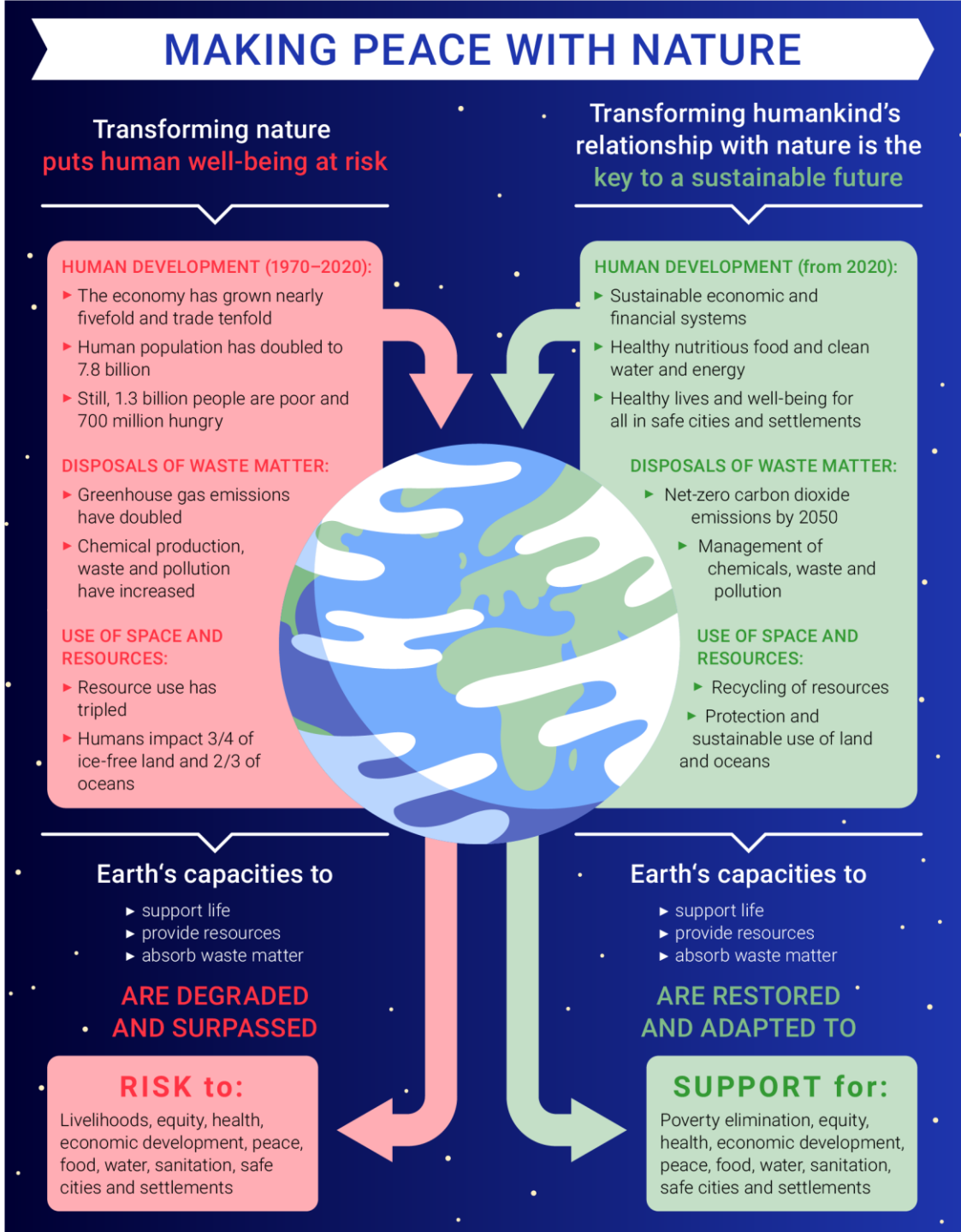
Transforming humankind's relationship with nature

Over the last 50 years:

- Trade has grown tenfold, the global economy has grown nearly fivefold and the world population has doubled
- Average prosperity has doubled, but about 1.3 billion people remain poor and some 700 million are hungry

The unequal and resource intensive development model degrades and surpasses Earth's finite capacity to sustain human well-being.

We must restore and adapt the Earth's capacity. The coming decade is crucial, and the challenge systemic.



Humans now have a major impact on the Earth

Of the combined biomass of mammals on Earth, human population now constitutes about a third and livestock nearly two thirds, while wild mammals now amount to less than 5 per cent

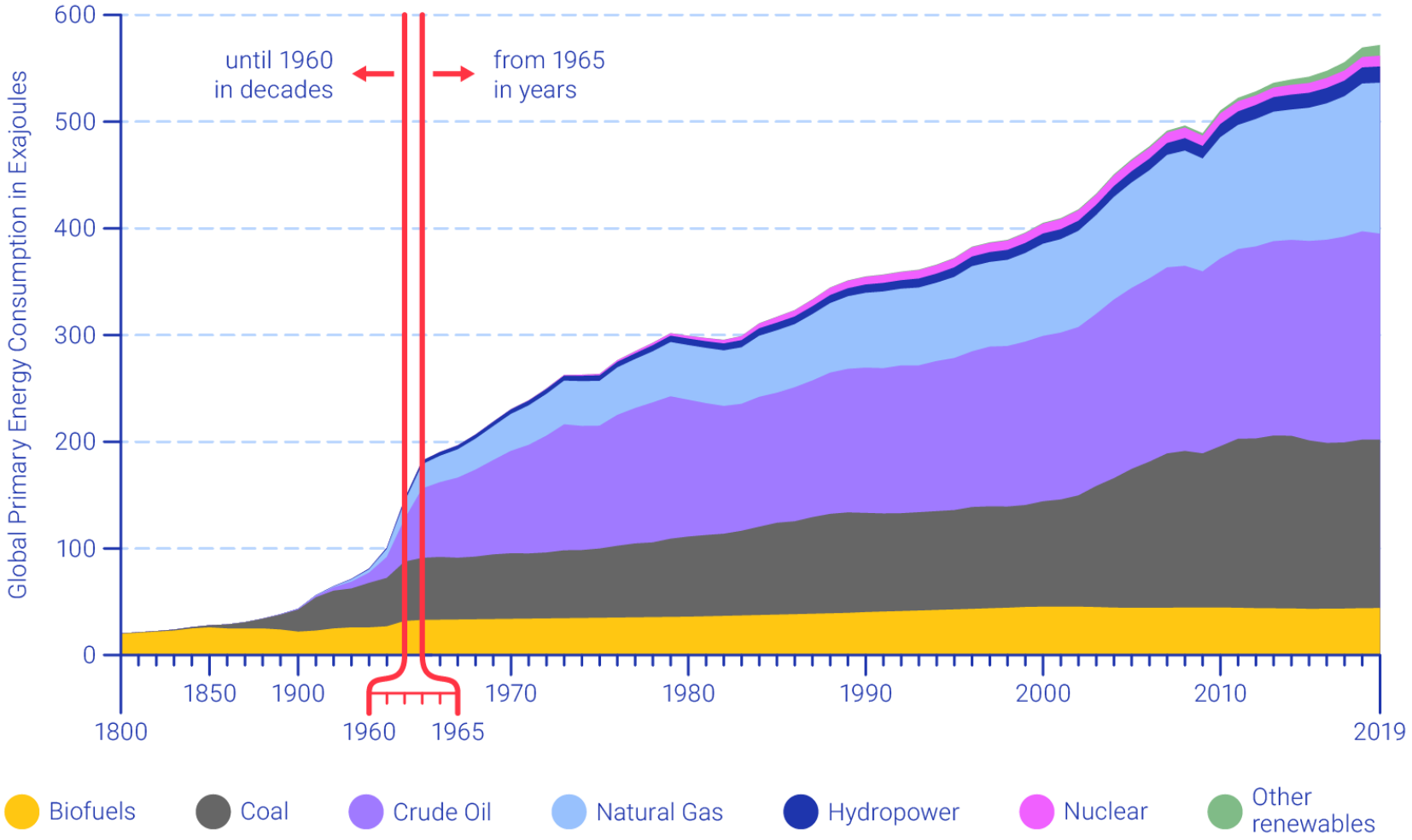
▲
Humans
0.06 Gigatons

▲
Domesticated animals
0.10 Gigatons

▲
Wild mammals
0.007 Gigatons

Extraction of natural resources and production of energy has tripled the past 50 years

2.5. Global Primary Energy Consumption by source



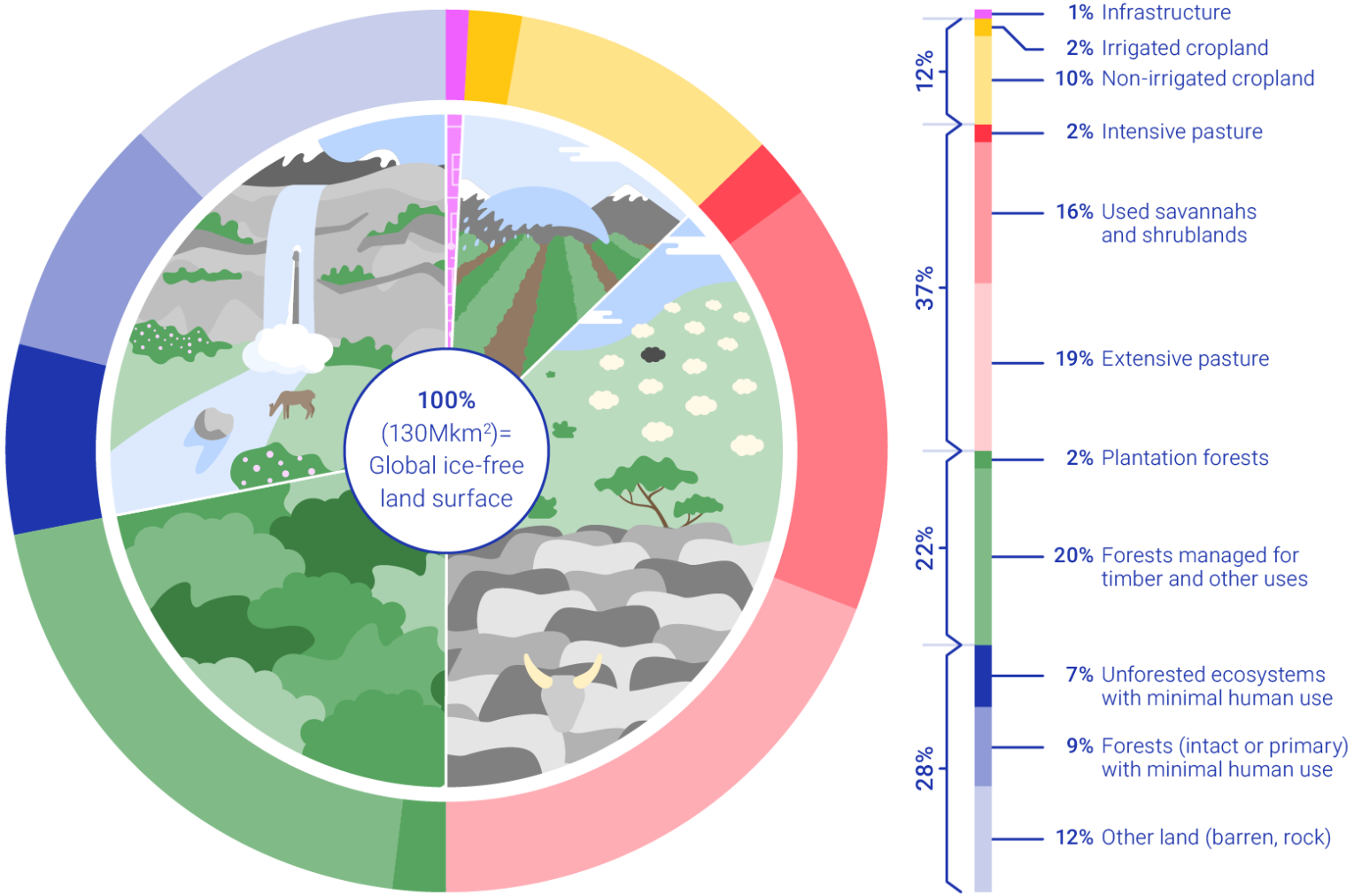
Humanity has a major impact on 3/4 of land and on 2/3 of oceans

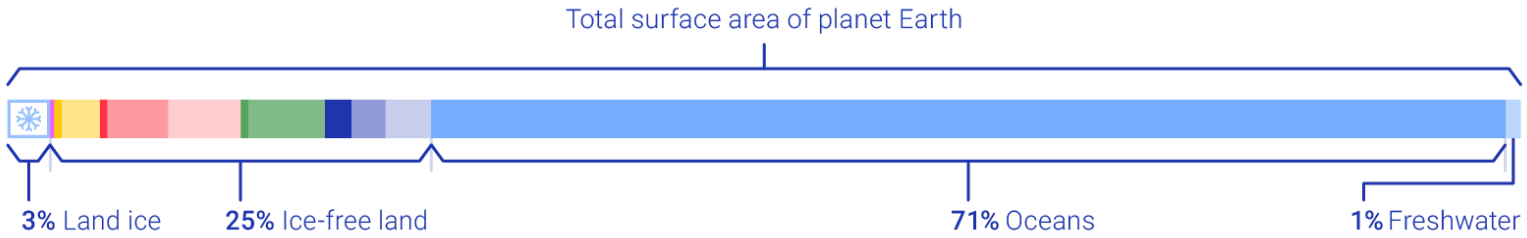
1/4 of global warming results from activities related to land-use

1/4 land has been radically transformed

Remaining near-natural land is projected to be only 10 per cent by 2050

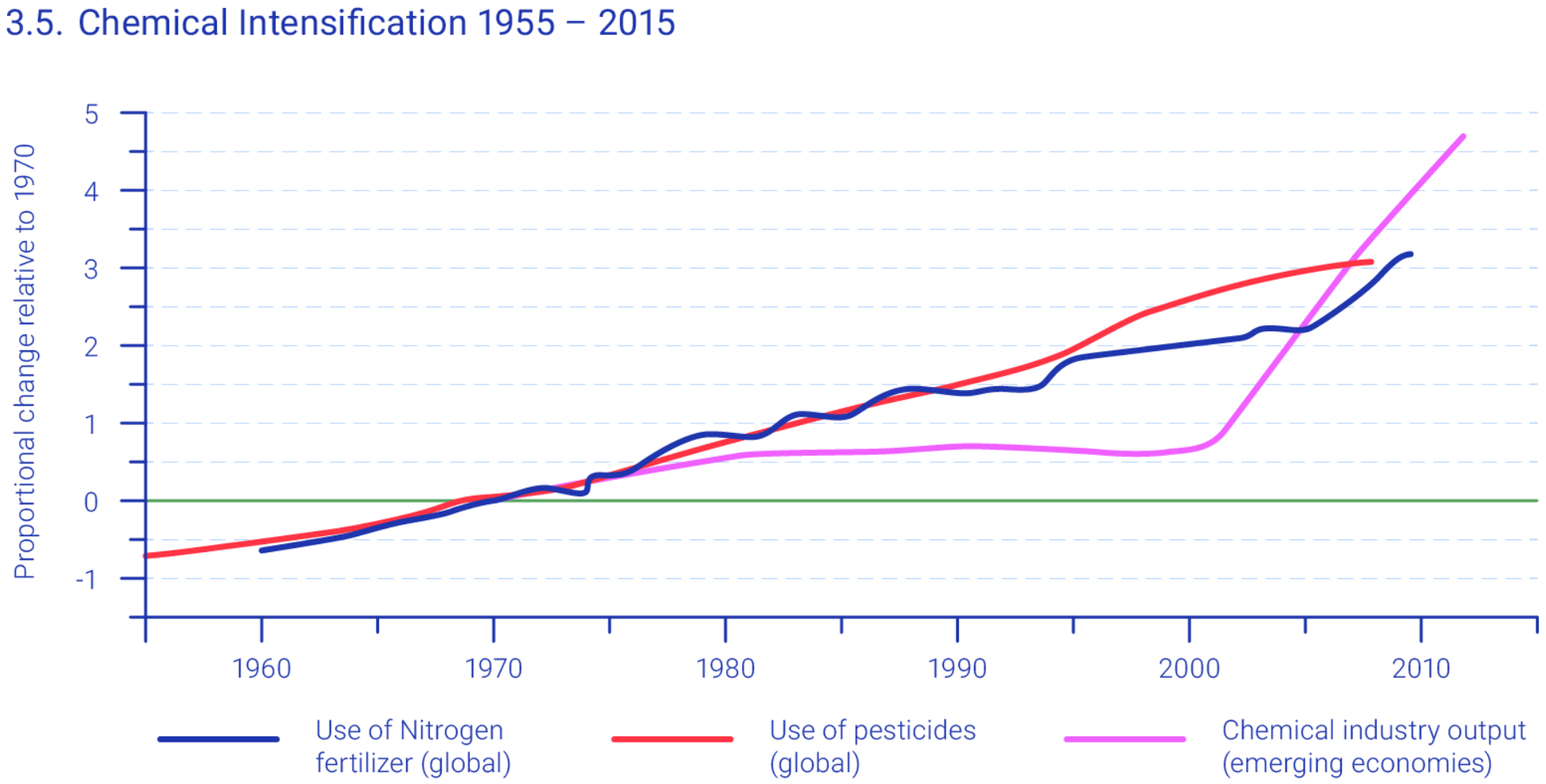
2.7. Global use of ice-free land around year 2015





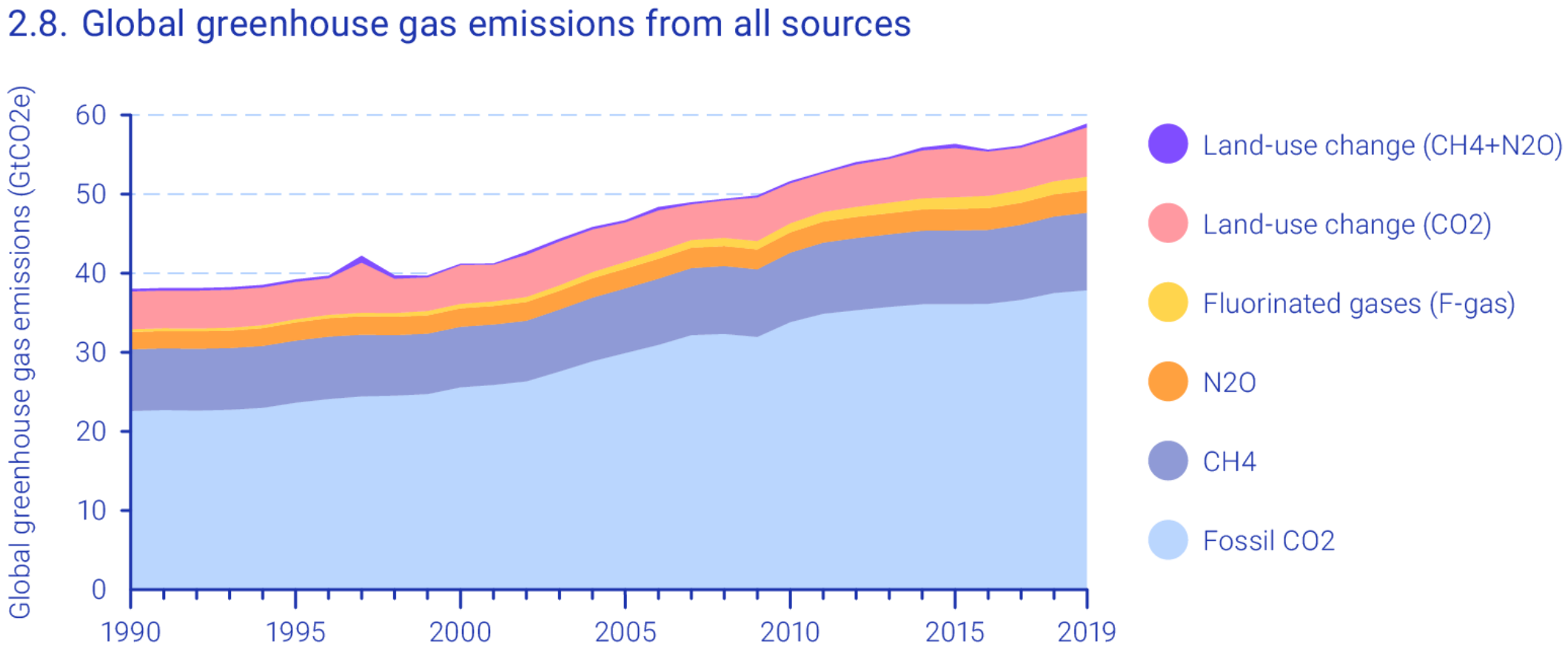
The production and release of chemicals is increasing fast

Some of these chemicals threaten human health and the environment



Human Emissions of Greenhouse Gases Continue to Increase

The world is already more than 1ºC warmer than a century ago, accelerating sea level rise, with more frequent and intense extreme events, threatening people and nature

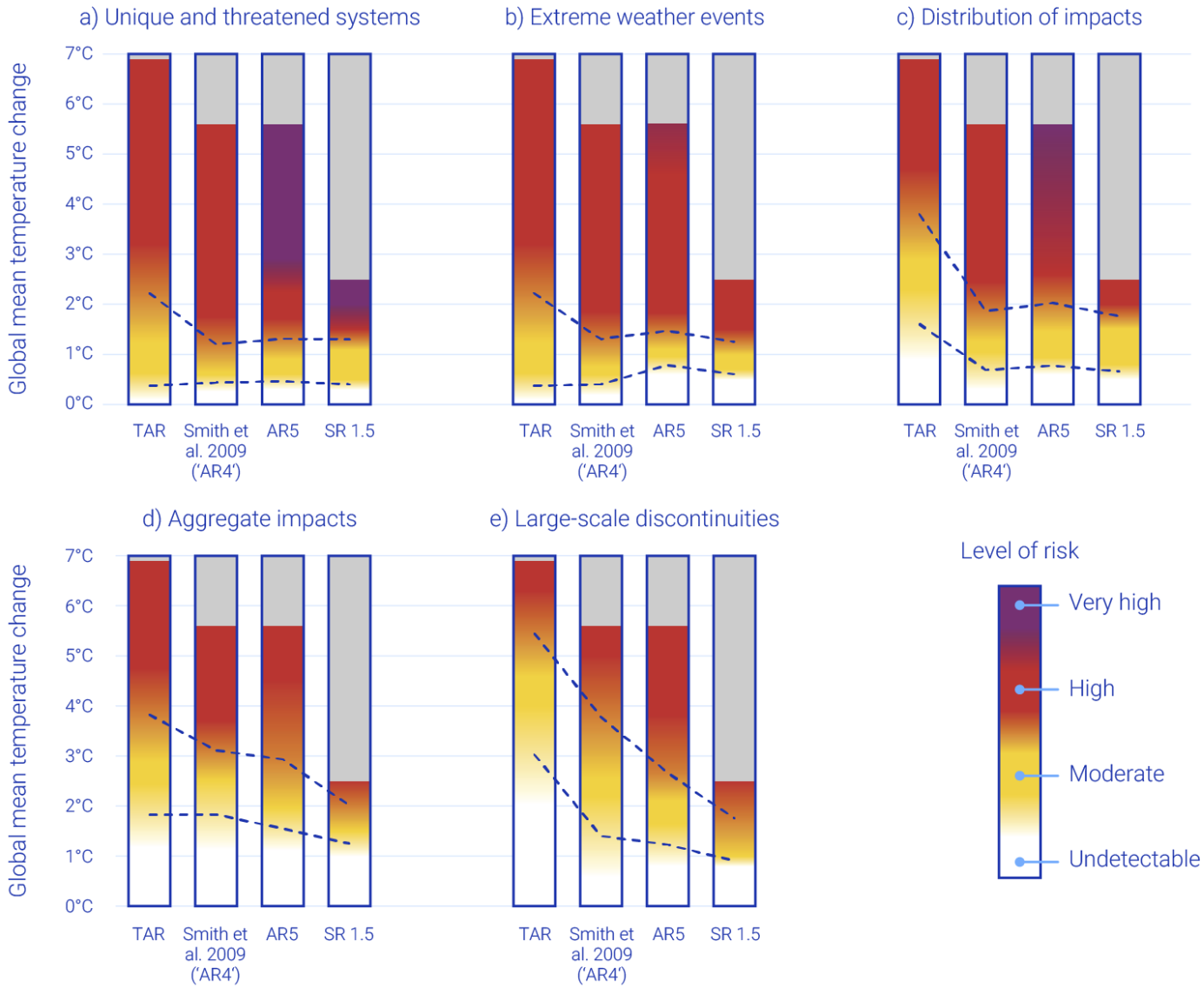


Risks associated with climate change

Risks of climate change are more severe than previously thought

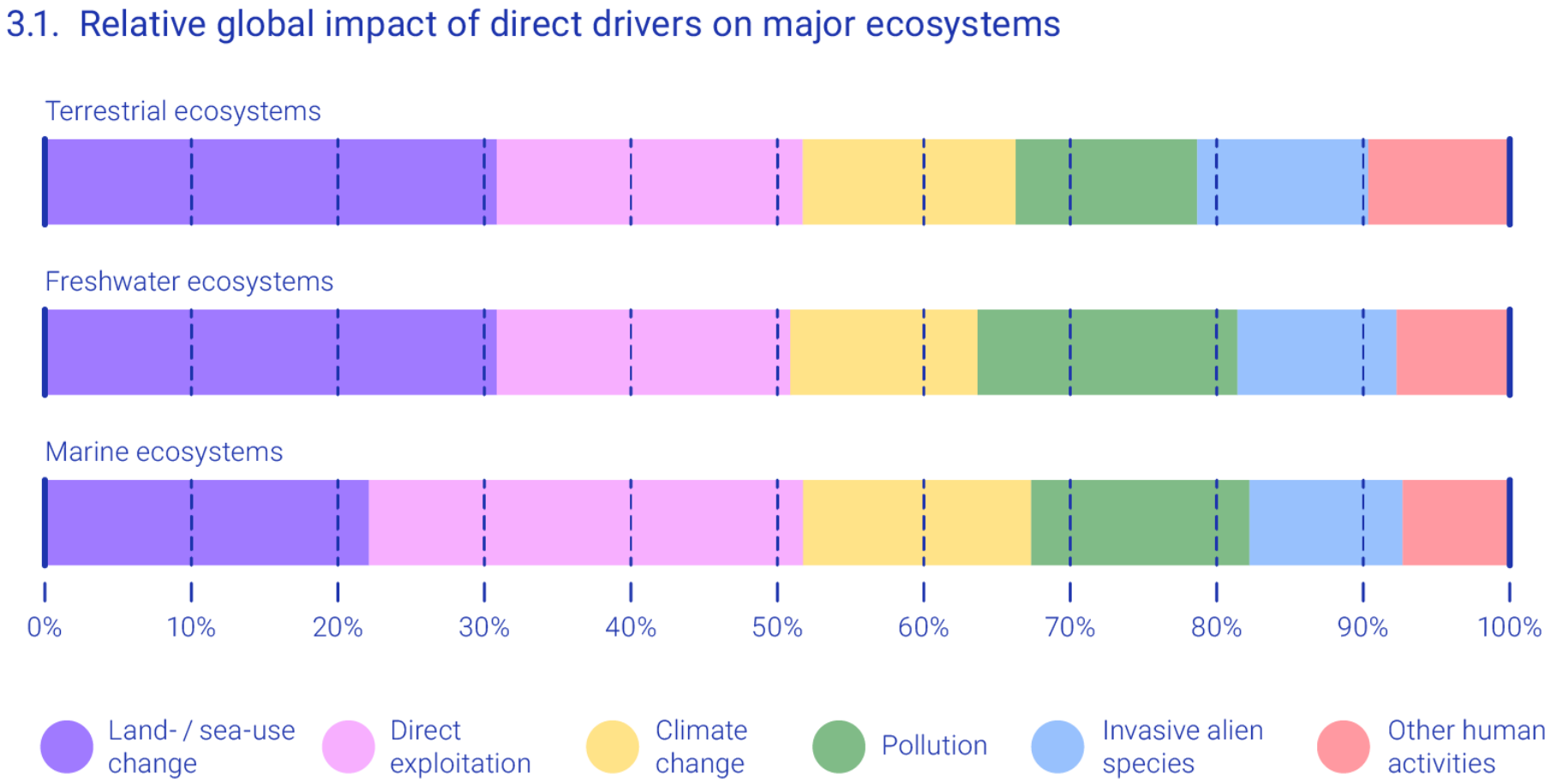
And are occurring with smaller changes in temperature

1.1. Comparison of risk thresholds across Intergovernmental Panel on Climate Change (IPCC) Assessments



Biodiversity continues to decline at an alarming and accelerating rate

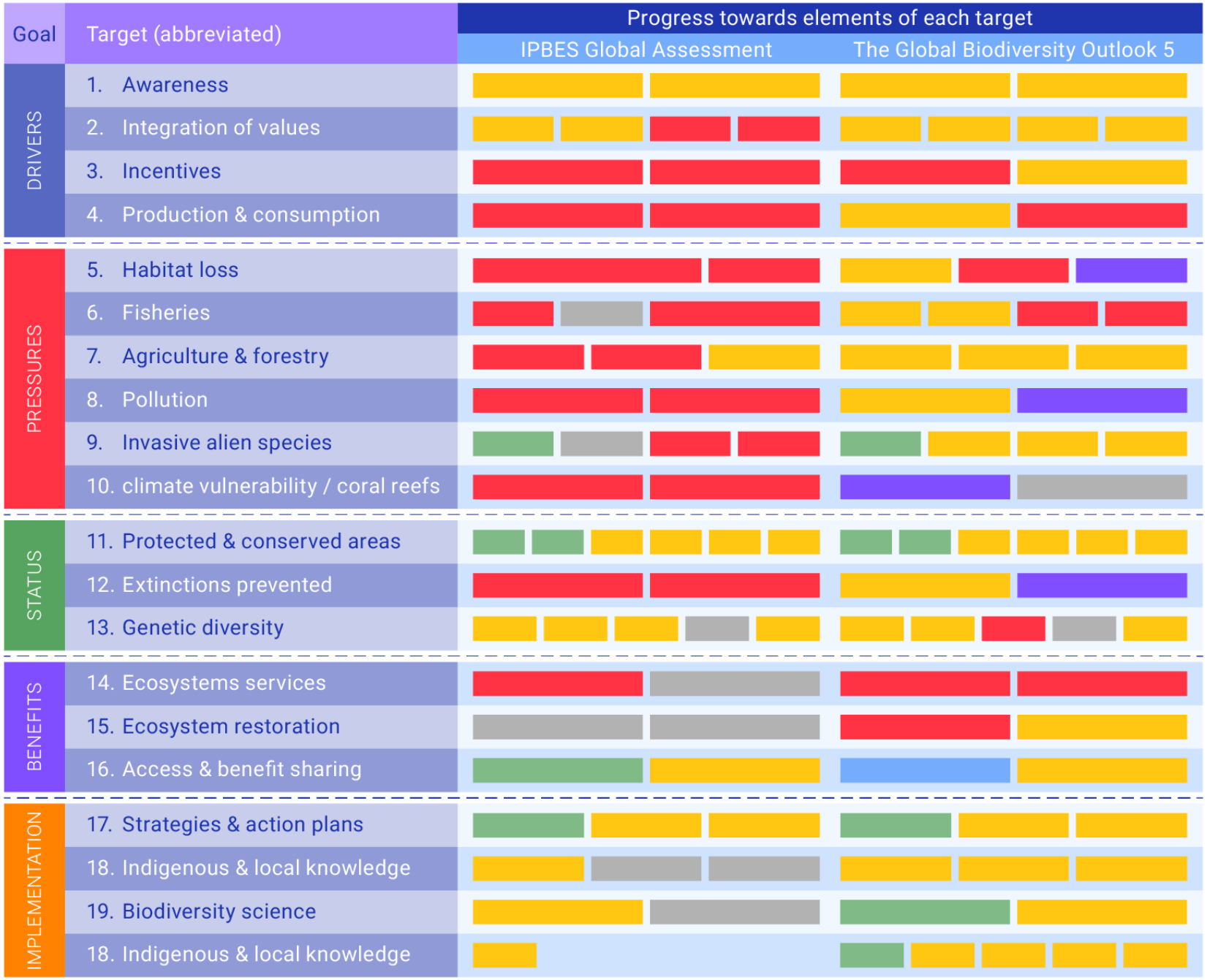
1 million of the world's estimated 8 million plants and animals species are threatened with extinction - population sizes and abundance are dropping - ecosystems are being degraded - ecosystem services are eroding



Progress towards the Aichi Targets

None of the Aichi Targets have been fully met

3.2. Assessment of progress towards the Aichi Biodiversity Targets

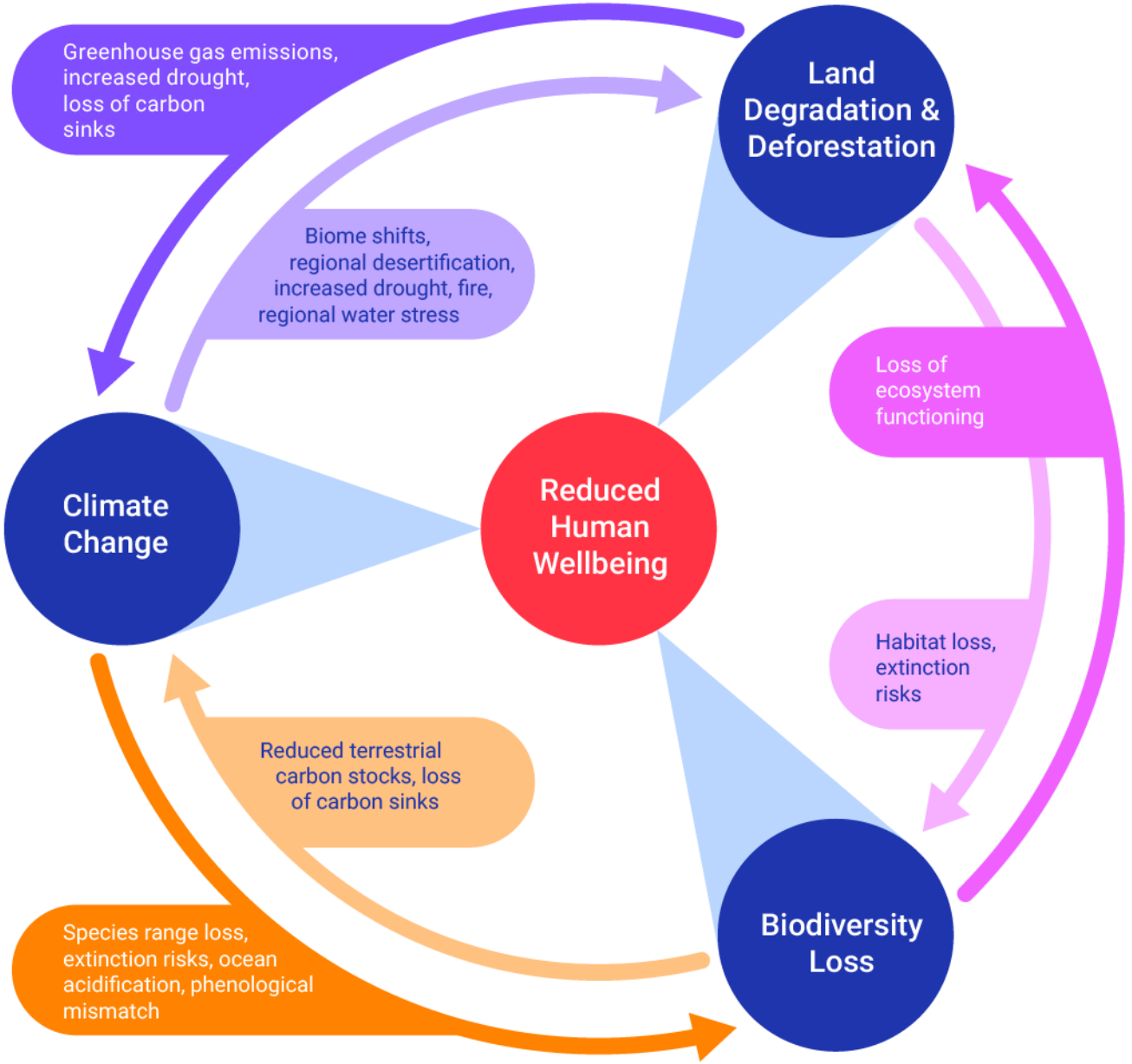


3.9. The interactions between climate change, land use and biodiversity

The environmental emergencies are intertwined

Earth's environmental emergencies and development challenges should be addressed together to achieve sustainability

International environmental agreements need to be aligned and become more mutually supportive

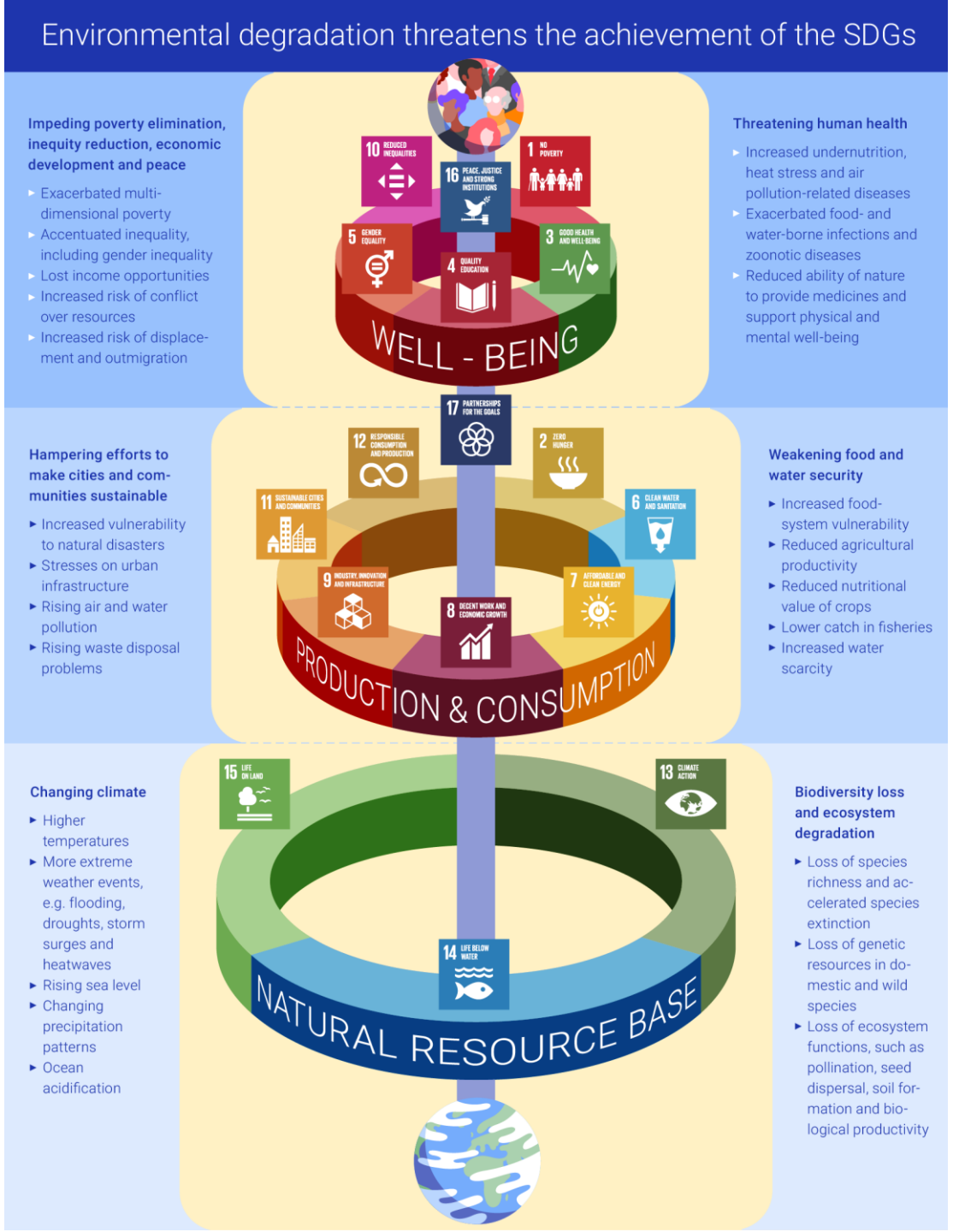


Environmental degradation threatens the achievement of the SDGs

In 2018, damages from climate-related natural disasters cost about $155 billion

Worldwide, 3.2 billion people are adversely affected by land degradation

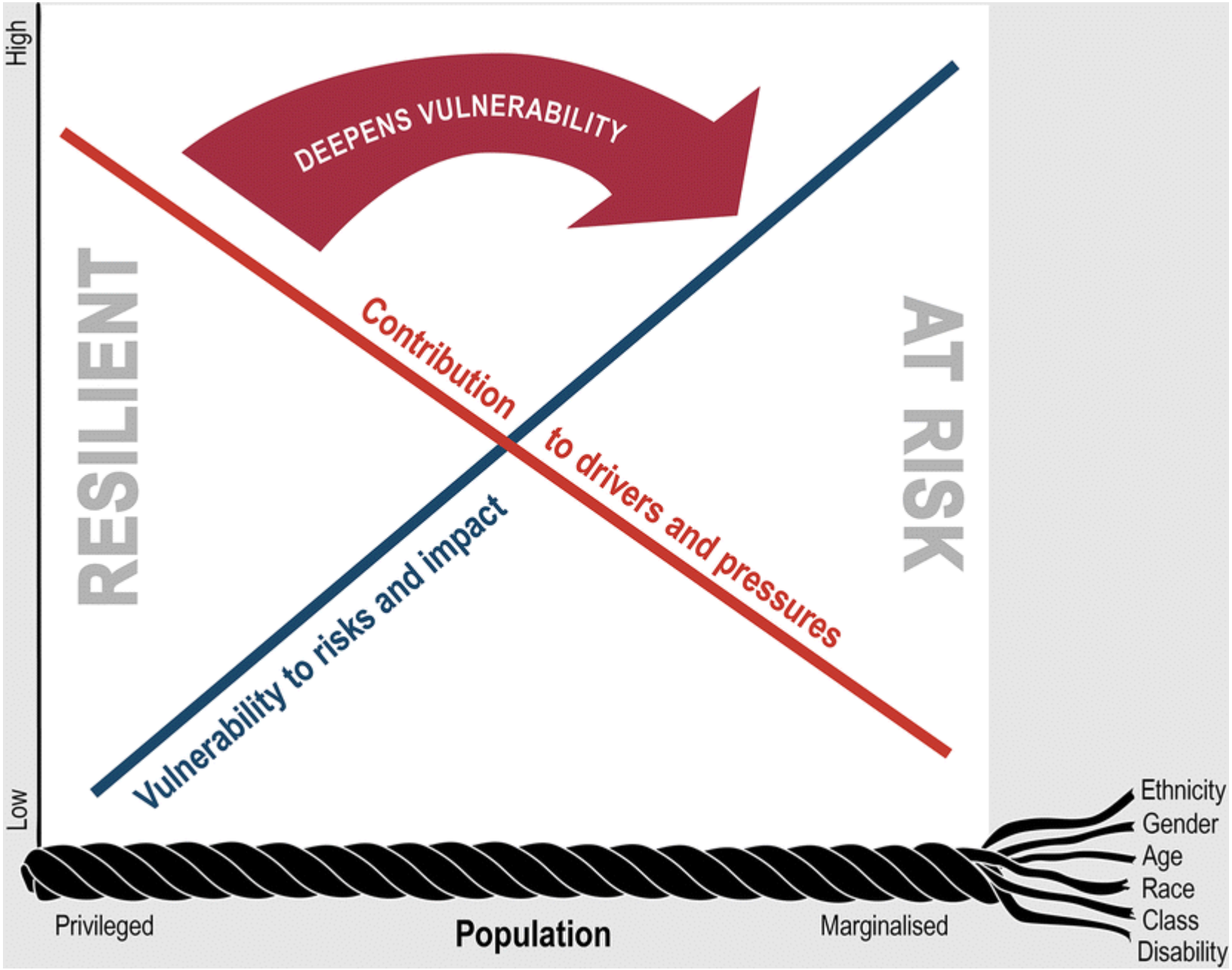
Pollution causes about 9 million premature deaths annually, primarily from indoor and outdoor air pollution



Equity and Justice

- Human wellbeing depends on nature, and nature's benefits and risks are inequitably distributed.

- Need to promote a just and equitable transformation.



Source: building on IPCC 2014; GEO-6 Technical Summary 2021; Gupta, *et al.* 2020

Transforming humankind's relation with nature is the key to a sustainable future

Human knowledge, ingenuity, technology and cooperation can transform societies and economies and secure a sustainable future

This transformation will involve a fundamental change in the technological, economic and social organization of society, including world-views, norms, values and governance

Major shifts in investment and regulation are key to just and informed transformations that overcome inertia and opposition from vested interests

The COVID-19 crisis provides an impetus to accelerate transformative change

Earth’s environmental emergencies are all interconnected, and should be addressed <u>together</u> to achieve sustainability

Closing the Greenhouse Gas Emissions Gap

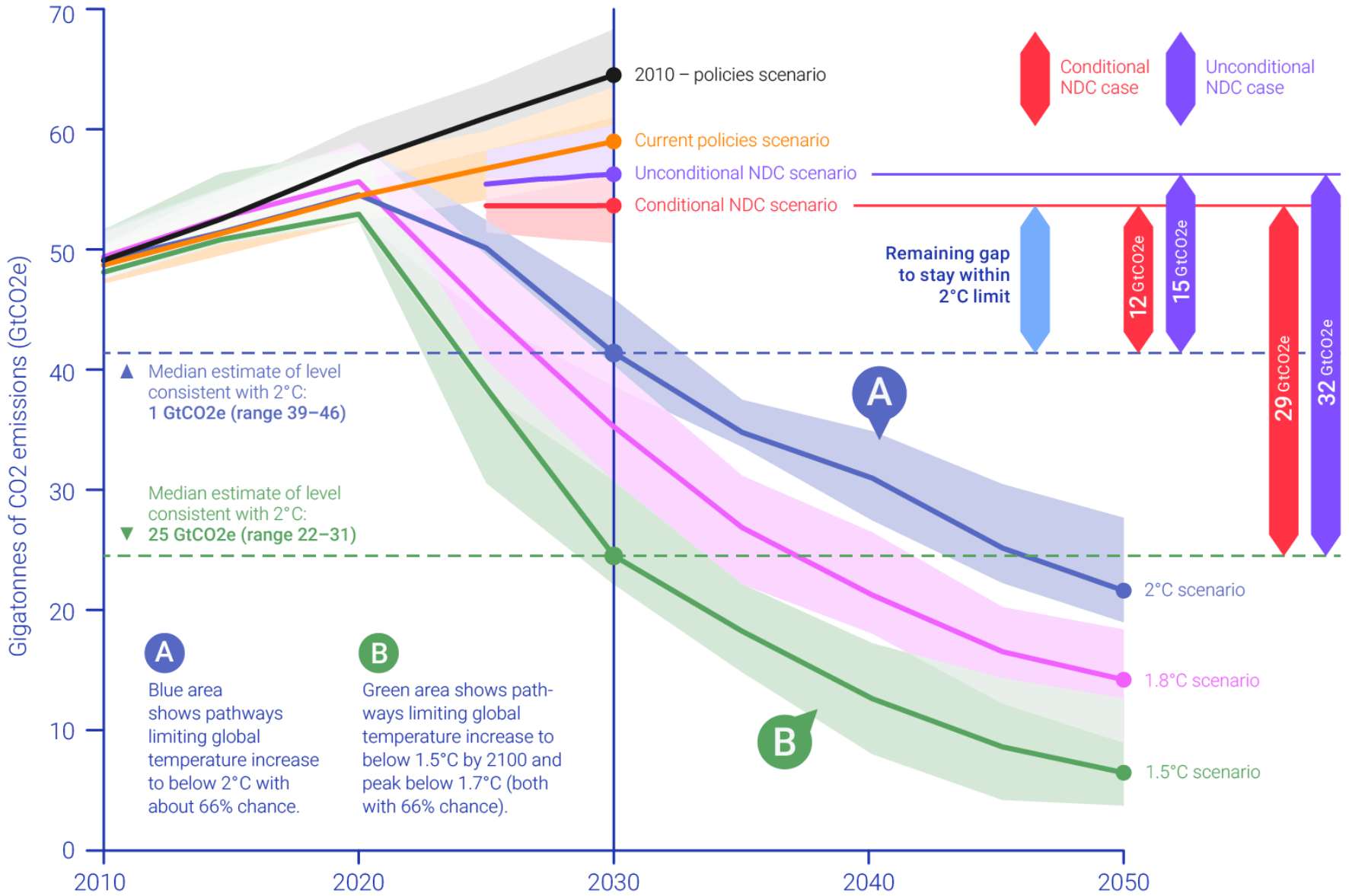
CO_2 emissions need to be:

- reduced by 45% by 2030 and
- net zero by 2050

to limit global warming to 1.5°C – and

- decline by 25% by 2030 and
- reach net zero by around 2070

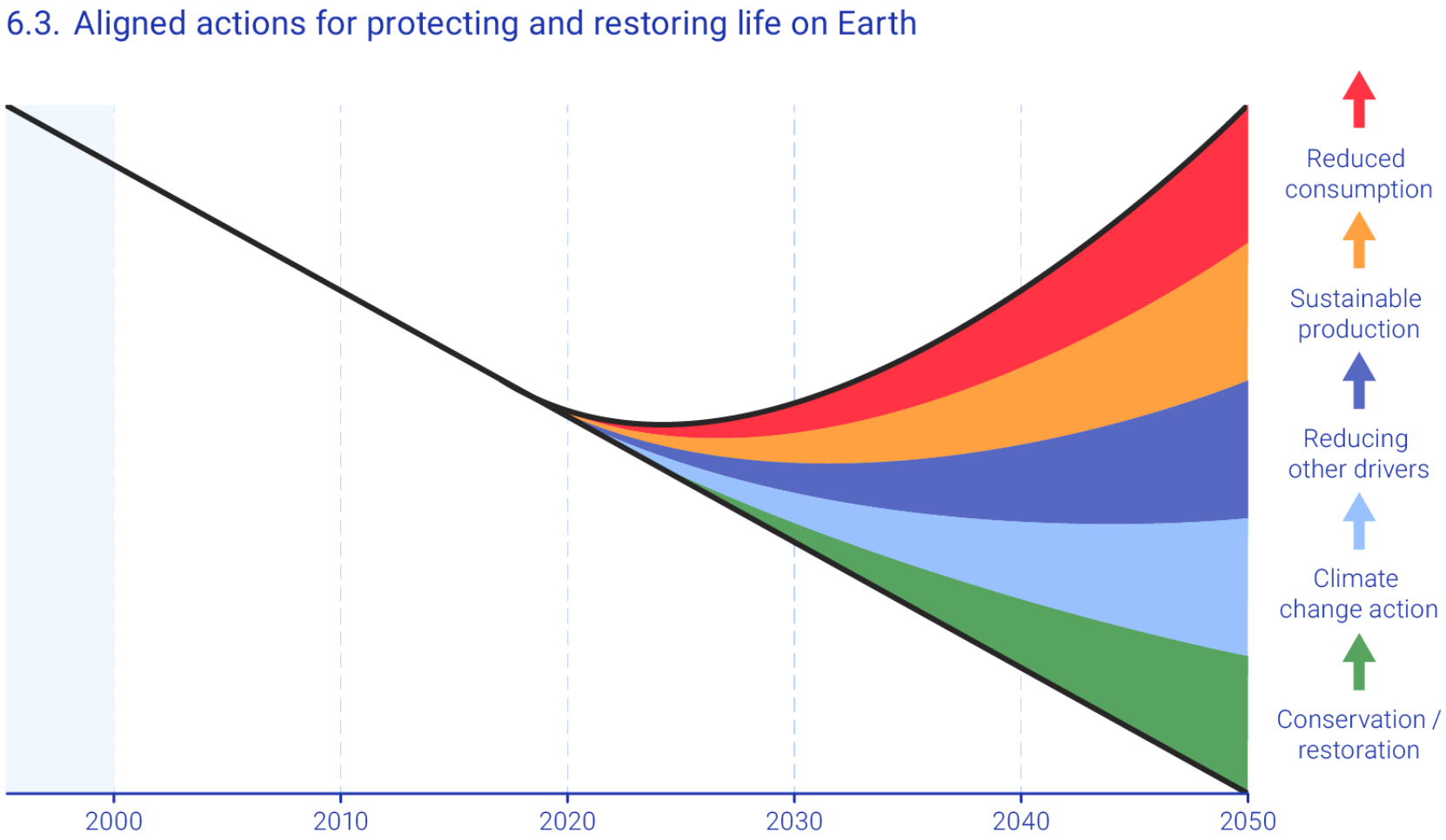
to limit warming to 2°C



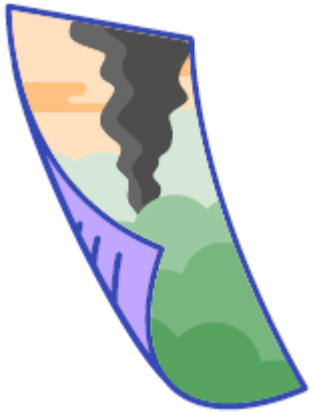
Aligned actions for protecting and restoring life on Earth

The loss of biodiversity can only be halted and reversed by providing space dedicated for nature while also addressing drivers such as:

- changing land and sea use,
- over-exploitation,
- climate change,
- pollution and
- invasive alien species

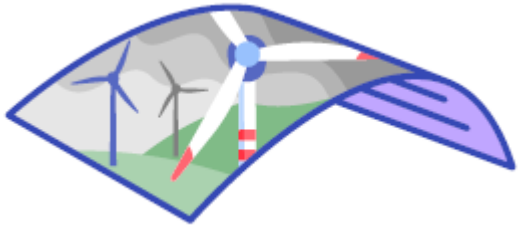


Transformed economic, financial and productive systems can lead and power the shift to sustainability

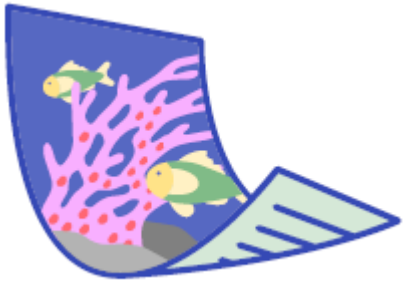


Society needs to include natural capital in decision-making, eliminate environmentally harmful subsidies and invest in the transition to a sustainable future

Biodiversity, climate and other environmental finance could be ramped up by redirecting some of the direct and indirect subsidies to fossil fuels, agriculture, fisheries and transport



The food, water and energy systems can and should be transformed to meet growing human needs in an equitable, resilient and environmentally friendly manner



A primarily plant-based diet has the potential to reduce current GHG emissions by 2-20 per cent.

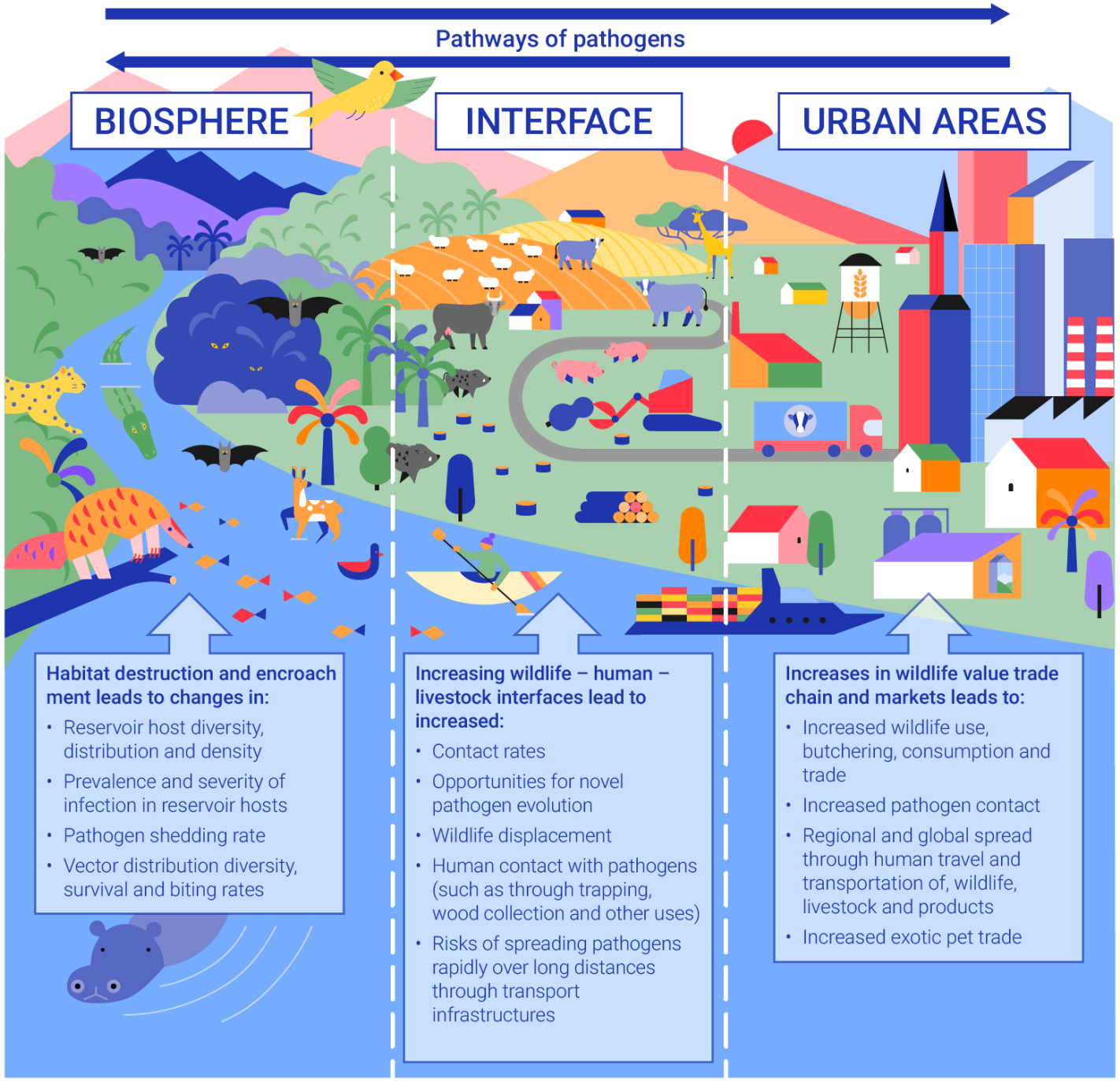
Investments in energy efficiency that can deliver cost savings of US$2.9-3.7 trillion per year by 2030

Keeping the planet healthy is key to providing health and well-being for all

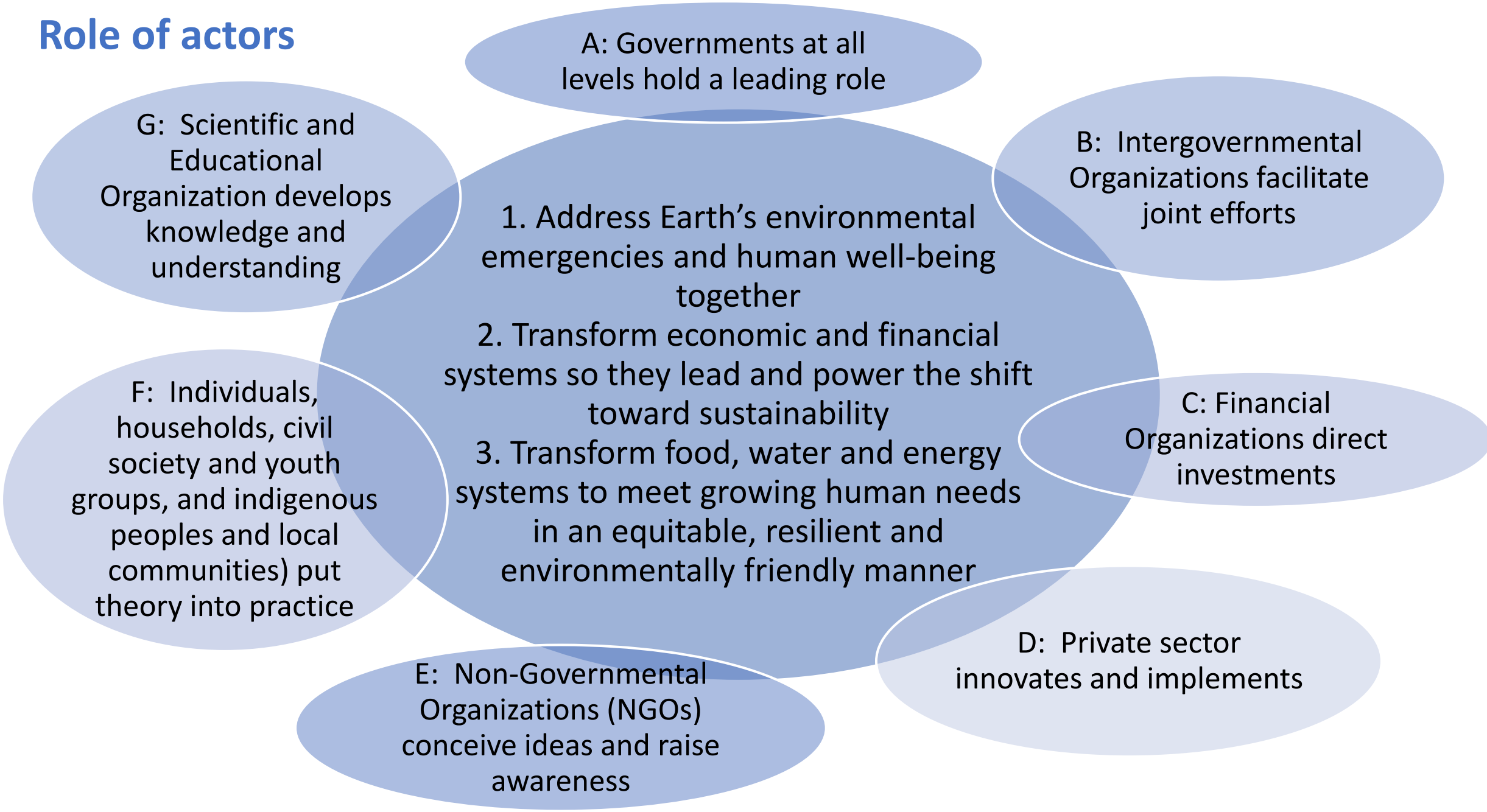
Zoonotic Diseases

- About 75% of all new infectious diseases have their origin in animals
- 700,000 potential viruses in animals and birds could pose a threat to human health
- The risks of future zoonotic pandemics could be reduced by managing human activities and applying a holistic one-health approach

8.1. Pathogen spillover events



Role of actors



#PeacewithNature

Information, resources and contacts:
https://www.unep.org/resources/making-peace-nature

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