



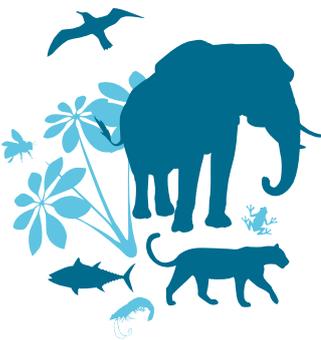
# LIVING PLANET REPORT 2020

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BRIEFING

## NATURE IN FREEFALL

*Nature is in crisis and COVID-19 shows our relationship with nature is broken, presenting significant risks for business and finance.*

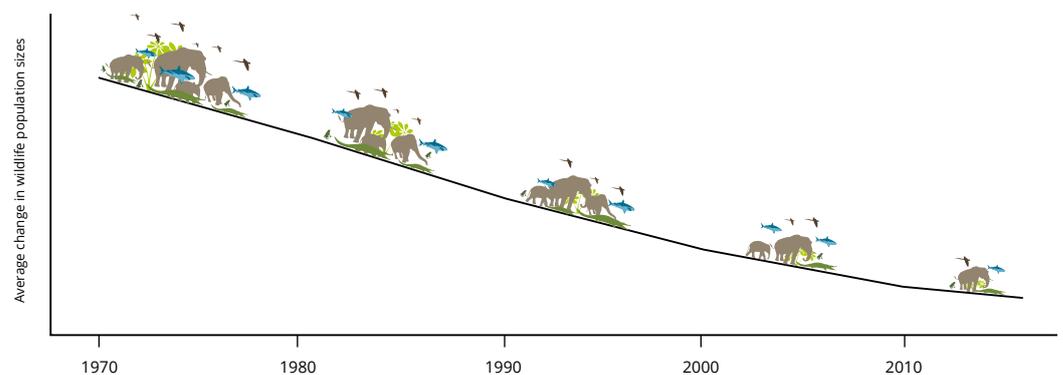


**“THE CORPORATE WORLD NEEDS A NEW MINDSET ON NATURE AND BIODIVERSITY BECAUSE, RIGHT NOW, COMPANIES ARE FREQUENTLY BLIND TO THE SIGNIFICANCE OF BIODIVERSITY LOSS TO THEIR BUSINESS MODELS.”**

**Duncan Pollard,**  
previously VP  
Sustainability  
and Stakeholder  
Engagement  
at Nestlé

Global trade and economic growth over the last half century have driven huge improvements in health and living standards but also undermined the stability of the Earth’s natural systems and exacerbated global inequality. The 2020 Living Planet Index shows that global populations of

mammals, birds, amphibians, reptiles and fish have suffered an average 68% decline in less than half a century (from 1970 to 2016). The main cause of this dramatic decline is habitat loss and degradation, including deforestation, driven by how we as humanity produce food.



Nature powers industry and enterprise but we are **using up ‘natural capital’ and degrading natural systems** faster than nature can replenish and restore them, exceeding Earth’s overall biocapacity by 58% according to Ecological Footprinting.

According to the World Economic Forum **Global Risks Report 2020**, the top five most pressing challenges facing the world over the next decade are, for the first time, all related to the environment, and include biodiversity loss and climate change.

Failure to tackle nature’s decline will increase nature-related risks, further disrupt supply chains, threaten global food security, and cost the global economy at least \$479 billion a year - **amounting to \$10 trillion by 2050.**

Our economies are embedded within nature but economics does not recognise that human health, wealth and security depend on safeguarding environmental health, according to the forthcoming **Dasgupta Review on the Economics of Biodiversity.**

# NATURE MEANS BUSINESS

*Business and finance depend on nature and the goods and services that healthy natural systems provide.*

In total, around \$44 trillion in annual economic value generation - over half of the world's GDP - is moderately or highly dependent on nature, according to the World Economic Forum [Nature Risk Rising](#) report.

The three largest sectors that are highly dependent on nature, together generate close to \$8 trillion of gross value added (GVA) - construction (\$4 trillion), agriculture (\$2.5 trillion) and food and beverages (\$1.4 trillion).

These sectors rely on either direct extraction of resources from forests and oceans, or ecosystem services such as healthy soils, clean water, pollination, pest control, and a stable climate whose decline is causing significant losses and increasing costs.

For example, more than half of the world's food comes from just three staples - rice, wheat and maize - which already suffer annual losses of up to 16% of total production (valued at \$96 billion) due to invasive species.

Almost every sector is dependent on nature and exposed to nature-related risk in some way - either through losing customers, markets or finance as a result of causing nature loss, or suffering its impacts through disruption to societies and markets.



# LAND USE CHANGE, UNSUSTAINABLE FOOD SYSTEMS AND OVERFISHING

*Land use change and overfishing are the key drivers of biodiversity loss on land and in the ocean.*

Land use change due to deforestation and conversion for agriculture is the most important direct cause of biodiversity loss in terrestrial and freshwater ecosystems, with climate

change, over-exploitation, pollution and invasive species not far behind.

Land conversion for agriculture has caused 70% of global biodiversity loss and half of all tree cover loss, and of the total amount of water withdrawn from available freshwater resources, 75% is used for crops or livestock.

Since 2000, 1.9 million km<sup>2</sup> of previously wild and undeveloped land – an area the size of Mexico – has been lost through conversion, mostly in tropical and subtropical grasslands, savanna and shrubland ecosystems, and Southeast Asian rainforests.

An estimated one-third of food produced globally by weight is never eaten, causing nearly \$1 trillion in economic losses while more than 820 million people face hunger or food insecurity – an economic failure and grave societal injustice.

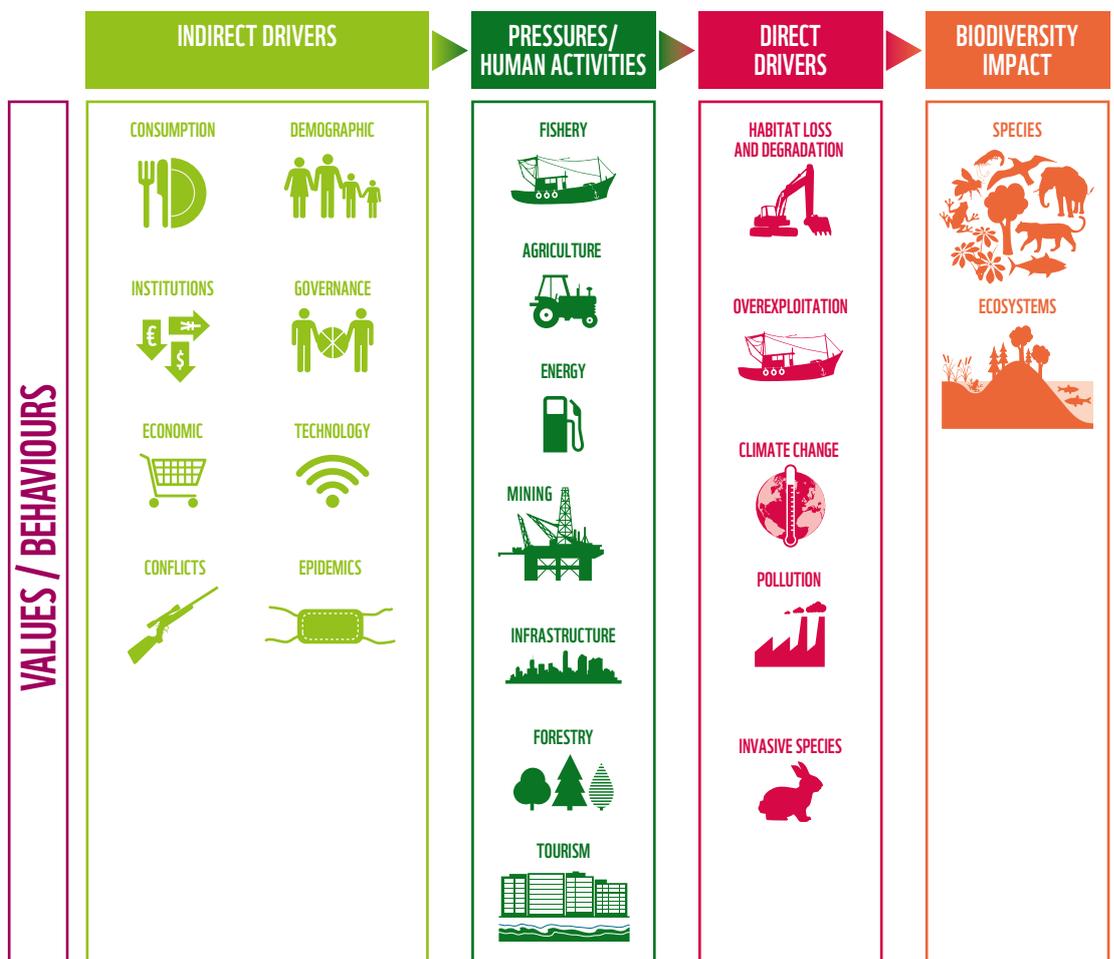
Without changes in production methods, food loss and waste, and diets, food production will need to increase by between 43% and 99% by 2050 and global cropland areas will have to be 10–25% larger to meet increased global food demand.

In the marine environment, **overfishing in wild capture fisheries** is the primary driver of change, with one in three fish stocks assessed, overfished. Pollution, coastal development, and climate change are also affecting ocean productivity.

Global fisheries models project large decreases in maximum catch potential of 20–24% by 2100 (relative to 1986–2005) threatening businesses reliant on fisheries as well as billions of people dependent on fish as a principal source of protein.

**SINCE 2000, 1.9 MILLION KM<sup>2</sup> OF PREVIOUSLY WILD AND UNDEVELOPED LAND – AN AREA THE SIZE OF MEXICO – HAS BEEN LOST THROUGH CONVERSION**

Threats to nature and the drivers and pressures behind them

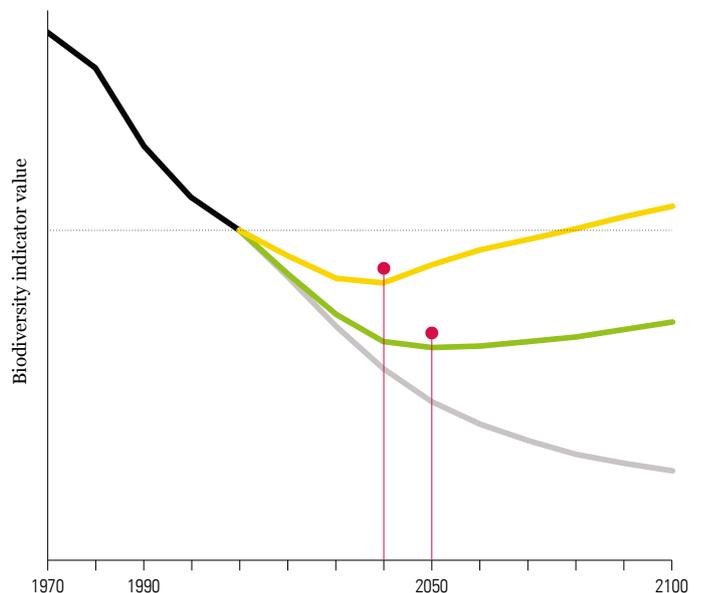
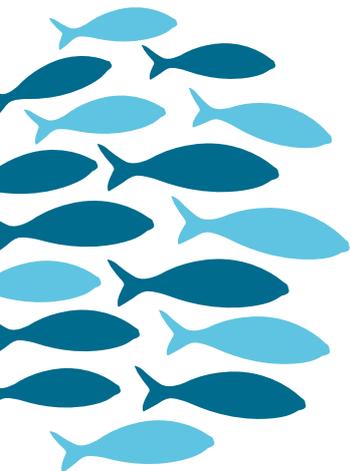


# RESTORING NATURE AND SHAPING A 'NATURE-POSITIVE' ECONOMY

*Only by combining conservation with food system transformation can we restore nature. Sectors and systems with the biggest impacts also present major 'nature-positive' investment opportunities.*

Reconciling food production with conservation is a major challenge of the 21<sup>st</sup> century. Instead of continuing to destroy pristine forests, savannahs and grasslands, agriculture could use and restore degraded land and protect vital ecosystem services such as pest control and pollination.

Pioneering scenario modelling by the Bending the Curve Initiative shows it is not too late to end nature loss *and* feed a growing global population - but only by immediately combining ambitious conservation efforts with the transformation of modern food production systems and consumption patterns, which change how we use land, reduce food waste, and improve our diets.



In order to bend the curve any earlier than 2050 and minimise biodiversity losses, ambitious conservation needs to be combined with sustainable production and consumption measures - the yellow line.

### 2010 INDICATOR VALUE

Conservation actions are crucial but the green line shows that alone they cannot bend the curve before 2050, and will allow much greater overall losses.

The grey line shows that biodiversity continues to decline if we continue on our current path and recovery does not begin before 2100.

Three socio-economic systems - food, land and ocean use; infrastructure and building; and energy and mining - are responsible for the most significant business-related pressures on biodiversity, according to the World Economic Forum **The Future of Nature and Business** report.

Transitioning these systems towards a 'nature-positive' economy - including through ecosystem restoration, regenerative agriculture, and circular business models - will cost \$2.7 trillion a year but could generate \$10.1 trillion in annual business value and create 395 million jobs by 2030.

## NATURE POSITIVE

'Nature-positive' means protecting and restoring natural habitats, safeguarding the diversity of life, and halving the footprint of production and consumption so that we can realise the promise of the SDGs - prosperity for all on a healthy planet.



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# COMMIT, ACT, ADVOCATE FOR NATURE

*Business and finance can help stop nature loss and create a nature-positive future.*

Business has a critical role to play in reversing nature loss. Forward-thinking companies and investors can reduce risk and future-proof their businesses and portfolios by making commitments, taking action and calling for change.

## COMMIT

Companies and financial institutions can **commit to protecting nature and natural systems**, including setting ambitious greenhouse gas emissions reductions targets through the **Science-Based Targets initiative**, and by joining the **Science Based Targets Network** which is helping companies develop and set targets for nature.

## ACT

Companies deliver on commitments by protecting nature and natural systems in the landscapes where they operate, or from which they source commodities like timber or palm oil. They can do this by using **tools and approaches** such as the **Accountability Framework**, and by investing in nature-based solutions to minimise environmental impacts, stop land conversion and deforestation,

and increase supply chain resilience.

Financial institutions can incorporate climate- and nature-related risks in financial decision-making, and scale investment in net-zero and nature-positive activities, including by adopting the **Task Force on Climate-related Financial Disclosures** framework for managing climate risks, and by supporting the creation of the **Task Force on Nature-related Financial Disclosures** to manage nature risks. Asset owners can join other major institutional investors in the **Net-Zero Asset Owner Alliance** and align portfolios for a 1.5°C future

## ADVOCATE

Business and finance can make the business case for nature and influence decision-makers in key business, finance and policy fora by joining the **Business for Nature** coalition, supporting its **policy recommendations**, and calling a **New Deal for Nature & People** that puts nature on the path to recovery by 2030.

Visit [panda.org/buildbackbetter](https://panda.org/buildbackbetter) to find out more.

**“THE BANKING INDUSTRY WILL BE A KEY ACTOR IN HOW THE WORLD ECONOMY CAN BE STIMULATED INTO A GREEN RECOVERY, ENABLING A SYSTEMIC, SUSTAINABLE AND INCLUSIVE RECOVERY.”**

**Mariuz Calvet,**  
Head of Sustainability  
and Responsible  
Investment, Grupo  
Financiero Banorte

## PARTNER WITH WWF

*WWF is working with business and finance for a nature-positive future.*

Working with government and civil society, business and finance can forge economies and societies that value nature and account for the risks of its degradation - including adopting measures of progress beyond GDP - and that deliver resilience, inclusivity and prosperity for all.

Visit [panda.org/partnerships](https://panda.org/partnerships) to find out more or contact us at [globalpartnerships@wwfint.org](mailto:globalpartnerships@wwfint.org).



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