



UN Report on Species Extinction



Question of survival

A 1,800-page Global Assessment Report, compiled by a UN agency from more than 1,500 academic papers, says that the world's life support systems are in trouble. Here are the report's key findings:



Extinction

1 million species face the risk of extinction – many within decades

5,00,000 plants and animals currently have "insufficient habitat for long-term survival"

40% of amphibian species are threatened with extinction, along with **33%** of reef-forming corals and **33%** of marine mammals

▪ Loss of pollinators caused by intensive farming is putting **\$235-\$577 billion** worth of annual crop output at risk



Consumption

1/3rd of all land is used to make food

▪ Food cultivation uses **75%** of all fresh water on Earth

25% of man-made emissions come from agriculture, the vast majority of them from meat production

50% of all new agricultural land is taken from forests

93% of marine fish stocks are either overfished or fished to the limit of sustainability

One-third of all fishing is said to be illegal or unreported



Pollution

▪ Humans dump up to **400 million** tonnes of heavy metals, toxic sludge and other waste into oceans and rivers each year

75% of land, **40%** of oceans and **50%** of rivers "manifest severe impacts of degradation" from human activity

▪ Plastic production has increased **10-fold** since 1990

▪ Pollution from fertilizers has led to the formation of **400** low-oxygen 'dead zones' in coastal waters, covering more than **2,45,000 sq km**



Climate

5% of Earth's species are at risk of extinction if the temperature rises just **2°Celsius** – still within the targets of the Paris climate deal

▪ Business as usual is predicted to warm Earth **4.3°Celsius** by **2100**. Were that to happen, one-sixth of all species could be wiped out

▪ Many of the policies that scientists hope could limit temperature rise by 2100 to **1.5°Celsius** would also help human beings to preserve biodiversity



- The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has released the **UN report on species extinction**. It is estimated that up to 1 million of the estimated 8 million plant and animal species on Earth are at risk of extinction within decades.

Significance of the report

- The assessment is the most accurate and comprehensive review yet of the damage people are inflicting on the planet. And they warn that **nature is declining at "unprecedented" rates** and that the changes will put people at risk.
- The report identified a **range of risks**, from the **disappearance of insects** vital for pollinating food crops, to the **destruction of coral reefs** that support fish populations that sustain coastal communities, or the **loss of medicinal plants**.
- **Decline of native species** in most major land-based habitats by at least 20%, mostly since 1900.
- It emphasizes that **business and financial concerns are also threatened**. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.
- **Key global threats: human's use of land and sea resources, climate change, pollution and invasive species.**
- **Ocean ecosystems degrading** as temperatures rise towards 2 degrees Celsius above preindustrial levels. **Loss of coral reefs** to warming and acidifying oceans could cause a collapse in commercial and indigenous fisheries.

Some of the report's notable findings

- **Damage extent:** 75% of the land environment and 66% of the marine environment impacted due to anthropogenic activities.
- **Loss of pollinators:** Up to \$577 billion in annual global crops are at risk from pollinator loss. Insect pollinators are unfortunately an excellent example of the problems caused by human activities. "There's a newly coined phrase for insect declines — the '**windshield effect**'.
- **Increased risk of floods and hurricanes** because of loss of coastal habitats and protection.
- **Pollution and waste**
 - Plastic pollution has increased tenfold since 1980.
 - 300-400 million tons of heavy metals, solvents, toxic sludge and other industrial waste are dumped into the world's water systems.

Conclusion

- Biodiversity and nature's contributions to people are our common heritage and humanity's most important life-supporting 'safety net.' But **our safety net is stretched almost to breaking point**.
- Humans as both the cause of the threat and a target of its risks. As humanity demands ever more food, energy, housing and other resources, they say, it's also undermining its food security and long-term prospects.
- The essential, **interconnected web of life on Earth is getting smaller** and increasingly frayed.
- Profound economic and social changes would be needed to curb greenhouse gases quickly enough to avert the most devastating consequences of a warming world.

IBPES

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body, established by member States in 2012.

Objective of IPBES: Strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.

The windshield effect

Also, the windscreen phenomenon is a term given to the anecdotal observation that people tend to find fewer insects smashed on the windscreens of their cars now compared to a decade or several decades ago. This effect has been ascribed to major global declines in insect abundance.

