

Biodiversity loss: time to protect forests, oceans and change diets

IPBES report an urgent call to action

May 6, 2019

The global assessment report on biodiversity and ecosystem services from the **Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES)** has warned for mass species loss due to human impacts. In response, Greenpeace is calling for urgent action to protect the world's forests and oceans and sweeping change in agriculture and food production and consumption.

The report was published on May 6 after the summary for policymakers (SPM) was finalised and approved by governments during a meeting at UNESCO headquarters in Paris. It is the first of its kind since the Millennium Ecosystem Assessment from 2005 and also draws upon 4 different Global Biodiversity Outlooks published in the years 2001, 2006, 2010 and 2014 by the Secretariat of the Convention on Biological Diversity (CBD).

The report's key takeaways

Species and biodiversity loss

The report gives a comprehensive overview on the status of nature, its services provided for people and trends over the last 50 years (A). The report highlights the rate of global change and the deterioration of biodiversity with its ecosystems, plant and animal species - warning that 1 million species are at risk of extinction, more than at any time in human history (A6) - and their genetic diversity (A7). It also gives a gloomy future outlook, warning that the world risks missing most of the global 2020 targets for the protection of nature outlined in the Strategic Plan for Biodiversity (Aichi biodiversity targets) (C1), undermining half of the assessed Sustainable Development Goals (SDGs) if current trends continue (C2).

Indigenous Peoples

The report also reveals the crucial role of Indigenous and local people who live most directly in and from nature with their traditional knowledge and livelihoods as stewards of much of the world's lands and biodiversity. They live with official tenure rights over 40% of terrestrial protected areas and over 37% of ecologically intact landscapes. However, their rights and territories are threatened by impacts from the expansion of infrastructure, extractive industries, industrial agriculture and other interests. Biodiversity there is also under growing pressure, but generally declining less rapidly than elsewhere (B3).

Drivers of change

The report lists key drivers of change in nature, both direct (such as land-use change, exploitation of organisms and climate change) plus indirect (such as per capita consumption, insufficient recognition of the values of nature in national politics & economies), all of which have accelerated to unprecedented levels (B, B1, B2).

The need for bold decisions

The report stresses the importance of biodiversity for the SDGs (C2) and risks to biodiversity with some climate change mitigation efforts such as large-scale bioenergy croplands or afforestation with tree monocropping (C4). The report mentions options, policies and measures to improve the conservation of nature (D) as well as the need for bold decisions, multi-sectoral planning, transformative change (D1) and a global sustainable economy (D2). It also lists key governance interventions (D3), leverage points (D4) and recognises the importance of Indigenous and local people's rights, knowledge, participation and consent (D5).

Greenpeace's response and the importance of forests

Greenpeace Germany forests and climate campaigner Dr Christoph Thies said:

"This is a devastating reality check. Governments must start putting people and planet ahead of corporate interests and greed and act with the urgency this report demands. Leaders must adopt strong targets and implementation plans to protect biodiversity with the participation and consent of Indigenous Peoples and local communities at the global nature summit in China next year (COP15). Profiteering has pushed nature to the brink, placing our own survival in peril due to overexploitation of the natural world and worsening climate change.

"Forests, peatlands and coastal marine ecosystems must be protected or restored. Combining biodiversity conservation and natural climate solutions with CO2 emission cuts and increased carbon storage in nature can contribute significantly to limiting global warming to 1.5C, especially if they are jointly implemented and financed on the national level through Nationally Determined Contributions (NDCs) and National Biodiversity Strategies and Action Plans (NBSAPs). These are the essential, immediate actions that can help bring us back from the brink."

Key takeaways on the role of oceans

Oceans are crucial life support systems

The report recognises oceans, as well as land and atmosphere, are global environmental commons [A] and intimately interconnected with protecting us from climate change [A1]. Along with forests, oceans protect us from climate change by absorbing over half of carbon emissions globally [A2].

Business as usual is damaging our oceans, including threatening iconic species

The report finds 'human actions have now significantly altered most of the area of both land and sea' - 40% of marine environment is showing 'severe alteration' from multiple human pressures [A5], from coastal to deep sea ecosystems [10]. The 'richness and abundance' of all levels of marine life is in decline [A5]; almost a third of sharks are threatened [12: 533]. Percentage coverage of live corals has halved since 1970s [A5], and 'nearly all coral reefs - among the world's most biodiverse ecosystems - show significant deterioration [10: 490-91] - and are further threatened by climate change [41]. Business as usual, including fisheries and climate change would worsen the status of marine biodiversity [39] - but we can change this trajectory if we act [C], taking 'bold decisions and transformative change' [D 232-233]. Only 13% of the ocean is still counted as wilderness [10], and degradation of the marine environment is reducing protection for coastal communities from storms. Conversely, improved management of marine ecosystems link to 'increased harvests' and 'coastal protection services' [35]

Fishing pressures

'Fishing pressure is more widespread than ever before' [10: 496] and now covers over half the ocean [17: 639]. Fisheries have the largest footprint globally - four times larger than agriculture [22]. Overfishing levels right now are reducing 'stocks essential for future supply in many places of the world' [4: 379]. Declining fish stocks are a warning of nature's ongoing ability to support us with food - one of the critical roles nature plays [A2]. To guarantee food security sustainably requires 'safeguarding the remaining terrestrial and marine habitats which show very low human intervention' [D6] - like high seas. "Despite decades of efforts...no significant progress has been made on a global scale on keeping fish and seafood stocks in safe biological limits." [10: 498-499]. This disproportionately affects the poorest and most vulnerable communities first. Fish catches have only remained stable by moving into more and more remote areas [18]. Sustainable fisheries requires a broad combination of "conserving and/or restoring marine ecosystems, rebuilding overfished stocks, reducing pollution (including plastics, managing destructive extractive activities, eliminating harmful subsidies and [IUU], reducing environmental impacts of aquaculture." [58: 354-357]. 13bn USD spent on fisheries subsidies in 2015 to 26

OECD members [31] - majority were capacity-enhancing 'which most probably affects the impacts on nature' [31].

Direct human exploitation at sea to blame

Direct exploitation of organisms is the largest driver of change in the oceans [B2] especially as it is 'increasingly more intense' [18: 653].

Climate change makes things worse

Burning fossil fuels on land is adding to ocean stresses, with carbon dioxide one of the top marine pollutants [18: 656] - and climate change is an increasing threat. Carbon will be 'one of the most difficult to tackle in the future if unchecked' [18: 673] and impacts will be 'extremely difficult to reverse, long after the root causes of their production are curtailed'. This means we are risking passing on irreversible changes to younger generations. By the end of the century, climate change will result in less fish biomass by up to quarter [39], and warming waters will see species move poleward, with 'local species extinctions' expected in tropics [41].

The need for a Global Ocean Treaty

The open ocean is much less impacted than terrestrial and coastal marine ecosystems [A5]. This means that a Global Ocean Treaty would help us to keep things this way - preserving these vital ecosystems for future generations so they don't face the same declines. "Governance for the oceans and the high seas is currently marked by policy fragmentation leading to biodiversity loss" [49: 1208-1209].

A precautionary approach

The report also highlights the need to 'take preemptive and precautionary action' and 'strengthen both the rule of law and the implementation of environmental laws and policies' - two of the key levers for transformative change [D3].

Marine Protected Areas work, but need to be done properly and faster

The Aichi target on marine protected area coverage will likely be missed [C1] - we have to set an ambitious, evidence based target for 2030 alongside creating the mechanism to make it possible. 'Partial achievement' and failure to effectively manage MPAs [32: 893-4] is not good enough given what is at stake. MPAs 'have demonstrated success in both biodiversity conservation and improvement of local quality of life when managed effectively' [43] - 'and can be further expanded, such as through larger or interconnected MPAs and in currently under-represented areas'.

MPAs are important for biodiversity protection and food security [58]. The report specifically recommends the expansion of 'effectively implemented coastal and marine protected areas' alongside better fisheries regulation, including the removal of subsidies [D7], recognising that current protection is "not yet fully ecologically representative, effectively managed or equitably managed" [32: 893-894]. Effective protected areas "can help to buffer the negative impacts of climate change, reduce disaster risks, and contribute to climate change mitigation and adaptation" [36: 1007-1008]. The benefits of marine protected areas can be enhanced by being made larger and being interconnected [43].

The problem of plastics

Reduction of consumption and production and changing the throwaway culture is the priority to tackle plastics pollution. The report states that ... the harm from the inputs of plastics, persistent organic pollutants, metals and ocean acidification [...], is felt worldwide [B2], making this a transboundary issue appropriate for international legislation. It also recognises correctly that production and consumption choices and patterns on land matter [B4] and interventions should include lowering total consumption and waste [D4], supporting the understanding that waste management and recycling cannot resolve the issue. Reduction in the production and dependence on single-use plastic products is needed. The report specifically recommends under national actions 'managing marine micro- and macro-plastics pollution through effective waste management and extended producer responsibility' [D7] - in other words the responsibility of companies producing plastics is critical. Plastics are entering ocean food web [18: 664], pointing to, still unknown, possible health risks and need for precautionary action.

Greenpeace response on the role of oceans

Louisa Casson of Greenpeace's Protect the Oceans campaign said:

"The report makes the case clearer than ever before that oceans are crucial life support systems and that humanity depends on healthy oceans. Business as usual, such as overfishing, increased pollution and poor management of our oceans is already having major impacts on wildlife and the communities that depend on them, and climate change threatens to make this worse. Only 13% of the world's oceans can still be considered wilderness due to human activity and we have a duty to protect at least 30% by 2030 by quickly creating more numerous, larger, inter-connected and better managed marine protected areas which are recommended by this report as a vital tool in protecting and restoring ocean biodiversity.

"It is clear that the existing management bodies such as those governing fisheries are failing in their mandate to ensure fish stocks remain healthy for future generations, and these governance flaws and gaps are acknowledged by the report in its mention of the need for a Global Ocean Treaty which could accelerate action."

Greenpeace response on the role of agriculture and food consumption

Greenpeace International food and agriculture campaigner Eric Darier said:

"We welcome the call for urgent action on dietary changes toward more plant-based food to reduce meat and dairy consumption which has well documented negative impacts on biodiversity, climate change and human health. Any increase in agricultural space required for animal feed for industrial livestock is a key driver of land-use change through deforestation and habitat destruction. Tackling meat and dairy consumption must become a priority for policymakers across the world at all levels of governments.

"Shifting toward a more plant-based diet would also make it easier to achieve the SDG of feeding everyone with nutritious, diverse and healthy food. We must reduce meat consumption and production globally by 50% by 2050. If left unchecked, agriculture is projected to produce 52% of global greenhouse gas emissions in the coming decades, 70% of which will come from meat and dairy.

"Meat consumption in many wealthier countries is significantly higher than the global average and addressing this imbalance is a key component of food justice. Current meat consumption in Western Europe is 85 kg per capita per year, far above Greenpeace's call for a global target average of 16 kg by 2050.

"We also welcome the report's focus on the urgency of reducing the scandalous food waste (ranging from 30 to 50% globally) and the need to enhance agricultural biodiversity and agro-ecology away from destructive industrial agricultural practices. Empowering Indigenous Peoples and local communities (small-holder farmers) must also be at the core of these solutions.

"Finally, Greenpeace calls on everybody to change their diet by shifting toward a plant-based diet, challenge food waste, support local food production and make sure food providers, canteens and schools also walk the talk. We cannot waste any more time."

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