



Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

Media Release

Strict Embargo

Friday, 23 March 2018

08:00 (Colombia Time) / 09:00 (US EDT) / 13:00 (London-GMT) / 14:00 (CET)

(other time zones, click here: <http://bit.ly/2nT8OL4>)

Check Against Delivery

- Summaries for Policymakers of all four assessment reports (Africa, the Americas, Asia-Pacific and Europe & Central Asia), photos, b-roll, other media resources: <https://goo.gl/oJ4DRq>
- Media launch webcast live from #IPBES6 (Medellín, Colombia): <https://goo.gl/af4wKm> starts 08:00 (Colombia) / 09:00 (US EDT) / 13:00 (London-GMT) / 14:00 (CET) on Friday, 23 March
- For interviews: media@ipbes.net or +1-416-878-8712 or +57-310-626-6641

Biodiversity and Nature's Contributions Continue Dangerous Decline, Scientists Warn

Human well-being at risk. Landmark reports highlight options to protect and restore nature and its vital contributions to people

Biodiversity – the essential variety of life forms on Earth – continues to decline in every region of the world, significantly reducing nature's capacity to contribute to people's well-being. This alarming trend endangers economies, livelihoods, food security and the quality of life of people everywhere, according to four landmark science reports released today, written by more than 550 leading experts, from over 100 countries.

The result of three years of work, the four regional assessments of biodiversity and ecosystem services cover the Americas, Asia and the Pacific, Africa, as well as Europe and Central Asia – the entire planet except the poles and the open oceans. The assessment reports were approved by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), in Medellín, Colombia, at the 6th session of its Plenary. IPBES has 129 State Members.

“Biodiversity and nature's contributions to people sound, to many people, academic and far removed from our daily lives,” said the Chair of IPBES, Sir Robert Watson, “Nothing could be further from the truth – they are the bedrock of our food, clean water and energy. They are at the heart not only of our survival, but of our cultures, identities and enjoyment of life. The best available evidence, gathered by the world's leading experts, points us now to a single conclusion: we must act to halt and reverse the unsustainable use of nature – or risk not only

the future we want, but even the lives we currently lead. Fortunately, the evidence also shows that we know how to protect and partially restore our vital natural assets.”

The extensively peer-reviewed IPBES assessment reports focus on providing answers to key questions for each of the four regions, including: why is biodiversity important, where are we making progress, what are the main threats and opportunities for biodiversity and how can we adjust our policies and institutions for a more sustainable future?

In every region, with the exception of a number of positive examples where lessons can be learned, biodiversity and nature’s capacity to contribute to people are being degraded, reduced and lost due to a number of common pressures – habitat stress; overexploitation and unsustainable use of natural resources; air, land and water pollution; increasing numbers and impact of invasive alien species and climate change, among others.

Declining Biodiversity – Now and in the Future

The Americas

“In the **Americas**, rich biodiversity makes an immense contribution to the quality of life, helping to reduce poverty while strengthening economies and livelihoods,” said Dr. Jake Rice (Canada), co-chair of the Americas assessment with Dr. Cristiana Simão Seixas (Brazil) and Prof. Maria Elena Zaccagnini (Argentina).

“The economic value of the Americas’ land-based nature’s contributions to people is estimated to be more than US\$24 trillion per year – equivalent to the region’s GDP, yet almost two-thirds – 65% – of these contributions are in decline, with 21% declining strongly. Human-induced climate change, which affects temperature, precipitation and the nature of extreme events, is increasingly driving biodiversity loss and the reduction of nature’s contributions to people, worsening the impact of habitat degradation, pollution, invasive species and the overexploitation of natural resources.”

According to the report, under a ‘business as usual’ scenario, climate change will be the fastest growing driver negatively impacting biodiversity by 2050 in the Americas, becoming comparable to the pressures imposed by land use change. On average today, the populations of species in an area are about 31% smaller than was the case at the time of European settlement. With the growing effects of climate change added to the other drivers, this loss is projected to reach 40% by 2050.

The report highlights the fact that indigenous people and local communities have created a diversity of polyculture and agroforestry systems, which have increased biodiversity and shaped landscapes. However, the decoupling of lifestyles from the local environment has eroded, for many, their sense of place, language and indigenous local knowledge. More than 60% of the languages in the Americas, and the cultures associated with them, are troubled or dying out.

Africa

“**Africa’s** immense natural resources and its diverse cultural heritage are among its most important strategic assets for both human development and well-being,” said Dr. Emma Archer (South Africa), co-chair of the African assessment with Dr. Kalemani Jo Mulongoy (DRC) and Dr. Luthando Dziba (South Africa). “Africa is the last place on Earth with a wide range of large mammals, yet today there are more African plants, fish, amphibians, reptiles, birds and large mammals threatened than ever before by a range of both human-induced and natural causes.”

“Africa is extremely vulnerable to the impacts of climate change and this is going to have severe consequences for economically marginalized populations. By 2100, climate change could also result in the loss of more than half of African bird and mammal species, a 20-30% decline in the productivity of Africa’s lakes and significant loss of African plant species.”

The report adds that approximately 500,000 square kilometres of African land is already estimated to have been degraded by overexploitation of natural resources, erosion, salinization and pollution, resulting in significant loss of nature’s contributions to people. Even greater pressure will be placed on the continent’s biodiversity as the current African population of 1.25 billion people is set to double to 2.5 billion by 2050.

Marine and coastal environments make significant economic, social and cultural contributions to the people of Africa. Damage to coral reef systems, mostly due to pollution and climate change, has far-reaching implications for fisheries, food security, tourism and overall marine biodiversity.

Asia-Pacific

“Biodiversity and ecosystem services contributed to rapid average annual economic growth of 7.6% from 1990 to 2010 in the Asia-Pacific region, benefitting its more than 4.5 billion people. This growth, in turn, has had varying impacts on biodiversity and ecosystem services,” said Dr. Madhav Karki (Nepal), co-chair of the Asia-Pacific assessment with Dr. Sonali Senaratna Sellamuttu (Sri Lanka). “The region’s biodiversity faces unprecedented threats, from extreme weather events and sea level rise, to invasive alien species, agricultural intensification and increasing waste and pollution.”

The report says that although there has been an overall decline in biodiversity, there have also been some important biodiversity successes including, for example, increases in protected areas. Over the past 25 years, marine protected areas in the region increased by almost 14% and terrestrial protected area increased by 0.3%. Forest cover increased by 2.5%, with the highest increases in North East Asia (22.9%) and by South Asia (5.8%).

There are concerns, however, that these efforts are insufficient to halt the loss of biodiversity and the decline in the value of nature’s contributions to people in the region. Unsustainable aquaculture practices, overfishing and destructive harvesting, threaten coastal and marine ecosystems, with projections that, if current fishing practices continue, there will be no exploitable fish stocks in the region by 2048. Intertidal zones are also rapidly deteriorating due to human activities, with coral reefs of critical ecological, cultural and economic importance, already under serious threat, and some reefs having already been lost, especially in South and South-East Asia. According to the report, up to 90% of corals will suffer severe degradation by 2050, even under conservative climate change scenarios.

The report emphasizes that climate change and associated extreme events pose great threats, especially to coastal ecosystems, low-lying coastal areas and islands. Climate change is also impacting species distributions, population sizes, and the timing of reproduction and migration. Increased frequencies of pest and disease outbreaks resulting from these changes may have additional negative effects on agricultural production and human well-being, with impacts projected to worsen.

Forests, alpine ecosystems, inland freshwater and wetlands, as well as coastal systems are identified as the most threatened Asia-Pacific ecosystems. The increasing variety and abundance of invasive alien species is highlighted as one of the region’s most serious drivers of ecosystem change and biodiversity loss.

Europe and Central Asia

A major trend is the increasing intensity of conventional agriculture and forestry, which leads to biodiversity decline. There are also examples of sustainable agricultural and forestry practices that are beneficial to biodiversity and nature's contributions to people in the region. Nature's material contributions to people, such as food and energy, have been promoted at the expense of both regulating contributions, such as pollination and soil formation, and non-material contributions, such as cultural experiences or opportunities to develop a sense of place.

"The people of the region consume more renewable natural resources than the region produces," said Prof. Markus Fischer (Switzerland), co-chair of the Europe and Central Asia assessment with Prof. Mark Rounsevell (UK), "Although this is somewhat off-set by higher biocapacities in Eastern Europe and northern parts of Western and Central Europe."

In the European Union, among assessments of the conservation status of species and habitat types of conservation interest, only 7% of marine species and 9% of marine habitat types show a 'favourable conservation status'. Moreover 27% of species assessments and 66% of habitat types assessments show an 'unfavourable conservation status', with the others categorised as 'unknown'.

The authors find that further economic growth can facilitate sustainable development only if it is decoupled from the degradation of biodiversity and nature's capacity to contribute to people. Such decoupling, however, has not yet happened, and would require far-reaching change in policies and tax reforms at the global and national levels.

Abandonment of traditional land-use systems, and loss of associated indigenous and local knowledge and practices, has been widespread in Europe and Central Asia, the report finds. Production-based subsidies driving growth in agricultural, forestry and natural resource extraction sectors tend to exacerbate conflicting land-use issues, often impinging on available territory for traditional users. Maintenance of traditional land use and lifestyles in Europe and Central Asia is strongly related to institutional adequacy and economic viability.

Global Development Goals in Jeopardy

"One of the most important findings across the four IPBES regional assessments is that failure to prioritize policies and actions to stop and reverse biodiversity loss, and the continued degradation of nature's contributions to people, seriously jeopardises the chances of any region, and almost every country, meeting their global development targets," said Dr. Anne Larigauderie, the Executive Secretary of IPBES.

"Achievement of the UN's Sustainable Development Goals (SDGs), the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets, and the Paris Agreement on climate change, all depend on the health and vitality of our natural environment in all its diversity and complexity. Acting to protect and promote biodiversity is at least as important to achieving these commitments and to human wellbeing as is the fight against global climate change".

"Richer, more diverse ecosystems are better able to cope with disturbances – such as extreme events and the emergence of diseases. They are our 'insurance policy' against unforeseen disasters and, used sustainably, they also offer many of the best solutions to our most pressing challenges."

The assessment of the **Americas** concludes that continued biodiversity loss could undermine the achievement of some of the SDGs as well as some of the international climate-related goals, targets and aspirations.

All the plausible future scenarios explored in the **Africa** assessment highlight that the drivers of biodiversity loss will increase, with associated negative impacts on nature's contributions to people and human well-being. Achieving the African Union's Agenda 2063, the SDGs and the Aichi Targets is unlikely in three out of five scenarios explored.

The experts of the **Asia-Pacific** assessment point to the value of ecosystem based approaches and identify, among others, lack of solid waste management, as well as air, water and land pollution as factors undermining gains in a number of the Aichi Targets and SDGs for many countries (e.g. extinction of plant and animal species due to deforestation, rising temperature and water pollution).

There has been some progress towards achieving the Sustainable Development Goals and the Aichi Biodiversity Targets in **Europe and Central Asia**, e.g. in terms of the area under protection and in mainstreaming biodiversity across government and society. However, the pressures on biodiversity from direct drivers of change are unlikely to be reduced and so progress has been negative for indigenous and local knowledge, the equitable distribution of nature's contributions and water security. Looking beyond the 2030 timescale of the SDGs, scenario analysis highlights that continuation of past and current trends in drivers of change will inhibit the contribution of the region to the widespread achievement of the SDGs, while scenarios which focus on achieving a balanced supply of nature's contributions to people and incorporate a diversity of values are more likely to contribute to achieving the majority of the SDGs.

Promising Policy Options Available

Accompanying the stark concerns of the IPBES experts, however, are messages of hope: promising policy options do exist and have been found to work in protecting and restoring biodiversity and nature's contributions to people, where they have been effectively applied.

In the **Americas**, protection of key biodiversity areas increased 17% between 1970 and 2010, yet fewer than 20% of key biodiversity areas are protected and coverage varies significantly. The report makes it clear that protected areas and restoration projects are only some of the possible interventions – with a need to also focus on strategies to make human-dominated landscapes more supportive of biodiversity and nature's contributions to people.

It also makes the point that biodiversity and nature's contributions to people are better protected when integrated into a broad array of economic and sectoral policies, such as payment for ecosystem services and voluntary eco-certification. Appropriate combinations of, for example, behavioural change, improved technology, research, adequate levels of finance, improved education and public awareness programs are among other options.

Measures taken by **African** Governments to protect biodiversity and nature's contributions to people, have contributed to some recovery of threatened species, especially in key biodiversity areas, and these efforts could be enhanced. Such measures include the establishment and effective management of protected areas and networks of wildlife corridors; restoration of degraded ecosystems; control of invasive alien species and reintroduction of wild animals. Despite the African Union's priorities of poverty alleviation, inclusive growth and sustainable development, especially in the context of global climate change, the report finds that the continent is greatly undervaluing its natural resources.

In addition to enhancing biodiversity conservation through appropriate governance, policies and national implementation, the authors emphasize the need for better integration of indigenous and local knowledge and greater use of scenarios in African decision-making. Of the five possible scenarios they explore, two (regional sustainability and local sustainability) are identified as the most likely paths to meet Africa's economic, social and environmental development aspirations, but the authors point to the need for capacity building on the use of scenarios in decision-making.

For **Asia and the Pacific**, the IPBES experts point to the success of countries that achieved rapid economic growth in gradually restoring and expanding protected areas – especially forests. They emphasize that, while assisting these countries in their efforts to meet some of the SDGs and Aichi Targets, this alone will not be sufficient to reduce biodiversity loss caused by the negative impacts of monoculture. For instance, the region registered a growth of 0.3% in terrestrial protected areas and 13.8% in marine protected areas – putting many countries on track to meet Aichi Target 11 – but most of the important bird areas and key biodiversity areas remain unprotected.”

Better application of science and technology, empowerment of local communities in decision making, integrating biodiversity conservation into other key sectors, scenario planning that is sensitive to economic and cultural diversity, private sector partnerships in financing biodiversity protection, as well as better cross-border regional collaboration, are some of the many important approaches the report identifies.

A range of governance options, policies and management practices is available in **Europe and Central Asia** to safeguard biodiversity and ensure nature's contributions to people. Some progress has already been made in mainstreaming biodiversity and nature's contributions to people into public and private decision-making.

The assessment report highlights integrated approaches. These include measuring national welfare beyond GDP. Governance could become more effective by using well-designed mixes of policy instruments to motivate changes in behaviour to support sustainable development. The authors also emphasize the relevance of reconciling biodiversity conservation and human rights standards through rights-based instruments, as well as capacity building for indigenous peoples and local communities. Sufficient funding is also needed to support research, monitoring, education and training.

Speaking about the policy options emerging from the four regional assessments, Watson said: “Although there are no ‘silver bullets’ or ‘one-size-fits all’ answers, the best options in all four regional assessments are found in better governance, integrating biodiversity concerns into sectoral policies and practices (e.g. agriculture and energy), the application of scientific knowledge and technology, increased awareness and behavioural changes.”

“It is also clear that indigenous and local knowledge can be an invaluable asset, and biodiversity issues need to receive much higher priority in policy making and development planning at every level. Cross-border collaboration is also essential, given that biodiversity challenges recognize no national boundaries.”



Note to Editors:

For enquiries and interviews please contact:

The IPBES Media Team
media@ipbes.net
+57-310-626-6641 or +1-416-878-8712
www.ipbes.net

For photos, 'B-roll' and other media resources go to: <https://goo.gl/oJ4DRq>

Three years in development, at a total cost of about US\$5 million, the IPBES Regional Assessment Reports on Biodiversity and Ecosystem Services involved the review of several thousand scientific papers, as well as extensive Government and other information sources, including indigenous and local knowledge, to arrive at conclusions about each region's land-based, freshwater and coastal biodiversity, as well as the state of ecosystem functioning and nature's contributions to people. Together they represent the most important expert contribution of the past decade to understanding of nature and its contributions to people, offering a roadmap for future action.

IPBES has today released the Summary for Policymakers (SPM) of each of the four reports. The SPMs present the key messages and policy options from each assessment, as approved by the IPBES Plenary. To access the SPMs go to <https://goo.gl/oJ4DRq> The complete reports (inclusive of all data) will be published later this year.

*Note: A 5th new **IPBES assessment report, on global land degradation and restoration**, will be launched on Monday, 26 March 2018, at 08:30 Colombia Time / 09:30 US EDT / 13:30 GMT / 14:30 British Summer Time / 15:30 Central European Summer Time. To access the live webcast of this launch go to <https://www.ipbes.net/webcast-media-launch-land-degradation>*

About IPBES:

Often described as the "IPCC for biodiversity" IPBES is an independent intergovernmental body comprising 129 member Governments. Established by Governments in 2012, it provides policymakers with objective scientific assessments about the state of knowledge regarding the planet's biodiversity, ecosystems and the contributions they make to people, as well as the tools and methods to protect and sustainably use these vital natural assets. For more information about IPBES and its assessments visit www.ipbes.net

Follow Us:

Twitter: @IPBES
www.facebook.com/ipbes
youtube.com/ipbeschanel
www.linkedin.com/company/ipbes
www.instagram.com/ipbes_/

UN Partner Comments about the IPBES Regional Assessments

“The Sustainable Development Goals aim to “leave no one behind”. If we don’t protect and value biodiversity, we will never achieve this goal. When we erode biodiversity, we impact food, water, forests and livelihoods. But to tackle any challenge head on, we need to get the science right and this is why UN Environment is proud to support this series of assessments. Investing in the science of biodiversity and indigenous knowledge, means investing in people and the future we want.”

- **Erik Solheim, Executive Director of UN Environment**

“Biodiversity is the living fabric of our planet - the source of our present and our future. It is essential to helping us all adapt to the changes we face over the coming years. UNESCO, both as a UN partner of IPBES and as the host of the IPBES Technical Support Unit on Indigenous and Local Knowledge, has always been committed to supporting harmony between people and nature through its programmes and networks. These four regional reports are critical to understanding the role of human activities in biodiversity loss and its conservation, and our capacity to collectively implementing solutions to address the challenges ahead.”

- **Audrey Azoulay, Director-General of UNESCO**

“The regional assessments demonstrate once again that biodiversity is among the earth’s most important resources. Biodiversity is also key to food security and nutrition. The maintenance of biological diversity is important for food production and for the conservation of the ecological foundations on which rural livelihoods depend. Biodiversity is under serious threat in many regions of the world and it is time for policy-makers to take action at national, regional and global levels.”

- **José Graziano da Silva, Director-General of the Food and Agriculture Organization of the United Nations**

“Tools like these four regional assessments provide scientific evidence for better decision making and a path we can take forward to achieve the Sustainable Development Goals and harness nature’s power for our collective sustainable future. The world has lost over 130 million hectares of rainforests since 1990 and we lose dozens of species every day, pushing the Earth’s ecological system to its limit. Biodiversity and the ecosystem services it supports are not only the foundation for our life on Earth, but critical to the livelihoods and well-being of people everywhere.”

- **Achim Steiner, Administrator of UNDP**

By the numbers

The Americas

Trends / data

- 13%: the Americas' share of world's human population
- 40%: share of world ecosystems' capacity to produce nature-based materials consumed by people, and to assimilate by-products from their consumption
- 65%: the proportion of nature's contributions to people, across all units of analysis, in decline (with 21% declining strongly)
- >50%: share of the Americas' population with a water security problem
- 61%: languages and associated cultures, in trouble or dying out
- >95%: North American tall grass prairie grasslands transformed into human-dominated landscapes since pre-European settlement
- 72% and 66% respectively: of tropical dry forest in Mesoamerica and the Caribbean have been transformed into human-dominated landscapes since pre-European settlement
- 88%: Atlantic tropical forest transformed into human-dominated landscapes since pre-European settlement
- 17%: Amazon forest transformed into human-dominated landscapes since pre-European settlement
- 50%: decrease in renewable freshwater available per person since the 1960s
- 200-300%: Increase in humanity's ecological footprint in each subregion of the Americas since the 1960s
- 9.5% and 25%: Forest areas lost in South America and Mesoamerica respectively since the 1960s
- 0.4% and 43.4%: net gains in forest areas in North America and the Caribbean respectively since the 1960s
- 1.5 million: approximate number of Great Plains grassland hectares loss from 2014 to 2015
- 2.5 million: hectares under cultivation in Brazil's northeast agricultural frontier in 2013, up from 1.2 million ha in 2003, with 74% of these new croplands taken from intact cerrado (tropical savanna) in that region
- 15–60%: North American drylands habitat lost between 2000 and 2009
- >50%: US wetlands lost since European settlement (up to 90% lost in agricultural regions)
- >50%: decline in coral reef cover by the 1970s; only 10% remained by 2003

Economic value of nature's contributions to people

- \$24.3 trillion: estimated value per year of terrestrial nature's contributions to people in the Americas (equivalent to the region's gross domestic product)
- \$6.8, \$5.3 and \$3.6 trillion per year: nature's contributions to people valued as ecosystem services in Brazil, USA and Canada respectively
- >\$500 million: annual cost of managing the impacts of invasive alien zebra mussels on infrastructure for power, water supply and transportation in the Great Lakes

Projections

- 20%: expected regional population increase (to 1.2 billion) by 2050
- +/-100%: expected growth in region's GDP by 2050, intensifying many drivers of biodiversity loss if 'business as usual' continues
- 40%: expected loss by 2050 of the region's original biodiversity under a 'business as usual' scenario for climate change (with loss of 35-36% expected under the three "pathways to sustainability")

By the numbers

Africa

Trends / data

- +/- 500,000: km² of land is degraded due to factors such as deforestation, unsustainable agriculture, overgrazing, uncontrolled mining activities, invasive alien species and climate change, leading to soil erosion, salinization, pollution, and loss of vegetation or soil fertility
- +/- 62%: rural population directly dependent on wild nature and its services for survival (the most of any continent)
- +/- 2 million: km² of land designated as protected (including 6% of biodiversity-rich tropical evergreen broadleaf forests and 2.5% of Africa's seas)
- 25%: people having faced hunger and malnutrition (2011–2013) in Sub-Saharan Africa, the world's most food-deficient region

Economic values of nature's contributions to people

West Africa

- \$4 billion: coastal fishery value added (per year)
- \$40,000: water purification services (per km², per year)
- \$4,500: mangrove coastal protection services (per km², per year)
- \$2,800: coastal carbon sequestration services (average per km², per year)

Central Africa

- \$2 billion: coastal fishery value added (per year)
- \$0.8 billion: inland fishery value added (per year)
- \$14,000: forest carbon sequestration services (average per km², per year)
- \$3,500: mangrove coastal protection services (per km², per year)
- \$3,000: timber value added (per km², per year)

Southern Africa

- \$0.5 billion: coastal fishery value added (per year)
- \$0.3 billion: inland fishery value added (per year)
- \$9,000: recreation value (per km², per year)

North Africa

- \$0.6 billion: inland fishery value added (per year)
- \$0.5 billion: coastal fishery value added (per year)
- \$300: coastal carbon sequestration services (average per km², per year)
- \$2,000: timber production (per km², per year)

East Africa and adjacent islands

- \$2.5 billion: coastal fishery value added (per year)
- \$1.2 billion: inland fishery value added (per year)
- \$16,000: food production (per km², per year)
- \$12,000: forest carbon sequestration services (average per km², per year)
- \$11,000: erosion control (average per km², per year)
- \$7,800: forest bioprospecting (per km², per year)
- \$5,000: mangrove coastal protection services (per km², per year)
- \$2,200: coastal carbon sequestration services (average per km², per year)

Projections

- >50% of African bird and mammal species could be lost to climate change by 2100
- 20 - 30%: expected decline in productivity of lakes by 2100
- 2.5 billion: predicted population of Africa in 2050 (double the current figure)
- 54%: Africans expected to live in urban and peri-urban areas by 2030 (up from 39% in 2003)

By the numbers

Asia-Pacific

Trends / data

- Zero: exploitable fish stocks in the region by 2048 if current fishing practices continue
- Up to 90%: percentage of corals expected to suffer severe degradation by 2050, even under conservative climate change scenarios
- 1%–2%: annual estimated coral loss even for the most managed reefs
- 4.5 billion: people that benefit from the region's biodiversity and ecosystem services, including food, water, energy, and health security, as well as cultural and spiritual fulfilment
- 400 million: region's share of people below the poverty line (out of 767 million worldwide) -- defined as \$1.90 per person per day, using 2011 purchasing power parity
- 7.6%: regions' average annual economic growth (1990-2010) compared to 3.4% global average
- 2-3%: region's annual urbanization rate (among the fastest in the world)
- Nearly 200 million: people in the region that directly depend on the forest for their non-timber forest products, medicine, food, fuel as well as other subsistence needs
- \$33.5 billion: estimated annual economic loss due to invasive alien species in South-East Asia
- 12.9%: reduction in forest cover in South-East Asia due largely to an increase in timber extraction, large-scale bio-fuel plantations and the expansion of intensive agriculture and shrimp farms (1990 to 2015)
- 22.9% and 5.8%: respective increase in forest cover in North-East Asia and South Asia (1990 to 2015), through policies and instruments such as joint participatory management, payment for ecosystem services and the restoration of degraded forests
- 37%: share of aquatic and semi-aquatic species in the region's freshwater ecosystems threatened by, among others, climate change, overfishing, pollution, infrastructure development and invasive alien species
- 60%: grasslands degraded due to overgrazing by livestock, invasion by alien species, or conversion to agriculture, resulting in a rapid decline of native flora and fauna
- 8 out of 10: top most plastic-polluted rivers in the world are in Asia – accounting for up to 95% of global load of plastics in the oceans
- Nearly 25%: proportion of region's endemic species that are threatened

Projections

- 24% and 29%: mammal and bird species likely to go extinct in lowland forests of Sundaland in South-East Asia in coming decades if forest loss continues at the present rate
- +/-45%: anticipated loss of habitats and species by 2050 if business continues as usual

By the numbers

Europe and Central Asia

Trends / data

- >50%: share of nature's regulating and some non-material contributions to people that declined from 1960 to 2016
- 42%: terrestrial animal and plant species with known trends that have declined in population size the last decade
- 5.1 hectares: per capita ecological footprint in Western Europe (subregion's biocapacity: 2.2 hectares, meaning Western Europeans depend on net imports of renewable natural resources and material contributions of nature to people)
- 3.6 hectares: per capita ecological footprint in Central Europe (biocapacity: 2.1 hectares)
- 4.8 hectares: per capita ecological footprint in Eastern Europe (biocapacity: 5.3 hectares)
- 3.4 hectares: per capita ecological footprint in Central Asia (biocapacity: 1.7 hectares)
- 15%: per capita decrease in water availability (since 1990)
- 25%: agricultural land in the EU affected by soil erosion (23% in Central Asia), which, combined with a decline in soil organic matter, might compromise food production
- 20%: increase in erosion control on arable land in Western and Central Europe
- 7%: of the assessments of EU marine species of conservation interest have shown favourable conservation status; 27% have shown unfavourable conservation status
- 9%: of the assessment of EU marine habitats of conservation interest have shown favourable conservation status; 66% have shown unfavourable conservation status
- 26.6%: estimated proportion of marine fish species (for which trend data exist) that have declining populations, due to unsustainable fishing, habitat degradation, invasive alien species, eutrophication and climate change
- 1.6%: estimated proportion of marine fish species (for which trend data exist) with increasing populations, due to improved conditions including better fishing management and decreased eutrophication
- 20%: diversity of arable crop species that have declined since 1950 in Western and Central Europe
- 73%: percentage of assessments of EU freshwater habitats of conservation interest indicating unfavourable conservation status
- 51%: extent of decline of wetlands in Western and Central Europe, and western parts of Eastern Europe, since 1970
- 16 - 65%: threatened species of crabs (bivalves 23 - 49%; crayfish 24 - 47%; gastropods 33 - 68%; dragonflies, 9 - 44%) in Western and Central Europe, and western parts of Eastern Europe
- 71%: fish populations in decline in past decade
- 60%: amphibian populations in decline in past decade
- 37%: freshwater fish species threatened with extinction (amphibians: 23%) in Western and Central Europe and western parts of Eastern Europe

Economic value of nature's contributions to people

- \$765 / hectare / year: estimated median value (mid-range) of value (2017) of nature's habitat maintenance in the region
- \$1,965: estimated median value (mid-range) of the economic value per hectare per year of nature's regulation of freshwater and coastal water quality (2017)
- \$1,117: estimated median value (mid-range) of the economic value per hectare per year of nature's non-material contributions to people, including physical and psychological experiences linked to tourism and recreation (2017)
- \$464 estimated median value (mid-range) of the economic value per hectare per year of nature's regulation of climate