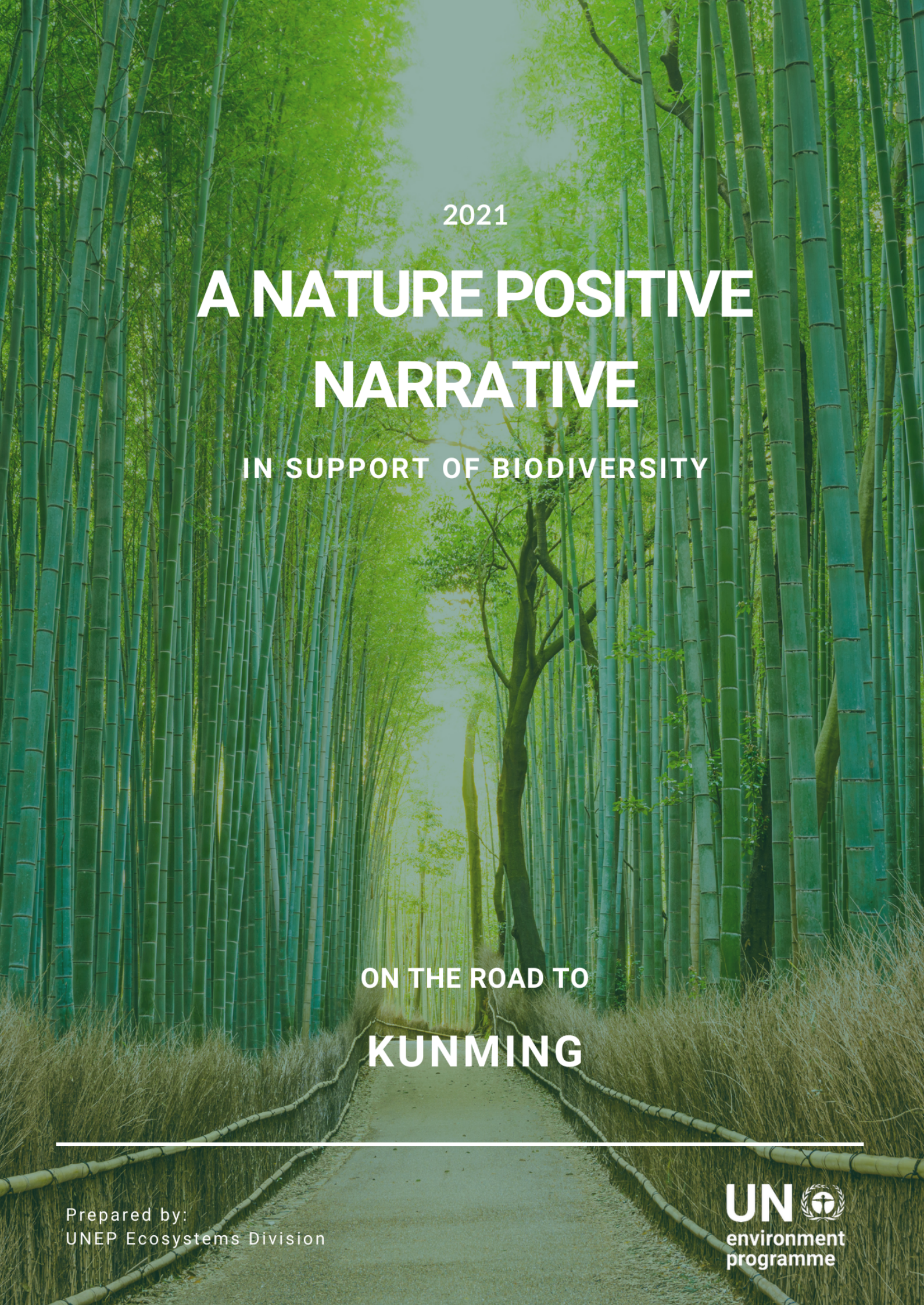




2021

A NATURE POSITIVE NARRATIVE

IN SUPPORT OF BIODIVERSITY

ON THE ROAD TO
KUNMING

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This briefing document outlines an overarching and coherent narrative for biodiversity, including inter alia for those who are participating and/or supporting in CBD COP 15 processes and other biodiversity-related events.

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GENERAL MESSAGING

The health and fate of the planet and the health and fate of humanity are inextricably interlinked - nature is our lifeline.

- On our planet, everything is connected. Our health, food, economies and future well-being depend on the over 8 million species and diverse ecosystems with which we share this planet – the web of life to which we are inextricably linked.
- Yet we have altered 75 percent of the planet's land surface and 66 percent of its oceans¹ – we are losing the world's biological diversity at catastrophic rates.
- We failed to fully meet the biodiversity targets that we agreed upon a decade ago. We cannot afford another decade of insufficient progress.
- By tinkering around the edges without making the transformational changes needed to address our triple planetary crises of climate change, biodiversity loss and pollution - we risk simply rearranging the deckchairs on a sinking Titanic.
- We have a chance to shift our course – to set our global compass towards halting and reversing nature loss – to chart a new path towards a new green horizon. But we need all hands on deck.
- Each person alive today, was born for this time – it is humanity's defining moment to shift our relationship with nature from one of insatiable consumption and destruction, and societal inequalities to a future where people and planet don't just survive – but thrive.
- It is time to abandon the notion that a good life depends on material consumption and limitless economic growth at the expense of biodiversity.

¹ <https://www.ipbes.net/news/Media-Release-Global-Assessment>

Being nature positive means being future-positive - securing our life on this planet with inclusive prosperity.

To support this transition, UNEP has identified the following critical areas to support a *Nature-positive Transformation* (as envisioned in the post-2020 Biodiversity framework):

- 1) Food and agricultural transformation
- 2) Economic transformation
- 3) Land and seascape transformation

1) A FOOD SYSTEM TRANSFORMATION

The challenge:

- With the world's population predicted to reach 9 billion by 2050, it is estimated that 70% more food calories will be needed² – this means 70% more dependence on the productivity of our landscapes and oceans.
- The global food system is the primary driver of biodiversity loss³.
 - Over the past 50 years, pollution by fertilizers, chemicals and pesticides and the conversion of natural ecosystems for crop production or pasture has been the principal cause of habitat loss, in turn reducing biodiversity.⁴
- Agricultural expansion is said to account for 70% of the projected loss of terrestrial biodiversity⁵.
- Close to 90% of the world's marine fish stocks are fully exploited, overexploited or depleted. We have reached the limits of perhaps one of our last natural harvesting activities on the planet.⁶
- Our food system has been shaped over past decades by the 'cheaper food' paradigm, producing ever more food at ever lower costs – but at the cost of biodiversity and the vital ecosystem services underpinning the provision of our food from land and oceans – in turn affecting our own health⁷.
 - Expanding food production into natural ecosystems coupled with the disruptive impacts of climate change allows pathogens to move in new ways between wild animals, farmed animals and humans – giving rise to novel and dangerous zoonotic diseases.
- At least 2 billion people depend on the agricultural sector for their livelihoods, particularly poor and rural populations.(WRI, 2019)

² <http://www.fao.org/news/story/en/item/35571/icode/>

³ https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-03-food-system-biodiversity-loss-benton-et-al_0.pdf

⁴ Ibid

⁵ <https://www.cbd.int/gbo/gbo5/publication/gbo-5-spm-en.pdf>

⁶ <https://unctad.org/news/man-made-tragedy-overexploitation-fish-stocks>

⁷ <https://www.unep.org/resources/publication/food-system-impacts-biodiversity-loss#:~:text=The%20United%20Nations%20Environment%20Programme,any%20time%20in%20human%20history.>

- Inequality and power imbalances – at household, community, national and global levels – are consistently constraining the ability of food systems to deliver poverty reduction and sustainable, equitable livelihoods.
- Poor diet, as defined by a cluster of dietary risks, is the leading cause of death and is the first or second biggest contributor to NCD disease burden in all six World Health Organization regions⁸.

We need nature-positive food systems

The solutions:

2) A FINANCIAL SYSTEM TRANSFORMATION

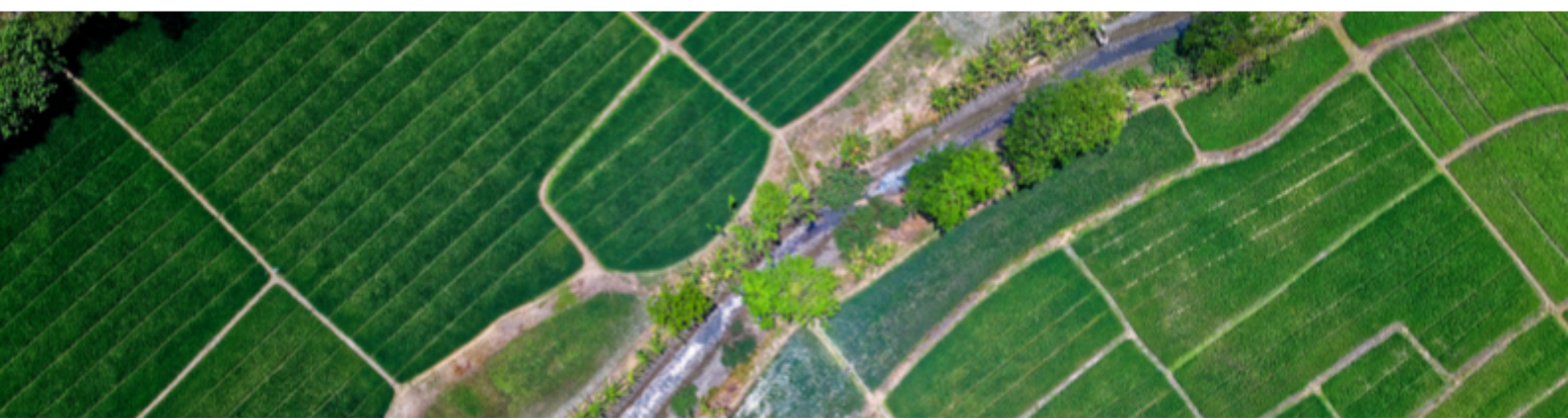
The challenge:

- Simply reviving the existing “grey” economy will only exacerbate irreversible biodiversity loss and climate change – causing an even greater threat to the global economy and to human health.
- We need to align post Covid-19 stimulus with the Paris Agreement and the anticipated Post-2020 Global Biodiversity Framework.
- The total annual international public finance for nature is significantly less than the subsidies leading to its degradation. This is neither sustainable nor does it make economic sense.
 - Only 2.5% (USD 368 billion) of USD 14.6 trillion in public stimulus spending across the largest 50 countries has been directed to so-called green investment.
 - The Greenness of Stimulus Index (GSI) found that a substantial part of the total capital will actually go towards sectors with major negative impacts on the climate and nature.

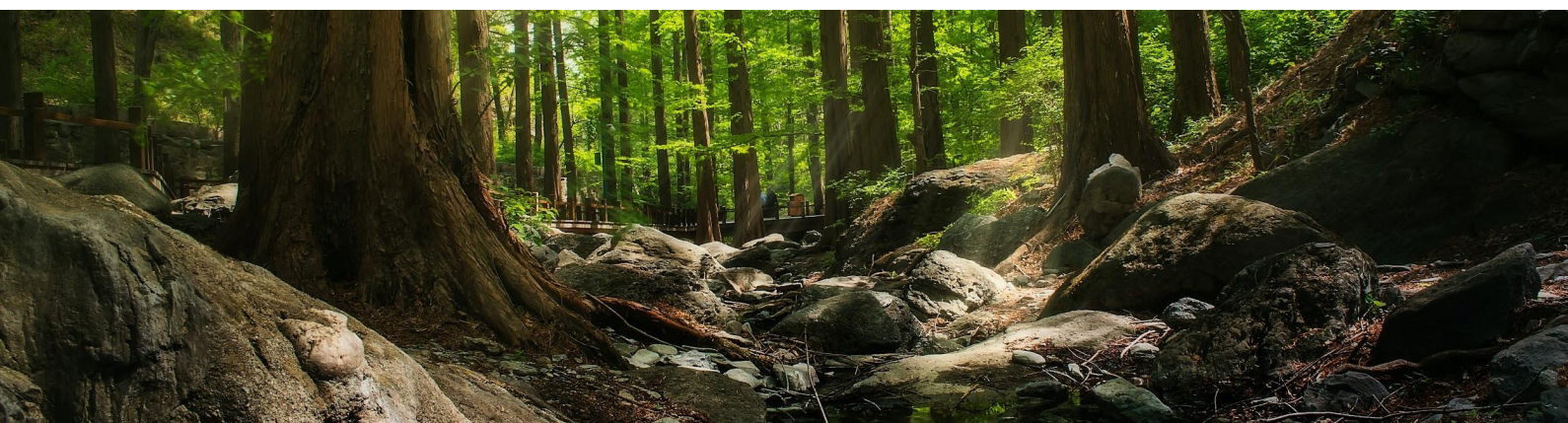
We need nature-positive finance

The solutions:

- **The nature-finance nexus: the time is now**
 - We need a comprehensive system and framework for labelling, tracking, reporting and verifying the state of finance for nature.
- **Put an end to perverse subsidies:** Eliminating harmful subsidies is not the only solution, but it is critical to making our fisheries and food systems sustainable – in turn addressing the greatest drivers of biodiversity loss.



- Redirect the more than US\$5 trillion of harmful annual subsidies in fossil fuels, non-sustainable agriculture and fishing, non-renewable energy, mining, and transportation – towards supporting low-carbon and nature-friendly solutions.
- **Accelerate financial flows by valuing nature**
 - Our ambitions for nature need to be matched with nature-positive investment from domestic and international, public and private sources.
 - USD 132 billion currently flows into nature-based solutions annually, with public funds representing 85% and private finance only 15%. This number is considerably smaller than the current trends in climate finance.
 - By 2030, investments in nature based solutions will need to at least triple in real terms if the world is to meet its climate change, biodiversity and land degradation targets.
 - We need nature and climate targets systematically integrated in loans, bonds, public and private equity if we are to move to the necessary scale
- **New modality to align public finance with nature needs**
 - Nature-based solutions need to be introduced as a formal cross-cutting modality of investment with a formalized strategic plan and resources associated with it.
 - For multilateral funds, this could be an additional result area, which in turn becomes more attractive for public financing.
 - We need available concessional finance to accelerate the transition to 'net zero, nature positive' sustainable agriculture, forestry and other forms of nature-based solutions.
 - We need institutional investor capital for sustainable agriculture, forestry and other forms of nature-based solutions that have clear and predictable flows of revenues.
- **Align private finance with public policy**
 - Scaling up capital flows to nature to a level that can meet the targets of the three Rio Conventions and other commitments requires unlocking private finance at a far greater scale through blended finance, changes in fiscal and trade policies, and other incentives. Private finance only accounts for 15% of total flows to nature-based solutions.
- **Governments should include natural capital in measures of economic performance**



- **We need a surge in the number of commercially viable projects and businesses that incorporate NbS into their business model through technical support, economic and regulatory incentives.**

- **Nature needs to be at the heart of socio-economic decision making:**
 - Create standard metrics, baselines. common characteristics
 - Build a track record and move towards the creation of an asset class for nature-based solutions.
 - Both regulatory efforts such as the EU Taxonomy on Sustainable Finance and industry standards such as those developed by the Climate Bonds Initiative help to set minimum standards for what can be considered sustainable investments.

3) A LAND & SEASCAPE TRANSFORMATION

We need nature positive land and seascapes

- Ecosystem degradation is already affecting the well-being of at least 3.2 billion people – 40% of the world's population. (IPBES, 2018)
- Every year, the world loses 10 million hectares of forests – an area the size of the Republic of Korea, or twice the size of Costa Rica. (FAO and UNEP, 2020)
- Soil erosion and other forms of degradation are costing the world more than \$6 trillion a year in lost food production and other ecosystem services.
- (Sutton et al., 2016)
- Approximately 30% of natural freshwater ecosystems have disappeared since 1970.
- One third of global fish stocks are overexploited, up from 10% in 1974. (FAO, 2020)
- To date, 33.8% of Key Biodiversity Areas lack any coverage by protected areas or OECMs in the terrestrial and inland water realms, and 33.9% in the marine realm.⁹
- Despite the progress made in scaling up protected and conserved area coverage - we need to strengthen the quality of protected and conserved areas in delivering on outcomes for nature and people in an equitable way.

The solutions:

- **More land needs to be protected and set aside for nature.**
 - The greatest gains for biodiversity will occur when we preserve or restore whole ecosystems.
 - Restoring 15% of converted lands in right places could prevent 60% of projected species extinctions¹⁰.
 - Ecosystem restoration could remove 13 to 26 gigatons of greenhouse gases from the atmosphere – but only if sustained – protecting and conserving restored areas will help lock in these and other benefits from restoration for the future.



- Ecosystem restoration contributes to the achievement of all 17 of the Sustainable Development Goals by their 2030 target date, including the elimination of poverty and hunger¹¹.
- **Invest smarter: restore, regenerate, revegetate**
 - Ecosystem conservation and restoration are nature-based solutions which are smart stimulus investments with tangible and sizeable economic benefits: It is critical that annual investment increases between 2030 and 2050.
 - For every dollar spent on nature restoration, at least \$9 of economic benefit can be expected.
 - Opportunities for restoration can be found on 2 billion hectares of deforested and degraded forest land worldwide – an area larger than South America.
 - Meeting the Bonn Challenge goal of restoring 350 million hectares of degraded and deforested lands around the world could create up to \$9 trillion in net benefits.
 - Protecting and restoring mangroves could create 1 trillion USD in net benefits globally by 2030
 - Protecting and restoring wetland ecosystems provides services worth up to 15 trillion USD, including flood protection, fisheries habitat and water purification
 - Restoring upland forests and watersheds could also save an estimated 890 million USD each year in water utilities in the world's largest cities
 - Restoring coral reefs in Mesoamerica and Indonesia could deliver an additional \$2.5–2.6 billion in ecosystem service benefits per year
 - Large-scale investments in dryland agriculture, mangrove protection and water management can generate benefits worth around four times the original investment.

ANNEX: FACTS & FIGURES

By the numbers: status and trends in biodiversity

- More than half of global GDP is moderately or highly dependent on nature and its services; and more than 70 per cent of people living in poverty are at least partly dependent on natural resources to earn their livelihoods. (World Economic Forum).
- In 2010, some 2.6 billion people drew their livelihoods either partially or fully from agriculture, 1.6 billion from forests and 250 million from fisheries. (Environment Management Group report – UN action to stop loss of biodiversity, version 9.3)
- More than 75 per cent of global food crop types, including fruits and vegetables and some of the most important cash crops, such as coffee, cocoa and almonds, rely on animal pollination. (IPBES)
- 91 countries currently apply global standards for integrating environment into national accounting – roughly double the amount in 2006. (GBO5/Notes)

¹¹ <https://www.resourcepanel.org/reports/land-restoration-achieving-sustainable-development-goals>

- The Nagoya Protocol on Access and Benefits Sharing has been ratified by 127 parties. Of these, 87 have measures in place and competent national authorities established.
- 69 countries have National Biodiversity Strategies and Action Plans adopted as whole-of-government policy instruments.
- Comparison of the last five years with rates in the decade ending in 2010 demonstrates a 33 per cent reduction in global deforestation rates. (GB05/Notes)
- 27 million hectares of land are under restoration – representing only 2 per cent of the estimated potential. (GB05/Notes)
- 75 per cent of the Earth's land surface has been significantly altered by human actions, including 85 per cent of wetland area. (IPBES)
- 66 per cent of ocean area is experiencing multiple impacts from people, including from fisheries, pollution, and chemical changes from acidification. (IPBES/Summit on Biodiversity: concept note)
- More than 60 per cent of the world's coral reefs are under threat, due largely to over- and destructive fishing. (GB05/Notes)
- Approximately 25 per cent of species are already threatened with extinction in most animal and plant species studied. (IPBES)
- 72 per cent of indicators developed by indigenous peoples and local communities show ongoing deterioration of elements of nature important to them. (IPBES)
- 1.7 "Earths" would be required to regenerate the biological resources used by humanity between 2011 and 2016. (GB05/Notes)

Biodiversity and the economy

- Industries that are highly dependent on nature generate 15 per cent of global GDP (US\$13 trillion), while moderately dependent industries generate 37 per cent (US\$31 trillion). Together, the three largest sectors that are highly dependent on nature – construction, agriculture and food and beverages – generate close to US\$8 trillion of gross value added (GVA) – roughly twice the amount of the German economy. (WEF)
- The consequences for secondary and tertiary industries can also be significant. For example, six industries – chemicals and materials; aviation, travel and tourism; real estate; mining and metals; supply chain and transport; retail, consumer goods and lifestyle – with less than 15 per cent of their direct GVA highly dependent on nature, still have "hidden dependencies" through their supply chains. More than 50 per cent of the GVA of their supply chains is highly or moderately dependent on nature. (WEF)
- Healthy ecosystems provide economic value for nations. For instance, between 5-8 per cent of global crop production, can be attributed to natural pollination. But, pollinators are under threat, and US\$235-577 billion in annual global crop output is at risk as a result. (IPBES).
- Currently, land degradation has reduced productivity in 23 per cent of the global terrestrial area. (IPBES)
- Food systems are currently the single biggest underlying source of decline in nature. (Biodiversity Summit: concept note) Since 1970, land-use change (predominantly for agriculture) has had the largest relative negative impact on nature; and more than one third of the terrestrial land surface is now being used for crops and livestock farming. (IPBES)
- Other sectors, such as the extractive industries, also have significant impacts on biodiversity. (Biodiversity Summit: concept note) The extraction and processing of natural resources accounts for more than 90 per cent of our biodiversity loss and

water stress and approximately half of our climate change impacts. Meeting the needs of a growing and increasingly affluent and urban population, will require natural resource extraction to double from 92 to 190 billion tonnes by 2060 under historical trends. (ED Report to UNEA5 draft for SMT review)

- The value of agricultural crop production (US\$2.6 trillion in 2016) has increased approximately threefold since 1970 and raw timber harvest has increased by 45 per cent, reaching some 4 billion cubic metres in 2017, with the forestry industry providing about 13.2 million jobs. However, indicators of regulating contributions, such as soil organic carbon and pollinator diversity, have declined, indicating that gains in material contributions are often not sustainable. (IPBES)
- The world's ecosystems have declined in size and condition by 47 per cent globally compared to estimated baselines, and the continued degradation of ecosystem services represents an annual loss of at least US\$479 billion per year. (UNEP FI)
- The World Bank estimates that crimes affecting natural resources and the environment inflict damage on developing countries worth more than US\$70 billion a year. The loss of coral reefs has significant physical and economic consequences for 350 million people living in coastal areas by reducing coastal protection and habitat for fish. Deforestation and land conversion contribute about 25 per cent of global greenhouse emissions, and the loss of diversity reduces the resilience of ecosystems to climate change and other disturbances.
- In 2018, damages from climate-related disasters cost an estimated US\$155 billion. (MTS Draft, citing GEO6) Global economic losses due to decreased labour productivity, increased health care costs and decreased crop yields could amount to 1 per cent of global gross domestic product by 2060. (OECD/Draft MTS)
- Total annual international public finance for biodiversity is valued at US\$9.3 billion – double the levels of the previous decade. (GEO5/Notes)
- As of 2019, the gap between what we spend and what we need to spend to sustainably manage biodiversity was up to US\$824 billion dollars. (ED Remarks to China Ministerial Conference on Biodiversity, citing the Financing Nature report)
- Government spending that is harmful to biodiversity is conservatively estimated to be about US\$500 billion per year globally, primarily in support to fossil fuels, agriculture and fisheries. The total volume of finance flows that are harmful to biodiversity, encompassing all public and private expenditures, is likely to be many times larger. In comparison, the financial flows directed towards conservation and restoration of biodiversity total around US\$80 billion globally per year, while the costs of inaction to address biodiversity loss continue to grow. (Biodiversity Summit: concept note)
- The cost of inaction in the face of biodiversity loss is estimated to rise to at least US\$14 trillion – 7 per cent of global GDP – by 2050; and biodiversity loss and ecosystem degradation are already disproportionately affecting marginalized populations. (EMG)
- Mobilizing long-term financing for biodiversity conservation – through public and private funds – is critical to help build resilient communities and move closer to achieving the SDGs.
- Modelling by the International Resource Panel shows that by 2060 the implementation of a policy package that promotes resource efficiency, climate mitigation and removal, biodiversity protection and changes in societal behavior (mainly dietary) could: (a) increase global GDP by 8 per cent; (b) decrease material use by 25 per cent; and (c) decrease greenhouse gas emissions by 90 per cent, compared to historical trends. (ED Report to UNEA5 Draft)

Biodiversity and health

- An estimated 4 billion people – roughly half the global population – rely primarily on natural medicines for their health care; and the majority (about 70 per cent) of drugs used for cancer are either natural or inspired by nature. (IPBES)
- Trees and other plants play an important role in regulating air quality; and ecosystems that have more plant species tend to have a greater capacity to remove pollutants from soil and water. (Approved key messages on biodiversity)
- Yet, exposure to indoor/outdoor air and water pollution costs at least 9 million lives annually; and many more millions suffer from illness and loss of livelihood. (ED Report to UNEA, citing GEO5)
- Deforestation, particularly in the tropics, has been associated with an increase in infectious diseases, such as dengue fever, malaria and yellow fever. (ED Report to UNEA5 Draft)
- The Illegal trade in wildlife also brings animals face to face with humans. As the trade is entirely unregulated, the chance is high that a potentially catastrophic disease will jump species. (ED Report to UNEA5 Draft)
- Millions of people die each year from neglected zoonotic diseases, like anthrax and rabies. The pathogens also weigh heavily on the world economy. Over the past 20 years, they have caused approximately US\$ 100 billion in economic damage, a tally that does not include COVID-19. (ED Report to UNEA5 Draft)
- The World Bank has shown that economic losses of six major outbreaks of highly fatal zoonoses averaged US\$6.7 billion per year, while required investments in One Health that would prevent those losses ranged between 1.9 and 3.4 billion per year in the different countries. (ED Report to UNEA Draft)

Biodiversity and COVID-19

- COVID-19 demonstrates that the stress people put on nature – through encroachment, deforestation, agriculture/livestock intensification, wildlife crime and climate change – also has a negative impact on their own lives.
- Sixty per cent of the 1,400 microbes known to infect humans originated in animals ([UNEP/ILRI](#)). As the world's population grows, rampant development is putting humans and domesticated animals increasingly in close quarters with wild species where previously there was limited interaction, making it easier for diseases like COVID-19 to vault between species.
- Conversely, healthy ecosystems can protect against the spread of disease: where native biodiversity is high, the infection rate for zoonotic diseases is lower. (Approved key messages on biodiversity)
- Responses to the pandemic provide a unique opportunity for transformative change as a global community. (Biodiversity Summit: concept note)

Biodiversity and the SDGs

- Biodiversity and the contributions it provides to all people are at the heart of sustainable development and the fight against climate change. (Biodiversity Summit: concept note)
- Based on current trajectories, rapid declines in biodiversity, ecosystem functions and many of nature's contributions to people mean that most international societal and environmental goals – including those embodied in the 2030 Agenda for Sustainable Development – will not be achieved. (IPBES)
- Most of the SDG targets related to biodiversity and environmental sustainability are not on track, posing a risk to the overall achievement of the 2030 Agenda. (EMG)

- Fourteen out of the 17 SDGs have biodiversity elements directly critical to the success of their achievement, enhancing the need to better mainstream biodiversity across all sectors of the economy and society. (EMG)
- Current negative trends in biodiversity and ecosystems will undermine progress towards 80 per cent (35 out of 44) of the assessed targets of Goals related to poverty, hunger, health, water, cities, climate, oceans and land. (IPBES)
- Lack of achievement in these areas will also have a bearing on achieving SDG 16 on peace, justice and strong institutions. (EMG)
- These declines will also undermine goals such as the climate goals articulated in Paris Agreement; and prevent us from meeting existing commitments on biodiversity. (IPBES)
- Pathways to achieve SDGs could have substantial positive or negative impacts on nature and therefore on the achievement of the other SDGs. (IPBES)
- To stimulate sustained socio-economic recovery that aligns with SDG and more ambitious NDC commitments, shifting the tax base from labour taxation (such as personal income tax) to taxing pollution and carbon can help countries reduce environmental degradation, improve material resource efficiency, increase disposable income for households and support demand recovery, and encourage increased investment and job creation by businesses aligned with “building back better”. (ED Report to UNEA5 Draft)

Biodiversity and climate change

- Ecosystems regulate the earth’s climate by capturing and storing greenhouse gases.
- Healthy ecosystems can provide 37 per cent of the mitigation needed to limit global temperature rise; while damaged ecosystems release carbon instead of storing it. (Approved key messages on biodiversity)
- Approximately 25 per cent of the globe’s greenhouse gas emissions come from land clearing, crop production and fertilization, with animal-based food contributing 75 per cent of that. (IPBES)
- Climate change is projected to become increasingly important as a direct driver of changes in nature and its contributions to people in the next decades. (IPBES)
- Even for global warming of 1.5°C to 2°C, the majority of terrestrial species ranges are projected to shrink dramatically. Changes in ranges can adversely affect the capacity of terrestrial protected areas to conserve species, greatly increase local species turnover and substantially increase the risk of global extinctions. For example, a synthesis of many studies estimates that the fraction of species at risk of climate-related extinction is 5 per cent at 2°C warming and rises to 16 per cent at 4.3°C warming. (IPBES)
- Coral reefs are particularly vulnerable to climate change and are projected to decline to 10 to 30 per cent of former cover at 1.5°C warming and to less than 1 per cent of former cover at 2°C warming. (IPBES)
- Therefore, scenarios show that limiting global warming to well below 2°C plays a critical role in reducing adverse impacts on nature and its contributions to people. (IPBES)
- Climate change has also been linked to increased risks from zoonotic diseases. For some contagions, increases in temperatures or rainfall can dramatically affect the life cycles of either the pathogen itself or its vector – the intermediate species that spreads the disease from the original host to humans. (ED Report to UNEA5 Draft)

- Meeting the SDGs and the 2050 Vision for Biodiversity depends on taking into account climate change impacts in the definition of future goals and objectives. (IPBES)

Biodiversity and nutrition/food security

- Although sustainable production practices exist, our food systems are currently the single biggest underlying source of decline in nature, responsible for three-quarters of deforestation, and for the most important pressures on marine fish stocks. At the same time, food systems themselves are dependent on biodiversity and are therefore undermined by its loss. (Biodiversity Summit: concept note)
- More than 75 per cent of important global food crops depend at least in part on animal pollinators, whose declines around the world threaten food security. (Biodiversity Summit: concept note)
- In 2017, 66 per cent of marine stocks were fished within biologically sustainable levels – down from 71 per cent in 2010, with great variation among regions, and among stocks. (GBO5/Notes)
- 163 million farms (29 per cent of all farms, worldwide) practice sustainable intensification, on 453 million hectares of agricultural land (9 per cent of the worldwide total). (GBO5/Notes)
- In an average year, 8 million tonnes of plastic alone ends up in our seas - killing aquatic life... and in some cases, finding its way into the human food chain. (ED Report to UNEA5 Draft)
- Around the world, fewer and fewer varieties and breeds of plants and animals are being cultivated, raised, traded and maintained; by 2016, over 9 per cent of domesticated breeds of mammals had become extinct and 1,000 more were threatened, out of a total of about 6,000 domesticated breeds (IPBES).
- This loss of diversity, including genetic diversity, undermines the resilience of many agricultural systems to threats such as pests, pathogens and climate change – undermining food security. (IPBES)
- More than half (60 per cent) of dietary energy is derived from just three cereal crops (rice, maize and wheat). (<https://www.un.org/sustainabledevelopment/biodiversity/>)
- Meanwhile, about 11 per cent of the world's population is undernourished; and diet-related diseases (related both to undernourishment and obesity) are the reason for 20 per cent of premature mortality. (IPBES)
- The loss of diversity, including genetic diversity, poses a serious risk to global food security by undermining the resilience of many agricultural systems to threats such as pests, pathogens and climate change. (IPBES)
- The world spends about US\$ 1 million per minute on agricultural subsidies that are often driving biodiversity loss and climate change as well as impacting long-term livelihoods and health. Repurposing them to reward good practices could support regenerative agriculture and ecosystem restoration. (ED Report to UNEA5 Draft)

Biodiversity and natural disasters

- Biodiverse ecosystems can serve as buffers against natural disasters by reducing damage from floods, storms, tsunamis, avalanches, landslides and droughts.
- However, the frequency and intensity of extreme weather events and the fires, floods and droughts that they can precipitate, have increased in the past 50 years; while the global average sea level has risen by between 16 and 21 cm since 1900, and at a rate of more than 3mm per year, over the past two decades. (IPBES).

- Loss of coastal habitats and coral reefs reduces coastal protection, which increases the risk from floods and hurricanes to life and property for the 100 million people living within coastal 100-year flood zones. (IPBES)
- According to the Global Risk Report, biodiversity loss ranks among the top five global risks to society – both in terms of impact and likelihood.

Biodiversity and human rights

- Failing to protect biodiversity can constitute a violation of the right to a healthy environment, a right that is legally recognized by 155 States and should now be globally recognized as fundamental, according to IPBES.
- 164 countries explicitly recognize women's rights to own, use, make decisions and use land as collateral on equal terms with men. (GB05/Notes)
- Of the 69 countries with National Biodiversity Strategies and Action Plans, 40 involved indigenous and local communities in their preparation. (GB05/Notes)
- People cannot enjoy their basic human rights to life, health, food and safe water without a healthy environment. (David Boyd, UN expert on human rights and the environment)
- Biological diversity and human rights are interlinked and interdependent... States' obligations to fulfil their human rights obligations include a duty to protect the biodiversity on which those rights depend. In addition to that general duty, States have specific duties, which include public information about measures that adversely affect biodiversity, providing for the participation of citizens in biodiversity-related decisions and providing access to effective remedies in cases of biodiversity loss and degradation. (UN Special Rapporteur on human rights and the environment, John H. Knox)
- Protecting the rights of indigenous peoples and others directly dependent on natural ecosystems is not only required by human rights law, it is often the best way of protecting biodiversity. (UN Special Rapporteur on human rights and the environment, John H. Knox)
- Those who risk their lives to protect the biodiversity that benefits all of us are not only environmentalists – they are also human rights defenders. Governments must do more to protect human rights defenders – who risk their lives to protect biodiversity – and honor their work. (UN Special Rapporteur on human rights and the environment, John H. Knox)
- The parts of the world most likely to experience negative impacts of climate change and losses of biodiversity, ecosystem functions and other natural contributions are home to large concentrations of indigenous peoples and many of the world's poorest communities.
- While they comprise less than 6 per cent of the world's population, indigenous populations steward 80 per cent of the world's biodiversity through traditional ecological knowledge. (WEF/Draft MTS)
- Nature managed by indigenous peoples and local communities is under increasing pressure, but is generally declining less rapidly in indigenous peoples' land than in other lands. At least a quarter of the global land area is traditionally owned, managed, used or occupied by indigenous peoples (IPBES).
- Resource use reflects stark global inequalities with high-income countries consuming over 13 times more per person (circa 27 tons) than low-income countries (circa 2 tons). (ED Report to UNEA5 Draft)
- The loss of ecosystem services can have disproportionate effects on certain members of society, notably women and young girls who are more reliant on and play a key role in managing biological resources such as fuel, water and food. As a result,

women remain one of the poorest groups within society who are far less resilient to loss or reduction of ecosystem services and the impacts of climate change. ([UNEP FI](#))

- Women comprise 80 per cent of those displaced by climate change. ([UNDP](#)/Draft MTS)
- By 2050, over 143 million people in Sub-Saharan Africa, South Asia and Latin America – 2.8 per cent of the population of these regions – will have become internal migrants. A major cause of that will be a result of various climatic impacts. (World Bank/Draft MTS)
- Healthy ecosystems – including a healthy climate – are also a right of future generations.
- Countries at different levels of development have experienced different levels of deterioration of nature for any given gain in economic growth. Exclusion, scarcity and/or the unequal distribution of nature's contributions to people may fuel social instability and conflict in a complex interaction with other factors. (IPBES)
- Armed conflicts have an impact on ecosystems beyond their destabilizing effects on societies, and a range of indirect impacts, including the displacement of people and activities. (IPBES)