



A world map is positioned at the top of the page, rendered in a dark, muted color against a background that transitions from a reddish-orange on the left to a teal on the right. A vertical line of small, light-colored dots runs down the right edge of the map area.

# The State of Finance for Nature in the G20

Leading by example to close  
the investment gap



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# Executive Summary

**Nature-based solutions (NbS) is a category of assets in which businesses, governments and citizens can invest in order to work with nature instead of seeing it as a barrier to economic development and progress.** NbS places nature at the heart of many societal challenges, such as the climate and biodiversity crises, as well as disaster risk reduction, food security and human health. Through the improvement of carbon sequestration on agricultural lands and peatlands, defence from flooding by restoring mangrove populations, and the protection of global biodiversity through forest and other land conservation, nature-based solutions can help improve society today and in the future.

**This report finds that in 2020 the G20 countries invested USD 120 billion in NbS.**<sup>1</sup> This represents 92 per cent of global annual NbS investment, broadly in line with the G20's share of the global GDP of 80 per cent.<sup>2</sup> The vast majority of current spending by G20 countries, USD 105 billion, is allocated internally towards domestic government programs, a third of which is invested in programs to promote the protection of biodiversity and the landscape. The other two thirds of domestic government investment (USD 67 billion) funds water management, pollution abatement, general environmental protection, and measures for agriculture, forestry, fishing and hunting.

**G20 official development assistance (ODA) and private sector investment in NbS is low compared to spending on NbS by domestic governments.** The G20 currently invests approximately USD 2.4 billion annually in NbS-relevant ODA programs with a focus on biodiversity and environmental policy. The private sectors of G20 countries invest an additional USD 14 billion, the majority of which is allocated to improving the sustainability of supply chains or biodiversity offsets.

**In order to achieve all future biodiversity, land degradation and climate targets, G20 countries would need to scale up their internal annual NbS**

**spending by 140 per cent: an additional USD 165 billion, by 2050.** This additional investment would allow G20 countries to reach a total annual spending of USD 285 billion by 2050. This estimate is based on an immediate action scenario in which the international community responds now to keep climate change warming at only 2°C in order to halt land degradation and to stabilize biodiversity and reverse its loss by 2050 at today's levels.<sup>3</sup>

**Future G20 domestic investment needs to comprise 40 per cent of total global NbS investment.** This estimate only takes into account four principal nature-based solutions: forestry, silvopasture, mangrove restoration and peatland restoration. Approximately USD 102 billion out of the USD 165 billion total additional investment needed in the G20 in 2050 would be invested in forestry, with USD 14 billion associated with plantation management and USD 88 billion with land conversion to forestry through restoration and afforestation. USD 63 billion annually would be invested in silvopasture and spent on its operation.

**The remaining 60 per cent of annual future investment lies in developing countries where fiscal space to invest in NbS is limited.** Future investment rates would be: forestry USD 101 billion, silvopasture USD 126 billion, peatland restoration USD 7 billion, and mangrove restoration USD 0.5 billion. All G20 members except India have investment grade sovereign debt, while most non-G20 countries do not. This means that it will be more expensive for non-G20 countries to borrow money on capital markets, limiting their fiscal bandwidth to fulfil NbS investment.

**In many instances, NbS investments in developing countries are more cost effective in abating climate risk.** For example, the average cost of land conversion to NbS in G20 countries is USD 2,600/hectare, while the average cost for non-G20 regions is USD 2,100/hectare. The situation is similar for mangrove restoration

<sup>1</sup> Please note that analysis for this report was limited to land-related NbS. The scope in the next report will cover both the terrestrial and marine environment more comprehensively.

<sup>2</sup> This number ranges from 74-92% because of uncertainty around the data.

<sup>3</sup> Note: These figures are taken from the Model of Agricultural Production and its Impacts on the Environment (MAgPIE v4.1), which was used to estimate investment need for forest-based NbS (which includes reforestation and afforestation cost estimates), and taken from separately estimated figures for silvopasture (planting trees on agricultural land), mangrove restoration and peatland conservation and restoration.

expenses, suggesting that G20 countries could improve their economic efficiency in NbS spending by investing in developing countries.

**In line with the global report on the ‘State of Finance for Nature’, it is clear that both the volume of capital directed to NbS-relevant assets and activities and the share of private finance are currently insufficient to meet the climate, biodiversity and other human-induced crises.** The investment case for NbS could be strengthened through a combination of regulation and economic incentives. G20 countries, which are among the richest nations on the planet, have a special responsibility to lead by example to reduce the gap between current NbS investment and what is needed to address the climate crisis, and to reverse land degradation and biodiversity loss. Opportunities to do this could involve:

- **G20 countries could align economic recovery post Covid-19 with both the Paris Agreement and future agreements on biodiversity**, focusing economies on being consistent with the 1.5°C warming above pre-industrial levels, as well as halting and reversing the loss of biodiversity. (Vivid Economics & Finance for Biodiversity Initiative 2021; United Nations Environment Programme [UNEP], Global Recovery Observatory, University of Oxford, 2021)
- **From a public funding perspective, G20 countries could pledge to:** a) increase ODA spending to help developing countries to reduce the NbS investment gap; and b) increase domestic expenditure for NbS-relevant sectors, including through repurposing agricultural subsidies. Other opportunities relate to: c) requesting multilateral development banks (MDBs) to expand NbS-relevant lending or debt relief to developing countries by supporting the issuance of IMF Special Drawing Rights

(SDR); or, d) creating and expanding results-based financing schemes, such as nature performance bonds.

- **In order to stimulate private finance, G20 countries have numerous policy options available**, such as: a) incentivizing corporate and financial institutions to disclose nature-related risks; b) aligning portfolios to become ‘nature positive’ and strengthening risk management to reduce the potential for negative impacts on nature by clients, suppliers, etc.; c) strengthening the investment case for NbS by harnessing the potential of carbon markets and other nascent markets for ecosystem systems; and, d) increasing the availability of concessional capital in the form of subordinate loans, guarantees and grants, which is also needed to reduce the (perceived) risk for novel business models.

In the wake of the dire warnings from the latest [Intergovernmental Panel on Climate Change \(IPCC\) report](#), and in the context of the world summit on transforming food systems, the role of investment in NbS is clear: it tackles these interlinked crises.

**This report is a first step in measuring NbS investments in G20 countries and therefore has a number of limitations that should be addressed in future iterations.** First, the scope only covers terrestrial ecosystems. Secondly, the data used in this report has limitations in tracking public and especially private investment in NbS due to the lack of internationally comparable datasets and NbS markers. The data presented in this report cannot be disaggregated by sex to conduct a gender analysis due to a lack of quantifiable metrics. Thirdly, it focuses on existing investment but does not estimate the benefits of investing in nature. Finally, it focuses on NbS positive investments and does not report on capital flows that negatively affect nature.



# Table of Contents



<b>1. Introduction</b>	<b>6</b>
<b>2. Current financial flows into NbS in the G20</b>	<b>10</b>
<b>3. Future investment needs</b>	<b>14</b>
<b>4. Spending gap analysis</b>	<b>17</b>
<b>5. Options to close the NbS investment gap</b>	<b>21</b>
<b>A. Appendix</b>	<b>25</b>





1

# Introduction

**Nature-based Solutions (NbS) can contribute to the transition towards a net zero carbon, nature positive global economy by putting nature at the heart of addressing economic and societal challenges.** Estimates suggest that more than half the world's GDP (USD 40 trillion) is moderately or highly dependent on nature and its services. (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [IPBES] 2019; World Economic Forum 2020) NbS can support the global economy, and can specifically contribute to achieving the objectives of the three Rio Conventions, by mitigating and adapting to the adverse effects of climate change, supporting environmental services, restoring degraded land, and halting and reversing biodiversity depletion. A healthy planet is also good for business and economies, because our livelihoods depend on nature. Emerging research, such as the Dasgupta Review (2021) and the State of Global Finance for Nature (2021), have made the economic case for triple action to tackle the climate, land degradation and biodiversity crises clearer and more compelling than ever. The loss of biodiversity poses enormous risks to human prosperity and wellbeing with disparities felt between genders. Investing in nature also provides multiple benefits, such as reducing the risk of future pandemics and accelerating global efforts to mitigate and adapt to climate change. Investing in nature-based solutions such as transitioning to deforestation-free sustainable agricultural production, natural infrastructure, etc. is smart from both a public and private sector perspective, for reasons including: (i) economic gains from job creation and from more productive sustainable natural resource use; (ii) avoiding the losses and costs required for protecting communities from hazards; and (iii) other social and environmental benefits. (Global Center on Adaptation 2020; World Resources Institute 2020) It is far cheaper to prevent environmental damage than to pay for its restoration afterwards. The most cost-effective policies are those that take a comprehensive approach towards appropriately valuing, protecting and restoring nature.

**Investment flows into nature need to increase while shifting away from harmful activities.**

Studies have shown that governments spend around USD 500 billion per year globally to support activities that potentially harm nature. (Organisation for Economic Co-operation and Development [OECD] 2020) Public and private financial flows that are harmful to the biosphere significantly outweigh the investment aimed at protecting and restoring it. Political and economic systems and financial markets have so far failed

to account for the full value of services that nature provides. Redirecting existing harmful financing, such as subsidies that encourage deforestation or environmental destruction, towards NbS can drive green growth and job creation while tackling the twin goals of the Paris Agreement on climate change and the anticipated Kunming Agreement on biodiversity. Incorporating NbS into financial and economic systems means that the two goals of sustainable natural resource management and socioeconomic growth can be addressed.

**Recent global reports, such as the IPBES report on biodiversity and climate change and the Dasgupta Review on the economics of climate change, summarize the scientific grounds for policies that place us on a pathway towards sustainability.** (IPBES 2019; Dasgupta 2021)

Nature-based solutions and ecosystem-based approaches have emerged as crucial instruments for delivering multiple benefits, including addressing climate change mitigation, adaptation and biodiversity loss: reducing flood risk, filtering air pollutants, providing reliable supplies of drinking water, strengthening food security, contributing towards business and job opportunities, gender empowerment and, more broadly, achieving the 2030 Sustainable Development Goals. The G20 countries have also recognized that protected areas are a principal tool for halting biodiversity loss, and would support efforts to protect at least 30 per cent of global land and at least 30 per cent of the global ocean, with at least 10 per cent under strict protection, by 2030, according to national circumstances and approaches.

**The G20 member states have expressed their commitment to taking the necessary actions to put nature and biodiversity on a path to recovery by 2030, for the benefit of people and the planet, and achieving the vision of 'Living in Harmony with Nature' by 2050.** (G20 2021)

They recognize the importance of advancing policies that protect and restore nature due to its cost-effectiveness and ability to provide multiple social, environmental and economic benefits. In 2021, they agreed to join efforts to advance together within a structured and ambitious agenda around ten key goals: (i) investment in nature as a means to address joint socioeconomic and environmental challenges; (ii) creation of an International Environmental Experts Network to boost capacity building; (iii) protection and restoration of degraded lands for an inclusive and sustainable recovery; (iv) sustainable water management; (v) protection of oceans and seas; (vi) reduction in marine plastic litter; (vii) improvements in sustainable and circular

resource use; (viii) investment in circular cities; (ix) improvements in education, capacity-building and training; and, (x) growth of green finance and blue finance measures.

**G20 countries recognize that 2021 is a critical year for increasing commitments towards tackling the crises of climate change, biodiversity loss and pollution exacerbated by unsustainable natural resource use.** Nearly thirty years after the signing of the Rio Conventions, there are opportunities to build international cooperation through the UNFCCC and the Paris Agreement, the anticipated Kunming post-2020 Global Biodiversity Framework to be adopted at CBD COP15, and the Land Degradation Neutrality goal championed by the UNCCD, among others.

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