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## POLICY BRIEF

# Means to promote the financing, sustainability and effectiveness of Nature-based Solutions

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## Introduction

By focusing on the importance of ecosystems for the economy and human well-being, Nature-based Solutions (NbS) provide sustainable measures to address various social, economic and environmental challenges<sup>1</sup>. To this end, the approach involves different activities for the management of ecosystems that ensure, when implemented correctly, they can continue providing fundamental services for people, while addressing challenges such as climate change, food and water security, health, social and economic development and disaster risk reduction.

With respect to climate change, the interest in NbS has increased as actions that address the problems of climate change mitigation and adaptation by restoring and/or conserving ecosystems and their services provide additional benefits while addressing the challenges mentioned above.

NbS have played a central role in the discussions at the Conferences of the Parties (COPs) in recent years, especially at the COP 26 in Glasgow, Scotland (Lipton, 2021). By November 2021, the month the conference was held, the number of countries that included NbS in their updated Nationally Determined Contributions (NDCs)<sup>2</sup> had increased from 82% to 92%, compared to June of the

same year (Bakhtary et al., 2021). Of the 16 Latin American and Caribbean countries that are part of the EUROCLIMA+ program, 10 explicitly include NbS in their NDCs, and 6 of them do so implicitly (Luna and Villate, 2022).

Despite the fact that NbS are widely recognized as effective measures to address the challenges associated with climate change, there are still some challenges to their implementation. Among them are challenges related to gathering the necessary data for designing actions, assessing their effectiveness, monitoring benefits, governance for their execution (including the necessary regulatory frameworks) and financing (NetworkNature, 2020; Seddon et al., 2020)<sup>3</sup>.

This policy summary focuses on the challenges associated with promoting and facilitating the financing for NbS that these projects need to address in order to ensure the implementation and sustainability of these measures. Due to the nature of this document, only some challenges and recommendations, considered more relevant for the context of Latin America and the Caribbean, are discussed. However, in the references included in the text, you will find additional resources on the topic.

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1 To learn more about the conceptual framework of the Nature-based Solutions approach, see the IUCN Global Standard for Nature-based Solutions (IUCN, 2020a). For examples of NbS, see: <https://casestudies.naturebasedsolutionsinitiative.org/>

2 To learn more about the conceptual framework of the Nature-based Solutions approach, see the IUCN Global Standard for Nature-based Solutions (IUCN, 2020a). For examples of NbS, see: <https://casestudies.naturebasedsolutionsinitiative.org/>

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3 To learn more about these challenges, see: <https://networknature.eu/nbs-knowledge-gaps>. Additionally, the NbS approach has received various criticisms, including the ambiguity of the term, the lack of safeguards for implementation, the inappropriate use by some organizations and corporations (greenwashing), the focus on climate change mitigation without considering the benefits for biodiversity and the lack of implementation in ecosystems other than forests, among others. (Seddon et al., 2020; Seddon, 2021; Schneider, 2021; Gerretsen, 2021).

## Financing for NbS

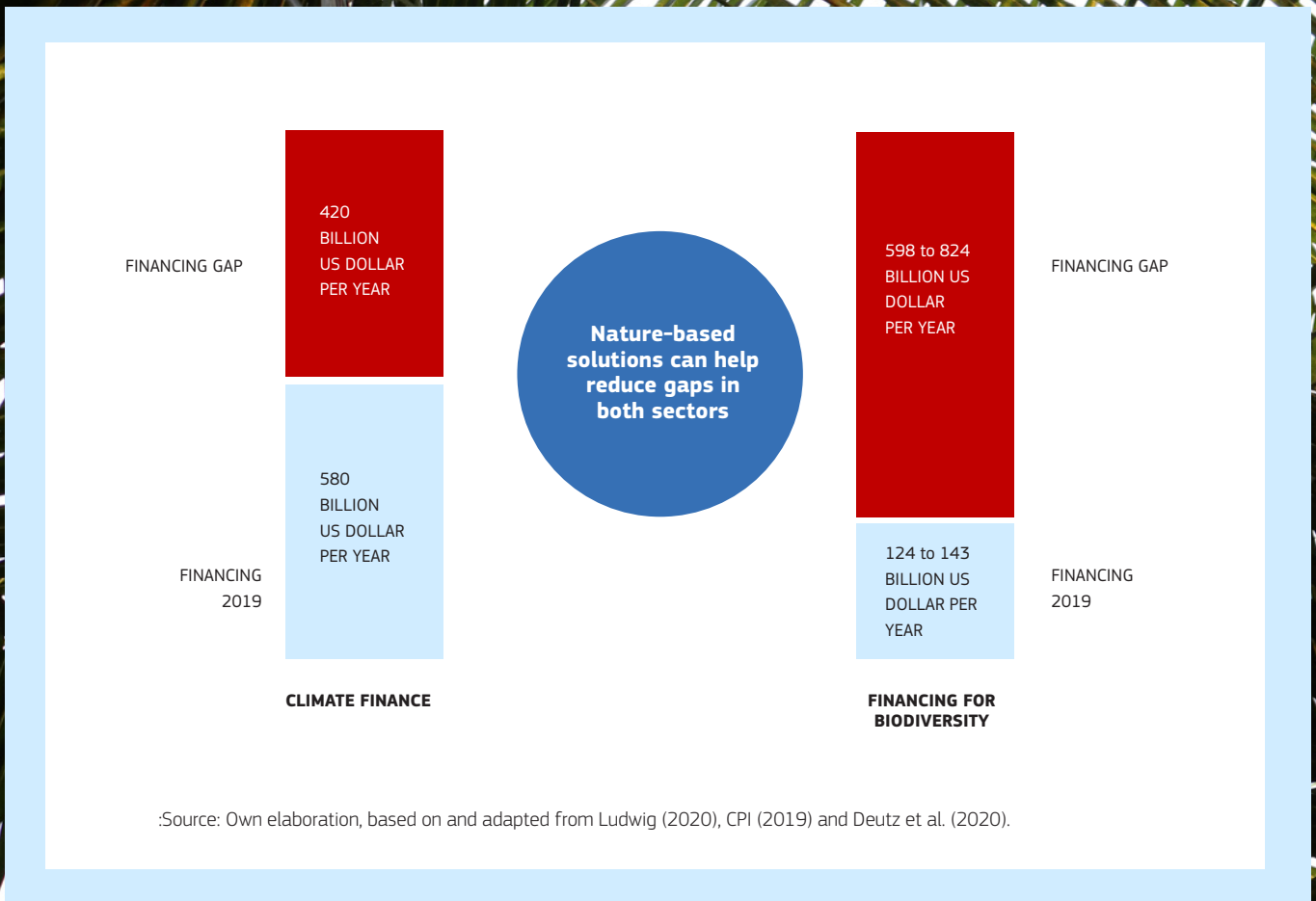
In 2019, the global climate financing gap was close to USD 420 billion, or roughly 50% of financing needs. In this same year, the financing gap for biodiversity was estimated at between USD 598 and USD 824 billion per year; that is, approximately 83% of financing needs (CPI, 2019; Deutz et al., 2020). The financing of NbS to address various challenges, including those associated with climate change and biodiversity, could contribute to closing the financing gap in both sectors.

According to a recent United Nations Environment Programme publication (UNEP, 2021), approximately USD 133 billion is invested in NbS annually. 86% of this investment comes from public resources, mainly to finance forest and wetland restoration, water conservation, regenerative agriculture and pollution control with natural systems. The remaining 14%, which comes from private resources, is directed mainly to agriculture and forestry supply chains. According to this publication, investments in NbS should triple by 2030, and quadruple by 2050.

With respect to Latin America and the Caribbean, Marsters et al. (2021) analyzed 156 representative NbS projects implemented in the region. Of these, 50% depend heavily on national public funds. Similarly, 82% are implemented by national or local governments, or local, national and international NGOs.

Even though NbS are recognized measures for addressing various challenges, the public resources for financing them are limited. Moreover, non-reimbursable public financing can be irregular, which makes it difficult to realize NbS projects in all their phases (Marsters et al., 2021).

It is clear that, in order to meet the NbS investment targets and close the gap, it is crucial to secure financing from the private sector. However, in order to obtain these investments, it is necessary to have regulatory and planning frameworks in place to facilitate this, as well as investment incentives. Additionally, due to their complexity, investments in NbS projects involves risks that would be difficult to fully assume by the private sector.



## Recommendations for NbS promoters:

- Incorporate NbS in the planning and execution of projects across development sectors. To this end, Ozment et al. (2021) recommend following the guidelines of the Inter-American Development Bank (Silva et al., 2020), the World Resources Institute (Browder et al., 2019) and the International Union for Conservation of Nature (Cohen-Shacham et al., 2019). This also implies formulating strategies to move away from policies that are not aligned with these goals and that are detrimental to NbS (for example, harmful subsidies).
- Dedicate resources and efforts to establish the necessary supporting policies, regulations and incentives to promote the financing of NbS, as well as mechanisms that reduce and mitigate the risks associated with these investments with co-financing (Deutz et al. 2020). Some of these are instruments that are already widely accepted and used, such as green bonds, and some are more innovative, such as mixed financing through concessional loans or parametric insurance.<sup>4</sup> Likewise, financing and associated risks can be diversified through the formation of consortia, funds and trusts (Marsters et al. 2021).

In the Inter-American Development Bank publication “Soluciones basadas en la naturaleza en América Latina y el Caribe” [Nature-based solutions in Latin America and the Caribbean], Ozment et al. (2021) identified that, of the 156 NbS projects analyzed, close to 47% are in their operational phase, and 53% of these are preparing and obtaining financing for feasibility studies, participation of stakeholders and business plans. The study mentions that 35% of the projects in preparation require funds to move from concept to planning, and 17% are testing NbS on a small scale and seeking financing for long-term implementation. Of the total number of projects in operation, a third of them are looking for capital to achieve full-scale operation.

This financing deficit for the preparation of NbS projects may be due, in large part, to the lack of information on their impacts

and socioeconomic and financial profitability. Unlike gray infrastructure projects, NbS projects are characterized by greater uncertainty regarding the effects of their implementation. It is necessary to estimate the changes that NbS generate in ecosystems and their services, which implies understanding the impacts resulting from complex ecological processes, and their effects on socioeconomic systems. This data is often unavailable or requires primary collection, making it difficult to attract financing, especially for the planning and design stages where the problem to be addressed by the NbS is identified and defined.

Moreover, these impacts generally materialize in the long term, which is not an attractive condition, especially for private sector financing, limiting possible financing sources.

<sup>4</sup> To learn more about some of the mechanisms used to finance NbS, see the publications: “The Blended Finance Playbook for Nature-based Solutions” (Earth Security, 2021), “Bankable Nature Solutions” (WWF, 2020) and “Soluciones basadas en la naturaleza en América Latina y el Caribe. Mecanismos de Financiación para la replicación regional” (Marsters et al., 2021).



## Recommendations for NbS project promoters

- Recognize and value the cost-benefits associated with NbS compared to their alternatives. This implies understanding the value of ecosystem services, the changes in the benefits of these services with the implementation of NbS measures and how these changes are reflected in costs or socioeconomic benefits and their distribution. Despite the difficulties in obtaining data for the design and evaluation of NbS, there are different methodologies for estimating costs and benefits in terms of ecosystem services<sup>5</sup>. Due to the inherent challenges in the application of these methodologies, such as uncertainty and lack of linearity in ecosystem processes, we recommend transparency in the assumptions used, as well as conducting sensitivity studies and assessments of the scenarios that arise. In the assessment process, it is important to highlight the data on the performance of the NbS measure, as well as, when appropriate, the financial returns and/or savings that will be realized with implementation.
- To promote the generation of data for assessing the effectiveness of NbS measures, it is not only necessary to collect and systematize data on the impacts of the actions in the long term, but also support and even finance the work of institutions dedicated to collecting the primary data that makes it possible to assess the costs and benefits of the measures with greater precision (Deutz et al. 2020), as well as the development of capacities of NbS project developers.



Photo: ANAMMA

- The design of NbS projects should include information of interest to the potential funders of the different project phases. It is important that promoters of NbS projects develop capacities for the formulation and design of financeable NbS projects. For example, the “Forests, Biodiversity and Ecosystems” sector of the EUROCLIMA+ program, together with the INCAE Business School, taught the course “Formulation of financeable projects in the area of Forests, Biodiversity and Ecosystems for the implementation of NDCs in Latin America” aimed at public sector officials in different Latin American countries. Among the modules, the course offered a module on the valuation of natural capital for projects associated with biodiversity and climate change, and its inclusion in cost-benefit analyses for decision-making.
- It is important to recognize that the impacts of climate and biodiversity crises are already being felt and represent significant risks to the stability of socioeconomic systems. For example, the World Economic Forum points out that half of the global Gross Domestic Product depends on ecosystem services (WEF, 2020). Thus, the lack of action to promote solutions that sustainably maintain and use ecosystems implies serious damage to global economies and human welfare. In cases where comprehensive and robust data on the effects of NbS is not available, waiting to obtain it may be ineffective. Adapting and applying the recommendations made in the “Transitioning to a net zero and nature positive economy” (Mugglin, 2022) suggests that decision makers adopt a precautionary approach. This approach may be perceived by private funders as presenting risks for investment. In these cases, it is important to employ co-financing approaches and mechanisms that allow government stakeholders to mitigate these risks to catalyze capital.

<sup>5</sup> There are a lot of online resources on economic valuation methodologies for ecosystem services. Among them is the Navegador de Métodos del proyecto ValuES (GIZ), which has an interface to filter the applicable methods according to the specific context of the project and the associated decision making ([http://aboutvalues.net/es/method\\_navigator/](http://aboutvalues.net/es/method_navigator/)).



Finally, an important part of the criticism of the NbS approach that has generated controversy over the financing of NbS measures is the lack of clarity concerning what constitutes an NbS. For example, the term has been used erroneously in the financing and implementation of mitigation projects for monoculture reforestation with exotic species, which compromises climate change adaptation and carbon storage and results in negative impacts on biodiversity and sustainable development (Seddon et al., 2019). Similarly, there are various projects that fail to consider the dynamics of ecosystems and their impacts on the well-being of the people who depend on them, such as the restoration of mangroves without considering the dynamics of ecological systems, erosion and sedimentation (IUCN, 2020b).

Unfortunately, this has sometimes resulted in financing the implementation of measures that do not qualify as NbS and, in many cases, has been used to create a misleading image of environmental responsibility (greenwashing).

### Recommendations for NbS project promoters

- To promote the implementation and financing of NbS that meet globally recognized parameters, we recommend following **the IUCN Global Standard for Nature-based Solutions** (IUCN, 2020a), as well as the application guide (IUCN, 2020c). It should be remembered that, in addition to providing solutions for different socioeconomic problems, the core of NbS is the conservation and/or sustainable use of ecosystems.
- NbS projects do not necessarily have to start from zero. Countries already have climate and biodiversity targets in place, with projects in their development plans and other planning instruments that can already be considered NbS or have the potential to become NbS projects. Thus, we recommend reviewing the methodology proposed by Luna and Villate (2022) to identify NbS in NDCs. Similarly, in the case of biodiversity targets, the biodiversity strategies and plans (Convention on Biological Diversity - CBD implementation instruments) can be revised to adopt an NbS approach. With climate and biodiversity actions, it is more likely that data will be available to facilitate planning, as well as financing for the initial phases. It is even possible that resources have already been allocated for the development of some of these projects.
- It is essential to be attentive in the design stages to ensure that projects satisfy NbS criteria. When defining an NbS project, the problem to be addressed should be clearly defined, as well as the specific impacts of the project on ecosystems and socioeconomic systems, in addition to establishing measuring and monitoring indicators. This allows potential funders to ensure that resources will be allocated to pursue projects that satisfy NbS criteria and avoid greenwashing.



In the publication **“Nature-based solutions in the NDCs of Latin American and Caribbean countries: classification of commitments for climate action”**, Luna and Villate (2022) provide a summary of the NbS approach, defining what can be considered (or not considered) and NbS approach. They provide an analysis of NbS for climate action in the NDCs of 16 countries that participate in the EUROCLIMA+ program. The document provides a classification system to facilitate the analysis of NbS in the NDCs of LAC countries, allowing for the identification of actions that are already in climate policy governing documents to allocate funding.

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