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SAFFE TECHNICAL NOTE

# Unlocking Nature-Based Solutions to Accelerate Climate Finance in Fragile and Conflict-Affected Settings

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SAFFE
Scaling Adaptation Finance in Fragile Environments

SPF STATE AND PEACEBUILDING FUND

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Accelerating Nature Based Solutions in Least Developed Countries

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# Table of Contents

**Acknowledgments** ..... 1

**Executive Summary** ..... 3

**Section 1: Introduction** ..... 13

**Section 2: Background and Context** ..... 16

**Section 3: Analyzing Financing for NbS and Climate** ..... 24

**Section 4: Barriers to scaling access to NbS finance for adaptation in FCV-affected settings** ..... 30

**Section 5: Opportunities and entry points to scale NbS finance and implementation** ..... 40

**Section 6: Takeaways and Recommendations** ..... 50

**ANNEX 1. High-level analysis of NbS finance data from publicly available sources** ..... 53

**ANNEX 2. Summary of interviews with key Bank staff** ..... 60

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# Executive Summary

**Conflict, environmental degradation, and disasters caused by natural hazards are becoming increasingly frequent and threaten to reverse development gains**.[1] This has been already recognized and documented, including in the World Bank Group Strategy for Fragility, Conflict, and Violence (FCV) 2020-2025, which identifies the role of climate change as a driver of FCV and a threat multiplier as well as the need to address the environmental impacts in tandem with drivers of FCV. In the past decade, violent civil conflict has tripled, the number of people living in proximity to conflict has almost doubled, and forced displacement is at a record high. Extreme weather events have increased five-fold over the past 50 years and slow-onset gradual climate change effects are increasingly threatening the livelihoods of resource-dependent populations globally - an estimated 80% of the world's poor live in rural areas and have livelihoods that depend on fast degrading natural resources. By 2030, two-thirds of the global extreme poor will live in countries impacted by FCV and climate impacts could push over 130 million additional people into poverty. By 2050, an estimated 216 million people could become internal climate migrants and potentially destabilize different regions.[2]

**Scaling up climate change adaptation in FCV affected settings is critical to address compounding risks of climate change, conflict, and increased fragility.** 67% of FCV affected settings are Least Developed Countries (LDCs) and Small Island Developing States (SIDS), who often have low adaptive capacity and lack the resources to respond to climate change impacts.[3] In addition, when ecosystems are disrupted, so are important ecological processes that are foundational to the health and well-being of communities. This, can increase the climate risks faced by communities in terms of loss of livelihoods and income, interrupted supply chains, forced migration, disease, and food insecurity.[4] Without joint actions to consider and address the drivers of environmental degradation and biodiversity loss alongside more traditional root causes of insecurity, a vicious cycle can emerge where nature loss exacerbates the drivers of instability, which, in turn, contributes to further environmental degradation both directly and indirectly.

**NbS have great potential to contribute to climate change adaptation while promoting sustainable development and peacebuilding throughout the cycle of conflict.** Transparent and sustainable natural resource management can improve peacebuilding measures by enhancing basic services' delivery, improving livelihoods and resilience to shocks, reducing competition for resources, and promoting inclusive governance. By protecting the environment, NbS can contribute to addressing and preventing conflict-linked environmental damage as well as to overcoming the risk of resource crises resulting from conflict, particularly in the face of future climate stresses.[5] Sustainably implemented NbS can also provide 37% of climate change mitigation needs until 2030 to meet the Paris Agreement goals,[6] generating co-benefits for biodiversity and ecosystem conservation,

[1] World Bank (2022). Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace,
[2] Potentially affected regions include those across Sub-Saharan Africa, South Asia, North Africa, Latin America, and Eastern Europe and Central Asia.
[3] Mercy Corps (2023). Overcoming the Fragility Barrier: Policy Solutions for Unlocking Climate Finance in Fragile States. Washington, D.C.: Mercy Corps.
[4] IISD Article "A Natural Path to Conflict Prevention: Unpacking the nature–security nexus", November 2022.
[5] International Union for the Conservation of Nature (2021), Conflict and Conservation. Nature in a Globalized World Report No.1.
[6] IPBES (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

food and water security, and creating synergies with multiple SDGs. NbS also offers opportunities for high-return investments in adaptation through reduction of future losses and risks, increased productivity, and social and environmental benefits.

**However, current investment in NbS represents only a third of the levels needed to reach climate, biodiversity, and land degradation targets by 2030 and is significantly outweighed by public and private nature-negative finance flows**.[7] Despite the urgent need for action and growing commitments, public sector NbS finance only increased 11% relative to 2021 levels, while private NbS finance flows increased by 10% mostly due to growing biodiversity offset markets, sustainable supply chains and impact investment.[8] In order to meet Rio targets, annual NbS investments need to almost triple from US$200 billion to US$542 billion by 2030. NbS provide cost-effective opportunities to deliver on the Rio targets, especially for initiatives focused on protection, sustainable land management and restoration. However, this investment potential can be undermined by finance flows of almost US$7 trillion with direct negative impacts on nature. Environmentally harmful subsidies have increased 55% since 2022, despite government commitments, driven mostly by fiscal support for fossil fuel consumption, which represents an investment 10 times greater than public finance flows to NbS.[9]

**Despite their heightened vulnerability to climate change, FCV-affected countries receive significantly lower amounts of climate finance compared to other low-income contexts.** Recent research conducted by the FCV Group at the World Bank, found that although adaptation finance is vital to helping countries deal with the impacts of climate change (especially for those affected by FCV), in 2020, per-capita commitments across major funders in FCV affected settings were less than two-thirds of those to other low-income countries (USD $4.85 and $7.17 respectively). The same trend is observed when analyzing financial flows amongst adaptation financing to biodiversity positive activities, including NbS. Similarly, other estimates suggest that within Africa, 20 countries identified as being in fragile and conflict affected situations (FCS) only received a combined 35% of the entire continent's adaptation finance.[10]

**Finance for NbS is crucial in settings affected by FCV due to several interlinked factors.** Firstly, many conflicts and drivers of fragility in these regions are intricately tied to natural resources, making effective natural resource management essential for peace and stability. Secondly, FCV countries are highly vulnerable to climate change, which exacerbates existing vulnerabilities and pressures on resources. Thirdly, the interaction between climate change and drivers of FCV compounds these challenges, creating a vicious cycle of instability and environmental degradation. NbS offer a vital approach to managing natural resources sustainably, as properly designed interventions can address the root causes of conflict while simultaneously increasing resilience to climate change. NbS also offers entry points to supporting access to climate finance in FCV affected settings where technical capacities are generally low and where co-benefits can be maximized. However, countries affected by FCV face significant challenges in accessing the necessary finance for NbS – therefore, overcoming these barriers is critical to enable FCV affected settings to implement NbS

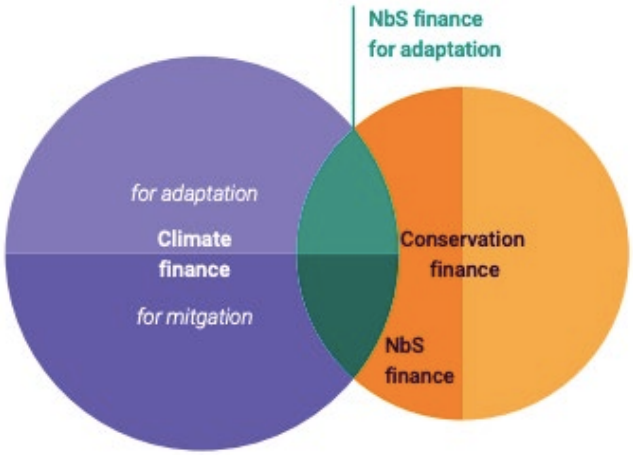
[7] UNEP (2023). State of Finance for Nature 2023.
[8] Ibid.
[9] Ibid.
[10] GCA and CPI (2023). State and Trends in Climate Adaptation Finance 2023

effectively, helping them build climate resilience and breaking the cycle of conflict and environmental degradation.

**The main objective of this working paper is to present preliminary findings about the relevance of NbS for building climate resilience in FCV affected settings, discuss the status of climate finance related to NbS and outline key barriers, opportunities, and recommendations to scaling NbS and/or climate finance in FCV affected settings/countries.** This analysis is to be understood as an ongoing effort that draws from existing literature and data, as well as interviews with key World Bank staff members. It is meant to provide high-level recommendations on actions that can be taken to accelerate access to finance, as well as hone-in on key issues that may be unique to NbS. Emphasis is placed on identifying relevant barriers and entry points to scaling access to climate finance in support of NbS in fragile and conflict-affected settings (or similarly how NbS-related finance can advance adaptation outcomes in these settings). This includes public financing from bilateral and multilateral sources, but also the potential for private finance to play a role.

**NbS finance is generally nestled in the intersection of climate finance and conservation finance.** Thus, both "adaptation finance for NbS" and "NbS finance for adaptation" can be scaled up to build resilience in FCV-affected settings.[11] These two sources of finance face similar challenges, primarily related to the inherent characteristics of adaptation and NbS projects. However, they also present overlapping opportunities albeit with some distinctions. For instance, adaptation finance can scale up NbS implementation by leveraging funds allocated for infrastructure, disaster risk reduction or ecosystem-based adaptation. Conversely, NbS finance for adaptation can tap into biodiversity finance or environmental, social and governance (ESG) financing, unlocking additional funding opportunities. In both scenarios, mitigation finance plays a supportive role, bridging gaps, providing co-benefits and enhancing efforts to build resilience in FCV-affected settings.

**Figure ES - 1. Relationship between NbS finance, climate finance and conservation finance.**




***Source: UNEP 2021.***

Accelerating "adaptation finance for NbS" and "NbS finance for adaptation" to help close the climate funding gap in FCV affected settings will require addressing existing barriers that currently hinder public and private investment:

[11] UNEP (2021). Adaptation Gap Report 2020. Nairobi

- **Political and Regulatory barriers:** Adaptation and NbS finance can be deterred by regulatory frameworks in recipient countries that fail to create conducive conditions and incentives for such investments and inadequate legal frameworks around land tenure and resource rights that complicate NbS implementation. These difficulties can be compounded by FCV, where the national government may not have control over some portions of the territory or where there is limited enforcement of regulation or standards, creating concerns among funders over the sustainability of investments. NbS investment in FCV affected settings can also be hindered by limited political will to prioritize NbS, stemming from competing incentives, limited fiscal space, and the need to address more urgent or basic priorities or pursue opportunities that could provide immediate economic gains. In addition, the lack of integration of NbS and adaptation in national development and climate policies may fail to secure national funding as well as to provide signals to international funders about the strategic importance of NbS to promote their implementation. The lack of a conducive regulatory and policy framework for NbS investment is particularly relevant for the private sector, which is often driven by the incentives generated through the policy environment and where investors seek regulatory stability, enforceable laws, and the protection of property/land rights, among other factors.[12]
- **Institutional barriers: :** These types of barriers generally arise from limitations in the capacities, arrangements, and processes of public and private institutions.[13] In FCV affected settings, government institutions are often underfunded, understaffed, battle with limited specialized climate knowledge and skills, face competing priorities, and institutional capacities need to be directed to shorter-term and more urgent action to address the consequences of conflict, rather than on longer-term measures to strengthen climate resilience and biodiversity positive activities.[14] This creates important obstacles for designing and implementing NbS interventions, mobilizing finance for their implementation, and managing financial resources in line with donor requirements to mitigate fiduciary risks. Institutional barriers also relate to limited capacities from international donors to manage compound climate-conflict risks due to a lack of long-term strategies and policies that link climate change to conflict and fragility and, lastly, limited private sector expertise and experience in NbS, which creates challenges to identify NbS investment opportunities or business applications.
- **Information barriers:** Knowledge and data gaps in a specific context or location (including climate risks but also basic socioeconomic data, among others), can significantly hinder the design of effective NbS projects. In FCV affected settings, minimum socioeconomic data, past and current climate data, or spatial analysis required for project proposals is often lacking and/or difficult to produce due to conflict limitations. For example, meteorological stations may not be sufficiently maintained because of stretched national hydrometeorological services, fail to be operative because of conflict, or armed groups may prevent access to areas to conduct assessments required to develop funding applications.[15] These barriers also include the lack of reliable information on the returns and impacts of NbS projects to demonstrate additionality and attribution to attract private sector funding.

[12] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report
[13] Druce et al. (2016). Demystifying Adaptation Finance for the Private Sector. UNEP Finance Initiative
[14] ICRC (2021). Working together to address obstacles to climate finance in conflict and fragile settings. Discussion Paper. https://www.icrc.org/sites/default/files/topic/file_plus_list/discussion_paper_on_climate_finance_0.pdf
[15] Cao et al. (2021). Exploring the Conflict Blind Spots in Climate Adaptation Finance.

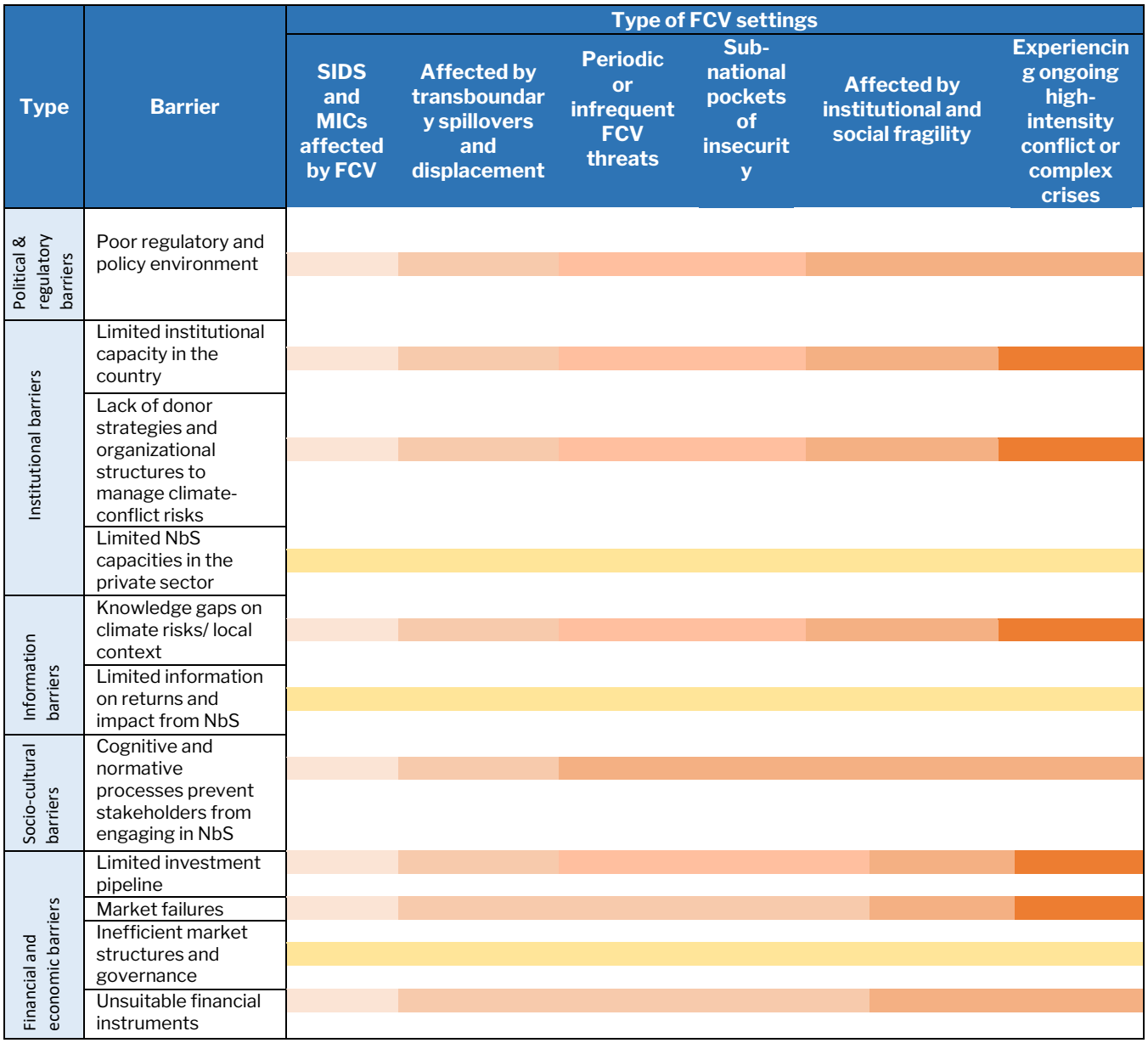
- **Socio-cultural barriers:** Cognitive and normative processes can prevent stakeholders from engaging with NbS, influenced by local values, beliefs, and perceptions of risk. Social and cultural barriers may also develop from issues associated with equity, access, and power, as well as from values associated with natural resource management or attachments to certain ways of life, and perceptions that adaptation solutions may be maintaining structural inequities related to land rights, gender, or ethnicity.[16] For example, in FCV settings, cultural values and priorities at the local level that differ from those of donors or funders, create a mismatch between available financing mechanisms and community needs. This may lead to a reluctance to support external interventions and adopt NbS projects that are not aligned with local values and traditional practices, especially if locals perceive associations with national government or companies that may exploit or take away their rights and access. Social and cultural barriers are often overlooked but can result in significant challenges for implementing and securing financing for NbS interventions when they are not adequately understood and addressed. In FCV settings, failure to address these barriers could create, reignite or exacerbate conflict.
- **Financial and Economic barriers:** These barriers are related to market failures and inadequate development and deployment of financial resources that prevent investment in NbS, particularly from the private sector. Market failures result in a disconnect between the beneficiaries of action and the parties that bear the cost, leading to a scarcity of finance available for adaptation projects (including NbS).[17] For example, the public good nature of NbS can deter financing from the private sector as investors carry the costs while the benefits are public.[18] In addition, the benefits of NbS investments usually manifest over long timeframes, projects may not offer tangible goods and services and often involve high upfront investments with long payback periods, which creates a mismatch with short-term horizons of private investors. These barriers also include inadequate financial instruments, lack of investment pipelines and market structures that discourage investment or complicate deploying capital for NbS.

**While FCV exacerbates the barriers to access and scale up NbS finance for adaptation, FCV-affected settings come in different forms, with some settings posing greater challenges than others. Different FCV settings can be identified based on different degrees of security, social cohesion, capacity, and legitimacy in a country.** For example, in settings affected by ongoing high-intensity conflict, political priorities are likely to focus on addressing immediate security needs rather than on promoting longer-term climate objectives. This contrasts with settings affected by institutional fragility, including in middle-income countries (MICs) or SIDS, where the risk of conflict is often much lower and there are stronger opportunities to support longer-term priorities and private sector engagement. Other barriers stemming from private sector actors or occurring at the global level, such as limited NbS capacities in the financing sector or inefficient market structures and governance, may be less sensitive to different FCV contexts. Figure ES-2 depicts how different FCV contexts may affect the intensity of the various types of barriers, however it

[16] Shackleton et al. (2015). Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. WIREs Clim Change, 6:321-344. doi: 10.1002/wcc.335
[17] Arame T. et al. (2021). Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action. World Bank, Washington, DC.
[18] Pauw (2015) Not a panacea: private-sector engagement inadaptation and adaptation finance in developing countries, Climate Policy, 15:5, 583-603, DOI: 10.1080/14693062.2014.953906

should be noted that the FCV settings are illustrative as many countries will be affected by more than one type of FCV context and these are not mutually exclusive.

**Figure ES - 2. Illustrative depiction of how different FCV contexts may affect the intensity of barriers.**




*Note: The FCV settings are illustrative as many countries will be affected by more than one type of FCV context and these are not mutually exclusive. The yellow color illustrates barriers that may not be sensitive to different FCV contexts.*

**Based on the extensive literature review undertaken and the insights collected from interviews held with key Bank staff members, a range of opportunities and entry points - specifically directed to address the identified barriers - have been selected for leveraging NbS finance for adaptation in FCV affected settings**. These are summarized in the table and text below.

**Table ES - 1. Areas of opportunities and entry points and barriers addressed.**

| Areas of opportunities and entry points | Barriers | | | | |
|---|---|---|---|---|---|
| | Political and regulatory | Institutional | Information | Socio-cultural | Economic and financial |
| Promoting environmentally and socially-sound interventions in the context of evolving FCV | | | | | |
| Embedding NbS into broader development programs and public-private partnerships to support national objectives | | | | | |
| Increasing conflict-sensitive climate programming, coordination and collaboration | | | | | |
| Considering synergies and complementarities between different private sector sources | | | | | |
| Using conflict-sensitive blended finance structures to implement NbS at scale | | | | | |
| Strengthened policy environments, market reforms and sustainable business models that capture the full range of value of NbS | | | | | |

- **Promote environmentally and socially-sound interventions in the context of evolving FCV:** this area mostly relates to the importance of considering the different FCV contexts to develop targeted NbS approaches to increase climate resilience. It also refers to the need to ensure NbS are context specific and respond to needs and realities on the ground, for example, considering customary laws, listening to local knowledge, and engaging marginalized groups. Lastly, it is also critical to ensure that NbS are set up as integrated approaches that ensure social and environmental integrity and strengthen trust from stakeholders, donors, and investors. Robust safeguards, standards, and guidance for NbS are critical and should be further developed, refined, and applied to ensure that NbS are implemented in ways that are effective, gender-responsive, transparent, and consensual.
- **Embed NbS into broader development programs and public-private partnerships (PPP) to support national objectives:** Recognizing the dependency of economies on natural resources is key to find ways to pursue economic development in ways that avoid depletion of nature. This approach can be operationalized, for example, through the integration of NbS into infrastructure programs (e.g., green-grey solutions), or into social impact programs (e.g., community approaches combining NbS projects with social protection and disaster risk management). PPPs can also support the integration of NbS into wider development programs, for example, by requesting the integration of green infrastructure and NbS options in project designs.
- **Increase conflict-sensitive climate programming, coordination, and collaboration:** International public finance can tackle issues related to limited information on climate risks and NbS by providing technical assistance, improving understanding of climate change risks in specific geographical areas and funding pilot projects.[19] It can also support

[19] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report

private sector engagement and help improving financial expertise for project development, providing advisory services tailored for conflict-sensitive project design and convening different key actors to design bankable NbS projects. Similarly, improved conflict assessment and management through internal capacity building is critical to increase private sector participation in this space and can help assessing and managing the risks arising from conflict, improve risk assessments to reflect complex climate and conflict dynamics, and provide clearer guidance on risk mitigation and sharing that includes participation of climate, conflict, and peacebuilding experts. Lastly, the general lack of dedicated approaches and targets of International Financial Institutions (IFIs) that specifically focus on FCV contexts and integrate conflict-sensitivity analyses as part of their investment models is an important barrier to be overcome.[20] Establishing accessible funds with lighter administrative processes, adaptive programming, and flexible requirements (including the eligibility of smaller projects) can provide avenues to channel finance for NbS that reflect the needs of FCV affected settings.[21]

- **Create synergies and complementarities between different private sector sources to scale up private finance for NbS:** A recent review of the NbS market found that there is indeed a growing interest and engagement opportunities for institutional investors in this space.[22] Opportunities also include the use of insurance for asset protection, liability reduction, and facilitation of capital inflow from financial markets[23], as well as the integration of NbS into corporate practices to strengthen supply chains reliant on ecosystems/natural resources, reduce operational or reputational risks, capture price premiums or support the implementation of Corporate and Social Responsibility (CSR) Strategies.[24] Philanthropic sources of private financing offer a great deal of opportunity because when tied to public finance in certain contexts, they can help create the enabling conditions to mobilize NbS investment from other private sector sources. In addition, creating portfolios of bundled NbS or adaptation projects that catalyze improved governance and benefit livelihoods can also increase the interest of private investors.[25]
- **Utilize conflict-sensitive blended finance structures to implement NbS at scale:** Due to the public good nature of many nature-based investments, grants from public finance remain crucial to support NbS in FCV affected settings and are still the largest tool to promote the growth of NbS. Financial instruments currently used by public and private entities to support nature-based projects include market-rate loans, concessional loans and equity, however, there are others such as guarantees, and innovative debt instruments such as debt-for-climate or debt-for nature swaps, or thematic bonds and sustainability-linked bonds (e.g. blue and green bonds or biodiversity bonds)[26] that have not been extensively used yet. An interesting concept is that of Peace bonds where proceeds are applied solely to finance new or existing projects that achieve verifiable

[20] Ahairwe et al. (2022). Financing fragile contexts: what can development finance institutions do better?
[21] Cao et al. (2022). Embracing Discomfort: A Call to Enable Finance for Climate-Change Adaptation in Conflict Settings. Policy Brief.
[22] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class. https://finance.earth/wp-content/uploads/2021/05/Finance-Earth-GPC-Market-Review-of-NbS-Report-May-2021.pdf
[23] Cook,S.J. and Holliday,S.C (2022). Insuring Nature's Survival : The Role of Insurance in Meeting the Financial Need to Preserve Biodiversity (English). Washington, D.C. : World Bank Group.
[24] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe
[25] IISD (2023). Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries
[26] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.

peace outcomes.[27] Given the significant public debt burden in many FCV affected settings, the deployment of financing instruments with a level of concessionality that considers debt sustainability is critical to enable fiscal buffers that provide coping capacities for climate shocks.[28] Blended finance structures will also be an important tool to help mobilize finance for NbS. For example, grants could cover technical assistance, and concessional loans alongside equity could provide sufficient capital for implementation, while guarantees and insurance could provide additional safety to borrowers.

- **Strengthen policy environments, market reforms and sustainable business models that capture the full value range of NbS:** Without reducing financing of nature-negative activities (i.e. greening finance), actions to scale up investment in NbS (i.e. financing green) will be insufficient to tackle the climate, biodiversity and degradation crises.[29] Furthermore, unless a structural change in the markets in which NbS operate happens, the public good nature of NbS projects will remain a challenge for private sector engagement. This could be supported by providing positive incentives to private actors for producing the outcomes sought by policymakers or designing incentive structures that penalize entities that cause environmental harm or do not intentionally contribute to nature-positive related targets.[30] In addition, ensuring there is the right investment climate that offers stability and good governance is critical. National governments, with the support of bilateral donors and Multilateral Development Banks (MDBs), can stimulate investor appetite through public policies that reduce uncertainty, regulatory barriers and transaction costs for investors as well as enable PPPs and deploy financial tools that address the risk/return profile of NbS investments and generally strengthen the policy environment. Recognizing the full spectrum of benefits of NbS to economies and societies and creating value for companies and investors is key to unlock the full potential of NbS. Sustainable business model innovation (i.e., reorganizing incentives and revenue mechanisms to take full advantage of sustainable solutions) can result in higher returns than other types of business innovation and provide additional benefits in terms of risk and resilience.

**In summary, FCV-affected settings are especially vulnerable to the impacts of climate change, which can increase environmental degradation and intensify existing tensions and inequalities.** The international community increasingly recognizes NbS' potential to address societal challenges, however NbS remains underfunded and has yet to adequately address FCV settings. Therefore, it is critical to find innovative and effective ways to support NbS in FCV affected settings and scale up public and private finance. Considering the information presented in this working paper, main recommendations and takeaways that could be "first-mover actions" to enhance the current support being given in terms of technical assistance, financing, and others, could focus on the following areas:

- It is crucial that NbS projects supporting adaptation in FCV affected settings are conflict-sensitive, inclusive, and actively seek to mitigate causes of conflict to avoid widening

[27] Interpeace and SEB (2022). Peace Bonds – Feasibility study. Assessing the potential of a new asset class that can lower risk and enhance peace. Edition 1, January 2022, Geneva.
[28] OECD (2023). Development finance for climate and environment-related fragility: Cooling the hotspots, OECD Publishing, Paris
[29] UNEP (2023). State of Finance for Nature 2023.
[30] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.

inequalities that can exacerbate conflict. Oftentimes, the mere perception of inequalities is enough to trigger conflict.

- In order to close existing funding gaps, IFIs, MDBs and bilateral donors can improve capacities for project design, address information barriers, and foster coordination and collaboration between multiple actors.
- Linking nature positive activities with elements of social inclusion, cohesion, resilience, and process legitimacy[31] is an important element for the sustainability of NbS investments.
- The combination and strategic use of different financing instruments is key to scale the deployment of NbS.
- Private sector participation in NbS will be critical to increasing financing for nature-positive activities, however, not all private finance sources are the same and some sources have more immediate potential than others.

It should be noted that potential tradeoffs may arise when implementing NbS given that these interventions will require long term commitments that can affect the implementation of more urgent/pressing needs of FCV affected settings.

[31] The extent to which beneficiaries and stakeholders in general feel like the way in which an intervention has been designed is fair and reflects needs and realities of communities.

# Section 1: Introduction

**Conflict, environmental degradation, and disasters caused by natural hazards are becoming increasingly frequent threatening to reverse development gains.**[32] In the past decade, violent civil conflict has tripled, the number of people living in proximity to conflict has almost doubled, and forced displacement is at a record high. Disasters caused by natural hazards and environmental degradation have also increased and threaten to further exacerbate fragile situations and vulnerability in the immediate and long term. Extreme weather events have increased five-fold over the past 50 years and slow-onset gradual climate change effects are increasingly threatening the livelihoods of resource-dependent populations globally - an estimated 80% of the world's poor live in rural areas and have livelihoods that depend on fast degrading natural resources.[33] By 2030, two-thirds of the global extreme poor will live in countries impacted by Fragility, Conflict, and Violence (FCV) and climate impacts could push over 130 million additional people into poverty.[34] Additionally, by 2050, an estimated 216 million people could become internal climate migrants and potentially destabilize different regions.[35]

**FCV-affected settings are especially vulnerable to the impacts of climate change[36] which can increase environmental degradation and intensify existing tensions and inequalities**. An estimated 70% of the most climate-vulnerable countries are among the most politically and economically fragile and 60% of the 20 most vulnerable countries to climate change are in conflict. Environmental degradation, biodiversity loss, and climate change are relatively new security threats, and they are not considered agents who are intentionally trying to harm people; instead, they have been described as "actorless threats". When ecosystems are disrupted, so are important ecological processes that are foundational to the health and well-being of communities. This, in turn, can increase the climate risks faced by communities, such as loss of livelihoods and income, interrupted supply chains, forced migration, disease/sickness, and food insecurity. These risks are particularly acute in countries and regions affected by fragility and conflict, where livelihoods and economies are highly reliant on ecosystems and natural resources.[37] Without joint actions to consider and address the drivers of environmental degradation and biodiversity loss alongside more traditional root causes of insecurity, a vicious cycle can emerge where nature loss exacerbates the drivers of instability, which, in turn, contributes to further environmental degradation both directly and indirectly. Fragility, Conflict and Violence (FCV) can pose significant risks for the implementation and effectiveness of environmental, adaptation and mitigation interventions given their potential to result in significant political, economic, and security-related challenges. At the same time, FCV-related challenges can also weaken the ability of governments and communities to respond to climate change.

[32] World Bank (2022). Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace.
[33] Ibid.
[34] Ibid.
[35] Ibid. Potentially affected regions include those across Sub-Saharan Africa, South Asia, North Africa, Latin America, and Eastern Europe and Central Asia.
[36] 15 of the 25 countries that are most at risk of climate-related impacts are also on the World Bank's Fragile and Conflict-affected Situations (FCS) list.
[37] IISD Article "A Natural Path to Conflict Prevention: Unpacking the nature–security nexus", November 2022.

**Nature-based solutions provide opportunities to simultaneously address challenges from environmental degradation, biodiversity loss and climate change in FCV affected settings.** Nature-based solutions (NbS) are *"actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits"*.[38] NbS aim to address environmental challenges such as biodiversity loss, climate change, land degradation, desertification, disaster risks, and water quality and availability, while contributing to sustainable social and economic development. NbS are often explicitly targeted at more than one challenge, and able to deliver benefits across a range of goals. For example, NbS for adaptation, such as conservation and restoration of mangroves to help reduce coastal flood risk, if well designed and implemented, may also increase carbon uptake and storage, conserve biodiversity and provide opportunities for sustainable livelihoods.

**The key role of NbS has been increasingly recognized in policy discussions at the international level.** The last United Nations Convention on Biological Diversity (CBD) Conference (COP15) held in December 2022 in Montreal (Canada) culminated with a landmark agreement to guide global action on nature by 2030-The Kunming-Montreal Global Biodiversity Framework (GBF).[39] The GBF aims to address biodiversity loss, restore ecosystems, and protect indigenous rights. COP15 also mandated the establishment of a Special Trust Fund –the GBF Fund– managed by the Global Environment Facility to support the implementation of the GBF, in order to ensure an adequate, predictable and timely flow of funds. Additionally, during the recently held 28th Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC), it was formally recognized that nature was of critical importance to accelerate and achieve the goals of the Paris Agreement. This is evidenced by several references to ecosystem-based approaches and NbS in the decision relating to the Global Goal on Adaptation under the Paris Agreement. Alongside donors pledging commitments to biodiversity and new funding for NbS such as the US' 10m USD contribution to the Inter-American Development Bank's (IDB) Biodiversity and Nature-Based Solutions Grant Facility[40], innovative and nuanced discussions were held on making the most of nature's contributions from the local to national and transboundary scale. For example, Multilateral Development Banks (MDBs) issued a joint statement[41] that recognized the need to integrate action on climate change, biodiversity loss and pollution, and agreed on shared common principles for nature-positive finance. There were also numerous cutting-edge discussions on topics central to business interests, such as how insurance can rapidly respond to climate events in marine and coastal ecosystems.

**However, NbS implementation and finance remain limited, particularly for FCV-affected settings.** Despite increasing commitments by governments, the private sector, and finance institutions for scaling up ambition in NbS, securing the investments needed to implement and sustain them poses a major challenge.[42] It is estimated that by 2030, investments in NbS will need to at least triple to meet global climate change, biodiversity and land degradation

[38] UNEA Resolution 5, March 2022.
[39] UNEP story/press release, December 2022.
[40] News release "U.S. Government Announces Enhanced Partnerships with IDB for Latin America and the Caribbean", November 2023.
[41] COP28 Multilateral Development Banks (MDB) Joint Statement, December 2023.
[42] United Nations Environment Programme (2021). Adaptation Gap Report 2020, Nairobi.

targets.[43] FCV-affected countries receive significantly lower amounts of climate finance compared to other low-income contexts. For example, in 2021, the ten most fragile states, received less than 1% of the total adaptation finance mobilized in that same year.[44] In addition to funding availability, important gaps remain in understanding specific barriers and opportunities for increasing finance for NbS implementation in FCV affected settings.

### Purpose and scope of this background note

**This background note is part of a wider research program aimed at identifying barriers and opportunities to scaling adaptation finance in FCV affected settings, which is part of the World Bank's Scaling Adaptation Finance in Fragile Environments (SAFFE) activity (Box 1).** Findings outlined in this note draw on (1) existing literature on this and related topics, (2) previously completed SAFFE research and (3) interviews with WB staff members with experience in relevant topics and projects (see Annex 2 for more information on these interviews).

**Box 1. Scaling Adaptation Finance in Fragile Environments (SAFFE)**

SAFFE seeks to tackle the adaptation finance gap found in FCV affected settings by increasing the capacity of funders and recipients to scale up commitments and distribution of adaptation finance in FCV settings. SAFFE activities focus on three priority areas:

i) Generating cutting-edge research on critical knowledge gaps
ii) Bringing key stakeholders together to identify innovative ways of working.
iii) Getting new ideas off the ground by providing dedicating time and resourcing.

**The main objective of this note is to present preliminary findings about the relevance of NbS for building climate resilience in FCV affected settings, while helping to break the cycle of conflict and environmental degradation, discuss the status of climate finance related to NbS and outline key barriers, opportunities and recommendations to scaling NbS and/or climate finance in FCV affected settings/countries.** This analysis is to be understood as an ongoing effort that draws from existing literature and data and is meant to provide high-level recommendations on actions that can be taken to accelerate access to finance, as well as hone-in on key issues that may be unique to NbS. Emphasis is placed on identifying relevant barriers and entry points to scaling access to climate finance in support of NbS in fragile and conflict-affected settings (or similarly how NbS-related finance can advance adaptation outcomes). This includes public financing from bilateral and multilateral sources, but also the potential for private finance to play a role.

**For this purpose, the note has been organized in six main sections**. The first three are focused on setting the tone and presenting the relevant context information (including a brief discussion on adaptation finance for NbS based on existing data and literature) that lead into sections 4 and 5 focused on understanding the overlapping barriers and entry points between adaptation and NbS finance that could help FCV-affected governments mobilize financing in a more efficient/effective way. Lastly, section 6 offers final key takeaways and recommendations.

[43] UNEP (2023). State of Finance for Nature 2023.
[44] Mercy Corps. 2023. Overcoming the Fragility Barrier: Policy Solutions for Unlocking Climate Finance in Fragile States. Washington, D.C.: Mercy Corps

# Section 2: Background and Context

**Recent global assessments estimate that about 75% of the planet's terrestrial and 40% of the marine environment have already been degraded.** Biodiversity loss and ecosystems degradation are accelerating due to a number of factors, including unsustainable resource extraction, demographic pressures, pollution, land- and sea-use change, invasive species, and climate change. When ecosystems are disrupted, so are the important ecological processes that humans rely on, including those that ensure the health and well-being of communities. This, in turn, can increase the risks faced by said communities, such as loss of livelihoods and income, interrupted supply chains, forced migration, disease and sickness, and food insecurity. These risks are particularly acute in countries and regions affected by fragility and conflict, where livelihoods and economies are highly reliant on ecosystems and natural resources.[45]

**Climate change is a global emergency that is expected to affect fragility, conflict, and peacebuilding efforts**. Global warming and the resulting changes to the natural environment pose a critical threat to humanity such as increased competition for resources (like fertile land and fresh water) which is already disrupting societies, exacerbating current conflicts, and fueling new ones. The climate crisis will put pressure on peace and prosperity, and complicate efforts to build peace in areas already affected by, and vulnerable to conflict. With the natural environment changing at an unprecedented rate, it is important to understand the impact of a changing climate on conflict and peacebuilding. And because no two conflicts are the same, it is critical to account for the specific issues in each situation. The impacts of the climate crisis manifest in multiple ways, so solutions are also diverse. Understanding the links between the climate crisis and conflict in each place is critical.[46]

**Box 2. Interactions between climate change, conflict and fragility**

Out of the top 25 most climate vulnerable countries, 19 are FCS.[47] In many FCS, climate change, conflict and fragility tend to interact, creating negative feedback loops that exacerbate social and economic development challenges. Climate change can intensify drivers of conflict (e.g., degradation of natural capital, food insecurity, migration), while conflict in turn can increase vulnerability to climate change by increasing environment-related displacement, interrupting basic services, damaging the physical and natural environment, and hindering the capacity of institutions and communities to adapt to climate change impacts. In addition to conflict, fragilities like heavy reliance on rainfed farming, inadequate infrastructure and weak policy buffers increase vulnerability to climate change because they compromise coping capacities and hinder efforts to build economic resilience. Furthermore, existing fragilities may prevent adequate responses in the case of extreme weather events.[48] Climate-related disasters can have a negative long-lasting effect in these contexts since countries have less capacity to rebuild, exacerbating existing fragilities.

**Climate change and extreme weather events challenge peace and security and its effects are widely acknowledged and increasingly well understood.** This is why governance bodies such as the United Nation's Climate Security Mechanism exist. The UN Development Program (UNDP) also plans to "climate proof" peacekeeping and stability in regions that have experienced conflict in past years. In addition, climate security has been extensively discussed at nine open debates at the UN Security Council since 2007, seven of which were

[45] IISD Article "A Natural Path to Conflict Prevention: Unpacking the nature–security nexus", November 2022.
[46] Conciliation Resources news article, Explainer: How is the climate crisis impacting conflict and peace?, May 2022.
[47] Mercy Corps. 2023. Overcoming the Fragility Barrier: Policy Solutions for Unlocking Climate Finance in Fragile States. Washington, D.C.: Mercy Corps.
[48] Jaramillo et al. (2023). Climate Challenges in Fragile and Conflict-Affected States. IMF Staff Climate Note.

held in the past four years. Adaptation and climate resilience building are critical for sustainable development and also have important benefits for peace, although they are not meant to replace traditional conflict resolution and peacebuilding programs. There is a clear short fall in adaptation planning in conflict situations and countries because adaptation plans often assume peaceful settings and fail to consider political contexts that may underpin local conflicts and be a major source of vulnerability. Yet, without peace, actions to address climate risks will be restrained, ineffective and possibly counterproductive. Therefore, in violent contexts, peacebuilding should be seen as the first and most crucial step toward addressing complex climate risks.[49]

**Box. 3 The Climate Security Expert Network (CSEN)**

The CSEN, comprising some 30 international experts based around the globe, is a hub for research on the linkages between climate and security, the effects of climate change on security and responses to these issues. CSEN supports the Group of Friends on Climate and Security and the Climate Security Mechanism of the UN system by synthesizing scientific knowledge and expertise, advising on entry points for building resilience to climate-security risks, and helping to strengthen a shared understanding of the challenges and opportunities of addressing climate-related security risks. The network is supported by a grant from the German Federal Foreign Office; the Secretariat of CSEN is run by the Berlin-based think tank Adelphi.
***Source:*** ***Climate Diplomacy***

**Rich habitats repeatedly fall under the shadow of violent conflict, despite only covering 2.3% of the Earth while hosting half of the world's endemic species.** Between 1950-2000, more than 90% of major armed conflicts took place in countries with biodiversity hotspots. Of these conflicts, 81% took place directly within a hotspot. Armed conflict directly and indirectly impacts the environment in ways that have long-lasting consequences for development. Violence directed at natural resources can appear to be acute and site-specific, but the impacts of conflict on environmental governing institutions, social and natural capital, and livelihood opportunities may be chronic and long-lasting. In a vicious cycle, armed conflict diminishes the assets that support resilience to political, economic, and environmental shocks, including climate change[50].

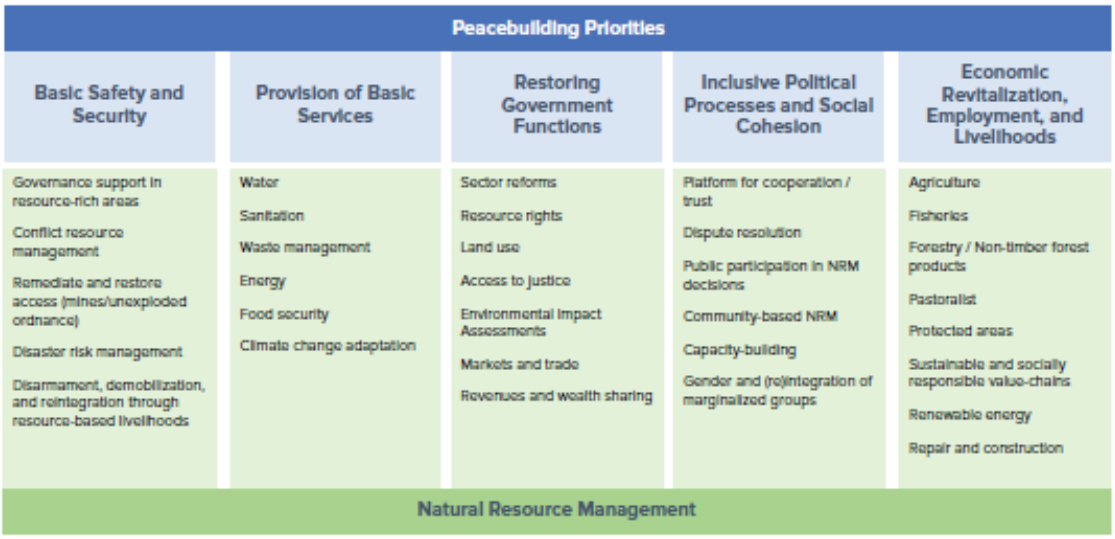
**At least 40% of all internal conflicts over the last 60 years have been linked to the exploitation of natural resources.** Frequently, conflict is a cause for environmental degradation and natural resources depletion, which leads to food and water insecurity, loss of livelihoods, and biodiversity loss among others. Similarly, competition over increasingly scarce resources can also increase tensions and conflicts. Whether increased competition over natural resources escalates into conflict depends on several risk factors, such as high natural resource dependence, inequality and marginalization, and a recent history of conflict - and each risk factor is exacerbated by climate change. In many conflict situations, natural resource stocks are being used to power countries. In any year from 1946 to 2008, at least 40% (and in some years as high as 65%) of all intrastate conflicts were triggered, funded, or sustained by natural resources. From 2014 to 2018, natural resources were a source of contention in 1 in 4 global crises and conflicts.[51] The negative impact of conflict on the environment is well understood but natural resources can also facilitate post-conflict peacebuilding and recovery and the protection of the environment can serve to build lasting and sustainable peace. Consequently, maintaining peace in fragile post-conflict societies requires consideration of natural resource management and governance, as conflicts

[49] Peace Research Institute Oslo (PRIO) (2022). Armed conflict and climate change: how these two threats play out in Africa.
[50] The World Bank (2022). Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace.
[51] Ibid.

involving natural resources have also been found to be twice as likely to relapse.[52] Without joint actions to consider and address the drivers of environmental degradation and biodiversity loss alongside more traditional root causes of insecurity, nature loss can exacerbate the drivers of instability, which, in turn, contributes to further environmental degradation both directly and indirectly.[53]

**FCV-affected economies are highly dependent on natural resources.** A 2014 evaluation of WBG assistance to low-income FCV countries identified that natural resources account for 28.5% of GDP in these countries or even as high as 60% in countries like Angola and the Republic of Congo. By contrast, the GDP from natural resource extraction in non-FCV countries is 7.1% on average. Agriculture is the largest sector in FCV countries (30% of GDP) and makes up 40 to 70% of total employment in countries exhibiting persistent fragility and/or conflict. When extracted natural resources provide a substantial part of a country's revenue or large portions of the population are dependent on land and renewable resources, special attention should be paid to the potential for changes in those resources to ignite conflict. In FCV affected settings various types of resources (renewable, nonrenewable, land, and water) interact with drivers of conflict and fragility differently. Therefore, investments in natural resource management, including restoration and preservation, need to consider the complex synergies between them and the drivers of conflict and fragility.[54]

**Figure 1. Linkages between natural resource management and peacebuilding**



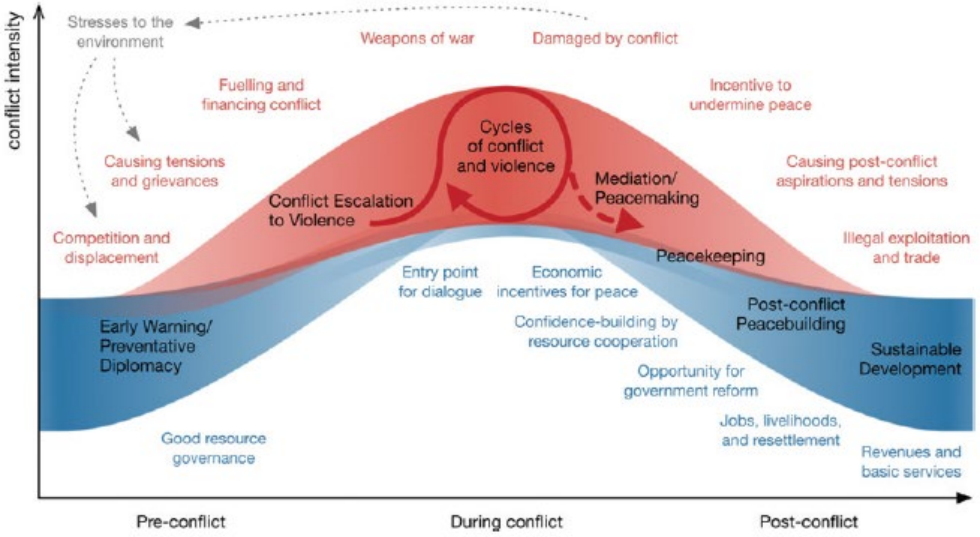

***Source: Adapted from UNDG and UNECHA, 2013. Reproduced with permission from UNEP (Defueling Conflict report, 2022, WB).***

**When identifying challenges and opportunities, it is important to differentiate between pre, during and post-conflict[55].** *Pre-conflict fragility* and its impacts on the environment are mostly related to insufficient state capacity to manage natural resources and adapt to climate change which poses threats to the environment. *Active conflict* and its impacts on

[52] Geneva Environment Group (2021). Nature-based Solutions and Peacebuilding | Geneva Nature-based Solutions Dialogues,
[53] IISD Article "A Natural Path to Conflict Prevention: Unpacking the nature–security nexus", November 2022.
[54] World Bank (2022). Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace.
[55] It should be note that thresholds aren't as clearcut in practice – pre/during/post conflict stages are meant to be understood as useful distinctions to conceptualize the different challenges and opportunities arising across the conflict cycle, but could also be defined as different environmental risks and opportunities identified across the conflict cycle.

the environment can result in direct and indirect impacts such as habitat loss and consistently negative effects on biodiversity; the use of natural resource revenues to finance armed conflict; the use of natural resources as a weapon of war to intimidate and weaken opposition and control populations living in contested areas; pollution due to the disruption and destruction of water, agricultural, industrial, and energy infrastructure; the diversion of capacity and resources from environmental governance and natural resource management to attend governance and rule of law issues; the undermining of social bonds and state-society relations. Lastly, *post-conflict* impacts on the environment can result in opportunities to (re)build resource systems that, otherwise, may be politically difficult; escalation of conflict over land tenure; and dependance on the extraction of natural resources to rebuild and generate government revenue, on average making up 50% to 80% of exports.[56]

**Figure 2. Environmental risks and opportunities across the conflict life cycle**




***Source: Schellens and Diemer 2020 adapting UNEP 2016. Reproduced with permission from author; further permission required for reuse (Defueling Conflict report, 2022, WB).***

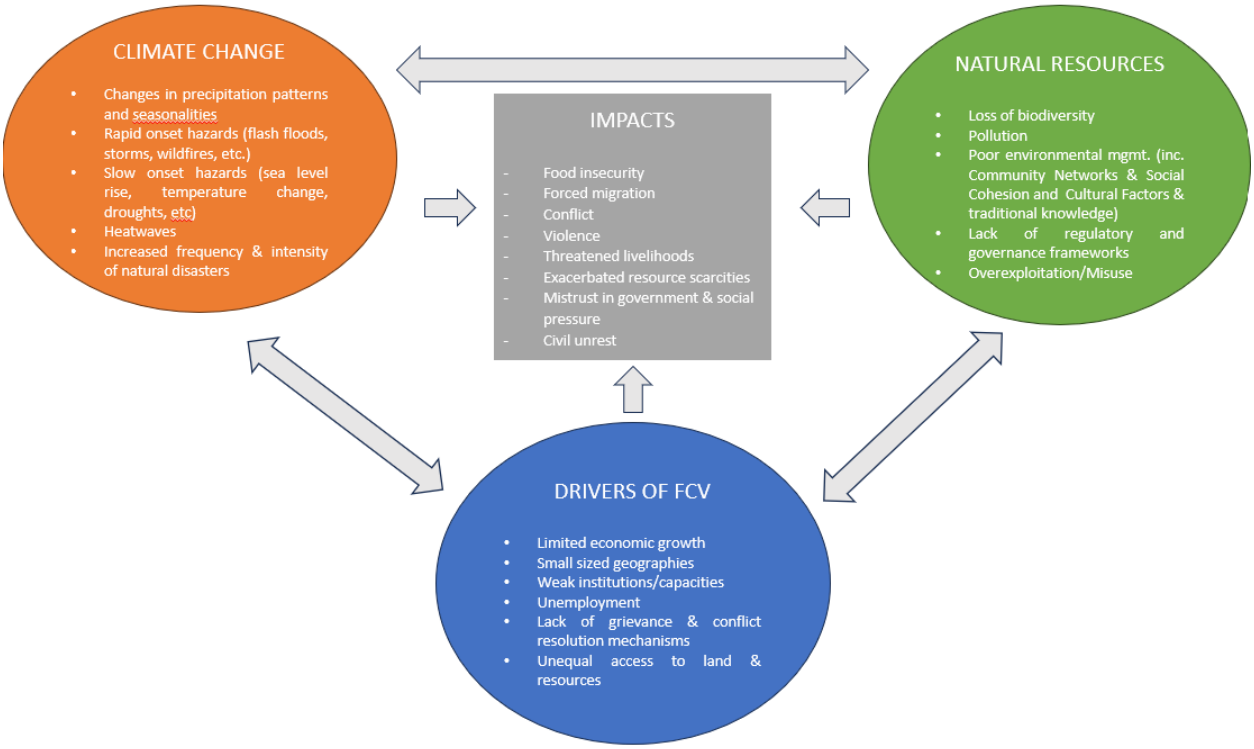
**Scaling up climate change adaptation in FCV affected settings is critical to address compounding risks of climate change, conflict, and increased fragility.** 67% of FCV affected settings are Least Developed Countries (LDCs) and Small Island Developing States (SIDS), who often have low adaptive capacity and lack the resources to respond to climate change impacts.[57] The impacts of climate change on fragile contexts are likely to increase with significant implications to livelihoods and food security. For example, three times as many people in FCV affected settings are affected every year by extreme weather events than in other countries[58] and 48 out of the 53 most food insecure countries correspond to fragile contexts.[59] A recent assessment[60] indicates that FCV countries already experience higher temperatures than other countries and are likely to be more exposed to extreme heat and weather events going forward. In addition, under a high emissions scenario, by 2060,

[56] World Bank publication Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace, 2022.
[57] Mercy Corps. 2023. Overcoming the Fragility Barrier: Policy Solutions for Unlocking Climate Finance in Fragile States. Washington, D.C.: Mercy Corps.
[58] Jaramillo et al. (2023). Climate Challenges in Fragile and Conflict-Affected States. IMF Staff Climate Note.
[59] OECD (2023). "Development finance for climate and environment-related fragility: Cooling the hotspots", OECD Publishing, Paris
[60] Jaramillo et al. (2023). Climate Challenges in Fragile and Conflict-Affected States. IMF Staff Climate Note.

conflict deaths for a median FCV country could increase by 8.5 percent, and up to 14 percent in countries facing an extreme increase in temperature.

**NbS have great potential to contribute to climate change adaptation while promoting sustainable development and peace throughout the cycle of conflicts.** Transparent and sustainable natural resource management can improve peacebuilding measures, by providing basic needs, reducing causes of tensions, and strengthening inclusive governance. By protecting the environment, NbS can contribute to address and prevent conflict-linked environmental damage as well as overcome the risk of resources crises resulting from conflict, particularly in the face of future climate stresses.[61] For example, greater protection of coral reefs, forests, and grasslands can help address many of the key drivers of instability. By protecting terrestrial and marine ecosystems and the services they provide, we can ensure supply of key resources such as food, energy, potable water, and—for many—livelihoods. These ecosystems also provide additional benefits like recreational and psychological well-being, and regulation or support for other ecosystem processes (e.g., climate regulation and pest control). As more individual and community needs are met, sources of resource competition and tension emerging over scarcity decrease and reduce the likelihood of conflict and the pressures to migrate in search of better economic opportunities. Attention to (and investments in) nature and natural systems before their decline—and before conflict erupts—can be instrumental for conflict prevention, peacebuilding, and security[62].

**Figure 3. Conceptual framework for the interaction between NRM, CC and FCV**




***Source: Authors.***

[61] International Union for the Conservation of Nature (2021), Conflict and Conservation. Nature in a Globalized World Report No.1.
[62] IISD Article "A Natural Path to Conflict Prevention: Unpacking the nature–security nexus", November 2022.

**NbS can also offer cost-effective adaptation and mitigation opportunities with important co-benefits**. Sustainably implemented NbS can provide 37% of climate change mitigation needs until 2030 to meet the Paris Agreement goals,[63] generating co-benefits for biodiversity and ecosystem conservation, food and water security, and creating synergies with multiple SDGs. For example, land-based options such as reforestation, forest conservation, restoration and conservation of natural ecosystems can enhance sustainable agricultural productivity and resilience, food security, and address land degradation.[64] NbS also offers opportunities for high-return investments in adaptation through reduction of future losses and risks, increased productivity, and social and environmental benefits. Estimates suggest that investing USD 1.8 trillion globally in early warning systems, new resilient infrastructure, improving crop production in drylands, protecting mangroves, and climate resilient water resource management could generate USD 7.1 trillion in total net benefits.[65] NbS can support four out of five of these investment areas and help seize these benefits. NbS could also provide 28% better value for money spent than gray infrastructure,[66] and create up to 750 full time jobs in developing countries for every USD million invested in NbS activities.[67]

**Some opportunities to invest in NbS to address conflict and climate change are more evident than others but what is key is ensuring there is a full understanding of the context and the intricate linkages between climate, nature and conflict.** A fragile government may face difficulties governing and establishing its authority in remote, rural areas that may be resource-rich, but are isolated and disconnected from central services. Insufficient capacity of the state to respond and adapt to climate change impacts threatens the resources many rural communities depend on for survival, but that increasingly face degradation. The resource curse theorizes that countries with an abundance of natural resources have less economic growth and higher risks of violence than countries with fewer natural resources, but research has refined the attribution of these issues to mediating factors related to poor governance and weak institutions underlying fragility. These are two areas in which investment in NbS can not only improve environmental management but also contribute to conflict prevention and mitigation.[68]

[63] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
[64] IPCC (2022). Summary for Policymakers In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change
[65] Global Commission on Adaptation (2019). Adapt Now: A global call for leadership on climate resilience
[66] Oliver and Marsters (2022). Nature-Based Solutions in Sub-Saharan Africa for Climate and Water Resilience: A Methodology for Evaluating the Regional Status of Investments in Nature-Based Solutions from a Scan of Multilateral Development Bank Portfolios. WRI.
[67] UNEP (2021), Smart, Sustainable and Resilient Cities: The Power of Nature-based Solutions.
[68] World Bank (2022). Defueling Conflict Environment and Natural Resource Management as a Pathway to Peace.

**Box 4. Biodiversity – Climate – Peacebuilding case study: Beekeeping in Gabon**

Gabon is a country with diverse wildlife and abundant natural, forestry, and mining resources, but which also faces significant criminal threats due to poaching and the illegal trafficking of its wildlife. Beyond the damage to the environment and biodiversity and the enormous economic loss for the country, illegal trafficking provides funding for criminal, terrorist, and rebel groups operating in the sub-region, directly impacting peace, security, and sustainable development. At the local level, failure to protect community rights to natural resources such as forests can threaten livelihoods, leading to tensions and potential conflict, while the revenues raised from illegal poaching and wildlife trafficking can fund transnational conflict. Gabon's agriculture sector is largely reliant on rain-fed agriculture and decreased water availability and prolonged dry periods as a result of climate change have exacerbated land degradation – this combined with impacts from the COVID-19 pandemic and strict mobility restrictions imposed, have led to a revenue decline for more than 70% of household businesses. The resulting loss of livelihoods and economic opportunities, increased food insecurity, and minimal government safety nets increased the incentives for engaging in illegal logging, wildlife poaching, or recruitment into non-state armed groups or criminal organizations, thereby driving further ecosystem degradation and species loss.

In response, Conservation Justice, through EU funding, has introduced training opportunities in honey cultivation to provide effective alternative livelihood strategies to illegal resource use and dependence on sectors highly vulnerable to climate impacts. Cultivating and protecting bees not only secures the ecosystem services they provide but can also build alternative livelihood strategies, providing additional income and economic opportunities, supporting the underlying drivers of peace and conflict prevention. Bee pollination directly contributes to food security, biodiversity, income diversity, biofuels, the availability of medicines, stable soils, and diverse wildlife. By facilitating plant reproduction, animal pollination supports the 75% of global food crop types, including fruits and vegetables. This project is already showing benefits in practice as the beneficiary communities have started to diversify to beekeeping and have expanded to community forestry based on the development of non-timber forest products. Nature-based alternative livelihoods such as beekeeping have been proven to be effective climate adaptation and biodiversity conservation/restoration strategies while also reducing drivers of conflict and violence and are initiatives that can easily be replicated in other FCV affected settings with similar challenges and community realities.

***Source: IISD (2022). A Natural Path to Conflict Prevention: Unpacking the nature–security nexus.***

**In this context, NbS are a powerful ally to foster synergies across sectors to address urgent societal and environmental challenges.** NbS can help facilitate and catalyze the engagement of cross-sectoral stakeholders to join forces towards the achievement of the Global Goal on Adaptation under the UNFCCC, and the implementation of an ambitious Post-2020 Global Biodiversity Framework (GBF), which allows to achieve the Biodiversity Convention's 2050 Vision of 'Living in harmony with nature'. NbS also offer an opportunity for synergies among several multilateral environmental agreements, including those on biological diversity (CBD), climate change (UNFCCC), disaster risk reduction (Sendai Framework), desertification (UNCCD) and the wider Sustainable Development Goals (SDGs) – and for mainstreaming nature conservation into sectoral decision-making processes.[69]

[69] Geneva Environment Group (2021). Nature-based Solutions and Peacebuilding | Geneva Nature-based Solutions Dialogues.

**Box 5. Supporting global goals on climate change and biodiversity through NbS**

The Kunming-Montreal Global Biodiversity Framework (GBF) includes concrete measures to halt and reverse nature loss, including putting 30% of the planet and 30% of degraded ecosystems under protection by 2030, as well as proposals to increase finance to developing countries. The GBF comprises, among others, 23 global targets for urgent action over the decade to 2030, some of which are directly linked to NbS[70]:

| | |
|---|---|
| **TARGET 8:** Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, ***including through nature-based solutions and/or ecosystem-based approaches,*** while minimizing negative and fostering positive impacts of climate action on biodiversity. | **TARGET 11:** Restore, maintain, and enhance nature's contributions to people, ***including ecosystem functions and services***, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, ***through nature-based solutions and/or ecosystem-based approaches*** for the benefit of all people and nature. |

Additionally, the 28th Conference of the Parties (COP28) of the UNFCCC, extensively discussed nature, NbS, biodiversity and ecosystems during the negotiations, and called for NbS for climate change actions to be implemented in line with the GBF. During the Nature, Forests and Oceans Day, a Joint Statement on Climate, Nature and People[71] was released by the UNFCCC COP28 and CBD COP15 presidencies jointly with other signatories (including 16 governments) committing to better alignment and coordination between the climate and biodiversity processes, acknowledging the need to urgently address climate change, biodiversity loss and land degradation together.

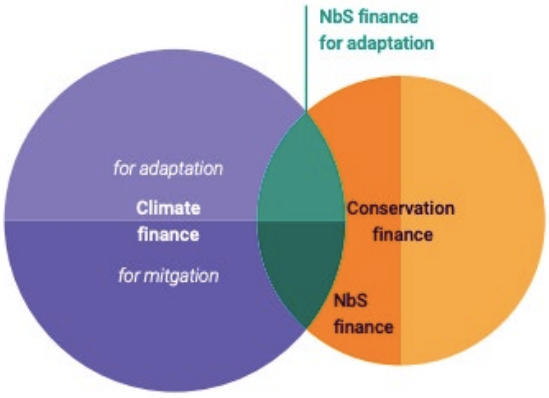
[70] More information available in the Decision document on the adoption of the GBF.
[71] COP28 Joint Statement on Climate, Nature and People.

# Section 3: Analyzing Financing for NbS and Climate

## Sources of NbS finance

**NbS finance is generally nestled in the intersection of climate finance and conservation finance.** Thus, both 'adaptation finance for NbS' and 'NbS finance for adaptation' can be scaled up to build resilience in FCV-affected settings (Figure 4).[72] These two sources of finance face similar challenges, primarily related to the inherent characteristics of adaptation and NbS projects, such as difficulties in securing long-term funding, measuring outcomes and impact, or integration into existing frameworks. However, they also present overlapping opportunities albeit with some distinctions. For instance, adaptation finance can scale up NbS implementation by leveraging funds allocated for infrastructure, disaster risk reduction or ecosystem-based adaptation. Conversely, NbS finance for adaptation can tap into biodiversity finance or environmental, social and governance (ESG) financing, unlocking additional funding opportunities. In both scenarios, mitigation finance plays a supportive role, bridging gaps, providing co-benefits and enhancing efforts to build resilience in FCV-affected settings.

**Figure 4. Relationship between NbS finance, climate finance and conservation finance.**




***Source: UNEP 2021.***

**NbS are usually integrated with other approaches, making it challenging to track specific investment in NbS.** Most funding statistics do not consider NbS as a distinct category. International public funders rarely record investments and expenditures specifically for NbS, often reporting NbS for adaptation as part of broader categories related to environment and natural resources.[73] This trend is also observed in the private sector, where investments in natural capital are often part of larger categories such as ESG financing, sustainable or green finance, and impact investment.[74] Both adaptation finance for NbS and NbS finance for adaptation share similar funding sources. Public funders can be grouped into the following categories: national and local governments, development agencies and multi-donor funds, bilateral donors, MDBs and Development Financial Institutions (DFIs).[75] Private investors for NbS include commercial banks, microfinance institutions, insurance companies, institutional

[72] UNEP (2021). Adaptation Gap Report 2020. Nairobi
[73] Ibid.
[74] Ibid.
[75] Van Raalte, D. and Ranger, N. (2023). Financing Nature-Based Solutions for Adaptation at Scale: Learning from Specialised Investment Managers and Nature Funds. Global Center on Adaptation and Environmental Change Institute, University of Oxford.

investors, private equity and venture capital investors, private foundations, NGOs, and businesses.[76] Irrespective of the source, NbS is underfunded and needs scaling up, as detailed below. Improving transparency in and standardizing methodologies for tracking and categorizing NbS investments is crucial for understanding funding flows and addressing financial gaps.

### Global Financial flows for NbS

**Current global finance flows to NbS are massively outweighed by finance flows with direct negative impacts on nature of almost US$7 trillion.** Recent research conducted by the UN Environment Program (UNEP) for its 2023 report on the State of Finance for Nature (SFN)[77] estimates that global nature-negative finance flows[78] from both public and private sector sources are almost US$7 trillion per year – and this is likely to be underestimated given it includes only direct impacts. Private finance flows that have a direct negative impact on nature are US$5 trillion, 140 times larger than private investments to nature positive activities. On the public side, environmentally harmful subsidies have increased 55% to US$1.7 trillion since the last report, despite government commitments, driven mostly by fiscal support for fossil fuel consumption, which represents an investment 10 times greater than public finance flows to NbS (US$165 billion). The combined impact of public and private nature-negative finance flows is enormously destructive and undermines potential increases in finance for NbS.[79]

**According to the SFN 2023, total annual finance flows to NbS in 2022 were roughly US$200 billion with public finance still being the main source of finance at 82% of total NbS finance flows.** Over 71% (US$117 billion) of public finance for NbS is directed to biodiversity and landscape protection and to sustainable agriculture, forestry and fishing. Private finance for NbS remains modest at US$35 billion (18% of total finance flows to NbS). More than half (57%) of private NbS finance is channeled through biodiversity offsets and credits and sustainable supply chains.

[76] IISD (2023). Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries

[77] The State of Finance for Nature (SFN) annual report series tracks finance flows to nature-based solutions (NbS) and compares them to the finance needed to maximize the potential of NbS to help tackle climate, biodiversity and degradation challenges. The report focuses on current levels of NbS implementation and finance and how much finance for NbS is needed to reach specific Rio targets – limit climate change to 1.5°C, protect 30 per cent of land and sea by 2030 (30x30 target) and reach land degradation neutrality (LDN) by 2030. The NbS finance gap is the difference between current finance flows and the Rio-aligned scenario NbS finance needs.

[78] Nature-negative finance flows are not the negative equivalent of positive finance flows to NbS. NbS are activities using nature to tackle climate and biodiversity loss while the estimation of nature-negative flows from private sources considers sectors and activities with a negative impact on nature, not just those that are nature based. As a result of these conceptual differences, a net finance flow to NbS cannot be derived.

[79] UNEP (2023). State of Finance for Nature 2023

**Figure 5. Public and private finance flows to NbS in 2022 ($ billion)**

***Source: SFN 2023, UNEP.***

**In general, NbS remain severely underfunded.**[80] Current finance flows to NbS of US$200 billion only represent a third of the levels needed to reach climate, biodiversity, and land degradation targets by 2030. Despite the urgent need for action and growing commitments, public sector NbS finance has increased only 11% since 2022. This increase is largely attributable to a US$17 billion increase in public funding of NbS, mostly through increased funding for sustainable agriculture, forestry and fisheries driven by post COVID-19 "Build Back Better" spending and targeted conservation spending by the US Department of Agriculture. More than half of finance for NbS to tackle biodiversity loss originates in four countries (US, France, Italy and Germany) and the increase is mostly related to improved spending in the US on wildlife conservation and in the EU under the EU biodiversity strategy to 2030. Private NbS finance flows have increased by US$3 billion or 10% since 2022 due to growth in biodiversity offset markets, sustainable supply chains and impact investment. The fastest growth was seen in philanthropy (39% increase) driven by support for the 30x30 CBD target and private finance mobilized by ODA (31% increase) via blended finance deals, for example, blue bonds and rhino bonds.

**In order to meet Rio targets, annual NbS investments need to almost triple from US$200 billion to US$542 billion by 2030.** NbS provide cost-effective opportunities to deliver on the Rio targets, especially for initiatives focused on protection, sustainable land management and restoration. Protection represents the biggest investment opportunity and would only require about 20% of additional NbS finance by 2030 to reach significant improved levels. Investment in sustainable land management has great potential to increase revenue streams 4x from US$63 billion in 2025 to US$241 billion in 2050 and therefore provides big opportunities to scale private investment. Lastly, investment needs for restoration need to double from US$125 billion in 2025 to US$227 billion in 2050 due to the current extent of land degradation.[81]

[80] UNEP (2023). State of Finance for Nature 2023
[81] Ibid.

**Box 6. The World Bank's biodiversity portfolio**

The WBG's active biodiversity portfolio in FY23 was valued at $3.7 billion[82], 31% more than in the last FY. The World Bank is mainstreaming nature considerations into economic policy, development programs, and strategic sectoral investments and has been at the forefront of financing nature for decades, providing integrated financing solutions for the conservation and restoration of nature, supporting institution-building, and developing tools and analytics that help provide evidence-based knowledge. The World Bank is also supporting the implementation of the Kunming-Montreal GBF and provides a wide range of financial tools to support biodiversity and ecosystems, from concessional IDA funds to blending and innovative tools that contribute to mobilize more "green finance." It has developed several programs to further support nature-based activities such as PROGREEN and PROBLUE, as well as the Global Program on Sustainability, the WAVES partnership, etc. More recently, the Bank has also developed a "Nature Finance Tracking Methodology", that will allow capturing contributions to the implementation of the GBF in a systematic manner. The approach aligns with the MDB Common Principles for Tracking Nature-Positive Finance and will help track nature-positive investments delivering measurable positive gains for nature, as well as those investments that integrate nature in various economic sectors and support a broader economic transition towards nature-positive practices.[83]

## Adaptation Finance flows for FCV-affected settings

**In the global landscape, adaptation remains overall underfunded.** Recent research shows that, of the global climate finance flows of US$1.3 trillion in 2021-22, only 5% (or US$63 billion) was spent on adaptation. This translates into an adaptation finance gap of US$194 – 366 billion per annum and international public finance alone is unlikely to close the gap – e.g., the commitment to double adaptation finance by 2025 would only reduce the gap by 5–10%. The public sector continues to account for 98% of all adaptation finance and although support of international climate funds is increasing, actions remain concentrated in selected sectors.[84] NbS accounts for only a small portion of total public adaptation finance. For example, in 2017-2018, 24%of public funding to climate adaptation was directed to agriculture, forestry, land use, and natural resource management. Of this, only a small share directly targeted NbS.[85]

**Private finance for adaptation remains very low.** The private sector has consistently provided less than 3% of adaptation finance from 2019-2022, a substantial portion of which comes from philanthropies. Only 15% of deals since 2013 have a pure adaptation focus. Hybrid transactions represent an area of opportunity, accounting for 45% of institutional investments into climate finance.[86] Most challenges for private sector investment in adaptation are related to the lack of visibility of government strategies, information asymmetry and lack of track record; lack of incentives and clear taxonomies and methodologies to invest, track, and disclose in adaptation and resilience; limited or uncertain cash flows that make adaptation investments less attractive as well as long investment horizons; and credit risks, macroeconomic and investment level risks perceived to be high for private investors in vulnerable countries.

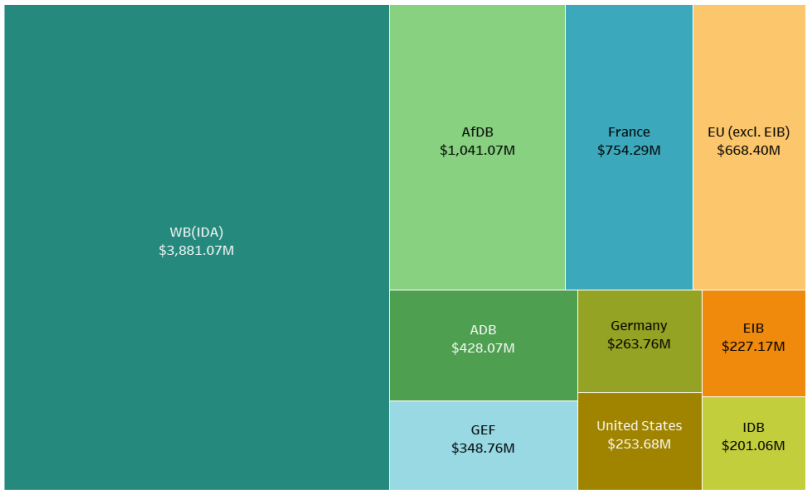
**Most adaptation finance continues to be provided through loans.** Globally, debt continues to be the most utilized instrument to deliver adaptation finance, increasing to 80% of total adaptation finance in 2021-2022. Grants (17%) and equity remain relatively a small

[82] This information comes from Central Coding and represents direct investment in biodiversity from the WB.
[83] The World Bank Group – Biodiversity topic: https://www.worldbank.org/en/topic/biodiversity#3
[84] Information taken from the Climate Change learning series of the Climate Change Group of the WB – Climate Finance session on "Overview of adaptation finance". Original sources are UNEP, Adaptation Gap Report (2023); CPI & GCA, State and Trends in Climate Adaptation Finance (2023).
[85] UNEP (2021). Adaptation Gap Report 2020. Nairobi.
[86] Information taken from the Climate Change learning series of the Climate Change Group of the WB – Climate Finance session on "Overview of adaptation finance". Original sources are UNEP, Adaptation Gap Report (2023); CPI & GCA, State and Trends in Climate Adaptation Finance (2023).

proportion. Many countries that face severe climate risks also face substantial debt burdens. With more than 60-80% of adaptation financing in the form of debt, there is a clear need for higher levels of grant and concessional finance to manage debt sustainability and affordability.

**Adaptation finance does not reach the most vulnerable.** Recent research conducted by the FCV Group at the World Bank (WB), found that although adaptation finance is vital to helping countries deal with the impacts of climate change (especially for those affected by FCV), per-capita commitments across major funders in FCV-affected settings were less than two-thirds of those to other low-income countries (USD $4.85 and $7.17, respectively).[87] This research also showed that there is little correlation between a country's vulnerability and the size of international commitments it receives towards adaptation as these are heavily associated with countries that have a higher financial absorptive capacity.

**Figure 6. Main funders of adaptation finance to FCV between 2015 and 2020.**




***Source: SAFFE knowledge brief – "Trends in Adaptation Finance to Fragile & Conflict-Affected Settings".***

**The World Bank is among the main funders for adaptation in FCV affected settings.** In less than a decade, the proportion of WB's adaptation finance commitments to FCV affected settings compared to non-FCV affected settings increased from less than 1% in 2013 – when the World Bank started formally tracking climate finance – to more than 28% in 2020. The CCAP significantly contributed to this increase as it played a major role in shifting attention back to climate adaptation needs of the most vulnerable, including a commitment to bring adaptation and mitigation finance on par at 50% from 2020. Another reason was the establishment of both climate change and FCV as cross-cutting solution areas within the organizational setup of the World Bank. This enabled better integration and coordination of these topics across World Bank's operations. A third reason was the emphasis on promoting climate change as a priority theme across the IDA portfolio, a key instrument in providing development finance to many FCV affected settings. These steps, along with many other factors, helped to raise ambition and awareness on the need to promote access to adaptation finance in vulnerable countries and encouraged greater cross-sectoral coordination.

[87] Jones et al. 2024. Closing the Gap: Trends in Adaptation Finance in Fragile and Conflict-affected Settings. World Bank. Accessible here

## NbS Finance flows for FCV affected settings

**Biodiversity positive activities are severely underfunded in FCV affected settings, even amongst climate adaptation funding.** Using previously developed data sets on adaptation finance in FCS and non-FCS countries[88], a high-level analysis of indicative financial flows for biodiversity positive activities and projects was undertaken as part of this assignment. As in previous research pieces developed under the SAFFE initiative, it uses publicly available data from the AidAtlas database.[89] However, there is a significant blind spot and data limitations in regard to accurate financial information for NbS and nature-positive activities and therefore this analysis is meant to be indicative and high-level (more information can be found in Annex 1). One of the first observations from this analysis is the overall small share of adaptation finance that actually goes to biodiversity related activities: only 5% of adaptation finance is committed to fund biodiversity related activities and this percentage is consistent across both analyzed country groups, i.e. in FCS and non-FCS countries.

**Financial flows to biodiversity positive projects in non-FCS countries are significantly above the amounts of financing for biodiversity in FCS countries, highlighting again a significant funding gap in FCV settings despite the challenges and vulnerabilities.** Through the previous research done by SAFFE and referenced above, it is already known that FCS countries receive significantly less adaptation finance than non-FCS countries, despite being more vulnerable and less resilient to external shocks, including climate change. The same trend is observed when analyzing financial flows amongst adaptation financing to biodiversity positive activities, including NbS. Previous sections of this background note have presented information on the importance of natural resources for climate resilience building, overall wellbeing, economic prosperity and even peacebuilding, as well as their potential to exacerbate conflict and existing instabilities when not properly managed. Despite these facts, the funding gap for biodiversity is still remarkable. These findings are consistent with other assessments of NbS finance, which have found that many LDCs and SIDS have received little or no climate funding to support NbS.[90]

[88] In late 2023, SAFFE financed research activities on Adaptation Finance Trends in FCV Settings which resulted in the development of a knowledge brief and a data set based on information from the AidAtlas database on climate adaptation commitments from main donors to FCS and non-FCS countries. The same data set has been used for the purposes of this high-level analysis, however focusing on those projects tagged for biodiversity, which has been taken as the closest sector to NbS.
[89] Aid Atlas is developed by Stockholm Environment Institute (SEI). It includes annual data on global development finance commitments and disbursements from 2002 onwards. The development finance data presented is sourced from several OECD databases, mainly from the Creditor Reporting System (CRS) Aid Activities database.
[90] Stockholm Environment Institute (2022). Assessing finance for nature-based solutions to climate change

# Section 4: Barriers to scaling access to NbS finance for adaptation in FCV-affected settings

**Accelerating NbS finance to close the funding gap in FCV affected settings will require overcoming existing barriers that currently hinder public and private investment.** As discussed in section 3, mobilizing 'adaptation finance for NbS' and 'NbS finance for adaptation', and particularly from the private sector, is critical to meet international climate and biodiversity targets and help countries address the impacts of climate change (especially for those affected by FCV). However, there are several challenges or barriers that hamper investment in NbS for adaptation (or NbS investment), often categorized into financial, information, institutional, political and regulatory, and socio-cultural barriers.[91] While these barriers are not unique to FCV settings, many of them are exacerbated by instability related to violence and conflict conditions which, as discussed in Section 2, interact with climate change impacts resulting in a vicious cycle that compounds existing fragilities. Table 1 outlines key barriers for accessing NbS finance for adaptation identified in the literature review and through the expert consultations.

**While FCV can exacerbate the barriers to access and scale up NbS finance for adaptation, FCV-affected settings come in different forms, with some particular settings posing greater challenges**. Different FCV settings can be identified based on different degrees of security, social cohesion, capacity, and legitimacy in the country. As these conditions decline, barriers to NbS finance for adaptation that are particular to the country context (e.g., barriers related to national institutional capacities, availability of information and policy and regulatory frameworks) can intensify in certain FCV settings. For example, in settings affected by ongoing high-intensity conflict, political priorities are likely to focus on addressing immediate security needs rather than on promoting longer-term climate objectives. This contrasts with settings affected by institutional fragility, including in middle-income countries (MICs) or SIDS. In these environments the risk of conflict is often much lower, with stronger opportunities to support longer-term priorities and for private sector engagement. However, other barriers stemming from private sector actors or occurring at the global level, such as limited NbS capacities of the financing sector or inefficient market structures and governance, may be less sensitive to different FCV contexts. Figure 7 illustrates which barriers might intensify in different FCV settings. The FCV settings are illustrative, as there will be settings that do not fall into any of these categories or others that will have aspects that span multiple groups.

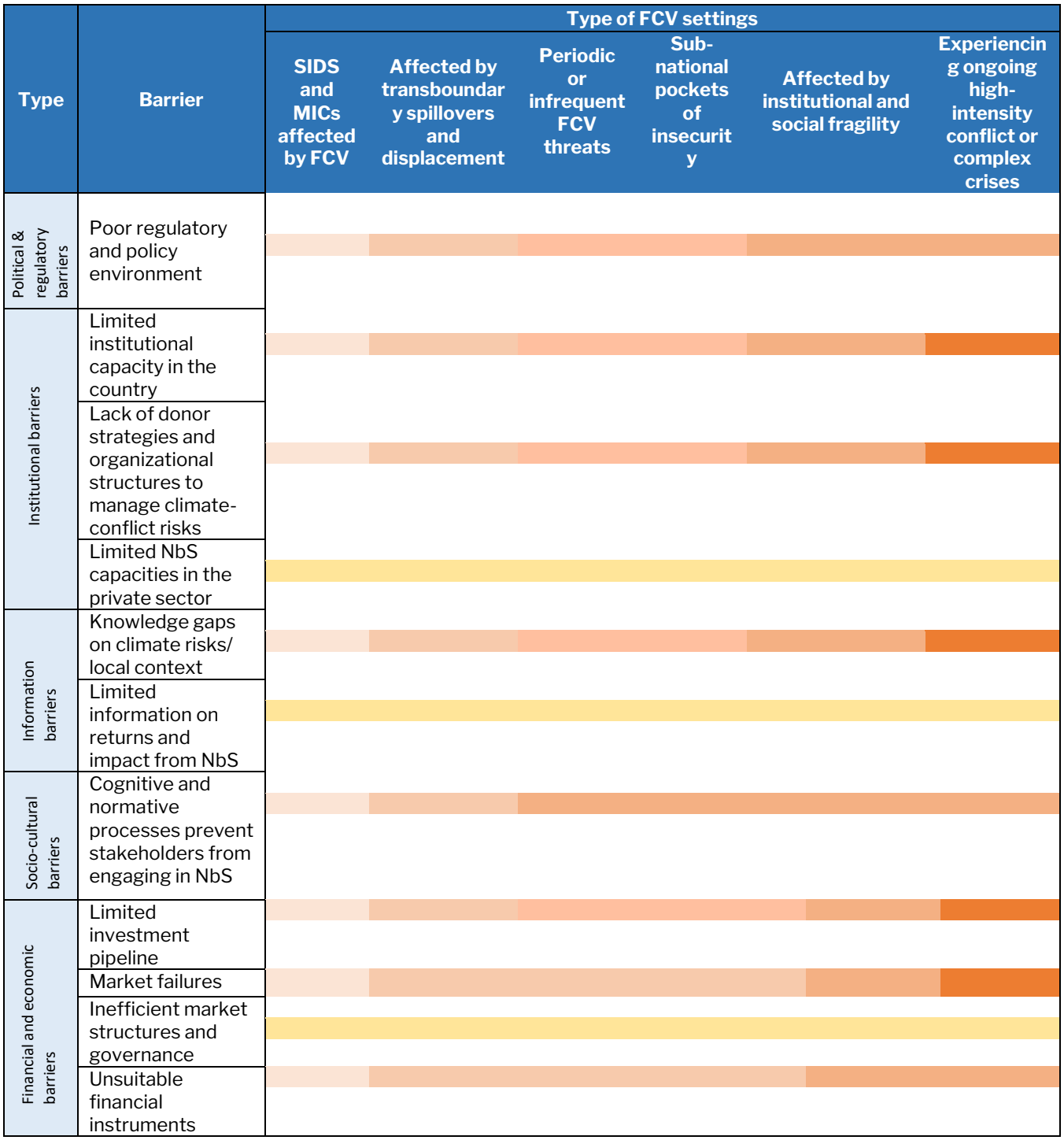
[91] Druce et al. (2016). Demystifying Adaptation Finance for the Private Sector. UNEP Finance Initiative.

**Table 1. Key barriers to accessing NbS finance for adaptation.**[92]

| Type of barrier | Barrier | Description | Source of finance affected | |
|---|---|---|---|---|
| | | | Public | Private |
| Political and regulatory | Poor regulatory and policy environment | The regulatory and policy framework lacks conditions to enable investment in NbS for adaptation. | ● | ● |
| Institutional | Limited institutional capacity in the country | State institutions lack the capacity to design NbS interventions as well as to absorb and channel financial resources for their implementation. | ● | |
| | Lack of donor strategies and organizational structures to manage climate-conflict risks | Providers of international public finance lack long-term strategies and policies that link climate change to FCV, resulting in risk aversion, absence of operating procedures suitable for FCV affected settings and limited conflict-sensitive climate programming. | ● | |
| | Limited NbS capacities in the financing sector | Limited skills and experience with NbS assets prevent investors' engagement in the NbS market | | ● |
| Information | Knowledge gaps on climate risks/ local context | Socioeconomic and climate data required to design NbS interventions is lacking and/or difficult to produce. | ● | ● |
| | Limited information on returns and impact from NbS | Lack of consistently measured and clear information on the benefits of NbS to inform investment-decision making. | ● | ● |
| Socio-cultural | Cognitive and normative processes prevent stakeholders from engaging in NbS | Inequities and social discrimination, as well as the values, beliefs, ideas, and morals that are particular to a certain group restrict access to or limit engagement in NbS initiatives | ● | ● |
| Economic and financial | Market failures | NbS activities that provide public goods reduce the attractiveness of investment. High upfront finance costs and long-term nature of NbS increases the perceived risk of the investment, reducing their financial viability. | | ● |
| | Inefficient market structures and governance | Lack of accessible databases/market research platforms on NbS transactions prevents market development. | | ● |
| | Limited investment pipeline | Insufficient supply of high-quality projects prevents investment at scale in NbS. | ● | ● |
| | Unsuitable financial instruments | Available financing instruments are not suitable for NbS projects or FCV settings. | ● | ● |

[92] Source: Authors compilation and synthesis from: Alcayna, T. and Cao, Y. (2022); Cao et al. (2021); Cao et al. (2022); Finance Earth (2021); Foxwell-Norton, K et al. (2019); Jones L. (2010); Micale et al. (2018); Pauw (2015); Pillay et al. (2017); UNEP (2023); WWF (2022).

**Figure 7. Illustrative depiction of how different FCV contexts may affect the intensity of barriers.** *Note: The FCV settings are illustrative as many countries will be affected by more than one type of FCV context and these are not mutually exclusive. The yellow color illustrates barriers that may not be sensitive to different FCV contexts.*




***Source: Authors.***

### a) Political and regulatory barriers may limit governments' capacity to mobilize funding for NbS both from national and international sources.

**NbS finance for adaptation can be deterred by regulatory frameworks in recipient countries** that do not consider climate risks (e.g., infrastructure codes, standards, environmental or social impact assessments laws), do not offer economic incentives for investments in resilience or incentivize sustaining business-as-usual practices, or fail to positively influence the business case for investing in adaptation projects.[93] Similarly, legal and policy frameworks that create uncertainties around land tenure and natural resources rights can complicate the implementation of NbS, affecting their potential to be financed. Access to ownership or control of land required for developing NbS is a particular challenge for institutional investors (banks, private equity investors and thematic funds). Land ownership can be costly and difficult to procure, while acquiring control of target areas requires national legislation that allows developing contractual relationships with beneficiaries or legal designations for conservation outcomes.[94] These difficulties are compounded by FCV where national government may not have control over some portions of the territory. The lack of a conducive regulatory and policy framework for NbS investment is particularly relevant for private capital, which is often driven by the incentives generated by the policy environment and where investors seek regulatory stability, enforceable laws, guarantees that the investment will not be lost, and the protection of property rights, among other factors.[95]

**Limited political will can also act as a barrier for NbS finance and implementation.** The lack of political will to prioritize NbS could stem from competing incentives, limited fiscal space, and the need to address more urgent or basic priorities or pursue opportunities that could provide immediate economic gains (e.g., linked to the exploitation of natural resources). In addition, the lack of integration of NbS and adaptation in national development and climate policies may fail to secure national funding as well as to provide signals to international funders about the strategic importance of NbS to promote their implementation. Furthermore, NbS investment may be deterred by the lack of policy coherence, as NbS often involves multiple actions implemented at the landscape or seascape level.[96]

### b) Institutional barriers often arise from limitations in the capacities, arrangements, and processes of public and private institutions and pose significant challenges for NbS finance in FCV-affected settings.

**Limited institutional capacities in countries.** In FCV settings, weak institutional capacities may arise from or contribute to conflict and consequentially result in limited NbS investments.[97] State institutions in FCV countries may not be able to absorb, implement or channel financial resources to implement adaptation actions at the local level because of institutional weaknesses but also because of conflict dynamics.[98] Government institutions also have limited technical capacity and expertise to design and implement comprehensive NbS interventions and lack the public financial management systems to meet various donor

[93] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report
[94] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class.
[95] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report
[96] Seddon N. et al. (2020). Understanding the value and limits of nature-based solutions to climate change and other global challenges. Phil. Trans. R. Soc. https://doi.org/10.1098/rstb.2019.0120
[97] Cao et al. (2021). Exploring the conflict blind spots in climate adaptation finance.
[98] ICRC (2021). Working together to address obstacles to climate finance in conflict and fragile settings. Discussion Paper.

requirements and mitigate fiduciary risks, including those related to fraud and corruption.[99] For non-English speaking countries, there is the additional challenge of developing proposals in English, particularly for multilateral climate funds.[100] These capacity challenges result in governments relying on international development institutions to develop and implement adaptation projects on their behalf, which can limit national ownership and relevance and/or leave vulnerable areas unattended as international actors may not be present in or may not have access to large portions of the territory. Furthermore, transactional costs for developing these types of applications (i.e. the time and investment required to develop a bankable project proposal) can be an important obstacle for accessing international public finance in FCV settings, where government institutions are underfunded, understaffed, battle with limited specialized climate knowledge and skills, face competing priorities, and institutional capacities need to be directed to shorter-term and more urgent action to address the consequences of conflict, rather than on longer-term measures to strengthen climate resilience and biodiversity positive activities.[101] Low capacity of government and the countries' financial institutions to handle certain volumes and types of financial instruments may discourage private investment.

**Lack of donor strategies and organizational structures to manage compound climate-conflict risks.** Generally, providers of international public finance lack long-term strategies and policies that link climate change to conflict and fragility. This results in high risk aversion, which contributes to the funding gap in FCV affected settings and manifests in complex and rigid requirements to access adaptation finance, as well as cumbersome and slow project approval processes that are difficult to navigate, particularly for government entities with limited capacities and resources. The lack of strategies and policies linking climate change to conflict and fragility also results in: i) inflexible and unrealistic funding protocols and rigid operational bureaucracy that prevents adaptation to volatile FCV contexts, leading to project delays or cancellations;[102] ii) lack of conflict-sensitive climate programming which can result in adaptation or NbS projects that exacerbate conflict (e.g., by marginalizing minority groups; increasing environmental degradation or by re-igniting and intensifying existing conflicts);[103] iii) institutional siloes or structural divisions in donor institutions that prevent complementing climate, conflict, and sectoral expertise to inform projects and programs;[104] and iv) limited coordination and partnerships between humanitarian, development and climate actors needed for the successful implementation of NbS projects in FCV affected settings as well as lack of involvement of indigenous/local communities who often rely on and are closer to natural resources and therefore play a key role in managing them sustainably.

**Limited NbS capacities in the private sector.** In the financial sector, limited skills and experience with NbS assets pose a significant barrier for investors seeking to engage in the NbS market. NbS is an emerging market, and the uniqueness of the asset types and interventions required creates difficulties for large financial institutions, which lack the staff

[99] Cao et al. (2022). Embracing Discomfort: A Call to Enable Finance for Climate-Change Adaptation in Conflict Settings. Policy Brief.
[100] Cao et al. (2021). Exploring the conflict blind spots in climate adaptation finance.
[101] ICRC (2021). Working together to address obstacles to climate finance in conflict and fragile settings. Discussion Paper. https://www.icrc.org/sites/default/files/topic/file_plus_list/discussion_paper_on_climate_finance_0.pdf
[102] Alcayna, T. and Cao, Y. 2022. Breaking the cycle: practical solutions to unlock climate finance for fragile states. Washington, D.C.: Mercy Corps
[103] Cao et al. (2021). Exploring the Conflict Blind Spots in Climate Adaptation Finance.
[104] Cao et al. (2022). Embracing Discomfort: A Call to Enable Finance for Climate-Change Adaptation in Conflict Settings. Policy Brief.

or structures to adequately address NbS.[105] [106] NbS investors also have limited analytical capacity to price climate risks and to integrate the "value" of NbS or adaptation outcomes into project assessments or return calculations.[107] Overall, there is a lack of NbS-specific knowledge management and training within financial institutions as well as a community of practice that allows for knowledge exchanges.[108] NbS provides opportunities for companies seeking to strengthen the resilience of their operations (e.g., supply chains reliant on natural systems), reduce operational or reputational risks, capture price premiums or implement Corporate and Social Responsibility (CSR) Strategies.[109] However, companies often require to develop the capacities and skillsets necessary to understand and address their supply chain impacts[110] and/or identify business applications of NbS (e.g., safeguarding water access and water quality, increasing soil health and agricultural yields, value chain decarbonization).[111]

### c) Information barriers in FCV affected settings translate into important challenges for the design, implementation and assessment of NbS interventions that hinder both public and private finance.

**Knowledge and data gaps on climate risks and the local context**. Designing effective NbS interventions for adaptation requires thorough understanding of climate risks in a specific context or location, which is challenging due to uncertainties related the actual frequency and severity of climate change impacts. It also often requires local data or data that needs to be collected in-situ. However, in FCV affected settings, minimum socioeconomic data, past and current climate data, or spatial analysis required for project proposals is often lacking and/or difficult to produce due to conflict limitations. For example, meteorological stations may not be sufficiently maintained because of stretched national hydrometeorological services, fail to be operative because of conflict, or armed groups may prevent access to areas to conduct assessments required to develop funding applications.[112] Where producing information on the local context and climate risks is possible, this may entail important costs and specialized expertise, which can hinder private sector investment in particular. Climate data limitations are compounded by limited capacities to distribute timely and appropriate meteorological information and analyze and translate climate data into useful information for decision-making.[113] [114]

**Limited information on returns and impact from NbS.** Measuring impact of NbS interventions is an important challenge for scaling private investment. NbS outcomes must demonstrate additionality and attribution in order to attract funding, but these can be challenging concepts and measuring them entails long time horizons, important expertise, and costs. In addition, NbS can potentially generate multiple impact outcomes that are project specific and often qualitative (social and environmental benefits related to wellbeing

[105] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[106] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class
[107] Arame T. et al. (2021). Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action. World Bank, Washington, DC.
[108] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[109] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe
[110] Ermgassen et al. (2022). Are corporate biodiversity commitments consistent with delivering 'nature-positive' outcomes? A review of 'nature-positive' definitions, company progress and challenges. Journal of Cleaner Production 379
[111] WBSCD (2024). The NbS Blueprint: Building business cases for Nature-based Solutions
[112] Cao et al. (2021). Exploring the Conflict Blind Spots in Climate Adaptation Finance.
[113] Alcayna, T. and Cao, Y. 2022. Breaking the cycle: practical solutions to unlock climate finance for fragile states. s
[114] Cao et al. (2021). Exploring the Conflict Blind Spots in Climate Adaptation Finance.

for example), which makes it difficult to compare between NbS benefits across different sectors, locations, habitat types and designs.[115] These difficulties are compounded by the lack of universal metrics or standards to measure NbS impacts and effectiveness (that are different to carbon benefits).[116] As a result, information on the benefits of NbS projects is inconsistently measured, project-specific, and ambiguous, which has led to challenges in articulating and comparing the risks, the financial return and impact associated with NbS investments.[117] The challenges in measuring the impact of NbS can lead to skepticism about the suitability of NbS in addressing urgent challenges.[118] Furthermore, these information gaps increase the perception of risk in NbS and make these investments susceptible to greenwashing, decreasing trust in NbS as an emerging market.[119]

### d) Socio-cultural barriers can complicate the process of securing NbS finance.

Social and cultural barriers refer to cognitive (i.e., beliefs and perceptions) and normative (i.e., the influence of social and cultural norms) processes that prevent individuals or groups from seeking particular adaptation measures.[120] Social and cultural barriers can be a critical factor in the formation of other barriers and can result in significant challenges when they are not adequately understood and addressed, with stakeholders becoming disengaged, resistant to change and unwilling to act, thus limiting the uptake of NbS projects and discouraging investment.[121] In FCV settings, failure to address these barriers could create, reignite or exacerbate conflict.

Socio-cultural barriers may arise from different understandings of NbS, how stakeholders perceive risks and the need to adapt to climate change (e.g., explanations of extreme weather events and changes in climate related to traditional beliefs or religion), particular cultural values associated with natural resource management or attachments to certain ways of life, and perceptions that adaptation solutions are maintaining structural inequities related to land rights, gender, or ethnicity (Box 7). [122] For example, risk aversion is generally high in marginalized communities, who are significantly resource-constrained and often prefer not to lose the little resources they have rather than gaining a wider range of uncertain or potential benefits. In addition, NbS narratives that frame nature as a provider of commodifiable, monetizable services that distant financial actors can purchase the rights to, often conflict with local and indigenous views on nature's value and motivations driving stewardship.[123] Furthermore, poor practices around NbS have led indigenous peoples and local communities (IPLCs) to perceive NbS as a form of "land grabbing", a rush for other natural resources, or as a way to exclude IPLCs of revenue generating initiatives such as carbon credits. [124] In FCV settings, cultural values and priorities at the local level that differ from those of donors or funders, create a mismatch between available financing mechanisms and community needs and may lead to a reluctance to support external interventions and adopt

[115] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class. https://finance.earth/wp-content/uploads/2021/05/Finance-Earth-GPC-Market-Review-of-NbS-Report-May-2021.pdf
[116] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[117] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class.
[118] UNEP (2022). Nature-based Solutions: Opportunities and Challenges for Scaling Up. Nairobi.
[119] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[120] Jones L. (2010). Overcoming social barriers to adaptation. Background Note. Overseas Development Institute.
[121] Foxwell-Norton, K et al. (2019). Social and cultural barriers to the implementation of climate change adaptations plans and action. Griffith University, Brisbane
[122] Shackleton et al. (2015). Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. WIREs Clim Change, 6:321-344. doi: 10.1002/wcc.335
[123] Chausson A. et al. (2023). Going beyond market-based mechanisms to finance nature-based solutions and foster sustainable futures. PLOS Clim 2(4): e0000169. https://doi.org/10.1371/journal.pclm.0000169
[124] UNEP (2022). Nature-based Solutions: Opportunities and Challenges for Scaling Up. Nairobi.

NbS projects that are not aligned with local values and traditional practices, especially if locals perceive associations with national government or companies that may exploit or take away their rights and access.

**Box 7. Example of socio-cultural barriers for increasing the climate resilience of traditional pastoralist systems**

For centuries, pastoralists in West Africa have contributed to food security and the economies of many rural communities through the provision of meat and milk, using cyclical migration to cope with changing fodder availability across seasons, a phenomenon known as transhumance. However, pastoralist practices are increasingly threatened by climate change, degradation of rangelands, and competing land uses from crop farmers, sedentary herders and other actors. The scarcity of land and water competition have been identified as major causes of farmer-herder conflicts.[125]

While traditional pastoral systems have intrinsic adaptive capacity, pastoralists' options for adaptation have been limited by political and socio-economic marginalization.[126] [127] Adaptation and/or policy strategies favoring the expansion of farmland over securing pastoral routes have led to the encroachment of arable farming into pastoral ecosystems, fragmentation of pastoral lands, obstruction of water points and reduction of livestock corridors, limiting the mobility of pastoralists and fueling conflicts over access to natural resources [128] [129] In Benin for example, population growth, raising demand for food crops, and government support to the cotton sector have been identified as direct drivers of decreasing grazing land.[130] Cultural factors also pose particular barriers to adaptation as many pastoralist groups have strong cultural attachments to their landscape and way of life, which prevent the uptake of alternative livelihood activities.[131] These barriers may also affect the implementation of participative rangeland management strategies as many farmers perceive pastoralist practices as a threat for natural resource management and a driver of degradation, resulting in a reluctance to provide access to pastoralists to water points or certain grazing areas.

In addition, developing NbS projects to attract investment may need to overcome normative barriers where communities or individuals are restricted in participation due to societal norms, institutional inequities, or because of traditional roles (e.g., due to gender or social standing).[132] Cultural norms that deter change and innovation can also limit the uptake of NbS projects and discourage investment (e.g., when the dominant culture objects to departing from the traditional ways).[133] In addition, social and cultural barriers may arise from failure to demonstrate tangible benefits to community organizations, lack or community cohesion and public mistrust on technical or government institutions.[134] These factors may affect stakeholders' willingness to engage as well as decision making processes that are key for securing and implementing adaptation and NbS financing. This is particularly relevant in countries experiencing ongoing high-intensity conflict or complex crises and countries with sub-national pockets of insecurity, where NbS projects and funding may be deterred by

[125] Diogo RVC et al. (2021). Farmers' and Herders' Perceptions on Rangeland Management in Two Agroecological Zones of Benin. Land. 2021; 10(4):425. https://doi.org/10.3390/land10040425
[126] Herrero et al. (2016). Climate change and pastoralism: impacts, consequences and adaptation. Rev. Sci. Tech. Off. Int. Epiz., 35 (2), 417–433
[127] Schilling et al. (2014). On raids and relations: Climate change, pastoral conflict and adaptation in north-western Kenya.
[128] Diogo RVC et al. (2021). Farmers' and Herders' Perceptions on Rangeland Management in Two Agroecological Zones of Benin. Land. 2021; 10(4):425. https://doi.org/10.3390/land10040425
[129] Snorek et al. (2014). Divergent adaptation to climate variability: A case study of pastoral and agricultural societies in Niger. Global Environmental Change. http://dx.doi.org/10.1016/j.gloenvcha.2014.06.014
[130] Diogo RVC et al. (2021). Farmers' and Herders' Perceptions on Rangeland Management in Two Agroecological Zones of Benin. Land. 2021; 10(4):425. https://doi.org/10.3390/land10040425
[131] Herrero et al. (2016). Climate change and pastoralism: impacts, consequences and adaptation. Rev. Sci. Tech. Off. Int. Epiz., 35 (2), 417–433
[132] Foxwell-Norton, K et al. (2019). Social and cultural barriers to the implementation of climate change adaptations plans and action. Griffith University, Brisbane
[133] Shackleton et al. (2015). Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. WIREs Clim Change, 6:321-344. doi: 10.1002/wcc.335
[134] Mackay, S. et al. (2019). Barriers to the implementation of climate change adaptation plans and action: Considerations for regional Victoria. Griffith University, Brisbane.

limited cooperation and coordination due to the lack of trust between different groups in the affected region and the national government, as well as limited representation in decision-making processes in insecure regions.

### e) Economic and financial barriers relate to market failures and inadequate development and deployment of financial resources that prevent investment in NbS, particularly from the private sector.

**Market failures**. NbS interventions for adaptation are often motivated by cost-savings from expected climate impacts and characterized by their ability to generate multiple co-benefits and public goods which result from enhancing ecosystem services, addressing societal challenges, and increasing climate resilience. However, the public good nature of NbS can deter financing from the private sector as investors carry the costs while the benefits are public.[135] These positive externalities generated by NbS are usually not integrated into the benefits obtained, which can result in the lack of an acceptable market rate on return on investment.[136] In addition, the benefits of NbS investments usually manifest over long timeframes, projects may not offer tangible goods and services and often involve high upfront investments with long payback periods, which creates a mismatch with short-term horizons of private investors. NbS projects often require constant commitment from the stakeholders involved, are implemented in remote places and rely on local actors or small and medium-sized enterprises with little track record, which coupled with the long-term horizons, creates uncertainties on the ability to complete projects as planned.[137] Furthermore, there are uncertainties associated to how climate change will impact the capacity of ecosystems to provide the expected environmental services, as the effectiveness of NbS is dependent on the resilience of the ecosystems to the impacts of climate change itself.[138] These characteristics result in projects with returns that are too low or too risky to be bankable and thus fail to access financing. NbS projects in the land, forestry and agriculture sectors also face risks from unintended negative social impacts that increases the perception of risk from investors.[139] The perceived risk of NbS investments can be magnified in FCV affected settings as risks related to conflict can significantly discourage investment. At the same time, peacebuilding actions and approaches that mitigate these risks are underfunded and not aligned with potential investment flows, which creates a gap between peace strategies and private sector activity.[140]

**Inefficient market structures.** Currently, the conventional sector reports, coverage, market analysis and transaction news are not developed for the NbS investment market.[141] The lack of widely available and accessible transaction databases and market research platforms makes the track records of transactions opaque and results in difficulties for investors to understand market developments and assess the risks and returns to make informed

[135] Pauw (2015) Not a panacea: private-sector engagement inadaptation and adaptation finance in developing countries, Climate Policy, 15:5, 583-603, DOI: 10.1080/14693062.2014.953906
[136] WRI (2022). 5 Barriers That Hinder Green Financing. https://www.wri.org/update/5-barriers-hinder-green-financing
[137] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[138] UNEP (2021). Nature-based solutions for climate change mitigation. Nairobi and Gland.
[139] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[140] Interpeace and SEB (2022). Peace Bonds–Feasibility study. Assessing the potential of a new asset class that can lower risk and enhance peace. Edition 1, January 2022, Geneva.
[141] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class.

decisions.[142] It also obstructs information sharing, increasing the transaction/due diligence costs, especially in transactions with novel structures.[143]

**Limited investment pipeline**. Despite efforts and commitments to accelerate NbS implementation, the insufficient supply of high-quality projects remains an important barrier to deploying capital into NbS.[144] The volume of the pipeline is low, and the majority of existing projects are often not financially viable or too early-stage in their commercial maturity.[145] In addition, projects often struggle to scale in terms of size as they are often tailored to the specific local context. This small scale of investment, combined with high transaction costs can become a barrier to private sector engagement.[146] The shortcomings of the available pipeline are influenced by the lack of financial expertise within NbS project developers that result in projects with weak bankability. Institutional, information and socio-cultural barriers can also affect pipeline development.

**Unsuitable financing instruments.** Many instruments available for financing private initiatives are not suitable for NbS projects, which integrate a wide variety of underlying business models and contexts. There is an important gap in risk sharing and reduction mechanisms, which can incentivize financial institutions with capacity to undertake riskier investments.[147] The increasing provision of international public adaptation finance through loans and other non-grant instruments constraints access to finance of FCV countries and FCV affected settings that often face economic fragility and have limited fiscal capacity. Financing instruments that do not consider debt sustainability also increase the risks of a vicious cycle where impacts from climate change reduce countries' ability to service debt and increase their borrowing costs. This in turn can affect countries' development investments while decreasing their capacity to adapt to climate change.[148]

[142] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[143] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class
[144] Ibid.
[145] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[146] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.
[147] WWF (2022). Nature Based Solutions – a review of current financing barriers and how to overcome these.
[148] OECD (2023). Development finance for climate and environment-related fragility: Cooling the hotspots, OECD Publishing, Paris

# Section 5: Opportunities and entry points to scale NbS finance and implementation

**While NbS financing and implementation faces several challenges as described in Section 4, there are different opportunities and entry points to help overcome them and scale NbS in FCV-affected settings**. Potential opportunities and entry points have been identified through both, a literature review and interviews conducted with key World Bank staff members (see Annex 2 for more information). Opportunities and entry points are organized under six main areas, including examples to illustrate how existing initiatives have addressed different barriers for NbS finance and mentioning key stakeholders, categorized as: i) MDBs, development finance institutions (DFIs) and development agencies; ii) private sector; and iii) governments interested in developing NbS. While some stakeholders may be more relevant to support particular entry points, all opportunity areas require participation and collaboration between these stakeholder groups. Table 2 provides an overview of the opportunity areas and the barriers that these could address.

**Table 2. Areas of opportunities and entry points and barriers addressed.**

| Areas of opportunities and entry points | Barriers | | | | |
|---|---|---|---|---|---|
| | Political and regulatory | Institutional | Information | Socio-cultural | Economic and financial |
| Promoting environmentally and socially-sound interventions in the context of evolving FCV | | | | ■ | ■ |
| Embedding NbS into broader development programs and public-private partnerships to support national objectives | ■ | ■ | | | ■ |
| Increasing conflict-sensitive climate programming, coordination and collaboration | | ■ | ■ | | ■ |
| Considering synergies and complementarities between different private sector sources | | | | | ■ |
| Using conflict-sensitive blended finance structures to implement NbS at scale | | ■ | | | ■ |
| Strengthened policy environments, market reforms and sustainable business models that capture the full range of value of NbS | ■ | ■ | | | ■ |

## 1. Promoting environmentally and socially-sound interventions in the context of evolving FCV

**Considering the different FCV contexts is crucial to develop targeted NbS approaches to increase climate resilience in FCV affected settings.** As highlighted in section 4, countries affected by FCV are not the same, with some countries having higher capacities and resources than others and facing different FCV threats. In some countries, FCV threats are more likely to occur infrequently or periodically, such as during election cycles or in the

aftermath of severe natural hazards. In other settings, FCV threats will persist over the long term and have compounding effects that spillover to other sectors such as agriculture and natural resource management.[149] Recognizing these threats can enable better understanding of the types of challenges being faced and tailor NbS to address these challenges in a conflict-sensitive way.

**NbS must be context specific and respond to needs and realities on the ground.** In addition to considering particular FCV threats, NbS interventions need to be tailored to the local context. This involves paying attention to customary laws, listening to local knowledge, and engaging marginalized groups. Many communities in FCV settings have substantial skills and knowledge in managing natural resources and can provide important insights of the type of NbS that could be more relevant, which makes it essential to include communities throughout the project cycle (Box 8). Equally important is building a common understanding of nature and the value of NbS to enable actions that respect the rights of IPLCs and that have strong environmental and social integrity, as well as to increase social acceptance of and demand for NbS. In addition, designing and planning NbS should consider the complexity of a proposed NbS (simpler NbS may have lower maintenance needs), including operation and maintenance costs in investment designs, developing efficient and simple monitoring and evaluation frameworks, and fostering capacity building.

**Box 8. Lessons learned from tree planting in Freetown.[150]**

The Freetown the Treetown campaign in Sierra Leone involved a two-year project to plant 500,000 trees in the first year and 500,000 in the second, covering both public green areas and private properties. In the first year, the high slopes and upper catchment areas where deforestation and mud slides posed a serious risk to Freetown were replanted, while during the second year, efforts continued by targeting lower areas, streets, and waterways to mitigate the downstream flooding and loss of biodiversity. Important characteristics of the project included: i) target locations and species were determined by a technical team from academia, government ministries, and civil society, which gave preference to local trees that were suited to decrease soil erosion; ii) ten tree nurseries were established to distribute seedlings to distribution centers established in each of the 13 catchment areas; and iii) a program was developed to track tree survival.

Community-based organizations (CBOs) were responsible for planting, nurturing, and monitoring the trees. CBOs were each issued a grant for planting. In return they became responsible for hiring Area Managers, Supervisors, and local people from within the community who would act as tree planters, stewards, and trackers. They were also provided with technical assistance and training on how to plant, nurture, and track the trees. CBO staff and community members received incentive payments, where a percentage of the payment was tied to the percentage of trees still growing and properly tracked. 553 jobs were created in the communities of Freetown, many of which continued into the second-year planting season. The project faced many challenges including procurement requirements, getting trees planted, and political and administrative obstacles that resulted in delays in funding. A key finding was the long-term need to maintain and grow the trees (i.e., watering them during the dry season) that went beyond just planting them, and its associated costs. In addition, involving CBOs in the project was crucial to get the community buy-in needed to ensure the trees' maintenance and the associated protection from landslides and floods.

**Scaling-up NbS in FCV affected settings will also require integrated approaches that ensure social and environmental integrity to strengthen trust from stakeholders, donors and investors.** Currently the sectors where most NbS projects tend to attract greater volumes of investment relate to major commodity markets, particularly in the forest, agricultural and water sectors. Emerging NbS themes, such as species protection and marine/coastal projects, are yet to achieve the level of commercial maturity needed to attract investment at scale but could potentially provide important benefits for nature and

[149] World Bank. Promoting FCV-sensitive Climate Action in CCDRs: An Approach Note.
[150] Ravenholt (2021). No Pleasure in the Pathless Woods: The Legal and Implementation Challenges of Tree Planting in Freetown, Oxford Policy Fellowship.

communities. While the commercial maturity of the forest, agriculture and water sectors provides scalable opportunities to evolve into NbS activities, traditional commercial models do not inherently deliver the multiple social, environmental and climate benefits needed to be considered an NbS and can create negative impacts and unintended consequences.[151] Robust safeguards, standards and guidance for NbS are critical and need to be further developed, refined and applied to ensure that NbS are implemented in ways that are effective, gender-responsive, transparent and consensual.[152] These issues also underscore the need for common approaches to measuring and validating impact from NbS investment.[153]

### 2. Embedding NbS into broader development programs and public-private partnerships to support national objectives

**Linking NbS actions to national priorities and objectives is crucial to promote investment.** Recognizing dependencies of the country's economy on natural resources is key to find ways to pursue economic development in ways that avoid depletion of nature. In addition, implementing NbS may require potential tradeoffs given the long-term commitments required and which can affect the implementation of more urgent/pressing needs of FCV affected settings. In the context of competing of priorities and needs of FCV settings, NbS could, for example, be embedded in infrastructure programs by promoting green-grey solutions. NbS could also be integrated in social impact programs, for example, using community approaches for NbS to create social inclusion or safety nets, or combining NbS projects with social protection and disaster risk management programs. NbS projects combined with shorter term protection measures could be part of post-conflict rebuilding efforts and generate jobs. Notably, the potential of NbS to create employment is an important entry point in FCV settings.

**Public-private partnerships can help mobilize NbS investment.** Public-private partnerships (PPPs) can support the integration of NbS into wider development programs while helping to overcome financial and economic barriers. For instance, infrastructure projects using PPP contracts can request the integration of green infrastructure and NbS options as part of the designs while making it clear that those which incorporate them will be prioritized. Public funds can be used to take on the actions with the lowest returns and reduce the risk for private investors, while private investors can contribute with the necessary capital. PPPs also allow the public sector to benefit from specialized skills that may exist only in the private sector.[154]

### 3. Increasing conflict-sensitive climate programming, coordination, and collaboration

**MDBs, DFIs and development agencies play a crucial role in breaking down information barriers and increasing capacities to develop bankable NbS projects.** International public finance can tackle issues related to the limited information of climate risks and NbS by providing technical assistance, facilitating access to Earth observation technologies, improving understanding of climate change risks in specific geographical areas and funding

[151] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class.
[152] United Nations Environment Programme (2022). Nature-based Solutions: Opportunities and Challenges for Scaling Up.
[153] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class.
[154] Christiansen, L., Ray, A. D., Smith, J. B., & Haites, E. (2012). Accessing International Funding for Climate Change Adaptation: A Guidebook for Developing Countries. UNEP Risø Centre on Energy, Climate and Sustainable Development. Technical University of Denmark (DTU).

pilot projects.[155] NbS projects can be complex to structure, particularly where public and private investment must come together to make a project viable. DFIs and development agencies can play an active role in improving financial expertise for project development, providing advisory services tailored to the needs of FCV affected settings and convening different actors to design bankable NbS projects. Project development support can also help reduce the costs for private investors by helping with preparatory works such as feasibility studies and attract their involvement in NbS initiatives by reducing risk. Furthermore, conflict-sensitive project design and programming can help reduce the risk of unintended consequences of NbS projects in FCV settings.

**Better understanding the perceived risks versus the real risks of operating in different FCV affected settings is crucial to increase the appetite and risk tolerance to invest in these settings.** Providers of international public finance can improve internal capacities to better assess and manage the risks arising from conflict, by updating risk assessments to reflect complex climate and conflict dynamics, producing clear guidance on risk mitigation that includes participation of climate, conflict, and peacebuilding experts, and developing procedures to share the risks with implementing partners at the local level.[156] The private sector also needs to better understand the perceived risks versus the real risks of operating in different FCV settings to increase investment appetite and risk tolerance. This requires going beyond simply describing countries as fragile or conflict-prone and accounting for differences in terms of risks (e.g., political instability vs. insecurity on the ground) and assessing FCV settings not just in terms of "state fragilities" but also business environment (e.g. developing FCV metrics that can be relevant for private sector to scale NbS in FCV that are broadly accepted by private sector and are linked to indicators in the different sectors as well as general business environment indicators). Improved conflict assessment and management can both open new investment opportunities and assist organizations in identifying those contexts where the real risk is so high that investment might not be feasible.[157]

**Providers of international NbS finance for adaptation can also increase access to adaptation and NbS finance that is sensitive to conflict risk and capacity constraints in FCV affected settings.** Establishing accessible funds with lighter administrative processes, adaptive programming, and flexible requirements (including the minimum amounts per project to allow smaller projects) can provide avenues to channel finance for NbS that reflects the needs of FCV affected settings.[158] DFIs can also establish dedicated approaches and targets that specifically focus on FCV contexts and integrate conflict-sensitivity analyses as part of their investment models.[159] Other options include supporting longer-term investments coupled with policy reforms, developing and deploying financing mechanisms with higher risk tolerance tailored to respond to the unique local contexts and challenges of FCV contexts, and prioritizing the implementation of programs over isolated projects.

**Catalyzing the development and delivery of successful NbS projects in FCV affected settings will also require improving coordination and collaboration between actors in different sectors as well as within the climate, humanitarian, and peacebuilding spaces.**

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[155] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report
[156] Mercy Corps. 2023. Overcoming the Fragility Barrier: Policy Solutions for Unlocking Climate Finance in Fragile States.
[157] Crossin and Banfield (2006). Conflict and Project Finance: exploring options for better management of conflict risk
[158] Cao et al. (2022). Embracing Discomfort: A Call to Enable Finance for Climate-Change Adaptation in Conflict Settings. Policy Brief.
[159] Ahairwe et al. (2022). Financing fragile contexts: what can development finance institutions do better?

While NbS projects may generate multiple benefits for society, they might also face cases where there are no clear incentives for a single agency to implement a project alone. Thus, coordination and collaboration from multiple stakeholders is crucial to scale up NbS, for example for urban projects with multiple entities charged with different mandates or projects involving different land uses[160] (Box 9). In addition, DFIs and bilateral and multilateral donors play a key role in fostering better coordination and collaboration and reducing the current humanitarian-development-peace-climate silos. Improved coordination and cooperation can help to share knowledge and expertise to address information barriers and increase access to finance by pooling funding from complementary financing mechanisms. It can also improve implementation by leveraging different mandates, skillsets, experience, and networks from each partner and enhancing flexibility to respond to sudden changes in the operating environment caused by conflict dynamics.[161]

**Box 9. Resilient and sustainable urbanization to support natural protected areas**

During the 1990's and early 2000's the Gorongosa National Park (GNP) in Mozambique was highly degraded, experiencing the effects of 15 years of civil war, in which two armies treated the park as a battlefield, killing wildlife for meat to feed soldiers and ivory to purchase arms. In 2008, the Government of Mozambique signed an agreement with the Carr Foundation to develop the Gorongosa Restoration Project, a long-term Public-Private Partnership to rewild the Gorongosa National Park (GNP) and promote sustainable development activities, education and healthcare in the park's Sustainable Development Zone (SDZ) under a vision to achieve a "human rights park". Under this partnership the park has significantly recovered and by 2018–when the agreement was extended, most species of big fauna were more numerous than in 1992, at the end of the civil war.[162]

The Gorongosa Restoration project also aims to reduce the climate vulnerability of communities in the SDZ, and in 2023 began the construction of 26 schools using resilient architecture techniques to withstand the high winds and flooding of cyclones, to serve as shelters during extreme weather events. The project is implemented in partnership with the United States Agency for International Development (USAID), the Ministry of Education, UN-Habitat and two NGOs. In addition, the GRP has developed the Model Cities initiative to promote well-planned and climate-resilient urban areas in the SDZ. The initiative aims to promote integrated planning and participatory governance, the construction of resilient infrastructure and implementation of NbS for basic infrastructure and public spaces, and local economy empowerment. This vision of sustainable urbanization has been captured in the Vila de Gorongosa 2030 Sustainable Development Framework, co-created with the Municipality, members of the community, and UN-Habitat.[163]

## 4. Creating synergies and complementarities between different private sector sources to scale up private finance for NbS

**NbS offers opportunities to engage private entities from different sectors.** Private actors are increasingly providing direct finance to NbS initiatives. A recent review of the NbS market found that institutional investors provided capital for 60% of the identified transactions, underscoring the growing interest and engagement opportunities for these private actors.[164] Insurers can also play a key role in increasing finance for NbS projects with biodiversity benefits through asset protection, liability reduction, and facilitation of capital inflow from the

[160] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe
[161] Cao et al. (2022). Embracing Discomfort: A Call to Enable Finance for Climate-Change Adaptation in Conflict Settings. Policy Brief.
[162] National Geographic (2018). https://www.nationalgeographic.com/animals/article/african-wildlife-is-rebounding-gorongosa-national-park
[163] Gorongosa National Park (2023). Gorongosa Highlights 2023
[164] Finance Earth (2021). A Market Review of Nature-Based Solutions: An Emerging Institutional Asset Class. https://finance.earth/wp-content/uploads/2021/05/Finance-Earth-GPC-Market-Review-of-NbS-Report-May-2021.pdf

financial markets.[165] Companies can directly finance NbS via corporate balance sheet investment, invest in ecosystem restoration within their value chain to improve their operations and reduce their environmental footprint, invest in funds that aggregate multiple NbS projects, or engage in voluntary carbon markets to support sustainability commitments or obligations.[166] However, the voluntary carbon market has increasingly been scrutinized over concerns of the quality of carbon credits and its ability to deliver environmental and social co-benefits and promote systemic change.[167] While assessing and ensuring the quality of carbon credits is generally challenging, this could be further complicated in FCV settings due to constraints in capacities and in policy and regulatory frameworks.

**Leverage different sources of private finance according to different FCV contexts.** Packaging NbS projects alongside projects that create revenue, such as commodity sales or combining coastal protection with road tolls, can increase private flows. For certain contexts, philanthropic resources tied to public finance can help to implement NbS while creating the enabling conditions to mobilize investment from other private sector sources. In addition, creating portfolios of bundled NbS or adaptation projects can increase the interest of private investors[168] (Box 10). This entails developing an overarching strategy and then crowding in different investments and scalable interventions, which is more effective when the private sector catalyzes improved governance and benefits livelihoods.[169]

**Box 10. Innovative private finance for forest community and SME-led restoration projects**

TerraFund, is a financing mechanism established to help channel funding to support the African Forest Landscape Restoration Initiative (AFR100), which seeks to restore 100 million hectares of land by 2030. The fund is a blended finance facility that has pooled philanthropic funding from eight donors and impact investors. Funders include Bezos Earth Fund, Meta, Good Energies Foundation, Lyda Hill Philanthropies, DOEN Foundation, AKO Foundation, and Caterpillar Foundation. The fund has channeled USD 15 million into 100 projects. Through 2030, these projects aim to restore 47,000 hectares, create 52,000 jobs and benefit 580,000 people.[170] By managing a portfolio of small restoration projects, TerraFund reduces the transaction costs and risks for investors but also opens opportunities for less experienced organizations in FCV settings to access funding, which is often discouraged by political instability and violence. For example, Climate Change Africa Opportunities (CCAO), an organization in Eastern Democratic Republic of Congo, has mobilized communities to grow 185,000 trees in eight years with almost no external investment. Terra Fund supported CCAO with two grants to restore the critical Congo Basin Ecosystem.[171]

Terra Fund also provides customized funding for organizations that engage in land restoration and make a profit through low-interest loans. In January 2024, Terra Fund had recuperated US$600,000 of its US$3 million in loan capital. 99% percent of this capital is revolved back to the same funded organizations when they are ready to expand. TerraFund also purchases shares of promising companies through equity investments and closely advises them as they grow.[172] By customizing offers to community organizations and SMEs and demonstrating their impact, TerraFund seeks to increase the appetite for investment in restoration of conventional investors, local financial institutions, and corporate donors.

[165] Cook,S.J. and Holliday,S.C (2022). Insuring Nature's Survival : The Role of Insurance in Meeting the Financial Need to Preserve Biodiversity (English). Washington, D.C. : World Bank Group.
[166] World Bank (2024). Blueprints for Private Investment in Ecosystem Restoration: Lessons from Case Studies. Washington, DC: World Bank.
[167] Schneider, L. et al. (2020). What makes a high-quality carbon credit?.WWF, EDF and Oeko-Institut.
[168] IISD (2023). Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries
[169] Hacking, J., et al. (2021). Beyond Carbon Credits: A Blueprint for High-Quality Interventions that Work for People, Nature and Climate. WWF.
[170] Terra Fund for AFR100 and World Bank (2024).
[171] WRI (2024). TerraFund Financed 100 Land Restoration Projects Across Africa. Here's What They Taught Us
[172] Ibid.

## 5. Using conflict-sensitive blended finance structures to implement NbS at scale

**There are opportunities to scale up and develop the NbS market through the use of current financing instruments and growing novel categories of sustainable finance.** Due to the public good nature of many nature-based investments, grants from public finance remain crucial to support NbS in FCV affected settings, as there are projects that will not meet the risk and return profiles sought by private sector investors regardless of the incentives offered by public finance.[173] Other financial instruments currently used by public and private entities to support nature-based projects include market-rate loans, concessional loans and equity. Instruments that have not been extensively used but could potentially help to overcome financial barriers include de-risking mechanisms such as guarantees, and more innovative debt instruments, including thematic bonds and sustainability-linked bonds[174] (Table 3). Relevant thematic bonds for NbS that could also be appropriate for some FCV contexts include blue and green bonds.[175] In addition, biodiversity bonds such as The Wildlife Conservation Bond (or Rhino Bond) could be explored.[176] Peace bonds have been proposed as a new bond instrument whose proceeds are applied solely to finance new or existing projects that achieve verifiable peace outcomes.[177] Among the sectors identified as starting points for peace bonds in FCV affected settings the water, agriculture, and land use sectors are also key for NbS. Given the significant public debt burden in many FCV affected settings, the deployment of financing instruments with a level of concessionality that considers debt sustainability is critical to enable fiscal buffers that provide coping capacities for climate shocks.[178] Furthermore, debt-for-climate or debt-for nature swaps could support fiscally constrained governments, particularly when access to grants or debt relief is limited.[179] However, debt-for nature swaps are not recommended in countries in debt distress and need a thorough feasibility assessment.

**Table 3. Financing instruments currently used and unused instruments with growth potential.**

| Financial instrument | Description | Complexity | Frequency | Effects on the NbS market |
|---|---|---|---|---|
| **Instruments frequently used** | | | | |
| Grants | Funding for projects, individuals or companies that does not need to be repaid. | Low | High | Support early development stage NbS projects and foster innovation |
| Market rate loans | Debt instruments whereby a contracting party borrows capital from financial institutions, paying interest based on the borrower's ability to repay and produce a return | Low | Intermediate | • Currently seldomly used for lack of sufficiently large loan opportunities<br>• Not favored by NbS projects for their high interest rate and the associated burden |

[173] IISD (2023). Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries
[174] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.
[175] OECD (2023). Development finance for climate and environment-related fragility: Cooling the hotspots, OECD Publishing, Paris
[176] The Rhino Bond was successful at leveraging climate financing from the GEF (investors receive a success payment at maturity, paid by the IBRD with funds provided by a performance-based grant from the GEF, in addition to principal redemption of the bond) and at crowding in private sector investment for biodiversity conservation.
[177] Interpeace and SEB (2022). Peace Bonds – Feasibility study. Assessing the potential of a new asset class that can lower risk and enhance peace. Edition 1, January 2022, Geneva.
[178] OECD (2023). Development finance for climate and environment-related fragility: Cooling the hotspots, OECD Publishing, Paris
[179] Ibid.

| Financial instrument | Description | Complexity | Frequency | Effects on the NbS market |
|---|---|---|---|---|
| Concessional loans | Debt instruments that offer more accommodating conditions for the borrower, allowing adjustment of the grace period, the interest rate or other features of the agreement. | Low | Intermediate | • Mostly offered by development finance institutions and states, not by the private sector<br>• Perceived as an intermediate solution between market-rate loans and equity |
| Equity instruments | Any contract that evidences an ownership interest in an entity, such as stocks or equity-like debt instruments. | Low | Low | • Potential to help scale small-NbS ventures, especially if concessional.<br>• Potential to accelerate the growth of mid-sized NbS, particularly if supported by additional technical guidance by the equity investor<br>• Unlikely to expand due to scale, low returns and high risk |
| **Promising but underused instruments** | | | | |
| Guarantees | Instruments whereby a financial entity, generally a public or multilateral financial institution, supports the private funding of a project by assuming responsibility for a debt should the borrower be unable to keep up on its payments. | Low | Intermediate | • Potential to boost private investment in NbS by de-risking them in at a nascent phase of the market<br>• Potential to bring in additional private capital on top of additional sources such as grants |
| Thematic bonds | Bonds are a fixed income instrument issued by corporations, governments, or other organizations and sold to a borrower to finance projects. Issuers are required to use the proceeds for the bonds they have raised only for eligible purposes.[180] | Low | Intermediate | • Can foster the growth of NbS in their mid-to-late development stage<br>• Enable investors to verify the claims and tie the issued debt to the exclusive use of projects<br>• High issuing costs and best tailored for large projects |
| Sustainability-linked bonds | The interest payments on a sustainability-linked bond are linked to performance, so that issuers receive a discount or pay a penalty depending on whether or not they achieve a certain result. This is done through target setting that is benchmarked against key performance indicators. | Intermediate | Intermediate | • Offer more flexibility on how the proceeds are employed and are cheaper than thematic bonds<br>• May lead issuers to set less ambitious key performance indicators and offer less rigorous accountability measures |

***Source: Adapted from EIB (2023).***

**Blended finance structures tailored to each project that seek to reduce risks both for investors and communities can help mobilize finance for NbS in FCV affected settings.** NbS projects typically require different funds to cover all relevant activities. Thus, the combination and strategic use of different financing instruments is key to scale the

[180] Interpeace and SEB (2022). Peace Bonds – Feasibility study. Assessing the potential of a new asset class that can lower risk and enhance peace. Edition 1, January 2022, Geneva.

deployment of NbS. While grants are currently the largest tool to promote the growth of NbS, investments that yield a return will require the diversification of funding sources and risk reduction.[181] For example, grants could cover technical assistance, and concessional loans alongside equity could provide sufficient capital for implementation, while guarantees and insurance could provide additional safety to borrowers. As the structure grows in size and complexity, more sophisticated instruments such as thematic bonds could be integrated.[182] Blended finance (mixing concessional and commercial returns) structures can help increase the attractiveness of investments for the private sector, provide avenues for strengthened collaboration between investors, public sector funders and philanthropic donors, and could potentially raise significant additional finance for NbS, development and peace. However, to date, least developed countries have only attracted 6% of all the private finance ODA has mobilized and it is not clear how much existing blended investment is conflict sensitive.[183] In addition, concessional finance approaches are often not conflict sensitive nor adequately consider conflict dynamics.[184] Thus, blended finance structures that adequately mitigate these risks are required to implement NbS at scale, engage the private sector and create value for investors and communities.

### 6. Strengthened policy environments, market reforms and sustainable business models that capture the full range of value of NbS

**Scaling private finance for NbS will require strong policy signals and market reforms.** The public good nature of NbS projects will remain a challenge for private sector engagement as long as private actors only invest in NbS projects to a level commensurate with their private benefit. Thus, a structural change in the markets in which NbS operate is crucial. This could be supported by providing positive incentives to private actors for producing the outcomes sought by policymakers or designing disincentive schemes that penalize entities that do not provide the NbS desired by policymakers, or otherwise restrict or add costs to those causing the environmental harm.[185] Furthermore, without reducing financing of nature-negative activities (i.e. greening finance), actions to scale up investment in NbS (i.e. financing green) will be insufficient to tackle the climate, biodiversity and degradation crises.[186] In FCV settings these activities could focus first on greening public finance, for example, by reforming or repurposing harmful government subsidies to create an even playing field for sustainable business models. However, careful assessment is needed to understand where repurposing subsidies could be feasible due to limited fiscal space. These activities must also be integrated to efforts to address the drivers of fragility, which is essential to mobilize private sector capital at scale.

**Governments can undertake several actions to improve the enabling environment for NbS investment.** Government leadership is key to attract NbS finance as public and private funders are attracted by investment climates that offer stability and good governance. Country governments can stimulate investor appetite through public policies that reduce uncertainty,

[181] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.
[182] Ibid.
[183] Interpeace and SEB (2022). Peace Bonds – Feasibility study. Assessing the potential of a new asset class that can lower risk and enhance peace. Edition 1, January 2022, Geneva.
[184] Finance for Peace. A collective effort to change how investment supports peace
[185] European Investment Bank (2023). Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe.
[186] UN Environment Programme (UNEP), The State of Finance for Nature report, 2023.

regulatory barriers and transaction costs for investors. Governments can also deploy financial tools that address the risk/return profile of NbS investments (e.g. public lending, risk guarantees, insurance) and enable PPPs. Strengthening the policy environment may also include mainstreaming NbS within existing national planning strategies and translating these objectives into concrete policies, plans and budgets, to increase the demand for adaptation and NbS investment.[187]

**While improving the enabling environment for investment at the country level needs to be led by governments, this can be extremely difficult in countries affected by FCV with limited capacities and facing severe security or economic challenges.** To support these efforts, bilateral donors and MDBs can provide policy advice and technical assistance to FCV countries to design adequate incentives for private-sector engagement. They can also support investment planning to provide clear information on where private participation will be critical for investments to be successful, improve public financial management (PFM) systems to provide more certainty on the delivery of financial resources, build capacities for developing or strengthening policy and regulation, support multi-stakeholder coordination, and foster policy dialogue that considers the interplay between climate, environmental degradation and fragility.[188] [189]

**Reflecting the full value of NbS in financial transactions and business models is crucial to scale NbS.** Recognizing the full spectrum of benefits of NbS to economies and societies and in creating value for companies and investors is key to unlock the full potential of NbS as a tool to deliver for climate, nature, equity and business ambitions at scale.[190] The proper valuation and monetization of benefits in business cases can build a competitive advantage to attract wider sources of capital for NbS projects. Sustainable business model innovation (i.e., reorganizing incentives and revenue mechanisms to take full advantage of sustainable solutions) can result in higher returns than other types of business innovation and provide additional benefits in terms of risk and resilience. While business model innovation using NbS has not been explored in depth, examples of this innovation are apparent where NbS contributes to restoration, disaster risk reduction and tourism (e.g., coastal/flood protection measures), in which these benefits are supported and used by a wide range of stakeholders interacting in a complex network. [191]

[187] Micale et al. (2018). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. A CPI Report
[188] OECD (2023). Development finance for climate and environment-related fragility: Cooling the hotspots, OECD Publishing, Paris
[189] Arame T. et al. (2021). Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action. World Bank, Washington, DC.
[190] WBSCD (2024). The NbS Blueprint: Building business cases for Nature-based Solutions
[191] European Environment Agency (2021). Nature-based solutions in Europe: Policy, knowledge and practice for climate change adaptation and disaster risk reduction.

# Section 6: Takeaways and Recommendations

**FCV-affected settings are especially vulnerable to the impacts of climate change which can increase environmental degradation and intensify existing tensions and inequalities**. Approximately 70% of the most climate-vulnerable countries are among the most politically and economically fragile and a significant part of them are also in conflict. Climate change can intensify drivers of conflict and fragility (e.g., degradation of natural capital, food insecurity, migration, heavy reliance on rainfed farming, inadequate infrastructure and weak policy buffers), while conflict in turn can increase vulnerability to climate change by increasing environment-related displacement, interrupting basic services, damaging physical infrastructure and the natural environment, and hindering the capacity of institutions and communities to adapt to climate change impacts. It is therefore critical to design actions that jointly consider and address the drivers of environmental degradation and biodiversity loss alongside more traditional root causes of insecurity. This can help to avoid a vicious cycle where nature loss exacerbates the drivers of instability, which, in turn, contribute to further environmental degradation both directly and indirectly. Another very important factor is the need to recognize that not all FCV challenges are the same and that there are specific particularities associated to settings affected by fragility versus conflict versus violence that need to be tailored to when identifying, designing, and implementing NbS. On the other hand, it should be noted that it will be important to consider potential tradeoffs when implementing NbS given that these interventions will require long term commitments that may affect the implementation of more urgent/pressing needs of FCV affected settings.

**The international community increasingly recognizes NbS' potential to address societal challenges, but NbS remains underfunded and has yet to adequately reach FCV settings.** Recent policy discussions at the international level are placing an increasing importance on NbS to address some of the most important challenges of the century directly linked to biodiversity loss and climate change. However, finance for NbS only represent a third of the levels needed to reach climate, biodiversity and land degradation targets by 2030. In order to meet Rio targets, annual NbS investments need to almost triple from US$200 billion to US$542 billion by 2030. While there is limited information on the amount of NbS finance channeled to FCV settings, preliminary estimates and information on adaptation finance flows to FCV countries indicate that FCV settings remain severely underfunded.

**There is a need to find innovative and effective ways to support NbS in FCV affected settings and scale up public and private finance.** Scaling up finance for NbS for adaptation will require addressing several economic and financial, information, institutional, political and regulatory, and socio-cultural barriers. Most challenges for private sector investment in NbS for adaptation are related to the policy framework and lack of incentives in recipient countries, information asymmetry and lack of clear taxonomies and methodologies to invest, track, and disclose in adaptation and resilience; small project sizes that increase transaction costs; limited or uncertain cash flows and long investment horizons that make adaptation investments less attractive; and macroeconomic and investment level risks perceived to be high for private investors in vulnerable countries. Considering the information presented in this background note and the insights collected during the interviews held with World Bank staff, key areas and topics to enhance the current support being given in terms of technical assistance, financing, and others, include:

1) **It is crucial that NbS projects supporting adaptation in FCV affected settings are conflict-sensitive and actively mitigate causes of conflict to avoid widening inequalities that can exacerbate conflict.** FCV affected settings are not all the same, some countries have strong economies, some countries have more resources than others, and there are different situations of stability. Considering these factors is important because approaches should be targeted and context specific, for example by considering customary laws, listening to local knowledge, and considering marginalized groups. In violent contexts, peacebuilding should be seen as the first and most crucial step toward addressing complex climate risks. It is also important to understand how the various types of resources (renewable, nonrenewable, land, and water) interact with drivers of conflict and fragility when designing actions to support NbS for climate adaptation in FCV affected settings and/or countries.

2) **In order to close existing funding gaps, IFIs, MDBs and bilateral donors can improve capacities for project design, address information barriers, and foster coordination and collaboration between multiple actors.** This should include playing an active role in improving financial expertise for project development, providing advisory services tailored to the needs of FCV affected settings and convening different actors to design bankable NbS projects. Project development support can also help reduce the costs for private investors and attract their involvement in NbS initiatives. Furthermore, the integration of conflict-sensitive considerations into project design and programming can help reduce the risk of unintended consequences of NbS projects in FCV settings. IFIs, MDBs and bilateral donors also play a key role in fostering better coordination and collaboration to reduce existing siloes both within institutions as well as within the climate, humanitarian, and peacebuilding spaces. International multilateral and bilateral institutions can also address existing knowledge gaps, particularly to improve the assessment/quantification of the effectiveness of NbS in various sectors and scales. Robust safeguards, standards, and guidance for NbS are also critical and need to be further developed, refined and applied to ensure that NbS are implemented in ways that are effective, gender-responsive, transparent and consensual. Public finance providers can also support analyses, information, and knowledge on how to make NbS investments economically interesting to help make the case for private, public and IDA investment, especially for long-term programs that have more potential to ensure the sustainability of efforts, and systematize knowledge and experience in implementing NbS projects, showcasing features and financial structures that resulted in successful (or unsuccessful) projects.

3) **Linking nature positive activities with elements of social inclusion, cohesion, resilience, and process legitimacy[192] could be an important entry point.** Social impact programs focused on the use of community based NbS to create social inclusion/cohesion have proven to be some of the most successful programs - social safety nets are good examples of how good land management, water security, etc. can also result in enhanced climate resilience. It is critical that interventions involve community organizations (including NGOs and humanitarian actors) early in the process as community driven development projects allow better use of resources by involving local voices in the decision-making process. Communities are the ones that primarily depend, manage and benefit from natural resources, so it is important to ensure that

[192] The extent to which beneficiaries and stakeholders in general feel like the way in which an intervention has been designed is fair and reflects needs and realities of communities.

community dynamics are not disturbed to avoid exacerbating existing or creating new causes of conflict. Social and environmental programs should seek to intentionally result in positive or at least non-harmful outcomes. At the same time, building institutional capacity of communities (decision making mechanisms, community platforms, etc.) can be used for a wide range of resilience building activities and can also improve the implementation of NbS. Small scale private sector or community NbS initiatives (e.g., restoration projects, payments for ecosystem services) should not be disregarded as they have the potential to support livelihoods, benefit the environment and create jobs, which is especially relevant in FCV settings.

4) **The combination and strategic use of different financing instruments is key to scale the deployment of NbS.** Many countries that face severe climate risks also face substantial debt burdens. With more than 60-80% of adaptation financing in the form of debt, there is a clear need for higher levels of grant and concessional finance to manage debt sustainability and affordability in FCV settings. Blended finance structures tailored to FCV affected settings are required to implement NbS at scale, engage the private sector and create value for investors and communities while reducing risks related to conflict. However, these efforts need to be accompanied by actions to address the drivers of fragility, which is essential to mobilize private sector capital. Some successful financial instruments that could eventually be replicated or explored include: (1) green bonds with nature-linked outcomes; (2) debt for nature swaps (however in very specific situations); (3) commercial-conservation approaches for example for forestry (where a company that commercially exploits a resource also invests in conserving it); (4) private equity funds to be blended with commercial vs concessional funds to be invested in NbS; (5) insurance for nature; (6) stopping harmful subsidies and repurposing (agriculture) subsidies in favor of nature-positive activities (i.e. greening finance).

5) **Private sector participation in NbS will be critical to increasing financing for nature-positive activities; however, not all private finance sources are the same; some sources have more immediate potential than others.** For example, philanthropic funding can effectively break down some of the barriers for private sector finance in FCV settings, paving the way to more "traditional" private investment/financing and eventually be scaled-up. There are already examples of successful initiatives, and this approach also allows to overcome the issue of the small scale of projects, which is relevant to unlock NbS finance. In addition, companies can finance NbS via corporate balance sheet investment, invest in NbS within their value chain to improve their operations and reduce their environmental footprint, and invest in funds that support NbS projects. Other ways to engage private sector include: focusing on the concept of avoided losses as an economic factor in insurance (however, more information is needed on the potential of insurance to mobilize private sector capital for NbS in FCV settings); integrating NbS and green-gray solutions as requirements for infrastructure projects using PPP contracts so that those that incorporate them are rewarded and prioritized; and creating collaborative partnerships under long-term agreements to manage protected areas on governments' behalf given the large amounts of funding the maintenance of these large areas require, which is often beyond governments' capacity.

# ANNEX 1. High-level analysis of NbS finance data from publicly available sources

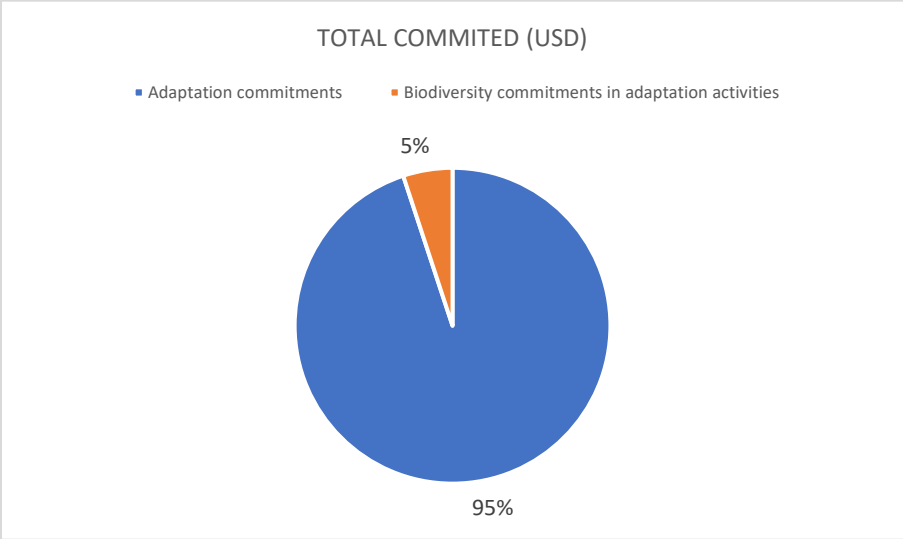
Using previously developed data sets on adaptation finance in FCS and non-FCS countries[193], a high-level analysis of indicative financial flows for biodiversity positive activities and projects has been undertaken as part of this assignment. Similar to previous research pieces undertaken under SAFFE, it captures data from publicly available information from the AidAtlas database.[194] Some observations about the data use and limitations are as follows:

- The timeframe for all data sets is 2010-2020 to ensure consistency and data comparisons.
- In the case of the non-FCS countries data set: regional projects and countries marked as undefined were excluded from the analysis to allow a fair comparison of results.
- The analysis of both data sets only considers projects that were tagged 'Yes' for biodiversity and adaptation for consistency purposes.
- Information on climate mitigation projects was consulted in AidAtlas but none of the projects tagged Yes for biodiversity seemed to have information on USD commitments, so no further data was added to the existing sets.
- All the data derives from the data set originally received from the SAFFE team on adaptation finance in FCS and non-FCS countries.
- Biodiversity has been considered a proxy for NbS for the purposes of this analysis given the absence of NbS-specific information.
- The focus is mainly on financial commitments rather than disbursements as there are large discrepancies between how different funders report against disbursements.
- This analysis is preliminary and high level and therefore should only be considered as indicative.
- This analysis does not highlight financial commitments from MDBs because they are not presently tagging their financial support using the climate change Rio Markers, therefore, their commitments for biodiversity are not being captured by the reporting method used in Aid Atlas[195].

**Biodiversity positive activities are severely underfunded, even among adaptation finance.** One of the first observations from the data analysis is the very small share of adaptation finance that actually goes to biodiversity related activities (those that have been tagged Yes for Biodiversity according to the indicators used by AidAtlas). According to the data, only 5% of global adaptation finance is committed to fund biodiversity related activities. This percentage is also consistent across analyzed country groups, i.e. in all data samples, only 5% of the total finance is destined to fund biodiversity relevant activities regardless of it being in FCS or non-FCS countries.

[193] In late 2023, SAFFE financed research activities on Adaptation Finance Trends in FCV Settings which resulted in the development of a knowledge brief and a data set based on information from the AidAtlas database on climate adaptation commitments from main donors to FCS and non-FCS countries. The same data set has been used for the purposes of this high-level analysis, however focusing on those projects tagged for biodiversity, which has been taken as the closest sector to NbS.
[194] Aid Atlas is developed by Stockholm Environment Institute (SEI) and is an interactive online platform which helps people to explore international development finance. It includes annual data on global development finance commitments and disbursements from 2002 onwards. The development finance data presented is sourced from several OECD databases, mainly from the Creditor Reporting System (CRS) Aid Activities database.
[195] More information on this can be found under "How complete is the data?" on the AidAtlas website.

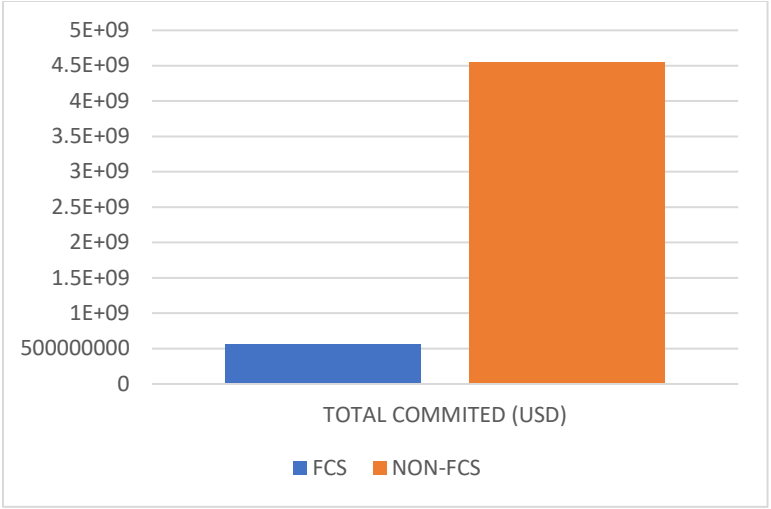
**Figure A.1-1. Proportion of biodiversity commitments among total adaptation finance between 2010 and 2020.**




***Source: Authors.***

**Financial flows to biodiversity positive projects in non-FCS countries are over eight times the amount of financing for biodiversity in FCS countries, highlighting again a significant funding gap in FCV settings despite the existing challenges and vulnerabilities.** Through previous research done by SAFFE, it is already known that FCS countries receive significantly less adaptation finance than non-FCS countries, despite being more vulnerable and less resilient to shocks that can be exacerbated by climate change. The same trend is observed when analyzing financial flows amongst adaptation financing to biodiversity positive activities, including NbS. This background note has discussed the importance of natural resources for climate resilience building, overall wellbeing, economic prosperity and even peacebuilding, as well as their potential to exacerbate conflict and existing instabilities. Despite these facts, the funding gap for biodiversity is remarkable.

**Figure A.1-2. Total committed amounts for biodiversity financing in FCS vs non-FCS countries.**




***Source: Authors.***

**Over the period between 2010 and 2020, over 500 projects (or 4.5 billion USD) in non-FCS countries have incorporated biodiversity elements while, in FCS countries, this number is still below 100 (or 565 million USD).** Although these numbers are all low when looking at the global landscape of adaptation finance, they highlight the need to design and fund projects that intentionally aim to address biodiversity related challenges, including the use of NbS to build resilience and contribute to improving FCS related challenges and issues.

| FCS countries | |
|---|---|
| 562,486,045 | Total Committed (USD) |
| 93 | Total Projects |
| 23 | Total Countries |
| 13 | Total Donors |

| Non-FCS countries | |
|---|---|
| 4,541,347,553 | Total Committed (USD) |
| 521 | Total Projects |
| 73 | Total Countries |
| 21 | Total Donors |

**During the timeframe considered, the Democratic Republic of Congo was the *FCS country* that received the most amount of financing for biodiversity relevant activities.** This allocation seems logical given the DRC's abundant natural resources and the critical role of nature in the country's ecological and economic landscape.[196]. DRC is closely followed by Mali and Haiti in terms of committed funding. On the other hand, Guinea, Papua New Guinea, and Iraq are the countries that received the least funding for biodiversity.

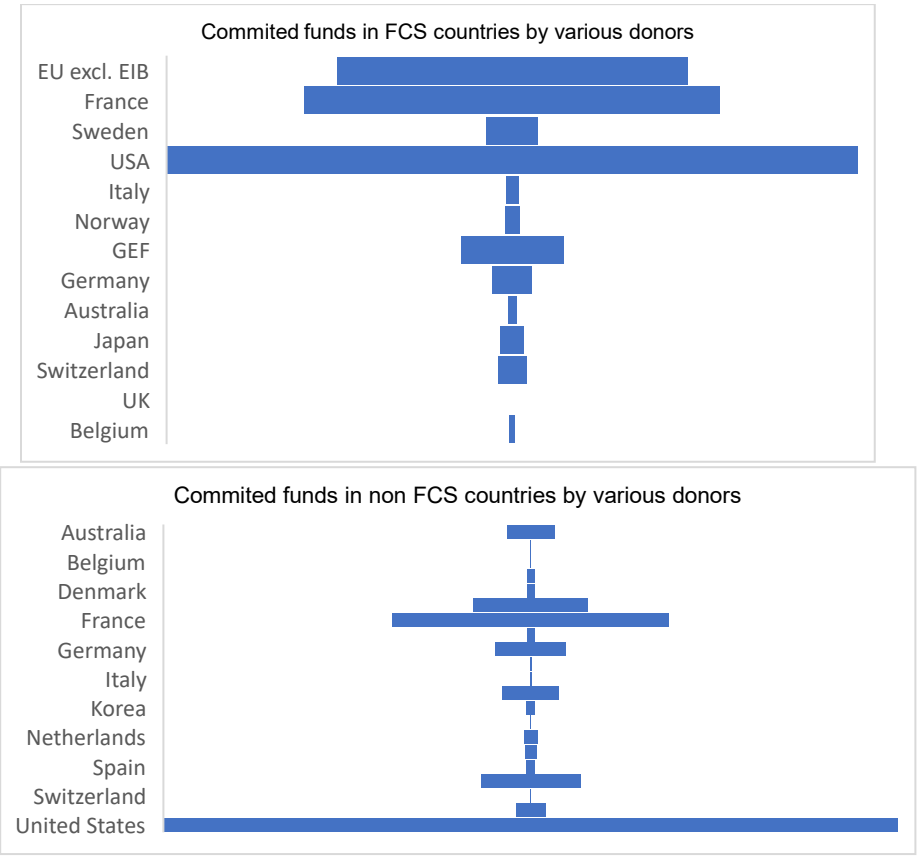
**In the case of *non-FCS countries*, Colombia is by far the country that has received the most amount of funding with over 670m USD**, followed by the Philippines with 521m USD and Vietnam with 340m USD. This also seems logical given the Convention on Biological Diversity (CBD) listed Colombia as one of the world's "megadiverse" countries, hosting close to 10% of the planet's biodiversity[197].

**The United States is the most active donor both in FCS and non-FCS countries with 221m USD and over 2b USD committed, respectively.** In the case of FCS countries, other donors such as France and the EU (excl. the EIB) also play important roles but in non-FCS countries, the USA is by far the donor with the highest amount of committed funding towards biodiversity activities.

[196] According to the Convention of Biological Diversity, DR Congo is one the world's 10 mega-biodiverse countries, with a high rate of endemism, important freshwater, forest and soil resources, including subsoils highly valued for their mineral content. The country possesses 50% of the freshwater resources of the African continent, numerous and diverse species of aquatic fauna, with a strong potential for the development of hydroelectric energy.

[197] Colombia has 314 types of ecosystems and possesses a rich complexity of ecological, climatic, biological and ecosystem components. It was ranked as one of the world's richest countries in aquatic resources, which is explained in part by the fact that the country's large watersheds feed into the four massive sub-continental basins of the Amazon, Orinoco, Caribbean, Magdalena-Cauca and the Pacific. The country has several areas of high biological diversity in the Andean ecosystems, characterized by a significant variety of endemic species, followed by the Amazon rainforests and the humid ecosystems in the Chocó biogeographical area.

**Figure A.1-3. Committed funds for biodiversity activities by donor in FCS and non-FCS countries.**

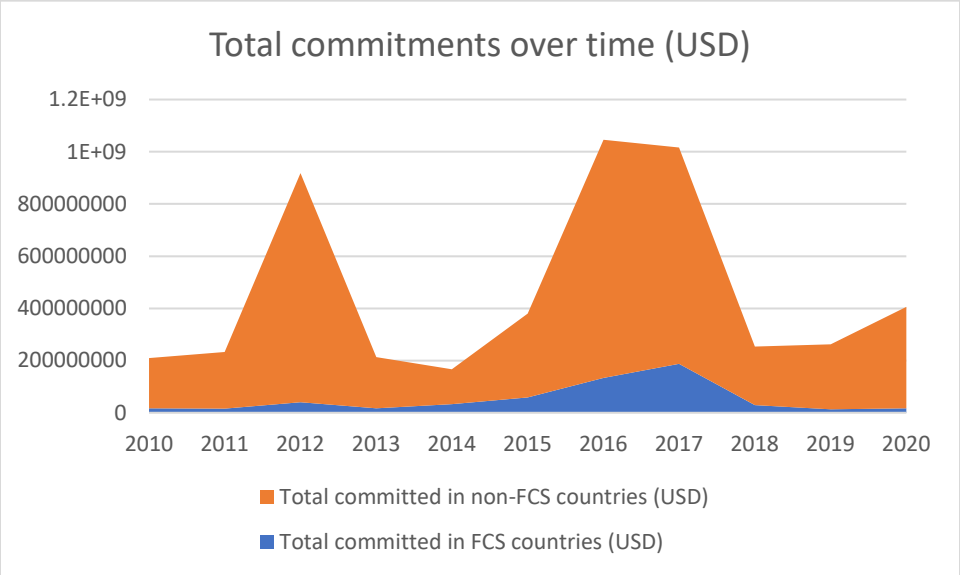



***Source: Authors.***

**Biodiversity financing reached all-time highs in 2012, 2016 and 2017 in non-FCS countries. This trend is also consistent with what can be observed in FCS countries, where 2016 and 2017 were peak years for biodiversity positive funding.** In FCS countries, there seems to be an upwards trend in financing between 2010 and 2017, while in non-FCS countries financing fluctuates from highs to lows with no specific trend. The financing peaks and trends can't be explained for certain with the available data, but they could have been influenced by the following milestones and trigger events:

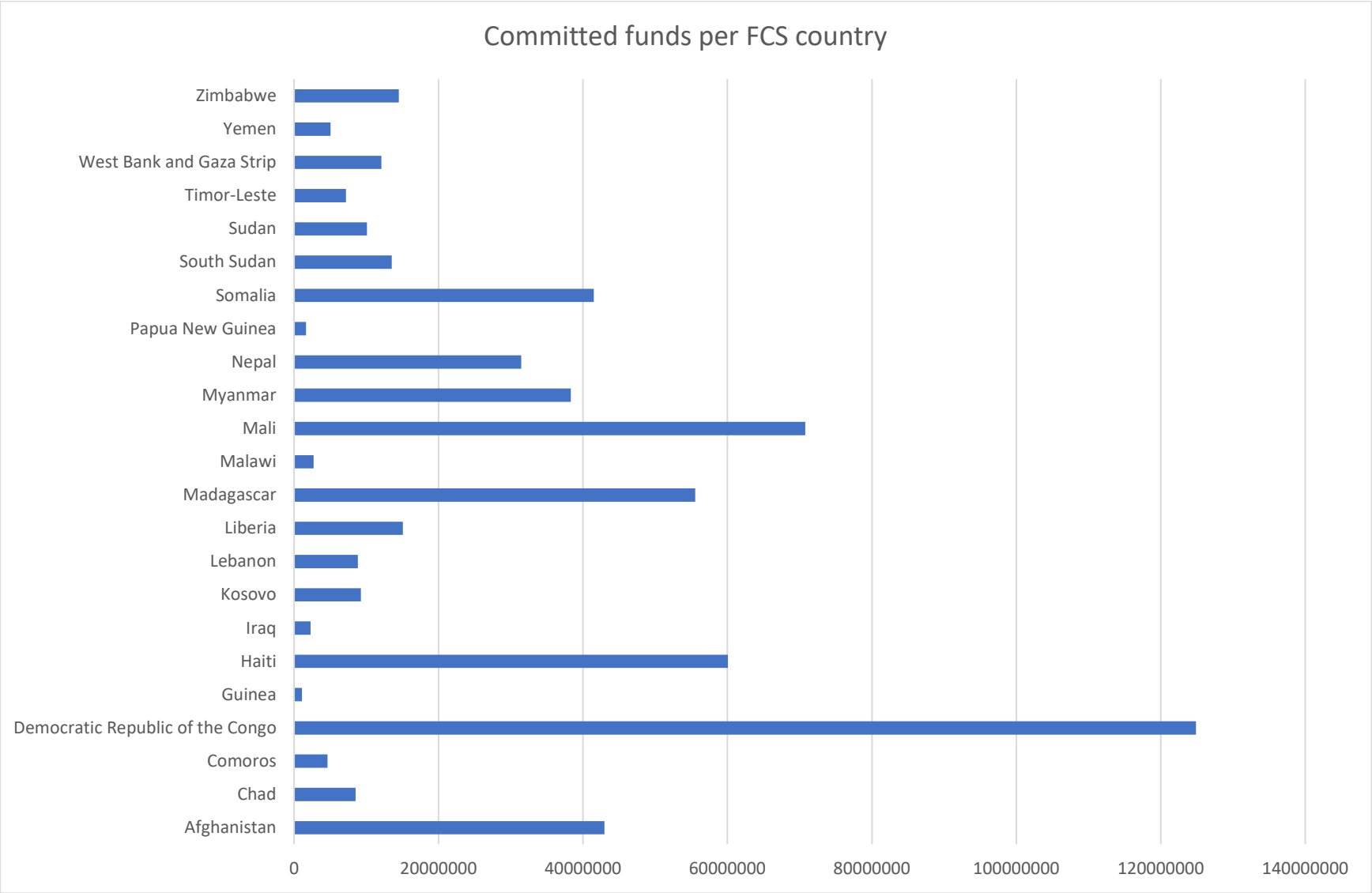
- In 2008, the Climate Investment Funds (CIFs) were established, and Phase 1 rollout started around 2010, which initiated some financial flows for climate finance (and possibly nature positive) purposes.
- In 2010 the Green Climate Fund, the biggest climate fund in history, was established.
- In December 2015 the Paris Agreement (a legally binding treaty) was adopted and in November 2016 it entered into force. Under the PA, countries made specific commitments to halt global warming and to commit financial flows to developing countries.
- In early 2020, the global Covid-19 pandemic put a halt on people's lives and economic development. The entire world stopped and so did the implementation of a multitude of projects that were active at the time.

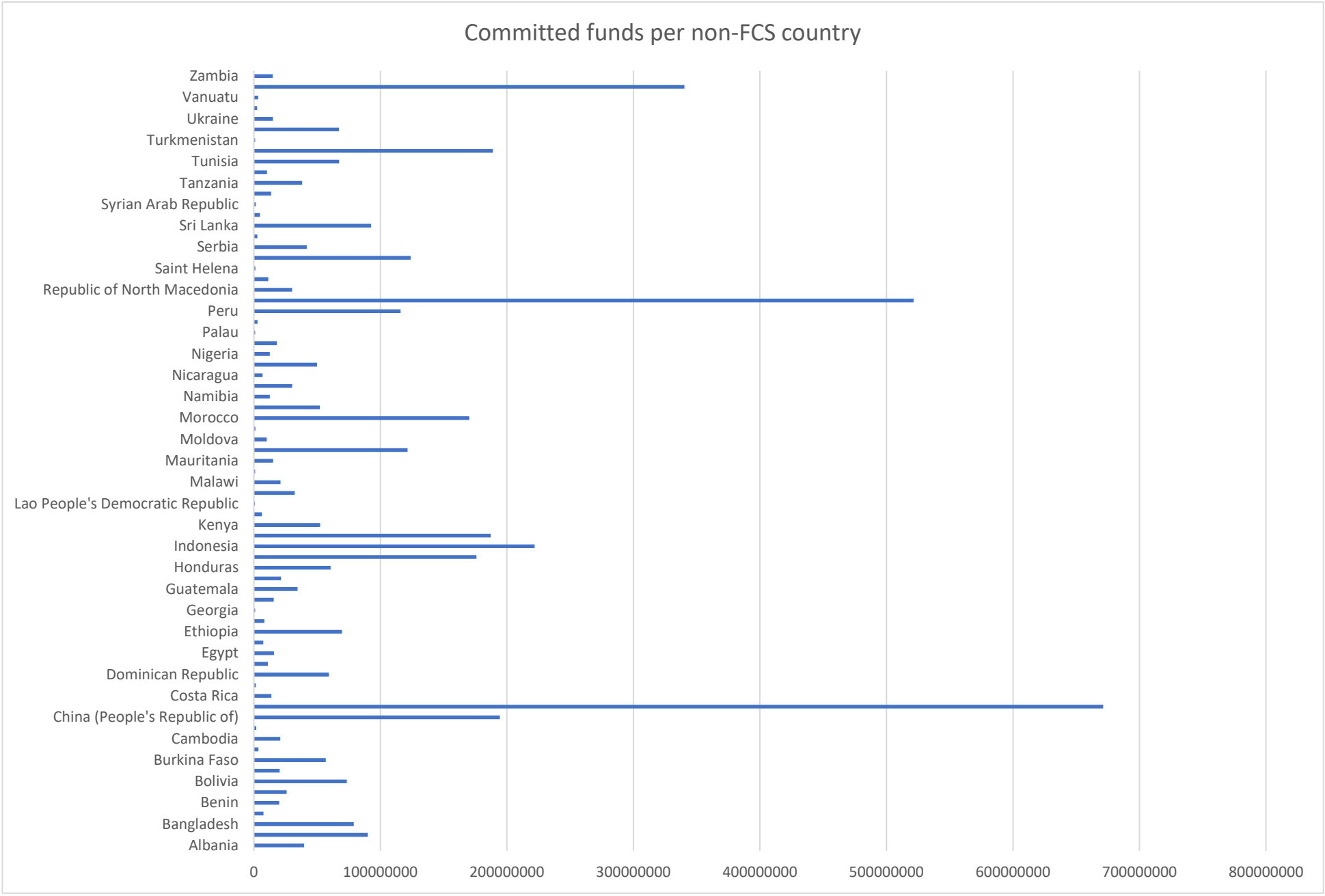
**Figure A.1-4. Total commitments for biodiversity positive activities in FCS vs non-FCS countries between 2010-2020.**




***Source: Authors.***

**Additional figures from the analysis are included below for further reference.**




Committed funds per non-FCS country
Zambia
Vanuatu
Ukraine
Turkmenistan
Tunisia
Tanzania
Syrian Arab Republic
Sri Lanka
Serbia
Saint Helena
Republic of North Macedonia
Peru
Palau
Nigeria
Nicaragua
Namibia
Morocco
Moldova
Mauritania
Malawi
Lao People's Democratic Republic
Kenya
Indonesia
Honduras
Guatemala
Georgia
Ethiopia
Egypt
Dominican Republic
Costa Rica
China (People's Republic of)
Cambodia
Burkina Faso
Bolivia
Benin
Bangladesh
Albania
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# ANNEX 2. Summary of interviews with key Bank staff

To complement the literature and desk review exercise, a series of interviews were held with relevant Bank staff to gather insights and additional information, especially as it relates to key barriers and opportunities that inform sections 4, 5 and 6 of this background note. A set of guiding questions was prepared for this purpose and the following persons were interviewed:

- Peter Kristensen, Lead Environmental Specialist.
- Brenden Jongman, Senior Disaster Risk Management Specialist.
- Fiona Steward, Lead Finance Specialist.
- Tracy Hart, Global Lead, Environmental Risk Management (ERM) & Fragile and Conflict States (FCS).
- Elise Doumergue, ENB.
- Caio Barbosa, SLCEN.
- Elisson Wright, Senior Environmental Finance Specialist.
- Dinara Akhmetova, Senior Natural Resources Management Specialist.
- Olga Gavryliu, Environmental Specialist.
- Patrick Barron, Senior Social Development Specialist (SSIDR).

The table below summarizes the findings and discussions of these interviews:

| Questions | Summary of answers |
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| 1. What are the key barriers to scaling finance for NbS in general (not specific to FCVs)? | <u>Limited public finance for adaptation and NbS and difficulties in accessing funding.</u><br><br>Public finance is always limited and it's difficult to make the case for nature in general because impacts and results are difficult to show and there are always competing priorities. Being able to show the full spectrum of benefits of NBS to economies and societies (co-benefits) is tough to ensure the allocation of public financing is made, understood and seen as valuable. Many forums on scaling up private finance exist but it is very difficult to make the business case due to the difficulty in making NBS profitable and the public goods nature of NBS. There is also the case of carbon credits for still limited and with competing priorities.<br><br>Making nature a top priority by itself is unrealistic – it should always go hand in hand with a bigger program or hard infrastructure (green-gray infrastructure).<br><br>Even though nature is currently at the top of the development and climate agendas, this does not translate into financial flows and action. There is not much climate finance that has been leveraged to date because there is an overall lack of interest even for adaptation projects. Not even in the WACA program which has |

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| | been ongoing for 8 years and has tried to leverage co-financing from private sectors, other donors like the GCF, etc., and has not been (as) successful.<br><br>The majority of climate finance available is going to OECD countries and not really to EMDES. On top of that, within climate finance, the % going to adaptation is significantly lower than mitigation. When you add NBS on top of that it becomes even smaller.<br><br>Access to climate finance is very difficult (time consuming, high transactional cost) so that discourages teams, countries and anyone trying to access climate finance for any purpose, including NBS. This is a significant barrier. Maybe MDBs and big institutions that have their own capital to finance sustainable initiatives should not be the primary recipients of these climate funds.<br><br><u>Competing priorities, limited capacities, and challenges with the governance framework.</u><br><br>Countries most in need get limited financial resources for adaptation because of different challenges. These include prioritizing economic activities, internal challenges, limited fiscal space and capacity to borrow for adaptation, and limited capacities to spend their money as needed.<br><br>Competing incentives and prioritization of short-term economic gains over long-term benefits. For example, activities linked to the exploitation of natural resources can generate immediate economic benefits. Many countries where needs are very high, have little appetite to borrow, so they prefer to pursue opportunities that quickly generate revenues that can push forward their economy. On the other hand, countries that want to pursue sustainable activities using debt, prefer to borrow for mitigation projects because they can generate revenue and can link those mitigation activities with economic activities (for example energy), but for adaptation, the immediate benefit is not evident.<br><br>Political will also plays an important role. For example, in Ethiopia, the government is strong, they are able to regulate and have various systems in place, but political government's interests may be in other areas. Strong government regulation in the country provides little space for private sector involvement.<br><br><u>Real or perceived risks of FCV and NbS.</u><br><br>NBS can be perceived as land grabbing or as a way to exclude (indigenous) communities of revenue generating initiatives such as carbon credits so there can be huge opposition, reluctance and definitely conflict, as a result of NBS-like initiatives.<br><br><u>Public good nature of NbS and financial challenges.</u><br>The public- good nature of NbS makes a challenge for financing for the private sector. |

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| | Nature is a public good, there is no cashflow, no obvious returns, most projects are rather small, etc. so what we are really talking about is public funding and crowding in and attracting other sources of financing is really difficult. When you add FCV on top of that it becomes practically impossible, especially in the case of private finance. |
| 2. Are any of these barriers more relevant in situations affected by fragility, conflict, and violence? | <u>Competing priorities, limited capacities and challenges with the governance framework.</u><br><br>NbS are already being used in FCS countries, especially by communities whose livelihoods depend on nature and natural resources. The issue relies in linking NbS with challenges that are specific to FCV countries and being able to scale them up. Governance-related aspects are particularly challenging for scaling NbS. Security concerns may prevent implementation and limit access to the places where NbS might be needed. The capacity of FCS government to regulate is also important. For example, in Madagascar, there are challenges associated with enforcing regulation to prevent mining in protected areas. In addition, the revenue generated from these activities is not used to improve the lives of people. If NbS with involvement of the private sector are going to work, they need to improve the lives of people.<br><br>Predatory relationships between countries and their natural resources are a challenge when trying to promote and implement nature-positive activities. The nexus between nature and people needs to be highlighted.<br><br>For private sector financing in FCVs you need basic macro stability and rule of law, which is difficult in FCVs so the appetite and trust is not there for private sector investment.<br><br>Access/value of land - You can't necessarily buy the land because it is state owned.<br><br>Nature is a long-term investment and, in FCV countries where there are so many more urgent and basic priorities, it is difficult and unrealistic to try to put NBS at the top of the list, even for public sector investment.<br><br>Competing priorities, low government budget and the enabling environment, which is particularly relevant for the private sector. The private sector needs government guarantees that investments will not be lost so, with low public capacity, private sector investment in public space becomes even more of a challenge.<br><br><u>Real or perceived risks of FCV and NbS.</u><br><br>Risk aversion from financial institutions, such as development banks. |

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| | Some challenges come from the high risks perceived by investors in FCV countries: low capacity of the financial sector to handle certain volumes and types of financial instruments which make investments not very attractive.<br><br>Getting finance for FCV settings could be harder because some donors don't want to engage in these countries because of challenges associated with financial instruments and capacities.<br><br>Marginalized communities are risk averse and don't like big changes to their dynamics, including to the availability of natural resources, they sometimes prefer not losing anything than gaining a lot. This can limit the scope and scale of NBS interventions.<br><br>In FCV there are many barriers to investment (investment impeding conditions) that will indeed affect NbS interventions.<br><br><u>Information barriers.</u><br><br>Knowledge of climate change is limited in FCV. Communities do not often understand climate change and climate finance, so this complicates the implementation of interventions such as those at the nexus of nature and climate. |
| 3. Given these barriers, is it feasible to promote/increase NbS interventions in FCV countries? | Communities in FCV countries have been using NbS for a long time, but the challenge is to scale them up and link these interventions to the challenges that countries face in the context of evolving FCS. NbS are linked to priorities in these countries, but how do we get to the point where we can make them work for those countries?<br><br>Key aspects for scaling NbS include an adequate enabling environment; that communities are part of the initiative; and an open, forward-looking, and pro people and environment government. In addition, it could help to recognize dependencies of the country's economy to natural resources, to find ways to pursue economic development without being predatory.<br><br>Theoretically the Rhino Bond could be replicated in other environments as part of an operation in the Bank or separate from the Bank but that has challenges associated with quality, safeguards, efficiency of operations. In addition, there are problems with debt sustainability, so we can't keep issuing bonds because of the risks of raising debt.<br><br>Debt for nature swaps need a thorough assessment of whether it is feasible to conduct complex restructuring. Ultimately, we should consider all options to design a swap, but be careful to avoid everybody collecting huge fees. Develop these models in a cheaper and more efficient way. |

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| | Debt for nature swaps could work but in very specific circumstances and can't be used in countries in debt distress.<br><br>We have to be careful to put too many eggs in the NBS basket. There are successful examples of NBS such as sand dunes or mangrove restoration, but a lot has to do also with just letting nature be and restore on itself. NBS should be regarded as an "add-on" to a bigger solution and not stand alone. Green-gray solutions are more recommended.<br><br>Combine climate projects with social protection, for example, combine disaster risk (backing social protection and insurance and be specific about the context considering which types of NbS could work better (eg., forestry). Public NbS combined with shorter term protection measures could be part of post-conflict rebuilding and generating jobs. The ability to create jobs is very important.<br><br>Linking nature positive activities with elements of social inclusion, cohesion, resilience, and process legitimacy (the extent to which beneficiaries and stakeholders in general feel like the way in which the intervention has been designed is fair and reflects needs and realities of communities) could be an entry point. NbS interventions should contribute to positive social outcomes that either don't have negative social effects (no harm) or actually create positive social benefits.<br><br>Interventions should involve community organizations – community driven development projects allow better use of resources by involving local voices in the decision-making process. At the same time, building institutional capacity of communities (decision making mechanisms, community platforms, etc.) is something that can be used for a wide range of resilience building activities, including NbS. |
| 4. What types of NbS are more relevant/ effective in the specific context of FCV countries? Do you think there will be types of NbS that will be more applicable to the specific challenges that fragility poses versus conflict and versus violence? (not | FCV countries are not the same, some countries have strong economies, some countries have more resources than others, and they have different situations of stability. The WB tries to reflect these different contexts. Considering this is important because the approach has to be very targeted. This also involves assessing what type of interventions and how their implementation can apply to the particular local context, for example, paying attention to customary laws, listening to local knowledge, considering women and girls as marginalized groups, etc.<br><br>The importance of nature is not the same for all countries and for LCDs and SIDs nature is overwhelmingly important.<br><br>NbS for forest conservation and recovery are especially relevant/effective given their many co-benefits in terms of biodiversity, protection, livelihoods, food security, etc. |

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| all FCV settings are the same) | The challenges that FCV poses are not so relevant to the type of NbS but rather to the design, implementation, and maintenance that NbS require in general, which is difficult with limited capacities. For example, the extent to which security on the ground will affect the maintenance and implementation. However, some of these issues are not so different to other environments (not FCS) with low capacities. |
| 5. What are examples of work undertaken by your institution or other institutions in supporting NbS or nature-related projects? Are any of these in FCV countries? | The World Bank has a huge portfolio on FCV countries, the defueling conflict report aims to take the lessons learned from operations and provide information on how nature-positive interventions can help address drivers of FCV.<br><br>The Wildlife Conservation Bond (or Rhino Bond) was very successful at leveraging climate financing from the GEF (investors receive a success payment at maturity, paid by the IBRD with funds provided by a performance-based grant from the GEF, in addition to principal redemption of the bond) and at crowding in private sector investment for biodiversity conservation activities. The Rhino Bond took around 6 years to structure and was a successful collaboration of many institutions: GEF, UNDP, Conservation Alpha, Citi Bank, Credit Suisse, Gov of South Africa, etc. The bank supervised the Rhino Bond project although the funds came from outside investors. This is a model that can be replicated in other countries and/or for the conservation of other species and ecosystems and is a successful way of passing project risks to capital market investors that allows donors to pay for conservation outcomes.<br>The Bank has supported a lot of NbS projects in FCV countries (see draft Factsheet). Examples with a specific PDO level result indicator for NBS include a project in Chad for the implementation of NbS in urban and coastal areas. Other examples of urban and/or coastal NBS include projects in Mali, CAR, DRC, the WACA program, and the creation of a large urban park and NBS for coastal and urban resilience in Mozambique. There are also examples of analyses for NbS in the transport sector in Afghanistan and Haiti, which are examples of how NbS can be challenging in FCV contexts.<br><br>The West Africa Coastal Areas Management (WACA) program involves 9 countries and 630m$ focused on coastal resilience to protect people and land from coastal erosion, flooding and pollution through a regional approach. This project has been successful at leveraging finance from IDA, several partnerships and other co-financing (including agreements with bilateral donors).<br><br>Some of the most successful programs that have NBS embedded in them, are led by SSI and are around social cohesion/inclusion and use community based NBS to create social inclusion.<br><br>The Forest Investment Program (FIP) is a quite successful program that linked agroforestry, sustainable land management, community practices, etc with climate objectives.<br><br>Social safety nets are good examples of how good land management, water security, etc. can also result in enhanced climate resilience. |

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| | Projects funded by the GEF have been key to sustain interventions indifferent from the risk profile of countries, which is a barrier to bank financing (regular and IDA).<br><br>The Terrafund project works across over 30 countries and mostly with CBOs, including some that are on the FCV list, providing mostly concessional funding from philanthropic and other private sources where Terrafund provides a platform to disburse the funds to the right projects and also provides MRV and TA services, and donor reporting. |
| 6. What lessons learned can you share from any projects you were involved in that included NbS (either positive or negative)? | Simplicity of investment designs, efficient and simple M&E frameworks and community engagement are key. Design NbS that are not too complex. The simpler the NBS are and the less maintenance they need, the better. Giving communities a role and engaging them from the start is also critical so that there is an uptake and community value to the NBS implemented. Ensuring there is capacity building and awareness/information dissemination for governments and relevant stakeholders is also key for sustainability purposes. Example of Sierra Leone with Freetown Treetown campaign. Secure finance for operations and maintenance.<br><br>Understanding the specific FCV context and identifying which type of challenge we are dealing with (e.g. political instability vs insecurity on the ground) and tailor the NBS around that is key, however not necessarily that different from what would need to be done anyway, even if in a non FCV country.<br><br>One example of how FCV situations affect project implementation is the NBS analysis that was being done in Haiti to identify green solutions to protect an airport located on the coast. Due to riots, protests and violence of gangs, the Bank lost the consultants who indicated they no longer wanted to be involved in Haiti.<br><br>The same way that not all FCVs are the same, not all financing is the same. When talking about private financing in FCVs most people immediately think NO. However, not all private financing is the same so focusing on philanthropic and more small-scale private financing can be a way to break down some of the private sector engagement barriers that then can lead to more “traditional” private investment/financing and eventually be scaled-up. This also allows to overcome the issue of scale, which is relevant to NbS. |
| 7. What are key actions that the World Bank, other MDBs, IFIs and donors should undertake to address key barriers for NbS finance in FCS? | The WB has special funding for FCV countries. However, what we are missing globally is valuing nature from a financial perspective. If this value was reflected in transactions everything could be easier. Until markets correctly price nature these barriers will continue to exist. We need to develop good business models. Put in laws that create these incentives and mobilize funds for nature-positive activities both in rural and urban settings.<br><br>It would be interesting to know what is working in other sectors. |

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| | In FCV countries it is important to provide Bank supervision and ensure safeguards to create trust for investors.<br><br>Solutions need to be context specific and responding to needs and realities on the ground to customize solutions is critical, especially in FCV countries.<br><br>Public NBS should be coupled with other programs and combined with shorter term protection interventions to become more feasible and attractive - so NBS is not standalone. Almost like a phase 2 for development in FCS where we address the drivers of FCV first and then move on to second tier priorities.<br><br>Communities are the ones that primarily depend, manage and benefit from natural resources, so we need to be careful not to disturb community dynamics and consequently exacerbate or create new conflicts.<br><br>The Bank can help make the case for NbS investments among all other priorities in FCS, making them economically interesting, providing analytical background and information on how to make the case for government and IDA investment. In FCV contexts maybe have longer investments coupled with policy reforms. The Bank should also think more long term and play a significant role in ensuring the sustainability of projects and programs, especially for NBS – e.g. set up programs instead of isolated projects.<br><br>The bank needs to be able to take on more risk in favor of promoting NbS investments that may be perceived as risky to encourage overall public and private investments in this field.<br><br>Small-scale interventions in marginalized communities are probably the ones that make most sense because those communities are the ones that have more scarcity of natural resources in their base.<br><br>Some key actions related to NbS could be 1) strengthening land tenure; 2) facilitation of transfer of natural capital via co-management agreement or concessions (relevant for private sector); 3) PPPs; 4) strengthening of institutional regulatory frameworks and facilitating sustainable certifications in key sectors (forestry, agriculture, fisheries, etc.); 4) strengthening of carbon markets and REDD+; 5) development of and access to critical infrastructure in key sectors (green-grey infrastructure opportunities). |
| 8. What are the main stakeholders that should be involved when designing and implementing NbS projects in FCV countries? | It is essential that communities are part of the initiatives.<br><br>Depends a lot on the context, but community engagement is key. Other key stakeholders include NGOs and humanitarian actors. Often the bank does not have that community penetration and, in FCS, neither does the government. Engage the engineering sector in the country as well to transfer knowledge and technology, ensure the right standards and solutions are implemented. |

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| | Government leadership is key for NbS, especially when trying to attract private sector investment. |
| 9. What are the differentiated roles the public and private sectors can play in the implementation of NbS in FCV countries/regions? How can they incentivize each other and work together? | There are newer markets that could provide funding for NbS but they haven't reached the scale they needed, so it's mainly public finance. The private sector is not going to get involved unless there are clear profits or a threat to inputs for their value chains. This makes it more feasible for investments in balance sheets or within their value chains. The private sector is very nimble and clever so if there is an opportunity to profit, they will invest. Regulation and financial incentives are the things that get the attention of the private sector, therefore without addressing drivers of fragility it will be very difficult to mobilize private sector capital.<br><br>The drivers of FCV need to be addressed first before trying to attract private sector investment, it would almost be like Phase 2 of a programmatic approach.<br><br>Governments need to be able to regulate, protect and enforce (especially important for institutional fragility situations) to create an enabling environment, especially to encourage or mandate private sector participation in nature positive activities.<br><br>NBS are not profitable, so the private sector has no appetite to invest. Avoided losses are still not enough to convince the private sector in general. Carbon credits (blue carbon) and corporate & social responsibility have proven to be somewhat successful in attracting private sector investment in nature. However, these investments need to be linked to bigger programs and not be stand alone.<br><br>Trying to incorporate NBS into PPP requirements can also be a feasible solution to engage private sector in NBS.<br><br>Small scale private sector or community NBS initiatives are often disregarded or not as obvious of opportunities for private sector engagement in nature positive activities, but they do have the potential to support livelihoods, benefit the environment and create jobs. |
| 10. How do we overcome the lack of appetite to invest in NbS given their long-term horizon in terms of showing impact and their (often) qualitative benefits? How do we make the case for profitable investments? | The main issue is to demonstrate profitability with NbS investments. The problem of NbS is cashflow, unless you structure something where donors or public finance pay for certain outcomes, it most likely won't happen. A good solution for preserving nature is the creation of collaborative partnerships under long-term agreements to manage protected areas on the government's behalf because it requires a lot of funding to maintain these large areas and the government usually doesn't have that much funding. Could be feasible from a loss avoidance perspective. There are examples of public-private partnerships that tie philanthropic capital and public resources. For example, the Carr Foundation in Mozambique. Public sector has budget constraints to invest in something like NbS because it is not perceived as an immediate need; private sector has low interest because these investments are not profitable; so, in light of this, philanthropic and other donor financing sources should be leveraged given they will most likely be more inclined to making "investments out of the goodness of their hearts". |

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| | Accounting for the externalities of climate and nature will be key. There is traction on the risk side to understand the costs of inaction. We know now that there is an economic and financially material risk to biodiversity and nature degradation. Natural capital was not a known term in the financial market a few years ago but now we have credit rating agencies using natural capital to assess countries, central banks doing assessments of financial sector risk and stability from biodiversity loss, companies reporting on the impacts and dependencies they have on nature, etc.<br><br>Focusing on the concept of avoided losses and using insurance may be a good way forward for NBS investment because if we can value avoided losses then we can make a case for insurance. Another way forward could be through infrastructure using PPP contracts to request the integration of green infrastructure and NBS options as part of the projects and making it clear that those which incorporate them will be prioritized. |
| 11. How do we avoid financing (or severely cut financing for) nature-negative activities as current financial flows for NbS show? | Nature should be regarded as a public good so if we can link natural resources to beneficiaries then we can structure a payment-for-ecosystem services scheme where the users of those resources pay to maintain the ecosystems that provide them. For example, in the case of water to service urban areas it is often assumed the resource will be always available so it would be ideal if wealthy urban areas paid for it so that investments can be made to enhance and conserve the ecosystem that provides it. The other option is creating and/or repurposing subsidies but politically it is very difficult and controversial.<br><br>We need to work on (1) reversing harmful subsidies such as fossil fuels, deforestation, etc., (2) ensure that NBS are mainstreamed into projects to introduce green solutions and NBS where possible, (3) avoid green-washing and ensure that NBS incorporated into projects are indeed significant and have biodiversity benefits.<br><br>We should focus on the “stop doing harm” approach for green finance. However, in FCVs there is not a lot of private finance already so there is not much space in “reversing” finance so the focus could maybe be on stopping/reversing harmful government subsidies. We should focus more on greening public finance. |
| 12. What is your opinion on the effectiveness and role that credits (carbon credits, biodiversity credits, farming credits, commodity sales, etc.) can play for revenue and value creation to | The carbon credit market is unreliable and complicated, and it is not realistic to expect investors’ interest in carbon credits coming out of FCVs. You have got to have legal certainty, contract law, etc and that doesn’t exist in FCVs.<br><br>It would be really risky and unrealistic to expect anything involving private financing and private contracts in a FCV country.<br><br>Some successful financial instruments that could be replicated are (although they will be much more difficult in FCV countries): (1) municipal/government green bonds with nature-linked outcomes; (2) debt for nature |

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| attract private investment/benefit stakeholders in FCV? | swaps (however in very specific situations); (3) commercial-conservation approaches for for example forestry (where a company that commercially exploits a resource also invests in conserving it); (4) private equity funds to be blended with commercial vs concessional funds to be invested in NBS (e.g. HSBC investments in pollination); (5) insurance for nature.<br><br>Repurposing agriculture subsidies in favor of nature-positive activities can be successful. |