



Filling the Gap:

A review of Multilateral
Development Banks' efforts
to scale up financing for
climate adaptation

REPORT



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Filling the Gap: A review of Multilateral Development Banks' efforts to scale up financing for climate adaptation

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Foreword

The three-year (2019–2021) “Mobilizing Development Finance for Strategic and Scaled-up Investment in Climate Adaptation” research project is implemented by the International Institute for Sustainable Development (IISD) in partnership with the African Centre for Technology Studies in Kenya, Prakriti Resources Centre in Nepal, and Libélula in Peru. The project is supported by Canada’s International Development Research Centre (IDRC). A Project Advisory Committee, comprised of representatives from the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, the World Bank, the IDRC, the Institute for Climate Economics (I4CE), and the governments of Kenya, Nepal and Peru, provides strategic advice on the research directions and outputs.

The research project explores common challenges to scaling up finance for adaptation across different contexts from the perspective of select developing countries and Multilateral Development Banks. The research will provide insights on the barriers that limit the use of development financing to address national adaptation priorities and will identify opportunities to overcome these constraints.



Executive Summary

Introduction

The economic costs of the impacts of climate change are expected to be significant and to disproportionately affect those made more vulnerable to climate-related shocks and stresses by factors such as poverty, livelihoods, gender, social status and location. The investment required to minimize and avoid these impacts will be substantial. *The Adaptation Gap Report 2016* estimated that the annual costs of adaptation in developing countries could range from USD 140 billion to USD 300 billion by 2030 and from USD 280 billion to USD 500 billion by 2050 (UNEP, 2016, p. 40). In stark contrast to these expectations, actual flows of adaptation finance to these countries in 2017 and 2018 were estimated to be USD 30 billion and climate finance with dual mitigation and adaptation benefits was estimated to be USD 12 billion (Buchner et al., 2019, pp. 21–23). The combined USD 42 billion amounted to 7.25% of the total estimated international public and private flows of climate finance, reflecting the persistent asymmetrical allocation of climate finance in favour of mitigation instead of adaptation.

These findings make it clear that finance for adaptation is not flowing at the pace or scale needed. This is due to several factors, including challenges with attracting private sector investments into adaptation, the context-specific nature of adaptation (which impedes replicability), and the often significant costs of building resilience to future climate risks. Overcoming the gap in adaptation financing is critical to enabling developing countries to achieve their economic and social objectives as well as international commitments under the Paris Agreement. This need remains valid in a world struggling to cope with and recover from the coronavirus disease 2019 (COVID-19) pandemic, where adaptation to climate change may not be a priority in the short term for some governments and mobilizing resources for adaptation may be challenging (NAP Global Network, 2020).

Multilateral Development Banks (MDBs) are expected to play a critical role in financing adaptation and addressing the adaptation gap in developing countries because they provide and leverage large-volume finance under attractive terms. Twelve MDBs have pledged to scale up financing for adaptation and are working toward doing so, in line with their 2015 commitment to the five Voluntary Principles for Mainstreaming Climate Action in Financial Institutions. MDBs and members of the International Development Finance Club (IDFC) that have agreed to these principles aim “to shift from financing climate activities in incremental ways, to making climate change—both in terms of opportunities and risk—a core consideration and a ‘lens’ through which institutions deploy capital” (Climate Action in Financial Institutions, 2018).

This use of a climate-informed approach to investment decisions across portfolios is a critical element of alignment with the goals of the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC). The Agreement’s signatories agreed, in Section 2.1(b), to an adaptation goal of “increasing the ability to adapt to the adverse impact of climate



change”; and, in Section 2.1(c), of “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (UNFCCC, 2015, p. 2). For MDBs, Paris alignment means that entire financing and investment portfolios are consistent with the adaptation and mitigation goals of the Paris Agreement (Larsen et al., 2018).

MDBs have taken significant steps to increase the provision of finance for adaptation through their designated climate finance and development finance streams. However, MDBs have encountered challenges in operationalizing their Paris alignment commitment, among other things when it comes to fully mainstreaming climate resilience across their portfolios. This working paper reviews this progress along with the challenges of and opportunities for scaling up MDB financing for adaptation and aligning it with the Paris Agreement. The main research questions addressed in this paper are:

- What constraints and barriers are MDBs encountering as they work to scale up and mainstream adaptation across their investment portfolios at the developing country level?
- How are MDBs working with developing country governments to overcome these challenges and further integrate adaptation into their development finance portfolios?

Scaling up MDB Finance for Adaptation: Issues and Opportunities

MDBs are taking steps to scale up their provision of finance for adaptation through their climate finance and development finance flows. This includes setting targets and commitments for adaptation finance and addressing climate vulnerabilities in projects across relevant development finance flows. As MDBs work toward Paris alignment in their developing country portfolios, they must transition from a focus on increasing climate finance for stand-alone adaptation projects or added-on adaptation components to instead ensuring that all investments consider and incorporate the objectives of the Paris Agreement. Their success in achieving Paris alignment will require the active support of MDBs' developing country partners. MDBs face a number of challenges, as well as opportunities, with respect to engaging developing country governments in efforts to scale up their provision of adaptation-focused climate finance and integrate adaptation considerations into their development finance flows. In particular, challenges and opportunities arise in regard to the ways MDBs engage with developing country governments in order to build climate resilience in climate and development finance flows, track finance for adaptation and its impacts, align MDB finance with national adaptation priorities, and encourage private sector engagement in adaptation actions.

Building Climate Resilience in Projects and Investments

To effectively mainstream climate adaptation considerations into development finance investments, decision-makers need to identify the climate risks and vulnerabilities that could impact a project and program, and act to address these risks. The use of tools to assess climate



risk exposure and vulnerability has become standard practice among MDBs over the past few years. However, MDBs still face challenges in mainstreaming their use internally and disseminating this expertise to operational teams and developing country governments. A lack of expertise on how to use the results of climate risk assessment, combined with limited data in many countries, means that climate resilience may not be adequately addressed in project design (GCA, 2019; Larsen et al., 2018). Additionally, developing country governments may not be interested in incurring the extra costs associated with undertaking these vulnerability assessments and mainstreaming adaptation, and often assume that the costs of these activities will be covered by grant funds or MDB administrative budgets (Larsen et al., 2019; Miller et al., 2019).

MDBs are building capacity in order to mainstream adaptation and address Paris alignment, but success requires credible action from developing country governments. MDBs can support and influence developing countries, but these governments must be convinced of the benefits of adaptation and must request MDB finance to build climate resilience. For MDBs to effectively increase financing allocations for adaptation, particularly in regard to improving the adaptation outcomes of development finance streams, they can work with developing country governments to build their capacity to assess climate vulnerabilities, take action based on the outcomes of climate vulnerability and risk assessments, and integrate adaptation and resiliency into planning and budgets.

Tracking Finance for Adaptation and its Impact

MDBs have made significant progress on tracking finance for adaptation, including the development of a joint methodology to track and report on finance for adaptation from both dedicated climate finance and climate-related development finance flows. MDBs attempt to capture the incremental costs of adaptation activities, differentiating between their usual development finance and finance provided with an explicit intent to reduce vulnerability to climate change. However, greater clarity on MDB data and calculations is required at the country and project levels, and some researchers have called for the independent verification of MDB-reported climate finance allocations in development finance flows (Weikmans & Roberts, 2019). Many developing countries lack the capacity to track domestic public finance for adaptation as well as the finance for adaptation received from MDBs and other international public sources.

MDBs are well positioned to draw on their own experience to assist developing country governments in tracking finance for adaptation and in better identifying where investment is flowing and where gaps exist. This enhanced understanding could help developing countries better engage with MDBs to identify the most strategic use of development and climate finance to achieve adaptation goals. MDBs are working to develop assessment frameworks to demonstrate the impacts and outcomes of finance for adaptation, including a framework and principles for climate resilience metrics (AfDB et al., 2019). Improved metrics will help MDBs and developing country governments better understand how flows of climate and climate-related development finance contribute to national adaptation goals and to the international adaptation goals of the Paris Agreement.



Using Developing Countries' Adaptation Priorities to Align MDB Finance with the Paris Agreement

Many developing country governments have identified their national adaptation priorities through country-driven Nationally Determined Contribution (NDC) and National Adaptation Plan (NAP) processes. Although increasingly these processes are influencing MDBs' investments and country strategies, NAP and NDC adaptation priorities are still being incorporated unevenly into MDB country strategies. This situation may result from limited MDB engagement in national processes (noting that MDBs only participate if requested by a government), and the difficulty of translating NDCs and NAPs into actionable investments. Moreover, while MDBs may be well positioned to support nationally determined adaptation priorities, the ministers of finance or planning officials with whom they negotiate country development strategies may not request this support. These officials have many competing priorities for scarce public dollars, particularly concessional loans. As well, "siloed climate action" can lead to adaptation processes being disconnected from national development planning and budgeting processes (OECD, 2019a, p. 27). This situation may stem from a dichotomy in the knowledge and capacity of ministries of the environment and central ministries that can impede the integration of climate change into financial planning. Specifically, ministries of the environment generally take the lead on and have expertise regarding adaptation planning, but lack expertise in finance. Ministries of finance and planning take the lead on engagement with MDBs and have finance expertise, but lack knowledge of adaptation processes and do not see themselves playing a leading role in the implementation of adaptation priorities.

Moving forward requires effective MDB–developing country engagement to generate financing for adaptation. MDBs can draw on developing country adaptation plans and processes when developing their country partnership strategies and identifying programs and investments. MDBs can build awareness in finance ministries on the importance and benefits of adaptation, and on how to strategically use domestic and MDB support for adaptation action. MDBs can also provide technical assistance for assessments of climate vulnerabilities, NAP processes, the updating of NDCs, and adaptation financing strategies. Continued research is required in order to identify options for improved engagement between MDBs and developing countries on NDC and NAP processes and to identify financing options for the adaptation priorities that emerge from these processes.

Engaging the Private Sector in Adaptation

The majority of finance for adaptation comes from the public sector, largely because many adaptation actions do not generate revenue streams but are investments made to avoid costs (such as making agriculture more resilient to expected climate impacts). While adaptation is likely to remain largely financed by public sources, MDBs can work with developing country governments to increase private sector investment in adaptation. At present, developing country governments often do not consider the need to engage the private sector in adaptation action, and often lack the capacity to attract private finance for adaptation. MDBs are well positioned to use financial



and non-financial tools to help developing country governments and the private sector overcome risks (both real and perceived) and other barriers to adaptation investment.

MDBs can support developing countries' efforts to increase private sector financing for adaptation by employing a wider range of innovative financial instruments that blend new financial resources with traditional resources in order to finance adaptation actions. MDBs are well suited to having a role in innovative financial instruments because they can be patient investors that work on long-term horizons and have lower expectations of returns. However, their role is limited by their mandate to promote development while making profits (Kapoor, 2019). When used, innovative financial instruments need to be carefully considered and applied as part of a country's broader strategy for financing adaptation. A realistic assessment of what is doable and how MDBs can use these instruments to engage the private sector is needed in each country.

Concluding Comments

MDBs have made commitments and taken action to scale up their provision of climate finance and to align their development finance flows with the Paris Agreement. Actions include setting institutional targets and goals, undertaking climate vulnerability and risk assessments, incorporating adaptation actions into project designs, tracking climate adaptation finance, and building capacities both internally and in developing countries. MDBs, multilateral organizations, and research institutions have undertaken considerable analysis and have enhanced their knowledge of how to align MDB portfolios with the Paris Agreement, including the strategic use of designated climate finance and the mainstreaming of adaptation as a priority in development finance flows.

The perspectives of developing countries, while a critical factor in MDBs' ability to successfully align their financing portfolios with the Paris Agreement, have received limited attention. Much less is known about the roles and needs of developing country governments, including their views on Paris alignment in MDB portfolios, on the value of addressing climate impacts and integrating climate adaptation in national programs, and on engaging the private sector in adaptation. Research is needed to identify strategies that help developing country governments engage with MDBs to identify and prioritize adaptation actions, and to request that adaptation be addressed in projects and programs supported by MDB development finance.

MDBs could also enhance their technical support to developing countries in order to strengthen their capacities to assess climate vulnerabilities and risks, track domestic and international finance for adaptation, engage the private sector, and develop informed and effective strategies that scale up financing for adaptation. In the near term, MDBs are well positioned to help countries update the adaptation components of their NDCs under the UNFCCC and address adaptation in the health and socioeconomic programs that are responding to the COVID-19 pandemic. Collectively, these efforts by MDBs and their developing country partners will help ensure that all investments and finance account for adaptation, which will be instrumental in bridging the adaptation finance gap.



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Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
AIIB	Asian Infrastructure Development Bank
CIF	Climate Investment Fund
COVID-19	coronavirus disease 2019
CPI	Climate Policy Initiative
CRAFT	Climate Resilience and Adaptation Finance and Technology Transfer Facility
CRED	Centre for Research on the Epidemiology of Disasters
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
G20	Group of Twenty
GCA	Global Commission on Adaptation
GCF	Green Climate Fund
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
I4CE	Institute for Climate Economics
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IDFC	International Development Finance Club
IDRC	International Development Research Centre
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IISD	International Institute for Sustainable Development
IPCC	Intergovernmental Panel on Climate Change
IsDB	Islamic Development Bank



LDC	Least Developed Country
MDB	Multilateral Development Bank
MIGA	Multilateral Investment Guarantee Agency
NAP	National Adaptation Plan
NCI	NewClimate Institute
NDB	New Development Bank
NDC	Nationally Determined Contribution
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
TFCD	Task Force on Climate-Related Disclosure
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations Office for Disaster Risk Reduction
USD	United States dollar
WEF	World Economic Forum
WRI	World Resources Institute



Glossary

- Adaptation** The Intergovernmental Panel on Climate Change (IPCC, 2014, p. 118) defines adaptation as “the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects.”
- Climate finance** The UNFCCC (2020) explains that climate finance “refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change.”
- The IPCC (2014, p. 120) notes that there is no agreed-upon definition of climate finance, and that the term climate finance “is applied both to the financial resources devoted to addressing climate change globally and to financial flows to developing countries to assist them in addressing climate change.”
- MDB climate adaptation finance streams include specific climate shares and the incremental costs of adaptation that are provided by MDBs’ own resources as well as external resources.
- Development finance** Development finance streams include non-concessional finance and concessional finance.
- **Non-concessional finance** (mainly project-based loans but also policy loans, equity investments, and loan guarantees) is provided to middle-income countries and private-sector firms in developing countries. Non-concessional lending windows are mainly financed through borrowing on international capital markets, and offer recipients advantages in terms of the timing and level of repayments and the duration of loans.
 - **Concessional finance** provided to LDCs and low-income countries needs to be replenished (mainly by developed countries). MDBs deploy official development finance within a mandate to promote economic and social development. Concessional finance is often provided through developed countries’ official development assistance, which is defined by the OECD (2019b, p.1) as “government aid that promotes and specially targets the economic development and welfare of developing countries.”



Innovative financial instruments

Innovative financial instruments for adaptation are new approaches and mechanisms to acquire, structure, govern, and allocate financial resources. These instruments can include three alterations to traditional finance:

1. The acquisition of new financial resources (including from financial institutions, private investors, institutional investors such as pension funds, impact investors, foundations, and other philanthropists) and blending with traditional resources (such as public grants, loans, climate finance, and ODA) to finance adaptation actions. Typically, public and philanthropic capital has a catalytic function to improve the risk-return profile of investment opportunities in order to attract private investors.
2. Mechanisms to improve the efficiency of raising and distributing financial resources, including those that reduce transaction costs, improve transparency, and improve access to investment opportunities.
3. Mechanisms to enhance the effectiveness of investments, including through a focus on the results and performance of the projects being financed.

Mainstreaming

Following the 2003 Rio Summit, Klein, Schipper, and Dessai (2005, p. 584) defined mainstreaming as “the integration of policies and measures to address climate change into ongoing sectoral and development planning and decision-making, so as to ensure the long-term sustainability of investments as well as to reduce the sensitivity of development activities to both today’s and tomorrow’s climate.” Mainstreaming, therefore, involves systematically integrating climate risk and adaptation into decision-making, planning, and implementation.

**Multilateral Development Banks**

The European Investment Bank (2020b) explains that

multilateral development banks, or MDBs, are supranational institutions set up by sovereign states, which are their shareholders. Their remits reflect the development aid and cooperation policies established by these states. They have the common task of fostering economic and social progress in developing countries by financing projects, supporting investment and generating capital for the benefit of all global citizens. MDBs also play a major role on the international capital markets, where they raise the large volume of funds required to finance their loans.

The main MDBs are the African Development Bank, the Asian Development Bank, the Asian Infrastructure Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank, the Islamic Development Bank, the New Development Bank, and the World Bank (International Bank for Reconstruction and Development, and International Development Association).

Resilience

The IPCC (2014, p. 127) defines resilience as

the capacity of social, economic and environmental systems to cope with a hazardous events or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation.

Strategy for financing adaptation

A strategy for financing adaptation can be an approach, plan, or strategy to increase or allocate funding for adaptation priorities identified by national governments. These strategies can include NAP or adaptation resource mobilization strategies or financing strategies, the adaptation components of NDC investment plans or financing strategies, climate finance strategies, and climate change action plans with costing and funder information. The strategy does not necessarily need to be a document; it may be a process undertaken by a government to identify and direct funds toward adaptation priorities.



1.0 Introduction

The total flows of finance for climate change fall far short of the growing need, particularly in developing countries. This shortfall impacts financial flows for both adaptation and mitigation, but the adaptation gap is particularly acute. This is due to several factors, including the persistent asymmetrical allocation of climate finance that favours mitigation over adaptation, and challenges with attracting private-sector investments in adaptation. In addition, the context-specific nature of adaptation limits standardized solutions, and building climate resilience into development projects can significantly increase costs. Overcoming the gap in adaptation financing is critical to enabling developing countries to achieve their economic and social objectives as well as international commitments under the Paris Agreement. Targeted investments in adaptation can also increase the long-term resilience of communities and countries as they recover from the initial consequences of the coronavirus (COVID-19) pandemic.

Multilateral Development Banks (MDBs) have pledged to scale up financing for adaptation, and thus are expected to play a critical role in addressing the adaptation gap in developing countries because they provide and leverage large-volume finance under attractive terms. Twelve MDBs committed in 2015 to the five *Voluntary Principles for Mainstreaming Climate Action in Financial Institutions*, which include developing climate strategies and managing climate risks.¹ MDBs and members of the International Development Finance Club (IDFC)² that have agreed to these principles aim “to shift from financing climate activities in incremental ways, to making climate change—both in terms of opportunities and risk—a core consideration and a ‘lens’ through which institutions deploy capital” (Climate Action in Financial Institutions, 2018).

This use of a climate-informed approach to investment decisions across portfolios is a critical element of alignment with the goals of the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC). The Agreement’s signatories agreed, in Section 2.1(b), to an adaptation goal of “increasing the ability to adapt to the adverse impact of climate change”; and, in Section 2.1(c), of “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (UNFCCC, 2015, p. 2).

¹ As of October 2020, 48 institutions have endorsed the five Voluntary Principles for Mainstreaming Climate Change. This includes 12 MDBs: the African Development Bank (AfDB), the Asian Development Bank (ADB), the Council of Europe Development Bank, the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Inter-American Development Bank (IDB), the International Finance Corporation (IFC, part of World Bank Group), the International Fund for Agricultural Development (IFAD, a United Nations Specialized Agency), the Islamic Development Bank (IsDB), the Multilateral Investment Guarantee Agency (MIGA, part of World Bank Group), the New Development Bank (NDB), and the World Bank (International Bank for Reconstruction and Development [IBRD] and International Development Association [IDA]). See: <https://www.mainstreamingclimate.org/institutions/>

² The IDFC, created in 2011, is a group of 26 national and regional development banks from all over the world, a majority of which are active in emerging markets. IDFC members are aligned with the Sustainable Development Goals (SDGs) and the Paris Agreement agendas, and work together to implement them. See: <https://www.idfc.org>



For MDBs, Paris alignment means mobilizing finance for adaptation projects as well as ensuring that all investments and finance account for adaptation, including responses to the coronavirus disease 2019 (COVID-19) (see Box 1). The World Bank's "rebuilding better" approach, for example, maintains a strong focus on climate change, supports economic recovery that embeds climate-friendly responses and policies, and is grounded in existing corporate strategies on climate resilience (World Bank Group, 2020b).

Box 1. COVID-19 and its implications for MDB financing for adaptation

The COVID-19 pandemic has resulted in disruptions to and a weakening of the global economy in 2020. This health crisis and its economic impacts have demanded the attention, management and resources of both governments and MDBs. The NAP Global Network (2020) reports that adaptation to climate change may not be a priority in the short term for some governments and that mobilizing resources for adaptation may be challenging. Governments in developing countries expect to spend less on climate change because of the expense of the COVID-19 response, revenue loss, and increased debt (Nationally Determined Contribution [NDC] Partnership, 2020).

MDBs are at the forefront of addressing the challenge of the pandemic in many developing countries, first helping to tackle the health emergency and then moving toward stimulus measures for economic recovery. The World Bank Group committed up to USD 160 billion of funding to mid-2021 to help countries respond to the health impacts of the pandemic and bolster economic recovery (World Bank, 2020a). The Asian Development Bank has committed USD 20 billion (ADB, 2020a), the Inter-American Development Bank will allocate USD 12 billion (IDB, 2020b), and the African Development Bank will provide up to USD 10 billion (AfDB, 2020) to respond to the COVID-19 crisis.

While MDB attention to adaptation finance may be subdued in 2020, it will be critical for economic recovery programs to incorporate climate resilience into their responses to the COVID-19 crisis. The Organisation for Economic Co-operation and Development is encouraging "building back better" (OECD, 2020), an approach in which decisions taken today incorporate a longer-term perspective, including strengthening resilience to the impacts of climate change in infrastructure investments, investing in natural infrastructure to improve climate resilience, and building climate-resilient food systems. Additionally, crisis response will need to stress the importance of access to the environmental determinants of health—including water, sanitation, and nutritious food—and the expected impact of climate change on these sectors. Existing national adaptation plans (NAPs) can be valuable in devising pandemic recovery strategies and providing guidance on ways in which recovery investments can advance adaptation efforts (Hammill, 2020).

Factoring climate adaptation needs into investments can create inclusive, resilient, and sustainable systems and communities that encourage economic and social development. Adaptation must remain at the forefront in MDB and developing country government planning and programming.



MDBs have taken significant steps to increase the provision of finance for adaptation through their designated climate finance and development finance streams. However, MDBs have encountered challenges in taking action toward Paris alignment, including when it comes to mainstreaming adaptation within projects and programs in developing countries supported by development finance. These challenges stem from factors within these MDBs as well as within their partner governments.

This working paper reviews MDBs' progress in increasing their provision of finance for adaptation in developing countries and aligning their entire investment portfolios with the Paris Agreement. It also explores the challenges and opportunities that arise with regard to scaling up adaptation finance and mainstreaming adaptation considerations into MDBs' development finance flows. In this review, particular emphasis is given to MDBs' engagement with developing country governments, as these governments' active support is required in order for the adaptation goals of the Paris Agreement to be achieved. The main research questions addressed in this paper are:

- What constraints and barriers are MDBs encountering as they work to scale up and mainstream adaptation across their investment portfolios in developing countries?
- How are MDBs working with developing country governments to overcome these challenges and further integrate adaptation into their development finance portfolios?

The approach to developing the working paper is outlined in Section 2. Section 3 reviews the adaptation finance gap, MDB finance for adaptation, and the implications of the Paris Agreement. Section 4 provides a review of the literature on the challenges and opportunities that arise when scaling up MDB development finance for adaptation, and identifies areas requiring further research. The concluding comments in Section 5 highlight opportunities to address the identified challenges going forward.



2.0 Approach

This working paper draws upon the growing body of research on MDBs' efforts to align their investments with the Paris Agreement. Much of this recent research has been stimulated by initiatives such as the Global Commission on Adaptation (GCA) and the Climate Action in Financial Institutions Initiative. The Commission was launched in 2018 by the United Nations Secretary General and aims to accelerate climate adaptation action. The work of the Commission is supported by a global network of research institutes that contributed to background papers that informed the 2019 report, *Adapt Now: A Global Call for Climate Resilience* (GCA, 2019). Research organizations and multilateral institutions have stepped up their analysis to explore ways to make progress on the five voluntary principles of the Climate Action in Financial Institutions Initiative: commit to climate strategies, manage climate risks, promote climate-smart objectives, improve climate performance, and account for climate action (Climate Action in Financial Institutions Initiative, 2019).

Additional relevant literature was identified through internet-based research. Most of the sources are considered “grey literature” and were developed by research institutions and multilateral organizations. Reviewed publications include working papers, technical reports, annual and activity reports, and research papers. Several recent publications have addressed barriers and constraints to mainstreaming adaptation, some of which are specific to MDBs (see, for example, Clark et al., 2019; Cochran & Deheza, 2017; Cochran & Pauthier, 2019; Larson et al., 2018; Micale et al., 2018; and Wright et al., 2018). Other publications address challenges to scaling up financing for adaptation that can be applicable to MDBs (see, for example, GCA, 2019; Miller et al., 2019; Organisation for Economic Co-operation and Development [OECD], 2017 and 2019a; United Nations Environment Programme [UNEP], 2018; and World Economic Forum [WEF], 2019).

To inform the development of this paper, the literature review looked in particular at challenges and opportunities in regard to the following issues:

- How MDBs are working with developing countries to assess climate vulnerability and address climate risks in development finance.
- How MDBs can assist developing country partners to integrate adaptation into project development and design.
- How MDBs can work with developing countries to encourage private sector participation in adaptation.



3.0 Multilateral Development Banks' Finance for Adaptation and Paris Alignment

3.1 The Adaptation Finance Gap

The economic costs of the impacts of climate change are expected to be significant and to disproportionately affect those made more vulnerable to climate-related shocks and stresses by factors such as poverty, livelihoods, gender, social status, and location. These economic costs are increasingly evident. The Centre for Research on the Epidemiology of Disasters and the United Nations Office for Disaster Risk Reduction (CRED & UNISDR, 2018) reported that climate-related disasters caused direct economic losses valued at USD 2.245 trillion from 1998 to 2017. The authors highlight systematic under-reporting by low-income countries and conclude that while economic losses are concentrated in high-income countries, the human cost of climate-related disasters falls mainly on the low- and lower-middle-income countries (CRED & UNISDR, 2018).

The investment required in order to reduce the adverse consequences of these impacts and increase resilience will be substantial. *The Adaptation Gap Report 2016* estimated that the annual costs of adaptation in developing countries could range from USD 140 billion to USD 300 billion by 2030 and from USD 280 billion to USD 500 billion by 2050 (UNEP, 2016, p. 40). But the economic benefits of investing in adaptation can be significant. The Global Commission on Adaptation (GCA, 2019) estimated that investing USD 1.8 trillion globally from 2020 to 2030 in five adaptation priorities—early warning systems, climate-resilient infrastructure, improved dryland agriculture, mangrove protection, and making water resources more resilient—could generate USD 7.1 trillion in net benefits.

Despite this expected return on investment, finance for adaptation is not flowing at the pace or scale needed and lags behind the allocation of financial resources for mitigation (GCA, 2019). The UNFCCC Standing Committee on Finance (2018) *2018 Biennial Assessment and Overview of Climate Finance Flows* illustrated the urgent need to scale up financing of climate adaptation. The document reports that mitigation finance flows are four to five times greater than adaptation flows and recommends improved efforts to balance adaptation and mitigation financial flows. The imbalance is illustrated by the flows of adaptation finance in 2017 and 2018, which were estimated to be only 5% of the total flows of climate finance of USD 537 billion from international public and private sources. About 93% of total flows of climate finance were for mitigation activities and approximately 2% went to activities with dual mitigation and adaptation benefits (Buchner et al., 2019, pp. 18-23).³

³ Climate Policy Initiative (CPI, 2017, p.1) defines global climate finance flows as “capital flows directed towards low-carbon and climate-resilient development interventions with direct or indirect greenhouse gas mitigation or adaptation benefits.” These flows include support for capacity-building measures as well as for the development and implementation of policies. See: Buchner, et al., 2019; Oliver, et al., 2018; and CPI, 2017.



Scaling up finance for adaptation can be challenging. Adaptation is context-specific, requiring solutions that are tailored to local needs and circumstances, and the upfront cost associated with building resilience to future climate risks can be significant. *The Adaptation Gap Report 2018* estimated that the extra costs of design and implementation that integrate the consideration of adaptation into a project range between 10% and 20% of the total finance (UNEP, 2018, p. 23). The extra cost to build climate resilience into power and transport infrastructure systems is estimated to be 3% of overall investment needs (Voegele, 2019). Furthermore, adaptation investments are often made to avoid costs (such as making a community or society more resilient to extreme weather events), and typically do not generate revenue streams or have the near-term financial return to cover the added costs of addressing climate risk. Additionally, the costs and benefits of adaptation can be difficult to estimate for a project.

Increasing finance to include the additional costs of adaptation can be challenging for MDBs that have a mandate to deliver development outcomes while making (modest) returns on investments (Ward & Caldwell, 2016). It is also difficult to attract private sector investment into adaptation because of the general lack of revenue streams (Miller et al., 2019). Additionally, many developing country governments are not acting to increase resilience to climate impacts, and they have many competing priorities for scarce public dollars and concessional loans (OECD, 2019a). Some governments expect that the additional costs of adaptation and resilience will be covered with grant funds provided through climate finance (Khan et al., 2019). This means that MDBs must push to include measures to address climate risks in development finance flows, as well as finding additional budget to pay for more resilient solutions. Tensions between economic, social, and climate goals will likely increase as countries strive to recover from the initial consequences of the COVID-19 pandemic.

3.2 MDB Finance for Adaptation

MDBs provide finance for adaptation to developing countries through two different financing streams: a dedicated climate finance stream and a climate-related development finance stream. The dedicated climate finance stream includes specific external financial resources delivered through MDBs that are provided by (mostly) developed countries to assist developing countries in implementing the UNFCCC,⁴ as well as the incremental costs of adaptation that are provided by MDBs' own resources. The external resources include dedicated climate funds that are provided by and have to be replenished by (mostly) developed countries. The external resources include the Climate Investment Funds (CIF) and other trust funds with a climate change mandate, and financial mechanisms under the UNFCCC such as the Green Climate Fund (GCF), Global Environment Facility (GEF) Trust Fund, Adaptation Fund, Least Developed

⁴ An example is the Government of Canada's commitment of CAD 2.65 billion in dedicated international climate finance from 2015 to 2021. Multilateral channels account for 97 percent of Canada's total commitment, including allocations of CAD 1.098 billion to special MDB funds established at the ADB, IDB, IFC, and World Bank (Tomlinson, 2019, pp.19-20). Financial flows through these special trust funds are considered dedicated climate finance, similar to funding that is delivered under the UNFCCC financial mechanism.



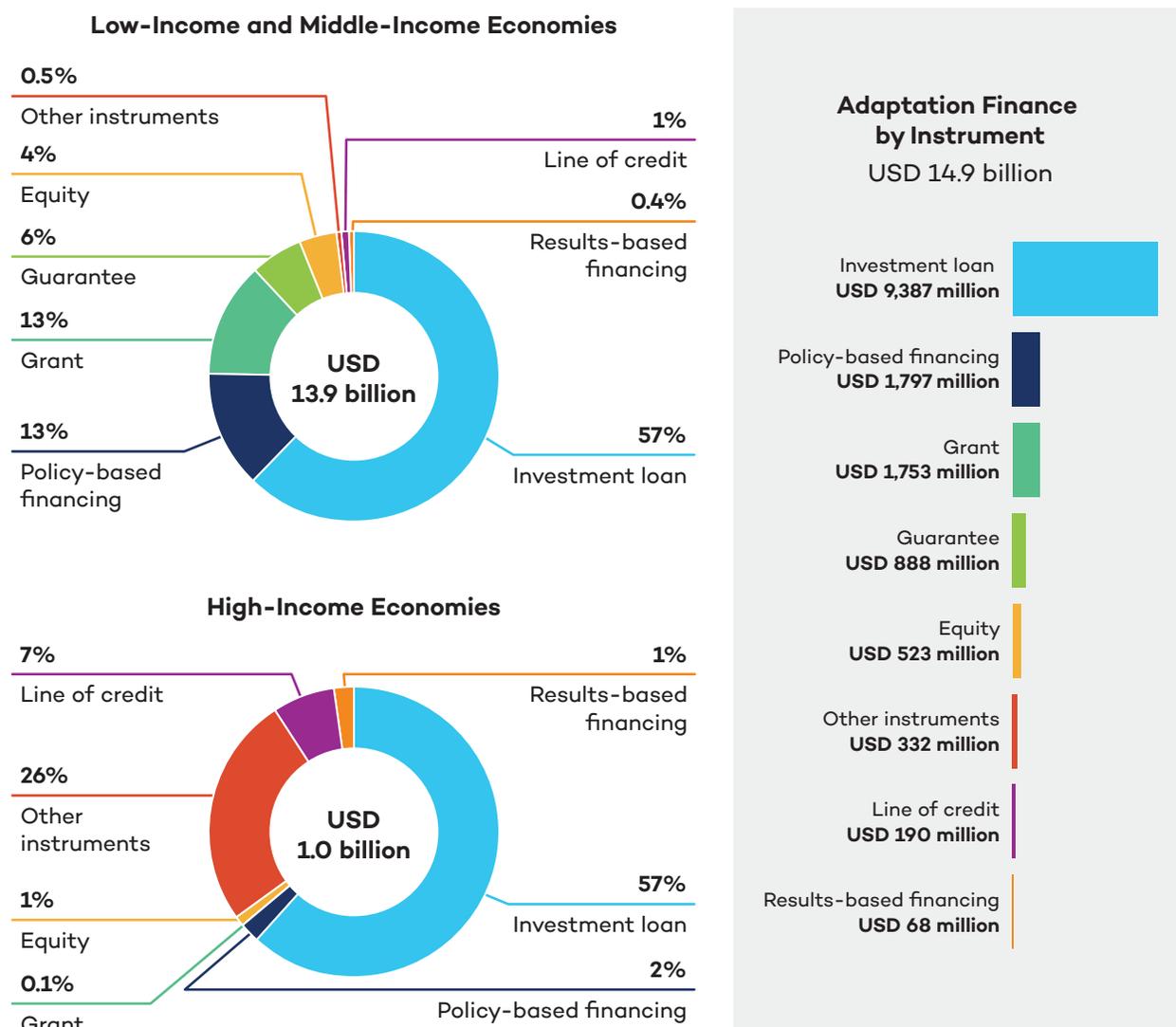
Countries (LDC) Fund and Special Climate Change Fund. Dedicated climate funds have an explicit mandate to achieve low-carbon climate-resilient development, and much of the financing is provided through concessional or grant terms.

Dedicated climate funds for adaptation can be used to support discrete adaptation projects designed and delivered by MDBs. An example is an MDB project that helps a developing country make decisions and take actions to manage the impacts of climate change, such as constructing embankments to protect against changes in flood levels. MDBs also support actions that help to build resilience to enable people, communities, sectors, and nature to respond to and withstand the physical impacts of a changing climate, such as a resilient livelihoods project that helps beneficiaries adopt climate-smart agricultural practices. MDBs also provide technical assistance that promotes adaptation action, such as supporting Nationally Determined Contribution (NDC) and National Adaptation Plan (NAP) processes and working to improve the policy and regulatory environment to protect people and assets from climate-related risks.

Climate-related development finance (or development finance with climate co-benefits) refers to MDB funding with the primary goal of economic development that is delivered in a climate-friendly way (World Bank, 2020b). Development finance includes concessional assistance provided to LDCs and low-income countries (grants and loans at below-market interest rates) and non-concessional finance (mainly project-based loans but also policy loans, equity investments, and loan guarantees at market-based terms) delivered through MDBs. Of the USD 13.94 billion in adaptation-focused climate financing provided by MDBs to low-income and middle-income countries in 2019, 63% was investment loans, followed by grants, policy-based lending and guarantees (see Figure 1). Climate-related development finance offers the opportunity for developing countries to use MDB resources, particularly concessional finance, to move toward low-carbon, climate-resilient development pathways (OECD, 2019a).



Figure 1. MDB adaptation finance by type of instrument, 2019



Source: AfDB et al. (2020). *Joint Report on Multilateral Development Banks' Climate Finance*, p. 17.

Much of MDB climate-related development finance for adaptation has gone to funding the marginal costs of making existing infrastructure resilient (UNEP, 2018). MDB development finance often supports large infrastructure projects. Climate-related development finance includes funding to assess climate vulnerability and, if needed, funding to address the extra costs of adjusting infrastructure projects to take action to increase climate resilience, such as strengthening landslide monitoring and management within highway improvement investments. Addressing adaptation does not necessarily entail allocating new finance for adaptation, but can include programming development finance in a more climate-sensitive manner. An example is adjusting the design of an agriculture project to increase farmers' capacity to manage more frequent droughts.



Since 2011, MDBs have reported on the volume of climate finance they provide each year. This reporting follows the MDB joint methodology for tracking adaptation finance, which identifies the specific adaptation activities within MDB development operations that are carried out in response to expected climate change impacts.⁵ Climate finance reported through this methodology includes both dedicated climate finance and climate-related development finance.

The *2019 Joint Report on Multilateral Development Banks' Climate Finance* reported that the world's six largest MDBs committed a total of USD 43.1 billion in climate finance to low-income and middle-income economies, which represented about 31% of all finance provided by MDBs in 2019 (AfDB et al., 2020, p. 11-12). This reporting showed that in low-income and middle-income countries, MDB flows to adaptation lagged behind flows to mitigation. Adaptation flows accounted for 34% of total MDB climate finance flows in 2019 (AfDB et al., 2020, p. 11), an increase from 30% in 2018 (AfDB et al., 2019, p. 9) and 20% in 2015 (AfDB, ADB, EBRD, EIB, IDB & World Bank Group, 2016, p. 11).

3.3 Implications of the Paris Agreement

MDBs are working to align the entirety of their financing portfolios with the goals of the Paris Agreement. The 2015 Paris Agreement aims to strengthen the global response to the threat of climate change, including the long-term goal in Article 2.1(b) of “increasing the ability to adapt to the adverse impact of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production,” and the related global goal of “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change” (Article 7.1). In Article 2.1(c), the Agreement’s signatories commit to “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.” Article 9.3 of the Paris Agreement states that “the provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation” (United Nations, 2015).

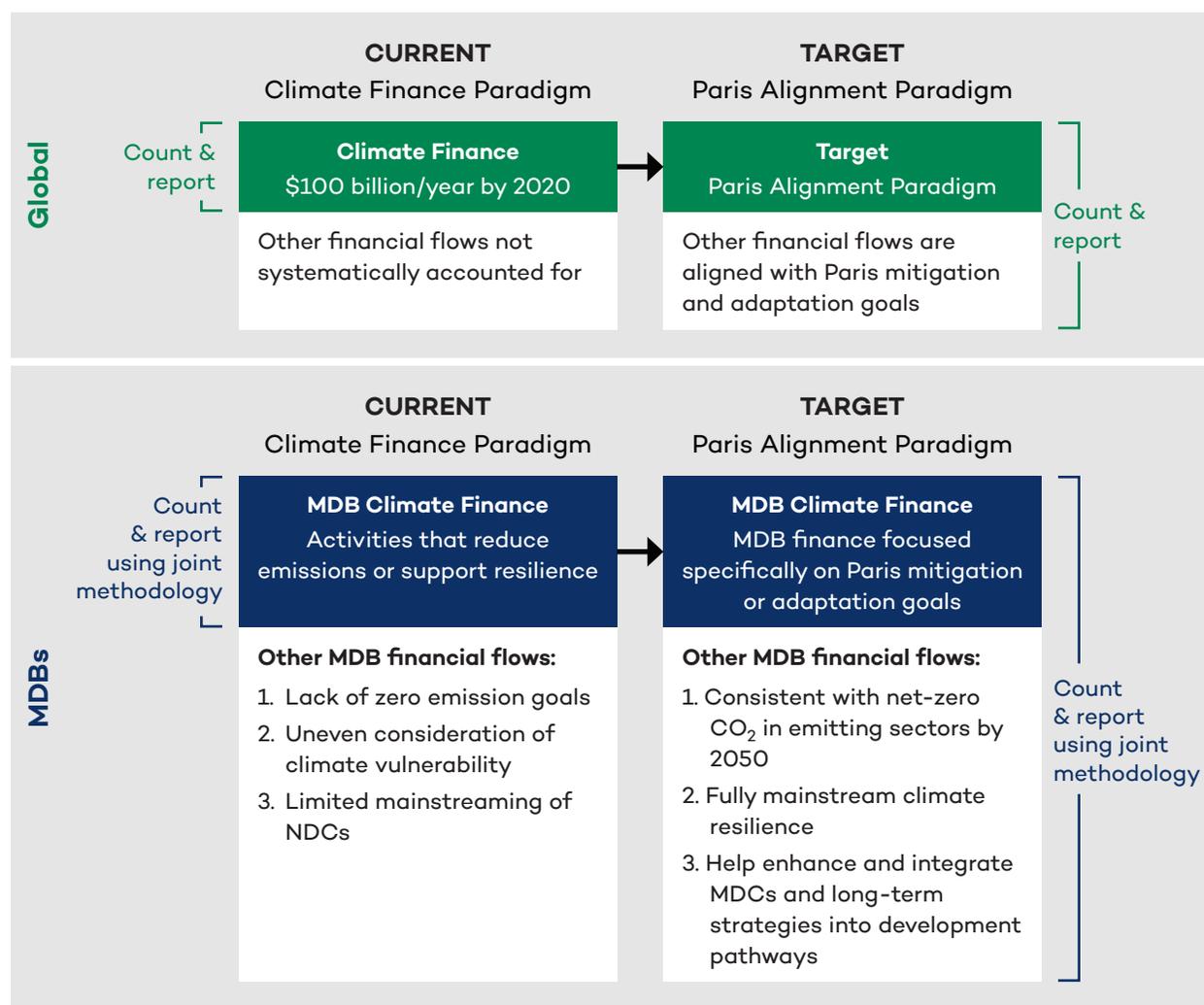
A sole emphasis on increasing climate finance flows falls far short of the economic transformation sought by the Paris Agreement. Rather, the entire financing and investment portfolios of MDBs need to be consistent with the mitigation and adaptation goals of the Paris Agreement (Larsen et al., 2018; World Bank, 2018; Clark et al., 2019; Cochran & Pauthier, 2019; and OECD, 2019a). The Paris alignment paradigm requires MDBs to go beyond mobilizing and tracking the amounts of climate finance they are contributing toward achieving the goal of USD 100 billion per year

⁵ Reporting on climate adaptation finance has been greatly enhanced by the establishment of a common system to track and communicate the climate finance allocations of the six largest MDBs: the AfDB, ADB, EBRD, EIB, IDB Group, and World Bank Group. In 2017, the IsDB began to track its provision of climate finance in accordance with the common principles followed by the other MDBs. See: Multilateral Development Banks & IDFC, 2015; Multilateral Development Banks Climate Finance Tracking Reporting Group & IDFC Climate Finance Working Group, 2018.



for climate action in developing countries (see Figure 2).⁶ MDBs must also work toward the mainstreaming of climate adaptation in development projects and investments to help developing countries move toward climate-resilient development pathways. The Paris alignment paradigm stresses the use of finance, policy support, and capacity building, along with tracking and reporting, to shift finance flows to low-carbon, climate-resilient pathways (OECD, 2019a).

Figure 2. Transitioning from the climate finance paradigm to the Paris alignment paradigm



Source: Larsen et al., 2018, p. 5.

⁶ Developed countries committed in the 2009 Copenhagen Accord and the 2010 Cancun Agreements to scale up climate finance to USD 100 billion per year by 2020. In 2015, as part of the Paris outcome, countries agreed to extend the developed countries' goal of mobilizing USD 100 billion per year from 2020 through 2025, and that a new collective quantified goal would be set before 2025 (UNFCCC, 2015, Decision 1/CP.21, paragraph 53).



MDBs have announced a number of commitments at the global and institutional levels to align their investments with the Paris Agreement paradigm. MDBs pledged in 2017 to align their financial flows with the objectives of the Agreement, and nine MDBs issued a joint declaration in 2018 that included six building blocks for Paris alignment. One of these core areas for alignment was “adaptation and climate-resilient operations,” which included “managing physical climate change risks, in a manner consistent with climate-resilient development” and supporting “a significant increase in our clients’ and their communities’ ability to adapt to the adverse impacts of climate change” (African Development Bank [AfDB] et al., 2018, pp. 1-2). In 2019, nine MDBs announced plans to increase collective global climate investments to at least USD 65 billion a year by 2025, with annual collective climate finance for adaptation doubling to USD 18 billion per year by 2025 (Asian Development Bank [ADB] et al., 2019, p.1).

At an institutional level, individual MDBs have set targets and commitments to increase financing for adaptation and to assess climate risks in projects (see Table 1). The World Bank and AfDB have made specific commitments to increase financing for adaptation. These commitments are reflected in their share of climate finance allocated to adaptation in 2018—59% and 49%, respectively (AfDB et al., 2019, p. 9). Several MDBs have committed to screening all projects for climate risks and to identifying and operationalizing adaptation options or climate-proofing measures.

These commitments guide MDB operations and help to raise awareness of and buy-in for achievement of the Paris alignment goal. The OECD (2019a) reports that the EIB includes climate financing targets as a key performance indicator in its overall corporate plan, and World Bank targets are translated into informal targets for operational departments. The IDB’s commitment on climate and disaster risk will be monitored through the Corporate Results Framework (IDB, 2020a). Work is ongoing to align MDBs’ full investment portfolios with the Paris Agreement, including efforts to increase understanding of how to undertake and measure alignment efforts (Igoe, 2019).



Table 1. Climate change and adaptation finance targets and commitments of the six largest MDBs.

MDBs	Climate change finance targets and commitments	Adaptation finance targets and commitments
MDBs – ADB, AfDB, Asian Infrastructure Investment Bank (AIIB), EBRD, EIB, IDB Group, IsDB, NDB, World Bank Group	Collective efforts of nine MDBs to total at least USD 65 billion annually by 2025 million, 50% above 2019 levels.	Collective efforts to double the total level of adaptation finance provided to clients, compared to 2019 levels, to USD 18 billion annually by 2025.
African Development Bank (AfDB)	Double climate finance commitments to USD 25 billion between 2020 and 2025.	About 50% of the climate finance commitments between 2020 and 2025 to be allocated for adaptation.
Asian Development Bank (ADB)	Climate finance from ADB's own resources will reach USD 80 billion cumulatively between 2019 and 2030, and at least 75% of committed operations will support mitigation and adaptation by 2030.	All projects screened for climate risks; those identified as medium or high risk undergo a detailed climate risk and vulnerability assessment, and viable adaptation options or climate-proofing measures are identified.
European Bank for Reconstruction and Development (EBRD)	Increase the volume of green financing to over 50% of EBRD annual commitments by 2025, and screen all investments for alignment with the Paris Agreement and national climate-related action plans (proposal for approval by shareholders in October 2020).	Systematic integration of climate risk assessments and adaptation measures into investment operations.
European Investment Bank (EIB)	Share of EIB finance dedicated to climate action and environmental sustainability to rise to 50% by 2025 and beyond. All financing activities to be aligned with the principles and goals of the Paris Agreement by the end of 2020.	Estimate and report on the residual physical climate risk of each investment loan using the EIB Climate Risk Assessment system that was adopted in 2019.



MDBs	Climate change finance targets and commitments	Adaptation finance targets and commitments
Inter-American Development Bank (IDB) Group (IDB and Inter-American Investment Corporation)	65% of annual project approvals include investments in adaptation and mitigation. 100% of country strategies take NDCs or long-term decarbonization strategies into consideration.	Adaptation to be tracked by the number of beneficiaries of enhanced disaster and climate change resilience. 100% of projects categorized as having a high disaster and climate risk to include risk analysis and resilience measures by 2023.
The World Bank Group (International Bank for Reconstruction and Development [IBRD], International Development Association [IDA], IFC, MIGA, and International Centre for Settlement of Investment Disputes)	For 2021–2025, double five-year investments to around USD 200 billion to support for countries to take climate action, with a strong focus on increasing adaptation.	Boost adaptation climate finance to reach USD 50 billion over FY21–25 and pilot new approaches to scale up private finance for adaptation and resilience; help countries mainstream adaptation by systematically managing and incorporating climate risks and opportunities in policy planning, investment design, implementation and evaluation; develop a new rating system to improve global progress on adaptation and resilience; and promote public- and private-sector investments in adaptation. All IDA and IBRD operations undertake climate risk screening. IFC began systematic climate risk screening of projects in seven industry sectors in 2019.

Source: ADB, AfDB, AIIB, EBRD, EIB, IDB Group, IsDB, NDB & World Bank Group (2019); ADB, 2017 & 2019b; AfDB, 2017 and 2019; Bennett, 2020; EBRD, 2015; EIB, 2020a; IDB, 2019; World Bank, IFC & MIGA, 2018; and World Bank, 2019.



4.0 Scaling Up MDB Finance for Adaptation: Issues and Opportunities

MDBs' high-level commitments on climate change and adaptation affect their relationships and programs with developing country governments. As MDBs work toward Paris alignment in their developing country portfolios, the effective mainstreaming of adaptation will involve a transition from increasing climate finance for stand-alone adaptation projects or added-on adaptation components to ensuring that all investments consider and incorporate the objectives of the Paris Agreement. These actions and success in achieving Paris alignment will require the active support of MDBs' developing country partners.

This section reviews the challenges and opportunities faced by MDBs as they work with developing country governments to align financial flows and programs with the adaptation commitments of the Paris Agreement. The analysis considers how MDBs engage with developing country governments to build climate resilience in climate and development finance flows, track finance for adaptation and its impacts, align MDB finance with national adaptation priorities, and encourage private-sector engagement in adaptation action.

4.1 Building Climate Resilience in Projects and Investments

The high-level commitments of MDBs can guide and increase finance for adaptation initiatives, but effective action must be based on developing countries' needs. MDBs and developing countries need to recognize the importance of building climate resilience and climate-proofing investments, and can work together to assess and address climate vulnerabilities.

The use of tools to assess vulnerability and climate risk exposure has become standard practice among MDBs over the past few years. MDBs have taken various approaches:

- The ADB (2019a) has been implementing a climate risk management framework for projects since 2013 that includes climate risk screening at the concept stage, undertaking a more thorough climate risk and adaptation assessment in the preparation of medium- and high-risk projects, and monitoring and reporting on the assessed level of climate risk.
- The IDB's Disaster and Climate Change Risk Assessment Methodology accounts for climate risks and identifies actions to increase the risk resilience of development investments starting in the design phase (Barandiaran et al., 2019).
- The EIB (2016 and 2019) adopted a climate risk assessment system in 2019 that estimates and reports on the residual physical climate risk of each investment loan. It has an in-house guide that outlines general principles and methodologies that can be followed to build resilience to current climate risks, build adaptive capacity and planning, and take action to address future climate risks.



- The EBRD adopted a climate resilience outcome approach on a pilot basis in 2018 to estimate the expected economic benefits of addressing climate vulnerabilities, and developed a toolkit to identify and manage climate risks to investment (EBRD & Global Centre of Excellence on Climate Adaptation, 2018).
- The World Bank Group is committed to supporting systematic climate risk management in partner countries, using country diagnostics and county partnership frameworks as the basis for integrating climate risk management (World Bank, 2019).

CHALLENGES AND ISSUES

While considerable progress has been made on assessing climate vulnerabilities and risks, MDBs are still facing challenges in mainstreaming this process internally and disseminating this expertise to operational teams and developing country governments.

A lack of expertise on how to use the results of a climate risk assessment, combined with limited data in many countries, means that climate resilience may not be adequately addressed in project design (GCA, 2019; Larsen et al., 2018). With most MDBs, the task of developing actions to enhance climate resilience and integrate adaptation lies with project teams and their clients (OECD, 2019a). While they may be assisted by MDB specialist climate teams, project teams and developing country governments and their consultants often lack the required expertise to design or alter the design of a project to address adaptation needs.

Beyond the lack of technical expertise, developing country governments may not be interested in assessing climate vulnerability or assuming the extra costs associated with adaptation. Many vulnerable developing country governments expect that adaptation funding will come in the form of grants, rather than loans, and that the grants will be comprised of new and additional finance that is differentiated from other development objectives (Khan et al., 2019). Additionally, many developing country governments may resist undertaking investments that reduce their exposure to climate risks because they operate on the assumption that disasters brought about by climate change will be addressed through post-disaster aid (Miller et al., 2019).

Climate resilience needs be built into MDB development finance investment decisions and project design at early stages, ideally by developing country governments and clients themselves, not considered as a climate finance add-on after other finance decisions have been made. However, MDBs may only be approached for financial support late in the project planning cycle when it is more difficult to assess climate risks and develop cost-effective adaptation solutions that reduce those risks (Larsen et al., 2018; Miller et al., 2019). Assessments of climate vulnerability and risk may add time to the project approval process at a time when MDBs are under pressure to shorten the project cycle. Additionally, undertaking thorough assessments of climate risks to identify adaptation opportunities can be costly, adding up to 25% to the average cost of an environmental and impact statement (Ward & Caldwell, 2016, p. 13). When developing countries are unable or unwilling to cover these upfront costs, MDBs may be challenged in paying these additional costs out of administrative budgets (Larsen et al., 2018).



Modifications to project design and implementation to increase climate resilience also come with a cost. Information from the Adaptation Fund on the additional costs of climate-resilient design and implementation range from 10 to 20% of the finance provided (UNEP, 2018, p. 23). Internal MDB resources are limited and addressing these extra costs may require that MDBs help developing country governments find other sources of funds, such as the multilateral climate funds, to ensure that projects funded by development finance are climate-resilient. MDBs must make decisions with partner governments as to when they will seek access to this climate finance, recognizing that climate finance allocations to any one MDB and any one government are finite and thus not always available (Wright et al., 2018). Additionally, requests for additional finance to address climate risks or adaptation increments in development projects may be deterred by the greater complexity of dealing with numerous potential funders (Restle-Steinert et al., 2019).

ACTIONS AND OPPORTUNITIES

MDBs are building the capacity to mainstream adaptation and address Paris alignment, but additional actions are required. MDBs have established climate units to support technical teams, employed specialists with expertise to assess adaptation and resilience options, strengthened collaboration between teams responsible for climate change and designing projects, and increased senior level management support of adaptation expertise (Germanwatch & NCI, 2018; Wright et al., 2018). Further work is still needed, though, if Paris alignment is to be achieved. Larsen et al. (2018), for example, highlighted the need to systematically integrate climate change into due-diligence processes, including the integration of climate resilience needs into project design documents, impact and economic assessments, and technical studies. Clark et al. (2019) stressed the need for MDBs to increase internal expertise on climate and sustainability, including undertaking regular assessments of capacity needs for implementing alignment with the Paris Agreement. The World Economic Forum (WEF, 2019) noted the importance of developing a broader range of skills to identify and develop innovative adaptation projects that account for the national circumstances in partner countries. National contexts, NDCs, and NAPs need to inform the mainstreaming of adaptation and the identification of ways to strategically use climate and development finance.

Developing countries require increased capacity to assess climate vulnerabilities, operationalize the outcomes of climate vulnerability and risk assessments, and identify financing for these actions. MDBs can influence developing countries to mainstream adaptation and can support them in doing so by increasing finance for technical assistance, capacity-building and project preparation. However, developing country governments must be convinced of the benefits of adaptation and must request finance to build climate resilience. Working with developing country governments to build their capacity to integrate adaptation and resiliency into planning and budgets is key to MDBs effectively increasing financing allocations for adaptation, particularly in regard to improving the adaptation outcomes of development finance streams.

Research is needed in order to establish best practices and identify lessons learned in regard to the strategic use of climate finance to meet adaptation needs and the mainstreaming of adaptation



in development finance flows (Miller et al., 2019). In addition, work is needed in order to clarify what it means in practice to align MDB portfolios with the adaptation goals of the Paris Agreement (Cochran & Pauthier, 2019), and how best to use MDB climate and development finance to achieve those goals.

4.2 Tracking Finance for Adaptation and its Impacts

Effective mainstreaming requires an understanding of the costs and benefits of adaptation actions, including actions to address climate vulnerabilities in development projects. MDBs have made considerable progress on tracking and reporting the flows of designated climate finance and climate-related development finance, but challenges remain in regard to measuring the adaptation impacts of those flows in developing countries.

MDBs have made progress on tracking adaptation finance, among other things by creating the Common Principles for Climate Change Adaptation Finance Tracking (see Box 2) that underpin the methodology they use to identify the activities within their development operations that are specifically designed to advance adaptation efforts by responding to perceived or expected climate change impacts. This methodology for tracking climate adaptation finance attempts to capture the incremental costs of adaptation activities; MDBs make the best possible efforts to differentiate between their usual development finance and finance provided with an explicit intent to reduce vulnerability to climate change (AfDB et al., 2019). The use of this methodology enables comparison and consistency in reporting, and helps to delineate MDB contributions toward the developed countries' commitment, under the UNFCCC, to mobilize USD 100 billion a year by 2020 for climate action in developing countries.

Box 2. The common principles for climate change adaptation finance tracking

In their efforts to track climate adaptation finance, MDBs and the IDFC have developed a set of three common principles to identify activities that count fully or partially towards adaptation finance. For an initiative to be considered as adaptation-related, it must:

1. Set out the climate vulnerability context of the project.
2. Make an explicit statement of the project's intent to reduce climate change vulnerability.
3. Articulate a clear and direct link between specific project activities and the project's objective to reduce vulnerability to climate change.

Reporting on adaptation finance is limited solely to those project activities (whether entire projects or components of a project) that are clearly linked to the climate vulnerability context. This prevents any over-counting of adaptation finance.

Source: AfDB et al., 2019, p. 26.



CHALLENGES AND ISSUES

MDBs have made significant progress on tracking finance for adaptation, but many developing country partners do not have comparable systems in place to track domestic and international financial flows for adaptation, including MDB finance flows. In addition, greater clarity is required in regard to MDB project-level data and calculations, and work is needed to improve the measurement of the impacts and outcomes of spending on adaptation and resilience.

MDBs do not have a joint methodology for reporting on investments that are not tagged as climate finance, meaning that it can be difficult to compare investment levels in different sectors, such as forestry or agriculture (Larsen et al., 2018). This information can be determined for some MDBs and some developing countries by reviewing project documents, but it is not available consistently across MDBs. More accessible information on existing finance flows to different sectors at the country level could help identify opportunities to fully mainstream climate resilience and to use development finance to promote adaptation and alignment with the Paris Agreement.

While MDBs do have a common methodology for tracking adaptation finance, this reporting has not consistently included project-level data (Larsen et al., 2018) and information that differentiates flows by origin (designated climate fund, internal resources), type of mechanism (grant, loan, guarantee), recipient country and project. MDBs use various approaches to disaggregate adaptation and non-adaptation shares of project finance (MDBs Climate Finance Tracking Working Group and the IDFC Climate Finance Working Group, 2018). Weikmans & Roberts (2019) note “limited transparency” in how MDBs calculate the incremental costs of adaptation, and call for independent verification of MDB-reported climate finance allocations in development finance flows.

Often these demands link back to the USD 100 billion commitment and aim to determine whether pledged climate finance is being provided by developed countries and is additional to official development assistance (ODA). Research shows that projects labelled as adaptation and funded by donors and national governments do not always address climate change risks (Wilkinson et al., 2014). It also is highly likely that some development finance addresses adaptation needs that are not accounted for in adaptation tracking. The application of the Common Principles has improved the consistency of MDB adaptation finance reporting, and MDBs continue to work toward improved reporting.

At the developing country level, the challenges in tracking finance for adaptation are particularly acute. Systems for tracking domestic public finance for adaptation in developing countries are largely inadequate (Parry et al., 2017), and many governments lack the capacity to track the flows of international public finance they receive to address adaptation priorities. As the UNFCCC has no standard format or requirement for developing countries to report on climate finance for adaptation received from developed countries (UNFCCC Standing Committee on Finance, 2018), these countries use various methodologies, which limits comparability. For example, some governments count the total project funding as adaptation rather than identifying



the components of projects that specifically address adaptation.⁷ This can significantly inflate the amount of funding, which can suggest that adaptation is adequately funded, even when this may not be the case. The inconsistency in reporting international finance flows and developing countries' own expenditures for climate adaptation makes it difficult to assess gaps and develop meaningful MDB investment strategies (Micale et al., 2016).

Better climate resilience metrics are needed in order to demonstrate the outcomes and impacts of finance for adaptation as a complement to the tracking of adaptation finance. Measuring adaptation outcomes is complex because the progress made in adaptation is incremental and context-specific, the benefits of resilience must be measured differently across sectors (Christiansen, Martinez & Naswa, 2018), and adaptation is usually not the sole objective of a development project (OECD, 2019). Improved climate resilience metrics would enhance the evidence base on the costs and benefits of addressing climate risks in development projects (UNEP, 2018), and would improve understanding of how MDB climate and development finance can align with the goals of the Paris Agreement. Cochran and Pauthier (2019) call for methodologies that focus on outcomes and impacts for both national and international pathways. They argue that this will help clarify whether adaptation finance is contributing to achieving both the global adaptation goal and a developing country's adaptation goals as set out in its NDC and NAP.

Work also is needed in order to measure the impacts of transformational resilience projects, defined by the World Bank (2018) as those projects that “make it significantly easier and cheaper to adapt to climate change and reduce climate and disaster risks in the future.” Being Paris-aligned requires that MDBs have the highest possible impact on the transformation of economies and societies towards low-carbon, climate-resilient development, and that actions do not reduce the adaptive capacity and resilience of developing countries. The World Bank (2020b) identifies the need to define interim results that lead to transformation by building on existing frameworks for identifying and tracking transformational change. An example of this is the Green Climate Fund's approach to identifying a paradigm shift that considers the degree to which funded adaptation investments can achieve sustainable development impact beyond a one-off project through replicability and scalability (GCF, 2015).

ACTIONS AND OPPORTUNITIES

MDBs have provided leadership in tracking adaptation finance, which has helped them and developing countries determine, at an aggregate level, whether climate investments are being scaled up, finance for adaptation is being scaled up relative to finance for mitigation, and MDBs are meeting institutional and international commitments. This leadership is being extended to the measurement of impacts of financial investments in adaptation. MDBs and the IDFC have developed a framework for climate resilience metrics in financing that sets out a series of principles to guide the development of metrics. The framework notes that climate resilience

⁷ See for example, Ethiopia's assessment of the implementation of its Climate Resilient Green Economy Strategy (NDC Partnership, n.d.), which included a review of international public finance allocations for adaptation priorities.



metrics “should be able to define, monitor, evaluate and report on the quality and results of adaptation financing activities, respecting the guiding principle of context specificity, flexibility, and diversity and being used in a way that is transparent, feasible, consistent and comparable” (AfDB et al., 2019, p. 13).

MDBs' climate resilience metrics have the potential to provide critical information to the broader financial community. MDBs' work to ascertain the costs and benefits of adaptation by measuring the contributions of financing activities to climate resilience could have wider applicability across financial markets. For example, the Task Force on Climate-related Financial Disclosures calls for metrics that can be used to assess and disclose physical climate risks and climate resilience opportunities in business and financing operations (see Box 3).

Box 3. Task Force on Climate-Related Disclosures

The Task Force on Climate-Related Disclosures (TCFD) encourages companies, banks and investors to identify, manage and mitigate their own climate risks, focusing on the climate resilience of the investment. In 2017, the TCFD released recommendations for companies to voluntarily disclose how they evaluate and mitigate climate-related financial risks. These risks include financial losses caused by a rise in extreme weather events, changing weather patterns over time and climate change impacts, as well as risks related to a transition to a low-carbon economy (such as a loss in the value of assets). Climate-related disclosure aims to “promote more informed investment, credit and insurance underwriting decisions”; and “enable stakeholders to understand better the concentration of carbon-related assets in the financial system and the financial system’s exposures to climate-related risks” (TCFD, 2020, p. 7).

The IFC (2018) made its first TCFD disclosure in 2018, recognizing that climate change poses a risk to its financial returns, particularly for longer-term investments. The IFC’s disclosure focused on strategy and governance, risk management (physical and transition risks), and targets and related disclosure. Management of climate-related risks is a priority for the IFC, and they are developing tools and processes to manage risk, including incorporating physical climate risk analysis into their investment due diligence.

MDBs could provide technical assistance to help developing countries develop and strengthen domestic systems for tracking finance for adaptation (Hallegatte et al., 2019; Micale et al., 2018; Parry et al., 2017). Improved developing country tracking and reporting would enhance knowledge of domestic and international public finance allocations to adaptation, the amounts of MDB climate finance these countries are receiving, how these amounts are allocated between mitigation and adaptation, which financial instruments are being used, and what sectors are receiving funding. Tracking finance for adaptation helps governments know if they are attracting the finance they need in order to achieve their NDCs, NAPs, and long-term adaptation goals (Whitley et al., 2018), and helps governments identify financing gaps and the most strategic use of MDB climate finance. Many MDBs have established NDC support



programs that potentially could be used to help developing countries monitor and report on their NDCs, including adaptation contributions.

4.3 Using Developing Countries' Adaptation Priorities to Align MDB Finance with the Paris Agreement

Increasing MDB finance for adaptation and ensuring that this finance is aligned with the goals of the Paris Agreement requires the active support of developing country governments. Many of these governments have identified their national adaptation priorities through country-driven NDC and NAP processes (see Box 4), and increasingly these processes are influencing MDB investments and country strategies (see for example the commitments of the EBRD and the IDB in Table 1). This section examines the challenges faced by MDBs in addressing the adaptation priorities identified in NDC and NAP processes, and opportunities to better incorporate the priorities into MDB country partnership strategies and in-country projects.

Box 4. Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs)

Signatories to the Paris Agreement are required to develop NDCs that set out national actions to help fulfil the goals of the UNFCCC. NDCs typically are focused on mitigation commitments, although many countries also include adaptation components.

Countries are expected to prepare and communicate an updated NDC in 2020 that reflects an increase in ambition, although this process has been delayed in several countries due to the COVID-19 pandemic. Enhancing the adaptation component of a country's NDC provides an opportunity to "make adaptation planning more robust," which can improve understanding of adaptation needs and strengthen adaptation support and action (World Resources Institute and UNDP, 2020, p. 4).

NDCs are complementary to NAP processes, which were formally established in 2010 under the UNFCCC's Cancun Adaptation Framework. The NAP process facilitates the integration of adaptation into development planning across all sectors and at different levels of government. NAP processes provide a concrete means for countries to achieve their adaptation commitments by setting out how adaptation goals are implemented, while NDCs provide an opportunity for countries to provide an overview of adaptation action to the international community (Hammill, Dazé & Dekens, 2019).

CHALLENGES AND ISSUES

MDBs' supply of climate and development finance may not always be aligned with the needs of developing countries as identified through their NDC and NAP processes. A combination of factors within MDBs and developing countries can contribute to this outcome. Within MDBs, adaptation priorities may be unevenly incorporated into their



country partnership strategies (Larsen et al., 2018). Additionally, MDBs may lack a strong understanding of a developing country's adaptation priorities because of limited engagement in NDC and NAP processes; MDBs are only involved in these processes at the request of developing country governments.

A multiplicity of national adaptation plans and strategies in a country can lead to incoherent messaging. A country may have an NDC, an NAP, an agriculture NAP, a climate change action plan, an NDC investment plan, an adaptation resource mobilization strategy, and other documents. These documents may identify different priorities and may not be linked to and supportive of one another (UNFCCC Standing Committee on Finance, 2018). The German Agency for International Cooperation (GIZ, 2017) noted, for instance, that adaptation components in many NDCs did not align with previously developed NAPs. This lack of coherence makes it more difficult for MDBs to identify a country's adaptation needs and priorities and to incorporate them into their country strategies.

The poor quality of some national adaptation strategies and plans can also make it difficult for MDBs to translate them into actionable investments. The adaptation components in many NDCs are weak and therefore do not form a rigorous basis for identifying adaptation needs and priorities (Miller et al. 2018). NAP and NDC processes in many developing countries are hindered as well by limited data and inadequate planning frameworks for identifying and assessing long-term climate impacts. Governments may have low technical capacity to assess climate vulnerabilities and develop adaptation responses. This high level of uncertainty and lack of knowledge can make it difficult for MDBs and their government counterparts to prioritize the strategic use of climate finance or to identify cost-effective investments to increase climate resilience in development finance programs (Larsen et al., 2019).

Challenges within developing countries can also contribute to a lack of alignment. **MDBs' developing country partners may not realize the benefits of incorporating climate resilience into investment decisions, and may not request that MDBs address adaptation in programs.** In particular, MDBs rely on and are strongly influenced by ministries of finance in regard to identifying and developing investment programs and projects. Ministries of finance, though, can be removed from the adaptation planning process and unaware of the need or opportunity to manage climate risks (OECD, 2019a). As well, these officials may not act to increase climate resilience or request support for adaptation projects because of the additional costs and a perception that these costs should be paid through climate finance. Recent efforts to support climate finance readiness in developing countries have encountered a lack of climate awareness among finance ministries, and have highlighted the need to build the capacity, skills, and tools to encourage better adaptation investment decisions (WEF, 2019).

As well, **NDC and NAP processes may be disconnected from broader national development planning, SDG strategies, and sector plans and resourcing because of "siloes climate action"** (OECD, 2019a, p. 27). This situation may be a result of the weak convening power of the ministries responsible for climate change—typically ministries of environment, which are often considered less influential than ministries of finance and planning



(UNFCCC Standing Committee on Finance, 2018). Ministries of the environment often lack expertise in finance, which impedes their capacity to engage with ministries of finance and planning as well as MDBs. Consequently, although MDBs may be well positioned to encourage adaptation projects and climate-resilient infrastructure, there may be a lack of developing country demand for finance aligned with adaptation needs and priorities (OECD, 2019a). MDBs can only influence countries to take on adaptation initiatives; they cannot insist. Often MDBs must push to have adaptation addressed as well as find additional budget to pay for the more resilient solutions.

ACTIONS AND OPPORTUNITIES

MDBs and developing countries can improve how they reflect country-defined adaptation priorities in their decision-making to address the adaptation financing gap. **MDBs can work to encourage alignment between their country strategies and developing country adaptation plans, including NDCs and NAPs.**⁸ Larsen et al. (2019) recommend that MDBs discuss NDCs in country strategy dialogues, include MDB climate experts in these dialogues, and ensure that all new country strategies explain how MDB investments and activities link to the country's NDC. Addressing adaptation also requires that NAP processes inform MDB country strategies, including by identifying climate risks and vulnerabilities, best use of climate finance, and opportunities to mainstream resilience in development finance investments. Country partnership strategies also offer the opportunity to promote economy-wide climate resilience through policy frameworks, such as adaptation-sensitive building codes, regulations for land use planning, and early warning systems. Finally, MDBs can place greater emphasis on adaptation investment strategies in their country strategies (Germanwatch & NCI, 2018), and work with developing country governments to assess how all development projects may contribute to Paris alignment (Larsen et al., 2018).

The mainstreaming of adaptation across MDB investment portfolios and the scaling up of adaptation finance will require increased technical capacity on the part of developing countries, including policymakers and institutions involved in developing adaptation policies, plans, projects, and programs. The GCA (2019) notes that mainstreaming adaptation requires skills in macroeconomic analysis, climate risk screening, environmental and social impact assessment, budgeting, permitting, and project design. MDBs already play an important role in providing technical assistance, sharing knowledge and advice, supporting demonstrations, and building capacity. As described in Box 5, there are a variety of ways in which MDBs could augment these efforts to strengthen developing countries' capacity to seek and use finance for adaptation.

⁸ Country partnership strategies are typically five-year plans that identify an MDB's anticipated role in helping a country achieve its long-term development strategy. The development of these plans is a consultative process that is usually led by the developing country's ministries of finance or planning.



Box 5. Areas for MDB technical assistance

The literature identifies various areas where MDBs can provide technical assistance to help developing countries scale up financing for adaptation:

Mainstreaming

- Developing skills, systems and data in developing countries to ensure that governments have the resources necessary to integrate climate adaptation considerations across their activities, including long-term planning and assessment of the economic benefits of adaptation (Larsen et al., 2018).
- Supporting governments and providing advice to develop forward-looking policy and regulatory analysis and reforms to develop climate-resilient development pathways (Clark et al., 2019; Cochran & Pauthier, 2019; Wright et al., 2018).
- Providing advisory services to help developing countries better understand the opportunities and benefits of resilience and adaptation strategies and programs (Cochran & Deheza, 2017).

Planning processes

- Improving national and sectoral planning processes by encouraging and strengthening collaboration between finance, environment, and line ministries to establish rigorous public investment priorities for adaptation that identify where resilience investments are most needed—a critical step in increasing finance for adaptation (WEF, 2019).
- Helping to shape and direct public investments by providing technical assistance to infrastructure and line ministries to identify opportunities that have clear mutual benefits for development and climate action (OECD, the World Bank & UNEP, 2018).

Policy reform and market creation

- Mobilizing investment indirectly by supporting governments in reforming core climate and broader investment policies, removing specific barriers to investment, and stimulating the creation of markets to scale up climate action (WEF, 2019).

Climate risk assessment

- Building in-country capacity to identify and mitigate climate risks, including physical, liability, and transition risks (Clark et al., 2019; Cochran & Pauthier, 2019; Germanwatch & NCI, 2018).
- Providing technical assistance to ensure that climate risks are included in land-use plans and policies (World Bank, 2018).



Project pipelines

- Working with client countries to develop pipelines of adaptation projects and bring the projects to bankability. This could include tools to promote Paris alignment and targeted project development support, including technical cooperation facilities that help with investment planning and pipeline development (Clark et al., 2019; OECD, The World Bank & UNEP, 2018; UNFCCC, 2018).
- Supporting the development of bankable adaptation projects, including feasibility studies, technical and financial assessments, climate risk assessments, and environmental risk assessments (Hallegatte et al., 2019; Miller et al., 2019).

Innovative financial instruments

- Building knowledge and capacity to enable developing countries' governments and the private sector to use and request the use of these instruments in MDB programming (Miller et al., 2019).

Tracking climate finance

- Developing and strengthening domestic systems for tracking climate and development finance for adaptation, both international support received and domestic allocations (G20 Climate Finance Study Group, 2016; Hallegatte et al., 2019).

Coordination

- Helping to improve coordination between institutions and facilitating multi-stakeholder dialogues that include ministries beyond environment, including, among others, finance, development, planning, and sectoral ministries such as agriculture and energy, as well as the private sector and civil society (Clark et al., 2019; Cochran & Pauthier, 2019).

Targeted technical assistance to finance ministries

- Building the capacity of finance ministries to promote greater use of blended finance approaches in order to accelerate adaptation investment, ensure that climate risk screening assessments are undertaken for MDB projects, design public-private financing models that invest in adaptation and crowd in private investment, and manage climate change impacts on public finance and wider financial stability (Miller et al., 2019).

MDBs could also work with developing country governments to strengthen their adaptation-related policy and planning processes, including NDCs and NAP processes. Possible roles for MDBs include helping to identify short- and long-term adaptation needs and priorities, communicating the importance of building climate resilience, helping policy makers strategically identify opportunities for MDB climate and development finance, and engaging in the development of financing strategies for NDCs, NAPs, and other adaptation-focused policy



processes. Such efforts could help developing countries go beyond the development of a long list of adaptation actions that identify MDBs as potential funders, to assessing national development plans and project pipelines to identify planned investments that would benefit most from strengthened climate resilience and the strategic use of climate finance.

MDBs can provide technical assistance to update NDCs through NDC support programs in the short term. The AfDB, ADB, EBRD, IDB and World Bank have programs that aim to enhance developing country capacity and knowledge so that these countries can prioritize actions, implement priority actions, and monitor and report on NDCs, as well as develop NDC investment plans and mobilize finance. For example, the World Bank's NDC Support Facility is supporting countries to update their adaptation NDCs through the development of adaptation investment plans, climate-smart agriculture investment plans, and coastal resilience plans. The Facility is also providing capacity-building support to help developing countries understand climate vulnerabilities and integrate climate resilience into their policies and plans (World Bank, 2020b).

MDBs may be able to help developing country governments address the dichotomy between finance and environment ministries, as they are well placed to encourage governments to work better across ministries to address the cross-cutting nature of adaptation. MDBs can build on their relationships in order to provide capacity-building support to both lead ministries (often environment ministries) and central banks and finance ministries to improve adaptation planning and mainstreaming adaptation in financial planning (Miller et al., 2019). To begin to overcome the finance–environment dichotomy that impedes the integration of climate change into financial planning and decision-making, it's crucial to obtain the engagement of all relevant ministries, including those that lead on adaptation, in the development of MDB country strategies and finance discussions. Such engagement can help MDB and finance officials understand climate risks, vulnerabilities, and adaptation priorities identified through adaptation planning processes.

MDBs are also well placed to increase awareness within finance and planning ministries of the importance and benefits of adaptation, and of priority actions requiring domestic and MDB support. An improved understanding of adaptation could facilitate coherence across national strategy and planning documents, increase requests to MDBs to integrate adaptation into country strategies, and mainstream climate resilience in development finance. The global Coalition of Finance Ministers for Climate Action, for which the World Bank serves as secretariat, could play an enhanced role in building this awareness. The Coalition recognizes the central role of policy, budgetary, and financial decision-making institutions, and it encourages collective and domestic action on climate change, especially through fiscal policy and the use of public finance (Coalition of Finance Ministers for Climate Action, 2019). Various MDBs and multilateral organizations are institutional partners supporting coalition activities, including strategy development, knowledge sharing, technical assistance, and event hosting.

The development of financing strategies for adaptation could help developing countries better align funding sources with their adaptation priorities (Parry et al., 2017). A review



of adaptation actions in NDC Partnership Plans determined that 11 of 18 plans identified adaptation investment plans or resource mobilization strategies as a short-term priority (Murphy, 2019), and the World Bank Group's *Action Plan on Climate Change Adaptation and Resilience* (2019) identifies the creation of adaptation investment plans as a key intervention to improve access to and scale up financing for adaptation. MDBs could assist developing countries with the development of strategies for financing adaptation that are aligned with broader national strategies for financing development, including SDG processes. MDBs are well placed to help developing countries strategically consider the best use of various finance flows, including MDB climate and development finance, in order to scale up financing for adaptation.

Moving forward requires effective MDB–developing country engagement to generate financing for adaptation—particularly in regard to NDC and NAP processes and the creation of adaptation financing strategies. MDBs and developing countries' governments, with support of the research community, can work to identify what comprises an effective financing strategy for adaptation that guides a developing country's domestic budget allocations and international public finance allocations toward national adaptation priorities. Importantly, at the developing country level, the strategy will need to encourage the best and most strategic use of MDB climate and development finance, particularly grant and concessional finance, to address adaptation priorities. Research on Paris alignment has begun to identify opportunities for MDBs to encourage developing countries to pursue adaptation projects (see for example, Micale et al., 2018), but there is less clarity about what developing countries need in order to improve access to MDB climate and development finance for adaptation priorities. Continued research is required in order to identify options for improved MDB–developing country engagement on NDC and NAP processes and to identify financing options for the adaptation priorities that emerge from these processes.

4.4 Engaging the Private Sector in Adaptation

At least 75% of financing for adaptation currently comes from the public sector (Climate Policy Initiative, 2017), largely because many adaptation actions do not generate revenue streams. However, public finance alone is unlikely to provide the investments needed to address the existing gap in adaptation finance. Opportunities exist for increased private-sector investments in adaptation actions in developing countries (World Bank, 2019), and **MDBs are working to encourage private-sector engagement for adaptation action in developing countries.** MDBs can help to catalyze private resources to support developing country programs, and MDB climate and development finance can be used to assist developing countries to scale up private investment for adaptation (GCA, 2019; WEF, 2019). MDBs are well placed to play an important role in driving action to mobilize private investment in adaptation given their climate-specific mandates, inclusivity, and legitimacy, and the fact that they can take risks that other financing institutions are unable to.

The private sector, for the most part, is for-profit. The NAP Global Network explains that it includes private enterprises and private financiers. The former are companies that manage their



climate risks as a business choice and invest in their own climate resilience. Private enterprises also develop and supply the services and products that build resilience, and have an incentive to capitalize on opportunities arising from the need to adapt to climate change. Private financiers provide financing to private enterprises for adaptation actions and can finance government interventions in ways that are aligned with their risk-return profiles. These financiers include commercial banks, microfinance institutions, insurance companies, institutional investors, private equity and venture capital investors, and private foundations (Crawford & Church, 2019). Insurance and re-insurance companies, in addition to being institutional investors, help to reduce financial risks by increasing the financial resilience of projects through their provision of insurance services.

MDBs work through various channels to encourage private enterprises to take action on adaptation, including through the private-sector arms of MDBs, such as the IFC, and the non-sovereign operations of the regional development banks. MDB support for private-sector engagement in adaptation includes:

- Co-investing with private enterprises.
- Providing loans to private enterprises in developing countries.
- Supporting the preparation of projects and structuring of deals in developing countries.
- Providing financing and lines of credit to enable local financial institutions to provide loans for adaptation technologies and practices.
- Building the skills and capacities of entrepreneurs.
- Supporting challenge funds that encourage the development and marketing of services and products that build climate resilience (see Box 6).

Box 6. MDB programs to support private-sector engagement in adaptation and adaptation-relevant actions

MDBs have various programs and facilities that support private-sector engagement in adaptation in developing countries. Here are some examples:

- The **Canadian Climate Fund for the Private Sector in Asia** is a trust fund managed by the ADB that offers financing on concessional terms and conditions to projects that would not proceed on a purely commercial basis, including for adaptation activities such as resilient infrastructure, coastal protection, and disaster risk management (ADB, 2020b).
- The EBRD (2017) established the **Climate Resilience Financing Facility** in Tajikistan, which is a USD 10 million credit line program, to provide financing through local financial institutions to support the adoption of climate resilience technologies and practices such as drip irrigation, rainwater harvesting, and water storage.



- The **Green Climate Fund's Private Sector Facility** provides funding for on-lending programs managed by the AfDB and the EBRD that provide credit lines to local commercial banks to increase access to finance for micro, small, and medium enterprises, and a risk-sharing facility managed by the IDB that targets agriculture micro, small, and medium enterprises in Latin America (GCF, 2020).
- The **Global Index Insurance Facility** is a World Bank Group program that facilitates access to insurance for smallholder farmers, microentrepreneurs, and MFIs in developing countries. Local companies provide insurance products, including weather index insurance products for farmers, that are often subsidized with MDB finance (IFC, 2020).
- The **Global Infrastructure Facility (2020)**, which includes seven MDBs as technical partners, supports the preparation and structuring of private-public partnerships in developing countries through the mobilization of private-sector and institutional investor capital, including for projects that strengthen climate resilience.
- The **infoDev Climate Technology Program** is a World Bank Group multi-donor program that supports entrepreneurs in developing countries, including the commercialization and scaling-up of climate technologies in adaptation-related sectors such as agribusiness (infoDev, 2020).
- The EIB (2020b) and the European Commission have partnered to create the **Natural Capital Financing Facility**, which is a EUR 100-120 million revolving fund that promotes biodiversity and nature-based climate adaptation. It provides grants, loans, and equity investment in climate resilience projects, and governments and private businesses are eligible for support.
- The **Private Sector Set Asides** of the Climate Investment Funds allocate concessional financing on a competitive basis to projects that engage the private sector. These projects address adaptation by enhancing resilience in the energy sector and offering financial products to promote climate resilience and financial risk management in the agricultural sector (Climate Investment Funds, 2018).
- IFAD co-invested with private investors in Vietnam through a **public-private-producer partnership** that supported the development of the coconut value chain to diversify crops in order to address the impacts of climate change on rice farming (Global Partnership for Effective Development Cooperation MDB Working Group, 2019).



MDBs also work to attract institutional investors to finance adaptation in developing countries by issuing debt through bond programs. The AfDB's Green and Social Bond Programs, for example, have attracted finance for projects with significant environmental and social benefits. While the emphasis is on mitigation-related projects, some adaptation projects are also supported, such as water and sanitation and flood risk reduction projects. The World Bank's Green Bond project portfolio has included commitments of USD 4.3 billion for adaptation projects in the past 11 years, which comprised 25% of the Bank's Green Bond project portfolio (World Bank's Capital Markets Department, 2019, p. 10). The EBRD (2019) issued the first dedicated climate resilience bond in 2019 that raised USD 700 million to finance climate-resilient infrastructure, business operations, and agriculture and ecological systems.

In addition, MDBs generate and provide climate information that can be used by private-sector actors to map climate risks and climate-proof their own assets (see for example, the World Bank Group's Climate Change Knowledge portal).⁹ MDBs also provide technical assistance and policy finance that can improve the policy environment for private-sector investment in adaptation (for example, updating building codes and regulations for water conservation) and engage in policy dialogue to support countries to attract private investment in order to implement their NDCs (see for example, the World Bank development policy credit for Vietnam [World Bank Group, 2020a] and the IDB's NDC Invest program [IDB, 2018]).

MDBs may be able to increase private-sector investment in adaptation by employing a wider range of innovative financial instruments (see Box 7). Innovative financial instruments, which can include investment strategies that blend public and private capital, are increasingly viewed as a means to scale up needed investment in order to achieve climate adaptation goals (GCA, 2019; WEF, 2019). Blended finance is “the strategic use of public or philanthropic development capital for the mobilisation of additional external private commercial finance for SDG-related investments” (Blended Finance Taskforce, 2018, p. 10). Miller et al. (2019, p. 42) explain that blended finance applications “are typically used in circumstances where there are perceived or real risks by private investors, and where public capital can take more risk (without the commensurate return expectations) to catalyze investments faster than would otherwise happen.” Such instruments could be supported by MDBs. Essentially, blended finance entails the use of MDB funding to overcome market barriers to crowd in private-sector investment for adaptation in developing countries.

⁹ <https://climateknowledgeportal.worldbank.org/country/bhutan/climate-sector-agriculture>



Box 7. Innovative financial instruments: A definition

Innovative financial instruments can be described as new approaches and mechanisms to acquire, structure, govern, and allocate financial resources. These instruments can include three alterations to traditional finance:

1. Acquisition of new financial resources (including from financial institutions, private investors, institutional investors such as pension funds, impact investors, foundations, and other philanthropists) and blending with traditional resources (such as public grants, loans, climate finance, and official development assistance [ODA]) to finance adaptation actions. Typically, public and philanthropic capital has a catalytic function to improve the risk-return profile of investment opportunities in order to attract private investors.
2. Mechanisms to improve the efficiency of raising and distributing financial resources, including those that reduce transaction costs, improve transparency, and improve access to investment opportunities.
3. Mechanisms to enhance the effectiveness of investments, including through a focus on the results and performance of the projects being financed.

CHALLENGES AND ISSUES

While there is a recognized need for greater private-sector investment in adaptation actions, including through the use of innovative financial instruments, various issues limit the potential for MDBs to work with developing countries to leverage these investments. These challenges come from within developing countries, the private sector, and MDBs.

Developing country governments often do not consider the engagement of the private sector in adaptation action. Developing country governments broadly understand the principles of engaging the private sector, but they often lack the capacity to do so. Efforts to systematically attract private finance in support of NDCs remain nascent (WEF, 2019), and the private sector plays a limited role in the NAP processes of many developing countries (Crawford & Church, 2019). MDBs are demand-driven institutions and respond to requests from developing country governments, many of which require improved capacity to identify opportunities to use climate and development finance in innovative financial instruments that catalyze private-sector engagement.

The public-service element of much adaptation investment also impedes developing country governments from considering the use of MDB finance to scale up private-sector engagement. Ward and Caldwell (2016) explain that in addition to generic investment barriers (regulatory, political, and institutional), adaptation investment tends to be cost-saving in nature, which is generally less attractive than revenue-generating investment. Adaptation investments can incur high upfront costs, and it can be difficult to monetize the benefits in the



form of short-term cash flow streams because the benefits from adaptation (meaning avoided costs) tend to accrue in the longer term. The risk-return profile of many adaptation projects, with low returns particularly over the short term, means that public resources finance most adaptation projects. While efforts to increase private-sector engagement in adaptation are important, it is also essential to stress the critical role that MDBs will continue to play in filling gaps where private investors will not invest, including proactive adaptation for the vulnerable and for non-market sectors (UNEP, 2018).

While there is a need for innovation in financial instruments for climate adaptation and resilience, the private sector is reluctant to become involved in these types of investments (GCA, 2019). The Global Commission on Adaptation's background report, *Driving Finance Today for the Climate Resilient Society of Tomorrow*, notes that efforts to increase private investment flows to adaptation are impacted by a perceived lack of benefits and immature business models (Miller et al., 2019). The profitability of investments in adaptation and climate resilience are seen to be low, with many investments considered as public goods that governments should fund. Miller et al. (2019) note that "while adaptation investment in certain infrastructure projects (such as irrigation and wastewater management) can generate sufficient revenue or savings to make private investment profitable, other projects with weak or absent cash flows, such as sea walls and water utility networks, are unattractive to private enterprise." Additionally, many adaptation and resilience technologies are perceived to have low commercial readiness and lack viable profitable markets (Miller et al., 2019).

MDBs have a track record of mobilizing private capital, but the Blended Finance Task Force reported that **MDBs do not crowd in as much private capital as they should for every development dollar**. In 2019, MDBs had private capitalization mobilization rates of less than 1:1. The task force noted the need for more development capital for blending, and the central role of MDBs in scaling up the blended finance market to improve the risk-return profile of infrastructure assets in emerging markets. Meeting higher mobilization targets could shift MDB portfolios toward middle-income countries and infrastructure investment, which could potentially free up development capital for low-income countries (Blended Finance Taskforce, 2018).

The poorest and most vulnerable developing countries, which are likely to require significant international public finance to address adaptation needs, are not likely to benefit from blended finance applications. An OECD/UNCDF report on blended finance found that only 6% of private finance mobilized by official development assistance (ODA) between 2012 and 2017 benefitted LDCs; and the largest recipient sectors in LDCs were the revenue-generating sectors of energy, banking and financial services, industry and mining, and communications (OECD/UNCDF, 2019, p. 19). While it is critical to build climate resilience in these sectors, they are not the priority adaptation sectors identified by developing countries in their NDCs—namely biodiversity and ecosystems, health, water, agriculture, and forestry (Tuhkanen, 2020).

Kapoor (2019) explains that MDBs are well suited to having a role in innovative financial instruments because they can be patient investors that work on long-term horizons and have lower expectations of returns. However, their role is limited by their



mandate to promote development while making profits. Kapoor explains that blended finance may distort the investment landscape and waste public resources, as well as providing subsidies to the private sector. An additional concern is that a focus on blending and mobilizing private-sector finance may redirect ODA and climate finance away from adaptation initiatives that deliver real benefits over the long term. Kapoor notes that any use of ODA or climate finance for blending needs strong justification of why public funds are needed and how the use of public funds will encourage private investment that leads to greater adaptation impacts than the use of public funds would alone. Providing this justification will require improved monitoring and reporting of adaptation outcomes, as well as improved methodologies to track the attribution of mobilized funds to the actions of MDBs. At present, calculating the benefits of adaptation projects, meaning the extent to which the adaptation impact has been realized, is often difficult because of limited data and modelling challenges (Kapoor, 2019).

Constraints within MDBs that impede the use of innovative financial instruments include restrictive accounting rules and a lack of in-house capacity in the use of innovative financial tools, such as loan guarantees, and in dealing with complex financial structures (Gohdes & Christianson, 2017). Wright et al. (2018) note there is very little data on MDBs' use of innovative instruments to mobilize private finance. Like other investors, MDBs are constrained by the limited experience in the use of innovative financial instruments to support adaptation. While various financial instruments have been used with varying levels of success to increase mitigation finance (OECD, World Bank & UNEP, 2018), the financial community, including MDBs, has considerably less experience in the use of innovative financial instruments that increase private investment in adaptation (J. Johnston, Convergence, private conversation, October 7, 2019).

ACTIONS AND OPPORTUNITIES

MDBs' strategic use of climate and development finance to mobilize private-sector investment for adaptation requires an understanding of how developing country governments want to engage the private sector and the risks and market barriers that need to be addressed in order to influence that engagement. MDBs can encourage developing country governments to engage the private sector in NDC and NAP processes, and provide technical assistance to help developing countries include innovative financial instruments in their NAP, NDC, and SDG financing strategies.

Innovative financial instruments for adaptation need to be carefully considered and applied as part of a developing country's broader financing strategy that considers the best use of MDB's climate and development finance. A realistic assessment of what is doable and how MDBs can engage in these instruments is needed in each country. For example, should the emphasis be on instruments that reduce the cost of investment by allowing the private sector to access capital at a lower cost, or on instruments such as bonds that encourage borrowing from private investors and repaying the adaptation investment in the future?

The crowding-in of private investment requires a conducive regulatory framework and promoting change in the enabling environment (World Bank, IFC & MIGA, 2019).



MDBs can build capacity in developing countries to use innovative financial instruments and to develop the enabling environment that facilitates the use of these instruments. This includes the policy, regulatory and legal environment for innovative financial instruments that encourages the generation of suitable revenue streams, and the sharing of costs and benefits (Miller et al, 2019). MDBs can assist developing country governments to scale up investment in adaptation through the development of adaptation projects that are appropriate for green bonds, which includes revenue-generating large-scale projects, projects that focus on hard adaptation components that are complemented with soft components, and projects in countries that have established bond markets (Tuhkanen, 2020).

MDBs can use their financial and non-financial tools to help private investors overcome risks (both real and perceived) and other barriers to adaptation investment. MDBs can promote financial solutions such as loan guarantees and credit lines to support actions to build climate resilience. In addition, MDBs can assist with the establishment of dedicated investment vehicles (such as the Climate Resilience and Adaptation Finance & Technology Transfer [CRAFT] Fund and the Acumen Africa Resilient Agriculture Fund¹⁰) that encourage private-sector investment (WEF, 2019). MDBs can learn from experiences to scale up funding for mitigation and the SDGs, where blended finance instruments have been used to increase private investment in the renewable energy sector, for example by using guarantees and first loss protection to overcome the main barriers of risk perception and lack of return on investment to compensate for those risks (Tonkonogy et al., 2018).

Encouraging the private sector to invest in and manage their own climate risks as a business choice may require MDBs to increase their provision of technical assistance to develop and disseminate climate information, as well as build private-sector capacity to conduct climate risk and vulnerability assessments. MDBs can also finance climate risk and early warning systems to ensure that reliable and sufficient climate data and information is collected and publicly available. In addition, MDBs can improve access to credit for small business owners and smallholder farmers by assisting programs that provide credit lines and technical assistance.

MDBs and developing country governments can work together to identify the best use of scarce public finance to design and apply instruments that attract private-sector investment in adaptation. Research can identify current applications of innovative financial instruments to raise financing for climate adaptation in developing countries, the sectors and types of adaptation actions that might be attractive to private-sector investors, which instruments have the greatest potential to scale up financing for adaptation, and the best use of climate finance and the role of development finance to encourage private-sector engagement in adaptation. Additionally, research is needed in order to improve the measurement and attribution (between public and private investment) of adaptation impacts, and to demonstrate value for money in the use of public funds (meaning greater adaptation impacts) to encourage private-sector engagement.

¹⁰ For information on CRAFT, see The Lab, n.d. For information on Acumen, see Green Climate Fund (GCF), n.d.



5.0 Conclusion

MDBs have made commitments and taken action to scale up their provision of climate finance and align their development financial flows with the Paris Agreement.

Actions include setting institutional targets and goals, undertaking climate vulnerability and risk assessments, incorporating adaptation actions in projects and programs, tracking climate adaptation finance, building internal and developing-country capacities, and working to increase private-sector engagement in adaptation. MDBs, multilateral organizations, and research institutions have undertaken considerable analysis and enhanced their knowledge of how to align MDB portfolios with the Paris Agreement, including the strategic use of designated climate finance and the mainstreaming of adaptation as a priority in development finance flows.

The perspectives of developing countries, while a critical factor in MDBs' ability to successfully align their financing portfolios with the Paris Agreement, have received limited attention. Much less is known about the roles and needs of developing country governments, including their views on Paris alignment, on the value of addressing climate impacts and integrating climate adaptation in national programs, and on the importance accorded to adaptation by finance and planning ministries. Research is needed in order to identify strategies that can help developing country governments engage with MDBs in the identification and prioritization of adaptation actions, and for those governments to request that adaptation be addressed in projects and programs supported by MDB development finance.

MDB actions to increase private-sector engagement in adaptation need to be part of a broader strategy that considers the priorities and perspectives of developing countries.

For example, a government may have interest in undertaking actions to encourage the private sector to build resilience and climate-proof their own assets, or in scaling up institutional investment through instruments such as green bonds. A realistic assessment is needed of what is doable and how MDBs can support increased engagement of the private sector in adaptation at the developing country level.

In the short term, MDBs and developing country governments can work to address climate adaptation in the programs that are dealing with the health and socioeconomic impacts of the COVID-19 pandemic. MDBs can help developing countries to build back better by strengthening resilience to the impacts of climate change in infrastructure investments, investing in natural infrastructure to improve climate resilience, and building climate-resilient food systems (OECD, 2019). NAPs can guide a country's resilient recovery because they provide assessments of risks, identify the country's priorities for becoming more climate-resilient, and identify actions that can be included in a pandemic recovery strategy (Hammill, 2020). The adaptation component of NDCs that are being updated in 2020 and 2021, often with MDBs' technical assistance, could outline the critical actions required over the short term (one to two years) to support recovery efforts that are consistent with long-term adaptation goals. MDBs are well positioned to support these efforts by helping developing countries assess climate



vulnerabilities, identify adaptation priorities, and develop effective strategies for mobilizing the required financial resources.

MDBs are working to align their developing country portfolios with the Paris Agreement and, through collaboration with their government partners, can be instrumental in encouraging this alignment more broadly in developing countries' national economic and development strategies. Collectively, these efforts by MDBs and their developing country partners will help ensure that all investments and finance flows account for adaptation, which will be instrumental in bridging the adaptation finance gap.



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