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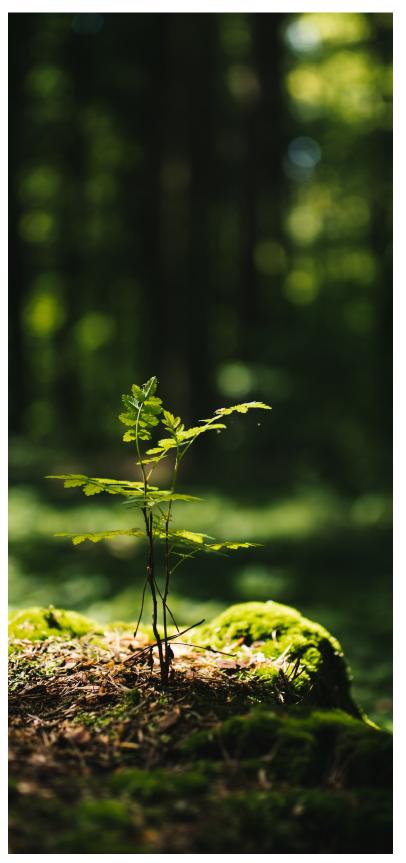
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# **Executive Summary**

Climate change is disrupting economies, societies, and ecosystems, disproportionately affecting the poorest and most vulnerable populations. To meet this growing challenge, the world must act faster and at greater scale to strengthen adaptation and resilience. However, financing for adaptation falls short of global needs.

This technical paper, developed collaboratively by the climate change teams at the multilateral development banks (MDBs), aims to inform ongoing discussions on advancing adaptation and resilience and on MDBs' role in supporting these efforts. It reflects collective analytical work and does not represent formal institutional positions<sup>1</sup>.

MDBs collectively contribute to closing the adaptation finance gap by mobilizing public and private resources and maximizing resilience outcomes. They are supporting the Glasgow goal by doubling their adaptation finance since 2019<sup>2</sup>,

providing over USD 26 billion to low and middle-income countries in 2024 to reach USD 42 billion by 2030.

Beyond providing finance at scale, MDBs play a pivotal role in catalyzing systemic changes. By linking financing with policy dialogue, strategic planning, and institutional capacity-building, they help integrate resilience into development pathways and investment decisions.

MDBs advance climate adaptation holistically through strategic engagement and long-term client partnerships. Their support spans the full spectrum – from upstream assistance on policy and strategy development to downstream implementation that delivers tangible, resilient outcomes. They also pioneer innovative financial instruments, place-based models, and system-wide approaches that embed adaptation across sectors and markets.

However, persistent external barriers – such as fiscal constraints and limited project pipelines – continue to hinder progress on adaptation investments. Strengthening cross-government coordination, creating clearer incentives for private sector participation, optimizing

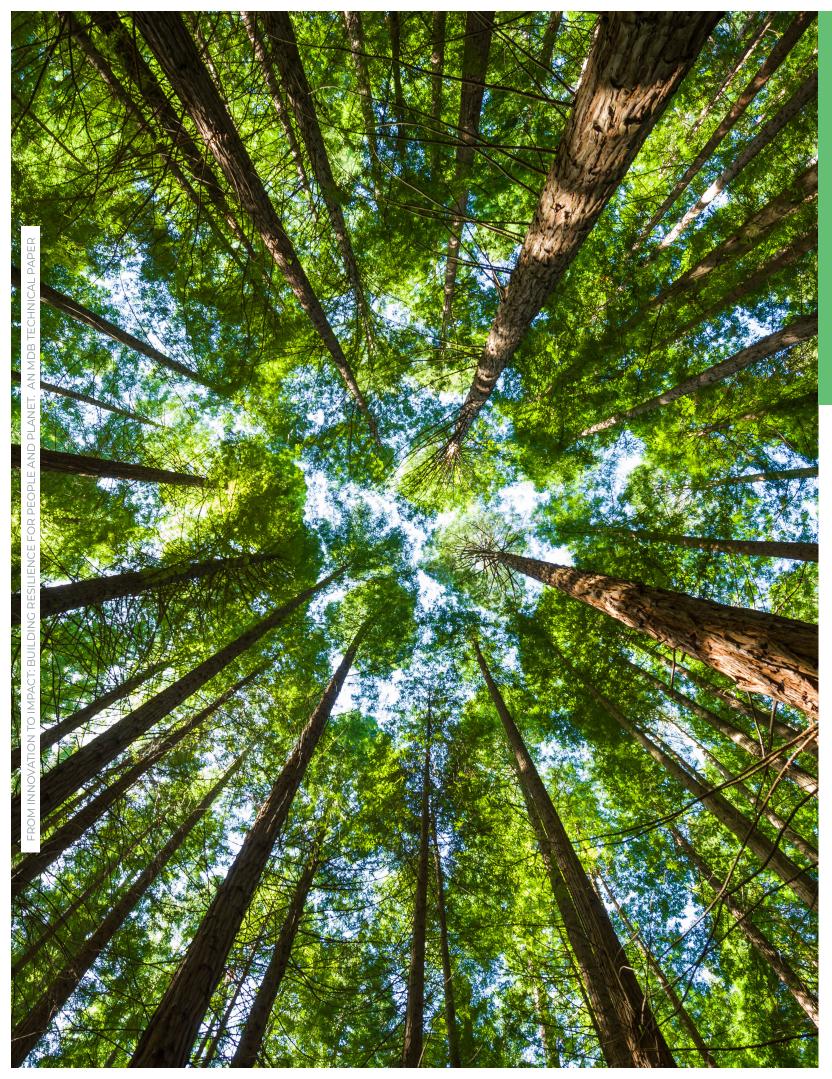
the use of concessional resources, and translating climate strategies into bankable opportunities would enable MDBs to significantly scale up their impact.

# MDBs remain firmly committed to scaling up adaptation and resilience.

They will continue to work alongside governments, partners, and the private sector to embed resilience in development strategies and investments, safeguarding communities, economies, and ecosystems from growing climate risks.

<sup>&</sup>lt;sup>1</sup> The paper was prepared with contributions from the African Development Bank, Asian Development Bank, Asian Infrastructure Investment Bank, Council of Europe Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank Group, Islamic Development Bank, New Development Bank, and World Bank Group.

<sup>&</sup>lt;sup>2</sup> The Glasgow Climate Pact – Key Outcomes from COP26, UNFCCO



# 1. Adaptation: Current State and Why it Matters

# 1.1 The urgency of adaptation and climate resilience

Climate change is no longer a distant threat. Its impacts are already disrupting economies, societies, and ecosystems. Climate risks increasingly affect systems in communities and businesses, undermining their economic development and eroding human capital. These changes take the heaviest toll on the poorest and most vulnerable.

Based on MDBs' experience, both public and private sector clients are seeking greater support to undertake long-term adjustments to climate impacts—adaptation—and to strengthen their financial and operational capacity to cope with and recover from shocks—

resilience—recognizing that their longterm development depends on their ability to manage current and future climate risks. To achieve resilience, climate risks and adaptation must be systematically mainstreamed and embedded into long-term development strategies, policies, and investments from design through implementation.

Additionally, adaptation agendas are increasingly intertwined with poverty, vulnerability, and inequality. Effective adaptation measures can mitigate these challenges by safeguarding livelihoods and strengthening social cohesion among the most vulnerable groups.

## 1.2 Adaptation as a shared, multi-actor process

**Building climate resilience requires coordinated action** across public institutions, financial systems, private actors, and society at large. Adaptation is shaped by factors ranging from national policy and investment planning to firm-level strategies and household choices.



**Governments enable adaptation** by establishing the policy, institutional, and investment frameworks that make society-wide climate resilience possible. The public sector is able to take a long-term view, coordinate across sectors and levels of government, and invest in resilient infrastructure. While many countries have adopted national adaptation plans (NAPs) and other adaptation strategies, translating them into financed, cross-sectoral programs remains a challenge. Fiscal constraints; capacity gaps in planning, data, and monitoring; and weak coordination between national and local levels often hinder implementation. Strengthening institutions and local governance and integrating adaptation into macroeconomic planning and public investment systems are key next steps.



#### Financial institutions channel resources

toward adaptation by integrating climate risk considerations into lending, investment, and insurance decisions. They influence capital allocation across sectors and can drive resilience by sharing or transferring climate risk, mobilizing private capital, and promoting long-term, climate-informed financial practices. However, their engagement is constrained by limited data and tools to assess physical climate risks, weak regulatory and market incentives, and the absence of clear returns on adaptation investments. To scale adaptation finance and strengthen resilience across financial systems, it is essential to overcome these barriers.



Firms and households bear the brunt of climate impacts, and their investment, production, housing, and consumption choices directly shape vulnerability and resilience. Yet adaptation does not strongly influence business and household decision-making because of limited awareness, low technical and financial capacity, a lack of clear incentives or regulatory drivers. Climate risk information gaps, financing barriers, and short-term planning horizons further reduce engagement. Accelerating action at the household level will be crucial to successfully scale up adaptation and climate resilience.



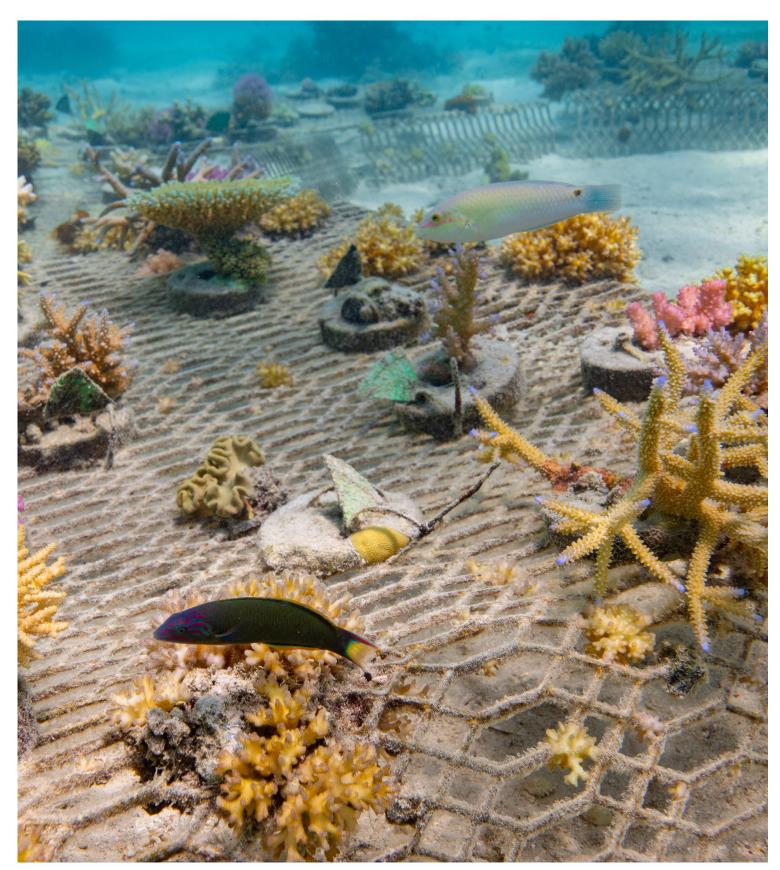
Despite the critical importance of adaptation finance for long-term development, global flows still fall short of estimated requirements. This substantial gap threatens progress on resilience and development, an issue highlighted annually in the United Nations

Environment Programme's Adaptation

Gap Report<sup>3</sup> and Climate Policy Initiative's Global Landscape of Climate Finance.

Closing the adaptation finance gap is essential but so is ensuring that adaptation is resource efficient. This efficiency entails going beyond finance for adaptation alone. It means ensuring that a robust understanding of climate risk

informs development decisions at all levels and that climate adaptation and resilience considerations are consistently integrated across policies, sectors, projects, and strategies so that every action contributes to tangible resilience outcomes. The volume of finance needs to be scaled up while at the same time ensuring that finance is mobilized, programmed, and sustained in the way that best protects lives, livelihoods, nature, and infrastructure systems.



<sup>&</sup>lt;sup>3</sup> In line with global adaptation finance goals, the Adaptation Gap Report tracks finance from developed country contributions to developing countries. The report estimates adaptation finance needs of developing countries will be U\$\$310 to U\$\$365 billion per year by 2035. Meanwhile, international public adaptation finance from developed to developing countries fell from U\$\$28 billion in 2022 to U\$\$26 billion in 2023. In contrast, the recent Joint Multilateral Development Bank Report shows an increase in adaptation finance as this report includes developing country contributions to Multilateral Development Banks, as well as non-flow instruments.

# 1.4 MDBs' role in scaling-up climate adaptation and resilience

As major providers of development finance, MDBs have significantly scaled up their adaptation finance over the years, demonstrating a shared commitment to helping countries strengthen climate resilience. In 2024 alone, they collectively delivered over USD 31 billion in adaptation finance – more than double the annual volume recorded five years earlier. In the COP29 Joint Statement, MDBs estimate that by 2030, their annual collective climate financing for low- and middleincome countries will reach USD 120 billion, including USD 42 billion for adaptation. They aim to mobilize USD 65 billion from the private sector for these countries by the same year. For highincome countries, MDBs project that their annual collective climate financing will reach USD 50 billion, including USD 7 billion for adaptation. They aim to mobilize USD 65 billion from the private sector for these countries as well.

While the scale of these figures is important, MDBs' most significant impact comes from their ability to catalyze systemic change in both the public and private sectors.

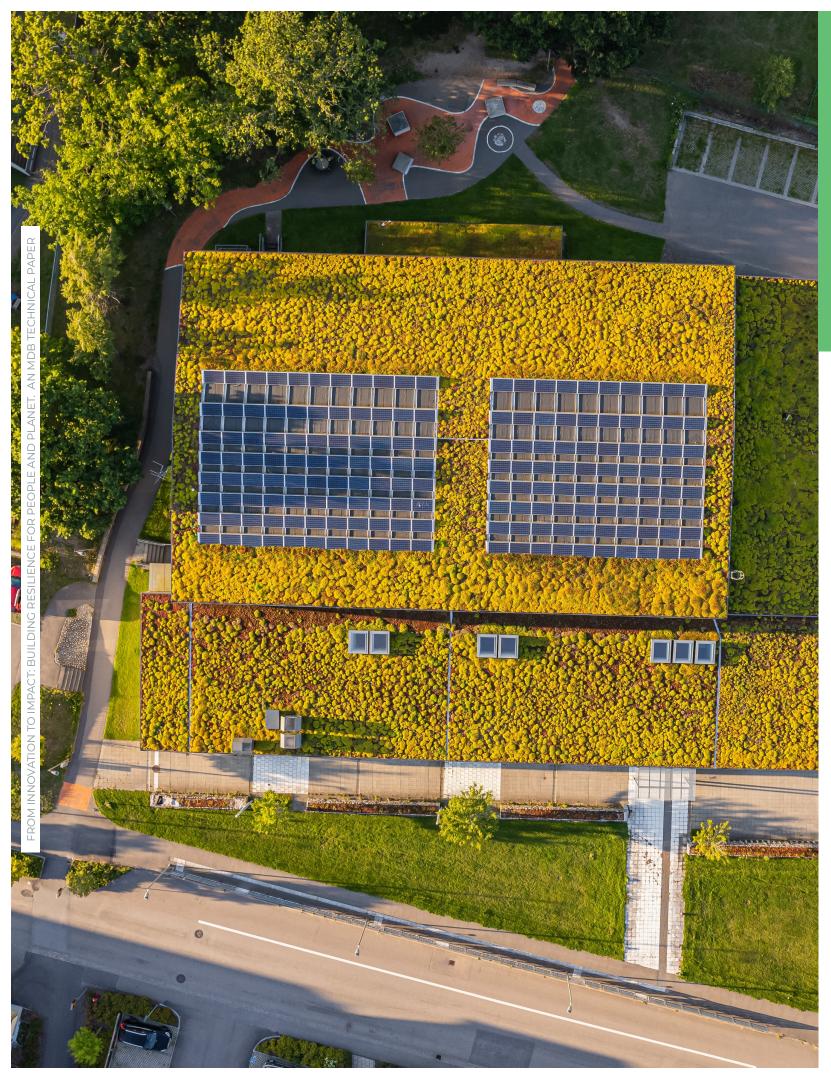
In the public sector, MDBs are uniquely positioned to help countries, subnational entities, and other public-sector clients move beyond piecemeal interventions and systematically integrate climate resilience into their development strategies, sectoral policies, and investment pipelines. By embedding adaptation in core development operations and policy and strategy frameworks and leveraging welldeveloped and high-level partnerships, they help public-sector clients mainstream climate risk considerations. These systemic changes lay the groundwork for long-term resilience and ripple out across entire economies.

In the private sector, the systemic improvements fostered through public

policy and institutional reform create a more favorable investment climate, lowering risk and encouraging private capital participation at scale. MDBs further enable this trend by supporting financial institutions and corporations as they mainstream adaptation. They drive a shift from a grant-based to a leverage-based approach, allowing them to unlock additional capital for climate resilience by de-risking investments through guarantees and insurance products, offering technical assistance to reduce perceived risk, and deploying concessional financing to enhance the risk-return profile of investments. When private actors align strategies, processes, and operational models with resilience objectives, they influence entire value chains and capital flows.

Looking ahead, MDBs are emphasizing both scaling up adaptation finance and enhancing the effectiveness, impact, and outcomes of these investments. Among other initiatives, they are

improving how adaptation results are tracked; strengthening partnerships with governments, international organizations, and financial intermediaries: and supporting capacity-building to ensure adaptation efforts tangibly benefit communities, ecosystems, and economies.



# 2. MDB Leadership and Action

Through strategic engagement and long-term client partnerships, MDBs connect policy, strategy, and technical support with innovative financing and market mobilization to advance climate adaptation. Their support spans the full spectrum – from upstream assistance on policy and strategy development to downstream implementation that delivers tangible, resilient outcomes and investable pipelines.

# 2.1 MDBs systematically integrate adaptation and resilience into operations

MDBs uniquely and systemically weave adaptation and resilience into their work. They advance adaptation and resilience in their operations in four main ways:

# a) Mainstreaming climate adaptation and resilience into their projects

MDBs are integrating climate risk and vulnerability assessments into project screenings to inform resilient design. They ensure that their operations are consistent with national and subnational climate adaptation and resilience strategies, including NAPs, sectoral strategies, and climate-resilient development pathways. Additionally, through their joint MDB Paris Alignment Assessment approach, they ensure that each project incorporates adaptation measures where necessary.

# b) Policy and strategy support that includes resilience

MDBs catalyze broader societal change on adaptation and resilience through policy and strategy support. Examples of this support include:

· Support for national adaptation plans and other adaptation policies and strategies

MDBs assist countries in developing and implementing NAPs and related strategies. They help translate priorities into concrete investment programs, embed climate risk into fiscal systems, and strengthen institutional capacity. These investment programs strategically engage the public and private sectors to drive the resilience of economic sectors, infrastructure, and financial intermediaries.

# · <u>Joint MDB Long-Term Strategy</u> Program (LTS-P)

Through the LTS-P, MDBs help countries design and implement longterm strategies (LTS), strengthen their institutions and technical capacity, improve cross-sectoral coordination, boost climate finance, and deepen their understanding of opportunities and challenges for a just transition to a resilient, net-zero economy.

## · Country-led platforms

MDBs' joint work on country platforms can effectively align investment planning with NAPs and adaptation components of nationally determined contributions (NDCs). These platforms bring together governments, development partners, and the private sector to scale up adaptation pipelines, coordinate support, and unlock climate finance tailored to national priorities and resilience needs.

# c) Technical assistance and advisory services

MDBs provide technical assistance and advisory services to both public and private actors. Through these services, MDBs assess physical climate risk; support integrating adaptation into policies, strategies, and project design; develop standards and certification processes; provide capacity building; improve climate governance and risk management frameworks; and develop and disseminate knowledge. Together, these efforts

strengthen MDB clients' ability to design, finance, and implement effective, system-level adaptation and resilience actions.

# d) Measuring adaptation finance and results

MDBs have played a key role in harmonizing methodologies for climate finance since 2011, in collaboration with the International Development Finance Club, becoming an important reference point to official climate finance targets.

In 2022, MDBs released an updated Joint Methodology for Tracking Climate Change Adaptation Finance, which refines the criteria and guidance to reflect evolving practices. This report builds on the Joint MDB Report on Adaptation Finance from 2011 and on the 2015 Common Principles for Climate Change Adaptation Finance Tracking, which guide how MDBs identify, quantify, and report adaptation finance. MDBs regularly share what they have learned from applying the updated Joint Methodology across different sectors and different financing instruments with each other and with external partners. MDBs report climate finance figures, including adaptation, in an annual Joint MDB Climate Finance Report. They are

working to enhance the transparency and accountability of their data through the digitization of climate finance reporting.

Additionally, joint MDB work on results metrics has shifted the focus from climate finance alone to impacts and outcomes. At COP28, MDBs committed to developing a common approach for reporting climate results that measures not only the volume of dollars spent on climate action, but also the impact of their financing. In April 2024, MDBs published the MDB Common Approach to Measuring Climate Results, the first shared framework for defining, measuring, and linking global progress on climate mitigation and adaptation with MDB results. At COP29, MDBs released an update to the April 2024 publication that provides a set of common indicators that MDBs can apply. These indicators align with the themes and processes of the Global Goal on Adaptation.

# 2.2 MDBs innovate to scale up adaptation results

To further strengthen MDBs' efforts to deploy programmatic approaches for adaptation and resilience that move beyond project-based interventions, MDBs are developing innovative financial instruments, targeted and place-based adaptation programs and models, and emerging institutional and system-wide approaches that complement and build on the efforts outlined in the previous section.

By supporting national, subnational, and sectoral resilience programs; integrating adaptation into development planning to ensure continuity and scale; and creating adaptive incentives through regulation, risk-sharing mechanisms, and financial innovation, MDBs are helping to close the adaptation gap and prioritize actions that trigger catalytic impact. These efforts also build awareness and capacity for risk-informed decision-making, strengthen institutions and markets, and promote best practices across the financial system—ensuring that resilient investments are sustained over time. See the Annex: *Innovative Approaches to Scaling Up Adaptation Results* – *Selected MDB Initiatives* for an extensive set of examples of these initiatives.

# a) Innovative financial instruments

MDBs are developing innovative financial instruments for adaptation and resilience. These tools go beyond traditional loans and grants and use capital markets, guarantees, insurance, and performance-linked structures to mobilize private capital, reduce risk, and incentivize climate-resilient investments. Together, these instruments help fill persistent gaps in adaptation finance and provide scalable models that can be replicated across regions. These arrangements include:

· Resilience & adaptation bonds and Sukuk

Several MDBs are pioneering adaptation-focused bonds and Sukuk<sup>4</sup> to raise dedicated financing for resilience. By extending thematic bonds beyond mitigation, these instruments expand the investor base and provide replicable models for channeling capital for adaptation.

 Climate Adaptation Bond – Asian Infrastructure Investment Bank (AIIB)

AIIB issued two adaptation bonds in 2023 and 2025, respectively. Each issuance raised AUD 500 million to support climate resilience projects. AIIB used the joint MDB methodology for tracking adaptation finance to select the adaptation projects to be funded.

◆ Green Sukuk for Adaptation — Islamic Development Bank (IsDB)

IsDB issues Sharia-compliant green Sukuk, with proceeds directed to adaptation projects such as water resilience. By applying Islamic finance structures, it opens capital markets for resilience in regions underserved by conventional bonds.

<sup>&#</sup>x27; Sukuk are Islamic financial certificates that represent an ownership stake in a portfolio of eligible existing or future assets

## · Guarantees & risk-sharing mechanisms

MDBs increasingly leverage guarantees, insurance, and other risk-sharing arrangements to unlock capital for adaptation. By reducing risk exposure and freeing up scarce bank capital, these instruments enable financial institutions to scale up climate-resilient lending.

Guarantee Platform — World Bank Group (WBG)

Launched in 2024, the Guarantee Platform consolidates all WBG guarantee products under the Multilateral Investment Guarantee Agency (MIGA). The platform prioritizes scaling up climate mitigation and adaptation in emerging markets and developing economies, including in fragile and conflict-affected situations where climate action needs are most acute.

Global Takaful Alliance — IsDB & Partner

With UNDP and others, IsDB launched the Global Takaful Alliance to deliver Islamic insurance products for climate-vulnerable communities. This provides culturally tailored risk-transfer tools in countries with low conventional insurance penetration.

# · Performance-linked finance for adaptation

Several MDBs are issuing performance-based incentives or sustainability-linked finance that tie borrowing conditions to measurable resilience outcomes. They leverage their experience with green and sustainability-linked instruments to now explicitly target adaptation.

Sustainability-Linked Loans with Resilience KPIs — European Bank for Reconstruction and Development (EBRD)

EBRD has invested in loans with terms tied to resilience targets, such as water-related key performance indicators (KPIs). These link borrowing costs to measurable climate outcomes, addressing the lack of incentives for private clients to embed adaptation in operations.

Blended Finance for Adaptation Milestones — IDB Invest

IDB Invest is dv eploying blended finance mechanisms that reward achievement of adaptation outcomes. Through performance-based incentives, clients receive concessional financing tied to progress on clearly defined resilience KPIs. For instance, in the Four Points Hotel project, financing is linked to adaptation milestones, demonstrating tangible progress on climate resilience in the hospitality sector.

#### · Climate-resilient debt clauses

Several MDBs incorporate climate-resilient debt clauses into selected operations, allowing borrowing countries or companies to temporarily pause debt service if predefined climate events occur. This pause frees up financial capacity for urgent response and recovery.

# ♦ Expanded Crisis Toolkit (2023) — WBG

This toolkit enhances preparedness and response through (i) debt repayment pauses, (ii) financing redirection, (iii) links between preparedness and financing, (iv) private-sector-backed project support, and (v) enhanced catastrophe insurance without debt. The toolkit leverages resources from across the WBG, including the International Finance Corporation (IFC) and MIGA.

# ♦ Climate-Resilient Debt Clauses — IDB and IDB Invest

Through IDB's **Climate-Resilient Debt Clause (CRDC)**, countries in the region can defer principal payments for a period of two years in the event of an eligible natural disaster, providing them with financial relief during times of financial stress. This clause, known in IDB loan contracts as the Principal Payment Option (PPO), has currently been activated by 6 out of 12 eligible countries.

Through the **Private-Sector Business-Resilience Program** IDB Invest is launching a first-of-its-kind MDB mechanism by scaling up its initial program to protect private investments from a broader range of external shocks that affect business continuity, now including extreme heat and others. These debt clauses allow for principal deferrals and tenor extensions of up to two years, helping de-risk transactions and unlock greater private investment in sectors such as agribusiness, infrastructure, energy, and tourism.

# · Non-Market-Based Approaches (Paris Agreement Article 6.8)

Individual MDBs are piloting ways to apply Article 6 concepts5 – such as results-based payments and benefit-sharing – to adaptation. These mechanisms mirror the success of carbon markets in order to create dedicated, scalable revenue streams for resilience.

# ◆ Adaptation Benefits Mechanism (ABM) – AfDB

Benefits (CABs) based on outcomes and outputs that lead to adaptation impacts. CABs are for sale to emitters, donors, and solidarity levies etc. Its "ex ante financing modality" offers cash flows to adaptation project developers, thereby enabling access to capital markets. The "ex post financing modality" retrofits ABM to existing grant-funded projects and generates CABs to replenish initial grant funding and facilitate replication and scale-up. The ABM specifically links to national adaptation plans and NDCs of host countries to ensure that ABM-funded projects directly address their stated adaptation needs.

Article 6 of the <u>Paris Agreement,</u> which lays out a framework for cooperation between countries to achieve climate goals, including through mechanisms like carbon markets.

· Supporting resilience through intermediated and local banking facilities

Several MDBs are strengthening domestic financial institutions to scale up adaptation lending. These initiatives typically combine credit lines, advisory services, and blended finance to create lasting channels for national and local resilience finance.

# Green Economy Financing Facilities — EBRD

Through credit lines to local banks, the EBRD provides intermediated finance for mitigation, adaptation and nature investments. The EBRD's Green Technology Selector (GTS) is a practical tool available to both EBRD's partner banks and the public to identify pre-approved green technologies. By clarifying what is considered adaptation, the GTS enables EBRD's partner financial institutions to channel more funds into resilience.

# African Green Banking Initiative (AGBI) — AfDB

AfDB supports the greening of public or private national financial institutions, with projects underway in Rwanda, Benin and Côte d'Ivoire and Morocco, and others soon to start in Egypt and Kenya. AGBI strengthens institutions' capacity to finance green (Paris-aligned, low-carbon, resilient) projects and then capitalizes the institutions with blended resources from the Green Climate Fund, AfDB, development finance institutions, investors, and others. By creating permanent, nationally owned vehicles, the initiative overcomes the lack of local structures to channel large-scale adaptation finance.

### · Resilience finance facilities

MDBs are creating specialized facilities that give countries additional flexibility and resources to manage climate shocks and scale up adaptation investments.

Asian Development Fund 14 (AFD14): Thematic Window on Resilience – Asian Development Bank (ADB)

The 14th cycle of the ADF has established a thematic window to provide additional grant financing (USD 400 million, approximately) to the ADB's lower income developing member countries to invest in climate adaptation and disaster risk reduction.

 Multi-Layer Infrastructure Equity Funds for Climate Adaptation — European Investment Bank (EIB)

EIB is working with infrastructure funds such as the Climate Resilience Solutions Fund, ACP Infrastructure Climate Resilient Fund, and Outrigger Impact Fund to finance adaptation. It also partners with funds focusing on nature-based solutions, such as the Ardian Nature-Based Solutions Fund.

# b) Targeted adaptation programs and place-based models

MDBs are scaling up adaptation through initiatives tailored to the specific needs of regions, countries, and communities. These programs combine local knowledge with MDB expertise, bridging gaps between global climate finance and on-the-ground resilience outcomes:

· Small island developing states and atolls

Some MDBs are developing programs that address the existential risks that small island developing states face, particularly sea-level rise. These efforts combine infrastructure, planning, and advisory services to support long-term resilience for some of the world's most vulnerable nations.

# Accelerating Atoll Adaptation Program — ADB

Focused on the four atoll nations – Maldives, Marshall Islands, Tuvalu, and Kiribati – this program provides tailored adaptation pathways for nations facing existential climate risks such as from sea-level rise. It combines phased infrastructure, nature-based solutions, human capital development, and longterm planning. See "Navigating the Rising Tide: Transformational Adaptation for Resilient Atoll Nations" for more information.

Pacific Climate-Resilient Transport Program — World Bank (WB)

EIB is working with infrastructure funds such as the Climate Resilience Solutions Fund, ACP This USD 338.6 million initiative helps Pacific states integrate climate risk considerations across the transport infrastructure lifecycle. Early results show more resilient roads, ports, and airports, with reduced maintenance needs and disaster losses.

# · Reaching vulnerable communities

MDBs are embedding adaptation into poverty reduction and social protection systems to ensure climate finance reaches those most at risk. By working through local banks, block grants, and trust funds, these programs extend adaptation to farmers, women, refugees, and low-income groups who are often left behind.

◆ Community Resilience Partnership Program — ADB and partners

This initiative is channeling more than USD 500 million in finance for local-level adaptation through national decentralization systems, social protection programs, and women's cooperatives to reach vulnerable groups. By embedding climate risk into poverty reduction systems, it ensures local-level benefits where finance is most scarce.

♦ Adaptation in Fragile and Conflict Settings — IsDB & partners

IsDB committed USD 1 billion to adaptation in fragile states, financing resilience for water, food, and infrastructure in highly vulnerable settings that are often excluded from traditional finance.

## · Other sector-specific approaches

MDBs are customizing adaptation actions in sectors like energy, agriculture, as well as across supply chains. These solutions account for sector-specific vulnerabilities and engage both public and private actors to address risks at their source.

◆ Climate-Resilient Supply Chain Support — EBRD

EBRD partners with midstream agribusiness companies to identify climate-related vulnerabilities within their supply chains and supports these firms in delivering climate resilience capacity building and financial assistance to their upstream suppliers, often smallholder farmers. This approach addresses risks at their source and strengthens the entire supply chain.

Distributed Access with Renewable Energy Scale-Up (DARES)
 Platform — WBG

The platform aims to significantly accelerate access to decentralized renewable energy to impoverished and remote communities and MSMEs in Sub-Saharan Africa. Decentralized energy solutions is one of the key avenues through which building climate resilience of energy systems and people in contexts with energy systems extremely vulnerable to climate shocks such as Nigeria, one of the target countries.

# c) System-wide and institutional approaches to mainstream adaptation · Climate data tools and analytics

In addition to adjusting adaptation actions to specific sectors and context, MDBs are also innovating in the macro-level, systemic dimension of adaptation. They embed climate risk considerations into fiscal frameworks, data systems, and institutional capacity to make resilience integral to development and financial decision-making. This moves adaptation from project-by-project efforts into systemic practice. Innovations in this area include:

· Integrating adaptation into national planning and fiscal systems

MDBs are helping governments bridge the gap between adaptation planning and implementation.

Climate Adaptation Investment Planning Program — ADB

ADB helps governments translate national adaptation plans into investment plans that identify strategic adaptation investment packages and suitable funding and financing options, thereby bridging the common gap between adaptation planning and implementation.

Through diagnostics, risk screening tools, and knowledge platforms, MDBs are helping governments and private institutions to translate climate risks into actionable investment, policies, and strategies.

### Access to Robust Climate Data — EIB

EIB is <u>cooperating with the European Centre f</u>or Medium-Range Weather Forecasts on enhanced use of Copernicus Earth observation data for investment decision-making. Together they are developing a public tool for banks that will screen infrastructure projects for physical climate risks, supporting climate-resilient planning, design, and management.

# Building Resilience Index (BRI) — IFC

This global program was developed to help the real estate sector assess, improve, and disclose the resilience of buildings through a web-based tool that provides hazard mapping and a resilience assessment framework. The tool supports the identification of adaptation and resilience solutions and provides a rating system to communicate resilience levels to investors, insurers, and regulators. By enhancing transparency and risk management, BRI enables developers, financial institutions, insurers, and governments to make informed decisions that strengthen the climate resilience of the built environment.

· Nature-based solutions & ecosystem approaches

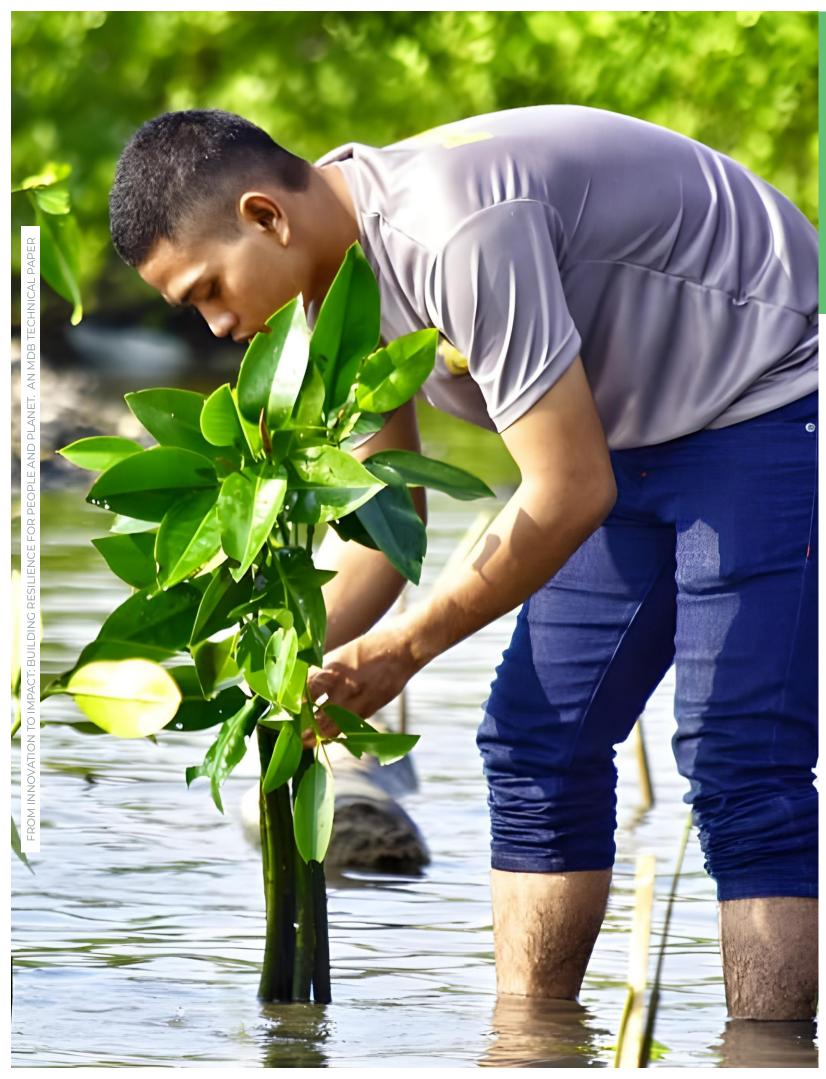
Nature-based solutions can harness ecosystems to reduce risks while restoring natural capital. Recognizing the interplay between natural and human systems, MDBs are integrating ecosystems and biodiversity into adaptation strategies, demonstrating replicable models for resilience in both urban and natural environments.

## Jaguar Impact Initiative – Inter-American Development Bank (IDB) and IDB Lab

The Jaguar Impact Initiative is a novel approach to enhance effectiveness, scalability, and transparency in climate and biodiversity projects using innovative outcomes-based financing (OBF) mechanisms in the Jaquar Corridor, which spans 18 Latin American countries. Under the Jaguar Impact Initiative, individual OBFs in pilot countries will be identified and financed. IDB Lab will co-design specific operations incorporating biodiversity, climate, and socio-economic indicators, using biodiversity and natural capital frameworks, international standards, and best practices. The initiative will serve as a platform, connecting public and private outcomes co-payers, impact investors, and local biodiversity solutions providers interested in building their capacity to perform under OBF and pay-for-results mechanisms such as social impact bonds, development impact bonds, social impact incentives, and conservation development bonds using the Jaguar as a proxy variable for biodiversity outcomes in terms of ecosystem regeneration.

Nature-Based Solutions for Urban Resilience — EBRD

EBRD finances urban adaptation measures such as river restoration and green roofs, integrating ecosystem services into infrastructure. This demonstrates how nature-based solutions can be scaled for urban resilience.



# 3. The Path to Scaling Up

MDBs are committed to scaling up their efforts on adaptation and resilience, responding to the growing demand from clients for effective solutions and financing in this area. However, their efforts are often constrained by factors beyond their control.

# 3.1 Barriers and limitations for MDBs in scaling climate adaptation and resilience

MDBs achieve the greatest impact when their efforts are matched by strong government leadership and political commitment. As financial institutions, they operate within defined business models and with limited concessional resources. However, several systemic barriers continue to constrain the pace, scale, and effectiveness of adaptation finance.

# · Fiscal and policy constraints

Many client countries face limited fiscal space and debt sustainability challenges, constraining their capacity to borrow for adaptation. Even when adaptation needs are well defined, countries often require a mix of concessional financing and debt-relief mechanisms to move forward. In addition, adaptation is often underprioritized in national budgets, slowing the integration of NAPs into development planning and implementation. Existing concessional finance windows are heavily subscribed, and available flows fall far short of demand for adaptation finance. This limits MDBs' ability to structure viable projects for countries with acute adaptation needs.

# · Pipeline and project preparation challenges

A key bottleneck lies in translating plans to bankable projects. Many countries face challenges in turning adaptation priorities into well-structured investment packages, particularly at the subnational levels. Global climate data and associated risk data, while increasingly available, are often not presented in formats directly usable for investment decisions, which can slow project preparation. Capacity to economically and financially appraise adaptation projects remains a challenge.

# · Barriers to private-sector engagement

Private-sector engagement in adaptation goes beyond financing and requires integrating resilience into core business models and daily operations. Corporate clients' motivation is often hindered by limited information on climate risks and long-term financial benefits of investing

in resilience. Financial institutions need clearer regulatory frameworks and targeted incentives to effectively steer capital toward adaptation.

# 3.2 Enabling MDBs to scale-up climate adaptation and resilience

As demand-driven institutions, MDBs' ability to act depends on enabling conditions that exist beyond their internal efforts. Key factors that can amplify their impact include:

· Stronger governance and crossministerial coordination to translate climate ambition into bankable investment opportunities.

When finance and planning ministries are more involved, alongside environment ministries and subnational stakeholders, countries can align adaptation priorities with broader economic planning, mobilize resources more effectively, and ensure that climate ambitions are converted into

concrete, investable programs.

· Clearer incentives and regulatory signals for private-sector engagement.

These incentives are crucial since most adaptation investments do not generate direct revenue streams. Targeted mechanisms and demonstration projects can help crowd in early private-sector participation and build confidence in emerging adaptation markets.

· Optimized and expanded concessional platforms.

On the donor side, predictable concessional finance is a cornerstone of efforts to scale up adaptation, particularly in countries with limited fiscal space. Expanding resources for adaptation and related technical assistance – and more closely aligning vertical climate fund financing with MDBs programming processes – would enable MDBs to

respond more effectively to client needs and leverage additional public and private finance.

# Annex: Innovative Approaches to Scaling Up Adaptation Results – Selected MDB Initiatives

#### Table 1 – Innovative Financial Instruments

# Resilience & Adaptation Bonds and Sukuk

#### Climate Resilience Bond — EBRD

EBRD issued one of the first adaptation-focused bonds, channeling resources to projects that directly address climate risks, aiming to fill the gap in capital markets for adaptation-dedicated instruments.

#### Fiji Sovereign Green Bond — WBG

With WBG and IFC support, Fiji issued the first sovereign green bond by an emerging market in 2017, raising USD 50 million. Proceeds supported investments in resilience, 100% renewable energy, and a 30% reduction in energy sector CO<sub>2</sub> emissions by 2030.

#### Global Green Bond Initiative — EIB

The forthcoming Global Green Bond Initiative will channel equity investments from development finance institutions, including EIB, into a global fund supporting first-time issuers of green bonds in emerging markets and the Western Balkans, covering both adaptation and mitigation.

#### Seychelles Blue Bond — WBG

With BG support and a Global Environment Facility guarantee, Seychelles issued the world's first sovereign blue bond in 2018, raising USD 15 million. Proceeds supported marine protection, sustainable fisheries, and strengthened coastal community resilience to climate change.

#### Wildlife Conservation Bond ("Rhino Bond") — WB

In 2022, the WB issued a USD 150 million outcome bond linking investor returns to black rhino population growth in South Africa. By financing biodiversity conservation, the bond delivers ecosystem services – such as water regulation and land restoration – that strengthen community resilience to climate change.

## **Guarantees & Risk-Sharing Mechanisms**

#### Africa Climate Risk Insurance Facility for Adaptation — AfDB

The Africa Climate Risk Insurance Facility for Adaptation is leading the charge to demonstrate and develop insurance as a vital tool to foster climate adaptation, resilience, and sustainable development within Africa's agricultural sector. The facility aims to raise an initial USD 1 billion in concessional, high-risk capital and grants to stimulate the development and uptake of targeted climate insurance solutions delivered through primary insurers and regional reinsurers across Africa.

#### Africa Disaster Risk Financing Facility – AfDB

In 2018, the AfDB established the Africa Disaster Risk Financing (ADRiFi) Programme to strengthen the resilience and response of the bank's regional member countries against climate shocks. The program promotes proactive climate risk management through proactive risk financing approaches. The ADRIFI Programme's specific objectives are: to strengthen the capacity of regional member countries to evaluate climate-related risks and costs and develop subsequent adaptation measures, and to promote the development and provision of efficient disaster risk financing through climate insurance solutions and support participating regional member country financing to enhance preparedness against climate shocks. AfDB partnered with the African Risk Capacity Group in the implementation of the ADRiFi, as both institutions share the goal of safeguarding development in Africa through protecting countries and populations at risk from climate-related disasters with

#### Africa Risk Capacity – AfDB

The African Risk Capacity (ARC) Group, set up with the support of AfDB, is a specialized agency of the African Union established to help African governments improve their capacities to better plan for, prepare for, and respond to extreme weather events and natural disasters. Through collaboration and innovative financing, the ARC Group enables countries to strengthen their disaster risk management systems and access rapid and predictable financing when disaster strikes to protect the food security and livelihoods of their vulnerable populations.

#### Capital Optimization Product — MIGA

MIGA's guarantee solutions help de-risk and unlock private capital for climate action. For example, its capital optimization guarantee product is designed for global retail banks with significant exposures to central banks in emerging and developing economies. By insuring the mandatory and voluntary reserves held by global banks' subsidiaries against expropriation, MIGA's capital optimization guarantee reduces risk and lowers the parent bank's risk-weighted assets. This frees up capital, which can be channeled to expand lending for low-carbon and climate-resilient solutions.

#### Caribbean Catastrophe Risk Insurance Facility — WB

The first regional catastrophe risk pool, offering quick parametric payouts for hurricanes, earthquakes, and floods to strengthen climate resilience.

# **Guarantees & Risk-Sharing Mechanisms**

#### Contingent Credit Facility (CCF) for Natural-Disaster and Public-Health Emergencies — IDB

The CCF facility is an investment loan that provides borrowing member countries with significant liquid resources following severe natural disasters or public health events to help deliver humanitarian relief, restore basic services to the population, and enact other response measures. It has two coverage modalities: i) CCF-Modality I is a parametric coverage for natural disasters, up to USD 300 million or 2% of GDP. It covers rapid onset, low-probability natural hazards with large-scale impact and is triggered by predefined and measurable parametric conditions; ii) CCF-Modality II is a non-parametric coverage for natural disasters and public health risks, up to USD 100 million or 1% of GDP. It addresses events not covered by CCF-MI, including non-parametric natural disasters and public health risks that significantly affect the population and economy. Coverage can be triggered upon the occurrence of an eligible event as specified in the contract.

#### Global Risk Financing Facility (GriF) — WB

The GriF provides grants for countries to develop prearranged disaster risk financing instruments, including insurance, catastrophe bonds, and contingent credit.

#### Global Index Insurance Facility (GIIF) – IFC

The GIIF facilitates access to finance for smallholder farmers, micro-entrepreneurs, and microfinance institutions through the provisions of catastrophic risk transfer solutions and index-based insurance in developing countries. GIIF's objectives are to provide access to financing for the vulnerable; to strengthen the financial resilience of the poor against the impact of climate change and natural disasters, and to sustain food production for local communities and larger markets.

#### IDA Crisis Response Window (CRW) — WB

Through IDA, the WB provides rapid financing to countries facing natural disasters, severe economic shocks, and health emergencies. By offering contingent resources that can be layered with insurance and Catastrophe-Deferred Drawdown Options (Cat-DDO), the CRW helps vulnerable countries preserve fiscal space and strengthen resilience to climate shocks.

#### Innovative Finance Facility for Climate in Asia and the Pacific – ADB

This initiative provides guarantees for parts of ADB's sovereign loan portfolios to enable ADB to free up capital to increase lending for climate mitigation and adaptation investments.

# **Guarantees & Risk-Sharing Mechanisms**

#### International Bank for Reconstruction and Development (IBRD) Catastrophe Bonds — WB Treasury

These sovereign cat bonds transfer disaster risk to capital markets (e.g., cyclones/earthquakes), accelerating post-disaster liquidity and reducing budget volatility.

#### Market-Based Risk Financing Solutions — WB

The WBG has introduced pioneering instruments for small states, including in the Pacific Islands. Tools include contingent credit lines, regional risk-pooling, and catastrophe bonds. One key instrument is the Cat-DDO, which provides immediate access to contingent financing once a disaster is declared and is integral to climate risk management. Alongside regional and donor partners, the WBG helped establish the Pacific Catastrophe Risk Assessment and Financing Initiative, providing Pacific Island countries with parametric insurance and access to global reinsurance markets to strengthen disaster and climate resilience.

#### Room to Run — AfDB

The AfDB, in collaboration with the Government of the United Kingdom and three globally recognized insurance companies, created a new and innovative risk-sharing transaction. The Room to Run Sovereign transaction is structured with the intention of scaling up the AfDB's commitments to climate finance by up to USD 2 billion and supporting African countries in meeting their NDCs. The support provided by the United Kingdom and private insurers in this risk transfer arrangement will allow the AfDB to reduce the risk capital currently consumed by its sovereign operations, thus creating headroom for new lending operations in priority sectors, particularly climate finance, to help support more mitigation and adaptation projects across the African continent.

#### Risk-Sharing Facility for High Yield and Resistant Seeds – IFC

IFC supported climate adaptation in Ukraine's agricultural sector by financing the distribution of crop inputs, including climate-resilient seeds, to farmers through partial credit guarantee through a Risk Sharing Facility and through a direct loan. These seeds include high yield malting barley, corn hybrids with high drought and heat resistance, and sunflower hybrids with increased resistance. The project will strengthen resilience in Ukraine's agricultural production and safeguard livelihoods against climate risk.

#### Risk-sharing <u>Luxembourg-EIB Climate Finance Platform</u> – EIB

LCFP is a joint initiative between Luxembourg and the EIB to mobilize and support investment in international climate finance, focusing on climate change mitigation and adaptation. The Luxembourg government is contributing a first-loss guarantee to mitigate the risk for the private sector when co-investing in funds dedicated to climate change mitigation and adaptation. Total investment supported to date is EUR 18.5 billion, achieving a multiplier effect from 33x to 750x, depending on the targeted equity fund. LCFP has supported the Climate Resilience Solutions Fund, known as CRAFT, targeting small businesses involved in climate intelligence such as analytics, risk modelling and water monitoring. This will help people in Africa, Asia and Latin America to better adapt to climate change. Already today, 85 million people benefit from climate risk insurance, mostly in rural areas, thanks to the investments. LCFP has also contributed to The Urban Resilience Fund B, which helps increase resilience in rapidly growing urban areas in Africa.

# Table P

#### Table 1 - Innovative Financial Instruments

# Performance-linked finance for adaptation

#### Biodiversity and Climate-Linked Mechanism for Ambition (IDB CLIMA) – IDB

IDB Clima is a results-based pilot program approach that rewards countries that invest in the needed capacities to access concessional financing from thematic and green debt markets at a scale that is compatible with national nature and climate commitments. IDB CLIMA is built around the Green Transition Framework, an approach that considers specific national sector capacities to define ambitious, realistic objectives. IDB CLIMA emulates the IDB's groundbreaking work in supporting the design of the world's first sustainability-linked bond that includes an interest rate abatement if nature and climate KPIs are met. IDB CLIMA provides a 5% rebate on the financing cost upon full achievement and independent verification of three predefined KPI targets.

#### Climate-resilient value chain: a sustainability-linked loan – ADB

Through a sustainability-linked loan, ADB is supporting the private sector in Mongolia to build the climate resilience of the cashmere value chain and thereby provide stable income and employment to herders and industry employees, which are facing increasing climate risk. See <u>Gobi Climate-Resilient Cashmere Value Chain Project</u>.

#### Partial Credit Guarantee (PCG) – AfDB

Deployed in six regional member countries to enable access to sustainability linked finance: Benin – PCG for the Mobilization of Financing Allocated to the Sustainable Development Goals, Egypt – PCG to Support an Inaugural Sustainability Panda Bond Issue by the Arab Republic of Egypt; Côte d'Ivoire – PCG for the Mobilization of Environmental, Social and Governance Financing; Senegal – PCG to mobilize Sustainable Financing; Rwanda – PCG for the Mobilization of Sustainable Financing.

#### Rwanda Sustainability-Linked Bond (SLB) — WB

With WB support and credit enhancement, Rwanda piloted the first sovereign sustainability-linked bond in Africa and the first ever by a national development bank to link debt costs to progress on climate and development goals. The key performance included improving environmental, social, and governance systems and practices of participating financial institutions from 0 to 75% by 2028. This will transform the banking sector lending practices to take into account climate considerations, including resilience. And, if the target is met, the interest rate on the SLB will be decreased.

#### Scaling Adaptation Finance through Sustainability-Linked Instruments — IFC

IFC is adapting green bonds and sustainability-linked loans to explicitly target adaptation outcomes. This opens new avenues for market-based resilience finance and tackles the lack of private-sector instruments dedicated to adaptation.

# Performance-linked finance for adaptation

#### Sustainability-Linked Loan (SLL) with Resilience & Mitigation KPIs — Côte d'Ivoire (WBG)

Côte d'Ivoire, in collaboration with WBG, introduced a Sustainability-Linked Financing Framework and a EUR 433 million SLL (guaranteed via IBRD-MIGA), where the country's interest rate is tied to performance on both mitigation and adaptation.

#### **Climate-Resilient Debt Clauses**

#### Climate Resilience Debt Clause - AIIB

The tool allows eligible borrowers to postpone debt payment obligations on AIIB loan for a defined period in the event of climate-induced or natural disasters.

#### Debt-for-climate-resilience in Barbados – EIB, IDB & Partners

Barbados has successfully completed an unprecedented debt-for climate operation to finance water and sewage projects resilient to climate change. Through support from its international funding partners, Barbados replaced outstanding, more expensive debt with more affordable financing, generating US\$125 million in fiscal savings which will be used to enhance water resource management and increase water and food security. The EIB and IDB are providing innovative financing solutions to support those most vulnerable to climate change, alongside the GCF and the European Commission.

## **Intermediated & Local Banking Facilities**

#### Blended Finance and Technical Assistance Solutions — IDB Invest

IDB Invest pairs blended finance tranches with advisory support to help clients build ISSB S1/S2 implementation plans from a gap analysis, quantify physical climate risks, and design strategies that turn risk into portfolio-wide opportunity. By linking blended finance incentives to upgrades in governance, strategy, risk management, and monitoring, this model catalyzes adaptation investment across entire balance sheets and priority high-vulnerability sectors.

# **Intermediated & Local Banking Facilities**

#### Climate Risk Management for Rural Finance — IDB Invest

In Guatemala, IDB Invest helped Genesis Empresarial, a microfinance institution serving rural and agricultural clients, integrate climate risk management into its operations. Through technical assistance, it developed a system to assess farmers' vulnerability to droughts, storms, and frost, and to identify tailored adaptation measures. As a result, the institution could finance climate-resilient agriculture while reducing borrower risk and improving productivity and market access.

#### Emergency Response and Wildfire Protection through Intermediated Finance – CEB

Rural areas in Turkey are facing increasingly rapid and intense wildfires due to climatic conditions, primarily high temperatures and drought. A loan channeled via local banks supports Municipalities in protecting their population and socio-economic structure against this growing threat. The program will enhance local capacity for early detection and prevention and improve response capability by funding the purchase of fire-fighting vehicles and equipment and constructing essential infrastructure to increase the climate resilience of the affected areas and populations.

#### First Rand Project, South Africa — IFC

IFC is piloting the integration of systemic adaptation into a major commercial bank's portfolio, using taxonomies and advisory support to guide lending. This builds private-sector capacity to identify and finance resilience.

#### Green Eligibility Checker - EIB

The EIB Green Eligibility Checker helps financial intermediaries assess if investments qualify for EIB green financing. It evaluates projects across sectors like energy, transport, and water for climate and sustainability impact, including adaptation measures. The tool ensures alignment with EIB criteria and supports risk reduction and sustainable development. While its primary audience is financial intermediaries, it also helps project promoters and policymakers in identifying eligible, environmentally beneficial investments.

## **Intermediated & Local Banking Facilities**

#### <u>Greening Financial Systems (GFS) Technical Assistance Programme</u> – EIB

Through the GFS technical assistance program, the EIB has joined forces with BMWE, the German Federal Ministry for Economic Affairs and Energy, to provide tailor-made technical assistance to central banks, supervisors, and financial institutions to build climate-resilient financial systems around the world. The GFS technical assistance program contributes to NDC Partnership's Readiness Support for Greening Central Banks initiative.

### **Resilience Finance Facilities**

#### Africa Adaptation Acceleration Program (AAAP) — AfDB & Global Center on Adaptation

AAAP is one of Africa's flagship adaptation programs, aiming to mobilize USD 25 billion by 2025 across food security, resilient infrastructure, youth entrepreneurship, and finance. It has integrated adaptation into 85 AfDB operations in 46 countries, reaching nearly 60 million people. This continent-wide initiative embeds youth and gender as central actors in resilience and provides a unifying platform for scaling adaptation across Africa. The African Adaptation Acceleration Facility has also been launched to accelerate and scale climate adaptation across the continent and support its four pillars: (1) climate-smart agriculture and food security; (2) Africa Infrastructure Resilience Accelerator; (3) YouthADAPT – empowering youth entrepreneurship and job creation in climate adaptation; and (4) innovative financial initiatives for Africa.

#### Africa Climate Change Fund (ACCF) — AfDB

ACCF is a multi-donor trust fund that contributes to the AfDB's target of tripling its climate financing and advancing Africa's climate resilience. The current size of the trust fund is USD 40.64 million. ACCF provides small grants (USD 250,000-USD 1 million) through competitive calls for proposals and the demand-driven window to African governments (ministries, departments, and agencies), subnational governments, NGOs, research institutions, regional institutions, the private sector, United Nations agencies (on case-by-case basis), and AfDB departments.

## **Resilience Finance Facilities**

#### Canada–AfDB Climate Facility— AfDB & Canada

This USD 100 million facility provides loans for resilient projects in creditworthy African countries, with a strong gender lens. By extending affordable adaptation finance beyond low-income countries, it fills gaps for vulnerable but more creditworthy economies.

#### Climate Action Window (CAW) — AfDB

The CAW is an innovative financing instrument established under the African Development Fund (ADF). The CAW earmarked 75% of its resource to climate change adaptation, supporting adaptation/resilience project in low income and climate vulnerable African countries. The goal is to bridge the climate finance gap in Africa, provide quick access to climate finance, mobilize cofinancing resources to expand scale, and prioritize vulnerable communities, including those in fragile and conflict-affected situations.

#### Climate Development Special Fund (CDSF) for Africa - AfDB

CDSF, operational since August 2014, is the investment arm of the ClimDev-Africa program that is jointly implemented by the African Union Commission, the AfDB and the United Nations Economic Commission for Africa. CDSF administers the program's resources to finance climate-resilient development programs that mainstream climate change information at all levels in Africa. CDSF provides direct access to government institutions, non-governmental organizations, civil society groups, and community-based organizations that promote building climate-resilient and inclusive economies. The fund features three sub-windows to allow wider coverage of the Climate Services.

# **Small Island Developing States & Atolls**

#### Technical Assistance for Small Island Developing States— EIB

EIB launched a pilot advisory operation in Cabo Verde, Mauritius, and Seychelles, deploying experts to help governments understand climate risks, set adaptation priorities, and prepare pipelines of bankable investments.

# **Reaching Vulnerable Communities**

#### Lives and Livelihoods Fund (Phase II) — IsDB & partners

This blended trust fund combines IsDB resources with contributions from philanthropies to support adaptation in low- and middle-income countries. By prioritizing resilience, it fills financing gaps where sovereign lending alone is insufficient.

#### Program to Build Resilience for Food and Nutrition Security in the Horn of Africa (BREFONS) — AfDB

BREFONS is a multinational initiative funded by the AfDB and implemented by organizations like the Intergovernmental Authority on Development and the Food and Agriculture Organization to enhance food security and living standards in countries including Djibouti, Kenya, Somalia, Ethiopia, and South Sudan. The program focuses on strengthening agricultural and pastoral systems, improving agribusiness and value chains, and building the capacity of communities to adapt to climate change.

#### Transition Support Facility (TSF) — AfDB

TSF is the African Development Fund's flagship instrument for addressing fragility, conflict, and institutional stress. It fosters resilience, social cohesion, and inclusive development, tackling complex drivers of instability, including climate risks. TSF-financed operations increasingly apply climate-informed approaches in fragile contexts, reflecting a broader shift to strengthen synergies across the humanitarian-development-peace nexus.

#### Urban Revitalization and Resilience Program in Recife — IDB

The program, implemented in Brazil, demonstrated a focus on building systemic resilience by redesigning urban spaces in socio-environmentally vulnerable areas, a dual-purpose solution that addressed both social and climate risks.

# **Other Sector-Specific Approaches**

#### Addressing Drought and Water Scarcity While Restoring Degraded Land — IFC

Timberland Investment Group, a subsidiary of BTG Pactual, established The Reforestation Fund as a greenfield climate-positive forestry fund to acquire 280,000 ha of degraded land and plant trees for timber production and restoration of natural forests across Latin America. Through investments in drought resistant clones and water absorbing jelly bags to control moisture, the project is climate-proofed from periods of prolonged drought and forest fires.

#### African Water Facility – AfDB

African Water Facility is a unique continental accelerator mobilizing financial resources to achieve water security and sanitation for all. As a special multilateral fund of the African Ministers' Council on Water that is hosted by the AfDB, the facility provides demand-driven financial and technical assistance to enable governments to invest in climate-resilient water and sanitation service delivery. African Water Facility is the continent's only dedicated project preparation facility for climate-resilient water and sanitation projects. It achieves results by preparing bankable projects, making innovative investments that leverage capital, and improving governance across the water sector.

#### Alliance for Green Infrastructure in Africa (AGIA) — AfDB and African Union Commission

AfDB and African Union Commission), with other partners, including philanthropists. AGIA is a \$10 billion initiative which seeks to support the design, preparation, development, and structuring of regional and national green infrastructure projects to unlock private financing. AGIA will support transformative climate resilient green investments projects in energy, transport, water supply and sanitation etc. sectors, thereby bridge the infrastructure gap in the Africa and boost growth and resilience.

#### Cambodia Climate-Adaptative Irrigation and Sustainable Agriculture for Resilience project — AIIB

AllB will strengthen the climate-resilience of Cambodia's agriculture sector by improving irrigation, promoting sustainable farming, and building institutional capacity.

#### <u>City Climate Finance Gap Fund</u> — EIB and WB

The Gap Fund is an initiative implemented jointly by the WB and the EIB, in partnership with the German development agency Gesellschaft für Internationale Zusammenarbeit (GIZ). It supports cities that wish to develop and finance resilient urban climate projects but lack the technical knowledge and resources. The Gap Fund helps cities in developing countries overcome these hurdles at an early stage by offering technical assistance. The fund has advised the rehabilitation of the Auji Creek, an inlet river that feeds into Lake Victoria in Kisumu, Kenya. The project aims to enhance the creek's ecosystem by creating green spaces, establishing nature walks, and building nature-based flood control infrastructure. The Gap Fund will provide technical support for a pre-feasibility study on nature-based solutions for reducing the severity of flooding associated with heavy rains and riverbank overflows.

# **Other Sector-Specific Approaches**

#### Comprehensive Early Childhood Development Program — IDB

This project strengthens climate resilience for over 300,000 vulnerable households through direct cash transfers linked to health, nutrition, and social protection. By securing stable support, it reduces exposure to climate shocks and prevents harmful coping strategies. Integrating social protection with climate risk mapping ensures targeted assistance, illustrating how climate adaptation can be mainstreamed into national systems to generate long-term resilience and advance poverty reduction.

#### Climate Resilience Program for Bridge Infrastructure — IDB

The program showcased a proactive, tools-based approach to a common infrastructure problem by investing in the pre-investment studies and technical support required to design climate-resilient infrastructure from the outset. It utilized sophisticated hydrological-hydraulic models that accounted for future climate scenarios, embedded resilience as a core design principle, and ensured that every new bridge was engineered to withstand extreme precipitation and flooding, thereby preventing future losses.

#### Desert to Power - AfDB

Desert to Power is an initiative led by the AfDB with the objective of harnessing the solar potential of the 11 Sahel countries (Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, and Sudan) through investments in 10GW of solar generation capacity and provision of electricity access for up to 250 million people through grid and off-grid solutions. By addressing the energy challenges in the region, the initiative seeks to resolve extreme poverty manifestations such as migration, resource conflicts, food insecurity, and desertification.

#### Energy Access and Resilience Collaboration in Africa — IFC & WB

Through the WBG energy platform, IFC finances private renewable energy projects while WB supports public entities. This joint approach expands access in remote areas and builds resilience by bridging sovereign and private investment.

#### Food Systems Resilience Program (Eastern and Southern Africa) — WB

This USD 2.3 billion regional program was launched in 2022 to strengthen climate-resilient food systems, tackle drivers of food insecurity, and build resilience against shocks. Initial investments target Madagascar and Ethiopia, which face severe drought and food insecurity.

# **Other Sector-Specific Approaches**

#### Great Green Wall Accelerator (GGWA) – AfDB

The Great Green Wall Initiative (GGWI) is an ambitious African response that was launched in 2006 to combat desertification, land degradation, and climate change. The initiative aims to be a green growth corridor for the Sahel, by restoring and sustainably managing an 8,000-km-long and 15-km-wide corridor of land across the Sahara and the Sahel, from Dakar to Djibouti. The GGWI has made notable progress in recent years, restoring millions of hectares of land, creating thousands of jobs, and improving the livelihoods of millions in the Sahel region through economic diversification and revenue regeneration. At the 2021 One Planet Summit for Biodiversity, the GGWA was launched to raise USD 10 billion by 2025 to support the acceleration of the GGWI. The AfDB pledged to contribute USD 6.5 billion by 2025 to the GGWA to support its next programmatic cycle from 2021–2025.

#### Green Building Certification Support for Adaptation - IDB Invest

IDB Invest supports local green building certifications to include resiliency measures as part of the certifications, fostering adaptation investments and helping enable banks to label their lending as adaptation once their clients' transactions adopt this certification.

#### M300 Initiative — WB and IsDB

This initiative expands electricity access to 300 million Africans by 2030 through low-cost renewable energy, enhancing resilience to extreme temperatures in a sustainable manner

#### Non-Revenue Water Initiative — IDB Invest

This end-to-end program supports small and medium water utilities in reducing water losses through tailored diagnostics, technical assistance, and access to finance. By improving efficiency and financial sustainability, the initiative strengthens the resilience of water services to climate impacts.

#### North Corridor Development Program — IDB

This program, implemented in Guatemala, was designed with a dual objective: improve trade connectivity and increase climate resilience to flooding, ensuring the corridor's functionality in a changing climate.

# **Other Sector-Specific Approaches**

#### Scaling Resilient Water Infrastructure facility and the Utilities 4 Climate Initiative — IFC

These initiatives provide advisory services to clients to strengthen climate resilience, future-proof commercial water infrastructure, and address water scarcity through technical assistance or concessional co-investments alongside IFC's own-account investments.

#### Sustainable Cooling Initiative — IFC

This initiative aims to accelerate the adoption of state-of-the-art cooling technologies. Access to sustainable cooling is critical for food security, health care, water and energy security and is crucial for living, learning, and working in extreme heat.

#### Sustainable Energy Fund for Africa (SEFA) – AfDB

SEFA is a multidoor fund aiming to provide catalytic financing to unlock private-sector investments in renewable energy and energy efficiency. SEFA instruments include Technical Assistance; concessional Investment, investment grants. In line with SDG7 ("ensure access to affordable, reliable, sustainable and modern energy for all" by 2030- and Mission 300, SEFA's activities are instrumental in expanding access to clean energy in Africa. Energy access in underserved and vulnerable population is vital to drive employment and poverty reduction thereby building climate resilient communities.

#### Urban Municipal Development Fund (UMDF) – AfDB

Launched by the AfDB in 2019, the UMDF aims to facilitate the Banks's engagement with cities across the continent to respond to the emerging needs of countries and cities to improve urban governance and planning, and mobilize investments for more climate resilient, livable and productive urban development. The recipients are national or subnational governments, municipalities, public utilities, service providers, civil society and non-government organizations. The fund involve: African Cities Program which is working towards supporting cities to move from ideas to plans and to concrete investments through long term engagement. Through such engagement the fund promotes an inclusive, climate resilient green urbanization in Africa.

# **Integrating Adaptation into National Planning and Fiscal Systems**

#### Africa NDC Hub — AfDB

This platform aims to provide African countries with the tools required for the effective delivery of their Paris Agreement commitments, in a coordinated manner and in accordance with their development priorities. About twenty-one partner organizations collaborate within the hub to coordinate the delivery of NDC support interventions.

#### <u>Fiscal Resilience Initiative</u> — ADB & partners

This initiative supports ministries of finance across Asia and the Pacific in assessing and managing climate-related fiscal risks through responsive fiscal policies and public financial management systems. For example, under the initiative, the ASEAN Climate Finance Policy Platform was established in 2024 as the first subregional initiative platform bringing together ministries of finance to work on common issues related integrating climate resilience into fiscal planning processes.

# **Climate Data Tools and Analytics**

#### Adaptation and Resilience Readiness Assessment - WB

This tool provides a whole-of-economy framework to evaluate progress, identify gaps, and inform effective strategies for adaptation and resilience and capacity development. Systematic assessments for 45 countries were recently published.

#### Adaptation KPIs in Infrastructure's Sustainability-Linked Finance—IFC

Sustainability-linked finance instruments present a promising avenue to support resilient infrastructure. Yet, adaptation-focused key performance indicators (KPIs) remain underutilized in these instruments. This paper examines how to scale up investments in resilient infrastructure, which are vital for development and job creation; explores how these KPIs can be more effectively integrated to better address climate risks and drive impactful investment; and offers insights on developing and implementing climate adaptation KPIs to address this critical market need.

#### Catalogue of Nature-Based Solutions for Urban Resilience – IFC

This catalogue, drawing from partnership with the World Bank, serves as a guide and toolkit to introduce municipalities and the private sector on how to integrate Nature-Based Solutions into urban settings to scale the resilience of cities. The catalogue provides global case studies on Nature-Based Solutions and the business case for deploying them to address the urban heat island effect, flooding, drought, water and air pollution, and more.

# **Climate Data Tools and Analytics**

#### Climate Change Knowledge Portal — WB

This portal provides high-resolution climate data and projections for over 200 countries to support risk assessments, policy design, and investment decisions.

#### Climate Knowledge and Screening Tools — WB

The Climate Change Knowledge Portal and project-level screening tools provide free, standardized risk analytics. They are widely used to overcome capacity gaps globally.

#### Country Climate and Development Reports (CCDRs) — WBG

To strengthen resilience and align with the Paris Agreement, the WBG developed CCDRs to inform governments, civil society, the private sector, and WBG investment decisions. Published for 72 countries, CCDRs systematically identify risks and adaptation priorities at the local level. They ensure that development plans, policies, and investments incorporate climate risks, and they highlight country-level priorities for adaptation. An initial assessment shows CCDRs have influenced national policies and now serve as a core input into the WBG's Country Engagement Framework and lending operations.

#### Resilience Rating System & Stress Testing Tool — WB

The WB developed a system to rate projects on resilience and stress-test them under climate scenarios, integrating risk into financial appraisal. This ensures climate risks are systematically considered in investment decisions.

# **Climate Data Tools and Analytics**

#### Systemic Adaptation Options Identification — EBRD

EBRD is piloting an approach to develop Resilient Network Action Plans (ReNAPs) that prioritizes systemic adaptation solutions across public and private actors, moving beyond site-specific interventions and addressing the gap between risk assessments and actionable investments.

#### ThinkHazard — WB

This tool identifies natural hazards in project areas and provides guidance to reduce their impacts.

# **Nature-Based Solutions & Ecosystem Approaches**

#### Debt-for-Nature Swap – IDB

The Debt-for-Nature Swap is an innovative instrument that enables countries to release fiscal resources to face climate change without creating fiscal deterioration or sacrificing spending on other development priorities (examples include Barbados and Ecuador). In these debt-for-nature swaps, the IDB supports issuers to access new investors and lower-cost financing. The IDB sovereign guarantee offers the opportunity to create innovative financial structures, aimed at mobilizing resources from the private sector, to promote sustainability in various sectors, such as social housing or biodiversity, and climate resilience. It can be applied at the regional or national level and is a good mechanism to incorporate strategic partners, such as development finance institutions, NGOs, or private investors. This facilitates improved efficiency through technical synergies and better resource mobilization.

#### Ecosystem Improvement for Urban Resilience — NDB

NDB has developed Lamphelpat waterbody area to increase water detention capacity and prevent urban flooding, restored catchment stormwater drainage channels, constructed arc bridge, providing green spaces, biodiversity zone, and tourism facilities in Imphal city of India. The project has contributed to the adaptation component of India's NDC under the Paris Agreement.

## **Nature-Based Solutions & Ecosystem Approaches**

#### Morocco Blue Economy for Results Program — WB

This USD 350 million program promotes sustainable use of marine and coastal resources. It has restored 7,400 hectares of coastal forests, assessed 1.5 million hectares of coastal areas using remote sensing, and rehabilitated 320 hectares of dunes to prevent flooding and erosion.

#### Nature-Based Solutions for Adaptation — EIB

EIB integrates biodiversity and ecosystem services into adaptation investments, demonstrating replicable models for urban resilience and water management. Through the Natural Capital Financing Facility, the EIB has supported a diverse range of nature-based solutions (NbS) projects. These projects include urban greening and flood mitigation efforts in cities such as Szczecin and Athens; restoration of riparian forests and management of floodplains in Thessaly, Greece; coastal protection and stormwater management in Romania; as well as regenerative agriculture in Ireland. Additionally, the bank's adaptation investments in Sub-Saharan Africa project focuses on early-stage engagement and the development of pipelines for adaptation investments in the Seychelles, Cabo Verde, and the Republic of Mauritius. Potential investments include NbS for water security that are specifically designed to address local challenges. The EIB-WWF NatureWise incubator is a joint initiative aimed at scaling up NbS for climate adaptation and biodiversity restoration across Europe. Furthermore, the City Climate Finance Gap Fund provides technical and advisory support to help cities prepare climate-smart investments, including NbS investments.

#### Nature Solutions Finance Hub (NSFH) – ADB

NSFH is regional platform that aims to scale up investments in nature-based solutions to address the intertwined crises of nature and climate by developing scalable and bankable projects and innovative financing mechanisms. It operates through three interconnected pillars: project origination, innovative financing (such as nature bonds), and policy alignment. It is supported by technical and financial partners including the International Union for Conservation of Nature (IUCN), European Union, Agence Française de Développement, and the OPEC Fund. It has identified priority projects in the Philippines, Thailand, and Uzbekistan.

### Integrated Programme for Development and Adaptation to Climate Change in the Niger Basin (PIDACC) – AfDB

PIDACC is a multinational initiative aimed at improving resilience and managing natural resources in the vulnerable Niger Basin. The program focuses on reducing river silting, improving sustainable natural resource management, and enhancing climate change adaptation capacity for the region's populations, particularly women and youth. Funded by multiple organizations, including the AfDB, Green Climate Fund, and the EU, PIDACC/NB involves nine countries and aims to protect the Niger River's ecosystems and infrastructure.









ASIAN INFRASTRUCTURE INVESTMENT BANK













