



How Is the World Bank Acting on Its Adaptation Action Plan?

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Summary

The World Bank’s 2019 [Action Plan on Climate Change Adaptation and Resilience](#) (Action Plan), covering Fiscal Years (FY) 2021 to 25, is notable for the specific targets it sets for the Bank’s work on adaptation, covering **Disaster Risk Management (DRM), Water Security, Coastal Resilience, Financial Protection, Forests and Integrated Landscape Management, and Human Development**.¹ Although a full assessment of the Bank’s performance against these targets would require on the ground verification, along with the release of the

¹ The Action Plan on Adaptation includes the following target on Human Development: “Support at least 20 climate hot-spot countries with human development engagements (education; health, nutrition, and population; social protection and jobs) to effectively implement climate-resilience strategies.” We did not evaluate any projects under this thematic area because we were unsure of the Bank’s definition and classification of ‘climate hot-spots’ and it is too general a theme for our keyword search.

Bank’s full climate data for FY2022-25,² we have used preliminary data from project documents to better understand how the Bank plans to meet its commitments and scale up adaptation finance, while recognizing that there is typically a gap between project design and implementation. In all cases, on the ground verification is essential to truly assess the Bank’s progress. Using the Bank’s climate finance [project list](#) for FY21, we extracted all projects with adaptation co-benefits before using a keyword search to extract all potentially relevant projects for the thematic areas. The chart below details the number of projects reviewed in each area in the order they are covered in the Action Plan.

² As of January 2024, the Bank adaptation project list for FY2022 (ending 6/30/2022) and later years was not publicly available. However, following our access to information request, the Bank’s climate finance project list for [FY22](#) and [FY23](#) has been publicly posted.

Chart 1. WB FY2021 Projects with Adaptation Co-benefits Per Thematic Area and Portion Fulfilling Adaptation Action Plan Commitments

Thematic Area	# of Projects	# (%) Fulfilling Adaptation Action Plan Commitments
Disaster Risk Management	11	5 (45%)
Water Security	15	15 (100%)
Coastal Resilience	63	9 (14%)
Financial Protection	104	30 (29%)
Forests and Integrated Landscape Management	46	12 (26%)
Five themes combined	191 ³	66 (34%)
All projects with adaptation co-benefits	348	66 (19%)

Of the 348 total projects with claimed adaptation co-benefits, we extracted 191 that are potentially relevant to the five themes of the Action Plan. While we analyzed project documents for quantifiable commitments, on the ground monitoring is necessary to fully assess progress of these projects towards the commitments.

On **Disaster Risk Management**, with just five relevant projects, the World Bank will need to significantly increase access to hydro-meteorological (hydromet) data and early warning systems (to reach an additional 250 million people in at least 30 developing countries) or support hydromet agencies if it hopes to meet its commitments.

³ While the total number of projects adds up to 241, we found some projects were listed under more than one thematic area. Therefore, the total number of projects reviewed is 191.

On **Water Security**, we found 15 projects that, according to project documents, will provide financing to advance the Bank’s goals of supporting at least 100 river basins with climate-informed management plans and/or improved river basin management governance. Many of the projects are designed to focus on Water Supply, Sanitation, and Hygiene (WASH) services. While this may be appropriate given the countries’ needs, we are concerned with the focus on gray (vs. green) infrastructure and a relative lack of attention to whether it will be climate-resilient.

On **Coastal Resilience**, we identified projects in nine (of 20 target) countries that, if implemented as planned, support the commitment. The projects financed under

this theme include financial support for the construction or rehabilitation of infrastructure, bans on degrading coastal activities (e.g., sand mining), and the creation of policies improving the resilience of coastal areas. While the latter two may help, if implemented, to enhance coastal resilience, the Bank's infrastructure support appears to prioritize gray infrastructure projects over green. Yet gray infrastructure interventions can be maladaptive due to their high cost, capital (vs. labor) intensity, fixed nature, and need for maintenance. Moreover, their construction and maintenance is typically carbon-intensive.

On **Financial Protection**, we identified projects in 13 (of 20 target) countries with financial protection instruments, such as cash transfers, and financial sector regulatory reform, including the development of disaster risk financing strategies. A major concern is whether these are designed to be sustainable and, even if successfully implemented, would go far enough to protect vulnerable populations, including marginalized groups. Reforms to incentivize more adaptive practices in sectors needing financial support, such as agriculture, are largely absent. Without such changes, it is questionable whether these efforts, even if fully implemented, would improve resilience beyond the short term.

On **Forests and Integrated Landscape Management**, we identified financing intended to protect close to 27 million hectares (ha.) of forests in 13 countries, against a five-year target of 120 million ha. in 50 countries. While this would be helpful if successfully implemented, it is important that the Bank shift its support for forest and integrated landscape management projects to countries that are most threatened by deforestation, as much of the existing work is in dryland countries.

Overall, while the Bank's project portfolio appears to be financing interventions that are aligned with the Action Plan commitments, our key finding is that, even with a thorough review of project-level documentation, the amount of financing going to its adaptation targets is hard to evaluate. The Bank should be more transparent about how it is calculating climate co-benefits for each project and publicly disclose the calculations in project documents. The Bank also needs to pay greater attention to whether these adaptation co-benefits are themselves designed to be green, resilient, inclusive, and financially sustainable. More rigorous attention to these elements is critical for the Bank's adaptation plans, if implemented, to be effective.

Introduction

The climate crisis is an equity and development crisis; those most vulnerable to the effects of climate change are historically least responsible for global emissions and face threats to development and their livelihoods. In 2019, the World Bank prepared an [Action Plan on Climate Change Adaptation and Resilience](#) (Action Plan) to define the steps it would take over the next five fiscal years to scale up financing and support for adaptation and how it plans to help borrowers increase their adaptive capacity.

The framework is centered around three objectives: (i) increasing the financing available for adaptation — the Bank has committed to provide up to \$50 billion in adaptation finance over Fiscal Years 2021 through 2025;⁴ (ii) help countries to prioritize and mainstream adaptation; and (iii) establish a rating system to track progress towards investments in adaptation.⁵

RESEARCH OBJECTIVE

The purpose of this research is to use project-level documentation to assess the projects and finance designed to meet the sectoral commitments in the Action Plan. They are:

- **Disaster Risk Management.** Expand access to high-quality hydro-meteorological (hydromet) data and early warning systems for an additional 250 million people in at least 30 developing countries, and support 100 agencies with improved meteorological, hydrological, and/or flood forecasting systems.
- **Water security.** Support at least 100 river basins with climate-informed management plans and/or improved river basin management governance, and provide at least 15 million people with improved flood and drought risk management infrastructure.
- **Coastal Resilience.** Support at least 20 countries in adopting measures to increase their resilience to climate-related shocks and stressors in coastal areas.
- **Human Development.** Support at least 20 climate hot-spot countries with human development engagements (education; health, nutrition, and population; social protection and jobs) to effectively

⁴ July 1, 2020 through June 30, 2025.

⁵ Arame Tall & Carter Brandon, The World Bank Group's *Action Plan on Climate Change Adaptation and Resilience: Managing Risks for a More Resilient Future (English)*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/519821547481031999/The-World-Bank-Groups-Action-Plan-on-Climate-Change-Adaptation-and-Resilience-Managing-Risks-for-a-More-Resilient-Future>

implement climate-resilience strategies.⁶

- **Financial Protection.** Support at least 20 countries in their efforts to respond early to and recover faster from climate and disaster shocks with additional financial protection instruments and reduce climate-related risks through financial sector regulatory reforms.

Forests and Integrated Landscape Management. Support interventions through an integrated landscape management approach for avoiding deforestation and promoting landscape restoration or sustainable forest management for 120 million hectares (ha) of forests in 50 countries.

Methodology

To evaluate the projects and finance aligned with the Action Plan, we utilized the Bank's [2021 Climate Finance Project List](#). This document includes a list of all International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) projects with climate co-benefits, including the total percentage of climate finance and the amount of finance for mitigation and adaptation. Using this list, we extracted all of the projects the Bank has claimed have adaptation co-benefits, 348 in total. Next, we used a keyword search to identify projects in the key thematic areas. The words and phrases are listed below, as well as the number of projects identified (subtotals may add to more than the total since some projects fit in multiple subcategories).

- **Disaster Risk Management (11):** disaster (4); risk (4); shock (3); catastrophe (2); flood (1); and warning (1).
- **Water Security (15):** water (14);⁷ river (1); basin (1); and flood (1).
- **Coastal Resilience (63):** resilience (53); blue economy (11); shock (3); coastal (1).
- **Financial Protection (104):** economic (47); macroeconomics, trade, and investment (36); protection (41); recovery (33); finance (23); fiscal (7); early warning (1).
- **Forests and Integrated Landscape Management (46):** agriculture (32); management (14); landscape (4); and forests (0).

⁶ While human development projects are one of the six areas with a quantifiable commitment, we did not look at these projects given the volume/breadth of the sector (education; health, nutrition, and population; social protection and jobs) and difficulty in identifying all key words needed to capture all projects contributing to human development.

⁷ For our keyword search, we extracted words and phrases from the commitment. In this case, while we used a more general term, 'water,' we still identified a number of relevant projects.

We analyzed the Project Appraisal Document (PAD) or Program Document (PD) to determine if the project components, prior actions, or disbursement-linked indicators finance activities or interventions that are designed to meet the criteria in the five thematic areas. In addition, we paid particular attention to the project development objective indicators and intermediate results indicators to see how they would contribute, if implemented, towards meeting the goals.

For each thematic area, the criteria we used to assess projects are based on the commitments in the Adaptation Plan (see Research Objective, above). For example, for Disaster Risk Management, we looked at whether the project, if implemented as approved, would contribute to:

- Expand access to high-quality hydro-meteorological data and early warning systems for an additional **250 million people** in at least **30 developing countries**.
- Support for **100 agencies** with improved meteorological, hydrological, and/or flood forecasting systems.

Limitations:

One limitation associated with using a keyword search is that it is unlikely to identify all projects the Bank considers as supporting its work towards the Action Plan. For instance, while reviewing the [First Amazonas Fiscal and Environmental Sustainability Programmatic DPF](#), we found the [PD](#) included a commitment to reduce deforestation by 23,400 hectares. Yet we did not review it under the 'forests and integrated landscape management' theme because the project name did not include any keywords used for that. It was reviewed under Financial Protection instead. In addition, we did not evaluate projects under the Human Development theme as it is too general to track using a keyword search.

A second limitation is the period covered. FY2021 was the latest year for which this climate finance project-level data was available at the time of the research and the first full year which should have reflected the Action Plan being implemented. Since the Action Plan is for five years, the data offers only an initial snapshot of the World Bank's progress in this area.

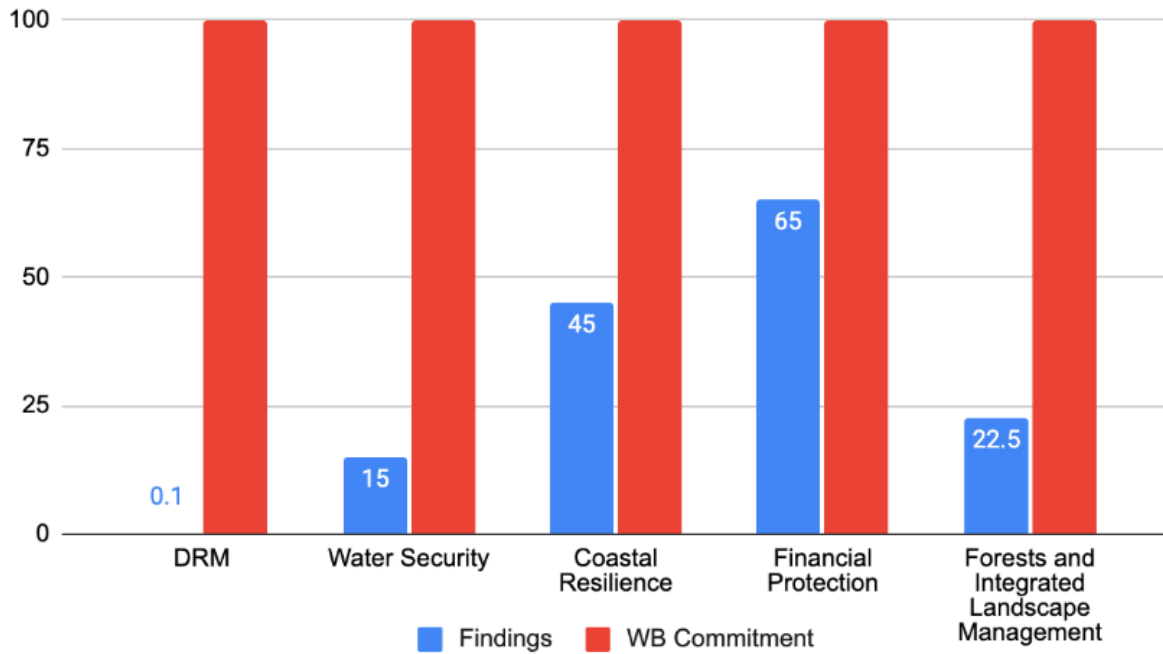
A third, perhaps most significant, limitation is that this analysis is based on review of Bank documents — what the Bank has said its projects are doing. Documents alone are not proof of action, and our project monitoring experience has shown that there is often a gap between project design and implementation. While a project

may include components and sub-components seeking to increase resilience, there is no guarantee that it will actually be implemented. Therefore, on the ground verification is important, but a review of this breadth did not allow for verification of results on the ground. Such results, in any case, are only verifiable once relevant project activities are substantially complete.

Findings

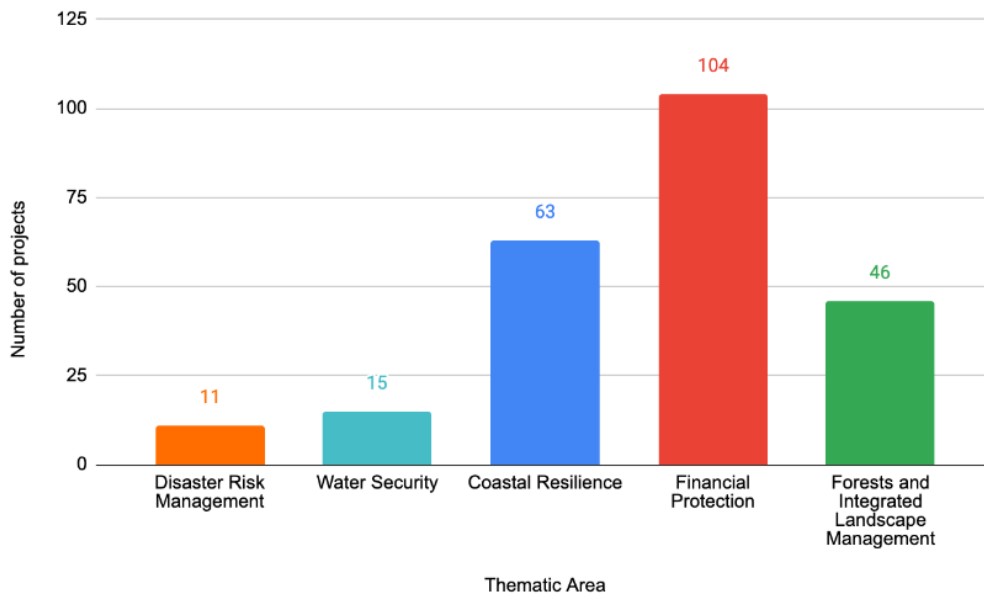
The chart below documents our findings on the Bank's projects and finance based on project documents. Based on our findings, the Bank has devoted the greatest relative efforts towards its adaptation goals in the

financial protection and coastal resilience sectors. In part, this reflects more modest commitments (the target is support for 20 countries in each). It will be important to monitor and assess the implementation of these projects to gauge actual progress towards the Bank's commitments. The figure for Forests and Integrated Landscape Management is just below a quarter; if the Bank continues on the same trajectory over the next four fiscal years, it will surpass its goal, but again, this finding is based on stated commitments in project documents and it will be important to evaluate progress towards this goal at the end of the action plan. In the Disaster Risk Management (DRM) sector, the Bank will need to drastically ramp up its financing because it is currently lagging.



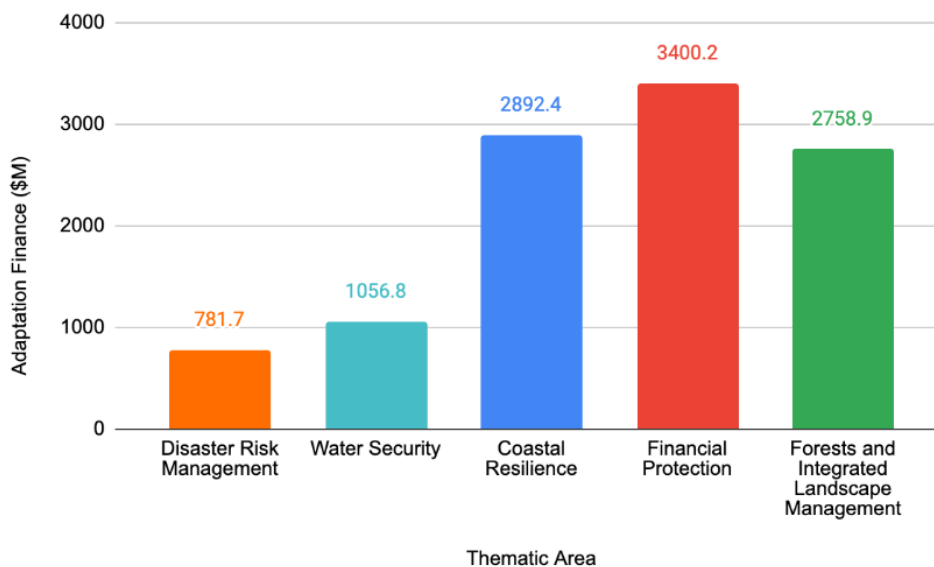
NUMBER OF PROJECTS PER THEMATIC AREA

The chart below illustrates the number of projects we identified and analyzed in each thematic area. We identified the greatest number of projects in the financial protection sector (104) and the lowest in disaster risk management (11).



AMOUNT OF FINANCE FOR THE FIVE THEMATIC AREAS, \$M

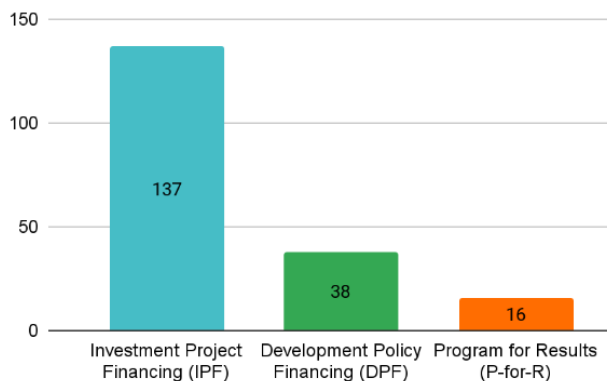
The chart below details the amount of adaptation finance for each thematic area. The amount is based on what the Bank has approved, but it will be important to monitor the disbursement to see if there is any variation.⁸ In addition, a trend we identified across project documents is a systematic failure to explicitly state which components, sub-components, prior actions, and DLIs have adaptation co-benefits and the exact sum of adaptation finance for each. We are particularly concerned about the low figure for DRM. As climate-induced disasters become more frequent and intense, it is important to help vulnerable countries increase their resilience so they can be better prepared to respond to or recover from a disaster. We would like to see this become more of a priority for the Bank.



⁸ Monitoring the disbursement of funds is particularly important as previous research on adaptation finance has found, “levels of finance reported by donors are consistently higher than the funding actually received by the target recipients.” Andrew Hattle, Christopher Roy, Hans Peter Dejgaard, John Nordbo, & Bart Weijs, *Climate Adaptation Finance: Fact or Fiction?* (CARE, 2021), https://careclimatechange.org/wp-content/uploads/2021/01/CARE_Synthesis-report_Final_April-2021.pdf

TYPES OF FINANCING INSTRUMENTS USED

In the Action Plan, the Bank said it would begin to use a more diverse set of financing instruments to support countries to increase their resilience to climate change and climate-induced disasters. The chart below shows the breakdown of financing instruments used for the projects we reviewed. While the Bank is planning to distribute financing through new instruments, most of the projects (137, or 72%) we reviewed are Investment Project Financing (IPF) operations, with 38 (20%) Development Policy Financing (DPF) and 16 (8%) Program-for-Results (P-for-R) operations



Discussion of Findings

DISASTER RISK MANAGEMENT

In our review of the 11 DRM projects, we found five that, according to project documents, meet at least one of the two commitments⁹ but only two projects with activities supporting both. The project documents we reviewed included targets to expand access to hydro-meteorological data and early warning systems for 250,000 people in three developing countries. In addition, project documents included commitments to support 11 DRM agencies. A problem in many projects is a failure to explicitly state the expected number of beneficiaries and agencies to be supported by the projects. The Bank should be clear in project documents about how its DRM projects contribute towards its DRM commitments.

More importantly, it is surprising that only 11 projects address disaster risk. Given the vulnerability of some Bank client countries to climate-related disasters and the high returns on disaster preparedness investments, one would expect this to be a more significant focus. Moving forward, the Bank will also need to distinguish

9 We evaluated projects on whether they were designed to address commitments of the Adaptation Action Plan. For DRM, the two commitments within the Plan are 1) expanded access to high quality hydro-meteorological data and early warning systems for an additional 250 million people in at least 30 developing countries and 2) support for 100 agencies with improved meteorological, hydrological, and/or flood forecasting systems.

between finance for adaptation¹⁰ and loss and damage.¹¹ In the context of DRM, it can be difficult to determine which components support adaptation versus loss and damage; this issue will become more important as the Bank is the initial host of the Loss and Damage Fund.¹²

WATER SECURITY

Based on our review of project documents, we found that all 15 water security projects include components designed for both improved river basin management governance and improved flood and drought risk management. However, the Bank will need to scale up its support for water security adaptation projects to be in position to meet its goal of supporting 100 river basins by 2025.

Many of the projects within this sector focus on Water Supply, Sanitation, and Hygiene (WASH) services and aim to develop infrastructure to deliver clean and safe water to people, with such infrastructure being resilient to floods and droughts. While this is an aspect of climate-informed management, one concern is the environmental impact of the infrastructure and its construction. For example, subcomponent 1.1 of the [Sava and Drina Rivers Corridors Integrated Development Program](#) finances the rehabilitation and upgrade of dykes and riverbanks, but does not address whether it would incorporate green¹³ or gray¹⁴ infrastructure. The former likely needs to be fully adapted to future flood and drought conditions and to reduce the project's own GHG emissions.

Another inconsistency was that, while some WASH projects seek to develop infrastructure that is resilient to flooding and prevent flood waters from mixing with wastewater, other projects did not include any assessment of this risk. In addition, we found the projects lack an analysis of how the infrastructure will fare in the event of other climate disasters. A more comprehensive determination of whether infrastructure is climate-informed in design and construction, and whether it will be climate-resilient upon completion, is needed to assess

10 "Adaptation finance is finance for actions that help communities reduce the risks they face and harm they might suffer from climate hazards like storms and droughts." <https://www.wri.org/insights/adaptation-finance-explained>.

11 "Loss and damage arising from the adverse effects of climate change can include those related to extreme weather events but also slow onset events, such as sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification." <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#loss-and-damage>

12 "The Fund to Address Loss and Damage," World Bank, accessed May 20, 2024, <https://www.worldbank.org/en/programs/funding-for-loss-and-damage>.

13 Green infrastructure "refers to natural systems including forests, floodplains, wetlands and soils that provide additional benefits for human well-being, such as flood protection and climate regulation." <https://www.conservation.org/projects/green-gray-infrastructure>

14 Gray infrastructure "refers to structures such as dams, seawalls, roads, pipes or water treatment plans." <https://www.conservation.org/projects/green-gray-infrastructure>

the project's resilience and must be done consistently across projects.

The lack of information in the PAD and PD, regarding the specifics of how infrastructure will be resilient and climate-informed and whether nature-based solutions will be implemented in the project, ultimately leads to ambiguity in this thematic area. The Bank should be more transparent in project documents about the specific activities it considers as having adaptation co-benefits and describe how they will help to contribute to long-term resilience.

COASTAL RESILIENCE

We identified nine projects in nine countries that were designed to help 20 countries enhance resilience to coastal climate shocks. Based on these nine projects, we identified a trend around the proposed interventions. The Bank-supported interventions can be divided into three categories: financial support for the construction or rehabilitation of infrastructure (e.g., groynes, dykes, drainage canals), a ban on degrading coastal activities (e.g., a ban on coastal sand mining), and the creation of national policy or legislation focused on improving the resilience of coastal areas.

A concerning finding is the prioritization of gray infrastructure projects over green. Gray infrastructure interventions can be maladaptive due to their high cost, capital (vs. labor) intensity, fixed nature, and need for maintenance. For instance, the [West Africa Coastal Areas Resilience Investment Project AF BN-TG](#) finances the construction of 21 groynes (13 in Togo and eight in Benin). While groynes can help mitigate coastal erosion, they can have an adverse effect further along the coast by trapping the sediment. They can also complicate navigation for artisanal fisherman who normally launch and land their boats directly from the beach.

Important factors for the Bank to consider with this type of intervention include where the materials are coming from, whether it will increase the adaptive capacity in other ways, and if it is an effective long-term solution for coastal erosion. It is important to consider emissions generated from producing and transporting the material and its lifecycle. For example, the lifetime of groynes varies based on the type of material used. Green infrastructure, such as vegetation that secures beaches, can be cheaper and more resilient than gray (e.g., cement) and often provides ongoing employment. These concerns are not addressed in the project documents.

This is emblematic of the need for the Bank to acknowledge the complementary nature of adaptation and mitigation. It is important for the Bank to develop

projects with these two goals in mind, and work to confirm that adaptation projects do not lead to a large increase in emissions or air pollution and that mitigation projects are not maladaptive.

FINANCIAL PROTECTION

We identified 30 projects in 26 countries that appear to support the Bank's financial protection sector goals: "support at least 20 countries in their efforts to respond early to and recover faster from climate and disaster shocks with additional financial protection instruments and reduce climate-related risks through financial sector regulatory reforms."¹⁵ However, not all 30 projects included activities designed to contribute to both aspects of the commitment; 14 projects¹⁶ addressed both, while 16 addressed just one.

Across the projects reviewed under this theme, we found the most commonly used financial protection instrument is a cash transfer program that could be scaled up in the event of a climate disaster. While cash transfers to alleviate financial pressures caused by climate disasters can certainly be helpful in recovering from these disasters, cash transfers are not enough and "do not in themselves build resilience, nor do such provisions reduce vulnerability to future events of the same kind."¹⁷

The Bank must also diversify financial protection for such protection to be adaptive. Additional instruments such as agricultural, structural, flood, and drought insurance could be supported by the Bank. Conditional agricultural insurance, with prices or availability of insurance tied to resilient and climate-friendly agricultural practices, could help both in disaster recovery and in reducing climate-related risks through the promotion of climate-smart agricultural practices.

We found relatively few projects addressing financial sector reform – only 18 of 104.¹⁸ Reforms, if implemented, could develop a disaster risk financing strategy or mechanism to promote the sustainability of disaster response safety nets such as pooling funds for disasters. The [Strengthen Ethiopia's Adaptive Safety Net Project](#) states it will develop a disaster risk financing strategy, but it does not describe what an effective strategy would

15 Arame Tall & Carter Brandon, *The World Bank Group's Action Plan on Climate Change Adaptation and Resilience: Managing Risks for a More Resilient Future (English)*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/519821547481031999/The-World-Bank-Groups-Action-Plan-on-Climate-Change-Adaptation-and-Resilience-Managing-Risks-for-a-More-Resilient-Future>

16 Of the 14 projects that fulfill both aspects of the commitment, there is support for 13 out of 20 countries.

17 Andrew Hattle, Christopher Roy, Hans Peter Dejgaard, John Nordbo, & Bart Weijs, *Climate Adaptation Finance: Fact or Fiction?* (CARE, 2021), https://careclimatechange.org/wp-content/uploads/2021/01/CARE_Synthesis-report_Final_April-2021.pdf

18 This figure includes the 14 projects fulfilling both aspects of the Financial Protection commitment and the four projects that only met the second part of the commitment.

look like. To best promote adaptive and inclusive disaster risk finance, the Bank must promote a diversified disaster risk financing strategy on a national level. This strategy should involve the use of various innovative financial protection instruments to address the distinct needs of heterogeneous populations, particularly those of marginalized groups, in times of increased vulnerability.

In addition to these strategies, the Bank could further support financial sector reforms to reduce climate risks. While some of the projects examined mention screening for climate risks in certain grants and loans offered to small and medium-sized enterprises (SMEs) as a project component, the Bank should also redesign loans to minimize and adapt to climate risks.

However, the Bank should first work to create an enabling environment through the promotion of innovative financial sector reforms that effectively address the diverse needs of vulnerable populations. These could include bond issuance for funding cash transfers as a disaster response mechanism, regulatory incentives for insurance markets to promote climate-smart agriculture and land use, or climate risk assessment requirements and subsequent action to avoid climate risks and negative impacts.

FORESTS AND INTEGRATED LANDSCAPE MANAGEMENT

We identified projects with interventions designed to protect or restore 26,749,125 ha. of forests in 12 countries.¹⁹ While this would be significant if implemented, it is important to note that two projects include commitments to bring around 24 million ha. (90 percent of the total) under sustainable forest management.²⁰ If this is representative of the Bank's approach moving forward, we are concerned the Bank will only support a few large-scale projects that will help it reach the 120 million ha. goal.

For sustainable forest management and efforts to prevent deforestation to be effectively mainstreamed, they must be at scale across the Bank's portfolio rather than only in a few countries. In addition, while most of the projects we reviewed seek to avoid additional deforestation by adopting sustainable land and forest management plans, they do not support interventions for afforestation, reforestation, or restoration.²¹ Afforestation and reforestation are effective tools

for enhancing resilience to climate change and can contribute to mitigation.²² Relatedly, it is important that the Bank implement and support forest and integrated landscape management projects in countries that are most threatened by deforestation; much of the existing work is in dryland countries.

A potentially useful tool for monitoring and collecting data on deforestation is a forest surveillance program. We identified financing for this in one project. The [Sustainable Rural Economy Program](#) in Mozambique includes an intervention that, if implemented, will establish a forest surveillance program. Forest monitoring, such as Satellite and Land Monitoring Systems and National Forest Inventories, can be helpful tools for assessing how effective forest management and forest conservation programs are in reducing rates of deforestation.²³ Regarding forest and landscape management projects, the Bank should support more countries in establishing these programs. It could also provide valuable insights into how successful sustainable land and forest management plans are in specific contexts.

Recommendations

Based on our review of the Bank's adaptation projects, we recommend both cross-sectoral and sector-specific changes in the Bank's adaptation efforts:

CROSS-SECTORAL

- **Include climate change mitigation and adaptation co-benefits analysis in project documents.** The World Bank should require all new projects to include a standardized climate change mitigation and adaptation co-benefits analysis as part of the Environmental Impact Assessment and have it referenced in the PAD or PID. This analysis should articulate how specific components, sub-components, prior actions, or disbursement-linked indicators contribute to adaptation and mitigation and quantify the percentage of each activity that is contributing to adaptation and mitigation. This analysis should quantify estimated *benefits* and not just the incremental costs — a major flaw in the existing [joint MDB](#) and [World Bank](#) methodologies. Moreover, these should disclose the full baseline analysis — a key weakness in the current methodologies.

19 The countries with qualifying projects are: Lao PDR, Türkiye, Madagascar, Guinea, Burkina Faso, South Sudan, Chad, Mali, Mauritania, Niger, Haiti, and Mozambique.

20 The two are: [Lao Landscapes and Livelihoods Project](#); and [Regional Sahel Pastoralism Support Project II](#).

21 There are two projects that are exceptions: Turkey Resilient Landscape Integration Project and the South Sudan Resilient Agricultural Livelihoods Project.

22 "Forests and Climate Change," *International Union for Conservation of Nature*, February 2021, https://www.iucn.org/sites/default/files/2022-04/forests_and_climate_change_issues_brief_2021.pdf

23 "National Forest Monitoring Systems," Food and Agriculture Organization of the United Nations, accessed May 20, 2024, <https://www.fao.org/redd/areas-of-work/national-forest-monitoring-system/en/#:~:text=Forest%20monitoring%20systems%20include%20measurement,deforestation%20and%20degradation%20of%20forests.>

- **Provide clear definitions and targets.** The World Bank should clearly define the terminology used in the adaptation commitments. For instance, it would be helpful if the Bank provided more clarity on sources, level, and duration of financial protection, as well as the specific instruments it is utilizing to enhance climate resilience to meet the targets. In addition, the Bank should disclose whether it is counting pre-existing projects as contributing towards the fulfillment of the commitments or whether the targets will be met through projects approved from FY21 through FY25.
- **Address the worst risks.** A “risk-based approach” means prioritizing climate impacts that are most likely to happen and will be dire for the geography and communities. This includes addressing the needs of communities, such as Small Island Developing States, facing existential risks, and heavily populated coastal/delta communities facing flooding, sea level rise, and extreme weather like cyclones.
- **Prioritize marginalized groups in climate adaptation.** Marginalized groups, such as persons with disabilities, are more vulnerable to the impacts and effects of climate change.²⁴ As the Bank seeks to scale up support for adaptation, it is critical for these interventions to be disability-inclusive to enable persons with disabilities to adapt to and be more resilient to climate change. The Bank should disaggregate data on disability in adaptation projects to better understand how projects and their interventions harm or benefit persons with disabilities. Inclusive climate action will lead to more effective adaptation and promote greater resilience for all.
- **Work with Nature.** It is good to see the ambitious commitments on forests and integrated landscape management. However, as the Bank knows well,²⁵ nature offers solutions in other sectors as well. Those other sectors, such as agriculture and infrastructure, also pose the greatest threats to the survival of forests and other ecosystems. With this in mind, the Bank should do more to prioritize ecosystem-based approaches across its adaptation work, including disaster risk management, water security, and coastal resilience.

Forests and Integrated Landscape Management should prioritize countries with high rates of deforestation, and these projects should address the drivers of deforestation to be more effective in the medium to long term. In addition, the Bank should promote afforestation and reforestation in these projects as they will help contribute to both climate change adaptation and mitigation.

- **Diversify Financial Protection and Disaster Risk Financing.** The Bank should promote a diversified disaster risk financing strategy that uses innovative financial protection instruments to respond to the unique needs and vulnerabilities, particularly in marginalized communities, to help them prepare for and respond to climate-induced disasters. A comprehensive set of Climate and Disaster Risk Finance and Insurance (CDRFI) instruments would provide 1) rapid financial assistance to households and businesses to act early against and respond to climate and disaster-related losses and 2) pre-arranged finance for governments, humanitarian agencies, and international and local non-governmental organizations (NGOs) for both disaster preparedness and rapid response. Based on country- and sector-specific needs, at the household and business level, instruments could include livelihood and social protection systems, livestock and crop insurance, property insurance, business interruption insurance, risk-sharing networks, and credit guarantees. For governments, agencies, and NGOs, regional and cross-institution risk pools could provide diversified insurance for public and institutional assets, along with other forms of contingent financing. This layered and diversified financial protection could greatly increase resilience.²⁶
- **Scale Up Finance for DRM.** The Bank should scale up finance for Disaster Risk Management as well as access to quality hydromet and early warning systems to help countries be more prepared in the event of a climate disaster. This issue will only become more pressing as climate-induced disasters are expected to increase in intensity and frequency.

SECTOR-SPECIFIC

- **Support Countries with High Rates of Deforestation.** Bank-supported projects under

²⁴ United Nations Commission on Human Rights (UNHCR) Analytical Study on the Promotion and Protection of the Rights of Persons with Disabilities in the Context of Climate Change (April 22, 2020), UN Doc A/HRC/44/30

²⁵ See [Convenient Solutions to an Inconvenient Truth](#), World Bank, 2009.

²⁶ See [Global Shield Against Climate Risks: A toolbox of tailored CDRFI instruments for the Global Shield](#).

Annex 1: List of Projects by Thematic Area

Below we list all of the projects reviewed in each thematic area, i.e. FY2021 projects with adaptation co-benefits that included one or more keywords from our search terms. The projects highlighted contribute to sector-specific quantifiable commitments in the Action Plan on Climate Change Adaptation and Resilience.

DISASTER RISK MANAGEMENT PROJECTS

- Indonesia Disaster Risk Finance and Insurance
- Tunisia Integrated Disaster Resilience Program
- Morocco Integrated Disaster Risk Management and Resilience Program- Additional Financing
- Samoa First Response, Recovery and Resilience Development Policy Operation with a Catastrophe Deferred Drawdown Option
- Fiji Recovery and Resilience First Development Policy Operation with a Catastrophe Deferred Drawdown Option
- Additional Financing to the Flood Risk Management Project
- Philippines Seismic Risk Reduction and Resilience Project
- Early Warning, Early Finance, and Early Action Project
- Shock Responsive Safety Net for Human Capital Project Additional Financing
- Shock Responsive Safety Net for Locust Response Project Additional Financing
- Tonga: Supporting Recovery After Dual Shocks Development Policy Operation

WATER SECURITY PROJECTS

- Climate-Smart Agriculture and Water Management Project
- West Bengal Inland Water Transport, Logistics and Spatial Development Project
- Sava and Drina Rivers Corridors Integrated Development Program
- Punjab Rural Sustainable Water Supply and Sanitation Project
- BD Rural Water, Sanitation and Hygiene for Human Capital Development Project
- Afghanistan Water, Sanitation, Hygiene and Institutional Support Project

- Nigeria Sustainable Urban and Rural Water Supply, Sanitation and Hygiene Program-for-Results
- Water Supply and Sanitation Improvement Project AF
- Second Dam Rehabilitation and Improvement Project
- Ghana Additional Financing for Greater Accra Metropolitan Area Sanitation and Water Project
- Water Supply and Wastewater Services Improvement Project
- Buenos Aires Water Supply and Sanitation with a Focus on Vulnerable Areas Program
- Stormwater Management and Climate Change Adaptation Project 2
- Matanza-Riachuelo Basin Sustainable Development Project Second Additional Financing
- Additional Financing to the Flood Risk Management Project

COASTAL RESILIENCE PROJECTS

- West Africa Coastal Areas Resilience Investment Project AF BN-TG
- Guinea Natural Resources, Mining, and Environmental Management Project
- Lao Landscapes and Livelihoods Project
- First Amazonas Fiscal and Environmental Sustainability Programmatic DPF
- Greater Cairo Air Pollution Management and Climate Change Project
- Turkey Resilient Landscape Integration Project (TULIP)
- Environment Sustainability and Urban Resilience DPF
- Northern Mozambique Rural Resilience Project
- Matanza-Riachuelo Basin Sustainable Development Project Second Additional Financing
- Additional Financing to the Sustainable Landscape Management Project
- Supplemental Financing to the Fiscal Reform and Resilience DPC Series
- Nepal Urban Governance and Infrastructure Project
- Second Rwanda Urban Development Project
- Boosting Inclusive Growth for Zanzibar: Integrated Development Project
- West Bengal Inland Water Transport, Logistics and Spatial Development Project

- Second Kenya Informal Settlements Improvement Project
- Resilient Urban Sierra Leone Project
- Kerala Solid Waste Management Project
- Kiribati Second Inclusive Growth and Resilience Development Policy Operation
- South Sudan Enhancing community Resilience and Local Governance Project
- Additional Financing to the Flood Risk Management Project
- Punjab Municipal Services Improvement Project
- Promoting Competitiveness and Enhancing Resilience to Natural Disasters Sub-Program 2 Development Policy Loan
- Senegal Additional Financing for Saint Louis Emergency Recovery and Resilience Project
- Kinshasa Multisector Development and Urban Resilience Project
- Philippines Seismic Risk Reduction and Resilience Project
- Maputo Urban Transformation Project
- Samoa First Response, Recovery and Resilience Development Policy Operation with a Catastrophe Deferred Drawdown Option
- Senegal Cadastre and Land Tenure Improvement Project
- Colombia Resilient and Inclusive Housing Project
- Djibouti Integrated Slum Upgrading Project-Additional Financing
- Solid Waste Emergency and Efficiency Project
- Sindh Resilience Project Additional Financing
- Medium-size Cities Integrated Urban Development Project Additional Financing
- Fiji Recovery and Resilience First Development Policy Operation with a Catastrophe-Deferred Drawdown Option
- Tunisia Integrated Disaster Resilience Program
- Nepal Programmatic Fiscal Policy for Growth, Recovery and Resilience DPC
- Adaptive Social Protection for Increased Resilience Project
- Covid-19 Response Additional Financing
- Saint Lucia Covid-19 Response, Recovery and Resilience Development Policy Credit
- Madagascar Covid-19 Response DPO
- The Resilient Kerala Program
- Additional Financing to Integrated Urban Development and Resilience Project for Greater Antananarivo
- Access to Finance for Recovery and Resilience Project
- Romania Safer, Inclusive and Sustainable Schools
- Burkina Faso Emergency Local Development and Resilience Project
- Integrated Urban Services Emergency Project II
- Resilience, Entrepreneurship and Livelihood Improvement Project
- Stormwater Management and Climate Change Adaptation Project 2
- Nicaragua- Hurricanes Eta and Iota Emergency Response Project
- Seismic Resilience and Energy Efficiency in Public Buildings Project
- Botswana Programmatic Economic Resilience and Green Recovery DPF
- Strengthening Resilience of the Agriculture Sector Project
- Honduras Tropical Cyclones Eta and Iota Emergency Recovery Project
- Improving Power System Resilience for European Power Grid Integration
- Yemen Food Security Response and Resilience Project
- Northern Crisis Recovery Project
- Additional Financing to the Somalia Crisis Recovery Project
- Morocco Integrated Disaster Risk Management and Resilience Program- Additional Financing
- Cambodia Relief, Recovery and Resilience Development Policy Financing
- Tonga: Supporting Recovery After Dual Shocks Development Policy Operation
- Shock Responsive Safety Net for Human Capital Project Additional Financing
- Shock Responsive Safety Net for Locus Response Project Additional Financing

FINANCIAL PROTECTION PROJECTS

- Philippines Customs Modernization Project
- Sierra Leone Economic Diversification Project
- Southern Africa Trade and Connectivity Project

- Financial Inclusion and Entrepreneurship Scaling Project
- Ghana Development Finance Project
- Modernizing Uzbekistan National Innovation System Project
- Turkey Organized Industrial Zones Project
- Economic Linkages for Diversification
- Helping Enterprises Access Liquidity in the Republic of Croatia
- Raising and Accelerating MSME Performance
- Promoting Access to Finance for Productive Purposes for MSMEs
- Finance for Growth Development Policy Financing
- Indonesia Second Financial Sector Reform Development Policy Financing
- Indonesia Disaster Risk Finance and Insurance
- Early Warning, Early Finance, and Early Action Project
- Georgia Relief and Recovery for Micro, Small, and Medium Enterprises
- Second Financial and Digital Inclusion Development Policy Financing
- Emergency Support for MSMEs Project
- Peru- Strengthening Foundations for Post Covid-19 Recovery DPF
- BiH Firm Recovery and Support Project
- Economic Transformation for Inclusive Growth Project
- Somalia Capacity Advancement, Livelihoods and Entrepreneurship, through Digital Uplift Project (SCALED-UP) Additional Financing
- Philippines First Financial Sector Reform Development Policy Financing
- Additional Financing to Madagascar Integrated Growth Poles and Corridor SOP2
- Access to Finance for Recovery and Resilience Project
- Bangladesh Third Programmatic Jobs Development Policy Credit
- Strengthening Quality of the Social Protection System
- Urban Productive Safety Net and Jobs Project
- Benin Youth Inclusion Project
- First Programmatic Human Capital for Inclusive Growth DPF
- Additional Financing to Refugees and Host Communities Support Project
- Strengthen Ethiopia's Adaptive Safety Net
- Salvador Social Multi-Sector Service Delivery Project II
- Morocco Covid-19 Social Protection Emergency Response Project
- Niger Adaptive Safety Net Project 2 Additional Financing
- Third Additional Financing for Social Safety Net Project
- Lebanon Emergency Crisis and Covid-19 Response Social Safety Net Project
- Sudan Family Support Project
- Emergency Social Protection Enhancement and Covid-19 Response Project
- Second Accelerating India's Covid-19 Social Protection Response (PMGKY)
- Beneficiary FIRST Social Protection Project
- Social Protection Emergency Response and Delivery Systems Project
- Recovery and Advancement of Informal Sector Employment
- Adaptive Social Protection for Increased Resilience Project
- Nigeria- Covid-19 Action Recovery and Economic Stimulus Program
- Brazil- Income Support for the Poor Affected by Covid-19
- Recovery of Economic Activity for the Liberian Informal Sector Employment Project
- Pakistan Crisis-Resilient Social Protection (CRISP)
- Additional Financing for Covid-19 Response Under the Service Delivery and Support to Communities Affected by Displacement Project
- Integrated Cash Transfer and Human Capital Project Additional Financing
- Second Additional Financing for Social Safety Nets in Comoros
- Additional Financing for Covid-19 Response Under the Madagascar Social Safety Net Project
- Fiji Social Protection Covid-19 Response and System Development Project
- Ghana Productive Safety Net Project 2
- Additional Financing to the Social Protection Integration Project

- Second Additional Financing for Girls' Education and Women's Empowerment and Livelihoods Project
- Additional Financing- Sudan Family Support Project
- Tunisia Covid-19 Social Protection Emergency Response Support Project
- Enhancing Shared Prosperity Through Equitable Services (ESPES) Second Additional Financing
- STEP Third Additional Financing
- Shock Responsive Safety Net for Human Capital Project Additional Financing
- Shock Responsive Safety Net for Locust Response Project Additional Financing
- Creating a Coordinated and Responsive Indian Social Protection System
- Additional Financing to the Safety Nets and Basic Services Project
- Jordan Emergency Cash Transfer Covid-19 Response Additional Financing
- Public Sector Efficiency and Green Recovery DPL
- Senegal- Additional Financing for Saint Louis Emergency Recovery and Resilience Project
- Samoa First Response, Recovery and Resilience Development Policy Operation with a Catastrophe Deferred Drawdown Option
- Nigeria Distribution Sector Recovery Program
- Resilient and Sustainable Infrastructure for Recovery DPF
- Fiji Recovery and Resilience First Development Policy Operation with a Catastrophe-Deferred Drawdown Option
- Crisis Response and Recovery in Guatemala DPL
- Community-Based Recovery and Stabilization Project for the Sahel
- Nepal Programmatic Fiscal Policy for Growth, Recovery, and Resilience DPC
- Panama Pandemic Response and Growth Recovery Development Policy Operation
- Saint Lucia Covid-19 Response, Recovery and Resilience Development Policy Credit
- Papua New Guinea Crisis Response and Sustainable Recovery Development Policy Operation
- Eswatini- Economic Recovery Development Policy Financing I
- Jamaica Covid-19 Response and Recovery Development Policy Financing
- Tonga- Supporting Recovery After Dual Shocks Development Policy Operation
- [Dominica First Covid-19 Response and Recovery Programmatic DPC](#)
- Accelerating Reforms for an Inclusive and Resilient Recovery DPF
- [The Bahamas Covid-19 Response and Recovery DPF](#)
- [Barbados Covid-19 Response and Recovery DPF](#)
- Botswana Programmatic Economic Resilience and Green Recovery DPF
- Honduras Tropical Cyclones Eta and Iota Emergency Recovery Project
- Northern Crisis Recovery Project
- Additional Financing to the Somalia Crisis Recovery Project
- CAR- Emergency Infrastructure and Connectivity Recovery Project
- The Vietnam Inclusive and Sustainable Recovery Development Policy Operation
- Cambodia Relief, Recovery, and Resilience Development Policy Financing
- Third Fiscal Consolidation and Inclusive Growth DPP
- First Amazonas Fiscal and Environmental Sustainability Programmatic DPF
- Uganda Intergovernmental Fiscal Transfers Additional Financing
- Grenada Covid-19 Crisis Response and Fiscal Management DPC
- [Costa Rica Second Fiscal and Decarbonization Management DPL](#)
- Supplemental Financing to the Fiscal Reform and Resilience DPC Series
- Tanzania Roads to Inclusion and Socioeconomic Opportunities (RISE) Project
- Higher Education for Economic Transformation Project
- Accelerating and Strengthening Skills for Economic Transformation
- Rural Enterprise and Economic Development Project
- Territorial Economic Empowerment for the Indigenous, Afro-Ecuadorians and Montubian Peoples and Nationalities (TEEIPAM)
- [Mexico Strengthening Economic Sustainability DPF](#)
- Liberia- Rural Economic Transformation Project

FORESTS AND INTEGRATED LANDSCAPE MANAGEMENT PROJECTS

- Lao Landscapes and Livelihoods Project
- Turkey Resilient Landscape Integration Project (TULIP)
- Haiti Resilient Productive Landscapes Additional Financing
- Additional Financing to the Sustainable Landscape Management Project
- Climate-Smart Agriculture and Water Management Project
- Guinea Natural Resources, Mining and Environmental Management Project
- Kerala Solid Waste Management Project
- Support to Land and Mining Management Strengthening Project
- Digital Governance and Identification Management System Project- PRODIGY
- Additional Financing to the Flood Risk Management Project
- Federated States of Micronesia Prioritized Road Investment and Management Enhancements Project
- Greater Cairo Air Pollution Management and Climate Change Project
- Grenada Covid-19 Crisis Response and Fiscal Management DPC
- Costa Rica Second Fiscal and Decarbonization Management DPL
- Stormwater Management and Climate Change Adaptation Project 2
- Morocco Integrated Disaster Risk Management and Resilience Program- Additional Financing
- China Food Safety Improvement Project
- Guinea Commercial Agriculture Development Project
- Valorization of Investments in the Valley of Benue
- AGP2- Additional Financing
- Additional Financing for Modern Food Storage Facilities Project
- National Agriculture Development Program
- Second Additional Financing for Philippine Rural Development Project
- South Sudan Resilient Agricultural Livelihoods Project
- Rural Enterprise and Economic Development Project
- Sustainable Livestock Development Program for Results
- Morocco Green Generation Program for Results
- Additional Financing of the Smallholder Commercialization and Agribusiness Development Project
- Chhattisgarh Inclusive Rural and Accelerated Agriculture Growth Project
- Cote d'Ivoire Agri-Food Sector Development Project
- Regional Sahel Pastoralism Support Project II
- Accelerating Impacts of CGIAR Climate Research for Africa
- Responding to Covid-19: Modern and Resilient Agri-Food Value Chains
- Sustainable Rural Economy Program
- Locust Emergency and Food Security Project
- Integrated Dairy Productivity Improvement Project Additional Financing
- Innovation for Rural Competitiveness Project-COMRURAL III
- Guinea-Bissau Emergency Food Security Project
- Emergency Agriculture and Food Supply Project
- Emergency Locust Response Project
- Liberia: Rural Economic Transformation Project
- Resilience, Entrepreneurship and Livelihood Improvement Project
- Strengthening Resilience of the Agriculture Sector Project
- Yemen Food Security Response and Resilience Project
- Additional Financing to Agricultural and Livestock Transformation Project
- Central African Republic Emergency Food Crisis Response Project