DEO Development Effectiveness Overview 2022

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LESSONS IN DEVELOPMENT

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Acronyms

ASR	Annual Supervision Reports
CASEIF	Central American Small Enterprise Investment Fund
CBA	Cost-benefit Analysis
CCF	Contingent Credit Facility for Natural Disaster Emergencies
CRF	Corporate Results Framework
DCCRA	Disaster and Climate Change Risk Assessment
DEF	Development Effectiveness Framework
DELTA	Development Effectiveness, Learning, Tracking, and Assessment Tool
DEM	Development Effectiveness Matrix
DEO	Development Effectiveness Overview
EDGE	Economic Dividends for Gender Equality
EOM	Early Operating Maturity
ERR	Economic Rate of Return
EROIC	Economic Return on Invested Capital
ESG	Environmental, social, and corporate governance
ESP	Specific investment operation
FI	Financial Institutions
FSR	Final Project Supervision Report
GDP	Gross domestic product
IDB	Inter-American Development Bank
iDELTA	Innovation DELTA
IGR	Investment grants
IRR	Internal rate of return
LAC	Latin America and the Caribbean
LGBTQ+	Lesbian, gay, bisexual, transgender and other sexual orientations and gender identities
MDB	Multilateral development bank
MSME	Micro, small, and medium enterprise
NAC	Natural Asset Companies
NPS	Net Promoter Score
OMB	Office of Management and Budget
OVE	Office of Evaluation and Oversight
PCR	Project Completion Report
PMR	Progress Monitoring Report
PPA	Power purchase agreement
PSR	Project Status Report
PSU	Project Status Update
RF	Reverse Factoring
SDG	Sustainable Development Goal
SIB	Social Impact Bond
SG	Sovereign Guaranteed
SME	Small and medium enterprise
TC	Technical Cooperation
XSR	Expanded Supervision Report

Note: All dollar amounts are in U.S. dollars, unless otherwise noted.

Message from the President

This year's Development Effectiveness Overview (DEO) comes at a time of multiple ongoing challenges for Latin America and the Caribbean. The pandemic hit our region hard and Russia's war in Ukraine is affecting daily life closer to home, amid increasing uncertainty and inflationary pressures. While addressing these pressing challenges, it is more important than ever to focus on development impact, measuring results, and applying lessons learned.

It is also why we are focused on creating a 21st-century IDB that is even more efficient and effective. As always, the DEO highlights progress towards corporate targets and includes a snapshot of results supporting the Sustainable Development Goals. We also take a close look at how we are continually striving for operational excellence by improving how we design, implement, and monitor projects with a focus on results from beginning to end.

Among notable achievements in 2021, not only did we see strong IDB Group support for small and vulnerable countries, but we also reached record levels of private capital mobilization, which is especially critical today as we intensify our efforts to channel more sustainability and impact-seeking capital from investors to the region. We are also encouraged by recent advances on the global stage regarding sustainability standards and increasing the transparency, harmonization, and integrity of how investors and companies measure and report on impact, to further propel capital flows to our region.

We also strengthened the mainstreaming of critical cross-cutting issues into our projects, with more than three quarters of the IDB's 2021 approvals supporting gender equality and over half of IDB Invest's 2021 commitments supporting climate change mitigation, adaptation, or both. Given the need to take robust action on climate change to ensure sustainable, inclusive growth in Latin America and the Caribbean, this year's DEO also includes a review of learning from the Group's support to strengthen climate change resilience and disaster risk management in the region.

There is still much work to be done to cement the region's pathway to long-term sustainable and inclusive growth. As a premier development finance institution for the region, the IDB Group's mission of improving lives has never been more important. We are committed to working hand-in-hand with our 26 borrowing member countries and private sector clients to strengthen development impact and build knowledge about what works and what can be done better.

Mauricio Claver-Carone
President
IDB Group
Washington DC, July 2022

Executive Summary

Each year, in its Development Effectiveness Overview (DEO) the IDB Group provides a snapshot of the progress made in addressing the priorities highlighted in its institutional strategy and embedded in Vision 2025. A critical element of each DEO includes reporting on progress made on the Corporate Results Framework (CRF) indicators that measure the Group's performance against operational and organizational targets and provide a high-level view of the development results supported by the IDB Group.

Core to the IDB Group's commitment to managing for results is to regularly take stock of the progress on each of its CRF targets. In 2021, 36 of the 51 indicators were on track with respect to their targets, 7 were on watch, and 8 were off track. While results at the halfway point of this CRF period are strong in many areas, efforts must be redoubled in 2022 and 2023 for the Group to approach its targets for the end of the CRF period. The IDB Group is taking action to enhance performance on its lagging indicators, including enhancing attention toward progress in achieving development results throughout the project lifecycle and maintaining its emphasis on cross-cutting issues such as gender equality and climate change. In 2021, the IDB Group also worked to enhance the alignment of critical planning exercises across the institution, leading to an increased alignment of the 2022 IDB administrative budget and annual goal-setting process with strategic priorities and CRF targets.

Each entity of the IDB Group has a set of development effectiveness tools that support the focus on results throughout the project lifecycle, including their respective approaches to monitoring project execution. The IDB tracks project performance using the Progress Monitoring Report (PMR), which captures both quantitative and qualitative information on project implementation to monitor outputs as compared to the expected costs and timeframe set at the beginning of execution as well as country benchmarks. In 2021, 79 percent of projects classified via the PMR were rated as having "satisfactory" performance. Similarly, IDB Invest monitors the progress of each investment in achieving impact against expectations, updating the initial impact rating assigned to each operation annually to reflect actual results achieved. In 2021, 58 percent of IDB Invest operations in supervision were classified as "satisfactory." For IDB Lab's loan and equity investment operations, financial and operational performance is monitored through the Project Status Update (PSU), and in 2021, 70 percent of these operations were classified as green flag, or "on track to high performance."

The IDB Group's project monitoring tools also allow for the capture of standardized indicators to track the magnitude of the Group's contributions to a range of development topics in support of the Sustainable Development Goals (SDGs). In 2021, the results supported by the IDB Group include 10.2 million beneficiaries of targeted anti-poverty programs, 1.8 million students benefited by education projects, 1.1 million micro, small and medium enterprises financed, and 1.4 million beneficiaries of enhanced disaster and climate change resilience.

The final project reports produced for each entity of the Group—Project Completion Reports (PCRs) at the IDB, Expanded Supervision Reports (XSRs) at IDB Invest, and Final Project Supervision Reports (FSRs) at IDB Lab—are one of the most critical tools of the Group´s Development Effectiveness Framework. These reports aim to determine whether operations met their objectives and how effectively and efficiently they performed, as well as the sustainability of achieved results and the lessons learned to inform future project design and monitoring. Four core criteria are used to assess both IDB and IDB Invest projects, which include effectiveness, efficiency, relevance, and sustainability. In 2021, 53 percent of IDB projects with PCRs, and 62 percent of IDB Invest operations with XSRs received an overall positive rating validated by the Office of Evaluation and Oversight (OVE). In addition, one of IDB Lab's key measures of success is the extent to which the innovations it supports are replicated or scaled up by the IDB Group or others. In 2021, 32 percent of the projects completed by IDB Lab were replicated or scaled, surpassing IDB Lab's 20 percent target for the fourth consecutive year.

As PCR and XSR ratings have fallen short of corporate targets in recent years, they have illuminated opportunities for improvements not only in how projects are designed and executed, but also in how we measure success and adapt to the changing circumstances of the region over time. To address these critical factors correlated with project success and foster development effectiveness, the IDB has established an Operational Excellence Agenda, which seeks to enhance results achievement through improvements to project preparation and design, project execution and supervision, and broader portfolio management and strategic oversight, and is planning to enhance its Development Effectiveness Framework. Likewise, IDB invest continues to leverage its enhanced analytics capacity to conduct in-depth analyses to better understand the drivers of operation performance at completion. These analyses also help illuminate how the end-to-end tools that make up IDB Invest's Impact Management Framework work to predict operation success. Recent analysis of XSRs shows that supervision tools can help to predict performance at maturity, underscoring the important role that data captured during supervision plays in IDB Invest's portfolio management capacity.

Finally, systematizing lessons learned from operations and using this knowledge to inform future interventions is an ongoing IDB Group priority. In this spirit, the 2022 DEO takes a deeper look at lessons learned from the IDB Group's work to help countries and clients in the region build resilience to climate change and effectively managing disaster risks in the face of the mounting threats posed by climate change. These overarching lessons include: (i) it is essential to embed resilience considerations in the operations of governments, the financial system, and private enterprise; (ii) investment projects should consider climate change and disaster risks systematically from concept to decommissioning; and (iii) resilience is a part of addressing both productivity and social objectives.

INTRODUCTION

The IDB Group's annual Development Effectiveness Overview (DEO) provides a snapshot of progress in addressing the priorities highlighted in the institutional strategy and in Management's approach to implement it as embedded in Vision 2025.

Progress on the Corporate Results Framework (CRF) indicators that measure the Group's strategic priorities and guiding principles is among the critical components of the DEO as the CRF provides a high-level view of the development results supported by the IDB Group and its performance against operational and organizational targets.

The DEO is also a gateway to additional IDB Group development effectiveness resources, which can be accessed by electronic links throughout the publication, including the development effectiveness homepages of the IDB and IDB Invest and IDB Lab's impact page. This year's DEO consists of the following four chapters:

Chapter 1 Chapter 1 reviews the IDB Group's 2021 performance against the targets in the **Corporate Results Framework** to identify where the Group has done well and where gaps remain.

Chapter 2 Chapter 2 provides information on **project performance during execution** and efforts to improve execution performance. It also features selected IDB Group contributions to the Sustainable Development Goals (SDGs).

Chapter 3 Chapter 3 reviews the results from the latest cycle of IDB Project Completion Reports (**PCRs**) and IDB Invest Expanded Supervision Reports (**XSRs**) and also highlights results from the scaling up of IDB Lab-supported projects.

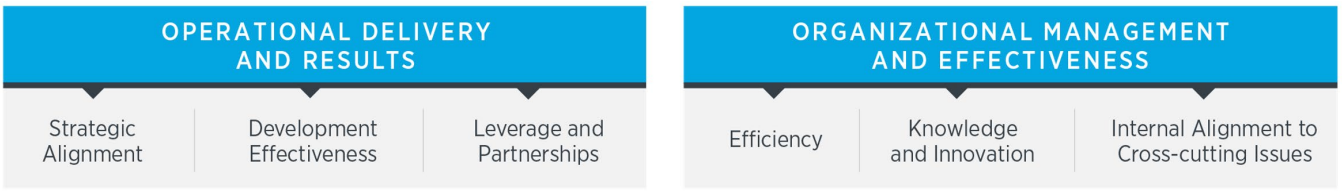
Chapter 4 Chapter 4 provides a brief thematic review of **lessons learned** from IDB Group support for climate resilience and managing physical risk to help build the knowledge base for effective development solutions.

CHAPTER 1

Measuring Progress towards Corporate Targets

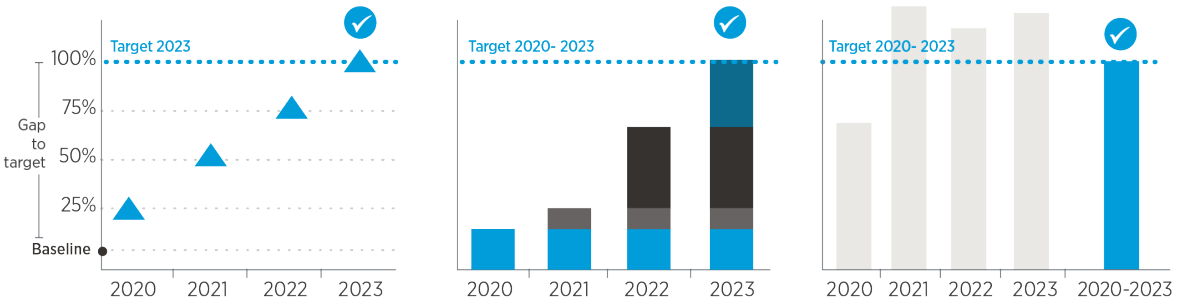
A critical aspect of the IDB Group's commitment to managing for results is regularly taking stock of progress on each of the targets in its Corporate Results Framework. The CRF consists of three levels of indicators, with targets set for nearly all Level 3 (IDB Group Performance) indicators.[1] These indicators are grouped into two broad categories, which are further categorized into sub-areas based on the guiding principles and comparative advantages of the institutional strategy as shown in Figure 1.1.

Figure 1.1 Areas Measured by CRF Level 3 Indicators



Each indicator is classified as "On Track," "On Watch," or "Off Track" based on the criteria described in the CRF Traffic Light Methodology, which vary according to the year to which the target applies and whether progress is summed over the period (see Box 1.1).

Box 1.1 CRF Traffic Light Methodology



Type A: Target applies to 2023. Indicators are classified based on progress toward the target as compared to the baseline.

Type B: Target applies to 2020-2023 based on the sum of progress each year. Indicators are classified based on the percent of progress as compared to the four-year cumulative target.

Type C: Target applies to 2020-2023 and is not based on the sum of progress each year. Indicators are classified by comparing yearly progress to their 2020-2023 target.

Figure 1.2 includes a summary of indicator status by institution based on 2021 performance. While results at the halfway point of this CRF period are strong in many areas, efforts must be redoubled in others in 2022 and 2023 for the Group to approach its targets for the end of the CRF period. The IDB Group is taking targeted actions to enhance performance on lagging indicators.

[1] A detailed description of each CRF level can be found in the approved CRF 2020-2023.

Figure 1.2 CRF Indicator Status 2021 by IDB Group Entity

Note: Figure is based on 2021 progress. Graph does not include data for indicator 3.29 since this data is not available for 2021.

Strategic Alignment

The strategic alignment indicators provide insight into the extent to which the IDB Group is aligning support to a key set of strategic priorities, including social inclusion and equality, productivity and innovation, economic integration, gender equality, diversity, climate change mitigation and adaptation, institutional capacity and rule of law, and support to small and vulnerable countries. Progress on many strategic alignment indicators increased across all entities of the Group in 2021 as compared to 2020 (see Table 1.1).

In 2021, annual progress on each of the IDB's strategic alignment indicators was on track, with progress rebounding from 2020 values for each of the cross-cutting issues. Climate finance (indicator 3.5) doubled from 15 percent of approval amounts in 2020 to 30 percent in 2021. The percentage of approvals mainstreaming institutional capacity and rule of law also increased from 58 percent in 2020 to 69 percent in 2021. Support for gender equality and for diversity hit record levels in 2021 at 76 percent and 37 percent, respectively. Systematic screenings of the entire project pipeline for opportunities to mainstream gender, diversity, and climate change have contributed to these results as well as direct technical support of subject matter experts, who are increasingly based in the region. Furthermore, governments are increasingly prioritizing these topics as part of their efforts to build back better following the COVID-19 crisis.

Table 1.1 Strategic Alignment Indicators, 2020-2021

		Institution	Progress 2020	Progress 2021	Progress 2020-2021	Target 2020-2023
3.1	Projects supporting social inclusion and equality (% of new approvals/ commitments)	IDB	78%	68%	73%	Monitor
		IDB Invest	56%	41%	49%	
		IDB Lab	69%	64%	66%	
3.2	Projects supporting productivity and innovation (% of new approvals/ commitments)	IDB	60%	77%	69%	Monitor
		IDB Invest	49%	59%	54%	
		IDB Lab	85%	74%	79%	
3.3	Projects supporting economic integration (% of new approvals/ commitments)	IDB	12%	16%	14%	Monitor
		IDB Invest	8%	34%	21%	
		IDB Lab	5%	6%	5%	
3.4	Support for small and vulnerable countries (%)	IDB	56%	40%	48%	≥ 35%
		IDB Invest	40%	35%	38%	≥ 40%
		IDB Lab	44%	45%	45%	≥ 45%
3.5	Climate finance in IDB Group operations (% of approved/committed amount)	IDB	15%	30%	23%	≥ 30%
		IDB Invest	23%	23%	23%	≥ 30%
		IDB Lab	24%	21%	23%	≥ 30%
3.6	Projects supporting climate change mitigation and/or adaptation (% of new approvals/commitments)	IDB	41%	77%	60%	≥ 65%
		IDB Invest	48%	53%	51%	≥ 40%
		IDB Lab	32%	30%	31%	≥ 40%
3.6a	Projects supporting agriculture, forestry, land use, and coastal zone management (% of new approvals/commitments)	IDB	1%	11%	7%	≥ 10 %
		IDB Invest	4%	7%	5%	≥ 8 %
		IDB Lab	18%	8%	12%	≥ 25 %
3.7	Projects supporting gender equality (% of new approvals/commitments)	IDB	54%	76%	66%	≥ 70% (2023)
		IDB Invest	29%	50%	40%	≥ 25%
		IDB Lab	53%	60%	58%	≥ 60%
3.8	Projects supporting diversity (% of new approvals/commitments)	IDB	20%	37%	29%	≥ 20%
		IDB Invest	8%	10%	9%	≥ 5%
		IDB Lab	10%	13%	11%	≥ 20%
3.9	Projects supporting institutional capacity and rule of law (% of new approvals)	IDB	58%	69%	64%	≥ 60%
3.10	Projects aligned to country strategies (% of new approvals/commitments)	IDB	83%	92%	88%	≥ 90%
		IDB Invest	84%	94%	91%	≥ 79%
		IDB Lab	84%	93%	89%	≥ 90%
3.11	New country strategies considering country's official commitments on climate (%)	IDB Group	-	100%	100%	100%

Progress is classified as: On Track; On Watch; or Off Track according to the traffic light methodology for those indicators for which progress data is available and for which targets have been set. There is no traffic light assessment for indicators 3.1, 3.2, or 3.3 as targets have not been set for those indicators and there is no traffic light assessment for 3.11 for 2020 as no country strategies were approved that year.

In the case of IDB Invest, the percentage of projects mainstreaming gender equality and diversity reached new highs at 50 percent and 10 percent respectively, reflecting its strong, continued commitment to these critical issues. Likewise, the percentage of projects mainstreaming climate change reached a record high of 53 percent; however, climate finance reached 23 percent of total commitments in 2021, short of the 30 percent target.[2]

IDB Lab is on track in terms of projects supporting gender equality and small and vulnerable countries, at 60 percent and 45 percent, respectively. Regarding diversity, while IDB Lab fell short in terms of support to the groups covered by the CRF target (indigenous, Afro-descendant, people with disabilities, and LGBTQ+), 33 percent of 2021 approvals supported a broader definition of diverse populations (also including migrants and at-risk youth). Although IDB Lab did not reach its climate change targets, it is worth noting that the investments made in 2021 have significant potential to push innovation within the climate change agenda through the use of technologies to enhance climate change mitigation and adaptation and strategic investments in companies creating new climate solutions in areas such as energy, mobility, agriculture and food, and water.

Development Effectiveness

The development effectiveness indicators in the CRF provide insight into the extent to which projects are effectively mitigating risks, executing according to plan, and achieving development results (see Table 1.2).

Regarding the mitigation of environmental and social risks during execution (indicator 3.14), 2021 performance for both IDB and IDB Invest surpassed targets. This strong progress can be attributed to closer monitoring and strengthened support for higher risk operations in recent years as a result of (i) increased field presence of environmental and social specialists (ii) greater awareness of environmental and social policies issues within project teams due to quarterly environmental and social risk reports and capacity-building efforts, and (iii) integration of these topics into portfolio reviews.[3]

The indicator *projects with considerable disaster and climate change risk that applied risk analysis to identify resilience actions* (indicator 3.15) reached 96 percent in 2021, near its 2023 target of 100 percent. This indicator reflects the extent to which IDB operations approved in the year with considerable disaster and climate change risk have conducted a diagnostic and

[2] This is due primarily to three factors: (1) The relatively high share of short-term finance—an important part of IDB Invest's counter-cyclical response to the COVID-19 crisis; (2) a focus on mobilizing the greatest share of projects possible; and (3) the fact that ongoing pandemic-related uncertainty has slowed infrastructure, which traditionally accounts for an important share of IDB Invest's climate finance. Of note, 31 percent of IDB Invest long term finance for 2021 was climate finance. IDB Invest continued to position itself as a market leader in climate finance with innovative operations such as ENGIE —the first project that seeks to monetize the cost of decarbonization—and knowledge products such as the guide to Blue Bond Issuances in Latin America and the Caribbean.
[3] Note that IDB Invest data for 2021 and previous years is now reported in alignment with the definition used by IDB, which includes in the numerator both projects rated "partially satisfactory" (26 percent) and projects rated "satisfactory" (74 percent).

defined a risk mitigation strategy.[4] While the COVID-19 pandemic initially led to delays in contracting support for this analysis, the team that provides technical advice on these issues has since been expanded, allowing for additional support to project teams to design appropriate strategies.

The remaining development effectiveness indicators relate to the performance of projects during execution (indicator 3.12) and the achievement of results at completion (indicator 3.13). Performance of each entity of the group for each of these indicators is discussed in detail in Chapters 2 and 3, respectively. As progress has fallen short of targets in many cases, improving performance on these indicators is a critical priority of the IDB Group.

Table 1.2 Development Effectiveness Indicators, 2020-2021

		Institution	Progress 2020	Progress 2021	Progress 2020-2021	Target 2020-2023
3.12	Active projects with satisfactory performance classification (%)	IDB (loans)	83% On Track	79% On Watch	81%	≥ 80%
		IDB Invest	61% On Watch	58% On Watch	59%	≥ 70%
		IDB Lab	77% On Track	70% On Track	73%	≥ 60%
		IDB (TC)	54% Off Track	62% On Watch	58%	≥ 75%
3.13	Projects with satisfactory development results at completion (%)	IDB	52% Off Track	53% Off Track	53%	≥ 70%
		IDB Invest	61% On Watch	62% On Watch	61%	≥ 65%
3.14	Projects with higher environmental and social risks rated satisfactory in the implementation of mitigation measures (%)	IDB	90% On Track	88% On Track	89%	≥ 84% (2023)
		IDB Invest	97% On Track	100% On Track	99%	≥ 90%
3.15	Projects with considerable disaster and climate change risk that applied risk analysis to identify resilience actions (%)	IDB	22% Off Track	96% On Track	-	100% (2023)

Progress is classified as: On Track; On Watch; or Off Track based on the traffic light methodology.

Leverage and Partnerships

The indicators on the extent to which the IDB Group mobilizes additional resources for development include *direct third-party financing deployed*—with a disaggregation for private resources—and *indirect third-party financing deployed* (see Table 1.3).[5] The IDB Group's mobilization efforts include working to address market failures as well as de-risk projects to attract additional investors, enable transactions, and make riskier operations and lower-income clients and countries commercially viable.

[4] Specifically, this indicator measures the application of the third step of the IDB's Disaster and Climate Change Risk Assessment Methodology, consisting of an initial qualitative diagnosis. This methodology recognizes that the most effective leverage point for investments related to disaster and climate change risks is upstream, by adequately accounting for these risks and increasing resilience of development investments to these risks starting in the design phase. The target of 100% in 2023 reflects an ambition to shape all operations to be disaster- and climate-resilient. For more information on the IDB methodology as well as on IDB Invest's Climate Risk Assessment Methodology, see Chapter 4 of this DEO

[5] The definitions for these indicators are mostly aligned to the Multilateral Development Banks (MDB) methodology for reporting on mobilization of private resources, but are not identical due to the need to capture public sector resources mobilized in CRF reporting as well. For more information, see the CRF indicator definitions. Third-party financing refers to the mobilization of funds from external actors, including investors, bilateral government partners, multilateral partners, corporations, philanthropic entities, and others.

In 2021, the IDB Group mobilized $4.4 billion in *direct third-party financing deployed* (indicator 3.16) (of which $3.2 billion was private), reaching a total of $7.2 billion ($4.9 billion private) over the 2020-2021 period, leaving these indicators on track to reach their CRF targets.[6] Regarding, *indirect third-party financing deployed* (indicator 3.17) the IDB Group reached $3.5 billion in 2020 and $2.3 billion in 2021, for a total of $5.8 billion in the first half of the CRF period as compared to a four-year target of $16.5 billion, leaving this indicator off track. Efforts to enhance performance on this metric include prioritizing the mobilization of private finance and expanding the use of guarantees, blended finance approaches, and local partners.

In terms of public-private synergies, the IDB Group strategy focuses on fully leveraging the Group's collective strengths and capacity to deliver added value by working together. The indicator *stakeholders that consider the Group to be effective in fostering public-private synergies* (indicator 3.18) aims to measure stakeholder and client perceptions of how the IDB Group is doing in this regard through a survey. From 2019-2021, the Group's score for facilitating coordination between the public and private sectors has remained relatively stable at 67 to 68 percent as compared to the 2023 target of 75 percent. Changing perceptions takes time and more information is needed to gain practical insights on areas for improvement. As such, the Group is working to identify the profile of respondents that are best positioned to evaluate the IDB Group on this matter, analyzing the survey questions to identify opportunities for improvement, and collecting complementary information to better understand the results. In tandem, the IDB Group is developing a new framework to enhance synergies across the IDB, IDB Invest, and IDB Lab at the strategic, operational, and financial levels in order to boost resource mobilization to the region and enhance the Group's development impact.

Table 1.3 Leverage and Partnerships Indicators, 2020-2021

		Institution	Progress 2020	Progress 2021	Progress 2020-2021	Target 2020-2023
3.16	**Direct third-party financing deployed ($ billion)**	IDB Group	$2.8	$4.4	$7.2	≥ $9.0
3.16a	**Private direct third-party financing deployed ($ billion)**	IDB Group	$1.7	$3.2	$4.9	≥ $6.0
3.17	**Indirect third-party financing deployed ($ billion)**	IDB Group	$3.5	$2.3	$5.9	≥ $16.5
3.18	**Stakeholders that consider the IDB Group to be effective in fostering public-private synergies (%)**	IDB Group	67%	68%	-	75% (2023)

Progress is classified as: On Track; On Watch; or Off Track based on the traffic light methodology.

[6] In 2021, IDB Invest delivered a record volume of direct third-party financing deployed (core mobilization) for the second year in a row, reaching $3.0 billion. Perhaps more significant than the volume increase is the higher number of transactions that have been mobilized, thereby reducing the reliance on mega-deals. While mega-deals boost mobilization volume, they are less predictable, so IDB Invest has sought to mobilize a higher number of transactions and investors to expand sources of capital for the region. For more information on IDB Invest products, see IDB Invest's resource mobilization page.

Organizational Management and Effectiveness

The Organizational Management and Effectiveness indicators aim to shed light on the extent to which the IDB Group is managed effectively, efficiently, and in accordance with its own principles (see Table 1.4) and are organized around three areas:

- The **efficiency indicators** look at the degree to which the IDB Group entities are financially sustainable and efficient in their use of resources (indicator 3.19 and indicator 3.20), as well as retaining their targeted credit ratings (indicator 3.21)[7]
- The **knowledge and innovation indicators** capture the reach of the Group's knowledge products (indicator 3.22 and indicator 3.23) as well as stakeholder perceptions regarding IDB Group knowledge sharing (indicator 3.24) and innovation (indicator 3.25). All saw strong progress in 2021.
- The **internal alignment indicators** look at the extent to which the IDB Group internally aligns to its strategic priorities for the region regarding climate change mitigation (indicator 3.26), gender equality (indicator 3.27), diversity (indicator 3.28), and transparency (indicator 3.29).

With the exception of the cost to income ratio for IDB, all of the Organizational Management and Effectiveness indicators were on track in 2021.[8] Of particular note are the Group's continued advances toward gender parity with improvements in the percentage of mid and senior-level staff who are women (indicator 3.27) and the achievement of the Economic Dividends for Gender Equality (EDGE) recertification in which both the IDB and IDB Invest were awarded the second level certification – EDGE Move. This prestigious distinction marked the IDB Group's move from a recognition of its commitment to a demonstration of its progress, acknowledging the IDB's proactive management of gender pay equity and strong framework of policies and practices to support gender equity. In terms of diversity, equity, and inclusion, the Group also continued actions to foster a diverse and inclusive work environment and the first working group on disability inclusion was formed.

[7] Given the nature of IDB Lab, the cost to income ratio is only used to measure IDB and IDB Invest. IDB Invest includes provision expense in the cost to income calculation, which incorporates undisbursed commitments and future expectations of market and macroeconomic conditions introduced with the current expected credit losses accounting standard. Credit ratings are indicators of creditworthiness used by investors in making investment decisions. They help determine an entity's access to capital markets and the pricing of its debt issuance. As credit ratings underpin the IDB Group's capacity to lend and mobilize, Governors have established specific rating mandates for IDB (AAA) and IDB Invest (at least AA) and have instructed management to establish regulations, policies, guidelines, and related initiatives to maintain these ratings.

[8] The cost to income ratio compares administrative expenses to net interest income, on a four-year-rolling basis. The recent slight increase in this ratio for IDB reflects the reduction in average loan income that was experienced since the start of the pandemic, mainly due to the low interest rate environment. Given that average administrative expenses are not expected to experience significant growth in 2022-2023, it is expected that the ratio will revert to a level in line with the CRF target once market interest rates increase. In the case of IDB Invest, the cost to income ratio decreased to 27.7% at the end of 2021 from 64.8% at the end 2020. This decrease was primarily due to an increase of $144.3 million in income from development related investments and liquid assets, net of borrowing expenses. This change was mainly driven by lower provision for credit losses combined with higher income related to the growth of the development related investments portfolio.

Table 1.4 Organizational Management and Effectiveness Indicators, 2020-2021

		Institution	Progress 2020	Progress 2021	Target 2023
3.19	Cost to income ratio (%)	IDB	39.9%	40.7%	< 40% (2020-2023)
		IDB Invest	64.8%	27.7%	< 60% (2020-2023)
3.20	Cost to portfolio ratio (%)	IDB	0.71%	0.69%	< 0.8% (2020-2023)
		IDB Invest	1.30%	1.21%	< 1.3% (2020-2023)
		IDB Lab	5.67%	5.69%	< 7.3% (2020-2023)
3.21	Credit rating agencies granting targeted ratings to IDB Group entities (#)	IDB	3	3	3 (2020-2023)
		IDB Invest	3	3	3 (2020-2023)
3.22	Average downloads of IDB Group publications (#)	IDB Group	2,219	4,758	≥ 3,000
3.23	Total IDB Group blog readership (# million)	IDB Group	11.4	15.3	≥ 5.5
3.24	Net Promoter Score: IDB Group as a provider of relevant knowledge (NPS)	IDB Group	34	48	≥ 38
3.25	Net Promoter Score: IDB Group as a provider of innovative solutions (NPS)	IDB Group	16	31	≥ 27
3.26	IDB Group facilities and fleet emissions (tons of CO_2 equivalent)	IDB Group	7,135	8,394	≤ 9,600
3.27	Mid and senior-level IDB Group staff who are women (%)	IDB and IDB Lab	41%	42%	≥ 43%
		IDB Invest	38%	38%	≥ 38%
3.28	Actions to promote diversity and inclusion at the IDB Group (#)	IDB Group	38	39	80 (2020-2023)
3.29	Aid Transparency Index score	IDB	95	Not available	90

Progress is classified as: On Track; On Watch; or Off Track based on the traffic light methodology. Data is not available for indicator 3.29 for 2021 given that the Aid Transparency Index was not carried out in that year. The Aid Transparency Index is a measure of the transparency of development cooperation that is conducted periodically by the non-governmental organization Publish What You Fund.

Reflections

The IDB Group is taking targeted actions to enhance performance on lagging areas, including maintaining its emphasis on cross-cutting issues, and enhancing attention toward progress in achieving development results throughout the project lifecycle. In 2021, the IDB Group also worked to enhance the alignment of critical planning exercises across the institution, leading to an increased alignment of the 2022 IDB administrative budget and annual goal-setting process with strategic priorities and CRF targets.

Progress towards meeting CRF targets is a shared responsibility across the IDB Group and its counterparts and is driven by a range of action plans and initiatives focused on supporting institutional priorities and driving improvements over time. The internal IDB Group CRF Tracker launched in 2021 helps identify lagging areas by automating the publication of quarterly disaggregated progress data for many indicators. By regularly assessing progress against CRF metrics and including these as part of senior management discussions, timely

action may be taken to channel efforts to lagging areas to enhance performance. The following two chapters describe ongoing and planned efforts to enhance the lagging development effectiveness indicators.

CHAPTER 2

Project Supervision and Monitoring for Results

Introduction

Each entity of the IDB Group has a set of development effectiveness tools that support the focus on results throughout the project lifecycle—from ensuring evaluability during design to conducting rigorous assessments of results at project completion. In between these two endpoints, project management is critical to support the achievement of results. IDB, IDB Invest, and IDB Lab each have their respective tools and processes to monitor execution.

This chapter takes stock of the 2021 results captured in the project monitoring tools including the percentage of projects performing satisfactorily at each entity of the Group according to their tailored classification methodologies. Project monitoring tools allow for the capture of key project outputs and outcomes during execution.[9] Through a set of standard indicators forming part of Level 2 of the IDB Group CRF, we highlight selected results supported by the IDB Group in 2021 aligned to the SDGs (see Figure 2.1 for a snapshot and the CRF website for additional details).

[9] The IDB Group also has a joint methodology for classifying projects according to the SDGs (link).

Figure 2.1. Selected IDB Group SDG Contributions in 2021

Note: See the IDB Group websites for the CRF (www.iadb.org/crf) and SDGs (www.iadb.org/sdgs) for additional details on IDB Group contributions to these and other indicators.

IDB

The IDB monitors progress during execution both for technical cooperation (TC) operations—tracked through the TC monitoring and reporting system—as well as for loan operations and investment grants with approved amounts greater than $3 million—tracked through the Progress Monitoring Report (PMR).

Supervision Results for TC Operations

TC operations are an important part of the value the IDB Group offers the region as they support knowledge generation, pre-investment activities, regional cooperation and more. A strategic use of TC resources in alignment with country priorities is an important aspect of maximizing their benefit to the region as is the satisfactory execution of TCs once approved. Satisfactory TC execution is measured by the share of the portfolio which is delivering planned deliverables on schedule. In 2021, 62 percent of active TC operations achieved a satisfactory classification, which was below the CRF target of 75 percent, but an improvement compared to the 54 percent seen in 2019 and 2020.[10] Given that a target for this indicator was first established in the CRF 2020-2023, the first two years have been an important time for raising awareness about this standard and increasing incentives to focus on timely achievement of planned outputs. This coincided with a period of great uncertainty in the context of the COVID-19 pandemic. A recent study identified factors affecting the timely completion of planned TC deliverables and found that failure to disburse during the initial execution stage, especially within the first six months after eligibility, is associated with a higher likelihood of a non-satisfactory performance classification.[11] Overly optimistic deliverable planning is another factor that adversely impacts the performance classification of active TC operations.

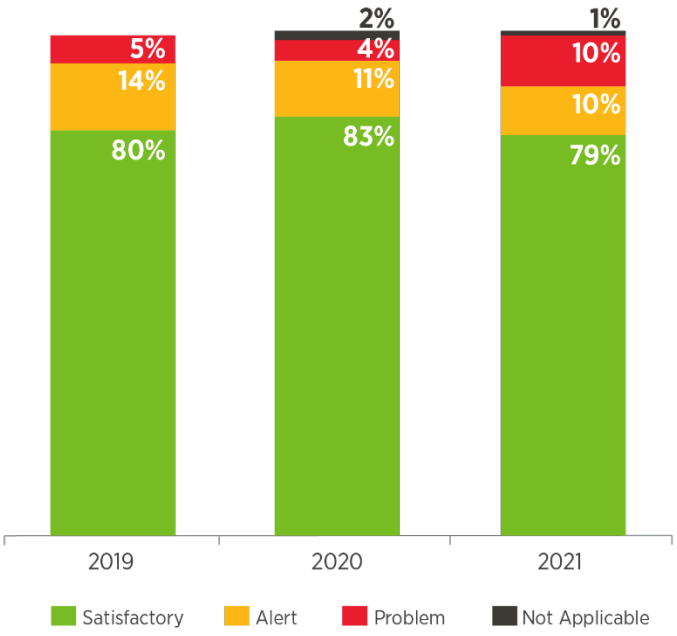
Both the TC preparation and execution processes are being strengthened to address TC performance. For example, during the quality and risk review of TCs under preparation, increased attention is paid to the feasibility of delivering outputs according to the proposed schedule. In terms of supervision, efforts have been made to identify relevant early warning indicators (i.e., when six months have passed since an operation reached eligibility without disbursing) and provide alerts to team leaders to take remedial action to enhance execution. In several departments across the Bank, action plans are also being developed to address TCs that fall in a category other than satisfactory.

[10] To be classified as satisfactory, active TC operations must have delivered at least 75 percent of planned outputs, cumulatively, from the first year of execution to the reporting year.
[11] See the IDB Technical Note: The Role of Technical Cooperation and Tools to Improve Monitoring (April 2022).

Supervision Results for Loans

During execution, the IDB tracks project performance using the Progress Monitoring Report (PMR)—the Bank's principal instrument for monitoring its operations and strengthening overall management for results at a project level. The PMR captures both quantitative and qualitative information on project implementation to monitor the outputs that are being generated and compares this information with the expected costs and timeframe set at the beginning of execution along with country benchmarks. Based on this information as well as the stage of execution and operation modality, the PMR rates the execution of outputs each year as "satisfactory," "alert," or "problem.". In 2021, 79 percent of the 487 operations[12] classified via the PMR were rated as having "satisfactory" performance, 10 percent as "alert", and 10 percent as "problem" (see Figure 2.2).[13] Figures 2.3 and 2.4 show the breakdown of satisfactory performance by country and sector departments.

Figure 2.2 PMR Classifications, 2019-2021



[12] This group is composed of SG operations in execution that have reached eligibility for disbursment.
[13] The remaining one percent comprises operations that plan to start execution in 2022 or later, and therefore a performance classification does not apply. These cases are shown as "Not applicable"in Table 2.2.

Figure 2.3 Satisfactory PMR Classifications by Country Department, 2019-2021

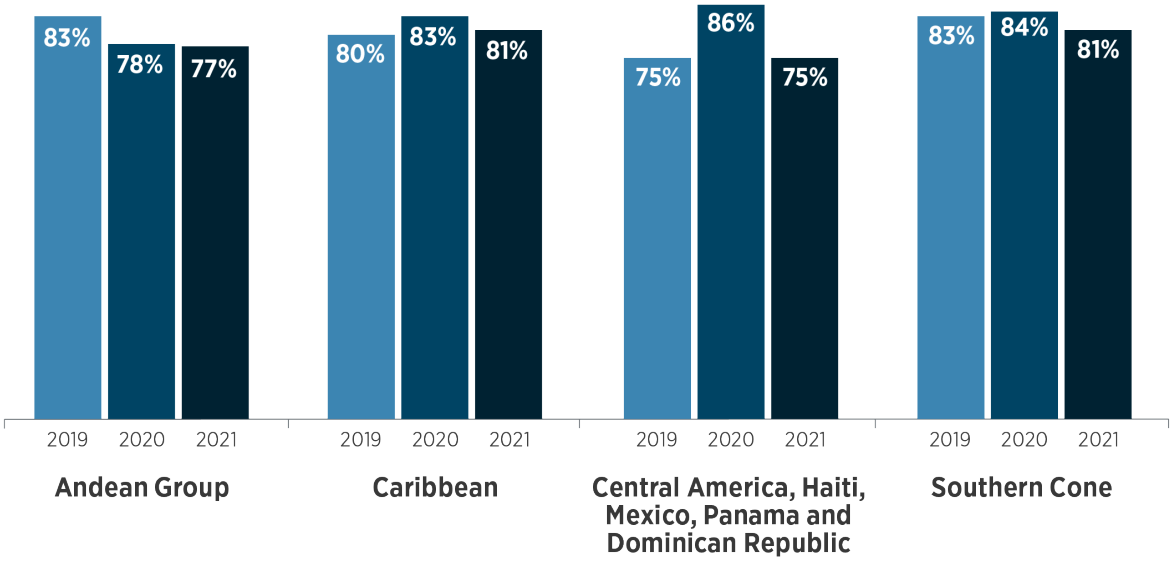
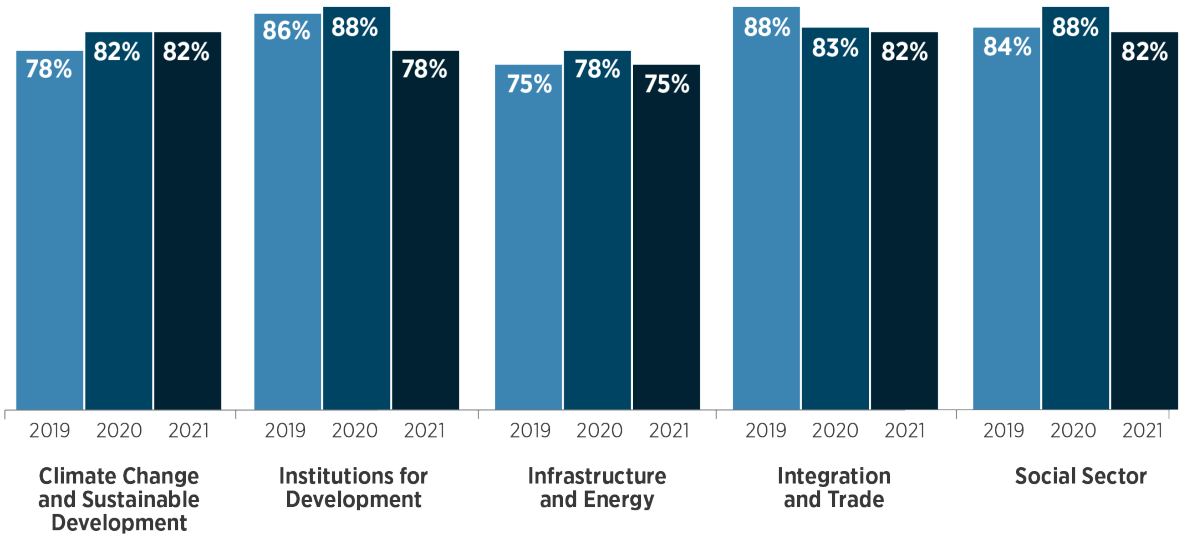


Figure 2.4 Satisfactory PMR Classifications by Sector Department, 2019-2021



Understanding what drives operation performance during implementation and taking action to correct the course

Understanding the most common issues and lessons learned that affect project performance is important to provide insights on the preparation and execution of similar operations. Project teams use a module within the PMR to provide qualitative information on project execution to complement monitoring indicators.

In reporting on 2021 progress, the COVID-19 pandemic was mentioned as a factor that continued to affect implementation progress and jeopardize the likelihood of achieving results. For example, in the case of operations aimed at supporting the supply of credit for second-tier banks, some project teams highlighted that the pandemic negatively impacted the foreseen demand for financial products and the likelihood of achieving results.

Thirty-three percent of projects downgraded their assessment of the likelihood of achieving results in the 2021 cycle as compared to 2020.[14] Among the factors affecting project implementation, those that were reported most frequently, besides the pandemic, had to do with (i) delays in signing loan contracts, (ii) insufficient budget allocation by the authorities, (iii) changes in the personnel of the Project Implementation Units (stemming from changes in government), and (iv) external controls imposed by other governmental bodies (e.g., the Comptroller's Office). To a lesser extent, teams relayed challenges pertaining to the economic environment, such as supply chain issues associated with construction materials or the availability of an appropriate team to implement the operation amid high staff turnover. Some teams highlighted as a lesson learned that improvements in coordination and project monitoring by the Executing Unit as well as taking a risk-based approach helped strengthen execution and oversight.[15] Others mentioned that the technical assistance provided by the IDB was critical to strengthening execution. In particular, resuming monitoring activities with the support of local consultants allowed them to spot issues and areas of improvement early to support the executing agency with pre-investment activities.

The PMR classification of whether operations are executing satisfactorily relies on the physical and financial progress of the outputs financed through the operation. Satisfactory performance during execution is a necessary but insufficient element to achieving intended project results. Measuring results during project implementation is challenging and may depend on factors such as the vertical logic of the intervention, the time required for outputs to lead to results, and beneficiary decisions and behavior, among others. Nevertheless, there are opportunities to enhance the measurement of results in the PMR, such as by linking the implementation status with the likelihood of achieving the expected results and ensuring clear alignment between the design, implementation, and closure of operations. This will allow for an enhanced focus on results throughout the project lifecycle. Chapter 3 includes additional details on ongoing IDB efforts to enhance operational excellence throughout the project lifecycle.

[14] The 33 percent of the operations that downgraded their assessment of the likelihood of achieving results from 2020 to 2021 consists of 19 percent that changed the likelihood from high to medium, 2 percent that changed the likelihood from high to low, and 12 percent that changed the likelihood from medium to low.

[15] An analysis of content in open text fields in the PMR using Natural Language Processing similarly found that operations that transitioned from satisfactory to alert or problem in 2021 mentioned more frequently words that could indicate implementation issues related to the context and legal red tape at the local level and/or obstacles related to accessing human and productive capital to continue implementing their activities. Such words found more frequently in problem or alert operations included "COVID," "delays," "contracts," "change," "hiring," "planning," "acquisition," and "coordination," among others.

IDB Invest

Supervision Results

As part of its end-to-end Impact Management Framework, IDB Invest assesses the impact performance of each operation in the portfolio annually until the final evaluation stage. The results matrix and the monitoring and evaluation plan, which are established during operation structuring, are the basis for monitoring and reporting on development results. The results matrix defines the operation's objectives, outlines the vertical logic (i.e., how the development objectives are expected to be achieved), and sets corresponding outcome[16] and output[17] indicators and targets. In turn, these indicators and targets provide the evidence needed to drive the scores for each category of the DELTA Impact Rating System,[18] and determine contributions to specific SDGs. The monitoring and evaluation plan contains additional relevant indicators aligned to business priorities and other project components, such as advisory services, to ensure adequate performance monitoring and evaluability.

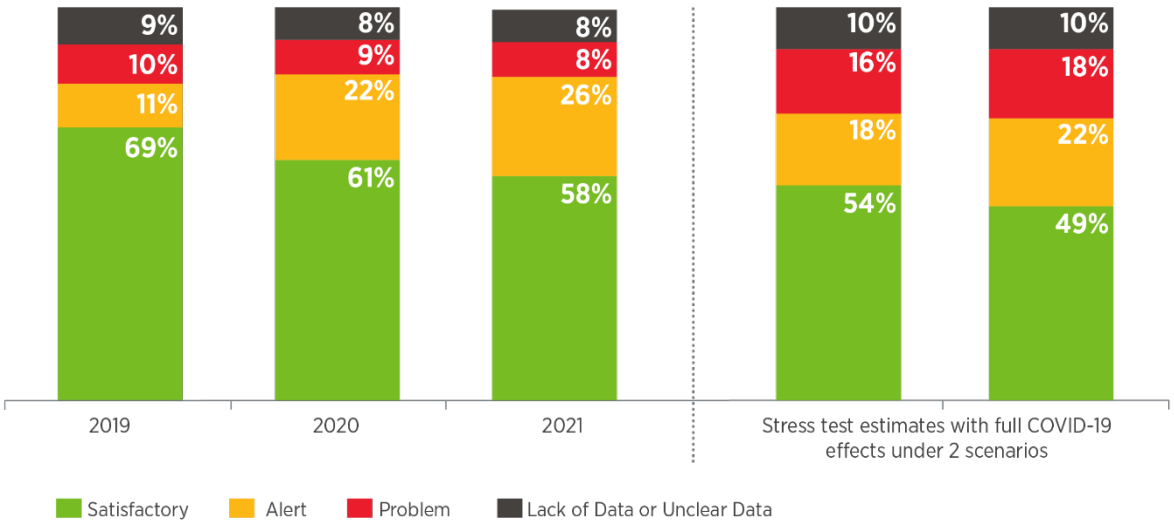
During supervision, data is collected for each indicator to compare actual results versus initial targets and assess whether the operation's components are being executed as expected (including non-financial components such as advisory services or Environmental and Social Action Plans). Based on this information, the DELTA score is updated annually to reflect actual performance towards achieving impact targets set in the results matrix. Additionally, the performance of each operation in the active portfolio is classified as "satisfactory," "alert," or "problem"[19] based on how much the DELTA score in supervision deviates from the score at approval. This provides an overarching view of ongoing impact achieved at the portfolio level. This assessment is documented in Annual Supervision Reports (ASRs) and consolidated in quarterly Development Impact Supervision Reports, which are presented to the IDB Invest Portfolio Supervision Committee.

At the end of 2021, 58 percent of the 226 operations in supervision were "satisfactory," 26 percent were "alert," and 8 percent were "problem."[20,21] The effects of the COVID-19 crisis continue to be a driver of "alert" and "problem" classifications across the supervision portfolio.[22] As expected given the magnitude of the crisis, overall portfolio performance has deteriorated since 2019 (Figure 2.5). On the plus side, there are fewer operations classified as

[16] Outcome indicators measure what is expected to be different as a result of the delivery of project outputs (or project components and activities). They represent the final level in the results chain, reflecting the end development impact objectives of the transaction.
[17] Output indicators are identified at the level of components. They describe the direct deliverables or the products that should be generated during the execution of the operation.
[18] DELTA = Development Effectiveness Learning, Tracking, and Assessment System. For more on the DELTA see: www.idbinvest.org/impact.
[19] A "satisfactory" classification refers to operations that are reaching their planned development objectives. An "alert" classification refers to operations that have the potential to achieve their targets, but closer supervision is recommended. When an operation is at high risk of not reaching its development goals, it is classified as "problem."
[20] During the supervision cycle, 8 percent of operations were unable to be classified due to unclear or incomplete data from clients. There is typically a certain amount of clients delayed in providing information, although this slightly increased during the pandemic.
[21] It is worth noting that as operations recover from the pandemic in 2022, several have moved from "alert" back to "satisfactory."
[22] Operations are assessed based on the previous year's data to correct for any seasonality effect (i.e., year-end targets are compared with year-end results achieved). Therefore the 2021 supervision assessments were mostly conducted based on 2020 data.

"problem" overall than estimated in the stress test scenarios conducted by IDB Invest to assess the potential impact of the COVID-19 crisis on achievement of development impact results.[23]

Figure 2.5 Evolution of Portfolio Classifications since 2019 and Stress Test Estimates



As far as performance by business area, the financial institutions (FI) segment of the portfolio was the most affected by the pandemic, as reflected by the increase in "alert" classifications to 32 percent (up from 20 percent in 2020). This is largely due to the nature of IDB Invest operations with FIs, which typically focus on expanding access to credit for underserved and riskier segments such as micro, small, and medium enterprise (MSMEs). Faced by the crisis, banks reacted to mitigate this risk by adjusting lending in these areas, in order to maintain healthy capital and liquidity buffers, while contending with deteriorating asset quality. Lower demand for credit overall also contributed to depressed portfolio growth and was likely influenced by moratoria on loan payments and government transfers to help firms weather the crisis. Likewise, some clients that were ready to launch new types of portfolios for women-led small and medium enterprise (SMEs) or green lending just as the pandemic hit had to put plans on hold in order to focus on their core business. Operations with investment funds were also affected, as some investment prospects froze during the crisis.

Performance of the corporate segment also deteriorated. The share of "problem" operations rose to 7 percent, versus 4 percent in 2020. A combination of mostly pandemic-induced factors contributed to this underperformance, including business closures (quarantines and restrictions), lower demand and sales, decreased exports, more expensive inputs, and supply chain issues. The number of clients who did not report data also increased during the pandemic.

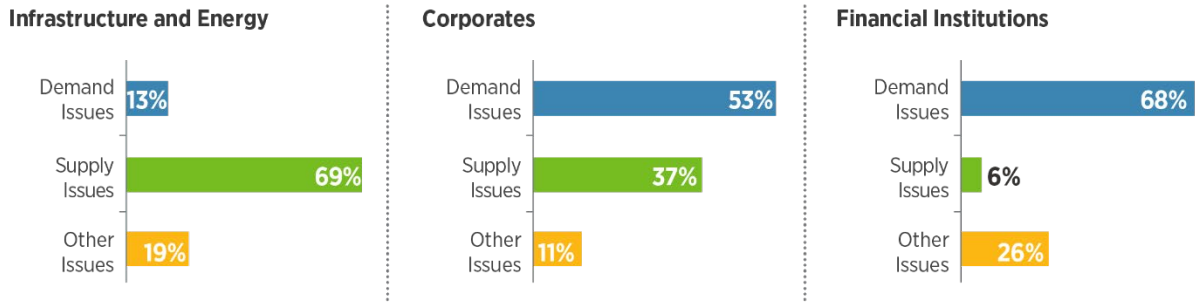
[23] Stress test exercise conducted in 2020 and updated in 2021; estimates based on a Monte Carlo simulation. Simulation of pandemic effects based on a two-level top-down approach: country-sector impact and the operation-specific severity of the shock.

For operations in the infrastructure and energy segment, the effects of the crisis seem to have been more temporary, mostly causing delays in the construction phase due to supply issues and worker shortages. As construction resumes, the effects tend to dissipate.

Given the prominent role of the pandemic in explaining portfolio performance, IDB Invest carried out a client survey as part of the 2021 supervision assessment to hear firsthand how the crisis was affecting their operations. The majority of corporate and FI clients (73 percent) reported experiencing lower demand for their products and services, while infrastructure and energy clients mainly highlighted supply issues (Figure 2.6). Nonetheless, 46 percent of respondents expect to perform better in 2022 and another 46 percent expect to at least maintain their current performance.

Finally, building on these supervision results, IDB Invest is reflecting on an evaluation process that will allow it to learn what types of operations are better able to recover from the effects of the pandemic, generating knowledge on resilience to a crisis of such magnitude.

Figure 2.6 Main COVID-19 Effects Reported by Clients, by Segment



Understanding what drives operation (under)performance in supervision and taking action to support clients in delivering impact results

Typically, the most challenging reason for underperformance are sudden exogenous shocks that affect an operation's ability to meet development impact objectives. In 2021, IDB Invest carried out an in-depth analysis of portfolio data from supervision to better understand the drivers of low performance. The data confirmed the sensitivity of operations to economic cycles (e.g., an increase in a country's unemployment rate increases the probability of an operation being classified as "alert" or "problem"). While impact risk assessment and sensitivity analyses are embedded in IDB Invest's ex-ante development impact assessment to account for possible downside scenarios, planning for results is challenging in volatile environments, particularly when confronted with massive crises like the COVID-19 pandemic.

For FI clients, it is even more difficult to forecast performance because of the underlying relationship between loan portfolio performance and the business cycle[24] (see Chapter 3 for a more in-depth discussion). A more complete and contextualized understanding of FI operation

[24] Ample literature documents this relationship. See J. Glen, C. Mondragón-Vélez (2011). "Business cycle effects on commercial bank loan portfolio performance in developing economies", *Review of Development Finance*, Elsevier, April–June 2011.

performance requires a continuous assessment of trends at the outcome level benchmarked against market trends, especially during periods of volatility. This is why it is particularly important to devote attention to the annual monitoring of FI operations, in addition to their ex-ante assessment and final evaluation. Continuous monitoring of FI operations also helps IDB Invest shorten the learning curve, strengthen the management of operations in the active portfolio, and improve the structuring of new ones (see Box 2.1). For instance, data from active FI operations provides benchmarks to help inform new operations with clients of the same size that are targeting similar portfolios or operating in similar contexts.

Likewise, taking action to support operations affected by external shocks is important both for achieving the expected development impact and building stronger relationships with clients. For example, in 2021, IDB Invest stepped in with additional financing to help the operation with Portland Caribbean Fund II, which had healthy financial performance and high development impact results until the pandemic hit its portfolio of investee companies. To preserve the value built by these companies pre-pandemic, as well as the jobs they generate in the Caribbean and Colombia, IDB Invest approved a $10 million loan to the Fund in 2021 to finance investee companies' working capital and investments in key areas such as digital technologies. Similarly, IDB Invest continued to support other existing clients affected by the pandemic through the Crisis Management Facility. This recent experience underscores the value of the supervision work carried out. It also suggests a new way to envision IDB Invest's relationship with its clients as an ongoing partnership, which can be expanded – or reduced – depending on results delivered and commitment shown during implementation.

Another reason for underperformance is temporary delays in the execution of certain operation components that are partly under the client's control. In the context of the pandemic, clients had to tighten focus on their core business and often put on hold important activities related to launching pilot products or services, promoting gender equality and diversity, or implementing environmental, social, and corporate governance (ESG) action plans. In 2021, IDB Invest established a quarterly notification system which flags delays in the implementation of advisory services or ESG action plans, allowing it to track the progress of these activities and coordinate responses to help clients reprogram them as needed.

Finally, clients may provide incomplete, unclear, or inconsistent data on the impact indicators being tracked. While a certain percentage of operations inevitably present data shortcomings or are delayed in providing data, IDB Invest makes a concerted effort to follow up with clients to review data and clarify inconsistencies. Once data issues are resolved, operations are typically upgraded to "satisfactory," contributing to better supervision performance.

Box 2.1 Improving Results Assessment during Supervision through Data Automation and Artificial Intelligence

IDB Invest has taken great strides to automate data collection during supervision. All results matrixes including targets and data to be collected from clients are now defined and tracked in IDB Invest's Business Process Management System. This has helped significantly reduce operational risk, increase the efficiency of data collection and consolidation, and ensure more consistent reporting. Automation has also allowed IDB Invest to improve how it visualizes the results achieved by the portfolio on an ongoing basis through the Impact Dashboard that was developed in 2021. This dashboard captures figures on the impact generated by IDB Invest at different levels, which can be disaggregated by year, region, country, and sector, among other filters.

Moreover, with the consolidation and automation of its supervision system, IDB Invest is better able to analyze the determinants of performance during implementation, gathering insights that can both inform the structuring of new operations and predict operation success at completion. For example, with an increasing number of operations classified as "alert" in 2021, IDB Invest analyzed the probability of these operations reverting back to "satisfactory" versus being downgraded to "problem." An analysis of supervision data leveraging machine learning models identified the variables that are the strongest predictors of an operation's current classification, allowing IDB Invest to establish predictive models for future performance. Similarly, together with the IDB Tech Lab, IDB Invest is implementing a machine learning model that will suggest a supervision classification for each operation based on a short-written assessment and historical data documented from past operations.

With these improvements, IDB Invest's supervision system is increasingly moving from descriptive analytics, describing what happened and why, towards predictive and prescriptive analytics, focusing on what will happen, and how the organization can use this intelligence to drive its course of action.[a]

[a] Developed in 2012, Gartner's Analytics Ascendancy Model describes four different stages of data analytics: 1. Descriptive Analytics; 2. Diagnostic Analytics; 3. Predictive Analytics and 4. Prescriptive Analytics. Organizations in the later stages of the model use data to make decisions.

IDB Lab

Supervision Results

Tracking the results achieved by projects in supervision is a core part of IDB Lab's value proposition. As part of ongoing efforts to strengthen its proactive portfolio management approach, IDB Lab implemented an early alert system in 2021 to identify underperforming projects and work with executing partners to correct course. This system allows IDB Lab to monitor achievement of key project milestones during execution (e.g., project signature and first and subsequent disbursements) and send personalized reminders about delays or other issues to project team leaders. This more proactive approach has also helped IDB Lab optimize the use of its resources by deploying funds more quickly to partners in the region—the average time between project approval and first disbursement decreased by 22 percent in 2021 compared to 2020—and through timely cancelation of unused or undisbursed committed resources, which make up a significant share of approvals in an organization with a high risk appetite and tolerance for failure. In addition, IDB Lab continued working with IDB Invest to integrate the iDELTA impact assessment tool into the supervision and portfolio management process, which is expected to be completed in 2022. See Box 2.2 for a snapshot of how projects in supervision are reaching poor and vulnerable populations through inclusive innovation.

Regarding IDB Lab's non-reimbursable operations (grants and contingent recovery grants), the portfolio consisted of 340 active operations as of end-December 2021. IDB Lab monitors the results achieved by these operations through the bi-annual Project Status Report (PSR). Based on the results captured by PSRs for 2021, 65 percent of projects are "green flag," 26 percent are "yellow flag," and 8 percent are "red flag."[25]

In addition, in 2021 IDB Lab took a closer look at early lessons from its newest non-reimbursable instrument: the prototype. Launched in 2019, this agile instrument was designed to support early-stage experimental innovations with high potential impact and higher risk with fast, flexible financing (up to $150,000; execution time up to 18 months). To date, 41 prototype projects have been approved ($5.9 million in IDB Lab financing plus $3.9 million in counterpart funds). Early lessons show that the lower counterpart requirements make it possible to work with a wider range of partners in smaller countries (46 percent of prototypes are in small and island and C&D countries). Likewise, the instrument fills a clear need for financing of high-risk early-stage innovation that was not previously addressed by IDB Lab. It also facilitates IDB Group collaboration around deploying resources quickly in response to a specific need (e.g., COVID-19 health-tech challenge). At the same time, experience with the COVID-19 prototypes in particular has shown that even when a solution is developed rapidly with the help of this instrument, bottlenecks may occur when it comes to approval or adoption by public sector partners.

[25] Note that figures do not add to 100 percent due to rounding.

For IDB Lab's loan and equity investment operations, financial and operational performance is monitored through the Project Status Update. As of December 2021, IDB Lab had an outstanding loan and equity investment portfolio of $178 million, distributed among 103 operations. In terms of portfolio quality, 70 percent of operations were classified as green flag ("on track to high performance"); 20 percent as yellow flag ("underperforming, minor losses expected" for equity investments and "in breach of covenant and likely to default" for loans); and 10 percent as red flag ("underperforming, major losses expected" for equity investments and "in default with risk of principal loss" for loans). The biggest shift in performance was in the share of yellow flag operations, which was 9 percent in 2020, mainly driven by an increase in loan operations in breach of covenant that require closer monitoring.

Similar to 2020, the overall quality of the portfolio remained stable in 2021 despite the ongoing COVID-19 pandemic. This is mainly due to the solid performance of equity investment operations, especially venture capital funds, and the diversity of business models within the investment portfolio. Red flag operations represented $25.2 million in risk exposure, or 16 percent of the outstanding amount at the end of 2021. Performance as of December 2021 reflects IDB Lab's risk appetite and continues to be consistent with its current provision policy and long-term financial projections.

Box 2.2 Reaching Poor and Vulnerable Populations through Inclusive Innovation

Innovative tech-driven business models are becoming increasingly relevant for empowering poor and vulnerable populations, both economically and with better living standards. Accelerating social inclusion by supporting such models is core to the work of IDB Lab. In 2021, IDB Lab achieved both its innovation and poverty and vulnerability targets for new approvals, reaching 90 percent and 60 percent, respectively, reflecting its innate capacity to combine both objectives.[a] In addition, an analysis of data on the use of technology within IDB Lab projects shows that the use of modern digital and life sciences technologies is comparable in projects that target poor and vulnerable populations and those that do not.

Beyond approvals, the share of projects in supervision that are reaching poor and vulnerable communities remained high at 67 percent in 2021, as reported by IDB Lab executing agency partners. And 35 percent of these projects are almost completely focused on poor and vulnerable beneficiaries (i.e., 80-100 percent). Partners also report that a substantial share of project beneficiaries are poor and vulnerable: 45 percent of jobs, 52 percent of people with improved living conditions, and 45 percent of households with improved access to essential services are within this segment.

[a] IDB Lab has a series of key performance indicators that it reports on independently to its Donors Committee.

CHAPTER 3

Assessing Achievement of Project Results

Introduction

Since the Development Effectiveness Framework (DEF) was first established to increase project effectiveness, the Group has made significant advances in its ability to measure and report development outcomes. The final project reports produced for each entity of the Group—Project Completion Reports (PCRs) at the IDB, Expanded Supervision Reports (XSRs) at IDB Invest, and Final Project Supervision Reports (FSRs) at IDB Lab—are one of the most critical tools of the DEF. These reports aim to determine whether operations met their objectives and how efficiently they performed, as well as the sustainability of achieved results. They also capture lessons learned to inform future project design and monitoring.

This chapter reviews the results of the 2021 exercise for PCRs and XSRs in the case of IDB and IDB Invest, respectively, highlighting key findings and ongoing efforts to enhance the achievement of project results.[26] Four core criteria are used to assess both IDB and IDB Invest projects, which include effectiveness, efficiency, relevance and sustainability.[27] As PCR and XSR ratings have fallen short of corporate targets in recent years, they have illuminated opportunities for improvements not only in how projects are designed and executed, but also in how we measure success and adapt to the changing circumstances of the region over time. IDB Lab's analysis focuses on selected key performance indicators and examples of scale from projects completed in 2021.

IDB Project Completion Reports

Summary of 2021 PCR Results

For the 2021 cycle, the Office of Evaluation and Oversight (OVE) validated 62 projects for which PCRs were prepared.[28] The complete list of PCRs and their associated ratings and PCR documents can be found on the CRF website page for the indicator projects with satisfactory achievement of development results at completion. These projects were approved between 2009 and 2020 for a total amount of $6.3 billion.[29] They spanned a wide range of sectors, diverse lending instruments, and covered 19 countries.

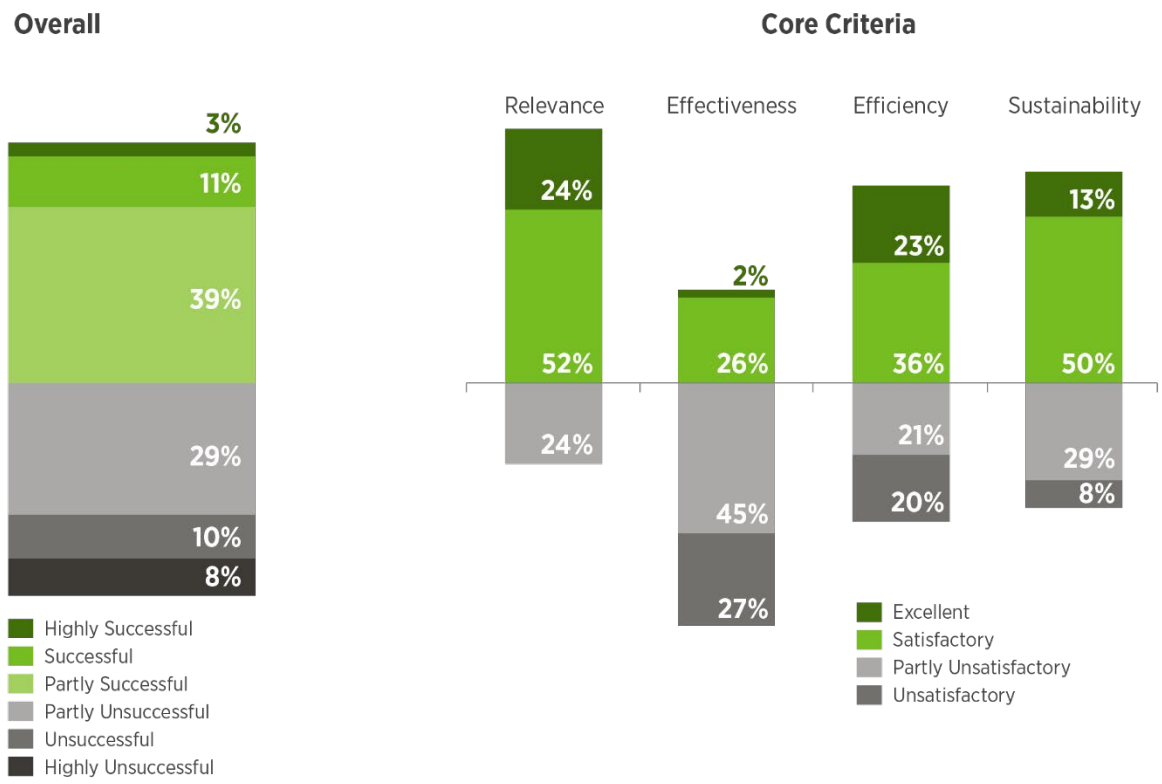
Overall, the OVE-validated rating was positive ("highly successful" "successful" or "partly successful") for 53 percent of the projects, in line with the most recent PCR cycles. As in previous cycles, the Relevance criterion continues to be the highest rated, with 76 percent of projects rated positively (see Figure 3.1). Effectiveness was rated the lowest, with 27 percent

[26] The 2021 exercise refers to the set of PCRs and XSRs that were due to OVE in 2021 and were validated by OVE in the first semester of 2022. For IDB, they correspond to projects that closed between 2018 and 2020. For IDB Invest, they correspond to projects that reached maturity between 2016 and 2022.
[27] See the Good Practice Standards of the Evaluation Cooperation Group for an overview of each criteria.
[28] This review was based on guidelines for evaluation of projects at completion that were established in 2018 and revised in 2020. PCRs are prepared for Investment Loans, Policy-Based Loans, stand-alone Reimbursable Technical Cooperation, and stand-alone Investment Grants greater than $3 million. Note that three projects supporting the transportation sector in Nicaragua (NI-L1049, NI-L1052, and NI-L1071) were covered by a single PCR, but validated individually by OVE.
[29] 80 percent of projects were approved between 2009 and 2014.

rated positively. The assessment is objective based. Each specific objective's attainment is measured based on the average achievement of associated result indicators. Specific objectives and outcome indicators are assessed against those approved by the Board of Directors or those resulting from the start-up workshop when the project reaches eligibility. Factors affecting effectiveness are explored in greater detail in this chapter.

Efficiency was slightly down to 59 percent of projects rated satisfactory or excellent (from 61 percent in the previous cycle), where the key issues continue to be related to unsupported or lack of clarity in the assumptions used to estimate project benefits and/or costs in the analysis, limited coverage by not including all activities supported by the project, and the proper incorporation of time and cost overruns. In some cases, the difficulty of monetizing benefits or the use of benefit transfer was also raised. An example of good practice on the ex-post efficiency analysis of environmental projects, that routinely utilize these techniques is presented in Box 3.1.

Figure 3.1 Share of Validated Projects in 2022 by PCR Score in Each Section



Note: The sample consists of 62 projects validated in 2022. Note that figures may not add to 100% due to rounding.

Box 3.1 Good Practice in Ex-post Economic Analysis of Environmental Projects: Serra do Mar (BR-L1241)

The Serra do Mar Socio-environmental Recovery and the Atlantic Forest Mosaic System Program (2376/OC-BR) was structured around two concurrent axes. On the one hand, in order to correct the disorderly urban expansion, social inclusion solutions were supported. Investments were made to urbanize or resettle irregular populations established within the Parque Estadual Serra do Mar (PESM) or in its buffer zones, subject to a high geotechnical risk. At the same time, surveillance and monitoring measures were implemented in the Conservation Units (terrestrial and marine), establishing the bases to ensure the provision of environmental services in the long term. Given that the Program completed its execution in 2019, the evidence of the impacts generated is still limited, since most of the expected benefits, both social and environmental, require an extensive period to manifest.

The ex-post efficiency analysis of the PCR was based on a cost-benefit analysis (CBA), considering the total investments made by the program during the execution period and 20-year projections of costs and benefits. For its part, the benefits of the project (increased vegetation cover, improved water quality, improved housing quality, reduced vulnerability to geological risks) were monetized using socio-environmental valuation methods related to carbon capture (using the shadow price recommended by the High-Level Commission on Carbon Price[a]), willingness to pay for improvement in water quality, avoided costs for loss of human life and infrastructure.

The discount rate used was 7 percent, lower than the 12 percent rate commonly used. This decision is justified following, among others, an IDB study (Campos et al., 2016) and the guidelines of the United States Office of Management and Budget (OMB) that suggest the convenience of adopting rates of less than 12 percent in projects of public investment that generate benefits in the longer term, as occurs with investment projects in environmental management. Indeed, the use of relatively high rates in projects of this kind can lead to underestimating environmental and social benefits that materialize in the long term, leading to the financial and economic infeasibility of the project and compromising the well-being of future generations. Specifically, the choice of 7 percent is based on the most conservative scenario of the range required by the OMB (3 percent to 7 percent) to provide a sensitivity analysis when a project produces benefits for future generations.

As a result of this CBA, the internal rate of return (IRR) was estimated at 8.3 percent, higher than the discount rate of 7percent. In addition, considering that there are elements of uncertainty about the projected level of some variables (e.g., sequestration and price of carbon, effect on the income of the populations in the intervened areas and probable annual loss due to disasters), the CBA presents a sensitivity analysis based on an exercise of (5000) simulations. According to this analysis, 90 percent of the estimates yield an IRR within the range of 6.87 percent to 10.3 percent.

[a] See High-Level Commission on Carbon Prices. 2017. Report of the High-Level Commission on Carbon Prices. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO

Drivers of Project Performance and Enhancing Results Achievement

The achievement of project results depends upon the design and execution of projects and both play an important role in the final PCR classification. The IDB has reviewed the results of its recent PCRs to identify the factors associated with achievement of project results and has published studies that review these in depth.[30] These range from the quality of the results matrix at design to the cancellation of resources during execution. To address these and other critical factors correlated with project success, the Bank has established an Operational Excellence Agenda. This initiative seeks to enhance results achievement through improvements to project preparation and design, project execution and supervision, and broader portfolio management and strategic oversight as described in the following sections and summarized in Table 3.1.

Table 3.1 Key Enhancements to Increase Results Achievement

	Enhancements
Project Preparation and Design	The IDB is updating the procedures to process operations and the development effectiveness matrix (DEM) used to determine evaluability during project preparation to strengthen the quality of the results matrix, including **increased attention to result indicators and targets** and the identification of priority outputs critical to achieving project results.
Project Execution and Supervision	To address delays in project start-up, the IDB is implementing a **process to monitor start-up** and ensure a focus on results matrix design and the monitoring and evaluation (M&E) plan during start-up meetings with the Executing Agency. Progress monitoring during project implementation will include a focus on project development objectives and a **standard mid-term review** process will be established to monitor progress towards development objectives. A formal **closing workshop** will be carried out to ensure all necessary inputs in advance of preparation of the PCR.
Portfolio Management and Strategic Oversight	At the country level, two annual **portfolio reviews** will be established, with a standard scope. At the portfolio level, an **early warning system** based on standard indicators will provide timely alerts for decision-making to ensure the delivery of results. In addition, four **portfolio management meetings** and two **portfolio technical briefings** will be held annually with the Board of Executive Directors.

Based on the above-mentioned analysis, the Bank is also in the process of proposing enhancements to the tools under its Development Effectiveness Framework to better support

[30] See Álvarez, Carola, Leonardo Corral, Ana Cuesta, César Montiel and Consuelo Yepez, "Project Completion Report: Factors behind project success and effectiveness", IDB Technical Note 2135, March 2021. See also, Álvarez, Carola, Leonardo Corral, José, Martínez Carrasco, and César Montiel, "Project Completion Report Analysis: Implications for the Portfolio," IDB Technical Note 3145, March 2021. See "Operational excellence: understanding project financial cancellations and its impact on the delivery of results" / Leonardo Corral, Giulia Lotti, José Martinez, Camilo Pecha. (2022) — (IDB Technical Note; 2417).

teams during project design, execution, and at closure in strengthening the focus on results. [31] This, on par with ongoing activities carried out to strengthen the management capacity of the executing agencies, will support enhanced achievement of project results.

Preparation and Design

A key element to achieving results is strong project preparation and design. Recurrent analysis shows that a foundational element of successful and effective projects is the quality of its results matrix, including the robustness of the vertical logic (the underlying structure by which critical outputs are expected to yield outcome indicators); the availability of baseline data; the establishment of realistic targets; and the means to verify achievement and attribute results through a high-quality monitoring and evaluation plan.

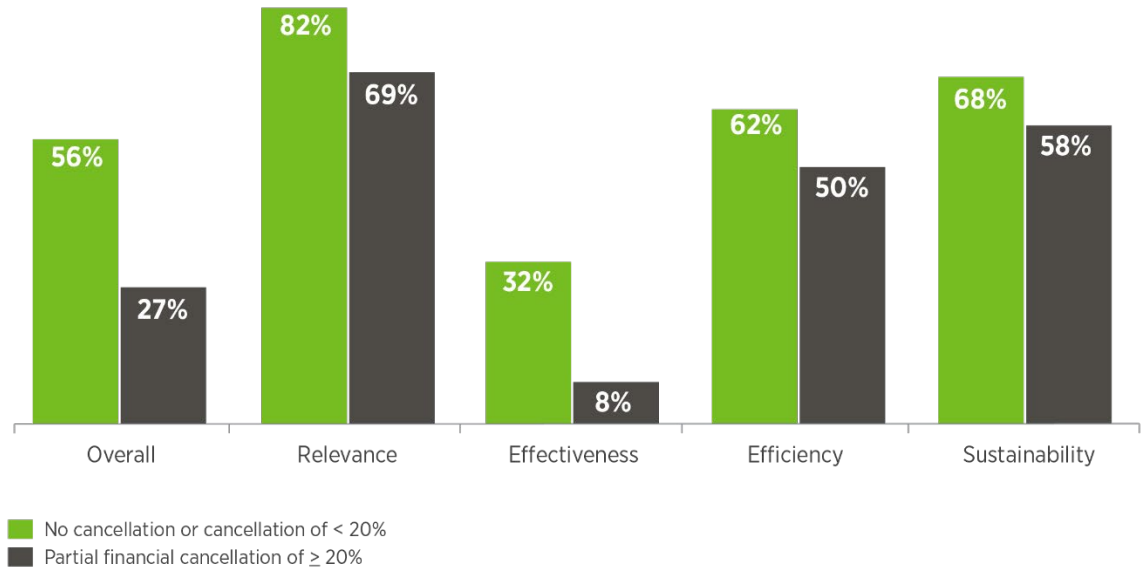
The IDB is focused on enhancing project preparation and design in several ways through a new project preparation process that is being piloted since late 2021. Among other improvements, it emphasizes enhancements to project design by increasing attention to elements critical to delivering project results such as identification of priority outputs to meet project targets and consideration of prior lessons learned during preparation.[32] This process also includes differentiated project preparation tracks based on risk to increase efficiency and improve risk mitigation, establishing an extended track for projects with higher risk or complexity.

Project Execution and Supervision

As mentioned before, execution performance focused on the delivery of outputs on time and at cost, is a necessary condition for successful projects, but not a sufficient one. Projects that have delays in the start-up phase, that are placed on Alert or classified as Problem are less likely to fully achieve results at completion. Those that undergo cancellations of project activities are also less likely to be successful (see Figure 3.2) given that when key outputs to deliver results are eliminated or not executed in the quantity or quality required, the underlying vertical logic of the project is broken. There are also failings of monitoring and evaluation practices, that translate in, for instance, 10 percent of result indicators not being measured in this PCR cycle (15 percent were not measured in the previous cycle). As shown in Figure 3.3, there is a direct relationship between unmeasured outcome indicators and specific objectives rated as unsatisfactory.

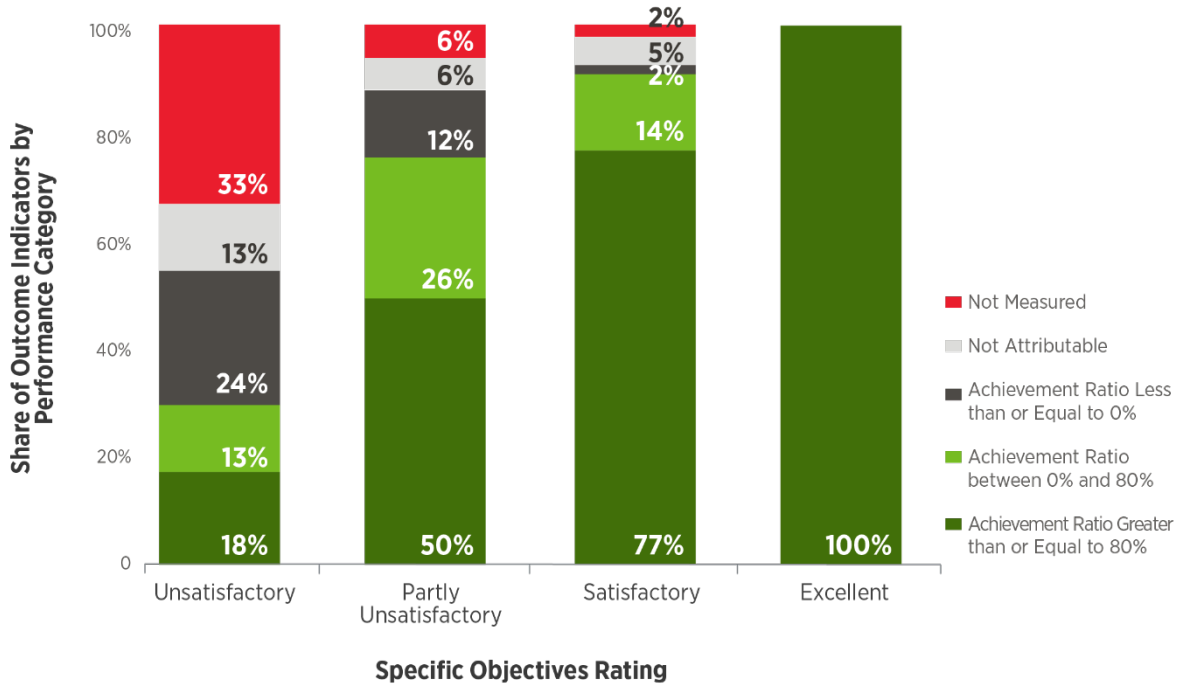
[31] At the design stage, the Development Effectiveness Matrix (DEM) measures whether the evaluation and results proposed for an operation are robust enough to be able to demonstrate results at completion. During project implementation, the Progress Monitoring Report (PMR) tracks twice a year the physical and financial progress of the project. During the evaluation phase, the Project Completion Report (PCR) informs on the achievement of project objectives.
[32] For example, the IDB is facilitating access to lessons learned during preparation through a new automatic knowledge package service developed in 2021. Using artificial intelligence, teams that register a new project will get an automatic email with a selection of similar projects and lessons learned from past operations, and other related information to facilitate the consideration of existing institutional knowledge and resources.

Figure 3.2 Share of Successful/Satisfactory PCR by Cancellation Status



Note: The figure is based on a sample of 184 projects validated as part of the 2019, 2020, and 2021 PCR cycles. 26 of these projects had partial financial cancellations greater than or equal to 20 percent of their approved amount. Investment grants were not included in the sample.

Figure 3.3 Distribution of Indicators' Outcomes by Specific Objectives Score



Note: For the 2020 and 2021 PCR cycles, 115 specific objectives were rated unsatisfactory, 77 were rated partly unsatisfactory, 75 were rated satisfactory, and 66 were rated excellent. Each specific objective generally has multiple associated outcome indicators, with 341 indicators associated with objectives rated unsatisfactory, 303 indicators associated with objectives rated partly unsatisfactory, 295 indicators associated with objectives rated satisfactory, and 143 associated with objectives rated excellent. Note that figures may not add to 100 percent due to rounding.

A key issue regarding execution is the need to shift focus from outputs to outcomes. This is not easy given entrenched execution incentives, practices, and systems. It is also difficult due to the inability to observe the evolution of outcomes during the execution cycle as these take time to materialize. Furthermore, in many instances it is cost prohibitive to track outcomes on a yearly basis, particularly where values are not routinely published and require the collection of survey data.[33] In these instances, an assessment of the continued validity of the vertical logic and of the monitoring and evaluation capacity and compliance could at the very least provide inputs for the project management adjustments needed to put the project back on track to achieve results. Projects whose vertical logic has been hampered to a degree where it is deemed too difficult or costly to re-steer, should be canceled or reformulated.

As part of the Operational Excellence Agenda, the IDB is developing and piloting a comprehensive portfolio management model that supports tracking factors that affect project performance and taking timely corrective actions where necessary to foster results delivery. The first part of this comprehensive portfolio management model is at the project level. Project implementation and supervision must be adequately integrated to ensure that their respective objectives are achieved effectively and efficiently. While sound project design is a necessary condition for effectiveness, even a well-designed project might face challenges in achieving its results if it is not properly implemented. In fact, a recent IDB study noted that three key elements in project success are project start-up speed, implementation performance, and supervision efforts. Early efforts to smooth the transition from design to implementation can support strong initial performance. In addition, ensuring that executing agencies have the necessary capacity in each area relevant to project implementation, including monitoring and evaluation, is critical.[34] Supervision, if accompanied by effective corrective actions, may help put the project back on track when the achievement of results is compromised.

During each phase of project implementation, the Operational Excellence Agenda contemplates an enhanced focus on results. In the start-up phase, the activities that take place between approval and first disbursement will be streamlined to make better use of the time available. During this phase, the Bank and the Executing Agency will hold a series of follow-up meetings culminating with the startup meeting to ensure that the project design is still valid or, if necessary, to address the changes that might have occurred since approval to have consistent development objectives. During implementation, after the start-up period, the project will continue providing updates on execution through the PMR. Once the operation has reached its midpoint, the Bank and the Executing Agency will conduct a mid-term review to assess the status of the project, identify any departures from what was planned, and confirm the validity of its vertical logic and the likelihood of achieving results.

[33] The use of remote sensing data and other sources of high frequency low cost data offers great potential in this regard.
[34] The Bank has several ongoing and renewed efforts focused on capacity building for executing units, which include training opportunities through BID Academy, such as the Project Management for Results Program.

In both start-up and implementation, the validity of the vertical logic becomes critical to ensure that, given its start-up or implementation status, the operation is on the right path to achieve the expected results. In this sense, modifications and reformulations are important if changes are needed. However, it is necessary to ensure that changes to the project's vertical logic and expected objectives are reflected consistently in the project results matrix. Finally, during the project completion phase, the Bank will work with the client to carry out a pre-closing review, gathering all the inputs necessary for the PCR. The final step after project completion will continue to be the independent validation of the PCR by OVE, which ensures accountability and transparency.

Strategic Management and Oversight

The second level of the IDB's comprehensive portfolio management model is the country portfolio level. At the country level the model relies on two country-level reviews each year. These will be informed by an early warning system that provides alerts about institutional priorities, design quality, delays, performance, environmental and social policies, cancellation of resources, and the extension of implementation periods. The proposed early warning system would help the Bank monitor operations, make timely decisions, and improve performance.[35]

The first semester portfolio review covers all projects to ensure adequate progress and take remedial action where needed. Taking into consideration the effect of project implementation on the expected development objectives, any request for cancellation of resources, modifications, reformulations, or adjustments in the supervision plan will be examined and authorized. Operations pending eligibility will also be reviewed, and the closing of projects will be adequately monitored. Agreements reached will be registered and monitored until their fulfillment. The second semester portfolio review will target a subset of operations, consisting of those identified as a priority within the portfolio. As in the first meeting, agreements will be registered and monitored until their fulfillment.

Comprehensive portfolio management monitoring is expected to be a continuous process to ensure that the progress of operations is regularly monitored, and that any deviations are analyzed and acted upon in a timely manner. The lessons learned from piloting the comprehensive portfolio management model in 2022 will be used to refine the model before it is fully institutionalized.

[35] Progress has already been made in establishing indicators for this early warning system to identify projects that are at risk of not achieving expected results (e.g., those that have been classified as alert or problem for three or more years, those that have canceled more than 20 percent of approved resources, those with delays in reaching effectiveness and eligibility for disbursements). Based on these early warning indicators, the Bank will identify operations in the active portfolio that may be at risk of not achieving their results and would assess the potential impact of these warning signs to develop action plans to improve performance where needed.

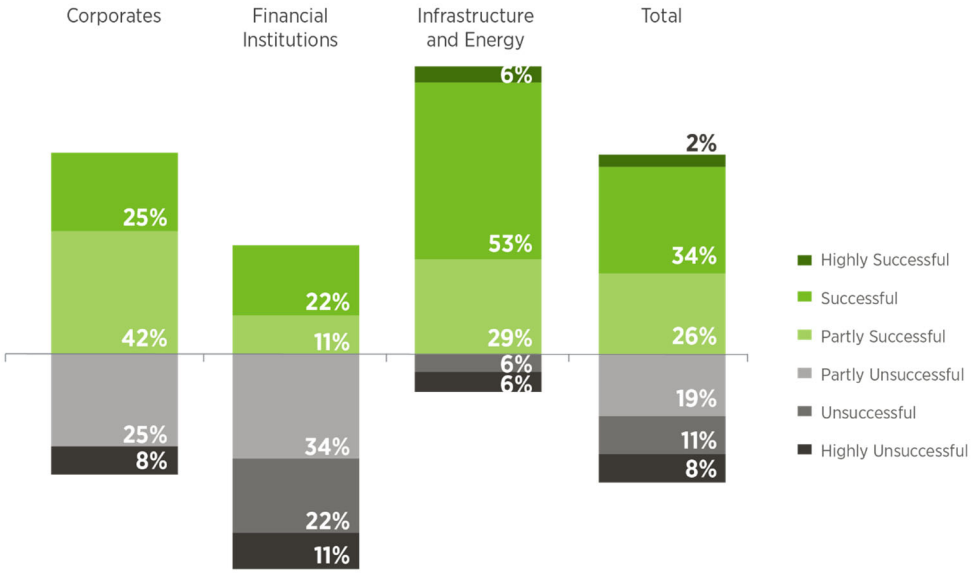
IDB Invest Expanded Supervision Reports

Summary of XSR Results 2021

In 2021, IDB Invest prepared 47 XSRs covering 55 operations. By segment, the sample included 12 XSRs for operations with corporates,[36] 17 for infrastructure and energy, and 18 for financial institutions (FI).[37] The results validated by OVE indicate that 62 percent of XSRs were positively rated,[38] with the highest share in the infrastructure and energy segment (88 percent), followed by corporates (67 percent) and FIs (33 percent) (see Figure 3.4). The effectiveness rating, which looks at the achievement of an operation's objectives and constitutes one of the main drivers of the overall project outcome, was positive for 51 percent of the sample.

These results highlight the relatively low performance of the FI portfolio, where a larger share of operations was rated Unsuccessful or Highly Unsuccessful (33 percent) when compared to the total sample (19 percent). To dig deeper into these results, IDB Invest carried out an analysis of the FI portfolio, both during supervision and at final evaluation, aiming to generate lessons to enhance project design and better understand the drivers of project performance and the sensitivity of the FI portfolio to exogenous shocks and macroeconomic conditions (see the Lessons from Evaluation section below for an in-depth discussion).

Figure 3.4 Summary of XSR Results, 2021



[36] The corporate segment refers to loans to agribusiness, manufacturing, telecommunications, and tourism companies.
[37] Looking at the project distribution, the sample was composed of: Corporates 27.3% (15); FIs 36.4% (20); and Infrastructure and Energy (INE) 36.4% (20).
[38] The Overall Project Outcome is considered "positive" when the rating is Highly Successful, Successful or Partly Successful, and "negative" when the rating is Partly Unsuccessful, Unsuccessful or Highly Unsuccessful.

Drivers of Project Performance and the Impacts of COVID-19

Several trends have emerged about the drivers of performance among operations evaluated in 2021. To start, IDB Invest has continued to strengthen its position in the infrastructure and energy sector through renewable energy projects. This success has mainly been driven by the strong capacity of operations in this area to achieve both development and financial goals. Other factors include the selection of the right partners, strong business models supported by long-term purchase agreements, and conducive regulatory frameworks.

For the corporate segment, partnering with companies with strong corporate capacity and explicit commitment to development goals was essential to achieving outcomes. For instance, although several operations faced adverse external conditions, clients with full vertical integration, deep market penetration, and strong alignment between financial, social, and environmental objectives were better equipped to maintain their business strategies and commitment to achieving development goals, performing better than those without these characteristics.

Regarding FIs, although partner banks have strategies to develop or grow specific credit lines for segments aligned with IDB Invest's interests (e.g., green lines, low-income housing, SMEs), when faced with a shock or volatile macroeconomic environment, the allocation of resources to such portfolios is at higher risk of being affected. For FI operations that were evaluated in this cycle, a series of negative shocks that affected multiple countries in the region even before the pandemic started, pushed banks to review their portfolio allocation. Although the shifts in strategy could be temporary and the target portfolio may recover over time, the timing of the evaluation for this cohort of FIs fell in what is probably one of the lowest points of a highly volatile trend. For instance, countries such as Chile and Argentina have continued to experience the effects of pre-pandemic economic crises and social unrest, on top of the most recent COVID-19 effects. Some of the FIs with positive performance were highly specialized small banks and non-bank financial institutions that focus on reaching underserved segments. This may be due to their deep expertise and experience serving these portfolios or the higher costs they confront to reallocate resources or make substantial changes to their strategy.

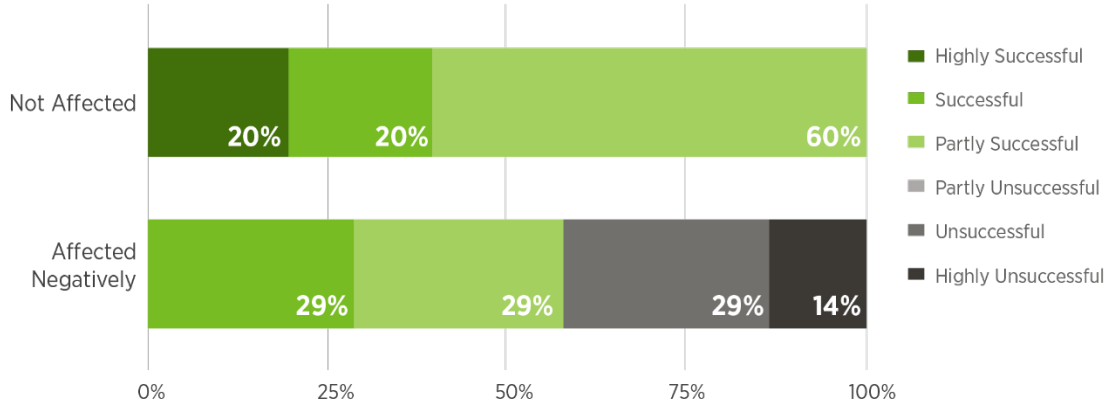
It is worth noting that while several FI operations did not achieve their targets, the targeted portfolios of multiple banks showed more resiliency when compared to peers or to the performance of the broader financial system. In addition, banks have played an important role during the recent health crisis to channel resources to populations most in need. Overall, evaluation results confirm how sensitive FI operations are to external conditions, signaling that there is room to reinforce the benchmarking of results against market trends in the evaluation, as well as enhance focus on the yearly results monitoring process to gain a more contextualized understanding of their overall performance. In addition, it is important to keep in mind that a negative rating does not necessarily mean that an operation had no development impact. For a deeper analysis, see the Lessons from Evaluation section.

The 2021 XSR sample is the first to include operations affected by the COVID-19 pandemic. Out of the 47 XSRs, 30 (64 percent) concern operations that have been impacted in some way by COVID, mainly in terms of negative effects on their financial performance following the overall pandemic-induced deterioration of macroeconomic conditions.[39] Uncertain economic conditions also affected operations in terms of the volume of credit provided to SMEs and delayed social housing construction. Decreased market demand was also a contributing factor, particularly in the first year of the crisis. However, the Overall Project Outcome rating was directly influenced by COVID in only 10 percent (3) of these cases. These operations were affected by COVID-specific issues such as disruptions in international trade, flight cancellations in the case of airport terminals, and lockdowns. In general, operations with negative ratings were already underperforming prior to the pandemic; the crisis simply amplified their deterioration.[40]

In contrast, the remaining 17 XSRs did not report significant COVID effects; more than half were infrastructure and energy projects (58 percent) followed by corporates (24 percent) and FIs (18 percent). The XSRs indicate that demand for energy and infrastructure services was the least affected by the pandemic given the vital nature of this sector for the economy. They also show that FI and corporate operations with adequate provisioning and the capability to provide online services were able to navigate the short-term effects of the crisis. In that sense, the portfolio mimics the dynamics observed overall during the pandemic in terms of the prioritization of essential activities and the pivot to digital services.

To gain deeper insight into how the pandemic has affected clients, IDB Invest carried out a survey in 2021 and 2022 (Figure 3.5). Client responses[41] regarding COVID effects coincide with XSR ratings for their operations: among clients who said they were negatively affected, 43 percent of their operations had negative XSR ratings, while there were no negative ratings among clients who indicated that they were not affected by the pandemic.

Figure 3.5 XSR Ratings and COVID Effects Reported by IDB Invest Clients



Note that figures may not add to 100 percent due to rounding.

[39] This is especially true for operations in Mexico and Costa Rica, which comprise 43% of operations affected by COVID in this XSR cycle.
[40] This was the case mostly for FI operations; the portfolio performance of at least in 5 FI operations worsened following the pandemic.
[41] Sample size is limited to 13 client responses.

Finally, leveraging its enhanced analytics capacity and automation of development impact information throughout the operation lifecycle, IDB Invest continued to conduct in-depth analyses in 2021 to better understand the drivers of performance at completion. These analyses also help illuminate how the end-to-end tools that make up IDB Invest's Impact Management Framework work to predict operation success. An analysis of the sample of XSRs validated from 2016-2021 confirms that the updated DELTA score, and particularly the supervision classification rating, are the strongest predictors of success at completion. The fact that supervision tools can predict performance at maturity is relevant from a portfolio management perspective as it underscores the important role that data captured during supervision plays in IDB Invest's capacity to continuously report on portfolio performance, without having to wait until the final evaluation stage. In addition, the fact that the DELTA score at approval is not significantly correlated with final evaluation results confirms that success is measured relative to expectations and that ex-ante assessments are not being overly positive.

Lessons from Evaluation

Every year the evaluation cycle varies in size and composition, offering new opportunities for learning and continuous improvement. Four key lessons have emerged from the 2021 cycle related to (1) continually assessing the evolution of FI operations; (2) clarifying assumptions in the economic analysis; (3) establishing clear XSR selection criteria; and (4) considering different evaluation criteria for new types of operations.

Continuous monitoring to better assess the evolution of FI operations

For infrastructure or CapEx corporate projects, specific investments are identified at approval and planned over a period of time. However, operations with FIs are less clear cut. While banks have strategies to allocate their resources in the short-term, by nature they have more flexibility to adapt plans as needed, by shifting the allocation of resources towards certain portfolios based on business strategies and in response to external forces such as macroeconomic conditions, consumer demand, changes in fiscal policies, and sudden shocks such as COVID, among others.

By design, an operation's XSR rating is closely tied to the progression of certain indicators towards predefined targets over a set period of time. For FIs, the outstanding value of the relevant portfolio is typically compared against the target set for the last year to be observed before final evaluation. This before and after assessment may end up overlooking the dynamic evolution of the bank's portfolio and makes the XSR rating highly dependent on the moment when the final evaluation is conducted. That is why working with FIs requires a deeper analysis of how their strategies evolve over the life of the loan, taking into account their long- and short-term commitments and differentiating between temporary and permanent strategic adjustments.

It is also important to understand how a bank's performance benchmarks against trends observed for the financial system at large, as described below. To this end, during supervision IDB Invest is focusing on better understanding each bank within its national context, as well as its evolving portfolio allocations in order to enhance achievement of each operation's development objectives (see supervision discussion in Chapter 2).

An analysis of FI operations evaluated in 2020 and 2021 confirms the importance of conducting benchmarking exercises to control for the external volatility that affects banks' operations. While building these counterfactual scenarios can be challenging, and this is not intended to be a one-size-fits-all approach, an approximation is to look at the performance of credit provided to the private sector in the financial system where the operation takes place and, when available, the amount of credit provided in the country to the operation's targeted segment. To the extent possible, it is important to compare banks with similar entities and conduct interviews with clients to better understand their performance and how markets affected their specific operations.

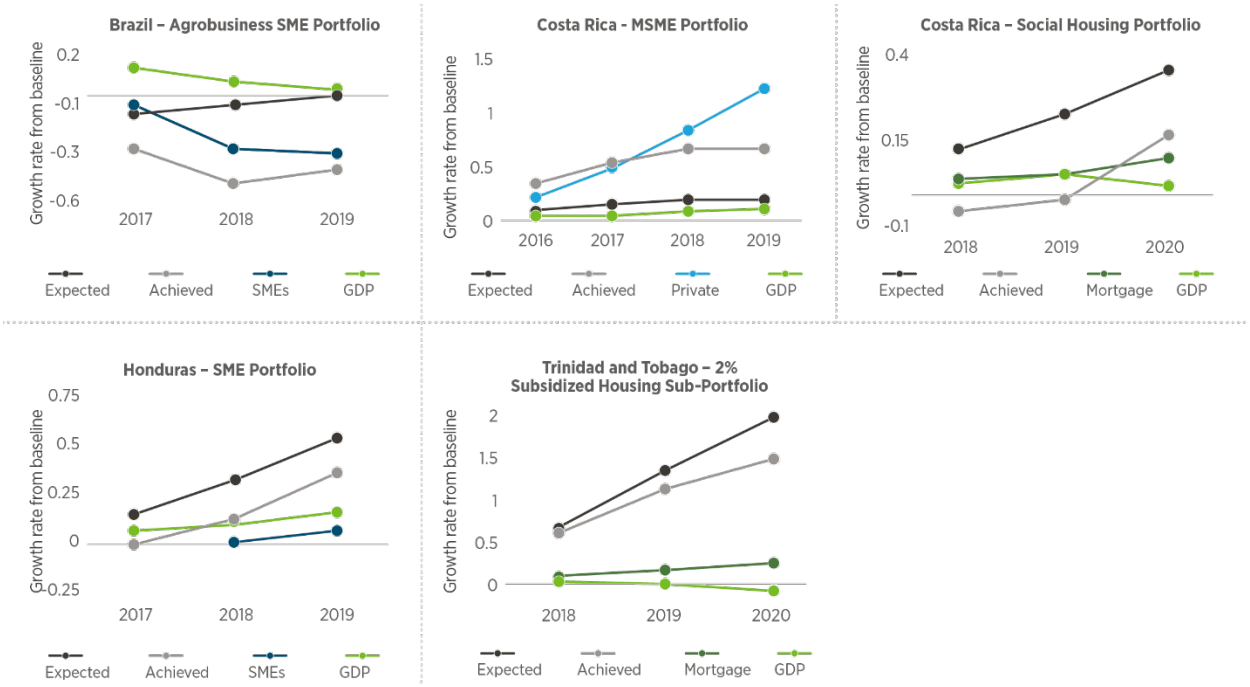
Figure 3.6 compares the growth trends of expected targeted portfolios and the actual values achieved, as well as trends for the broader financial system and gross domestic product (GDP). The analysis includes operations where some objectives were rated as Partly Unsatisfactory. As expected, the data shows that the actual portfolio values achieved for these operations were below targets. However, two key insights emerge when actual performance is compared against the financial system benchmark and GDP growth. First, credit and economic growth are correlated; credit system trends closely follow GDP trends, consistent with existing external evidence.[42] Second, the performance of evaluated operations was in line with the benchmark and, in multiple cases, outperformed the financial system. This last observation is particularly relevant; in the context of a crisis or economic deceleration, a portfolio performing in line with the financial system or outperforming it should be an indication of resilience. In particular, for FIs that outperform the system, this is a solid indication that the FI did not simply follow the market trend, but made an effort to keep serving the intended beneficiaries.

It is important to mention that while several FI operations that were rated negatively failed to achieve targets, some have delivered positive benefits that are not reflected in the final rating. For example, a mortgage finance company in Trinidad and Tobago did not grow its total housing portfolio as expected, but it did manage to more than double its outstanding mortgage loans in its 2 percent subsidized portfolio targeting lower-income segments, and increase the total number of loans in this portfolio by more than 2,000 between 2017 and 2020. Likewise, a bank in Brazil surpassed targets related to the growth in its outstanding women-led MSME portfolio and increased the number of women-led MSME clients by 17,000 between 2017 and 2019; however, since another outcome indicator related to the number of loans to women-led MSMEs was below target, the operation was rated negatively.

[42] See for example Behr et al. (2017) and Altar et al. (2021).

In general, while some operations with FIs may fail to achieve objectives, the analysis presented here suggests that the adoption of a deeper counterfactual perspective when evaluating FI operations can provide a more accurate view of their performance. Likewise, the timing of the final evaluation is critical, particularly for operations that were exposed to major exogenous shocks, both positive and negative, and for which impacts are expected to be temporary. The possibility of postponing final evaluation dates to observe the operation's performance in more stable external conditions should also be considered. Finally, and most importantly, to have a better sense of how volatility affects the performance of FI operations and provide timely technical support as needed, greater emphasis should be placed on a continuous monitoring approach based on the yearly supervision exercise.

Figure 3.6 Financial Institutions: XSR Performance and Benchmarking



Source: Source: GDP data extracted from ECLAC Statistics; Credit data at the system level extracted from the Central Bank of Brazil, the Central Bank of Costa Rica, Honduras NCBI and the Central Bank of Trinidad and Tobago.

Note: Only partly unsatisfactory outcome indicators were included in Figure 3.7. Each operation's target portfolio is compared against the relevant system portfolio in its country, based on available data. For example, housing portfolios are compared to data on credit for mortgages at the country level. When data for the target portfolio is not available at the system level, the portfolio of commercial credit or credit to the private sector is used as a benchmark.

Strengthening the economic analysis by using the appropriate type of data and amount of assumptions

Quantifying the costs and benefits of an operation for the economy and society (i.e., the economic and social rate of return (ERR)) is at the core of how IDB Invest assesses investments both at approval and final evaluation. While assigning a monetary value to these costs and benefits facilitates decision-making and comparisons across investments, this analysis also

relies on various assumptions and evaluator decisions. While there is broad consensus around some approaches and assumptions in the evaluation world, others are more complex and open for debate and may require clearer guidance.

In general, the preparation of an economic analysis involves a trade-off between monetizing as many elements as possible versus limiting the number of assumptions to avoid potentially confusing the results. Some cases of this potential trade-off emerged during this year's review.

One case related to renewable energy projects when the government is the energy buyer. When estimating the ERR, the difference in price between the long-term power purchase agreement (PPA) established for the renewable energy produced by the project and what the government would pay in the absence of the project will result in either a cost or benefit for society. The spot or market price is sometimes used to construct this counterfactual scenario. However, whether this price appropriately reflects the long-term price of energy in the relevant wholesale market is still an open debate; including it in the analysis implies additional assumptions and data. Using a sample of the energy projects in the 2021 XSR cycle, IDB Invest did a sensitivity analysis with and without the spot price as a proxy. The data showed that the XSR ratings were marginally affected in most cases.

Another example related to whether to include foregone taxes to the government in cases where the production of a value-added product could displace exports of raw materials. Evaluators and validators had several technical discussions to agree on the best approach to conduct this analysis, which required certain assumptions and data on prices of raw and processed products and export tariff rates. The results confirmed that including the tax differential did not make a substantial difference in the conclusions.

To continue improving the quality and standardization of economic analysis calculations, IDB Invest has been actively collaborating with OVE to align criteria and develop economic analysis guidelines for project teams to use during both structuring and final evaluation.

Effectively collecting data for prepaid and repaid operations and establishing clear selection criteria for operations to be included in each XSR cycle

In 2021, IDB Invest analyzed a sample of 27 repaid and prepaid operations that reached Early Operating Maturity (EOM)[43] from 2016-2019 but did not have an XSR prepared before they left the portfolio. Preliminary findings from this exercise show that clients who prepaid their loans did so for various reasons, including adverse financial conditions and accessing other sources of finance. In addition, the lack of a formalized process to assess operations that were going to be pre/repaid affected IDB Invest's ability to collect impact data from clients before

[43] Following the Good Practice Standards, Early Operating Maturity (EOM) is defined as the earliest date when a loan has been fully disbursed, the project has been implemented, and it has started having development impact. An XSR is prepared one year after reaching EOM (e.g., projects that achieved EOM in 2020 had their XSR prepared in 2021).

they left the portfolio. Finally, prepayment and repayment dates were not automatically flagged in the system, which increased the risk of missing these operations in the pool of XSRs designated for each cycle.

Based on these findings, IDB Invest now has an automatic notification system for pre/repayments, which ensures impact data is collected before the client leaves the portfolio. It has also automated the calculation of EOM dates for the entire portfolio and shared this information with OVE to ensure coordination in identifying the XSR pipeline.

New types of operations may require tailored evaluation criteria

IDB Invest has a growing portfolio of Reverse Factoring (RF) operations aimed at providing liquidity to MSMEs in value chains. Since anchor companies generally take several days to pay their suppliers, suppliers in need of liquidity can sell their invoices to a financial institution (FI) at a discount (equivalent to an interest rate for a loan). RF allows the anchor company to confirm to the FI that invoices are real to lower the discount rates.

In 2021, IDB Invest conducted the first two evaluations of RF operations. As part of this process, and in collaboration with OVE, specific evaluation guidelines were created. The results of these two evaluations provided positive ratings and valuable lessons learned. First, providing technical assistance to clients is key to help them capture more granular data on the characteristics of MSMEs in their supply chain to better understand who benefits from RF lines. Second, as RF lines are relatively new instruments, they are still unfamiliar to suppliers and have a longer ramp-up period. This means it takes longer to disburse these funds, given that MSMEs need to first register in discounting platforms and then decide to use them. With this in mind, and considering that RF products are highly standardized, it may be more appropriate to differentiate them from FI operations by evaluating them at a more mature stage and exploring the possibility of evaluating these transactions as a program rather than individually. Finally, to increase uptake of these funds, further analysis is needed to identify any structural or behavioral barriers that may prevent MSMEs from participating in RF and explore what types of strategies are best-suited for increasing their usage and impact.

To better understand the impact of RF products, IDB Invest is launching an in-depth evaluation that will assess some of the topics discussed above, among others, and collect microdata from MSMEs to measure impacts.

IDB Lab

IDB Lab tracks and reports on the results of projects as part of its annual report on key performance indicators. At the project level, upon project completion, IDB Lab documents cumulative results of each grant operation in the final edition of its Project Supervision Report.[44] In 2021, 34 IDB Lab projects were completed.

According to its key performance indicator review, in 2021 IDB Lab-supported projects created roughly 132,000 jobs, 46 percent of which were supported through intermediary entities with expertise in specific sectors, such as funds, accelerators, incubators, and company builders. Additionally, over 440,000 households improved living conditions, many through improved access to water and sanitation. Similarly, for the first time, IDB Lab measured the number of people with improved access to essential services, especially health and education, reaching 8.3 million people in 2021. Underscoring the role of technology in enhancing access to quality services, about six million of these people had access to telemedicine services provided by an IDB Lab-financed project in Colombia (CO-T1483), of which nearly 285,000 used them in 2021. Surpassing pre-pandemic levels, IDB Lab projects also benefited approximately 102,000 companies, half of which are women-led. About 94,000 of these firms improved their productivity or business performance (e.g., increased sales, profitability, return on capital).

In addition, one of IDB Lab's key measures of success is the extent to which the innovations it supports are replicated or scaled up by the IDB Group or others. Projects can either be scaled through growth, which is when the company or client is able to expand the scale of its own business, or through third-party scaling, which is when IDB Lab supported businesses or innovations are adopted by other private sector actors or by governments in the form of public policy.

In 2021, IDB Lab implemented a more rigorous methodology for estimating scale by having supervision team leaders validate client responses from the annual impact survey. Of projects completed in 2021, 32 percent were replicated or scaled (compared to 35 percent in 2020), surpassing IDB Lab's 20 percent target for the fourth consecutive year. Notably, of the projects that were scaled, 18 percent were massively scaled,[45] up from only 5 percent in 2020, greatly expanding the benefits generated by projects beyond their original scope. The following three examples highlight different paths to scale recently taken by IDB Lab-supported funds, projects, and enterprises.

IDB Lab is one of the main investors in venture capital funds in the region. It often supports first-time fund managers in early-stage ecosystems that may go on to have several

[44] OVE does not conduct annual validations of IDB Lab operations. Rather, a sample of IDB Lab projects have been reviewed by OVE in the context of corporate evaluations of IDB Lab by OVE. The third OVE evaluation of IDB Lab was completed in 2021.
[45] Massive scale refers to projects with a +500% growth in clients or that have reached 5 times more users than were reached under the original IDB Lab project (5X).

rounds and attract more investors, including IDB Invest and others. For example, in 2021 IDB Lab concluded the execution of the Central American Small Enterprise Investment Fund (CASEIF II), the second in a franchise of funds that invested in SMEs in Central America, one of the regions in Latin America and the Caribbean with the lowest penetration of SME finance. The fund's General Partner, LAFISE Investment Management has led four rounds of SME funds, through CASEIF I (2000), CASEIF II (2006), CASEIF III (2015), and CASEIF IV (2020). These funds, the first-of-their-kind in Central America, targeted SMEs with growth potential, mostly through debt financing. IDB Lab took the lead as a limited partner in the first two funds (TC9810351; RG-Q0004), along with other early investors such as the Nordic Development Fund and Norfund. The two more recent private equity/growth stage funds were scaled up with investments by IDB Invest (for CASEIF IV; 13320-01), the International Finance Corporation and others. CASEIF I-III, which have mostly concluded their investment periods, raised $88 million, financing 33 SMEs, the majority of which are exporters in sectors such as agriculture that have since expanded regionally. In turn, these companies have created approximately 15,000 direct and indirect jobs, 40 percent of which are occupied by women. As the funds have evolved, the fund manager has increasingly focused on promoting gender equality both among investee companies and within the management firm itself and will further strengthen its capacity with the advisory support of IDB Invest as part of the $69 million CASEIF IV, which is still in the investment stage. Notably, in 2022, CASEIF IV became the first Flagship Fund under the 2X Challenge[46] in Latin America and the Caribbean, with a commitment to adopting a gender lens investing approach and empowering women in at least 30 percent of investee companies.

Another example of scaling innovation can be seen in the evolution of IDB Lab's pioneering work developing the Social Impact Bond (SIB)[47] ecosystem in Colombia in close partnership with the Swiss State Secretariat for Economic Affairs (SECO), the Department of Social Prosperity of Colombia, and Fundación Corona. The SIBs.CO program (CO-T1434) was launched in 2016 aiming to improve employment outcomes for vulnerable populations and build knowledge and capacity through the design and implementation of innovative pay-for-results models. Through this program, Colombia became the first developing country in the world to launch a SIB in 2017 (*Empleando Futuro*) with three impact investors assuming the financial risk of the project. The results showed the success of the model at the national level: nearly 900 people were placed in formal jobs, 85 percent of whom remained employed after three months. Similarly, the second SIB (*Cali Progresa con Empleo*) was also successful in terms of job placement and permanence, and this time included six impact investors.

Driven by this evidence that it was indeed possible to achieve both financial and social returns at the same time, and to facilitate the contracting and expansion of pay-for-results models, in 2019, the program introduced an international best practice by creating an

[46] The 2X Challenge is a multilateral initiative with the objective of mobilizing resources towards women's economic empowerment. It provides a set of aligned metrics designed to help financiers identify and manage the gendered impacts of their investments.
[47] As defined by Social Finance, SIBs are unique public-private partnerships that fund effective social services through performance-based contracts. Impact investors provide the capital to scale the work of high-quality service providers. Government repays those investors if and when the project achieves outcomes that generate public value and are verified by a third-party expert. In the Colombian case, IDB Lab, with SECO funds, was the copayer with the Colombian government. In the 4 SIBs to date, 16 impact investors have provided the upfront capital to 8 service providers; 3 intermediaries have signed contracts with the government to coordinate each SIB implementation. Instiglio has been the international technical advisor for SIBs.CO.

Outcomes Fund within the Colombian government, the first of its kind in Latin America and the Caribbean. The country's third and fourth SIBs (underway as of mid-2022) were launched through this Fund. The Department of Social Prosperity also used this new vehicle to launch two Outcomes Contracts paid for with public funds to improve jobs for vulnerable populations during the pandemic, thereby mainstreaming outcomes payments within public employment programs, the most sustainable avenue for scale. Additionally, SIBs.CO has supported the City of Bogotá to deploy its own pay-for-results model to increase the formal employment of approximately 12,000 vulnerable women and youth, the biggest initiative to date in Colombia. Finally, in December 2021 SIBs.CO reached a major milestone: the incorporation of both SIBs and the Outcomes Fund into public policy,[48] ensuring a dedicated stream of public resources for these efforts in the future across administrations. Beyond Colombia, this experience has informed the design of new pay-for-results models in other counties and sectors such as the Haiti Impact Facility (HA-T1295) approved in 2021 and two IDB Lab projects related to education in El Salvador and Honduras currently being designed. (For more information, see this case study, evaluation, and lessons learned paper).

Finally, an impact-driven company supported by IDB Lab has also achieved impressive scale while addressing the top cause of death in Mexico: diabetes. Founded in 2011, Clínicas del Azúcar provides high-quality yet affordable diabetes and hypertension care to low-income Mexicans. Its disruptive one-stop-shop model, that combines state-of-the-art technologies with convenience, affordable prices, and pay-as-you-go memberships, has made it the largest private provider of specialized diabetes care in the country, operating 27 clinics in 12 states as of end-2021. It also launched a virtual clinic in 2021, a digital pivot that propelled even greater scale: the number of clients served reached 204,000 in 2021 an increase of 34 percent from 2020, 64 percent of whom had their blood sugar under control within six months, a much higher rate than the country's public programs. The resulting prevention of complications has saved patients and society an estimated $575 million. An impact evaluation found similarly large health effects, with blood sugar control increasing by more than two-thirds among diabetics in the sample. The company continues to push for greater health returns as it expands, increasing the use of artificial intelligence and behavioral science to proactively identify patients at risk of dropping-off diabetes treatments. IDB Lab has been supporting Clínicas del Azúcar along its growth trajectory, starting with a grant project in 2016 co-financed with the Swiss Agency for Development and Cooperation (ME-T1314; ME-G1013) to implement a Social Impact Incentives model (see 2021 case study), followed by a loan in 2018 (ME-L1286) to support the company's expansion.

[48] CONPES. Estrategia para fortalecer el uso de los mecanismos de pago por resultados en programas sociales y declaración de importancia estratégica del proyecto fortalecimiento de la gestión de oferta para la superación de la pobreza FIP a nivel nacional.

CHAPTER 4

Lessons on Building Climate Change Resilience and Managing Disaster Risk

Introduction

Partnering with countries to maximize development effectiveness requires a deep understanding of the factors, approaches, and strategies that drive the intended results as well as those factors that may hinder results achievement. It further requires incorporating this understanding into planning and project development. The IDB Group analyzes such factors as part of the development of its country strategies, sector frameworks, and projects to ensure that new efforts take advantage of lessons from the past. In addition, as discussed in Chapters 2 and 3, lessons from active and completed projects are documented on an ongoing basis to build the knowledge base of what works and what does not in addressing the region's evolving development needs. In this way, the knowledge can be used to inform future investments and policymaking in the region. In many cases, impact evaluations are used to measure project effects rigorously and assess whether observed outcomes are attributable to a specific development intervention.

In this year's DEO we draw on these many sources of learning to take a deeper look at lessons regarding building resilience, adapting to climate change, and effectively managing disaster risks. Climate resilience refers to the capacity to adequately address risks posed by climate, which includes anticipating, preparing for, responding to, and recovering from such threats with minimal damage to social well-being, the economy, and the environment. Climate adaptation is the process through which systems evolve to become resilient. This topic was chosen because of its critical relevance for Latin America and the Caribbean, one of the most affected regions in the world in terms of climate change impacts. The region is highly susceptible to natural disasters—such as hurricanes, landslides, and droughts—which are becoming more frequent and intense due to climate change. Yet the region has one of the largest adaptation finance gaps, with an estimated $14–18 billion in additional funds needed per year to respond to and prevent continued losses from climate impacts (World Bank, 2019). At the same time, it has become clearer than ever that the risks and impacts of climate change are deeply interconnected to many aspects of social and economic life. Without robust action on climate change, the region may reverse hard won development gains in other areas, while also missing out on the opportunities that decarbonization can bring to economies and societies.

Therefore, adapting to this reality based on the needs of different geographies and sectors will be critical to the region's future prosperity and has been a growing focus of IDB Group support.[49] It is becoming increasingly clear that considering climate change is a matter of overall development effectiveness and is critical to ensure the long-term sustainability of investments. That is, the effective and efficient use of development resources requires integration of climate considerations at all stages of project planning.

[49] In addition to the commitments made as part of the Environmental and Social Policy Framework (ESPF) regarding building disaster and climate change resilience, minimizing greenhouse gas (GHG) emissions, and implementing decarbonization pathways in the region, the IDB Group has an aspirational commitment to align its new operations to the objectives of the Paris Agreement starting in 2023 as well as an ongoing commitment to reach 30 percent climate financing in new IDB Group approvals each year.

Scope

The lessons learned summarized in this chapter are based on IDB Group work supporting climate change adaptation and disaster risk management across a range of interventions. They are not meant to be comprehensive, but rather illustrate recurrent lessons found in diverse countries and clients throughout the region. Links to many of the studies and reports from which the lessons have been drawn are included throughout the chapter and Box 4.2 provides a list of additional resources with further insights related to this topic.

Lessons were compiled from a range of sources including final evaluations of projects completed from 2015 to 2021, projects currently in execution, impact evaluations from projects in sectors such as agriculture, transportation, and financial services as well as IDB Invest advisory and risk management work with private sector clients. In total, the review covered more than 80 projects approved between 2008 and 2022 across the IDB Group as well as non-project-based learning.[50]

Lesson 1: It is essential to embed resilience considerations in the operations of governments, the financial system, and private enterprise

With the increasing impact of disasters, as well as the higher frequency and intensity of climate-related hazards, countries and clients in the region are conscious of the need to further invest in prevention, and to better prepare and protect themselves against future disasters. For both the private and public sectors, it is important to embed climate change adaptation and disaster risk management into institutional planning, strategy, and budgetary frameworks. These structural changes foster the sustainability of support for resilience.

A strong governance framework can save lives and support the reduction of economic losses from disasters. Countries with strong regulatory frameworks, institutional arrangements, and budget instruments for disaster and climate change risk management show the best performance in reducing human and economic losses from disasters. Empirical evidence compiled by the IDB indicates that improvements in risk governance of 1 percent, measured through the Index of Governance and Public Policy in Disaster Risk Management (iGOPP),[51] are associated with an average reduction of 3 percent in human casualties caused by disasters and of 6 percent in economic losses.[52] IDB support for Peru in strengthening its

[50] Specific lessons and project examples were identified in collaboration with a range of IDB Group business units and technical experts. Many of the lessons were identified via the IDB Group's FindIt tool, which is an artificial intelligence search engine that provides consolidated access to different sources of knowledge, including lessons from impact evaluations, PMRs, PCRs, technical cooperation operations, and other sources.
[51] The iGOPP is an Index designed to evaluate the provable existence of a series of legal, institutional, and budgetary conditions considered fundamental for the processes of Disaster Risk Management to be implemented in a country (Lacambra et.al, 2015) https://publications.iadb.org/es/igopp-indice-de-gobernabilidad-y-de-politicas-publicas-en-gestion-de-riesgo-de-desastre
[52] These findings come from Guerrero R. y Lacambra S. (2020). Disasters and Loss of Life: New Evidence on the Effect of Disaster Risk Management Governance in Latin America and the Caribbean. IDB Working Paper Series;

governance framework to reduce vulnerability to disasters allowed the country to implement a comprehensive financial risk management strategy that combined specific investments in resilience with the adoption and adaptation of financial protection mechanisms. Specifically, Peru created a Strategic Budget Program for Risk Reduction that increased the investments made by the central government, regions and municipalities in risk reduction by more than 1,000 percent in just three years. In addition, it strengthened the Fiscal Stabilization Fund to be able to respond to disasters, signed contingent lines with several multilateral banks, including the IDB, and participated in a catastrophic bond within the Pacific Alliance framework. For more information, see the PCR for PE-L1086, PE-L1104, and PE-L1138.

Flexible financing tools set up before disaster strikes can help address climate-related emergencies and shocks at a range of levels. The IDB's Contingent Credit Facility for Natural Disaster Emergencies (CCF) offers countries contingent loans that are prepared in advance but are disbursed after a severe or catastrophic natural disaster occurs to cover unexpected public expenses arising from the emergency.[53] By having this ex-ante arrangement in place, countries can respond to natural disasters more efficiently. For example, when Hurricane Dorian struck The Bahamas in 2019, the contingent loan (BH-O0003 – BH-L1049) disbursed $80 million. Within days, the Bank made the first disbursement to alleviate the impact of this devastating disaster, supporting government efforts to provide humanitarian relief and restore basic services for the affected population.[54] As of June 30, 2022, the CCF is providing active coverage to 15 countries for more than $3.2 billion to cover earthquakes, hurricanes, floods, wildfires, health risks, and other disasters. At a sector level, IDB Invest has found that flexible financing tools can help address the impacts of climate change on agriculture. One of the lessons gleaned from a review of final evaluations of IDB Invest agribusiness projects (for more see Chapter 4 of the 2019 DEO) focuses on the need to design more flexible loan structures and financial covenants to respond to the cyclicality and volatility of agricultural markets due to climate shocks. To this end, IDB Invest has included a "climate events clause" in four transactions to date in Argentina and Peru, which allows clients to reschedule one-year capital payments if a climate event has had adverse effects on their ability to pay. This is a prime example of a loan structure with added flexibility, that reflects the unique characteristics of agricultural production.

When building the climate risk capacity of private sector organizations, it is typically more feasible to integrate a climate risk lens into existing processes. This can take the form of incorporating physical impacts that could be exacerbated by climate change (e.g., water scarcity, heatwaves, flooding) into the client's environmental and social risk matrix. It may also mean updating existing emergency and response plans to incorporate acute hazards that may become more severe or likely due to climate change. To this end, IDB Invest is increasingly

1126.https://publications.iadb.org/en/disasters-and-loss-life-new-evidence-effect-disaster-risk-management-governance-latin-america-and and Guerrero R. y Lacambra S. (2022). Disasters and Economic Losses: The Effect of Disaster Risk Management Governance in Latin America and the Caribbean (forthcoming).

[53] Proceeds from CCF Loans are used to cover extraordinary government expenditures incurred six months after the disaster, such as emergency sanitation equipment, medications and vaccines, temporary shelter, water and food for displaced populations, among other costs. In 2020, the risks covered under the CCF were expanded to include public health risks and COVID-19.

[54] Hurricane Dorian was among the most devastating natural disasters ever to hit The Bahamas, with estimated damages and losses equal to nearly a quarter of the country's GDP. For more information, click here.

asking clients across sectors, from infrastructure to agriculture, to update their environmental and social risk matrices to incorporate climate-related risks.

For financial intermediaries such as banks, credit unions and microfinance institutions, the starting point for financing adaptation is to understand the climate risk of their loan portfolios. By using climate risk assessment tools to understand the risks borrowers face, particularly in sectors such as agriculture, banks can offer more and better solutions to small firms and farms to build resilience, and in turn, better manage portfolio risk. This is a key lesson learned from the IDB Lab-supported EcoMicro Program (RG-O1649) which works with financial institutions to create green finance products designed to build climate resilience among MSMEs and low-income households, supporting 29 projects across 19 countries from 2011-2021. And technology-based tools are especially powerful. For instance, a project in Ecuador (EC-T1406) deployed a digital climate risk assessment platform across a network of 14 banks that analyzes site-specific information collected from farmers, crop sensitivity data, and pre-loaded climate data for different geographies. This mix of data gives the banks a better idea of the yields a farmer might expect for certain crops under certain conditions and therefore how risky the loan might be. At the same time, it is also important that this information be easily digestible for loan officers. That is why the tool developed by a project with three credit unions in Belize (BL-T1112) produces a color-coded map for each loan applicant indicating the risk levels for drought, flooding and wildfires at the farm's particular location (for more on these EcoMicro projects and others see this case study). Building on lessons such as these, IDB Invest and IDB Lab are currently working with a microfinance institution in Guatemala (12696-01; GU-L1173; GU-T1302) to develop an integrated online climate risk management system so both credit and climate risk are assessed together when making lending decisions.

Building the capacity of banks to deploy climate adaptation finance calls for a tailored approach. A good place to start is looking at whether a bank has a sustainability strategy in place and if so, how mature it is, as well as its systems for managing environmental and social risks, which may or may not integrate climate risk since this is a relatively new area for banks. Some banks are just embarking on the green finance path while others are market leaders with increasingly sophisticated products, requiring different types of support. This lesson stems from IDB Invest's experience working with banks to promote green credit for SMEs, which highlighted the importance of "buy in" from banks as far as the business case for developing this line of business, as well as the need to build bank capacity to design green strategies, select transactions to finance, and systematically track and report on the performance of that portfolio. Without these fundamentals in place, it is difficult to successfully deploy green finance lines. For example, projects evaluated with banks in Brazil and Costa Rica faced challenges with selection criteria for green projects, as well as with collecting and processing data from green borrowers, limiting the overall effectiveness of these new lines. Likewise, the capacity of banks to manage data and environmental, social, and climate risks is critical for developing and deploying climate adaptation finance.

Developing new types of financial instruments linked to local needs can help financial institutions move from a focus on climate mitigation to climate adaptation finance. While financing for climate mitigation such as renewable energy projects has become mainstream,

financing for investments in climate adaptation for the private sector is less prevalent. This is largely because mitigation is easier to understand and quantify (i.e., megawatts of energy to reduce/avoid a ton of carbon) and in turn, financial products targeting mitigation are more easily scaled regardless of geography. In contrast, climate adaptation requires an incremental, localized approach that is difficult to measure (i.e., there is no single metric for increased resiliency), replicate, and scale. This calls for creating new ways to increase the flow of capital towards climate adaptation. To help guide banks and companies in this regard, IDB Invest has developed criteria for specific sectors or types of interventions to help classify what constitutes climate adaptation measures (e.g., protection of water reservoirs, coral reef or mangrove management), which can then be linked to a specific financial product, such as blue bonds (see this blue bond report for more).[55]

Government engagement and durable regulatory arrangements are important for private sector-led innovation efforts in climate adaptation to be successful. In the case of IDB Lab's development of Natural Asset Companies (NACs)—companies that generate value by developing and preserving natural assets, such as land or marina areas—the first attempts to develop a NAC in the Central Suriname Nature Reserve (CSNR) failed in part because some key elements were not in place. The project (SU-T1096) did not broadly engage stakeholders and was overly reliant on a single "project champion" in the Ministry of Finance. There was also little government engagement and dialogue at the technical level. Furthermore, the regulatory conditions that allowed a NAC to operate in the CSNR were weak, relying on a presidential decree that did not have effect after the change in government. However, this early failure paved the way for future work, including the development of normative and regulatory standards for NACs. And today there are several potential NACs in Latin America and the Caribbean, including one underway in Costa Rica. In another IDB Lab project in Colombia (CO-Q0014; CO-T1436) aiming to create the region's first habitat bank, the regulatory framework was adjusted so that land regenerated and conserved under the habitat bank model can now be accepted as credits that companies may use to compensate for the negative climate and environmental impacts of their economic activity. The habitat bank financing model also had broad support within the government. These factors have contributed to the project exceeding its climate and environment targets. Also, since the habitat banks sign long-term agreements to regenerate land, they serve an important adaptation function, by absorbing climate change risk from partner landholders. Both of these innovations in climate and environment finance will require continued efforts to engage governments and private investors if they are to become durable and reach scale. For more information on these natural capital projects and others see this report.

[55] On the public side, the IDB has been supporting national development banks in the development of climate risk heatmaps for the identification of highly climate vulnerable clients (defined via sector and geography) and specific climate resilient solutions that would reduce their risk exposure and improve resiliency (report forthcoming).

Lesson 2: Investment projects should consider climate change and disaster risks systematically from concept to decommissioning

Systematically integrating climate change and disaster risk considerations during project preparation is important to increase resilience and reduce potential losses, both in terms of human and economic costs. Resilient infrastructure is critical for promoting inclusive growth and providing energy, transport, water, sanitation, and communication services. Increasing infrastructure's resilience to climate change and disaster impacts is a high priority to maximize the benefits of these long-term investments.

Tools to determine the vulnerability of assets to climate change and disaster risks can aid decision-making regarding potential infrastructure investments. Before project development even begins, it is important to determine where to best invest limited resources, considering the uncertainties posed by climate change. For example, in a project in the Dominican Republic, the IDB provided support through a technical cooperation operation (DR-T1173) to: (i) update and geo-reference existing infrastructure assets; (ii) identify critical points in the country's transport network and their vulnerability to disaster risks; and (iii) incorporate hydrological modeling with climatic variables into new road and bridge design and maintenance regulations. The identification of vulnerable points in the transport network was carried out utilizing Blue Spot Analysis—a methodology to prioritize the most cost-effective actions for the transportation system. As a result, the country was able to improve and rehabilitate key road segments as part of a subsequent loan program (DR-L1151), selecting interventions in areas with high levels of vulnerability and criticality, thereby reducing the risk of future losses. Further details are available in this blog.

Assessing climate and disaster risks during project preparation is critical to efficiently incorporate resilience measures before they are fully designed. It is estimated that $1 invested in climate change and disaster risk reduction will avoid an average of $4 in post-disaster relief expenses (MMC, 2005). For this reason, the IDB has implemented a standardized approach to assess disaster and climate change risk during the preparation and design of operations—the Disaster and Climate Change Risk Assessment (DCCRA) methodology (see Box 4.1). By using this methodology, a project in the Dominican Republic (DR-L1141) that contemplated port and logistics infrastructure was identified as having a high level of disaster and climate change risk. The resulting disaster and climate change risk assessment included the main hydrometeorological hazards that could impact the investment (e.g., temperature rise, tropical storms, droughts). Based on this analysis, a disaster and climate change risk management plan was prepared, detailing structural and non-structural mitigation measures, implementation phases for the measures proposed, and roles and responsibilities for monitoring. For instance, the project committed to adhering to 100-year event design and construction standards for flooding and, in addition, it will support partnerships with water committees to improve management of the floodplain. These measures aim to reduce the

likelihood of damage from flooding events, increasing the resilience of the infrastructure and reducing economic losses.

The analysis of climate change and disaster risk should consider the specific circumstances of the sector and the specific asset. To analyze climate risk beyond physical exposure, it is important to take a sector-specific approach that also considers the degree of vulnerability and adaptive capacity of the asset or client. For example, ports are naturally exposed to climate-related hazards such as storm surge or sea level rise, but exposure levels differ significantly by location, and the degree of vulnerability depends heavily on infrastructure design. As outlined in this IDB Invest guide, a site- and asset-specific risk assessment allows port developers and operators to identify adaptation needs and prioritize investments to build resilience. Carrying out Independent Engineer Reports that consider climate scenarios in addition to historical data can also add value, as in the case of the Puerto Posorja project in Ecuador (12177-01). The report provided quantitative, project- and context-specific information about both the port's climate risk and potential adaptation and resilience measures. Since piloting this approach with Puerto Posorja, IDB Invest has been leveraging such reports for its climate risk assessment of other infrastructure projects, and for communicating climate-related risks to project sponsors.

Monitoring climate change and disaster risk mitigation efforts during construction and maintenance is crucial for achieving project objectives. During project implementation, teams monitor operations to ensure that safety evaluations, appropriate maintenance and the disaster risk management activities defined in the project risk management plan are carried out effectively by the Executing Agencies. During the execution of a project to strengthen the national energy transmission system in Honduras (HO-L1186), disaster risk considerations were monitored on an ongoing basis in light of the natural hazards present in the area of intervention. When the tropical storms Eta and Iota struck Honduras in November 2020, affecting electricity substations in areas where the project was designed to be implemented, the executing agency was able to integrate enhanced climate change and disaster risk considerations in the designs of infrastructure works before construction. The updates to these designs included considerations to prevent damage from future flood and other disaster risks, such as elevating the basement of the control house, the platforms of the autotransformers, and the control board of yard equipment, all elements of existing electricity substations. Furthermore, the consideration of disaster and climate change risks does not end when construction is complete. Proper maintenance of infrastructure to ensure ongoing resilience requires a plan for operation and maintenance of the structural works. One of the lessons learned from a drainage and sanitation program in Uruguay (UR-L1069, PCR) is that the maintenance of the flood control structures needs to be considered as part of project design. The lack of appropriate planning for its maintenance could affect the long-term sustainability of resilience infrastructure. Therefore, it is necessary to define a detailed structured plan that details the responsibilities and roles of the executing agencies and other relevant stakeholders (e.g., local communities) for the operation and maintenance of these structural works. Similarly, this maintenance should also include screening and modeling of these infrastructures to extreme events. Amid the impacts of recent floods in Montevideo, specialists are now preparing digital screening to model the effects of natural disasters in these drainage structures to improve future designs.

Box 4.1 IDB Group Approaches to Assessing Climate Change and Disaster Risk

A standardized approach to assess disaster and climate change risk during the preparation and design of operations has proven to have an important effect on the identification and management of these risks. Both IDB and IDB Invest have dedicated tools and processes to do so.

In the IDB portfolio, the application of the Disaster and Climate Change Risk Assessment (DCCRA) methodology has enabled a consistent, gradual, and risk-based integration of disaster risk into E&S risk management. The methodology provides practical guidance to project teams, executing agencies, technical experts, and external consulting and design firms on how to integrate disaster and climate change risk considerations into projects in a meaningful and relevant way. On the one hand, ignoring the potential impact of future climate conditions puts investments and communities at risk. On the other hand, it is also possible to overengineer solutions and apply costly or inappropriate mitigation measures. While scientific models show that climate will certainly change, in many cases the direction and the magnitude of the change is uncertain. Thus, the methodology focuses on low-regret solutions (i.e., solutions likely to minimize costs and achieve co-benefits that will be valuable even if the future climate differs from the central trend of model predictions). A 2021 diagnostic on the integration of climate change and disaster risk in the IDB's active operations found that climate change and disaster risk has been increasingly well identified in the preparation phase following the initial stage of the integration of the DCCRA methodology in 2018.[56]

Similarly, anchored in the climate and natural disaster-related commitments in its Environmental and Social Sustainability Policy, IDB Invest helps clients identify tangible risks and/or opportunities and assists in building resilience to current and future climate hazards by applying its Climate Risk Assessment (CRA) methodology to its direct investments. The objective of the CRA is to identify and analyze both natural disaster and physical risks and carbon transition risks in a two-pronged process during transaction appraisal.[a] As of the end of 2021, IDB Invest has screened 64 transactions for exposure to physical and transition risks with the two respective tools as part of the Environmental and Social Due Diligence, summarized in one climate risk screening report.

[a.] Transition risks are those related to the financial and reputational risks associated with society transitioning to a low-carbon economy. They refer to the policy, legal, technology and market changes resulting from climate change mitigation and adaptation requirements. Carbon pricing regulations or changing consumer preferences are examples of such risks.

[56] The analysis included 70 operations of the active portfolio of operations of the IDB. This set of operations represented 19 percent of overall IDB operations as of Q1 of 2021 that were classified as category A and B and was representative of the IDB portfolio in terms of regions, departments and financial instruments, excluding PBLs, guarantees, and FIs. The sample included grants, specific investment operation (ESP), and multiple work operations (GOM). From this sample portfolio, 100 percent of operations approved in 2021 integrated disaster and climate change risk sufficiently

Lesson 3: Resilience is a part of addressing both productivity and social objectives

Fostering climate resilience is an important aspect of addressing other social and economic development objectives in a range of sectors. Gaps in social and climate change resilience overlap, and there are opportunities to address them simultaneously. Similarly, climate variables can have an important impact on productivity. For example, agriculture is vulnerable to changes in precipitation and temperature, which impact seasonal growth patterns, extreme weather events, as well as plant diseases and pests. Together, these threaten food security and livelihoods in the region. Establishing resilient agricultural practices can help manage the uncertainty around the effects of climate change and protect food production in the region.

The conservation, recovery, and restoration of the natural resource base is not only compatible with agricultural production, but also allows for improving the productivity and resilience of agroecosystems. In Nicaragua, a project (NI-L1048) to reduce the vulnerability of rural populations to phenomena associated with climate change incentivized the use of climate resilient agricultural techniques (e.g., agroforestry systems, energy crops). An impact evaluation showed several positive impacts for program participants as compared to the control group, such as increased value of annual crop production of $195 per hectare and a rise in milk sales during the dry season. At the same time, improvements were observed on key metrics, such as tree cover and the number of eco-forest management plants, showing how agricultural productivity and environmental objectives can work in tandem. Similarly, an impact evaluation of a project in Haiti (HA-L1059) found comparable benefits associated with the use of agroforestry.[57] Promoting the adoption of agroforestry techniques through financial incentives was found to have a positive impact on the total value of production of crops and associated agricultural income for project participants. When compared to a control group, the group receiving the incentives had a 38 percent higher value of crop production (actual and expected) and 63 percent higher profits (actual and expected). While the environmental benefits of agroforestry techniques are long-run and can be complex to assess, literature on the subject generally concludes that those techniques generate positive impacts on tree cover recovery, soil fertility, carbon sequestration, water retention, and ecosystem health, among other areas.[58]

Efficient irrigation and water management interventions are a key adaptation strategy to address potential water shortages associated with climate change. The IDB's experienced supporting four national irrigation programs in Bolivia has shown how increasing the agricultural area under irrigation and making efficient use and distribution of water for

[57] Agroforestry—or the use of an agricultural system where trees are grown in the same plots with other crops and/or pasture—offers a range of benefits in terms of agricultural productivity, diversification, and climate change mitigation/adaptation. See the blog Agroforestry and Sustainable Land Management in Haiti for more information on its benefits and use in Haiti.
[58] Such experiences informed the design of 2019 approval for El Salvador (ES-L1135) to boost the resilience of coffee forests to climate change, which included the provision of non-reimbursable vouchers for farmers that can be exchanged to benefits related to the implementation of agroforestry systems that will support its adaptation to climate change.

agricultural purposes can be highly beneficial for farmers.[59] Under the program, 233 public irrigation infrastructure projects were completed, the agricultural area under irrigation increased by 30,466 hectares, and 27,199 families were benefited. Importantly, the impact evaluation of PRONAREC I (BO-L1021) showed that, among other results, participating farmers (i) increased their total household income by 45 percent and the value of their agricultural production by 70 percent, (ii) improved their access to markets and observed 30 percent higher sales volume than the control group, and (iii) expanded the use of complementary technologies including improved seeds by 90 percent as compared to the control group. In the context of growing uncertainty about the periodicity of rain due to climate change, the program has shown to be an effective adaptation strategy for small scale farmers to ensure reliable access to water in some of the driest areas of the country. Likewise, beyond efficiency, designing irrigation systems in a holistic way is an important adaptation measure, as demonstrated by an IDB Invest project (12814-01) with a sugar company in Nicaragua (see blogpost). This means tackling additional aspects such as waterproofing irrigation canals to reduce losses, improving soil conservation practices, building reservoirs for capture and storage, and promoting native forest conservation and restoration measures to help preserve groundwater. This comprehensive approach helped the company decrease water consumption by about one-third from 2019 to 2021.

For agribusinesses, adapting to climate change calls for understanding the climate risk of their supply chain and building the resilience of suppliers. By helping small producers adapt their practices in the face of increasingly frequent floods, droughts, or other extreme weather events, both large companies and producers stand to gain from higher productivity and fewer climate-induced supply chain disruptions. For instance, in Mexico, Naturasol (13117-01) carried out a climate vulnerability assessment of its 400 honey suppliers—which analyzed climate change projections, flood risk, sensitivity to climate variables, and adaptive capacity—and provided technical assistance and supplies to build their resilience (see this blogpost for more information). In turn, beekeepers have improved their productivity and maintained a steady supply of honey to the company even during droughts. On a related note, when working on projects with large agribusiness companies aiming to integrate SME suppliers into the supply chain, it is important to analyze the potential impact of climate shocks on small producers and not only on the company's financial performance. For example, in an IDB Invest project with a lemon exporter in Argentina (AR3966A-01), sourcing from SME lemon suppliers increased by 30 percent over the first three years of the operation, only to drop sharply when adverse climate conditions affected small producers' production volumes and quality, leading the company to use its in-house capacity to meet production needs.

To mainstream climate-smart agriculture approaches among small farmers, packaging locally adapted practices and technologies together with dedicated technical assistance can help promote uptake. The IDB Lab-supported ProAdapt Sertão project (BR-M1122) aimed to build the resilience and productivity of smallholder livestock and dairy farmers in the Jacuípe Basin, a semi-arid region in northeastern Brazil. The project bundled different locally-adapted

[59] These include the Programa Nacional de Riego; Programa Nacional de Riego con Enfoque de Cuenca (PRONAREC I) (BO-L1021); PRONAREC II (BO-L1084); and PRONAREC III (BO-L1106).

strategies and low-cost technologies together to create a "climate smart toolkit" (i.e., the MAIS module - *Modulo Agroclimático Inteligente e Sustentável*) to help 465 farmers prepare for periods of prolonged drought. This included implementing best practices in animal nutrition, farm management, food and water security, and soil restoration. An impact evaluation found that MAIS farmers fare better than non-MAIS farmers in terms of agricultural production and income—their incomes doubled over a two-year period compared to similar farmers who did not participate in the program—, as well as in perceptions of work and life conditions. Similarly, an IDB Lab project in Nicaragua (NI-L1142; NI-T1231) aimed to transition small coffee producers to a more diversified agroforestry system of production to increase climate resilience and incomes. It deployed a digital climate monitoring and early warning system, including data on climate conditions, soil, water, plants, and trees to tailor the design of these agroforestry systems to the characteristics of each region. Before doing so, the project worked closely with producers to design this intervention and understand their productive practices and challenges, ultimately fostering greater acceptance and adoption of the innovation.

Interventions that simultaneously address urban neighborhood improvements and disaster risk mitigation can have an important effect on the quality-of-life of beneficiaries. An urban development program implemented in the Metropolitan Area of El Salvador (ES-L1016) combined both neighborhood improvement interventions, and disaster risk mitigation strategies to enhance the quality of life of beneficiary families living in informal settlements. The project included improvements in access to water and sanitation, electricity, health services and social interventions (e.g., the development of green spaces and the implementation of community interventions) as well as risk mitigation projects, such as the construction of flood detention and stormwater drainage systems. At the end of the program, the land value of the benefited informal neighborhoods had increased by 33 percent, on average, and seven informal settlements decreased their vulnerability to floods with no flooding or landslides observed in a 12-month period.

Project results matrices and targets should clearly reflect resilience objectives. Fostering resilience requires ensuring that resilience objectives are a fundamental part of the outcomes defined for a project. In the case of agriculture, for example, this means that targets to measure success must go beyond productivity. A project in Nicaragua (NI-L1067), which fostered agroecological systems to adapt to climate change, showed that when promoting the shift towards non-conventional agricultural practices, it is also necessary to adopt non-traditional productivity indicators (see project PCR). The indicators included in the project results matrix measured increased land productivity of monoculture crops and did not reflect the project's ambition to enhance diversified production systems to adapt to climate change. The recommendations drawn from this operation suggest that interventions focused on diversified agricultural production should include indicators that measure a broader scope of sustainability factors, such as environmental health and biodiversity; and other types of productivity indicators such as the *gross value of production* or the *land equivalent ratio*.[60] These lessons were later used in the design of a sustainable agricultural innovation project in

[60] Land equivalent ratio refers to the monoculture crop land that would be needed to produce the same quantity as land using a diversified system.

Panama (PN-L1166), which included indicators to better capture the resilience aspects of the project (e.g., the percentage of farms increasing their level of productive diversification, the percentage of farms increasing the organic matter in the soil).

Final Reflections

As the IDB Group has recognized in its institutional strategy and Vision 2025, building climate resilience is an increasingly urgent need for the region and much more efficient than ex-post emergency response. Furthermore, managing climate risk is becoming a societal imperative as the push for globally harmonized sustainability standards and mandatory climate risk disclosures accelerates. At the same time, there is growing recognition that beyond focusing on the environment, addressing the social consequences of climate change is essential, for both people and prosperity.

The lessons highlighted in this chapter showcase a few common threads observed in projects supported by the Group. Advancing climate adaptation initiatives and driving broader climate action requires that the IDB Group executing agency or client be committed to integrating climate adaptation considerations and understanding that these are fundamental to driving core business results. The IDB Group continues to enhance feedback loops to make use of these and other lessons to improve our support for the region and enhance the delivery of results. Continued learning in this space will become even more critical as the IDB Group has increased its climate ambition with new targets for green finance and the commitment to align all new operations with the Paris Agreement.

Box 4.2 Related IDB Group Resources

- A Framework and Principles for Climate Resilience Metrics in Financing Operations
- Avances del Perú en la adaptación al cambio climático del sector pesquero y del ecosistema marino-costero
- Building Transformative Institutional Adaptive Capacity
- Climate Policies in Latin America and the Caribbean: Success Stories and Challenges in the Fight against Climate Change
- Climate Resilience Opportunities and Metrics
- Climate Resilient Public Private Partnerships: A Toolkit for Decision Makers
- Fiscal Policy and Climate Change
- IDB Group Climate Change Action Plan 2021-2025
- IDB Group Climate Change Sector Framework Document (forthcoming)
- Identification of Climate Resilience Opportunities and Metrics in Financing Operations
- What Works to Promote Forest Conservation, Environmental Sustainability, and Climate Resilience (forthcoming)

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