

# what worked (and didn't)

Lessons on Development  
2012–2015

# **what worked (and didn't)**

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2012–2015

# Development Effectiveness Overview

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# Acronyms

<b>CAP</b>	Career Advancement Programme (Jamaica)	<b>HEART</b>	Jamaica's Human Employment and Resource Training
<b>CEABAD</b>	Center for Advanced Studies in Broadband for Development	<b>IATI</b>	International Aid Transparency Initiative
<b>CNM</b>	Haitian National Center for Meteorology	<b>ICT</b>	Information and Communications Technology
<b>CONAFE</b>	Mexico's National Council for Educational Development	<b>IDB</b>	Inter-American Development Bank
<b>CRF</b>	Corporate Results Framework	<b>IDB-9</b>	Ninth General Capital Increase
<b>CSI</b>	Citizen Security Initiative	<b>IDBG</b>	IDB Group
<b>DEF</b>	Development Effectiveness Framework	<b>IFC</b>	International Finance Corporation
<b>DEM</b>	Development Effectiveness Matrix	<b>iGOPP</b>	Index of Governance and Public Policy Disaster Risk Management
<b>DEO</b>	Development Effectiveness Overview	<b>IIC</b>	Inter-American Investment Corporation
<b>ECG-GPS</b>	Evaluation Cooperation Group Good Practice Standards	<b>JFLL</b>	Jamaica Foundation for Lifelong Learning
<b>ECLAC</b>	Economic Commission for Latin America and the Caribbean	<b>MCS</b>	Multi-donor Fund for Citizen Security
<b>EFS</b>	External Feedback System	<b>MDB</b>	Multilateral Development Bank
<b>EM-DAT</b>	Emergency Events Database	<b>MDG</b>	Millennium Development Goals
<b>EMR</b>	Electronic Medical Records	<b>MIF</b>	Multilateral Investment Fund
<b>FDI</b>	Foreign Direct Investment	<b>MINCYT</b>	Argentina's Ministry of Science, Technology and Productive Innovation
<b>FSO</b>	Fund for Special Operations	<b>MSME</b>	Micro, Small, and Medium Enterprises
<b>GDP</b>	Gross Domestic Product	<b>NSG</b>	Non-sovereign Guarantee
<b>GHG</b>	Greenhouse Gas		
<b>GPS</b>	Global Positioning System		

## Acronyms (continued)

<b>NYS</b>	National Youth Service (Jamaica)	<b>SENASA</b>	Peruvian National Sanitary Agricultural Authority
<b>OECD</b>	Organization for Economic Cooperation and Development	<b>SERNAM</b>	Chilean National Women's Service
<b>OEDE</b>	Argentine Observatory of Employment and Entrepreneurial Dynamics	<b>SEPYME</b>	Argentine Small and Medium-sized Enterprise Secretariat
<b>OLADE</b>	Latin American Energy Organization	<b>SIECA</b>	Secretariat of the Central American Economic Integration System
<b>OMJ</b>	Opportunities for the Majority Sector	<b>SG</b>	Sovereign Guarantee
<b>OVE</b>	Office of Evaluation and Oversight	<b>SME</b>	Small and Medium Enterprises
<b>PACC</b>	Credit Access and Competitiveness Program	<b>SNRE</b>	Haitian National Water Resource Service
<b>PCR</b>	Project Completion Report	<b>SPD</b>	Office of Strategic Planning and Development Effectiveness
<b>PISA</b>	Programme for International Student Assessment	<b>TC</b>	Technical Cooperation
<b>PMDN</b>	Natural Disaster Mitigation Program	<b>TCM</b>	Technical Cooperation Monitoring and Reporting System
<b>PMR</b>	Progress Monitoring Report	<b>TIM</b>	International Merchandise Transit
<b>PPP</b>	Public-Private Partnership	<b>UIS</b>	Update to the Institutional Strategy
<b>PRODESA</b>	Peruvian Program for Agricultural Health	<b>UNODC</b>	United Nations Office on Drugs and Crime
<b>PYD</b>	Positive Youth Development	<b>WCO</b>	World Customs Organization
<b>RDG</b>	Regional Development Goal	<b>WDI</b>	World Development Indicators
<b>RFP</b>	Request for Proposals	<b>WHO</b>	World Health Organization
<b>SCF</b>	Structured and Corporate Finance Department	<b>WTO</b>	World Trade Organization
<b>SEDLAC</b>	Socio-Economic Database for Latin America and the Caribbean	<b>XPSR</b>	Expanded Project Supervision Report

# Message from the President

**2015** marked a critical year for both the global development community and the Inter-American Development Bank (IDB). Landmark agreements reached among the nations of the world at major conferences in Addis Ababa, New York and Paris underscored the importance of what we do as a development bank — leverage our financial resources and technical expertise to support efforts by our borrowing member countries to address their unique and evolving development challenges. These agreements on future resource requirements for development finance, on a set of universal and comprehensive global development goals and on urgent action to tackle climate change reflect an unprecedented level of collaboration and recognition of shared responsibility.

**At the IDB Group, we are committed to helping the countries of our Region to implement the 2030 Sustainable Development Agenda and in particular to achieve sustainable inclusive growth, reduce poverty and inequality and protect the planet.**

The IDB achieved important milestones during the year that reinforced our ability to carry out our mission. The Update to our Institutional Strategy honed the strategic focus of our work going forward by zeroing in on three key challenges and three cross-cutting issues: the challenges of inequality and inclusion, productivity and innovation, and economic integration; and the issues of climate change and environmental sustainability, gender equality and diversity, and institutional capacity and the rule of law. In addition, the consolidation of the IDB Group's private sector activities into the Inter-American Investment Corporation (IIC), accompanied by a US\$2.03 billion capital increase, represents a key step, given the prominent role that private finance will play in achieving development results.

2015 also saw the conclusion of the first Institutional Strategy period covered by the Ninth General Capital Increase, whose progress was measured by the Corporate Results Framework (CRF). This year's edition of the Development Effectiveness Overview presents the overall progress on each of the Strategy's five sector priorities in the four years comprising 2012–2015. While much was accomplished,



there is more work to do in reducing poverty, enhancing integration, building institutions and infrastructure and taking steps to deal with climate change.

As in past editions, in this report we discuss what went well and what did not. We do not shy away from examining lessons learned, so that we can continuously improve the ways in which we serve the Region. Measuring, monitoring and reporting on both project and corporate performance, through credible methodology, allow us to make decisions that are better informed and that can be adjusted if a change in strategic direction is necessary.

Whether we are working to help make cities clean, safe and sustainable, improving health care, improving countries' responses to natural disasters, fostering productivity in small and medium sized enterprises, or harnessing the power of the digital age in innovative ways as part of the Fourth Industrial Revolution, the IDB Group reaffirms its commitment to work closely with each of its borrowing member countries, providing the needed financial resources, technical assistance, and policy advice to meet their unique and evolving needs. The work is far from finished: it is just the beginning of a new chapter to continue improving lives in Latin America and the Caribbean.

Luis Alberto Moreno  
President  
Inter-American Development Bank  
Washington, D.C., July 2016

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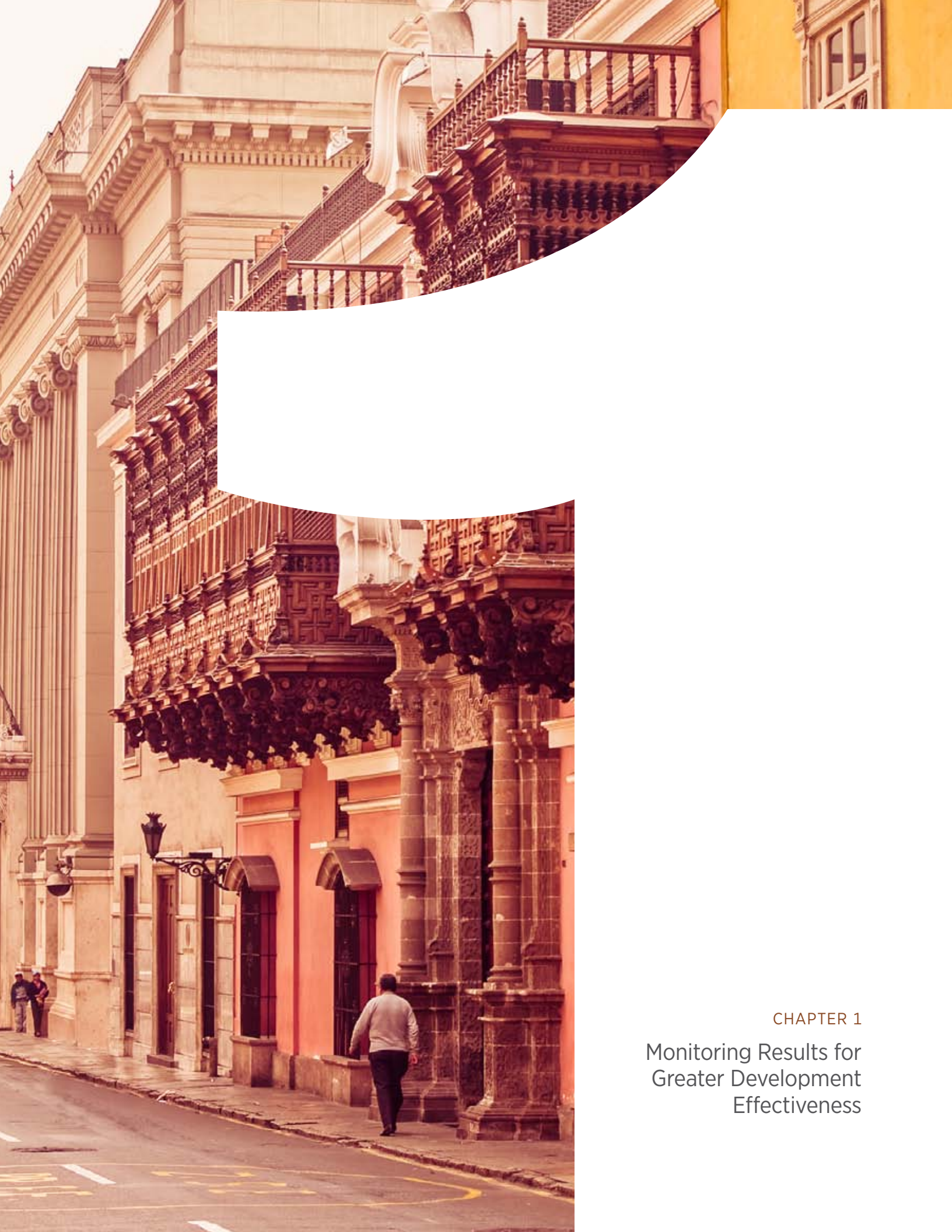
Paloma Acevedo  
Geovana Acosta  
Xiomara Alemán  
Juliana Almeida  
Nathalie Alvarado  
Pablo Angelelli  
Rafael Anta  
Julián Aramburu  
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Carolina Piedrafita  
Claudia Piras  
Hubert Quille  
Sonia M. Rivera

Raul Rodríguez Molina  
Manuel Rodríguez Porcel  
Laura Natalia Rojas Sánchez  
Anabella Ron  
Mireya Eugenia Rossi  
Vanessa Ruperez  
Lina Salazar  
Norbert Schady  
Tomas Serebrisky  
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Matthew Shearer  
Marcia Maria Silva Casseb  
Dimitra Stamatopoulos  
Marco Stampini  
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Joaquim Tres Viladomat  
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## CHAPTER 1

# Monitoring Results for Greater Development Effectiveness



# Monitoring Results for Greater Development Effectiveness

In 2010, the Board of Governors of the Inter-American Development Bank (IDB) approved the Bank's Ninth General Capital Increase (IDB-9) to strengthen the Bank's financial capacity to support economic and social development in Latin America and the Caribbean. Together with this increase in financial resources, the Bank laid out the strategy to realize its vision for the years to come. To do so, the Bank identified the Region's most pressing development challenges and the areas where the IDB could best leverage its comparative advantages to maximize the effectiveness of the interventions it supports. This vision, along with the challenges, and objectives were articulated in what became the IDB-9 Institutional Strategy, with the Corporate Results Framework (CRF) 2012–2015 as the instrument to measure the IDB's progress on its implementation.

With IDB-9, the Bank adopted a series of measures to become more responsive, efficient, transparent and accountable, that is, to become not just “a bigger Bank” but also “a better Bank”. The introduction of the CRF was a key element of these reforms, allowing the Bank to begin reporting on the contribution of specific outputs to selected regional goals. This made IDB-9 different from previous capital increases, where monitoring and reporting focused solely on lending volumes for specific mandates, such as poverty reduction and social equity, and lending to the poorest countries in the Region.

The CRF can be thought of as the keystone for managing for results at the IDB, with the different tools of the Development Effectiveness architecture (discussed in Chapter 4) underpinning it. With the year 2015 marking the end of the CRF 2012–2015 reporting period, it presents a timely opportunity to reflect on the results achieved through IDB-supported interventions and reflect on what went well and what did not. Although this comprehensive, four-year recap of Bank results makes the 2015 Development Effectiveness Overview (DEO) different from the editions of previous years, it retains its essence as a means for examining not only the successes, but also the failures encountered by the IDB along the way, including in constructing meaningful indicators with robust targets and baselines used to measure IDB performance (see Box 1.1).

Learning from what did not work in the past can help an organization continuously improve. For the IDB, this learning from failures helps refine products, services, and internal processes. It is a constructive process that entails thinking open-mindedly and flexibly, and innovating to craft solutions to the Region's



If you can't measure it, you can't improve it.



Peter Drucker

The IDB places utmost importance on development effectiveness. One aspect of this broader effort entails continuously working to improve the existing performance measurement architecture. The lessons learned in the development and implementation of the CRF 2012–2015 became important inputs for the CRF 2016–2019 approved in November 2015, and the resulting improvements in both the CRF’s content and the processes surrounding it are expected to give way to a more useful CRF. In this vein, performance information emerging from annual CRF progress reports will inform corporate processes, such as business planning, budget allocations, and personnel work program management, which will in turn enable better-informed decision-making across the Bank.

In addition to a number of broader lessons discussed in Chapter 5, the Bank has learned three important insights regarding the construction of the CRF Indicators.

## Box 1.1

**Learning from Failure:**  
Challenges in Defining Indicators, Calculating Baselines, and Setting Targets for the CRF 2012–2015



**1.** Institutional-level target-setting has limitations due to the complex nature of development work.

Factors such as the change in IDB partners’ demand for Bank-supported interventions, the extension of project execution beyond reporting periods (e.g. infrastructure projects may need longer maturity periods to generate measurable results which extend beyond a given CRF period), and the emergence of other circumstances that are challenging to forecast at project approval (for example, delays in related bidding processes) have prevented some indicators from reaching their established targets.



**2.** Target-setting for the first CRF was also particularly challenging due to the lack of accurate data to rigorously calculate baselines.

At the time the CRF 2012–2015 was established, the Bank did not yet have all the necessary systems in place to establish baselines for all indicators. This is an ongoing challenge when designing new indicators as systematic data collection typically begins only

once the indicator has been agreed upon. In the case of the CRF 2012–2015, the first DEO that reported formally on CRF results (DEO 2012) did not include baselines for a significant number of indicators, although these were calculated for later DEO editions. This ultimately means that caution should be exercised in drawing conclusions about IDB performance based on the final status of the CRF 2012–2015 indicators.

## Box 1.1

**Learning from Failure:**  
Challenges in Defining  
Indicators, Calculating  
Baselines, and Setting  
Targets for the CRF  
2012–2015  
(continued)



### **3.** Selecting the right scope for output indicators, and defining indicators that truly measure IDB corporate performance are also challenging.

In some cases, indicators were defined with too narrow a scope, such as “inter-urban roads” as opposed to “roads” more broadly. In the case of IDB operational effectiveness and efficiency (Table D of the CRF), the challenge was defining indicators that capture Bank performance as opposed to the combined performance of the executing agencies with which it works (for example, regarding disbursement levels). In this sense, as seen in Chapter 4, a number of efficiency indicators capture factors that are partially beyond the Bank’s control. Thus, interpreting these indicators requires additional context and analysis.

In preparing the CRF 2016–2019, the Bank took stock of these insights and other lessons (discussed in Chapters 4 and 5) to improve the usefulness and overall quality of the CRF indicators along with the processes associated with it. Special attention was given to fostering a participatory process, which involved maintaining frequent dialogue with both the Board of Executive Directors and Bank staff across all Divisions in the development of the indicators. This all helped instill a sense of institutional ownership while enhancing the accuracy of the target-setting process. Better availability of data also helped the Bank to construct more robust baselines and targets.



complex development challenges. Ultimately, this learning helps the Bank improve what it does and how it does it to become a more effective and efficient development partner for its member countries.

Following this thinking, the IDB began a tradition in the 2013 DEO to candidly reflect upon failure. Given the scope of the 2015 DEO, however, the word “failure” takes on a much more specific meaning:

1. To what extent did the Bank meet its CRF targets for 2012–2015?
2. How well did the Bank do in the design of this results measurement tool?
3. What lessons did the Bank learn from evaluating completed projects? And how are the lessons learned during 2012–2015 informing the Bank’s work program for the next four-year period?

To examine the Bank’s results over the 2012–2015 period, it is useful to review the priorities identified in the IDB-9 Institutional Strategy, which defined part of the structure of the CRF 2012–2015.

By the time the need for IDB’s Ninth General Capital Increase became evident, the Region had experienced more than a decade of significant economic and social progress. Poverty rates had fallen, democracy had been consolidated, and income distribution had improved in several countries. All these factors contributed to making significant — albeit incomplete — progress toward meeting the Millennium Development Goals. While the 2008 global financial crisis was one of the largest systemic shocks to ever hit the Region, the majority of its economies were better able to weather it relative to other regions and to sustain spending on much-needed social protection measures, in part due to the Bank’s previous work on bank supervisory securities, fiscal and monetary policy frameworks and other similar areas.

Even in the face of these significant improvements, however, the Region still needed support to address a number of long-term structural problems such as a highly unequal income distribution; a substantial productivity gap compared to other emerging regions; uneven economic integration into the world economy; and social exclusion disproportionately affecting certain segments of the population, such as women and historically excluded populations including indigenous groups and people of Afro-decent.

Based on these challenges, the IDB’s Institutional Strategy defined five sector priorities to guide the Bank’s efforts: (1) social policy for equity and productivity; (2) infrastructure for competitiveness and social welfare; (3) institutions for growth and social welfare; (4) competitive regional and global international integration; and (5) protecting the environment, responding to climate change, promoting renewable energy, and enhancing food security. Additional guidance in the form of 20 Sector Framework Documents was produced over 2013–2015 that draw on the Bank’s experience and provide a clear sense of what the Bank needs to accomplish in a given sector. The CRF 2012–2015 comprised four levels of indicators:

With IDB-9, the Bank adopted a series of measures to become more responsive, efficient, transparent and accountable, that is, to become not just “a bigger Bank” but also “a better Bank”.



- **Table A: Regional Development Goal Indicators.** These track the Region's progress in addressing long-term development challenges for each of the five priority areas. These indicators represent measures of development reflecting a multitude of factors beyond IDB-supported interventions. As such, they are included for contextual purposes only.
- **Table B: Output Contributions to Regional Development Goals.** These indicators identify and monitor the Bank's direct contribution (products and/or services resulting from project activities) toward the Regional Development Goals.
- **Table C: Lending Program Indicators.** These track the Bank's financial support for four areas: (1) supporting development in small and vulnerable countries; (2) reducing poverty and enhancing equity; (3) dealing with climate change, sustainable energy (including renewable energy), and environmental sustainability; and (4) increasing regional cooperation and integration.
- **Table D: Operational Effectiveness and Efficiency.** These indicators capture dimensions related to the Bank's performance in terms of the effectiveness of its interventions, its efficiency, and its management of human resources, particularly with regard to gender equality and technical presence in the field.

In the discussion that follows, this structure will set the stage for a synthesis of the Bank's results over 2012–2015.

**Chapter 2** presents an overview of the results achieved within each of the five sector priorities and a selection of IDB thematic platforms addressing emerging challenges in the Region.

**Chapter 3** reports on the results of recently completed evaluations of IDB-supported projects and shows how in practice, impacts have been achieved (or not) and what lessons have been extracted in the process.

**Chapter 4** reflects on the Bank's responsiveness to clients, in terms of both meeting the demand for IDB lending and responding to requests from IDB's stakeholders. These considerations cover "how" the IDB does its work: that is, the level of effectiveness of its operations and the efficiency with which the Bank operates, among other relevant aspects.

**Chapter 5** closes the discussion of the progress achieved in the CRF 2012–2015 cycle with an eye toward the next four year-period. It also describes the process whereby the Bank prepared its Update to the Institutional Strategy 2016–2019 (UIS), as well as the lessons learned from the use of this first CRF.

One of the commitments within the UIS is to improve coordination between private and public sector operations through the Renewed Vision for the Private Sector. Given the consolidation of the IDB's private sector activities into the Inter-American Investment Corporation (IIC) as of January 1, 2016, the UIS applies to

The Corporate Results Framework (CRF) can be thought of as the keystone for managing for results at the IDB, with the different tools of the Development Effectiveness architecture underpinning it.

the entire IDB Group (IDBG): that is, the Inter-American Development Bank (IDB), the IIC, and the Multilateral Investment Fund (MIF) (Box 1.2).<sup>1</sup>

As this DEO represents the final reporting on the CRF 2012–2015, it refers to the IDB only—as it existed until the end of 2015 (including activities of IDB’s Structured and Corporate Finance Department and Opportunities for the Majority). It is anticipated that future DEOs will report on the entire IDB Group.

1 The CRF 2016–2019 proposal will be submitted to the Board of Executive Directors of the IIC for its consideration and approval once the update to its business plan is approved.

Until the end of 2015, the IDB Group’s private sector activities were carried out by the IDB’s Structured and Corporate Finance Department (SCF) and the Opportunities for the Majority sector (OMJ), the Inter-American Investment Corporation (IIC), and the Multilateral Investment Fund (MIF). On March 30, 2015, the Boards of Governors of the IDB and IIC adopted Resolutions AG-9/15 and CII/AG-2/15, authorizing the transfer of the activities of SCF and OMJ from the IDB to the IIC consistent with certain principles set forth in the Merge-out Proposal (document CA-556/CII/CA-165), and a US\$2.03 billion of capital increase.

This transfer was completed on January 1, 2016. As indicated in paragraphs 2.39 and 2.8 of the Merge-Out Proposal, the IIC “is to have a strategic framework closely aligned with the IDBG’s institutional strategy and integrated country strategies”. Together with the IDB, it “will design a Corporate Results Framework that will use higher order result indicators to reflect shared institutional goals”. Because MIF is a fund administered by the IDB, it is also covered under the IDBG’s updated CRF. The CRF 2016–2019 was therefore designed to capture the contributions made to each of the priority areas of the Update to the Institutional Strategy by the entire IDBG (unlike the CRF 2012–2015, which applied to only the IDB).

## Box 1.2

### The Consolidation of the IDB’s Private Sector Activities



## CHAPTER 2

### Progress on IDB-9 Sector Priorities




## Progress on IDB-9 Sector Priorities

**H**ow did improving preschool education in rural areas of Honduras foster early childhood development? How did access to electricity improve opportunities for Ecuadorean women to earn more income? How did the public and private sector come together to finance the largest hydropower plant in Central America? The answers to questions like these illustrate the wide range of development results that the Inter-American Development Bank (IDB) supported during the 2012–2015 period. These results, and others like them, are described in the pages that follow. They reflect on progress on each of the specific targets established for this period as part of the Corporate Results Framework (CRF). While most of those targets were met, others were not. The first section of this chapter provides an overall account of achievements of CRF indicators as well as exploring why some CRF indicators did not reach their targets for 2015. It explains challenges in terms of defining corporate result indicators.

Subsequent sections of the chapter focus on the five sector priorities set out in IDB-9. To provide context on the Region's progress in terms of its longer-term development challenges in these five areas, each section opens with an overview of the Regional Development Goals (RDG) indicators included in the CRF 2012–2015. It is worth noting that Bank support is typically only one of many factors contributing to each goal; thus progress on the RDGs cannot be directly attributed to IDB-supported interventions, and the trajectory of these indicators depends on many factors.

After providing context for the status of the Region based on the RDGs, each section describes the results from various IDB-supported projects. Finally, because a single measurement tool like the CRF cannot capture all of the Bank's work in support of the Region's development, this chapter concludes with a discussion on several key initiatives that emerged during 2012–2015.





# Overview of Contributions of Outputs to Regional Goals

**T**he indicators at this level of the CRF measure the progress achieved in the period 2012–2015 period within each of the five sector priorities set forth in the IDB’s Ninth Capital Increase (IDB-9). The indicators measure the IDB’s contribution to country development results by providing the final data on outputs, outcomes and beneficiaries of IDB-financed projects. Figures B.1 to B.5 show the final 2015 achievement as well as the cumulative progress throughout the 2012–2015 period for each indicator. Each figure is accompanied by a set of bar graphs showing the final progress on each indicator as compared to its IDB-9 target. Based on the cumulative data, each indicator is color-coded. Green (✓) indicates that the target was met or exceeded in 2015; Yellow (⚠) indicates that the achieved value is between 85 percent and 99 percent of the target; Red (✗) indicates that the value is less than 85 percent of the target.

The targets for the majority of output indicators (18 out of the 27) were achieved or exceeded in 2015, which corresponds to 66.7 percent of the indicators at this level. The final progress on two indicators (3.4.5 “Mobilization volume by NSG financed projects/companies” and 3.5.1 “Power generation capacity from low-carbon sources”) is 91 percent of the target for the period. Nonetheless, seven output indicators were not within 85 percent of their respective 2015 targets, which correspond to 30 percent of the indicators at this level. Box 2.1 explains reasons why these CRF targets were not met.

Monitoring and reporting on progress calls for understanding what the data reveal, and the factors that drive performance. Below are the key reasons why some CRF targets were unmet.

## Box 2.1

**Learning from Failure:**  
Key Reasons Why CRF  
Targets Were Unmet



### 1. Lower-than-expected demand.

For example, the Indicator “Teachers trained” (3.1.2) did not achieve its target because the borrowing countries’ demand was lower than expected for the 2012–2015 period. Specifically, projects have allocated a smaller portion of their funding to teacher training than originally anticipated, instead prioritizing improvements in school infrastructure.



### 2. Unforeseen delays in project execution.

This was the case of Indicators “Households with new or upgraded water supply” (3.2.1), “Households with new and upgraded sanitary connections” (3.2.2), and “Farmers given access to improved agricultural services and investments” (3.5.6). Among the reasons for extending water supply and sanitary connection projects (Indicators 3.2.1 and 3.2.2) were delays in land acquisition, delays in the bidding processes and negotiations, and delays in obtaining local counterpart resources—often due to budget constraints. In the case of Indicator 3.5.6, loan preparation periods were longer than expected and execution was slow to start for a few large projects.



### 3. Timeframe was too short for projects to generate results.

In the case of the transport Indicator (3.2.3), the four-year CRF reporting period was too short for large-scale transportation projects to generate measurable results. In addition, the nature of the IDB’s transport portfolio has shifted from interventions to maintain and rehabilitate rural and secondary roads, which typically generate results in a shorter period of time, to more complex interventions



such as metro systems, sub-urban rail and high-end bus rapid transit systems. Transportation projects typically have execution period of 7 years, from approval until they exit the portfolio.



## 4. Unfounded targets.

This was the case of “Number of jobs added to the formal sector” (Indicator 3.1.6). When this target was set the Bank only had a small number of projects with data on expected employment, and there was no tracking of actual employment data within the Bank’s projects. Thus the target was extrapolated based on a small sample of projects that was not representative of current projects. Similarly, the Indicator “Number of households with new or upgraded dwellings” (3.2.5) set a target that was significantly lower than what was ultimately achieved (which represented 3,000 percent of the original target).

### Box 2.1

**Learning from Failure:**  
Key Reasons Why CRF  
Targets Were Unmet  
(continued)

Source: Based on *Final Report: 2014 Progress on Corporate Results Framework Indicators* (GN-2818). Washington, DC: Office of Strategic Planning and Development Effectiveness (SPD), Inter-American Development Bank.

# Social Policy for Equity and Productivity

In the sector priority of Social Policy for Equity and Productivity, the CRF Regional Development Goal indicators are linked to long-run measures of human capital accumulation, poverty reduction and productivity improvements. Considerable progress was made in all six indicators over the period (Figure A.1). Extreme poverty, as measured by the percentage of population living below US\$3.10 per day, fell from 13 percent to 12 percent. The Gini coefficient used to measure income distribution, fell from 0.55 to 0.50, where 0 reflects perfect equality and 1 perfect inequality.

Educational attainment, as measured by the share of youth aged 15 to 19 that complete ninth grade, rose from 47 percent to 65 percent over the period. Maternal mortality and infant mortality both declined. The observed increase in survival rates represents considerable progress in health. Finally, the improvements in the share of formal jobs out of total jobs from 46 percent to 55 percent demonstrates progress in an outcome identified as central to productivity by the IDB's 2010 research flagship report *The Age of Productivity: Transforming Economies from the Bottom Up*.

With respect to output indicators (Figure B.1), targets were met for four out of six indicators in this sector priority. A total of more than 180 projects in 25 countries contributed to progress. For example, Story 2.1 illustrates how a US\$37 million sovereign guaranteed (SG) loan in Honduras improved children's learning by expanding access to preschool education (Indicator 3.1.1).

Despite multiple contributions in this sector priority area, Indicators 3.1.2 (teachers trained), and 3.1.6 (jobs added to the formal sector) fell short by 27 percent and 41 percent respectively. Although 31 different projects in 18 countries contributed to progress on Indicator 3.1.2, lower-than-expected demand affected achievement of this target because many education projects active during this period focused on school infrastructure rather than teacher training.

In the case of jobs added to the formal sector (Indicator 3.1.6) the target set for 2012-2015 turned out to be unrealistic. As mentioned in Box 2.1, the Bank based









this target on a small number of projects that were not representative of current projects. Despite not achieving the target, more than 75 projects in 19 countries contributed to progress on this indicator. Story 2.2 illustrates how a Non-Sovereign Guaranteed (NSG) loan to one of Ecuador's oldest textile manufacturers helped add jobs in this country.

	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.1.1</b> Extreme poverty rate	<b>13%</b>	2007	<b>12%</b>	2013
<b>2.1.2</b> Gini coefficient of per capita household income inequality	<b>0.55</b>	1999–2004	<b>0.50</b>	2009–2014
<b>2.1.3</b> Share of youth ages 15 to 19 who complete ninth grade	<b>47%</b>	2000–2007	<b>65%</b>	2007–2015
<b>2.1.4</b> Maternal mortality ratio (per 100,000 live births)	<b>100</b>	2000	<b>85</b>	2013
<b>2.1.5</b> Infant mortality rate (per 1,000 live births)	<b>21</b>	2007	<b>16</b>	2015
<b>2.1.6</b> Share of formal employment in total employment	<b>46%</b>	2007	<b>55%</b>	2013

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: ECLAC's Statistical Yearbook for Latin America and the Caribbean 2015, SEDLAC data, IDB, UN MDG Report Statistical Annex 2015 and WDI Report 2015 (World Bank).

Figure A.1

Regional  
Development Goals:  
Social Policy for Equity  
and Productivity

Target 2012–2015	Cumulative Progress	Progress against Target	Status
<b>3.1.1 Students benefited by education projects</b>			
8,500,000	<b>18,562,077</b> girls 9,098,794 boys 9,463,283		✓
<b>3.1.2 Teachers trained</b>			
530,000	<b>387,814</b>		✗
<b>3.1.3 Individuals receiving a basic package of health services</b>			
23,000,000	<b>29,047,141</b> indigenous 3,088,176 Afro-descendants 4,569,482		✓
<b>3.1.4 Individuals receiving targeted anti-poverty program</b>			
16,000,000	<b>21,001,684</b> indigenous 2,589,082 Afro-descendants n/a		✓
<b>3.1.5 Individuals benefited from programs to promote higher labor productivity</b>			
600,000	<b>1,274,728</b> women 871,976 men 402,752		✓
<b>3.1.6 Jobs added to formal sector</b>			
160,000	<b>94,037</b>		✗

n/a No data available

 Progress 2012–2015

 Gap to target

✓ Target met or exceeded in 2015

⚠ Indicator value is greater than or equal to 85% and less than 100% of target

✗ Indicator value is less than 85% of target

Figure B.1

2012–2015  
Contribution of  
Outputs to  
Regional Goals:  
Social Policy for Equity  
and Productivity

# To a Great Start

## Quality Education from an Early Age

**A** 2011 diagnostic study found that despite gains in access to education, Honduras still faced challenges in terms of the quality, efficiency, and equity of its educational system. The evaluation showed that many students did not attain the knowledge and skills expected of them: 20 percent of students had to repeat the first grade, and during the first three years of primary school 10 percent of students were either left back or dropped out.

To address the problem, the government of Honduras worked with the IDB to design the Primary Education and Technology Integration Program. The program, financed by a US\$37 million sovereign guaranteed (SG) loan aimed to improve learning by children in preschools and primary schools that serve the very poor. The initiative sought to expand access to primary education, provide educational materials and training for teachers, and introduce technologies such as laptop computers and network connections.

### THE SETUP

**Preschool is essential**  
for early childhood development

**20%** of students  
**repeated the first grade**

**10%** of students  
**were left back or dropped out**  
within the first 3 years of primary school

As argued in the 2015 edition of the IDB's study *Development in the Americas* on *The Early Years: Child Well-Being and the Role of Public Policy*, preschool is a critical tool for preparing children and improving their chances for success in primary school. Preschool is essential for child development because it develops cognitive, motor, memory, and social skills. To ensure that the program benefited children most in need, it targeted families in rural communities who are beneficiaries of Honduras' conditional cash transfer program known as Bono Vida Mejor.

This program established 624 community preschool education centers, furnishing them and providing educational materials and stipends for volunteer teachers. Teachers also received training in a guided learning method known as "Play and Learn."

By the time the project had ended, in 2014, 5,128 Honduran children from poor families had benefited from the new preschool education centers. As a result, the children were better prepared to face the challenges of entering primary school. An

## Story 2.1

Honduras

Students benefited by education projects (Indicator 3.1.1)



## THE RESULTS

**624**  
**education**  
**centers**  
were furnished

**Teachers**  
**were trained**  
received educational  
materials & stipends

**5,128**  
**children**  
**benefited**

evaluation of students who received the preschool training during the first year of the project found that repetition rates for first grade declined by 7 percent, surpassing the program goal of 4 percent.

Ambitious development initiatives such as the Primary Education and Technology Integration Program are not immune from challenges. Focusing on poor rural communities entailed certain difficulties for implementation. Many of the communities are difficult to access and have dispersed populations which complicated getting the minimum number of students required to establish a new preschool. In addition, the lack of fiscal resources to cover teacher salaries caused some desertion by teachers and reduced students' exposure to teachers who had been trained.

Despite these difficulties, an impact evaluation conducted by the Bank showed the positive effects of the program. Children who received a preschool education advanced in indicators such as motor skills, recognizing forms and figures, and expressing emotions by an average equivalent of one year compared with students who did not attend preschool. The gains for these students in those key variables of early childhood development demonstrate the benefits of receiving a quality education from an early age.

Story by:  
**Javier Luque**, education  
senior specialist in the Edu-  
cation Division at the IDB.

This results-story is based  
on the Project Completion  
Report of SG loan HO-L1062,  
that closed in October 2015.



# More than Denim and Profits

## Creating Jobs and Engaging the Community

**R**emaining competitive in the textile business is not easy, as it is an industry with low barriers to entry and intense global competition. As a result, profit margins are typically low.

That's why companies like Vicunha Ecuador S.A., one of the country's oldest textile manufacturers, need to constantly invest in growth, efficiency, and productivity. At the same time, they must remain attractive to employees in a sector where employee turnover is high.

In support of Vicunha's efforts to address these issues, the IDB financed two non-sovereign guaranteed (NSG) operations: a total of a US\$ 20 million A-loan, and a US\$15 million B-loan. The Bank also provided technical assistance to expand production, modernize equipment, and increase the firm's capacity to generate green energy. By supporting Vicunha's purchases of new machinery, upgrades to its hydropower plant, and the introduction of its new denim production lines, the

IDB has helped foster the company's growth. **These investments have led to the creation of 135 new formal jobs since 2010.** In addition, the company has improved its manufacturing process and quality control, which has helped it gain access to more sophisticated markets and reduce production costs. Vicunha has increased denim production by 58 percent since 2010 and can now generate 86 percent of its energy demand, an improvement in energy self-sufficiency that prevents the emission of approximately 17,000 tons of CO<sub>2</sub> per year.

The IDB's partnership with Vicunha has also yielded development benefits that extend to the community in Pichincha Province where the company is located. The IDB's involvement facilitated a collaborative agreement between Vicunha and a local women's association called ASOCONFEC. The objectives of this agreement were to foster employment for women and economic development in the province of Pichin-

### Story 2.2

Ecuador

Jobs added to the formal sector (Indicator 3.1.6)

#### THE SETUP

Textile industry is **highly competitive**

Employee **turnover is high** and companies must remain attractive

Financing & technical assistance was **provided to foster growth**



## THE RESULTS

**135 formal jobs created**  
since 2010

Nearly  
**500 women**  
received training

**75% of them**  
are working for local  
companies or their  
own small businesses

cha; promote the production and commerce of Ecuadorian goods; and incorporate vulnerable populations into the value chain of denim manufacturing.

Vicunha provided workers from ASOCONFEC with the raw materials (denim fabric) they needed to get started, and trained them to make garments using industrial machinery for clothing manufacturing. As a result of this collaboration, more women in Pichincha are joining the labor force and gaining access to better-paying jobs. Nearly 500 women have received training, and 75 percent of them are working for local companies or have launched their own small businesses.

The Vicunha Ecuador S.A. project sets an example of how IDB-financed operations can foster employment opportunities, particularly for women, even in challenging sectors like textile manufacturing, by supporting local companies to engage with the community.

Story by:

**Max-Emanuel Hatzold**,  
finance and investment consultant in the Development Effectiveness Division of the Inter-American Investment Corporation.

This results story is based on NSG projects EC-L1063 (last disbursement on April 2011) and EC-L1148 (last disbursement in June 2015).

# Infrastructure for Competitiveness and Social Welfare

In the sector priority of Infrastructure for Competitiveness and Social Welfare, the Region has made considerable progress in accessing basic services such as water and sanitation and electricity. Between 1995 and 2015, 220 million people gained access to water and sanitation. During this period the percentage of the population using improved drinking water increased from 93 percent to 95 percent. Challenges remain, however, with 34 million people continuing to lack drinking water, 106 million lacking adequate sanitation, and 19 million still practicing open defecation.

The Region is also very close to achieving universal access to electricity. By 2014, the proportion of households with electricity was 96 percent, a 3 percentage-point increase since 2007. However, the percentage of people with access to electricity varies widely from country to country and between areas within a country. The challenge of connecting 26 million of people who still lack access, and 87 million people that do not have access to clean and modern cooking fuels, requires a combination of off-grid and on-grid solutions.

By building and maintaining key infrastructure for connectivity and logistics, Latin America and the Caribbean is helping to enhance its competitiveness. Still, by the end of 2015, only 38 percent of the total road network was paved. The quality of the Region's overall transport infrastructure lags behind with a score of 3.5 out of 7, when compared with countries from the Organisation for Economic Co-operation and Development (OECD), whose average ranking was 5.5. Road safety also represents an important challenge, where 17.2 per 100,000 people in the Region are victims of road traffic fatalities. Moreover, access to efficient transportation systems that are resilient to climate change is critical for the future development of urban areas.

Infrastructure projects represented a sizable portion of the IDB's work with the Region in 2012–2015, with investments in infrastructure comprising 39 per cent of the total amount approved for SG loan operations. More than 200 projects in 24 countries contributed to this sector priority. Story 2.3 portrays the benefits of a project that improved the sanitation conditions in Managua and four neighboring

municipalities. Story 2.5 shows how the expansion of access to electricity benefited milk producers in Ecuador.

Only two of the five targets in this sector priority were met (Indicators 3.2.4 and 3.2.5 in Figure B.2). There are two reasons, specific to infrastructure projects, which explain why targets were not met. First, unforeseen delays in project execution affected achieving targets in Indicators 3.2.1 and 3.2.2 (see Figure B.2); including delays in land acquisition and soil characterization. These two indicators achieved 34 percent and 45 percent of their targets, respectively.

Second, the nature of IDB's transport portfolio shifted from maintenance and rehabilitation interventions of rural and secondary roads to larger and more complex infrastructure interventions (see Box 2.1). Story 2.4 features one of 75 projects contributing to Indicator 3.2.3, for which 53 percent of the target was achieved. The story describes how an emergency program approved soon after Hurricane Sandy hit the southern regions of Haiti helped rehabilitate inter-urban roads.

	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.2.1</b> Incidence of waterborne diseases (per 100,000 inhabitants) <i>Proxy<sup>B</sup>: Proportion of population using improved drinking water source<sup>C</sup></i>				
	<b>93%</b>	2008	<b>95%</b>	2015
<b>2.2.2</b> Paved road coverage (km/km <sup>2</sup> )				
	<b>0.038</b>	2001–2006	<b>0.038</b>	2008–2013
<b>2.2.3</b> Percent of households with electricity				
	<b>93%</b>	2007	<b>96%</b>	2014
<b>2.2.4</b> Proportion of urban population living in dwellings with hard floors <i>Proxy<sup>B</sup>: Proportion of urban population living in slums</i>				
	<b>29%</b>	2000	<b>21%</b>	2014

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: UN MDG Report Statistical Annex 2015, World Road Statistics 2015, OLADE data and IDB.

B A proxy is reported due to the unavailability of data for the original indicator.

C The value for this indicator has increased during the period indicated; nonetheless, it is important to recognize that an increase in water access does not necessarily imply that the service provided is adequate in terms of continuity, quantity and quality.

Figure A.2

Regional  
Development Goals:  
Infrastructure for  
Competitiveness and  
Social Welfare



Target 2012–2015	Cumulative Progress	Progress against Target	Status
<b>3.2.1 Households with new or upgraded water supply</b>			
2,770,000	<b>950,898</b> indigenous 76,340 Afro-descendants 62,111		✗
<b>3.2.2 Households with new or upgraded sanitary connections</b>			
3,600,000	<b>1,626,049</b> indigenous 42,129 Afro-descendants n/a		✗
<b>3.2.3 Km of inter-urban roads built or maintained/upgraded</b>			
53,000	<b>27,869</b>		✗
<b>3.2.4 Km of electricity transmission and distribution lines installed or upgraded</b>			
1,000	<b>13,475</b>		✓
<b>3.2.5 Households with new or upgraded dwellings</b>			
25,000	<b>866,098</b> indigenous n/a Afro-descendants n/a		✓

n/a No data available

Progress 2012–2015  
 Gap to target

Target met or exceeded in 2015

Indicator value is greater than or equal to 85% and less than 100% of target

Indicator value is less than 85% of target

Figure B.2

2012–2015  
Contribution of  
Outputs to  
Regional Goals:  
Infrastructure for  
Competitiveness and  
Social Welfare

# Strength and Coordination

## Flood Control for the Lake Managua Watershed

Imagine going through every rainy season worrying that a flood will damage or destroy your home. That was the situation for some of the people living in the southeastern area of the Lake Managua Watershed, known as Sub-Basin III. The area includes the capital of Nicaragua and the municipalities of Ticuantepe, El Cru-cero, La Concepción, and Nindirí. Together these localities are home to more than 220,000 people.

Over the past 15 years the area has had to deal with deforestation, unplanned urbanization, and changes in crop management. Among other problems, these developments resulted in soil erosion that made the terrain less usable for sustainable

### THE SETUP

The area has dealt with **deforestation, unplanned urbanization, changes in crop management**

A program was designed to **mitigate the risk of flooding** and better management of solid residues

The project also aims to **reduce erosion** and improve **environmental management**

agricultural production. Another serious consequence of the erosion was that it impeded rainwater from filtering into aquifers, endangering the water reserves that supply this basic service to a large portion of Managua's population. Instead of filtering, the rainwater ran toward the low part of the watershed, carrying with it all types of solid residues and increasing the risk of flooding.

To address this problem, the government of Nicaragua and the IDB agreed in 2009 to design a program to mitigate the risk of flooding and run-off by building works for storm drainage and for better management of solid residues. The program, financed by a US\$13 million IDB sovereign-guaranteed (SG) loan, also aimed to reduce soil erosion and promote land-use planning with an environmentally responsible focus.

The results of project activities, which concluded in 2014, included reducing the number of people at risk of flooding. The program also reduced the area susceptible to floods by 177 hectares; increased the capacity for solid waste collection by 40 percent; implemented measures to reduce erosion; and designed

## Story 2.3

Nicaragua



## THE RESULTS

### Area susceptible to flooding reduced

by 177 hectares

### Capacity for solid waste collection increased

by 40 percent

### Municipalities joined forces

to address the challenges

environmental and development management plans for the municipalities in the area.

A year after the project was completed, in 2014, the rains arrived once again with the winter season. The area where the new storm drainage works had been built was protected from the devastation that affected surrounding areas, proving the effectiveness of the infrastructure that was financed.

This project exemplifies the fundamental importance of having strong and coordinated institutions. The municipalities in the affected area established an association to jointly address the problems of the Sub-Basin and benefit their local communities.

In addition, the project's institutional strengthening activities included the creation of an Environmental Management Unit in each municipality. These units played an important role in handling such tasks as detecting deforestation activities and illegal garbage dumps, assessing environmental fines and sanctions, and promoting environmentally responsible agriculture. In this way, the project contributed to strengthening the capacity of local authorities to better manage the Sub-Basin.

Story by:  
**Hubert Quille**, an institutions and financial management lead specialist in the Water & Sanitation Division at the IDB.

This results story is based on the Project Completion Report of SG loan operation NI-L1010 which closed in December 2014.

# Rebuilding with Local Force

## Response to Hurricane Sandy Strengthens Haitian Firms

**H**aiti was still recovering from the catastrophic 2010 earthquake when Hurricane Sandy hit the island on October 23, 2012. The deadliest and most destructive storm of that year's Atlantic hurricane season, Sandy caused enormous damage in Haiti, displacing 19,000 people and damaging or destroying more than 27,700 homes. Torrential rains caused landslides, eroded riverbanks, and damaged transport infrastructure, leaving many communities isolated. Haiti's southern departments of Grand'Anse, Nippes, South, and Southeast were hardest hit.

The government declared a state of emergency following the storm and requested IDB support to initiate reconstruction. The Bank responded within two months after Hurricane Sandy hit the island with a US\$17.5 million grant from the Emergency Road Rehabilitation Program to reestablish access to basic services, road connectivity, and the normal flow of commerce and humanitarian aid. The program aimed to benefit some 651,000 people.

The main program objective was to repair, stabilize, and protect road infrastructure damaged by flooding. However, designing projects under emergency situations like in the one facing Haiti poses several challenges. An initial challenge was the absence of detailed information regarding the extent and precise location of the damage, which made it difficult to draw up a comprehensive list of the interventions needed. A second challenge was the pressing need to act effectively but quickly to head off any further humanitarian crises.

Under such emergency circumstances, deploying local resources is usually faster than bringing in external contractors. The government agency in charge of implementing the project—which, as a unit of the Ministry of Public Works and Transport, was well-accustomed to working under challenging political, technical, social, and environmental circumstances—suggested deploying local companies to undertake the reconstruction. That strategy proved to be

### THE SETUP

Designing projects under **emergency** situations is a challenging task

The objective was to **repair, stabilize, & protect road infrastructure** damaged by flooding

**Local companies** were deployed to undertake the reconstruction

## Story 2.4

Haiti

Km of inter-urban roads built, maintained or upgraded (Indicator 3.2.3)





## THE RESULTS

Work included **bridges, hydraulic structures, ditches, culverts and other critical sites**

Average **connectivity and travel times** were restored

The program provided local firms with **additional experience**

beneficial because it allowed for mobilizing multiple teams to be mobilized simultaneously to do the work more rapidly. On the other hand, there were some delays in the procurement process due to the additional time needed to identify and certify local companies.

On balance, the overall outcome of the strategy to use local companies was positive: the road rehabilitation works completed exceeded program targets. **Over 22 months, nearly 70 kilometers of roads were rebuilt; eight bridges were repaired and stabilized; nine hydraulic structures were rebuilt; more than 40 ditches, culverts, and other sites were cleaned and repaired; and 30 additional critical points along the national road network were improved.** Completion of these works allowed normal connectivity and travel times to be restored in the affected areas.

This project also benefited the local economy identifying and working with the Haitian firms capable of bidding on and executing medium-sized construction contracts. The program provided them with additional project experience and helped strengthen their administrative capacity, as they became more familiar with formal procurement processes. About half the firms involved in the reconstruction were subsequently contracted for projects financed by the IDB.

Story by:

**Reinaldo Fioravanti**, transportation senior specialist in the Transportation Division at the IDB, and **Alejandro Fros**, transportation lead specialist in the same Division.

This results story is based on the Project Completion Report for the SG operation HA-L1086, which closed in June 2015.

# Cows and Kilowatts

## Electricity to Create New Opportunities

**E**very morning at 4 a.m., women in the communities of Prado 1 and 2 in Ecuador's Pichincha Province wrap themselves in shawls, put on their bowler hats, and head out to lead their cows to pasture lands in the mountains.

The cows are milked twice a day, a difficult and tiring task, and until recently the work was hardly profitable because the communities did not have the equipment necessary to refrigerate and store the milk. As a result, instead of enjoying the benefits of their hard work, the families had to throw away some of the milk that was produced. To make matters worse, a large portion of the small profits went to intermediaries who owned the storage and refrigeration tanks needed to keep the milk fresh until it reached processing plants.

This began to change in May 2012, when the IDB extended a US\$40 million sovereign guaranteed (SG) loan to the government of Ecuador, aimed at funding a project that aimed to provide quality electricity service to rural communities and

marginal urban areas by **installing 3,871 kilometers of power lines**. As a result, the project helped communities modernize their production. The new power connections facilitated the development of a number of initiatives ranging from grist mills to sheep shearing, washing and drying of wool, milk collection facilities, sewing workshops, and artisanal microenterprises — all of which created new income-generating opportunities.

For milk producers in Pichincha Province, most of whom are women, the project has brought about a marked change in their day-to-day activities. Thanks to having electricity in their community, along with financing and technical assistance provided through the project, the producers now have a certified milk collection facility that allows 3,000 liters of milk to be refrigerated. The facility also has a small laboratory to evaluate the quality of the milk.

More than 200 families in these communities have also benefited from training courses on milking cows using hygienic practices that comply with

### Story 2.5

Ecuador

Km of electricity transmission and distribution lines installed or upgraded (Indicator 3.2.4)

#### THE SETUP

Until recently  
**cow milking  
was hardly  
profitable**

The communities  
**did not have  
electricity nor  
the equipment  
necessary**  
to refrigerate and  
store the milk

**Intermediaries  
took most of  
the profits,**  
rather than the  
men and women  
performing the work



## THE RESULTS

Through the project  
**3,871 km**  
of power lines  
were installed

Producers now  
have a certified  
**milk collection**  
facility that  
keeps milk  
refrigerated

standards established by the community milk collection facility. This training has been key to increasing incomes for the beneficiary families, who affirm that they no longer depend on intermediaries to sell their milk. Instead, their cooperative negotiates the price and sells their milk directly to processing plants. This has not only increased their incomes by 21.5 percent, but has also opened the door to start additional marketing initiatives with new dairy products.

Story by:  
**Jesús Tejeda**, energy senior specialist in the Energy Division at the IDB.

This results story is based on the Project Completion Report for the SG operation EC-L1087, which closed in December 2014.

# Institutions for Growth and Social Welfare

**T**he Region has progressed significantly in the sector priority of Institutions for Growth and Social Welfare with respect to improved tax collection, decentralized public expenditure, and credit access, and relatively less so in reducing the number of homicides and expanding the percentage of children registered at birth.

Led by a large increase in social security contributions, the ratio of total tax revenues to gross domestic product (GDP) has risen significantly. This is particularly important given that for many years, a number of countries relied heavily on an ongoing commodity price boom to finance relevant public spending. As the boom comes to an end, countries need to rely on internal sources of funding (mostly taxes) to maintain a funding stream for their development projects.

Though the percentage of children under five whose births were registered has changed little, innovative initiatives are underway to reach the marginalized communities in which these children tend to be located, for example in Guatemala and Ecuador. In Guatemala, a system of early warning of births was introduced and several municipalities have been declared free of under-registration. Policy innovations in crime and violence prevention have been insufficient to curb the Region's homicide rate, which remains the highest in the world, according to the IDB's latest study on the topic *The Welfare Costs of Crime and Violence in Latin America and the Caribbean*. However, investments made during this CRF in foundations like common definitions of crime statistics and the creation of crime "observatories" to collect these statistics have laid the groundwork for future improvement. The use of banks to finance investments was another goal in this area. To achieve this goal, the Bank has expanded programs that reduce the risks to banks of lending to small and medium sized firms, including partial credit guarantees and value chain finance, and promoted new technology and business models, such as alternative credit scoring models, to reach the unbanked population.

The CRF 2012–2015 established five output indicators for this sector priority and all targets were met. More than 130 projects in 21 countries contributed to

achieving the targets in this sector priority. Stories 2.6 and 2.7 provide a glance into Indicator 3.3.1, highlighting two different initiatives that illustrate how the public and private sector windows of the Bank each supported SMEs in the Region. Story 2.6 features a US\$100 million public sector initiative that promoted innovation in SMEs. Story 2.7 shows how a US\$10 million private sector loan to a Brazilian wholesale distributor, Tenda Atacado, helped expand access to credit for micro-entrepreneurs. Finally Story 2.8 shows how unconventional forms of subnational governments can be a helpful ally in the implementation of IDB-financed projects (Indicator 3.3.4). This story illustrates how a Maroon village in Suriname decided to invest national government funding to benefit its community.

	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.3.1</b> Percent of firms using banks to finance investments				
	<b>19.6%</b>	2006	<b>32.2%</b>	2010
<b>2.3.2</b> Ratio of actual to potential tax revenues <i>Proxy<sup>B</sup>: Actual tax revenue collected (% of GDP)</i>				
	<b>17.7%</b>	2007	<b>22.2%</b>	2013
<b>2.3.3</b> Percent of children under five whose birth was registered				
	<b>89%</b>	2000–2007	<b>92%</b>	2005–2013
<b>2.3.4</b> Public expenditure managed at the decentralized level as percent of total public expenditure				
	<b>20%</b>	2007	<b>25%</b>	2013
<b>2.3.5</b> Homicides per 100,000 inhabitants				
	<b>25.1%</b>	2008	<b>23.1%</b>	2012–2013






A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: World Bank and International Finance Corporation (IFC) Enterprise Survey, IDB and State of the World's Children Report 2015.

B A proxy is reported due to the unavailability of data for the original indicator.

Figure A.3

Regional  
Development Goals:  
Institutions for Growth  
and Social Welfare



Target 2012–2015	Cumulative Progress	Progress against Target	Status
<b>3.3.1 Micro / Small / Medium productive enterprises financed</b>			
120,000	<b>2,624,754</b>		✓
<b>3.3.2 Public Financial systems implemented or upgraded (budget, treasury, accounting, debt, and revenues)</b>			
28	<b>47</b>		✓
<b>3.3.3 Persons incorporated into a civil or identification registry</b>			
3,000,000	<b>14,094,170</b>		✓
	women <b>6,867,401</b> men <b>7,226,769</b> indigenous <b>1,028,580</b> Afro-descendants <b>541,978</b>		
<b>3.3.4 Municipal and other sub-national governments supported</b>			
1,000	<b>1,023</b>		✓
<b>3.3.5 Cities benefited with citizen security projects</b>			
32	<b>72</b>		✓

■ Progress 2012–2015  
□ Gap to target

✓ Target met or exceeded in 2015  
⚠ Indicator value is greater than or equal to 85% and less than 100% of target  
✗ Indicator value is less than 85% of target

Figure B.3

2012–2015  
Contribution of  
Outputs to  
Regional Goals:  
Institutions for Growth  
and Social Welfare

# Promoting Productivity

## Continuously Improving Business Innovation in Argentina

One of the most important ways to improve productivity is by supporting and promoting innovative firms that not only offer new products and services to consumers and other businesses, but also create new jobs and help modernize productive structures.

In Argentina, 40 percent of manufacturing firms with 10 or more employees do not carry out any activity considered innovative, according to Argentina's Ministry of Science, Technology and Productive Innovation (MINCYT) and only 13 percent have any type of formal research and development (R&D) unit. Internal R&D investment by Argentine firms represents only 0.25 percent of sales, while that figure is more than 2 percent for countries in the OECD. These low levels of private

investment in innovation are associated with market failures caused by information asymmetries between businesses and investors, as well as with coordination problems between businesses and knowledge production centers. An additional factor is the low use of systems to protect intellectual property of local firms.

In 2009, the MINCYT and the IDB joined forces to launch a US\$100 million initiative called the Technological Innovation Program to promote innovation in small and medium enterprises (SMEs). It provides financing instruments such as grants and loans to cofinance projects by businesses to develop and modernize technology.

**Between 2010 and 2014, some 550 SMEs implemented projects with the support of these instruments.** As a result, more than 60 percent of these firms developed new products and processes and more than 30 percent modernized their organization and marketing processes. For example, some businesses made changes in their business practices and procedures (organization) or changed the design, packaging, or positioning of their products (marketing).

Some of the achievements in innovation could be categorized by the type of financing instrument used.

### THE SETUP

**40% of manufacturing firms do not carry out any activity considered innovative**

**The initiative set out to promote innovation in SMEs**

**Provided financing instruments to businesses to develop and modernize technology**

## Story 2.6

Argentina

Micro, small and medium productive enterprises financed (Indicator 3.3.1)



## THE RESULTS

More than 60% of the firms developed new products and processes

More than 30% modernized their organization and marketing

These changes led to improvements in their productive performance compared to non-innovative firms

Grants, which financed R&D activities, focused more on developing new products (74 percent of firms) than on developing new processes (60 percent). In contrast, loan resources, which were used more for acquiring new machinery and equipment, facilitated innovation more in processes (69 percent of firms) than in products (62 percent). Overall, the results of using both financing mechanisms were associated with significant efforts in investment. Grants beneficiaries invested 4.1 percent of sales in innovative activities, while loan beneficiaries invested 2.48 percent.

These changes in the behavior of innovative companies supported by grants and loans led to improvements in their productive performance. According to the latest innovation survey prepared by the MINCYT, innovative companies are distinguished from non-innovative by creating jobs with better qualifications and have higher wage and productivity levels. For instance, differences in wages and productivity between innovative and non-innovative firms are 6 percent and 12 percent respectively.

Since 2010, new and refined instruments have been used to co-finance projects in five priority areas: agribusiness, environment, health, social development, and renewable energy. The new tool supports innovation for larger-scale projects, which are the product of associations between firms and research centers.

Although there is still an “innovation deficit” among Argentine firms, it is now possible to foresee this situation changing if institutional capacity and public policies continue to evolve as they have in recent years. The lesson from the Argentine case is the importance of combining continuity of financing with refinement. In other words, continue to improve the financing mechanisms (such as grants and loans) that are proving effective in spurring innovation among SMEs, while at the same time continuing to refine public policies through the design of tools to address new challenges.

Story by:  
**Pablo Angelelli**, science and technology lead specialist in the Competitiveness & Innovation Division at the IDB.

This results story is based on the Project Completion Report of SG operation AR-L1073, which closed in June 2015.

# Tackle the Funding Gap

## Expanding Access to Credit for Brazilian Microentrepreneurs

**M**s. Terezinha runs her own small business selling churrasquinho, a type of steak stick, in Pindamonhangaba, a city in the countryside of São Paulo State, Brazil. Terezinha needs credit to grow her business, but until recently her access to credit was very limited.

### THE SETUP

Millions of people with small and informal businesses are unable to access credit

The lack of working capital causes logistical challenges and keeps them from growing

A loan was given to Tenda Atacado expand the credit program VoxCred

A grant was also given for training for microentrepreneurs manage their finances

Throughout Latin America and the Caribbean, millions of people like Terezinha with small and informal businesses are unable to access credit. These entrepreneurs — most of them part of their countries' poorest population — often resort to inconvenient and burdensome options to fund their businesses. These include turning to informal lenders, expensive credit cards, and overdraft checks — all with exorbitant interest rates. Meanwhile, their lack of working capital causes logistical challenges, forcing them to manage small inventories and make multiple purchases in short time periods.

To tackle this funding gap in Brazil, the IDB provided a US\$10 million loan in 2011 to Tenda Atacado (a retail and wholesale distributor), to expand its credit program, known as VoxCred. To complement the loan, the IDB-managed Korea Poverty Reduction Fund provided a US\$270,000 grant for a training program to strengthen the ability of microentrepreneurs to manage their finances.

The credit program has since benefited more than 190,000 microentrepreneurs, including Terezinha. Tenda's current average credit limit is R\$517 (around US\$146), but the average loan is less than half that. The repayment rate is strong, with non-performing loans accounting for 5.67 percent of the portfolio.

The program is mitigating the problems faced by Brazil's microentrepreneurs. For Tenda Atacado, ex-

## Story 2.7

Brazil

Micro, small and medium productive enterprises financed (Indicator 3.3.1)



## THE RESULTS

**190,000  
microentre-  
preneurs  
benefited**

**Repayment  
rate is strong,**  
with nonperforming  
loans accounting for  
5.67% of portfolio

panding access to credit for its clients and strengthening their financial skills is a win-win strategy. For the clients, the expanded access to credit allows needed investments to grow their businesses. Tenda gains by attracting and retaining new clients, increasing sales, and making its credit portfolio more profitable. As a company's manager said: "Tenda's objective with this credit program is not to sell to clients, but to create shared value with the people who walk into our stores."

Story by:  
**Helio Bertachini**, management and strategy consultant in the Development Effectiveness Division of the Inter-American Investment Corporation.

This results story is based on a NSG operation (last disbursement on September 2012).



# A Home for the Poorest and Most Vulnerable

## Furnishing Housing in Suriname's Hinterland

**M**aseja Amoloe is a single mother in Pikin Pada, a small Maroon village in Suriname's hinterland.<sup>2</sup> These villages have their own form of government rooted in Amerindian traditions such as birth rights, and are fully recognized by Suriname's government. The villages are run by a *kapiten*, who functions as the highest local authority.

### THE SETUP

**12%** of Suriname's population live in the hinterland

A program was devised to provide **affordable housing for the poor**

20 beneficiaries received a US\$8,000 **subsidy to build their homes**

The target population included about **150 villages of Amerindian or Maroon groups**

Like others in her village, Amoloe cultivates yucca, bakes bread, and sews for a living. She lived in a hut with her five children until November 2015, when a government housing program targeting rural villages reached Pikin Pada. Amoloe was selected by the village chief as one of 20 beneficiaries to receive a US\$8,000 subsidy to build a better home. She now has plenty of space, sanitary facilities, and a good quality roof and walls.

Approximately 65,000 people, or 12 percent of Suriname's total population, live in the hinterland, including around 150 villages inhabited by either Amerindian or Maroon groups. Most of these villages can only be reached by dirt road, river, or small plane. Many lack electricity and depend on government generators that work just a few hours a day.

The initiative that helped Amoloe's family and many others is the Second Low Income Shelter Program, financed by a \$15 million sovereign-guaranteed (SG) loan from the IDB. The program is tailored to provide affordable housing options for the poor, including Amerindian and Maroon populations. Since its launch in 2011, it has financed building 200 houses and improving 1,800 houses for more than 2,000 families.

It took some trial and error to improve the hinterland housing stock. Building there is challenging: some materials are not readily available, transporta-

## Story 2.8

Suriname

Municipal and other sub-national governments supported (Indicator 3.3.4)

<sup>2</sup> Maroons are those who descended from persons enslaved on plantations who were able to escape into the interior jungles, where they resumed the lifestyle held in Africa. Maroon communities live in the hinterland of Suriname.

## THE RESULTS

**Local workers were hired,** including women who helped in making bricks for the house

A single house was built first in each of the two pilot villages **to incorporate lessons learned** before scaling up

Within a year, **100 houses had been built** in 8 villages

Since 2011, **the program has financed 200 houses** and improving 1,800 houses for more than 2,000 families

tion and supervision costs are high, and an adequate workforce is hard to come by because men, who traditionally worked in this sector, often migrate to find work. Moreover, most beneficiaries are too poor to obtain a loan, and the communal ownership regime does not allow them to use land as collateral.

**Four villages — two Amerindian and two Maroon — were selected for a pilot program to design a subsidy model tailored for the hinterland.** Beneficiaries were chosen by the kapitens based on need according to clearly defined criteria. The upfront subsidy was set at US\$8,000 to cover most of the cost of building a 50-square-meter house with a water harvesting system, but beneficiaries still contributed in kind (materials, labor) or cash, according to their ability. For example, Amoloe provided sand, gravel, door locks, nails, and a PVC ceiling, and paid for the transportation of these materials.

The process started with a meeting where the kapitens explained the program, followed by a building and design workshop where village members drew their dream home. A team of architects translated that vision into a small but functional unit that incorporated specific requests, such as, a bathroom accessible from the outside, a front porch, and the number of partitions within the structure. Once the house was designed and the beneficiaries selected, the program negotiated the acquisition of materials that best worked for the project. The construction process was guided by an architect and a village foreman, prioritizing hiring local workers, including women who helped in making bricks for the houses.

Initially, a single house was built in each of the pilot villages to incorporate lessons learned before scaling up. The pilot trained community members in building techniques and provided a low-cost, streamlined, and replicable house design. Within a year, 100 houses had been built in eight villages, with many others on the waiting list.

Suriname's program changed lives in some of the country's most remote areas, providing housing for the poorest and most vulnerable in a sustainable and culturally appropriate way, all this while instilling a sense of pride in beneficiaries who contribute to the building process that incorporated traditional designs.

Story by:  
**Carolina Piedrafita**, counselor to the Argentina & Haiti Executive Director at the IDB, and Carol Nijbroek, operations senior analyst at the IDB Country Office in Suriname.

This results story is based on the SG operation SU-L1015, which closed in December 2015.

# Competitive Regional and Global International Integration

**A**fter the collapse of world trade in 2009 and a brief period of recovery in 2010 and 2011, countries in Latin America and the Caribbean, have faced a severe negative shock in their terms of trade, especially the commodity exporting countries. Meanwhile, sluggish growth is also slowing in the Region's trade partners: a modest 2.1 percent GDP growth in 2015 for the OECD countries, which has been low since 2011, has been joined by a sharp slowdown in developing countries, particularly China. These factors are behind the deterioration in trade openness ratios (see Indicator 2.4.1 in Figure A.4). In order to counter the economic headwinds coming from the global economy, the Region needs to keep advancing a modern trade and integration agenda to lower trade and transportation costs. Against this adverse external scenario, trade within the Region has remained relatively stable (see Indicator 2.4.2 in Figure A.4). Latin American and Caribbean exports to partners within the Region have been more diverse, more stable in their composition, and more concentrated in manufactures than the Latin America and the Caribbean's exports to other regions. While the decline in the prices of minerals has affected the foreign direct investment (FDI) inflows in this sector recently, in general, FDI inflows remain very important for the Region, and their pace has remained relatively stable (see Indicator 2.4.3 in Figure A.4).

Targets were met for four of the five CRF output indicators for this sector priority (Figure B.4), with contributions from more than 200 projects in all 26 borrowing member countries. Only Indicator 3.4.5 ("Mobilization volume by NSG financed projects and companies") did not meet its target in 2015. During the last four years, this indicator was tracked in terms of "total project cost minus IDB financing" at financial closing (totaling US\$17.9 billion in 2015) to better reflect the amount of funds eventually committed to the Region. However, because this indicator target was originally defined in terms of approval this year the DEO reports the "total project cost minus IDB financing" at approval (totaling US\$26.9 billion) to more accurately measure progress towards the original final target of US\$31.2 billion. The observed gap between approvals and commitments

(i.e. closings) is mostly attributable to various transactions not expected to close until after December 31, 2015.

Stories 2.9 and 2.10 illustrate the reach of the projects that contributed to this sector priority. Story 2.9 features a private sector operation that mobilized resources through an innovative financing structure (Indicator 3.4.5), which in turn, made possible the development of the largest hydropower plant in Costa Rica. Story 2.10 illustrates one way in which a Mesoamerican initiative contributed to meeting the target for Indicator 3.4.3 (“Number of cross border and transnational projects supported”). The initiative simplified the procedures to transport goods across the border from El Salvador by systematizing many processes that allow transporters to complete border check procedures in just a matter of minutes.

	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.4.1 Trade openness (trade as percent of GDP)</b>				
	<b>84.9%</b>	2004–2007	<b>76.7%</b>	2011–2014
<b>2.4.2 Intraregional trade in Latin America and the Caribbean as percent of total merchandise trade</b>				
Exports:	<b>24.2%</b>		<b>27.3%</b>	
Imports:	<b>33.1%</b>	2004–2007	<b>31.8%</b>	2011–2014
<b>2.4.3 Foreign direct investment net inflows as percent of GDP</b>				
	<b>4.2%</b>	2007	<b>4.6%</b>	2011–2014

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: IDB, WDI Report 2015 (World Bank) and IMF Direction of Trade Statistics.

Figure A.4

Regional  
Development Goals:  
Competitive  
Regional and Global  
International  
Integration






Target 2012–2015	Cumulative Progress	Progress against Target	Status
<b>3.4.1</b> Public trade officials and private entrepreneurs trained in trade and investment			
65,000	<b>79,533</b> women <b>23,294</b> men <b>56,239</b>		✓
<b>3.4.2</b> Regional and sub-regional integration agreements and cooperation initiatives supported			
10	<b>47</b>		✓
<b>3.4.3</b> Cross-border and transnational projects supported (infrastructure, and customs, etc)			
22	<b>27</b>		✓
<b>3.4.4</b> International trade transactions financed			
1,000	<b>4,762</b>		✓
<b>3.4.5</b> Mobilization volume by NSG financed projects/companies			
\$31.2B	<b>\$26.9B</b>		⬆
<div> <div></div> Progress 2012–2015 <div></div> Gap to target </div> <div> <div>✓</div> Target met or exceeded in 2015 <div>⬆</div> Indicator value is greater than or equal to 85% and less than 100% of target <div>✗</div> Indicator value is less than 85% of target </div>			

Figure B.4

2012–2015  
Contribution of  
Outputs to  
Regional Goals:  
Competitive  
Regional and Global  
International  
Integration



# One Step Forward Towards Carbon-neutral

## Costa Rica's Electric Partnership for Renewable Energy

**C**osta Rica's ambitious goal to become one of the world's first carbon-neutral nations by 2021 is a challenging task for a small country where a flourishing middle class is driving demand for more electricity. More and more Costa Ricans are moving into homes with modern conveniences that range from microwaves to internet access.

To work toward its goal, Costa Rica has needed to find an environmentally friendly way to generate more renewable energy. One solution has come in the

### THE SETUP

Costa Rica aims to become **one of the world's first carbon-neutral nations** by 2021

Increased demand for electricity calls for **new ways to generate renewable energy**

US\$1.4 billion needed to build **Reventazón, Central America's largest hydro-electric plant**

form of water power from Central America's largest hydroelectric plant, Reventazón, which is powered by the Reventazón River, which flows from Costa Rica's central highlands to the Caribbean Sea. The plant will start operations at the end of 2016, and will represent 10 percent of the country's installed electricity capacity. It is worth highlighting that this type of project, when designed without taking into account international best practice, has a potential to cause negative environmental impacts. However, with support from the IDB, Costa Rica is taking unprecedented steps to ensure that the project protects the environment and mitigates any effects on biodiversity. In this sense, the Reventazón project is also consistent with IDB's sector priority of Protecting the Environment, Responding to Climate Change, Promoting Renewable Energy, and Enhancing Food Security.

The total cost of this massive infrastructure project was almost US\$1.4 billion, so the Costa Rican government looked for financing partners, including the private sector, to make it happen. The IDB first responded with a sovereign-guaranteed (SG) loan of \$250 million to foster power generation. Of the loan's total amount, \$98 million were allocated to support

## Story 2.9

Costa Rica

Mobilization volume  
by NSG financed  
projects/companies  
(Indicator 3.4.5)

## THE RESULTS

The IDB supported the project with  
**US\$250 million SG** and  
**US\$200 million NSG** loans

**Mobilized private investors** to provide an additional US\$135 m

**Up to 10%** of the country's installed electricity capacity could be produced by the plant once it starts operating at the end of 2016

the Costa Rican Institute of Electricity's (ICE) investment in the Reventazón hydroelectric project.

As the owner of Reventazón, ICE made an equity investment for a total of US\$475 million. The private sector window of the IDB financed \$335 million through its A/B loan program. The International Finance Corporation (IFC) and four state-owned local banks provided financing totaling US\$579 million.

The IDB's A/B loan program is a useful tool to mobilize financing because it attracts banks and institutional investors as co-financiers of IDB-supported projects. The IDB offers the A portion of the loan from its own resources and partners with other financial institutions to provide the B loan. Under this structure, the IDB is the lender of record in the transaction and acts as lead lender and administrative agent for the entire A and B loan facility.

The A/B loan structure offers benefits for both the borrower and the financial institutions partnering with the Bank. For the Reventazón project, the IDB offered the A portion with a US\$200 million NSG loan and **partnered with other private investors to provide US\$135 million financing through a B-bond**. In designing this operation, the Bank aimed to leverage its preferred creditor status to attract institutional investors in the capital markets, thus benefiting the borrower with access to significantly longer tenors than would have been available from the typical commercial banks that participate in B-loans. The IDB's involvement also stimulated private investor participation by reducing the operation's risk.

In addition to fostering renewable energy and protecting biodiversity, the Reventazón project has been a prominent source for learning about the potential of innovative financing structures that have since been used in other partnerships with the private sector. The B loan structure used for the Reventazón project was the first of its kind for the IDB, providing a blueprint for scaling up the mobilization of nontraditional funding sources such as institutional investors for future projects of this scale.

The benefit of the Reventazón project goes beyond funding structures; it's about the use of innovative financing to help a country like Costa Rica raise its standard of living while protecting its natural resources.

Story by:  
**Enrique Palacios**, general operations consultant in the Development Effectiveness Division of the Inter-American Investment Corporation.

This results story is based on NSG loan CR-L1056 (last disbursement in May 2016).

# Trade without Borders

## Simplifying Customs Procedures to Enhance International Trade

**L**ike some 200 other freight haulers, Eduardo Escobar crosses the border almost every day between El Salvador and Honduras with his load of containers. And on every one of those days, until recently, it took him some five hours in the blistering heat to complete all the administrative procedures and inspections to get across.

Why is it necessary to inspect loads at a country's border crossings if the merchandise is simply in transit to another country? Many countries in the subregion posed that question, so the IDB responded by supporting the design and implementation of the Mesoamerican International Merchandise Transit system (Tránsito Internacional de Mercancías, TIM).<sup>3</sup> The system provides an electronic Single

Transit Declaration form (*Declaración Única de Tránsito*) that allows transporters to complete procedures in minutes at border agencies, particularly customs. This in turn enables customs to focus more on its country's imports and exports.

**The IDB provided US\$155 million in sovereign-guaranteed (SG) financing for operations associated with the TIM.** Part of the system's success has been due to the purchase and implementation of information systems, the redesign of processes, and improvements in border control posts. This sophisticated system of paperless transit has improved the border crossing process and significantly reduced the costs of commerce in the Mesoamerica subregion. The adoption of the TIM represents a major change that required the agreement of the customs agencies of all of the countries involved, with the IDB serving as mediator to facilitate the process.

Another key factor behind the improvements has been the training of employees from both customs agencies and transport firms who have had to learn how to use the TIM system. This was achieved through specialized training provided by the IDB, with

### THE SETUP

**Goods are transported across borders in Mesoamerica daily**

**Administrative procedures and inspections at the borders take up to 5 hours**

**The sub-region was looking for ways to facilitate the transit of goods and products**

## Story 2.10

El Salvador

Number of cross-border and transnational projects supported (Indicator 3.4.3)

<sup>3</sup> The participating countries are: Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama.

## THE RESULTS

IDB has provided US\$155 million in SG financing for the **design and implementation** of the TIM system

**Wait times** at the borders **have been reduced** from 5 hours to 5 minutes

**Trained** more than **305 users and implementers** of the TIM system

resource support from integration funds of Canada, Chile, Colombia, Japan, Mexico, Spain, Switzerland, the United Kingdom, and the United States as well as multilateral organizations such as the World Customs Organization (WCO), World Trade Organization (WTO), and subregional institutions in Latin America and the Caribbean, particularly the Secretariat of the Central American Economic Integration System (Sistema de Integración Económica Centroamericana, SIECA).

**The IDB-financed program has trained more than 305 implementers and users of the TIM system in the Mesoamerican countries**, offering widely available and up-to-date courses on a range of topics, available at [www.connectamericas.com](http://www.connectamericas.com).

Thanks to the TIM, the five hours it used to take to cross between El Salvador and Honduras now takes only five minutes. For each hour a typical truck idles, it uses on average around 3.8 liters of diesel fuel and emits approximately 10 kilograms of CO<sub>2</sub>, and the wear to the engine is twice that of running at normal speed, so the cost savings and reductions to emissions are significant. Central American haulers no longer even need to get out of their trucks; they just wait for the computerized system to give them the green light, improving security in addition to efficiency. Eduardo and his fellow haulers can make more trips, which has increased their family incomes, and is accompanied by reduced operating costs and merchandise losses due to heat and humidity.

Story by:  
**Joaquín Tres**, integration and trade principal specialist in the Integration Department at the IDB.

This results story is based on SG operations CR-L1066 and NI-L1083, which are ongoing projects.

# Protecting the Environment, Responding to Climate Change, Promoting Renewable Energy, and Enhancing Food Security

The year 2014 made headlines: it was the first in decades that saw worldwide economic growth and a reduction of energy-related GHG emissions (which make up 72% of worldwide GHGs). Similarly, Latin America and the Caribbean effectively reduced the emissions intensity of its economy, from 776 metric tons of CO<sub>2</sub>-equivalent GHGs per US\$1 million GDP in 2000 to 607 metric tons in 2012, with decreases in the energy sector and agriculture, forestry and other land-use sector which combined make up nearly 90% of the Region's emissions. If continued, this “decoupling” of economic growth from GHG emissions would signal a transformation of growth patterns and make feasible a global climate stabilization strategy. The Region has also improved its planning and investment capacity to align with the low-emissions and climate-derisking development pathways which are now signaled by the Paris Agreement on Climate Change. Such increased capacity is due to a better understanding of current and anticipated climate change impacts, clearer policy and investment options, and stronger leadership and coordination among key public and private sector actors.

More than 100 projects in 22 countries contributed to this sector priority during the 2012–2015 CRF period. Out of the six CRF Output indicators corresponding to this priority, targets were met for three (see Figure B.5). However, progress fell short for Indicators 3.5.1, 3.5.2, and 3.5.6, for which 91 percent, 38 percent, and 63 percent of the target was met respectively. The target for Indicator 3.5.2 was not met due, in large part, to the long timeframe needed to complete public transport projects, and thus count specific beneficiaries (see Box 2.1). Story 2.11 illustrates the dimension of this type of project, featuring the expansion of São Paulo's metro



system. This project contributed to Indicator 3.5.2 by providing access to a low carbon transportation system to nearly 200 million people in 2015. In the case of Indicator 3.5.6 (“Farmers given access to improved agricultural services and investments”), a few large projects experienced longer than expected loan preparation periods and delays to begin execution. Story 2.12 is based on a project that illustrates Indicator 3.5.3. The story reflects the benefits of a policy reform in Peru that developed the country’s capacity to adapt to climate change and mitigate its effects. Story 2.13 portrays the benefits of a project that recovered the São Domingos River in Brazil and improved the quality of life of the inhabitants of Catanduva.













	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.5.1</b> CO <sub>2</sub> emissions (kilograms) per \$1 GDP (purchasing power parity)				
	<b>0.29</b>	2006	<b>0.28</b>	2010
<b>2.5.2</b> Countries with planning capacity in mitigation and adaptation of climate change				
	<b>3</b>	2009	<b>18</b>	2015
<b>2.5.3</b> Annual reported economic damages from natural disasters (billion US dollars)				
	<b>\$7.7</b>	2007	<b>\$8.2</b>	2014
<b>2.5.4</b> Proportion of terrestrial and marine areas protected to total territorial area (%) <sup>D</sup>				
	<b>19.3%</b>	2009	<b>13.3%</b>	2014
<b>2.5.5</b> Annual growth rate of agricultural GDP (%)				
	<b>3.7%</b>	2005–2007	<b>2.1%</b>	2012–2014

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: UN MDG Report Statistical Annex 2015, IDB, EM-DAT, ECLAC's Statistical Yearbook for Latin America and the Caribbean 2015.

D The 2014 value is not comparable with the values reported in previous years (including the baseline) due to methodological revisions to the source indicator — MDG indicator 7.6 Proportion of terrestrial and marine areas protected. This value comes from the UN's MDG statistical annex.

Figure A.5

Regional Development Goals:  
Protecting the Environment,  
Responding to Climate Change, Promoting Renewable Energy, and Enhancing Food Security

Target 2012–2015	Cumulative Progress	Progress against Target	Status
<b>3.5.1</b> Power generation capacity from low-carbon sources over total generation capacity funded by IDB	93%	<b>85%</b> 	
<b>3.5.2</b> People given access to improved public low-carbon transportation systems	8,500,000	<b>3,224,415</b> indigenous n/a Afro-descendants n/a	 
<b>3.5.3</b> National frameworks for climate change mitigation supported	5	<b>7</b> 	
<b>3.5.4</b> Climate change pilot projects in agriculture, energy, health, water and sanitation, transport, and housing	10	<b>12</b> 	
<b>3.5.5</b> Number of projects with components contributing to improved management of terrestrial & marine protected areas	30	<b>35</b> 	
<b>3.5.6</b> Farmers given access to improved agricultural services and investments	5,000,000	<b>3,166,562</b> women 607,678 men 2,558,884 indigenous 720,424 Afro-descendants n/a	 

n/a No data available

 Progress 2012–2015

 Gap to target

 Target met or exceeded in 2015

 Indicator value is greater than or equal to 85% and less than 100% of target

 Indicator value is less than 85% of target

Figure B.5

2012–2015  
Contribution of  
Outputs to  
Regional Goals:

Protecting the  
Environment,  
Responding to Climate  
Change, Promoting  
Renewable Energy,  
and Enhancing Food  
Security

# Fighting the Epic Traffic Jams

## Line 4 Eases the Commute to Millions in São Paulo

**T**he São Paulo Metropolitan Region encompasses 39 municipalities with a total population of 19 million people. The region contains 10 percent of the Brazilian population and is the fifth largest urban area in the world.

Home to more than 11 million of the metropolitan region's residents, the city of São Paulo is one of the most congested cities in the world. Enhancing public transportation systems is a critical priority.

Until recently, São Paulo's metro system lacked sufficient capacity and was limited in its coverage, prompting commuters to mostly use buses and private vehicles to the detriment of urban mobility and air quality. Traffic jams during rush hour sometimes extended more than 200 kilometers, according to official estimates.

To address the city's transportation problems, the government of São Paulo launched a public-private partnership to expand its metro network with the construction of Metro Line 4. The concession was awarded to a private company, ViaQuatro,

to operate Line 4 for a period of 30 years. The IDB supported the project with a US\$69 million non-sovereign guaranteed (NSG) loan from its own resources, and mobilized US\$240 million from private investors.

Completion of the first construction phase of Line 4 has already added 8.9 kilometers and six stations to the metro system. As a result, **Line 4 transported 198 million passengers in 2015, according to the Metropolitan Company of São Paulo-Metro.** When completed, Line 4 will extend for 12.8 kilometers, increasing the existing metro network by 20 percent and transporting almost one million passengers a day. The new line will connect large business districts with residential areas in the southwestern corridor, where there is heavy traffic congestion due to growth of suburban areas and increased industrial activity.

The addition of Line 4 also contributes to the overall efficiency of the public transport system, since it connects the metro with key rail networks and five bus

### Story 2.11

Brazil

Number of people given access to improved public low-carbon transportation systems (Indicator 3.5.2)

#### THE SETUP

São Paulo is one of the **most congested cities** in the world

Enhancing public transportation systems is a **critical priority**

A public-private partnership was launched to **expand its metro network**

## THE RESULTS

The first phase of construction added 8.9 km and 6 stations to the metro system **transporting 198 million passengers**

The line will **extend for 12.8 km** and will transport almost 1 million users a day

The line **mitigates traffic congestion**, reduces travel times, and generates social and environmental benefits

stations. Besides improved connectivity and reduced travel times, a more integrated public transport system brings significant environmental and social benefits. For example, by shifting daily commuting from roads to the metro, Line 4 is helping ease air pollution and noise emission levels by reducing bus fleets and road traffic in the southwestern region. A 2010 [study](#) showed that São Paulo's metro system emits about 50 times less greenhouse gases than cars per passenger/kilometer, and almost 25 times less than buses. Every ton of CO<sub>2</sub> equivalent emitted from operating the city's metro system foregoes 61 tons of CO<sub>2</sub> equivalent emissions that would have been emitted as a result of cars and buses.

By supporting the expansion of low-carbon transportation systems with projects such as Line 4 in São Paulo, IDB financing contributes to mitigating traffic congestion, reducing travel times, and generating social and environmental benefits to improve the quality of life.

This project presents valuable lessons learned regarding Public-Private Partnerships (PPP). The PPP agreement established that the Government of the State of São Paulo, the granting authority, would perform the civil works before turning over the operation and maintenance of Line 4 to ViaQuatro, the concessionaire.

There were substantial delays in the construction of civil works for Phase I of the project; instead of completing the six new Phase 1 stations simultaneously, their delivery was split into three sub-phases.

As a result, full commercial operation of Phase 1 of the new line was delayed by 20 months. These delays led to a US\$ 72 million cost overrun for the project. Although the financing structure of the project incorporated a sizable cushion to mitigate the risk of a delayed start-up, the cost overruns meant that the project's private sponsors had to provide additional funds to avoid liquidity difficulties for the concessionaire.

The difficulties encountered during project execution allowed the Bank to identify various findings and recommendations. First, engagement with the granting authority during the early stages of project preparation is key to having a well-balanced concession contract and to ensure its bankability. Second, assessing the granting authority's institutional capacity to perform its obligations is as important as having creditworthy private sponsors to be able to address unforeseen events such as the ones faced in this project. Third, flexibility is crucial. Even when a concession is located in a well-developed state as São Paulo and the granting authority is experienced and reliable (such as the Government of São Paulo), there may be a need for the project and its stakeholders to accommodate decisions made by the granting authority that could negatively affect their interests and structure solutions around that.

Story by:  
**Vanessa Ruperez**, general operations consultant in the Development Effectiveness Division of the Inter-American Investment Corporation.

This results story is based on NSG project BR-L1079 (last disbursement in April 2011).

# Climate Change Mitigation Laws

## Strong Governance and Institutions to Cope with Natural Disasters

**T**he magnitude 8.0 earthquake that ravaged a large part of Peru in August 2007 left behind a massive toll: 7,000 families without homes or safe water, 220,000 children without schools, collapsed ground transportation, and destroyed infrastructure.

### THE SETUP

Peru is one of the most vulnerable countries in the Region to **natural disasters**

It is important for countries like this to **put the necessary measures in place** to cope with natural disasters

The Bank worked with Peru through a series of policy-based loans to support the development and implementation of a **modern legal and institutional framework** to improve disaster risk management

Such natural disasters are not isolated incidents, especially in Peru, one of the most vulnerable countries in the Region to such events. Disasters such as droughts, floods, earthquakes, and volcanic eruptions affected Peru 109 times between 1970 and 2010, causing 74,000 deaths and affecting some 18 million people. In addition to the enormous impact on the population, there is a devastating effect on the national economy. For example, the two most severe episodes of the El Niño phenomenon in 1982–1983 and 1987–1988 caused losses of nearly US\$6.8 billion.

Peru's experience shows why it is so important for countries to put the necessary measures in place to cope with natural disasters. One way to reduce vulnerability is to strengthen governance and institutions, since the country's ability to address the risks associated with, and respond to, such disasters is directly related to its institutional capacity and governance.

A 2008 diagnostic study conducted by the IDB found that Peru had a weak regulatory, institutional, and budgetary framework that constrained strategic and coordinated disaster risk management. In response, the Bank worked with the country through a series of policy-based loans to support the development and implementation of a modern legal and institutional framework to improve disaster risk management. Under this forward-looking approach to risk,

## Story 2.12

Peru

National frameworks for climate change mitigation supported (Indicator 3.5.3)



## THE RESULTS

Creation of the **Budget Program 0068** for Emergency Response and Reduction of Vulnerability

The portion of the national budget for prevention and mitigation of natural disasters **increased by 1,200%** from 2011 to 2014

The policies put in place give the capacity to **reduce the adverse effects** of these natural events on the population and the national economy

disasters are considered more a problem of a poorly planned development, as opposed to a humanitarian response. As such, disaster response agencies must join efforts with key actors involved in development, such as ministries of economy and finance, housing, the environment, agriculture, health, and education.

**One result of the reform supported by the IDB was the creation of Budget Program 0068 for Emergency Response and Reduction of Vulnerability.** This achievement puts Peru in the forefront in the Region in this field, since few countries have budget programs that enable them to track the amount invested in risk management and evaluate its benefits. As a result of this change, the portion of the national budget for prevention and mitigation of natural disasters increased by 1,200 percent from 2011 to 2014. Furthermore, **the program was able to improve the country's governance with regard to disaster risk management and adaptation to climate change, increasing Peru's Index of Governance and Public Policy in Disaster Risk Management (iGOPP) from 31 percent to 51 percent.**

Since climate change translates at the local level into an increased risk of natural disasters, the supported reforms contribute to improve the national framework for climate change adaptation. The policies put in place give Peru the needed capacity for the mitigation of and adaptation to climate change, reducing the adverse effects on the population and the national economy.

Story by:  
**Sergio Lacambra**, disaster risk management lead specialist in the Environment, Rural Development and Disaster Risk Management Division at the IDB.

This results story is based on the Project Completion Report of a Programmatic Policy-Based Loan comprised of operations PE-L1086 (closed in November 2010); PE-L1104 (closed in October 2011); and PE-L1138 (closed in December 2014).

# Bringing a River Back to Life

## Improving the Quality of Water of the São Domingos River

**C**atanduva, the capital of Brazil's ceiling fan industry, is located in the exuberant hinterland of the state of São Paulo and is home to 120,000 people. Catanduva is one of the most promising regional economic centers in Northern São Paulo, thanks to its bustling service industry and household appliance manufacturing industry. In spite of Catanduva's booming economy, for decades the city neglected one of its most valuable resources, the São Domingos River.

### THE SETUP

For decades the **São Domingos River had been neglected**

Until recently, Catanduva poured almost **all of its sewage into the river**

A program was created to expand the city's green spaces and leisure areas, and **find a lasting solution to restore the river**

The river runs through the city of Catanduva and is part of the region's most important water basin, the Turvo Grande Basin. Until recently, Catanduva poured almost all of its sewage into the river. As pollution increased, the vegetation near the banks of the São Domingos River slowly stopped growing. The city urgently needed to find a solution to clean the river and bring it back to life.

In 2009, the city of Catanduva obtained a US\$8.4 million sovereign guaranteed (SG) loan from the IDB to supplement the financing of an ambitious US\$26 million initiative known as the Catanduva Integrated Development Program. **The program's goal was to expand the city's green spaces and leisure areas and find a lasting solution to restore the São Domingos River.**

Through the program, the city's sewage treatment system was completed and a sewage treatment plant was constructed. Today, the plant treats 100 percent of the municipality's sewage. Catanduva has joined a select group of Brazilian cities that collect and treat 100 percent of their local municipal sewage.

The quality of the water in the São Domingos River and its ability of sustain aquatic life have also improved. One indicator of water quality, the biochemical oxygen demand, plunged from 73mg per liter

## Story 2.13

Brazil



## THE RESULTS

**sewage treatment system completed** and sewage treatment plant constructed

the plant now **treats 100% of the municipality's sewage**

**the program modernized operations,** processes, and services of the local sanitation agency

to 4.9mg per liter. The river's ability to sustain aquatic life, measured by the average dissolved oxygen in the water, rose from 0.89mg per liter to 5.1mg per liter.

The program also modernized the operations, processes, and services of the local sanitation agency, the Catanduva Water and Sanitation Superintendence (known as SAEC, for its initials in Portuguese). The SAEC, which had been troubled by inefficiencies in service provision, now runs a revenue surplus, and built a new headquarters with revenues it had generated.

In addition to the environmental benefits, the program financed the rehabilitation of important areas of the city. The Mandaçai, Ipês, and Aeroporto Parks were built. And Catanduva's emblematic Ninth of July Square, located in the heart of the city, received a makeover, offering more leisure space for the inhabitants of Catanduva.

Now Catanduva is known not only known as Brazil's ceiling fan capital but as the city that brought the São Domingos River back to life.

Story by:  
**Marcia Maria Silva Casseb**, urban development and sanitation lead specialist in the housing and urban development Division at the IDB.

This story is based on the project completion report of the sovereign-guaranteed (SG) loan BR-L1171, which closed in December 2014.

# Alternative Approaches to Addressing the Needs in the Region

**N**ot all of the development progress achieved in Latin America and the Caribbean with IDB support from 2012 to 2105 has occurred explicitly within the five priority areas defined by the IDB-9 Strategy, or has been measured by CRF indicators such as those discussed. Some progress stemmed from the Bank's design of new and innovative approaches to persistent problems, while some reflected its ability to identify emerging challenges to the Region's sustainable development. These efforts required substantial research in new areas and leveraging IDB technical expertise in new ways as well as securing necessary resources to launch special initiatives. In turn, these new ventures have resulted in new opportunities for the IDB. The following section describes three such alternative approaches: the Emerging and Sustainable Cities Initiative, the Citizen Security and Civic Coexistence Initiative, and the Broadband Initiative.

## Emerging and Sustainable Cities Initiative

Latin America and the Caribbean is one of the most urbanized regions in the world, with 80 percent of its population living in cities. Among the poor, 66 percent live in urban areas. The Bank has long financed projects in the largest cities in the Region, but another element of the urbanization process—the growth of medium-sized cities—is providing an opportunity for a dynamic and multisectoral approach to sustainable urban development.

Medium-sized cities with populations from 100,000 to 2 million have become hubs for new investment and economic development in Latin America and the Caribbean. These cities account for 25 percent of regional GDP, and in some countries their contribution to the national economy is even more significant. For example, Panama City accounts for 58 percent of Panama's GDP, even though it is home to only 37 percent of the country's population.

However, the growth of these cities is also posing new challenges. Much of their expansion is unplanned and dispersed, exacerbating social segregation of the poor due to the challenge of extending public infrastructure and social services toward

increasingly sprawling urban fringes. Taken together, these factors make it extremely difficult to raise urban quality and living standards, which in turn feeds a vicious circle of poverty by limiting access to opportunity.

The IDB's Emerging and Sustainable Cities Initiative (ESCI) was created in 2011 to address these challenges by providing technical assistance grants to assess urban quality and sustainability in an integrated manner across 120 indicators, perform three baseline studies — a greenhouse gas (GHG) emissions inventory, an assessment on the risk of natural disasters, and an analysis of urban development patterns — and carry out a multistakeholder prioritization process. Using these inputs, the Initiative works with each city to lay out an Action Plan that identifies critical interventions to promote sustainable urban development. The initiative currently operates in 71 cities in the Region and is only one country short of achieving its goal of operating in all IDB's borrowing member countries.

The Initiative's comprehensive and multisectoral urban planning methodology, along with its resulting prioritized interventions, are used to carry out pre-investment studies that will help tackle roadblocks that constrain the sustainable growth of emerging cities. These in-depth studies help craft the policies and works that can improve the quality and sustainability of urban services, strengthen citizen security, protect the environment, improve natural resource management, and mitigate and adapt to climate change at a local and increasingly metropolitan level.

The Cities Initiative has benefited local governments by strengthening their technical capacity and facilitating policy dialogue. It has also empowered civil society by putting in place systems where citizens are responsible of monitoring local performance on urban sustainability indicators and projects. Importantly, the Initiative has provided both international and national development banks with access to a portfolio of projects with high-impact potential that they might look to support. Because of this added value, the Initiative has been able to expand its influence and become a public good for the Region. Through the establishment of alliances with a range of local development agencies, funds have been made available to replicate the methodology without financial support from the Bank.

Furthermore, many of the cities that have completed their Action Plan have begun deploying interventions linked to the Bank's regular operational programming. The 23 loans linked to the Initiative's work are either in design or approved stages, and total US\$1.48 billion. In addition, the Initiative has also played an important role as an experimentation playground where the Bank has been able to try new ideas that different sectors have been advocating for several years in order to adapt to the rapid pace of technological change and to the uncertainties brought about by phenomena such as climate change. As a part of the new Housing and Urban Development Division within the Sustainability and Climate Change sector, the Emerging and Sustainable Cities Program will continue working to reduce financing and



The Cities Initiative has benefited local governments by strengthening their technical capacity and facilitating policy dialogue.



infrastructure gaps with the aim of supporting growth and innovation in emerging cities that are both inclusive and sustainable.

For more information, please visit the [Emerging and Sustainable Cities Initiative website](#).

## Citizen Security Initiative

Crime and violence have been two of the main obstacles to human and economic development in Latin America and the Caribbean, whose countries are among the most violent in the world. According to a [2012 Latinobarómetro study](#), Latin America and the Caribbean is home to 9 percent of the world population, yet its countries account for almost one third of the world's homicides.

Crime and violence impose very high costs on the Region's economies. Although estimating these costs is difficult and varies greatly depending on methodology and data availability, a [2015 IDB study](#) shows that for a typical country in the Region, these costs can range from 2 percent to 6 percent of GDP.

As a response to this situation, in 2012 the IDB approved the Citizen Security Initiative (CSI) to help improve the effectiveness of public policies on citizen security in Latin America and the Caribbean. The CSI is a non-reimbursable fund for national and regional technical cooperation operations that supplements the IDB's work in citizen security. Its resources come from the Bank's Ordinary Capital as well as from external donors through the Multi-donor Fund for Citizen Security (MCS).

CSI has provided catalytic support in three critical areas to help countries improve their capacity to better design, manage and evaluate citizen security policies by: (i) generating, analyzing, and disseminating data to enable the design, execution, and evaluation of policies; (ii) strengthening the capacity of public entities to manage and evaluate public policies on citizen security; and (iii) promoting more knowledge sharing and best practices through regional dialogue and bilateral cooperation between countries.

Since its creation, CSI has financed 61 projects totaling US\$25.5 million. The projects have ranged from individual actions in 19 countries to region-wide initiatives such as DataSeg, which will be first interactive citizen security online platform in the Region. The platform will contain crime data at the national and sub-national level and be freely accessible to policy makers, academics, government authorities, and the general public.

Going forward, the CSI will continue to prioritize projects that are aligned with the Bank's Citizen Security and Justice Sector Framework approved in July 2014, and help respond to the emerging needs for knowledge, engaging the private sector and the civil society, strengthening forums for dialogue and knowledge exchange,



The Citizen Security Initiative has provided catalytic support to help countries improve their capacity to better design, manage, and evaluate citizen security policies.

leveraging resources, establishing strategic alliances, and expanding the number of countries benefitted by this Initiative.

CSI will remain a source of technical and financial support in strategic citizen security issues. The Initiative will support the countries' efforts in generating, analyzing and disaggregating crime and violence statistics, and improving data at the local and municipal level.

The Initiative will also help give more visibility and attention to issues related to youth violence and violence against women from a comprehensive approach of improving information, strengthening prevention strategies and responses to victims, identifying what works, and fostering dialogue and exchange among policy makers and other relevant stakeholders in the Region. CSI will look to increase its partnerships with both civil society organizations and the private sector in order to foster innovation particularly in topics related to the social and economic reintegration of at-risk youth.

## Broadband Initiative

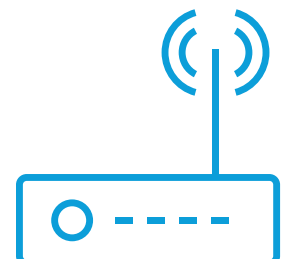
In 2012 an IDB study reported that a 10 percent average increase in broadband penetration in Latin America would yield a 3.2 percent increase in GDP, 2.6 percent greater productivity, and 67,000 new jobs. However, Latin America and the Caribbean weren't (and still aren't) enjoying these benefits because of their poor access to broadband.

Countries of the OECD had five times more fixed broadband lines installed per 100 inhabitants (30 lines per 100 inhabitants) than the countries in Latin America and the Caribbean (6.2 lines per 100 inhabitants), as of 2012, according to the International Telecommunications Union. The problem is even worse when these data are analyzed at the individual country level.

The broadband access gap persists at three levels: between the Region and the OECD countries; among the different countries of the Region with stark differences in penetration and scope of the problem; and between urban and rural areas within the same country.

In 2013 the Bank approved the Broadband Initiative to address the gap in broadband access in Latin America and the Caribbean as a response to the growing demand from the Region for technical cooperation in this area.

The IDB Broadband Initiative promotes an institutional and regulatory environment that facilitates competition and investment to increase access, speed, and use of broadband Internet in the Region. The initiative includes a conceptual framework based on four pillars representing the Region's greatest challenges: develop public policies; develop a strategic regulatory framework; deploy infrastructure; and build capacity.



The Broadband Initiative has produced 56 technical cooperation projects, funding regional projects in the Andean Community, Central America and the Caribbean, and the Region as a whole.

To date, the Broadband initiative has produced 56 technical cooperation projects financed both by Ordinary Capital through the Bank's Broadband Fund and other funding sources such as the Korean Fund. Resources for these projects amount to about US\$23 million. These resources have funded regional projects in the Andean Community, Central America and the Caribbean, and the Region as a whole. They have also funded specific projects in Bolivia, Costa Rica, the Dominican Republic, Ecuador, Honduras, Mexico, Nicaragua, Panama, Paraguay and Peru.

The Initiative has had seven main results: (i) establishment of national broadband plans for 17 countries; (ii) the development of a broadband index for the Region (DigiLAC), that consolidates information on challenges, opportunities, and scope for broadband development; (iii) a training center on broadband for Central America and the Dominican Republic (CEABAD), which provides specialized training to government officials on select broadband topics; (iv) a number of South-South Cooperation and innovation events such as the digiLAC Hackathon<sup>4</sup>; (v) two ministerial forums that addressed country challenges related to access, affordability, and capacity building for broadband development; (vi) a Broadband Policy toolkit for the Region in partnership with the OECD; and (vii) a loan operation to increase connectivity in Nicaragua. In addition, the IDB acted as a neutral broker to promote and facilitate dialogue between governments and private sector to develop broadband in the Region.

Until now, all resources have been channeled towards improving the supply side since an adequate broadband infrastructure is essential to increase the demand for broadband services. In those countries with a good base of broadband infrastructure, the Bank continues to work with its partners on designing innovative solutions in such areas as e-health, e-learning, and e-government.

4 As a result of the digiLAC Hackathon participants from Andean countries worked on the development of app proposals. The winning proposal was Conectandes, that allows the visualization of broadband indicators in the Andean region.





## CHAPTER 3

### Evaluating Projects to Enhance Learning and Policy Making

## Evaluating Projects to Enhance Learning and Policy Making

**D**evelopment programs and policies are intended to improve people's quality of life. *Evidence-based policy making* aims to identify the most appropriate intervention, track a program's implementation, and measure whether the intended impacts were actually achieved. Generating rigorous evidence, in turn, can enhance accountability, inform budget allocations, and guide policy decisions. To help facilitate the implementation of the development effectiveness agenda, the IDB has institutionalized the practice of evaluating IDB-financed operations through a variety of evaluation methodologies.

Most of the project evaluations carried out by the IDB fall into one of the following three categories: cost-benefit, cost-effectiveness analysis, or impact evaluations. A *cost-benefit analysis* quantifies the costs and benefits of a program in monetary terms, while a *cost-effectiveness analysis* compares the cost of similar interventions for achieving a desired outcome. *Impact evaluations* assess changes in outcomes that are directly attributable to a program. The emphasis on causality and attribution is its hallmark.<sup>5</sup>

Some 44.5 percent of IDB public sector projects approved by the IDB's Board of Directors in 2015 planned to use impact evaluations (experimental or quasi-experimental methodologies) to evaluate some component of their interventions, while 47 percent proposed cost-benefit and cost-effectiveness analysis (Figure 3.1).<sup>6</sup>

As mentioned, impact evaluations are distinct from other forms of program evaluation because they can provide empirical evidence of the causal effects of programs or policies on important outcomes. Only impact evaluations allow policy makers to verify the attribution of their programs or projects on specific outcomes: in other words, they can verify whether programs are fulfilling their objectives. The portfolio of impact evaluations to date consists of a total of 478 evaluations, which includes not only evaluations of IDB-financed operations, but also evaluations of non-IDB supported programs. The IDB is often approached for its expertise to evaluate interventions carried out by its strategic partners.

As of December 2015, 46 percent (221 evaluations) of all evaluations were in the design stage and 16 percent (76 evaluations) had been concluded (Figure 3.2). About 2 percent of impact evaluations have been cancelled. As discussed in the DEO 2014, difficulties and unforeseen circumstances throughout program implementation have been the main reason for cancellation.

5 *Impact evaluations* refer to evaluations using experimental and quasi-experimental methodologies. Quasi-experimental methodologies include: difference in differences, matching, regression discontinuity, synthetic control, instrumental variables, simulation models, and other approaches that allow attribution.

6 Specific figures for evaluations in private sector operations are expected in the future. The current IDB evaluation repository covers only public sector operations.



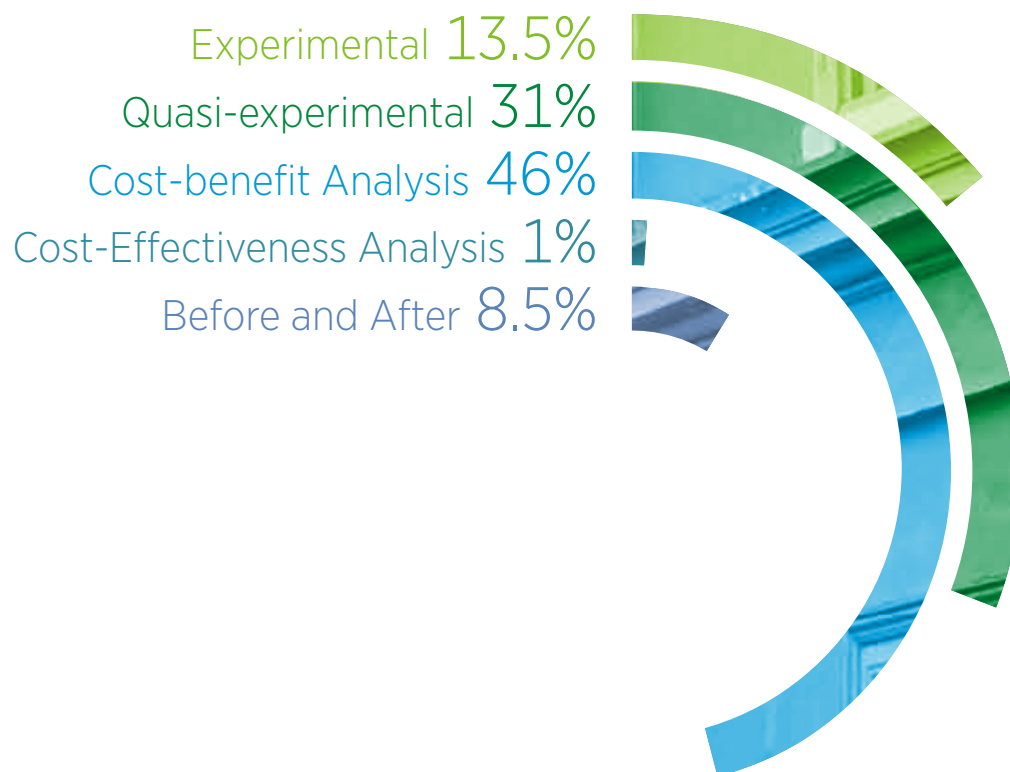


Figure 3.1  
Ex Post Evaluation  
Methodologies of  
Sovereign Guaranteed  
Loan Projects  
Approved in 2015\*

\* Projects with more than one evaluation methodology are counted under the most rigorous methodology only.

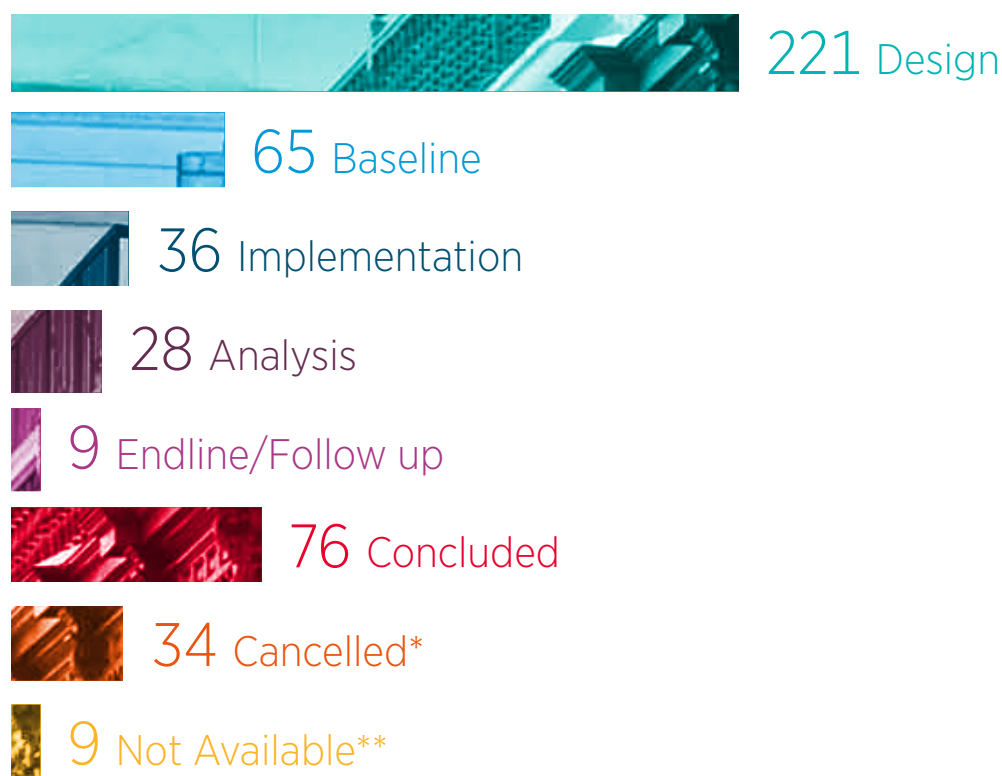


Figure 3.2  
Number of Impact  
Evaluations at IDB by  
Stage, 1999-2015

\* Includes evaluations that were designed as impact evaluations but changed to other methodologies.  
\*\* Data not available as of December 2015.

 240  
 Social Policy for Equity and Productivity

 25  
 Infrastructure for Competitiveness and Social Welfare

 137  
 Institutions for Growth and Social Welfare

 15  
 Competitive, Regional and Global Integration

 61  
 Environment and Enhancing Food Security

Figure 3.3  
 Impact Evaluations by  
 IDB's Sector Priorities  
 as of December 2015

Source: Inventory of Impact  
 Evaluations at the IDB as of  
 May 2016.

In terms of sector priorities, the majority of evaluations have been carried out by the Social Policy for Equity and Productivity sector (50 percent), followed by the Institutions for Growth and Social Welfare sector (29 percent) (Figure 3.3).

Since the IDB established its Development Effectiveness Framework (DEF) in 2008, the percentage of approved public sector projects that have been or will be subject to an impact evaluation has increased considerably (Figure 3.4).

To date, 351 impact evaluations of IDB-funded projects have been designed, completed, or are under way<sup>7</sup>. Of the 83 sovereign-guaranteed loan operations approved by the IDB in 2015, 36 (43 percent) planned an impact evaluation, compared to only nine projects (9 percent) approved during the first year of the DEF in 2008. In the past two years, the percentage (and number) of approved projects that are subject to an impact evaluation has decreased.

Since impact evaluations are costly, it is important to direct those resources toward projects for which they are most beneficial. Projects where substantial knowledge gaps have been identified, pilot projects that could eventually be scaled up, and large projects where accountability is critical, merit evaluations. The design of an impact evaluation needs to take into account not only the program's desired impact, but also factors such as data availability, timing, logistics, and cost.

After the DEF was established, both the Bank and its country counterparts have systematically considered the possibility of carrying out an impact evaluation early on, during the design of each project. This has increased awareness of the benefits of impact evaluation, and, by ensuring an appropriate evaluation method-

7 IDB-financed operations include several components. Impact evaluations of IDB-financed operations usually assess the impact of a particular component of select operations.

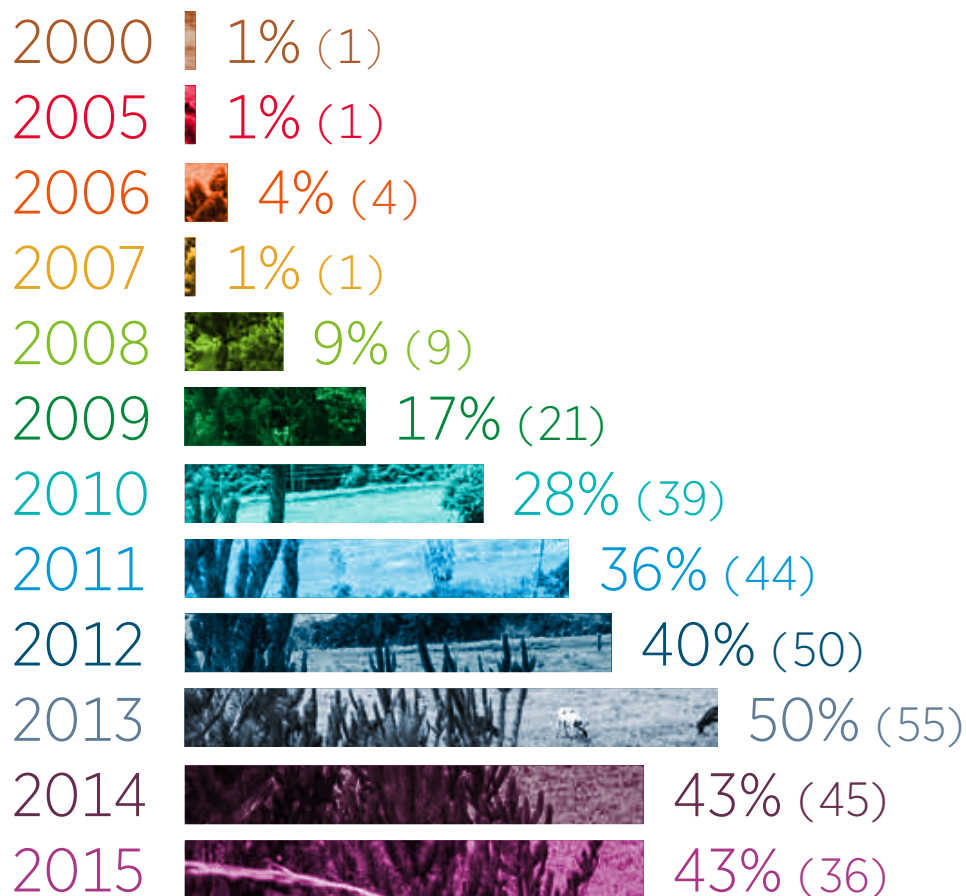


Figure 3.4  
Percentage of and  
Number\* of Approved  
Projects with Impact  
Evaluations

\* Number of operations  
with impact evaluations in  
parenthesis.

ology, has strengthened the commitment of all parties involved. For example, some evaluations need to identify the comparison groups before a project even begins. Moreover, the decision on how, when, and what to evaluate can vary from project to project. For example, not all the evaluations supported by the Bank and its borrowing member countries can use randomized control trials, considered the most rigorous evaluation methodology.

*Randomization* involves assigning potential beneficiaries to a treatment or comparison (control) group. This ensures that groups are on average the same, and that other effects attributable to factors beyond the scope of the project can be separated from the effects that can be attributed specifically to the project. In some of the projects that are featured in the following pages, excess demand for the services being offered facilitated the use of randomization. The evaluation in Chile, for example, randomly offered admission to an after-school program for children ages 6 to 13, while in the evaluation in Venezuela early admission was offered to the country's most renowned youth music program.

*Quasi-experimental methodologies* including regression discontinuity design and propensity score matching, provide alternatives to randomization in order to identify a control group.

A *regression discontinuity* design employs a specific program requirement to distinguish the treatment group from the *counterfactual*: that is, a comparison

group to allow evaluators to estimate the outcomes, whether positive or negative, of what could have happened had the program not been implemented. For example, an agricultural program aiming to eradicate fruit fly plague was implemented only in select geographical areas of Peru because of funding limitations. A control group was identified from among farmers in neighboring areas who were confronted by the same plague and grew the same crops, but were ineligible for the program because they did not reside in the area where the program was being implemented.

In the case of *propensity score matching*, the control group is constructed by searching among a sample of non-beneficiaries whose observable characteristics are similar to those of program beneficiaries. In other words, based on the available information, a non-beneficiary “clone” is matched to each beneficiary of the intervention. For example, firm characteristics such as size, employment, and sector helped identify “clones” in an evaluation of a productive development program in Argentina, but firms differed in characteristics such as their motivation to participate in the program.

All the knowledge the IDB has acquired on program evaluation since 2008 has been centralized on a web platform known as the IDB’s evaluation portal ([www.iadb.org/evaluationportal](http://www.iadb.org/evaluationportal)). This site contains a variety of resources, tools, and guidelines which users can consult and adapt to their specific needs. In addition, in 2015 the IDB developed a module within the Bank’s platform to monitor sovereign guaranteed (SG) operations to track all inputs of impact evaluations. All working papers related to impact evaluations are published online on the IDB’s publication site. The IDB has also developed a series of seminars and courses, known as the Development Effectiveness Series, to foster knowledge sharing on program evaluation among IDB employees and government authorities. IDB specialists incorporate all this knowledge into IDB operations when designing future projects.

After all these years implementing program evaluations and documenting and sharing the findings, recurring obstacles have been identified.

Teams are often faced with serious challenges when conducting an impact evaluation, and different factors influence the success of an evaluation. Box 3.1 presents five lessons that have been learned about how to best evaluate the impact of a development project.

This chapter showcases a representative selection of 12 recently concluded project evaluations on a wide variety of topics that use different methodologies in specific contexts. They highlight the shared interest of both country authorities and the IDB in learning what works and what does not work in order to improve the effectiveness of the development interventions they support as well as related policymaking. The first evaluation is from Haiti, where the project team faced several challenges in performing a rigorous cost-benefit analysis of an infrastructure project. It is followed by accounts of 10 experimental and quasi-experimental impact evaluations, starting with an evaluation of an intervention to support Argentine firms and ending with an evaluation of a widely recognized music program in Venezuela. Chapter 3 closes with an evaluation that uses a different type of methodology—a meta-analysis—to assess the use of technology in the classroom. This example shows how analyzing rigorous impact evaluations on a particular topic,



but in different contexts, can yield recommendations for best practices for designing and implementing a program. In other words, these stories illustrate not only whether a program has an impact, but also how to make them more effective.

**First, timing is of the essence.** The timing of an evaluation is often based on the planned timeline and funding of the project, as opposed to the right time to assess the project's effectiveness. If conducted too early, an impact evaluation might suggest that a project had no impact. However, such a conclusion can be inaccurate if the full effect of the intervention has not yet had the time to materialize. The project team therefore needs to carefully decide when to conduct the evaluation, and modify the evaluation plan based on the actual progress of the project.

Second, “the only thing that is constant is change.” This quote from the ancient Greek philosopher Heraclitus is true not only for life in general, but also for impact evaluations. Over the course of an impact evaluation, conditions often change. Institutions can change and this can affect programs. For example, an evaluation of youth programs in Jamaica ran into problems because the program was moved to a different ministry during the course of the evaluation. Anticipating and adapting to such changes is important both for a successful project and its impact evaluation.

Third, get ready to chase your control group. Control groups are often comprised of specific individuals. Keeping up with them may not always be easy, a lesson learned in the same evaluation of youth programs in Jamaica. Individuals can move because of personal reasons, a job change, or other circumstances, and they might not always inform the project team. Teams need to be aware of possible relocations and find ways to stay in contact with everyone in the group.

Fourth, short-term results do not equal long-term results. If a project shows results shortly after implementation, this does not mean that the results will be maintained in the long term. Similarly, a project might not show significant results in the short term, but will reveal its impact over the long term. Depending on the project type and the desired project outcomes, pursuing an impact evaluation over a longer period of time can be worthwhile to determine the full impact. An additional challenge is to find a funding source to conduct such an evaluation, years after a project has been completed.

Fifth, long-term evaluations and resources are needed. To be able to understand whether or not a project worked in the long term, longitudinal evaluations are needed. A strategy needs to be established to identify where knowledge gaps are and their relevance to future interventions; and to find a source of funding to ensure financing of long-term evaluations.

### Box 3.1

Overcoming  
Challenges:

Lessons to Better  
Evaluate Project  
Impact



# Troubled Waters

## Drawing on Experience to Improve Natural Disaster Risk Management in Haiti

**W**ater is the most essential element to life on earth, yet too much water all at once can have devastating effects. One country very familiar with the destructive force of water is Haiti, which has a particularly high exposure to natural disasters, but very low capacity for natural disaster risk management.

In 2008, for example, within less than a month, Haiti was hit by three hurricanes and a tropical storm. The damage caused by the resulting floods and erosion was massive: Hurricanes Gustav and Hanna alone caused an estimated US\$900 million in damage that year, according to the Haitian government.

In 2009, the IDB financed the construction of key infrastructure as part of the Natural Disaster Mitigation Program I (PMDN I) with the goal of reducing the environmental and socioeconomic vulnerability to natural disasters of the population living in the Artibonite and Cavaillon watersheds.

Once the project was completed the team faced some serious challenge: How can you reliably analyze the impact of natural disaster mitigation measures when data are scarce? How can you know that the benefits are higher than the costs of the project? And how can the Bank use the findings to improve future operations?

### What Did Natural Disaster Mitigation Program (PMDN I) Deliver?

PMDN I financed the construction of four downstream riverbank protection works along the Artibonite and Cavaillon Rivers. The powerful current of the Artibonite River caused erosion along the canals built alongside the river to feed the country's largest irrigation system. Without these canals, rice and vegetable producers working an area that spans 15,862 hectares would have to rely on rainwater to irrigate their fields—a much less reliable source of water, and a haphazard system that would eventually lead to agricultural losses. To prevent the collapse of these canals

## Evaluation 3.1

Haiti

Story by:

**Sebastien Gachot**, an impact evaluation consultant in the Environment, Rural Development and Disaster Risk Management Division in the IDB office in Port au Prince, Haiti.

**Gines Suárez**, a disaster risk specialist in the Environment, Rural Development and Disaster Risk Management Division in the IDB office in El Salvador.

**Bruno Jacquet**, a rural development specialist in the Environment, Rural Development and Disaster Risk Management Division in the IDB office in Port au Prince, Haiti.

**Carmine Paolo De Salvo**, a rural development specialist in the Environment, Rural Development and Disaster Risk Management Division in the IDB headquarters in Washington DC.

due to erosion, PMDN I financed the construction of three concrete retaining walls that can reach up to nine meters in height, commonly known as “Berlin Walls”.

PMDN I also financed the construction of gabion walls (metal cages filled with rocks) along the downstream river-bank of the Cavaillon watershed to protect the town of Maniche. The town had experienced significant economic losses, particularly in the agricultural sector, as a result of frequent exposure to flooding.

## How Can We Know Whether the Project Was Effective?

After investing US\$13.9 million in the infrastructure component of the project, the Haitian government and the IDB wanted to measure the effectiveness of the infrastructure built under PMDN I before contemplating a second phase of the project. A rigorous evaluation would fulfill two purposes: first, to estimate the benefits of what had been done, and second, to facilitate decision-making regarding the second project phase. However, evaluating infrastructure projects poses three big challenges for evaluators.

First, it is very difficult to find a comparable population exposed to a similar event: that is, to construct a counterfactual.

Second, the infrastructure financed by PMDN I was built to mitigate the effects of natural disasters — random events that cannot be planned or replicated.

Finally, the lack of data intensifies the first two challenges and makes it difficult to establish baselines and follow-ups.

Given these challenges, the PMDN I evaluation team decided to assess the benefits of the infrastructure measures through a cost-benefit analysis in order to evaluate the cost-effectiveness of each infrastructure alternative.

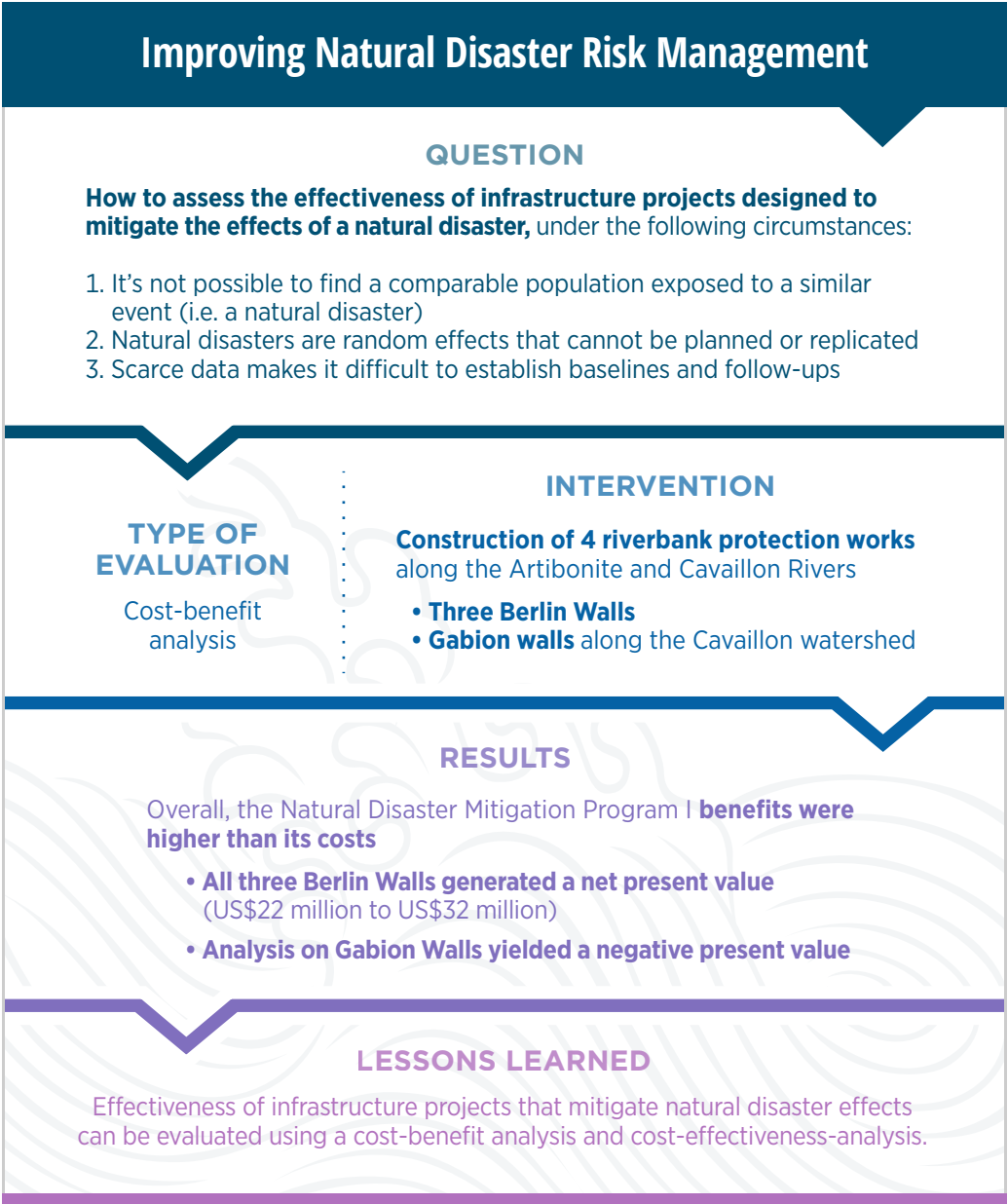
## What Methodologies Were Used?

To assess the works to prevent erosion of the canals in the Artibonite watershed, the evaluation team conducted a technical diagnosis of the state of the canals before the project, to establish a baseline before anything new was built. The results showed that the canals would have collapsed within an average duration of five years.

To evaluate the agricultural losses that would result from the destruction of the canals, the team incorporated data in the cost-benefit analysis from a household survey conducted in 2012 for another IDB operation in the same area. This was crucial for establishing a counterfactual scenario that demonstrated that all three Berlin Walls built by the project helped prevent agricultural losses and generated a positive net present value ranging from US\$22 million to US\$32 million, where the investment costs on the Berlin Walls ranged from US\$1.9 million to US\$3.8 million.

The cost-benefit analysis used to evaluate the impact of the gabion walls built in the area of Maniche was more challenging. The team aimed to compare expected annual economic losses caused by floods before the project (ex-ante) with projected losses after the project (ex-post). A direct comparison of the effects of two similar

How can you reliably analyze the impact of natural disaster mitigation measures when data are scarce?



climate events before and after the project was not possible because — fortunately — no significant climate event occurred in the direct aftermath of the construction work. Instead, the team created loss curves specifically built for the Cavaillon watershed by establishing the relationship between expected annual economic losses caused by floods and the annual probability of flooding for both pre- and post-project scenarios. The post-project scenario was created under the assumption that the new infrastructure would provide protection against flood events having a return period (or probability of occurrence) ranging from less than once every year (for small floods which, on average, occur every year or less) to once every ten years (for larger floods which, on average, occur once every ten years).

The main challenge here was the scarcity of concrete data on the effects of climate events on households. To overcome this problem, the project team conducted

a survey inquiring about households' assets, as well as the height of water levels that those surveyed had witnessed in their homes during specific historical flood events. With this information, the team was able to create a map visualizing the reported water levels and the exposed economic assets.

To estimate how often extreme rains occur in Haiti, the team used data collected by the National Water Resource Service (*Service National des Ressources d'Eau – SNRE*) and the National Center for Meteorology (*Centre National de Météorologie – CNM*).

Despite avoiding annual economic losses in the Cavaillon watershed, which were estimated to be around US\$500,000, the analysis found that the flood mitigation infrastructure yielded a negative net present value of US\$2.2 million. This means that the costs of this portion of the project exceeded the benefits. The construction of the Berlin and gabion walls yielded a positive net present value.

## What Did We Learn from the Evaluation?

The two methodologies that were developed and used to measure ex-post the impact of the downstream riverbank protection works built as part of PMDN I were then used ex-ante to identify and objectively prioritize the best opportunities to mitigate flooding and erosion in Haiti in the project's second phase (PMDN II). This marks a significant improvement in the design of natural disaster and risk management programs in Haiti, where cost-benefit analyses in the past were typically conducted only after the infrastructure in which to invest had already been selected. The evaluation of PMDN I thus contributed to the IDB's goal to improve policymaking in natural disaster risk management in Haiti.

Project information:  
[HA-L1041](#)

# Unlocking Competitiveness

## Do Productive Development Policies Work for Micro, Small, and Medium-sized Enterprises?

**M**icro, small, and medium enterprises (MSMEs) in Argentina accounted for more than half of the gross domestic product (GDP) and three-quarters of all jobs in the second half of the 2000s. However, evidence suggests that market and coordination failures have threatened the productive potential of these firms.

Among the many challenges faced by Argentine MSMEs, the most critical have been the shortage of qualified and affordable professional technical services, weak management capacity, and a lack of skills to prepare investment projects. In addition to these problems the lack of coordination among the MSMEs themselves, and difficulties in accessing credit, have made the challenges even more complex.

To address these issues, the Argentine government obtained a \$50 million IDB sovereign guaranteed loan to support the MSMEs Credit Access and Competitiveness Program, (PACC as per its initials in Spanish) in 2007. The main objective of the program was to improve the competitiveness of MSMEs by providing co-financing for individual technical assistance in order to reduce or eliminate barriers to their growth and increased productivity. One element of the program was to provide grants to MSMEs in order to mitigate the effects of the various market and coordination failures they face.

The PACC contained the necessary ingredients to foster the competitiveness and productivity of Argentine MSMEs. However, measuring the effectiveness or the impact of these types of program, which are commonly known as productive development policies, has long been a methodological challenge for evaluators. Two such challenges stand out.

The first challenge is the demand-driven nature of this type of program. The beneficiary firms are typically better off than firms that do not apply to or benefit from the program. So it is often difficult to find nonbeneficiary firms to make valid

## Evaluation 3.2

Argentina

Story by:

**Lucas Figal Garone**, an economist in the Development Effectiveness Division of the Inter-American Investment Corporation (IIC) of the IDB Group in Washington, DC. He leads the design and implementation of impact evaluations of Inter-American Development Bank-Inter-American Investment Corporation (IDB-IIC) projects.



comparisons and assess whether the program was effective. The second methodological challenge is related to the fact that many of the effects of productive development policies show up a number of years later (between three and five years). Thus, measuring those effects requires collecting data several years after implementation of the policies, which in turn often implies expanding the time frame of the evaluation beyond the mandate of those who designed the policies being evaluated.

## Was the MSMEs Credit Access and Competitiveness Program (PACC) Effective?

In spite of the methodological challenges, the evaluation confirmed that beneficiary firms, before participating in the program, were on average better off than the rest of the firms. The results also show that the PACC had a positive and significant impact on beneficiary firms in comparison with a control group with similar ex-ante characteristics. This was demonstrated in particular by the firms' growth measured by their number of employees (an increase of 5 percent), probability of exporting (6 percent), and volume of exports (6 percent). At the same time, PACC beneficiary firms had a greater survival rate (1.5 percent) than firms in the control group. The program also had a positive and significant impact on the productivity of firms, as measured by average wages (1 percent).

In addition, the evaluation found heterogeneous effects between firms in different sectors as well as between different types of projects that were co-financed. For example, the effects on export performance come mainly from beneficiary firms in the manufacturing sector. On the other hand, for firms in both the manufacturing and services sectors, the most effective mechanism to increase productivity was support for improving the quality of processes and services.

Finally, the study concluded that the greatest benefits of the program were linked to the first time the firm-project received program support. Those benefits diminished with additional support until they reached a point where there was no additional benefit.

## Why Is It Difficult to Evaluate Such Programs?

To correctly estimate the impact on those firms that participate in the program versus those that do not, it is critical to have a balanced sample of firms with similar (observable and unobservable) characteristics. In other words, it is necessary to have a comparison (or control) group identical ex ante to the beneficiary group. The evaluation used administrative records from the PACC provided by the Small and Medium-sized Enterprise Secretariat (*Secretaría de la Pequeña y Mediana Empresa, SEPyme*) together with a panel database on the universe of formal firms in Argentina constructed by the Observatory of Employment and Entrepreneurial Dynamics (*Observatorio del Empleo y la Dinámica Empresarial, OEDE*).

Argentina's competitiveness program (PACC) increased the number of employees, the probability of exporting, and the volume of exports in MSMEs.

Because the support provided by the PACC was not randomly assigned—that is, the firms that received support applied for it, presented a project and met certain eligibility criteria—the rest of the firms (nonparticipants) were not necessarily comparable with the beneficiaries. In other words, there was *selection bias*.

To estimate the effects of the PACC on the firms' performance, the evaluation used two econometric methods. The aim of the first method was to use propensity score matching to identify among a sample of nonbeneficiaries, those firms with observable characteristics similar to those of beneficiary firms. In other words, based on the information available, a “clone” nonbeneficiary firm was found for each beneficiary firm. Once that sample was obtained—and to eliminate potential differences in characteristics not observable to evaluators, such as entrepreneurial spirit, management capacity, or growth potential—a second econometric method, a lagged dependent variable model, was used to control for firm performance before entering into the program.

Despite the methodological challenges faced by the evaluation team, this evaluation yielded valuable insights on the effectiveness of the PACC. Today, an increasingly number of productive development policy programs are finding methodological ways to rigorously measure whether projects work.

**Project information:**

[AR-L1033](#)

**More about the evaluation:**

Castillo, Victoria, Lucas Figal Garone, and Alessandro Maffioli. Forthcoming. “Evaluación de Impacto del Programa de Acceso al Crédito y Competitividad para MyPyMEs en Argentina,” IDB Working Paper Series, Inter-American Development Bank, Washington, DC.



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ARGENTINA

## Do Productive Development Policies Work for MSMEs?

### PROGRAM:

MSMEs Credit Access and Competitiveness Program (PACC in Spanish): Co-finances technical assistance with the aim of fostering the competitiveness of micro, small, and medium-sized enterprises (MSMEs).

### WHY THIS EVALUATION?

To determine the effectiveness of productive development policies that co-finance individual technical assistance for MSMEs in Argentina.

### WHAT'S NEW?

This was the first impact evaluation of the PACC that combines diverse sources of administrative data.



### UNIVERSE

Combination of propensity score matching and a lagged dependent variable model



Control:  
3,639 firms

Treatment:  
3,639 firms

### INTERVENTION

Grants that co-finance technical assistance and/or training for individual firms in the following strategic areas:

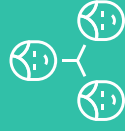


- Markets and marketing
- Productive infrastructure, products, and services
- Organization and systems
- Quality in processes and services
- Human resources
- Information and communications technology (ICT)

### RESULTS + CONCLUSIONS

With support from the PACC, and compared to the control group the **treatment group** showed:

5%\*\*\* increase  
**level of employment**



6%\*\*\* increase  
**probability of exporting**



6%\*\*\* increase  
**volume of exports**



1.5%\*\*\* increase  
**survival rate**



1%\*\*\* increase  
**average wage paid**

However, the effects varied depending on the firm's sector and type of project co-financed.

### POLICYMAKING RECOMMENDATIONS

The cost-effectiveness of productive development policies such as the PACC can be improved by:

- Focusing resources on the first project co-financed for a firm.
- Focusing on specific types of investment projects, such as support for improving the quality of processes and products.
- Using differentiated instruments according to the economic sector.

Significance level: \*\*\* 1 percent

# Does Tutoring Improve Learning?

## Tem+Matemática: Improving Educational Performance in Brazil

**S**tudents often complain that math is difficult to learn, and for many, it is far from their favorite subject. Improving performance is a considerable challenge because the subject is often not taught in an interesting way and not related to problems relevant to students.

The state of São Paulo, Brazil launched the Tem+Matemática initiative to motivate students to improve their math skills, which are considered critical in order to access more complex knowledge and function in society.

### Background

Since the 1990s, there has been a gradual but significant increase in Brazil in the enrollment rates of school-age youth. This development has substantially changed the student profile and brought about major challenges for public education systems. The students who enrolled in the education system increasingly come from less-privileged socioeconomic groups and aspire to attain an education that surpasses that of their parents.

However, this increase in enrollment has not been accompanied by improvements in the quality of instruction. The higher enrollment rates often mask important issues: high repetition rates, low completion rates of educational cycles, and poor performance on international tests such as the Programme for International Student Assessment (PISA). For example, on the 2012 PISA tests, 67 percent of 15-year-old Brazilian students did not attain minimum learning levels to carry out simple algebraic equations and/or calculate proportions or areas. That rate is three times higher than the rate for countries in the Organisation for Economic Cooperation and Development (OECD).

## Evaluation 3.3

Brazil

Story by:  
**Marcelo Pérez Alfaro**, a lead education specialist at the IDB in Brazil.

## Intervention

With this situation in mind, the Foundation Institute for Economic Research (*Fundación Instituto de Pesquisas Econômicas*), the Education Secretariat of the State of São Paulo, and the IDB designed Tem+Matemática. The program provided tutoring for students in the seventh and ninth grades who had problems learning math and had a desire to overcome those problems. Study (tutoring) groups made up of three to five students from the same grade and a tutor were formed and met periodically until the end of the school term.

The tutors were university students in mathematics or other areas such as chemistry and physics. By working in an informal environment, students could show the tutor what specifically was giving them problems or could review work from the class, with guidance of the tutor. The connection with the tutors—who often came from the same socioeconomic background as the students and thus demonstrated that the challenges involved in attaining a university degree could be overcome—was considered key for the program to be a success.

Study sessions lasted 90 minutes and were held between August and November of 2011. The time devoted to these sessions, on top of class time, amounted to 40 percent of the class time assigned for math during the school year. The objective was for the tutoring sessions to bring about an improvement in student learning.

## Evaluation

To determine the effectiveness of the program, an experimental impact evaluation supported by the IDB examined four dimensions: performance in mathematics, Portuguese, science, and geography; dropout, retention, and absenteeism rates; non-cognitive skills such as perseverance, self-esteem, self-efficacy, socialization (willingness to work in group settings and networks of friends, among others), and autonomy; and study habits (strategies for study and time devoted to mathematics).

The Education Secretariat selected 1,200 schools with the lowest average math scores. Among these, 210 schools were selected that had seventh and ninth grade classes and that were located near universities with bachelor's degree programs. Students were then given the opportunity to participate in the tutoring sessions. Finally, 142 schools were selected that had the physical space available for the sessions and where at least 10 students signed up for the tutoring and three tutors expressed interest in participating. The schools were divided into an 88 school treatment group (those that participated in the tutoring program) and a control group comprised of 54 schools. The evaluation was conducted with the pool of students who participated in at least one-third of the tutoring sessions.

The evaluation estimated the short-term effects upon completion of the program and the long-term effects two or three years after the program had ended. The results showed: little short-term impact in terms of improved learning; positive

By working in an informal environment, students showed what specifically was giving them problems or reviewed work from the class, with guidance of the tutor.



effects on indicators of perseverance and willingness to work in a group setting; and negative effects, although not statistically significant, on retention, dropout, and absenteeism rates. No evidence was found of long-term effects on the variables evaluated.

## Modest Results, Useful Lessons

Since it had no impact on any of the variables of interest, why is it worth reviewing the experience of this program? The answer is because it provides lessons for future endeavors. Issues that came up during program implementation included the following:

- Problems with recruiting interested tutors resulted in frequent absenteeism of both students and tutors, mainly during the initial weeks of the project. What made recruitment and retention of tutors most difficult was the distance between the schools where the tutoring took place and the universities where the tutors were studying, as well as the low and unattractive remuneration for the tutors during a time when they had other employment possibilities in the labor market.
- Students frequently dropped out of the tutoring sessions, many of them because of the absence of the tutors during the first week of the program. Nearly 65 percent of the students who originally enrolled or were offered an opportunity to participate in the program never attended a session, or attended less than 10 of the 30 planned sessions.

Without a doubt, there is a need for increased availability and better coordination of this type of programs. In terms of the tutors, it is important to strengthen their understanding of teaching practices before they graduate. In terms of the students, their teachers should take on a more active role in recommending them for the tutoring sessions and following up on their actual participation. Finally, it is essential that coordination between math teachers and tutors be improved with regard to the activities to be covered in the tutoring sessions and to overcome the challenges in learning mathematics and also with teacher training institutions in order to support the tutors along the programs.

**Project information:**  
[BR-T1158](#)

**More about the evaluation:**  
Fundação Instituto de Pesquisas Econômicas.  
2015. "Avaliação do impacto de Programa Tem Mais Matemática," Relatório Final de Resultados.



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BRAZIL

## Improving Educational Performance

### PROGRAM:

Tem+Matemática, a tutoring program in Brazil, focused on seventh and ninth grade students who have problems learning mathematics.

### WHY THIS EVALUATION?

Low mathematics scores of Brazilian students on the PISA tests. Sixty seven percent of students do not attain minimum learning levels for this subject.

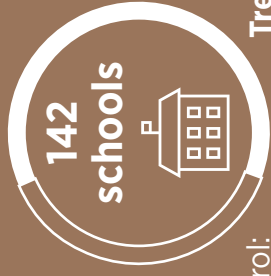
### WHAT'S NEW?

Evaluation of cognitive skills and noncognitive skills in the short and long-term: willingness to study in a group setting, perception of teachers (using students' report cards), and enrollment in the following academic year.



### UNIVERSE

Experimental design with random assignment including 939 students

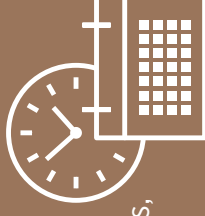


Control: 54 schools  
Treatment: 88 schools

### INTERVENTION

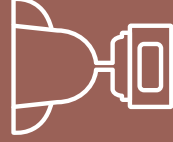
**45 hours of tutoring**

(90-minute sessions, twice a week, for 15 weeks)



### RESULTS + CONCLUSIONS

Short-term results show:



**increase in perseverance**  
(0.33\*\* points)

7th grade students



**increase in willingness to work in a group setting**  
(0.5\*\* points)



**increase in study planning**  
(0.8\*\* points)

9th grade students



Not statistically significant negative effects on **retention, dropout, and absenteeism rates**



**No evidence of long-term impact** on the variables evaluated

### POLICYMAKING RECOMMENDATIONS

- Strengthen the link between the tutoring and the initial learning of the students.
- Strengthen the link between the teachers and tutors in order to better coordinate the tutoring activities.

Significance level: \*\* 5 percent

# Would You Leave a 10-year-old Child Home Alone?

## Most Moms in Chile Say No

**W**hat is the most common reason given by women when asked why they are not looking for a job? Just what you might think: because they have to take care of their children. This was the answer of almost 40 percent of non-working women with children under 14 surveyed as part of an IDB study in Chile.

And what is the most common policy advice given to governments that want to promote female labor force participation? Again, just what you might think: invest in childcare programs.

That leads to the more complicated question: Why, then, don't countries necessarily see a significant increase in women's participation in the labor market when they invest in expanding access to daycare?

Part of the answer may be the fact that caregiving doesn't end when the children reach age six and start school full-time. To further understand the problem, it is useful to keep in mind some of the fundamental circumstances involved:

- **School day:** In most countries of Latin America and the Caribbean, the school day traditionally lasts between four and five hours, either in a morning or afternoon session.
- **Work day:** The average work day in the Region is close to eight hours, without taking into account commuting time. This is incompatible with the school schedule.
- **Unattended children:** Unless parents have no choice, they feel it's not safe to leave school-age children alone in the house.
- **Mothers:** Women are the main caregivers of children, regardless of the children's age.

Taken together, these factors help explain why, regardless of the supply of day care centers, many women are still constrained from working outside the home even when their children start elementary school. These factors also help explain

## Evaluation 3.4

Chile

Story by:  
**Claudia Piras**, a lead social development economist in the Gender and Diversity Division in the IDB headquarters in Washington, DC.

what has been a puzzling question in Chile, where women are as educated as men and have the highest level of schooling in Latin America and the Caribbean, yet where the average female labor force participation of 43.5 percent in 2011 was 9 percent lower than the regional average.

In 2011, the government of Chile launched the 4-to-7 Program, which provides after-school activities for children aged 6 to 13 from 4 p.m. to 7 p.m. Its objective is to help women participate in the labor market by providing a safe place in public schools where children can go after the school day, get help with their homework, and participate in a variety of activities such as art and culture, sports, and computer classes. Today, 196 schools and 11,500 children are enrolled nationwide, and more than 8,000 women are beneficiaries.

The IDB, in partnership with the Chilean National Women's Service (SERNAM), conducted an experimental impact evaluation to measure the results of the program. Because the demand for the “4-to-7” program exceeded its capacity, it was possible to randomly offer daycare vacancies to some of the mothers requesting the service. This in turn facilitated the application of the impact evaluation and a follow-up household survey to determine the impact of the program on mothers' labor force participation, employment, and use of afterschool childcare. The women who were offered a vacancy for their children became the treatment group, while the ones who didn't were part of the control group.

The evaluation showed positive effects of the program: employment of mothers who were offered afterschool care for their children increased by 5 percent, and their labor force participation increased by 7 percent relative to the average for the control group. No statistically significant effects were found in terms of the mothers' hours worked or their income when compared to the last job held by the mothers. The most surprising finding was that the subgroup that increased its labor force participation and employment outcomes most was the group of women who, in addition to having children in the program, also had children younger than 5.

Why would the 4-to-7 Program have a greater impact on women with young children when the supply of daycare in Chile has expanded six-fold in the previous seven years? The explanation is that those mothers, even though they might have had access to day care for their younger children, had still needed to stay home to supervise their school-age children in the afternoon. Providing an after-school program for the older children almost doubled the enrollment of small children in formal day care for those families.

This finding highlights the need for public policies to take an integrated and coordinated approach to supplying child care services that encompasses not only early childhood daycare but also before-school and after-school programs for children between 6 and 13 years old. It's clear, and it's understandable, that mothers in Chile, like anywhere else in Latin America and the Caribbean and across the world, do not want to leave their children home alone.

**The most common policy advice given to governments that want to promote female labor force participation is investing in childcare programs.**

**Project information:**  
CH-T1112

**More about the evaluation:**  
Martínez, C. and M. Peticarà. (2014). “Childcare Indivisibility and Maternal Employment,” *Poverty Action Lab Working Paper*. Abdul Latif Jameel Poverty Action Lab, Massachusetts Institute for Technology, Cambridge, MA.



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CHILE

# Would You Leave a 10-year-old Child Home Alone?

## PROGRAM:

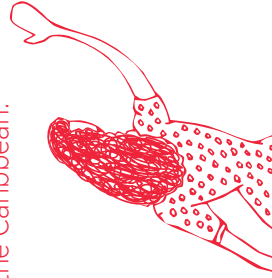
Chile's 4-to-7 Program helps women participate in the labor market by offering free after-school care for children aged 6 to 13.

## WHY THIS EVALUATION?

To determine whether offering an after-school care program has an impact on increasing female labor participation in Chile.

## WHAT'S NEW?

It is the first randomized control trial that examines the impact of an after-school care program on female labor participation in Latin America and the Caribbean.



## UNIVERSE

Experimental design with random assignment



## INTERVENTION

**Offering after-school childcare from 4 pm to 7 pm** for economically active women with children aged 6 to 13

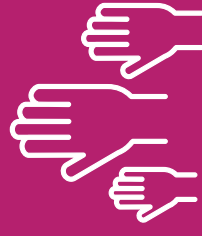


## RESULTS + CONCLUSIONS

The program increased:



**mothers' employment by 5%\***



**labor force participation by 7%\***  
(relative to the average for the control group)

Effects were greater...



when the **childcare hours were compatible** with mothers' regular **working hours**



**for women who were not working** when they enrolled their children in the program



**for women with children younger than 5 years of age**

## POLICYMAKING RECOMMENDATIONS

After-school day care programs that aim to increase female employment need to have a schedule compatible with regular working hours, and do so in coordination with childcare services for preschoolers.

Significance level: \* 10 percent



An illustration in the background of the top half of the page shows a hand holding a heart. The heart is composed of several small dots, and the hand is rendered in a sketchy, line-art style. The entire background of the top half is a solid orange color.

# A Call that Protects Lives

## The 123 Mujer Hotline: Reducing Domestic Violence in Colombia

### Evaluation 3.5

Colombia

“On May 21, 2014 at around noon, I called the police because I was being abused by my husband. I had called the police before and they came and calmed down the situation, but things remained the same after they left. The next time it happened, I called *123 Mujer* and I finally felt that the situation would be resolved. The police detained my husband and I got psychological counseling by phone. They told me that I should press charges and I did. *123 Mujer* also provided me transportation to the police station, then picked me up afterward and brought me home.”

The paragraph above is the summary of a testimony from a 57-year-old woman interviewed for an evaluation of the *123 Mujer* hotline service provided by the city of Medellín, Colombia and its police department. Anyone can call the emergency line to report violence they have suffered or witnessed. All domestic violence callers receive a full police response before consenting to have their calls passed on to the *123 Mujer* team for additional assistance. If the caller wants, and the situation legally permits it, she may be directed straight to the *123 Mujer* team without police intervention.

Despite the obvious benefits of such domestic violence emergency hotlines, their effectiveness in reducing domestic violence in Latin American and the Caribbean had never been evaluated until recently. Almost all countries in the Region have such hotlines which provide a range of services of varying quality and cost administered either by public agencies or nongovernmental organizations.

The *123 Mujer* hotline was one of five promising interventions in the Region assessed by the IDB and a committee of gender experts from the United Nations, the Pan American Health Organization, and the Colombian non-governmental organization *Profamilia* as one of the ideal candidates to conduct an impact evaluation. The government of Medellín agreed to facilitate the evaluation, which was financed by IDB technical cooperation resources.

Story by:  
**Adria Natalia Armbrister**, a social development specialist in the Gender and Diversity Division in the IDB office in Lima, Peru.

## Finding A Way to Respond to Domestic Violence

Colombia's National Household Demographic Survey conducted in 2010 reported that 71.1 percent of women aged 13 to 49 in Medellín had experienced intimate partner violence, a type of domestic violence that occurs between current or former romantic partners. In response, Medellín's Secretary for Women created the *123 Mujer* hotline in March 2013 to provide timely and more responsive care for survivors of such violence. The goal was to prevent the escalation or repetition of violence and reduce its adverse impact on women, their families, and the community. The hotline also enabled the local government to collect accurate data on the number of intimate partner violence cases reported to the police. This allowed the city to tailor the hotline to respond more effectively to emergencies. Initially, the hotline operated only from 7 a.m. to 7 p.m. Monday through Friday. Women who called after hours and left their contact information were called back starting the following day, but most of those follow-up calls came more than 24 hours after the reported incident. Some calls were never completed because of difficulty making phone contact.

## Evaluating Medellín's Response

Increasing demand for assistance eventually led to the introduction of around-the-clock *123 Mujer* hotline services in early 2015. But the two-and-a-half-year window during which the hotline operated on a limited schedule provided an optimal context to evaluate ex-post whether such services could in fact reduce the incidence of intimate partner violence in Medellín and, if so, what would be the most effective way to go about it.

From the 2,100 calls to the hotline between September 2013 and May 2014, the evaluation team randomly selected a sample and divided it into two groups: a treatment group of 459 women who called between 7 a.m. and 7 p.m. Monday through Friday and were attended to immediately or within 12 hours; and a control group of 290 women who called the hotline after hours and were helped 36 hours or more after the initial call or never contacted.

The evaluation found that women in the treatment group reported significant improvements in their situation compared to women in the control group. Women who received immediate attention or attention within 12 hours were 19 percent less likely to report having suffered moderate events of domestic violence in 2014, such as control over the woman's comings and goings and threats of violence; 37 percent less likely to report having suffered physical domestic violence; and 16 percent less likely to report having suffered psychological domestic violence.

The evaluation also found that women assisted within 10 minutes of their call to the hotline were 25 percent less likely to report subsequent domestic violence events in 2014 than women assisted after 36 hours or more and 31 percent less likely to report subsequent domestic violence events than women that didn't receive any attention at all.

The goal was to prevent the escalation or repetition of violence and reduce its adverse impact on women, their families, and the community.

The results of this rigorous quantitative evaluation suggest that providing prompt assistance to survivors of intimate partner violence improves their ability to take positive steps to liberate themselves from violent situations before that violence escalates to its severest and deadliest forms. The window for helping women suffering from domestic violence attacks is brief, and once it closes, the potential benefits of the hotline intervention quickly diminish. The results thus support introducing adequately staffed and around-the-clock emergency hotlines in conjunction with police services to assist survivors of intimate partner violence, rather than stand-alone services with limited hours.

**Project information:**  
[RG-T1908](#)

**More about the evaluation:**  
Armbrister, Adria N., Claudia Peñaranda, Juliana Rodríguez, Olga Lucía Romero, and Marcos Vera. Forthcoming. "Can Dialing Three Numbers Reduce Violence against Women? Evidence from a Natural Experiment in Medellín, Colombia. IDB Working Paper Series. Inter-American Development Bank, Washington, DC.



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COLOMBIA

# The 123 Mujer Hotline: Reducing Domestic Violence

## PROGRAM:

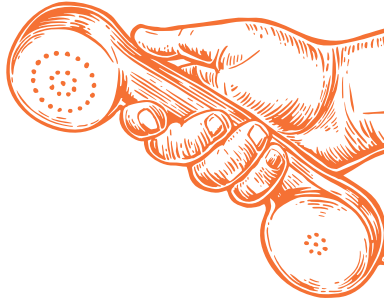
123 Mujer hotline, an emergency hotline for female survivors of domestic violence in Medellín.

## WHY THIS EVALUATION?

To evaluate the effectiveness of hotlines that aim to reduce the number of domestic violence events women experience in a given year.

## WHAT'S NEW?

First known quantitative evaluation of a publically financed emergency domestic violence hotline in the world.



## UNIVERSE



Natural Experiment



## INTERVENTION

## RESULTS + CONCLUSIONS



Response time  
10 min

Time  
of call

12 hrs

36 hrs

**10 minutes or less**  
vs 36+ hours:

**25%\*\* less**  
reported domestic violence events

**12 hours or less:**  
vs 36+ hours or no attention at all

**19%\*\* less**  
“moderate” domestic violence events

**37%\*\*\* less**  
physical violence

**16%\* less**  
psychological violence

**Shorter response time means less reported domestic violence**



**10 minutes** vs no attention at all:  
**31%\*\*\* less**  
reported domestic violence events

## POLICYMAKING RECOMMENDATIONS

Hotline services should:

- Provide assistance in conjunction with the police within 12 hours or less, and ideally within 10 minutes after an emergency call.

- Ensure the delivery of psychological, legal, and financial assistance.
- Be appropriately funded and staffed.

Significance level: \* 10 percent, \*\* 5 percent, \*\*\* 1 percent

# Blackboards versus Laptops

## Challenges of Using Technology in Education

**T**echnology has increased productivity in the workplace and shaped the way we use our free time and the way we socialize. So why is technology not at the core of classroom learning? Funding to equip schools and students with technology is usually considered one of the biggest challenges, especially in the developing world. But finding the right approach to use technology effectively in the classroom is also a major challenge, according to an [evaluation by the IDB](#).

The Costa Rican government and the IDB recently conducted an experimental evaluation of seventh grade students to assess the effectiveness of technology in improving students' ability to reason, debate, and communicate using mathematics. The results showed that the use of technology had negative effects on student learning—a surprising outcome, since various studies have shown that technology, when guided, offers students opportunities to explore and understand mathematics in all of its dimensions.

The Costa Rican experiment aimed to foster students' active participation in geometry classes by changing the way classroom time is allocated in order to carry out different tasks and devote more time to exploration. Unlike the traditional lecture-style teaching of math in Costa Rica, the classes gave students an active role and teachers a less controlling one.

The evaluation was carried-out in 85 schools, involving 18,000 seventh grade students and 190 teachers. In Costa Rica, the seventh grade is the first year of secondary school. The country has a long tradition of technology in its schools, and the students involved in the experiment were also accustomed to using technology at home.

The students were divided into five different groups, including: a control group in which teaching continued with the traditional method. These participants did not receive new materials or new technologies. Of the four treatment groups, three used the new teaching approach and a new set of class materials designed by Costa

## Evaluation 3.6

Costa Rica

Story by:

**Samuel Berlinski**, a principal research economist in the IDB headquarters in Washington, DC.

**Matías Busso**, a lead research economist in the IDB headquarters in Washington, DC.



Rican and international experts, including a new technology (either an interactive whiteboard, a computer lab, or a laptop for every child); and one used the new teaching approach and materials but did not receive the new technologies.

Surprisingly, the control group learned significantly more than any of the four treatment groups. The treatment group that did not use the new technologies learned about 17 percent of a standard deviation less than the control group. The treatment groups that used the new technologies performed on average 25 percent of a standard deviation below the control group. In other words, for an average student this is equivalent to be ranked 10% lower after being exposed to the new pedagogy and technology.

Students in the treatment groups performed worse than those in the control group in learning both basic concepts and higher-order geometry skills. In addition, the evaluation found that students in the treatment groups were less willing to try the new learning strategies, more disengaged from the class, less inclined to make an effort, and liked math less. Performance declined most among students who previously had been the best in their classes: their behavior deteriorated and they were less engaged with learning. Why did this happen? There are several possible reasons. Students may have been better equipped to learn under the traditional method or the new approach may have given children more opportunity to become distracted. Another possible contributing factor may have been that student-teacher interaction suffered during the intervention. The role of teachers is decisive: their ability and creativity in leading, motivating, and engaging students can make all the difference. For this evaluation, teachers used the training they received but didn't master the innovation in a way that maximized the benefit for their students. The findings suggest that teachers found it difficult to adapt to the new teaching style with the new materials, and some of them may have rushed over some of the material.

The study in Costa Rica shows the importance of evaluating small pilot projects before embarking on large-scale interventions. The IDB has made several efforts to analyze the use of computers in schools and give policy recommendations on strategies to implement information and communications technology in education.

It should be noted that the results of the Costa Rica evaluation reflect student performance in the short term. Perhaps additional training, more finely-tuned materials, and a better blending of active learning techniques with technology could produce significant improvements in math performance. The evaluation does show, however, that educational reforms involving new technologies and teaching approaches may not bring immediate results. Policy makers should monitor the performance of such reforms carefully and also consider alternatives to strengthening short-term performance, such as tutoring programs.

The study in Costa Rica shows that educational reforms involving new technologies and teaching approaches may not bring immediate results.

**Project information:**  
[RG-T1946](#)

**More about the evaluation:**  
Berlinski, Samuel and Matías Busso. (2015) "Challenges in Educational Reform: An Experiment on Active Learning in Mathematics." Working Paper No. 561, Inter-American Development Bank, Washington, DC.



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COSTA RICA

# Challenges of Using Technology in Education

## PROGRAM:

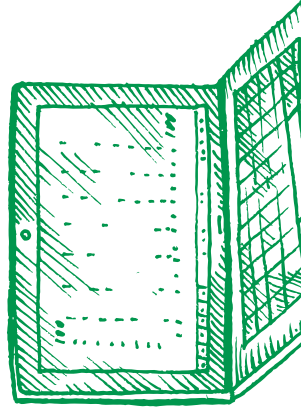
Evaluation of a secondary school program in Costa Rica designed to improve students' abilities to reason, debate, and communicate using mathematics.

## WHY THIS EVALUATION?

To assess whether the use of technology combined with a new curriculum in Costa Rica improved student learning of math.

## WHAT'S NEW?

This evaluation is one of the few experiments in which technology is blended with a new pedagogical approach.



## UNIVERSE

Experimental design with random assignment including 18,000 students and 190 teachers



Control:  
20 schools

Treatment:  
65 schools

## INTERVENTION

### New curriculum +

1 of 3 different types of technology or none



Interactive whiteboards



Computer labs



One laptop per student



No new technology

## RESULTS + CONCLUSIONS

New curriculum +  
no new technology

**learned  
17%\*\* less**

(of a standard deviation)  
than control group

New curriculum +



**performed 25%\*\*\* below**

(of a standard deviation) than control group on average

## POLICYMAKING RECOMMENDATIONS

Educational reform entails sizable costs in the short run, so policymakers should carefully monitor the performance of these reforms and consider alternatives to strengthen student learning, such as tutoring programs.

Significance level: \*\* 5 percent, \*\*\* 1 percent



# Skills and Opportunities for A Better Future

## Positive Youth Development in Jamaica

In Jamaica, more than 120,000 “unattached” 16-to-24 year-olds are not in school and are not working. Youth unemployment in Jamaica is more than twice (30.3 percent) that of adults (13.5 percent) and crime rates are highest among 18- to 24-year-old males.

Many young people in this age bracket have given up on school because they don’t feel they are learning skills that will help them find a job. They want to work but do not have the needed job experience or training. Often they don’t have adequate skills in reading and math, or the exam scores necessary to get into higher education or vocational training programs.

The government of Jamaica has designed two programs to help these “unattached” youth, both financed in part by an IDB sovereign guaranteed loan of US\$11 million:

- The Career Advancement Programme (CAP) extends high school education for two years to keep youth off the streets and in school. It focuses on fundamental reading, math, vocational, and life skills, along with a three-week work internship. CAP started in 2010 with 1,500 youth at more than 60 secondary schools and has served some 53,800 students since its inception.
- The National Youth Service (NYS) Corps provides training in multiple locations across the country, including a one-month training program in intensive job skills and basic academic skills, followed by a six-month job internship. NYS Corps transitioned over time from a residential to a non-residential program, with a focus on job skills and volunteerism. Since 2008, nearly 60,000 youth have benefitted from NYS programs.

Both programs were inspired by what is known as positive youth development (PYD) theory, an area of applied development science that aims to optimize the developmental progress of young people. The Jamaican programs have focused on

## Evaluation 3.7

Jamaica

Story by:

**Cynthia Hobbs**, a lead education specialist in the IDB office in Panama.

**Darrell Hull**, an Assistant Professor in the Department of Educational Psychology at the University of North Texas.

**Lincoln Williams**, the Director of the Consortium for Social Development and Research at the University of the West Indies: Open Campus.

**Carolyn Thomas**, a Junior Research Fellow at the University of the West Indies.

developing youths' capabilities and helping them realize their potential to participate actively in society through productive work and as good citizens.

Two impact evaluations as well as qualitative research studies carried out from 2011 to 2013, assessed the effectiveness of both programs. The qualitative analysis involved focus groups with participants and parents/guardians, giving them a direct channel to provide feedback about their experiences and make suggestions for future improvements to the programs.

The research team of these impact evaluations included specialists from the University of the West Indies and the University of North Texas, with support for data collection from NYS field officers, CAP coordinators, a team from the Jamaica Foundation for Lifelong Learning and the team responsible for managing the IDB loan. A Steering Committee comprised of government agencies and IDB staff accompanied the evaluation process.

## Some Challenges to the Evaluation

Ten different instruments, including tests and surveys, were administered on four occasions over the course of two years. They measured academic performance, social functioning, confidence, development of workplace skills, and economic and social benefits from participating in the programs.

Both impact evaluations used propensity score matching in order to compare program participants (the “treatment” group) with similar nonparticipants (the “control” group). Keeping track of participants in the two programs over two years was difficult because of attrition and poor record keeping (of students leaving the program or moving to a different school). Keeping track of those not in a program was even more challenging since many moved or changed their phone numbers making it difficult to find them throughout all four stages of the evaluation.

Making the analysis even more complex was the fact that both programs underwent changes during the evaluation period. In 2012, a new government moved the NYS program from the Ministry of Education to the Ministry of Youth and Culture. Moreover, mid-way through the evaluation, all the CAP coordinators were changed and the research team had to train the new cohort to apply the instruments. Other evaluation challenges included site coordination, scheduling delays, and enrollment changes.

Jamaican programs have focused on developing youths' capabilities and helping them realize their potential.

## Did the Program Work?

Despite the challenges, the evaluations showed some important findings. CAP participants improved their skills in reading and mathematics (by an increase of 8 percent and 12 percent, respectively), communications (a 14 percent increase), and capacity to adapt to change (a 12 percent increase).

Overall, CAP participants, many of them dropouts, were grateful: “I feel good... because I get a second chance to better myself,” one participant said.

NYS participants also made gains in reading (an 8 percent increase), math (a 10 percent increase), and problem-solving (a 9 percent increase) when compared against the control group. They also showed increased confidence in their ability to get a job, although there were no significant differences at the end of the evaluation between the number of program and non-program participants actually holding a full-time job.

Overall, the impact evaluations provided evidence of the potential of PYD-based programs to positively influence youth development in Jamaica. The evaluations concluded that both programs should provide more opportunities for youth to work with peers and mentors on activities that require teamwork and building relationships, promote social and emotional development, and provide transition support to maintain and build on the skills developed during the program. In addition, more connections need to be made between the programs and other key agencies such as the Jamaican Foundation for Lifelong Learning (JFLL) and the Human Employment and Resource Training (HEART) in order to better integrate services and leverage skills training.

The evaluations also found that basic sensitivity training of work supervisors and other workplace staff could increase the likelihood of positive work/internship experiences for participating youth. Finally, it is critical to focus attention on the transition from the program to employment.

Programs that bring skills, opportunities, and hope to Jamaican youth are clearly important to the country's future. The recommendations outlined above were shared with government officials and technical staff from the two ministries with the aim of helping to shape and improve existing and future programs.

**Project information:**

JA-L1005

**More about the evaluation:**

University of North Texas and University of the West Indies. 2014. "Impact Evaluation of Youth Development Programmes in Jamaica: The National Youth Service (NYS) Non-residential Corps Programme & The Career Advancement Programme (CAP). Presentations of Findings". (Unpublished manuscript November 6th, 2014), Power Point presentation.





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JAMAICA

## Positive Youth Development - CAP

### PROGRAM:

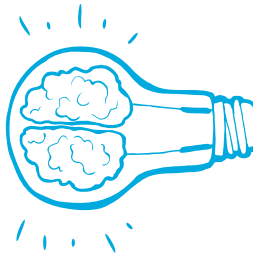
Career Advancement Programme (CAP) directed toward 16- to 24-year-olds who are not in school and not employed ("unattached" youth).

### WHY THIS EVALUATION?

To establish the effectiveness of the CAP program on academic, social functioning, and workplace skills development.

### WHAT'S NEW?

This was the first rigorous evaluation of CAP since the program's inception.



### UNIVERSE

Quasi-experimental impact study (propensity score matching)

514 youth

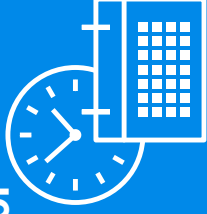


Control:  
257 youth

Treatment:  
257 youth

### INTERVENTION

Offer of 4 days of classes a week (4-hour sessions) for two academic years, including a 3-week internship



### RESULTS + CONCLUSIONS

When compared to the control group CAP participants improved:

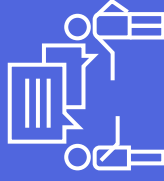
reading skills  
by 8%\*



math skills  
by 12%\*\*\*



communication  
skills by 14%\*\*\*



capacity to adapt  
to change by 12%\*\*\*



### POLICYMAKING RECOMMENDATIONS

CAP needs to provide more opportunities for youth to work with peers and mentors on activities that require teamwork and relationship-building and promote social and emotional development.

In particular, CAP should:

- Provide individualized training when possible, or in small groups.
- Use real-world activities and career-related tasks to emphasize the practical value of reading and math.
- Provide better links to vocational training to facilitate the transition from CAP to work.
- Train staff to become mentors and champions and to include parents and guardians.

Significance level: \* = 10 percent, \*\*\* = 1 percent

# Positive Youth Development - NYS

## PROGRAM:

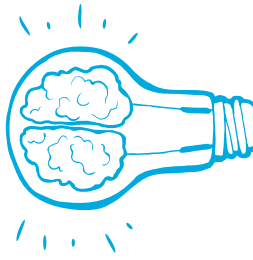
The National Youth Service (NYS) Corps, is a program directed toward 16- to 24-year-olds who are not in school and not employed (“unattached” youth).

## WHY THIS EVALUATION?

To establish the effectiveness of the NYS program on academic, social functioning, and workplace skills development.

## WHAT'S NEW?

Multiple waves of data collection on the NYS program enabled researchers to assess its lasting effects on participants.



## UNIVERSE

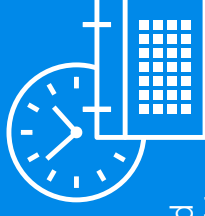
Quasi-experimental impact study (propensity score matching)



## INTERVENTION

**Offer of 20 working days of training for one month**

(10 of core curriculum/academic and life skills, and 10 of technical skills) and a 7- to 12-month internship (depending on specialization)



## RESULTS + CONCLUSIONS

When compared to the control group **NYS participants improved:**

**reading skills by 8%\*\***



**math skills by 10%\*\*\***



**problem-solving skills by 9%\*\***

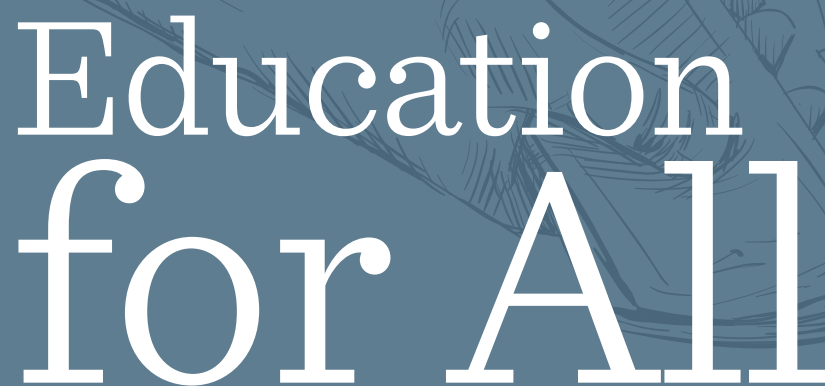


## POLICYMAKING RECOMMENDATIONS

NYS needs to provide more opportunities for youth to work with peers and mentors on activities that require teamwork and relationship-building and promote social and emotional development.

To ensure longer-term positive impacts, the NYS program should:

- Provide transition support to maintain and build on skills developed during the program.
- Focus on the transition from the program to employment.
- Ensure that participants receive the necessary training, supervision, and assessment they need to obtain vocational certifications.

A blue-toned illustration of two hands holding several sheets of paper, with the title 'Education for All' overlaid in large white text.

# Education for All

## The Effect of Upfront Payments on Rural Instructors' Turnover

**T**he dream of many young Mexicans is to go to college. Juanita's high school dream was to become a teacher one day. Little did she imagine that her dream would make a difference to children living in small rural areas of Mexico. But Juanita's dream began to come true after she met a representative from Mexico's National Council for Educational Development (*Consejo Nacional de Fomento Educativo* – CONAFE).

CONAFE focuses on providing educational opportunities to children and teenagers in remote communities with fewer than 500 inhabitants. One of CONAFE's programs consists of enrolling young instructors to teach in those communities for at least a year. The more than 35,000 CONAFE instructors often live in the community during the week with local families and those families are responsible for providing food and housing. CONAFE offers them a monthly subsidy of Mex\$1,427 (about US\$110 at the time of the evaluation). If instructors teach for a full year, they become eligible to have their higher education financed. Those who stay for two years receive CONAFE financing for up to 30 months of college.

Unfortunately, in the past few years about one in three young instructors dropped out before the first school year was over, disrupting the education of the very children CONAFE aimed to help. The difficult living conditions young instructors faced in the rural communities was leading to increasingly high turnover rates. For example, Juanita arrived in her community only after a two-and-a-half-hour bus ride followed by a 45-minute walk. Also, she found herself living with no access to running water and no cellphone service to call home.

Aware of these difficult living arrangements, CONAFE and the IDB worked together to find an innovative and cost-effective way to get community instructors to complete their service and ultimately ensure the continuity of CONAFE's program. The young instructors program, known as Social Equity Builders, is funded

## Evaluation 3.8

Mexico

Story by:

**Rosangela Bando**, an evaluation economist in the Strategy Development Division in the IDB headquarters in Washington, DC.

**Claudia Uribe** was a lead specialist in education in the Education Division in the IDB headquarters when this evaluation was conducted.

by the second phase of an IDB sovereign guaranteed loan for US\$100 million approved in 2010.

CONAFE and the IDB agreed to provide a compensatory payment of Mex\$ 750 per month (an extra US\$58 at the time of the evaluation) in addition to the Mex\$1,427 subsidy. Moreover, they decided to implement a randomized control trial over two years modifying the subsidy payment schedule. The trial took place in the Mexican states of Chiapas, Puebla, and Veracruz, where nearly 60 percent of all young instructors in the country serve. One payment schedule provided the monthly compensatory payment of Mex\$750 for 10 months, and the other one was designed taking into account three drop out peaks. Participating instructors in the second schedule had their payments distributed in three installments. They received a considerably larger payment of Mex\$3,000 when they arrived in their communities in order to defray costs associated with settling in. The second and third payments provided Mex\$2,250 following the winter and spring breaks as incentives for young instructors to return. An earlier analysis had found that these were the three periods when dropout rates spiked.

An evaluation of the trial revealed considerable success for the alternative scheme. It showed dropout rates were lower for the community instructors paid under the alternative, second payment schedule throughout the academic year. At the end of the school year, for example, 23 percent of the instructors with monthly payments had dropped out. By contrast only 17 percent of those instructors under the alternative scheme had done so. Furthermore, there was no increase in early dropouts—in other words, teachers did not cash out and leave. Thus, more students were able to receive instruction without disruption right after the 2nd and 3rd payments were made.

Juanita was one of the instructors who received payments under the alternative payment schedule, and she went on to successfully complete her service. She is in college now, pursuing a teaching degree. Even considering her rough start as an instructor, Juanita looks back with pride on her experience. “I had to grow up,” she said. “In my home I was a child. In the community I was the teacher. I was responsible for the education of 10 children.”

Had she considered dropping out after receiving the first incentive payment? After all, it was probably the largest amount of money she’d seen at once in her lifetime up until then.

“No,” Juanita answered, “I used some of it to buy a laptop that helped me teach and study while I was in the community. The rest, I saved. I was careful with it. I knew I would need it.”

Juanita is pursuing her dream of becoming a teacher one day!

The difficult living conditions young instructors faced in rural communities lead to increasingly high turnover rates.

**Project information:**  
[ME-L1033](#)

**More about the evaluation:**  
Bando, Rosangela and Claudia Uribe. (2016). “[Experimental Evidence on Credit Constraints](#),” Working Paper No. 670, Inter-American Development Bank, Washington, DC.



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MEXICO

# The Effect of Upfront Payments on Rural Instructors' Turnover

## PROGRAM:

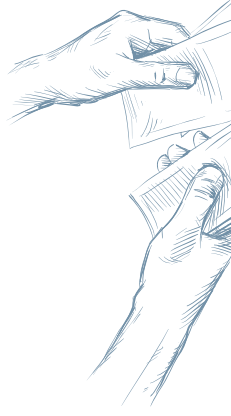
Consejo Nacional de Fomento Educativo's (CONAFE's) Builders of Equity Program aims to improve the quality of education provided in Mexico by decreasing the turnover of instructors.

## WHY THIS EVALUATION?

To identify alternative solutions to decrease instructors dropout rates in the CONAFE.

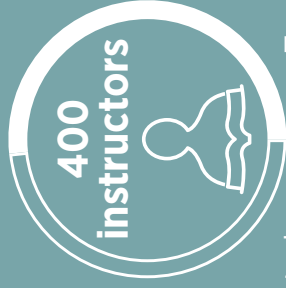
## WHAT'S NEW?

This is the first evaluation to explore the effects of changing the schedule of payments to its beneficiaries.



## UNIVERSE

Experimental design with stratified random assignment



Control:  
194 instructors

Treatment:  
206 instructors

## INTERVENTION

Implementation of an

**alternative payment schedule** switching from 10 monthly payments of MEX\$750 **to three installments** of MEX\$3,000, MEX\$2,250 and MEX\$2,250



## RESULTS + CONCLUSIONS

End of the year **dropout rates:**

On the 10 monthly payments plan:

**23%\***



On the 3 installments payment plan:

**17%\***



**No increase in early dropouts—teachers did not cash out and leave**

## POLICYMAKING RECOMMENDATIONS

Upfront payments to rural instructors in Mexico seem to improve their welfare and ultimately ensure the continuity of education programs such as CONAFE.

Significance level: \* = 10 percent





# Small Bug, Big Trouble

## The Fruit Fly Plague in Peru

**N**othing is more annoying than a fly buzzing around your head. But flies can be much more than an annoyance: fruit flies, for example, are one of the most harmful threats to fruit production in Peru, damaging crops by laying their eggs within the fruit.

Since 1990, Peru's fruit and vegetable exports have increased at an average annual rate of 16 percent, a growth rate faster than Peruvian merchandise exports as a whole. However, according to the government's National Sanitary Agricultural Authority (SENASA), at least 30 percent of the country's total agricultural production is lost each year due to the fruit fly plague.

Some 233,000 farmers in Peru's coastal region have had to implement pest control measures that, have increased their production costs. In some cases, their access to international markets has been restricted due to phytosanitary restrictions imposed on infested areas. The eradication of the fruit fly is therefore essential to protect the country's fast-growing agricultural export sector and ensure the economic benefits to Peruvian farmers.

In the last two decades the IDB has been supporting the government of Peru in the implementation of phytosanitary activities including the control and eradication of the fruit fly. In 1998, the Program for Agricultural Health (PRODESA) was the first project implemented for this purpose (a US\$45 million sovereign guaranteed loan), followed by the Control and Eradication Program of the Fruit Fly (a US\$15 million sovereign guaranteed loan). In 2009, the IDB approved a US\$25 million sovereign guaranteed loan, which is the focus of this analysis.

The package to eradicate the fruit fly, implemented by SENASA, included technical assistance, application of organic insecticides, releases of sterile males to reduce reproduction, and implementation of quarantine centers to monitor, detect, and restrict transportation of infested fruit from treated to untreated areas. The program was executed in three phases from 1998 to 2014, covering more than

## Evaluation 3.9

Peru

Story by:

**Julián Aramburu**, an impact evaluation consultant in the Environment, Rural Development and Disaster Risk Management Division in the IDB headquarters in Washington, DC.

**Lina Salazar**, an economics senior specialist in the Environment, Rural Development and Disaster Risk Management Division at the IDB in Washington DC.

1 million hectares of agricultural land and 150,000 hectares of host crops—those in which the fruit fly can feed and reproduce—in the coastal area.

## Did the Program Work?

In 2010, the IDB supported SENASA in designing and conducting an impact evaluation to measure the short-term effects of the third phase of the fruit fly program. The study aimed to answer two critical questions. First, do these types of programs increase the adoption of preventative and control practices by small farmers? Second, is the program generating the impact that was initially expected as measured by insecticide use, the value of production, and sales?

Because the program was implemented in phases, borders between treated and untreated areas could be clearly identified. This in turn made the geographic regression discontinuity methodology the most suitable one for the impact evaluation, because researchers could compare farmers from treated and untreated areas that were similar along the border. To test the effectiveness of the program, the IDB and SENASA designed a test to measure farmers' knowledge of fruit fly characteristics as well as prevention and control measures. The test found that farmers who participated in the program increased their knowledge about fruit flies by 10 percent and were 35 percent more likely to adopt best practices for infestation, prevention and control. The value of their fruit production and sales also increased. However, contrary to initial expectation, farmers have been reluctant to reduce insecticide use. This might be explained by farmers' fear of facing a fly outbreak and therefore, have not adapted their input usage in the short term.

In order to sustain the results in the long term, it's important to understand how this type of agricultural program works in the short term. So what are the lessons from this evaluation?

The first lesson is that technical assistance and training for farmers are crucial as reflected in the difference between treatment and control of adoption of best practices to limit infestations. The farmers who increased their knowledge about pest infestations actually put into practice what they learned as a result of technical assistance provided by the program. Farmers who received the training (the treated group) were far more likely to implement pest prevention and control measures than those who did not (the control group).

The second lesson is that training and technical assistance, combined with the other components of the program's package, improved agricultural production considerably. Farmers who received the full package of assistance saw a 65 percent increase in fruit production, a more than 100 percent increase in sales, and a 15 percent increase in the value of production per plant.

Overall, the impact evaluation confirms that the fruit fly program successfully achieved its main short-term objectives. Although more studies will be needed to verify whether this program is a long-term solution, it clearly is a good start.

Further studies are needed to confirm the long-term effects of this type of agricultural programs.

**Project information:**  
[PE-L1007](#)

**More about the evaluation:**  
Salazar, Lina, Alessandro Maffioli, Julián Aramburu, and Marco Agurto Adrianzen. (2016). "Estimating the Impacts of a Fruit Fly Eradication Program in Peru." Working Paper No. 677, Inter-American Development Bank, Washington, DC.



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PERU

## The Fruit Fly Plague

### PROGRAM:

Program to eradicate the fruit fly plague in the coastal areas of Peru.

### WHY THIS EVALUATION?

To identify and measure the causal short-term effects of the program on farmers' agricultural outcomes and knowledge.

### WHAT'S NEW?

This is the first evaluation that uses a geographical regression discontinuity approach to measure the effects of a crop plague prevention program on farmers' agricultural outcomes. This methodology uses the geographical barriers of the intervention to identify comparable beneficiary group and control group farmers.



### UNIVERSE

Geographic regression discontinuity approach



Treatment: 307 households

### INTERVENTION

Farmers were offered a comprehensive package that included:

- Training in pest prevention and control
- Release of sterile male fruit flies to stop the flies reproductive cycle
- Application of species-specific insecticides
- Installation of quarantine centers



### RESULTS + CONCLUSIONS

Beneficiary farmers:

**Increased their knowledge**

about the pest & prevention  
**10%\*\***



**Increased sales** up to  
**370%\*\***



**Improved productivity**

**15%\*\***



**Increased fruit production**  
**65%\***



**Were 35%\*\* more likely to implement pest prevention** & control measures



### POLICYMAKING RECOMMENDATIONS

Pest eradication programs work when they combine the provision of control measures in specific geographic areas with intensive training to farmers in pest prevention and control.

Significance level: \* = 10 percent, \*\* = 5 percent



# Mind-blowing Science

## A Hands-on Approach to Learn Science in Peru

**W**hy is water wet? Why do I have brown eyes? Why do stars twinkle? A group of third-grade students at the Corazón de Jesús school outside Lima, Peru have been staying after school to grapple with questions like these. The children are part of a science tutoring project that aims to improve test scores and close learning gaps by getting struggling students excited about science.

Most children start school with a natural love of science; they are curious to learn how the world around them works. Unfortunately, Latin American and Caribbean schools focus almost exclusively on memorization and drills, which tends to quickly extinguish any budding enthusiasm. In Peru as throughout the Region, student scores in the natural sciences on international standardized tests such as the Programme for International Student Assessment (PISA) are far below those of students in developed countries, and the gap between income groups is vast.

To remedy this situation, Peru's Ministry of Education designed a new primary education curriculum for science and environmental studies in 2011 that aimed to shift classroom practices from "chalk and talk" to student-centered learning. To put the new curriculum to the test, the government partnered with the IDB and the non-profit organization Innovations for Poverty Action to conduct a pilot project in both rural and urban areas in the department of Lima which included the country's capital and surrounding areas.

Instead of asking students to memorize the names and discoveries of long-dead scientists, the pilot project challenged the third graders to roll up their sleeves and participate more actively in their learning. Activities included everything from building windmills to exploring the sources of water pollution and designing environmental prevention and clean-up strategies.

An initial project evaluation found that the new curriculum indeed improved science skills by the equivalent of 14 additional weeks of instruction, but a closer look at the data revealed that boys in urban schools benefited disproportionately.

## Evaluation 3.10

Peru

Story by:

**Emma Näslund-Hadley**, a lead education specialist in the Education Division in the IDB headquarters in Washington, DC. She is the coordinator of the Bank's efforts to improve mathematics and natural science education.

Science scores for urban girls did not improve; while the boys loved the science kits and monopolized the hands-on activities, the girls were relegated to being science observers. Scores also did not improve for children in rural areas, regardless of gender, or for students who had started the project with the lowest science skills.

In 2013 the government and the IDB went back to the drawing board. Teachers focused more on building girls' confidence in their science skills, and classroom teams were separated by gender for some activities to ensure that girls got more time doing hands-on experience. Teachers in rural areas also received additional mentoring and training to help boost the skills of boys and girls alike.

Those efforts made the average gender and rural-urban effect gaps insignificant. The project then took the additional step of adding an after-school tutoring program where struggling students could conduct supervised science experiments. Low-performing students were given the opportunity to attend 90-minute sessions once a week for 16 weeks, providing them with 40 hours of tutoring, which was the equivalent of a 14 percent increase in total science instructional time. An evaluation showed that students who attended these sessions improved their science test scores by an equivalent of 13 weeks of additional instruction. The project continues to be refined, with current efforts focusing on providing remedial science instruction models to help struggling female students.

Peru's pilot program shows that it is possible to improve student achievement in science studies if young people receive additional training and are given the opportunity to conduct hands-on experiments and extend learning beyond the typical classroom lesson. Science taught correctly can foster children's innate love and passion asking "why?" Sometimes just trying to find answers to the simplest questions can lead to eye-opening experiences and extend learning beyond the typical classroom lesson. For example, on the day project officials visited the Corazón de Jesús school, a group of five students were building a lever to test the limits of how heavy an object they could lift.

"Look," said one girl excitedly as she pulled the officials over to see the experiment. "My lever can lift this sandbag, and it's heavier than I am!"

An initial project evaluation found that the new curriculum improved science skills, but a closer look at the data revealed that boys in urban areas benefited more than girls.

**Project information:**  
[PE-T1155](#)

**More about the evaluation:**  
Saavedra, Juan, Emma Näslund-Hadley, and Mariana Alfonso. Forthcoming. "Targeted Remedial Education: Experimental Evidence from Peru."



PERU

# A Hands-on Approach to Learn Science

## PROGRAM:

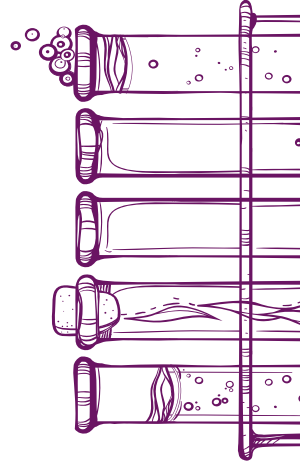
Inquiry-based Remedial Science Education in Peruvian Primary Schools.

## WHY THIS EVALUATION?

- To explore what works in remedial science education in Peru.
- To explore if a remedial inquiry-based Science education can help close learning gaps.

## WHAT'S NEW?

World's first rigorous evaluation of early remedial science education.



## UNIVERSE

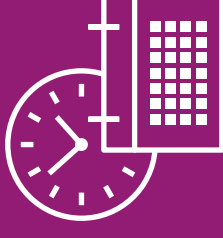
Experimental design with random assignment in 48 schools



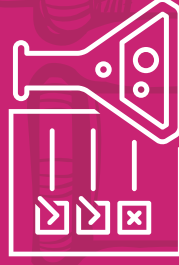
Treatment:  
610 students

## INTERVENTION

**16 weeks of tutoring sessions**  
90-minutes once per week



## RESULTS + CONCLUSIONS



**Increase**  
in science test scores  
**equivalent to 13 weeks**  
of additional instruction<sup>\*\*\*</sup>



Current efforts are focused to  
**help struggling female students**

## POLICYMAKING RECOMMENDATIONS

- Low-performing students can learn through inquiry-based pedagogical approaches.
- A challenge remains for education researchers to identify remedial science instruction models that help close the gender achievement gap.

Significance level: \*\*\* 1 percent.

# Music as an Opportunity for Development

## An Alternative Approach to Improve Lives of Young People in Venezuela

**W**ho could have imagined four decades ago that a few Venezuelan musicians rehearsing in a garage would lay the foundation for a project that to date has enrolled millions of children and adolescents? But that's just what the Venezuelan National System of Youth and Children's Choirs and Orchestras (*El Sistema*) has done.

Founded in 1975 and administered by the Fundación Musical Simón Bolívar (Fundamusal), the program has received national and international awards honoring its musical and social initiatives. More than 25 countries have either completely or partially replicated the program. Some of those efforts have been supported by the IDB through technical cooperation grants.

Despite its international reputation, however, *El Sistema* had never been subject to an impact evaluation to rigorously measure its benefits. To address that need, the IDB and Fundamusal agreed in 2011 to assemble an interdisciplinary team comprised of economists, engineers, sociologists, and psychologists to design an impact evaluation to identify the causal effects of the program. To get started, they conceptualized a “change theory” or model that described how the music program could contribute to a chain of intermediate effects, and then ultimately to the results expected in the long term.

At the time of the evaluation, approximately 400,000 children and youth were participating in the program at 370 training centers throughout Venezuela devoted to teaching music theory and applied music. The evaluation makes two key contributions: It is the first experimental evaluation in any country of a scaled-up, government-implemented music intervention. It also presents experimental evidence on the effects of a group music program in a developing country with high rates of violence.

## Evaluation 3.11

Venezuela

Story by:

**Xiomara Alemán**, a social protection specialist in the IDB headquarters in Washington, DC.

**Suzanne Duryea**, a principal research economist in the Social Sector in the IDB headquarters in Washington, DC.

**Marco Stampini**, a social protection lead specialist in the IDB headquarters in Washington, DC.

**Nancy Guerra**, a professor of the Department of Psychological and Brain Sciences at the University of Delaware.

**Rodrigo Muñoz**, an engineer and researcher specialized in social metrics and evaluation.

**Ariel Williamson**, a graduate student of the Department of Psychological and Brain Sciences at the University of Delaware.

## The Methodology

Following an ongoing dialogue between the IDB and Fundamusical and a thorough review of the literature on psychology, four constructs were identified to explain how the music system could potentially benefit children and adolescents. The four constructs were self-control skills, prosocial skills and connections, behavior, and cognitive skills.

Because of the excess demand for the program in some training centers, it was possible to conduct an experimental impact evaluation to measure the short-term causal effects in 16 training centers in the Capital District and in the departments of Aragua, Bolívar, Lara, and Miranda. All families with children aged 6 to 14 applying for admission were divided randomly into two groups: the treatment group was offered admission into the program in September 2012, and the control group was offered a guaranteed admission into the program in September 2013.

To obtain information directly related to the four constructs, data collection occurred in two phases. The first took place between October 2012 and February 2013, and the second occurred between September and October 2013. The analysis focused on the changes in children's outcomes related to the four constructs over one academic year.

## Did the Evaluation Find an Impact of the Music Program on Children and Youth?

Through a comprehensive bibliographic review, a set of instruments was selected to estimate the effects in the four constructs. The set of instruments included computerized questionnaires and exercises completed by program applicants and their parents or guardians. This in turn allowed 26 indicators to be defined that captured the dimensions of the four constructs.

The evaluation results showed that, on average, children in the treatment group increased their scores on the self-reported self-control scale by 1.13 percent compared to the control group. This increase means that receiving an offer of early admission to the music program helped the children improve their capacity to control their attention, behavior, and emotions.

In addition, children in the treatment group reduced their scores on the scale of self-reported total difficulties by 2.05 percent. This means that children who received an offer of early admission into the program suffered fewer conduct problems and improved relations with their peers.

Finally, the evaluation found that the effects observed were, on average, more positive for children from the most vulnerable situations. For the subgroup of boys exposed to violence, the offer of admission improved their scores on the scale of self-control on average by 2.42 percent and reduced their scores on the scale of difficulties on average by 6.03 percent. Similarly, the offer of admission reduced aggressive behavior on average by 6.9 percent in this subgroup.

An interdisciplinary team comprised of economists, engineers, sociologists, and psychologists was crucial for the design of the impact evaluation of *El Sistema*.

The design of the evaluation provides important lessons for the group of evaluators. It points to the importance of working with an interdisciplinary group to design the change theory that guides impact evaluation. In addition, it shows the value of incorporating psychometric analysis to confirm the precision and reliability of the measures of the results that are being sought. Finally, it underlines the value of unifying, standardizing, and automatizing the information processes that collect the registrations and achievements of the participating training centers, especially with regard to pre-registration processes for students. The participant registration forms used in the impact evaluation will be used at all the training centers in the music program, which will help in monitoring the program in the years ahead.

Although this evaluation estimated only the short-term effects of the program, El Sistema seems to be particularly effective for boys exposed to violent situations. Multiple studies of other interventions working with groups of vulnerable boys or young males have not shown such positive impact.

**Project information:**  
[VE-T1026](#)

**More about the evaluation:**  
Alemán, Xiomara, Suzanne Duryea, Nancy Guerra, Patrick McEwan, Rodrigo Muñoz, Marco Stampini, and Ariel Williamson, A. (2016). "The Effects of Musical Training on Child Development: A Randomized Trial of *El Sistema* in Venezuela," Forthcoming, IDB Technical Note. Inter-American Development Bank, Washington, DC.



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VENEZUELA

# Music as an Opportunity for Development

## PROGRAM:

The Venezuelan National System of Youth and Children's Choirs and Orchestras as a social program that promotes comprehensive training of individuals along with social inclusion through musical education.

## WHY THIS EVALUATION?

First experimental evaluation of a recognized, replicated and scaled-up music intervention to measure its potential benefits.

## WHAT'S NEW?

Rigorous evaluation of the short-term effects of how music benefits children and adolescents with 1) self-control skills, 2) prosocial skills and connections; 3) behavior, and 4) cognitive skills.



## UNIVERSE

Experimental design with random assignment in 16 academic centers in the departments of Aragua, Bolívar, Lara, Miranda, and the Capital District



## INTERVENTION

Offer of admission to the music program for the 2012-2013 academic period



## RESULTS + CONCLUSIONS

The **children and adolescents** in the treatment group:



Subgroup of **boys** exposed to situations of violence:



## POLICYMAKING RECOMMENDATIONS

Support social programs for musical training as a mechanism that can contribute to self-control and behavioral difficulties of children, especially those exposed to vulnerable situations.

Significance level: \* 10 percent, \*\* 5 percent, \*\*\* 1 percent





# To Guide or Not to Guide?

## How to Use Technology to Improve Learning

**C**onsidering everything that technology has made possible, from instant global communication to space travel, harnessing it to improve learning and revolutionize education would seem well within our reach.

Indeed, the IDB is looking at how technology can improve learning across Latin America and the Caribbean, where there is an urgent need to improve student performance in such a critical field as mathematics. In 2012, schoolchildren from eight countries of the Region participated in the Program for International Student Assessment (PISA), a test administered every three years to a half-million 15-year-olds in 65 countries worldwide by the Organisation for Economic Cooperation and Development (OECD). The Latin American and Caribbean countries were among the 14 lowest-ranked countries tested.

This poses problems for a region that is seeking to raise productivity and reduce poverty and inequality, so the IDB has been trying to determine how technology can best be used to improve teaching and learning. To that end, the IDB undertook a meta-analysis: comprehensive and systematic review of 15 impact evaluations from around the world that focused on both guided and non-guided use of technology in the classroom.

What can we learn from these experiences around the world? How can the findings improve the design of similar interventions in our Region? Here are a few lessons from the meta-analysis that could improve learning and teaching through effective introduction of technology in Latin American and Caribbean classrooms:

- **Simply providing technology does not do the job.** Peru implemented an ambitious technology in education program that distributed 900,000 laptops and trained teachers. But there was little clear guidance regarding how to use technology to improve learning, and an evaluation of this program in rural elementary schools found no measurable impact on mathematics and language learning.

## Evaluation 3.12

Regional

Story by:  
**Elena Arias Ortiz**, a senior associate in the Education Division in the IDB headquarters in Washington, DC  
**Julián Cristia**, a lead specialist in the Research Department in the IDB headquarters in Washington, DC.

- **Programs that guide the use of technology increase academic performance in both mathematics and language about four times more than programs that provide little or no guidance.** The best guided-use programs are those that define the “3 S’s”: subject, software, and schedule. A program implemented in primary schools in India followed this approach. It provided students with two weekly hours of computer use (schedule), focused on math (subject), and used software that could tailor the level of difficulty of exercises to individual students. The program brought about large positive effects in math learning.
- **Successful guided-use programs share a number of important features.** These include using computers at school rather than at home; sharing computers and equipment among students; focusing on only one subject, such as math or language; carefully coordinating infrastructure, content, and teacher training

## Using Technology to Improve Learning

### QUESTION

How can we design and implement **effective technology programs in the classroom** to improve children learning?

### TYPE OF EVALUATION

A meta-analysis of 15 impact evaluations of randomized controlled trials in developing countries around the world. Four studies in countries of Latin America and the Caribbean were included.

### INTERVENTION

Comparison of **two uses of technology** in the classroom:

- Provide laptops to children **without guidance**
- Provide laptops to children **with guidance**

### RESULTS

**Programs that guide the use of technology increase academic performance** in both mathematics and language about four times more than programs that provide little or no guidance.

### LESSONS LEARNED

Best guided-programs...

- Focus on **one subject**
- Include **adequate software**
- Implement a specific weekly **schedule to use computers**

resources; emphasizing exercises aligned with regular course content; and providing technical support to help students use the software properly.

- **The design and rollout of technology-assisted learning programs is critical.** The use of such technology produces the best learning results when programs start with small pilot initiatives that can be evaluated and then scaled up if found to be effective.
- **Even guided-use programs are not a panacea.** To achieve positive results, these programs should be carefully designed, implemented, and monitored. In a sense, guided-use programs are similar to a global positioning system (GPS). In general, a GPS can be an effective tool, but if we use it with outdated maps, it may take us on the wrong route and end up wasting our time. Similarly, guided-use technology-assisted learning programs can be effective, but if they are poorly designed they can also be detrimental to student learning.

In sum, the meta-analysis shows that while using technology may not solve all problems in education, it can enhance student learning when implemented with a clear vision and used effectively. Using this approach, governments, the private sector, nongovernmental organizations, and the IDB and other development banks can design and operate programs in Latin America and the Caribbean to help students learn. This will strengthen the skills of today's generation of students to prepare them for the professional challenges of the twenty-first century.

Guided-use technology-assisted learning programs can be effective, but if they are poorly designed they can also be detrimental to student learning.

**Project information:**  
[RG-T2634](#)

**More about the evaluation:**  
Arias Ortiz, Elena, and Julian P. Cristia. (2014). "[The IDB and Technology in Education: How to Promote Effective Programs.](#)" IDB Technical Note No. 670, Inter-American Development Bank, Washington, DC.



## CHAPTER 4

### Responding to Client Demand Effectively and Efficiently

## Responding to Client Demand Effectively and Efficiently

**W**hile Chapters 2 and 3 describe “what” the Inter-American Development Bank (IDB) has helped its client countries achieve over the last four years in terms of development results, this chapter focuses on “how” the Bank has done so.

As a demand-driven institution, responsiveness has been — and continues to be — one of the main principles driving IDB’s relationship with its clients. Responsiveness takes on significance along several fronts. The first, and the most obvious, is the actual response time to clients to approve new projects and disbursements and to respond to day-to-day client inquiries. Yet beyond time is the quality of the response and ultimately, ensuring that the desired development results are achieved.

Second, responsiveness is a core element of the Bank’s corporate processes, strategies, and policies that guide its activities with borrowers. They reflect a focus on specific country needs, and also allow for flexibility to make any necessary adjustments along the way to better respond to client demand. Responsiveness forms part of the results-oriented culture within the Bank and its efforts to continuously improve its effectiveness and efficiency.

This chapter highlights key elements of IDB’s response to these two aspects of client demand through the final two levels of the Corporate Results Framework (CRF): Lending Program Targets (Figure C) and Operational Effectiveness and Efficiency (Figures D.1 to D.6). As previewed in Chapter 1, the Lending Program targets reported in Figure C are a high-level reflection of the demand for IDB lending for 2012-15, while Figure D indicators are intended to capture different dimensions of corporate performance that attend to other specific stakeholder needs.



# 2012–2015 Lending Program Targets

As mentioned, the CRF 2012–2015 Lending Program targets reflect each of the highest-level strategic priorities for IDB lending over this period, expressed as a percentage of total sovereign-guaranteed and non-sovereign guaranteed lending approved in 2015. The four lending targets, as shown in Figure C, are for: small and vulnerable countries; poverty reduction and equity enhancement; climate change, sustainable energy (including renewable) and environmental sustainability; and, regional cooperation and integration.

The Bank exceeded all four lending targets for 2015 (see Figure C). Notably, the Bank made remarkable progress in its support to address climate change and foster sustainability in the Region. In 2012, only 5 percent of lending was oriented toward this area. By 2015, about one third of the Bank's total lending volume was in line with the Region's efforts directed toward climate change adaptation and mitigation, and sustainable energy and environmental practices.<sup>9</sup>

<sup>9</sup> In April 2016, the Board of Governors mandated the IDB Group (IDBG) to double its efforts, specifically on climate change mitigation and adaptation initiatives, to 30% of IDBG approvals by 2020. The baseline for this target is 14 percent (the average lending volume of new approvals over 2012–2014). The Updated CRF 2016–2019 (covered in Chapter 5) calls for the Bank to apply the joint Multilateral Development Bank (MDB) methodology on climate finance tracking, which considers operational components (not necessarily the operation's full cost), and includes loans, guarantees, equity and technical assistance funded by external resources managed by the IDBG.

2015 Target	Progress <sup>A</sup>	Status
<b>1.1 Lending to small and vulnerable countries</b>		
35%	<b>50%</b>	✓
<b>1.2 Lending for poverty reduction and equity enhancement</b>		
50%	<b>57%</b>	✓
<b>1.3 Lending to support climate change initiatives, sustainable energy (including renewable) and environmental sustainability</b>		
25%	<b>35%</b>	✓
<b>1.4 Lending to support regional cooperation and integration</b>		
15%	<b>26%</b>	✓

A Total percentages exceed 100 because loans may qualify for more than one category.

✓ Target met or exceeded in 2015

⚠ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Figure C  
Lending Program  
Indicators

# Fostering an Institutional Culture Based on Accountability and Results

**T**he IDB regularly monitors its performance with an eye toward continuing to improve what it does and how it does it. As such, it makes certain that there are systems and processes in place to enable the measurement of key dimensions of its performance.

The Bank makes sure that project designs include clear, measurable results; it applies rigorous environmental and social safeguard standards in the design and execution of the projects financed; it strives for greater cost and process efficiency and higher client satisfaction; and it recognizes the importance of promoting gender balance among employees and having a strong presence in the field.

These efforts are a reflection of the Bank's core values as an institution dedicated to improving lives in the Region, and are rooted in the Bank's commitment as a multilateral development bank, with specific mandates on transparency and accountability (see Box 4.1)

The indicators in the fourth level of the CRF 2012–2015 provide insights into how the IDB performs across three important dimensions: effectiveness, efficiency, and human resource management. Effectiveness indicators illustrate how well the Bank is doing in meeting its evaluability and performance standards for country strategies, loans and technical cooperation operations (TCs), and how satisfied partners are with IDB work. Efficiency indicators show how well the IDB performs in the use of its budgetary resources and in terms of the speed of its main operational processes, such as loan approvals and disbursements. Human resource indicators shed light on how much progress the Bank has made toward becoming a more decentralized and gender-balanced institution, as mandated by the Ninth Capital Increase (IDB-9). Three main conclusions can be drawn based on the IDB's performance as measured by these indicators from 2012 to 2015.

First, the Bank and its partners have raised the bar in ensuring the evaluability and effectiveness of country strategies, loans, and TC products. This reflects their commitment to rigorously demonstrate development results in all the key interventions supported by the IDB. Furthermore, continuous feedback from a diverse set of in-country counterparts (government officials, civil society, and private sector)

## The International Aid Transparency Initiative (IATI)

is a global initiative aimed at making information on development cooperation easier to access and use. It provides a data standard and a single website to access data from a wide range of funders and implementing partners. IDB signed onto IATI in 2011 and over the last several years, has increasingly published more detailed information about its work in the Region. In addition to basic project information (such as title, description, total budget) for more than 1,000 projects covered in IDB's IATI datasets, users can also access such details as project results over time, precise geographic coordinates of projects, and the contact information for the project team leader. The Bank has also added several IATI datasets to the IDB's open data portal, allowing users to download IATI data in Microsoft Excel and other user-friendly formats.

IDB's advances in implementing IATI and in transparency more broadly over the past few years have been recognized by the non-governmental organization Publish What You Fund as part of its Aid Transparency Index, which assesses the commitment of the world's largest providers of development assistance to aid transparency. On the 2016 index, the Bank scored 85.6 out of a possible 100 points, moving into the top category of performance and improving nearly 29 points since 2013 (see Figure B4.1.1). The Bank's ranking also improved from 11th in 2013 to 7th in 2016 and the 2016 report noted that the IDB is one of the organizations that fully met the commitment it made in 2011 at the Fourth High Level Forum on Aid Effectiveness in Busan, Korea to make its aid transparent by the end of 2015.

### Box 4.1

Transparency about and for Development Results



Figure B4.1.1

IDB's Performance on the Aid Transparency Index, 2013-2016\* (0-100 scale)

Source: Publish What You Fund.

\* The Aid Transparency Index was not produced in 2015.

demonstrates that the IDB enjoys high levels of partner satisfaction and at the same time has allowed the identification of important areas for improvement going forward.

Second, defining meaningful indicators that reflect and can be used to drive performance is challenging. Specifically, measuring the cost dimension of corporate efficiency has proven complex. The Bank recognized that these types of indicators needed to be refined to better capture those performance elements that are more under IDB control and not as subject to external factors. As such, the Bank introduced new efficiency indicators in the CRF 2016–2019 to help respond to this issue.

Lastly, in the area of human resources, having clear and ambitious targets was instrumental to bringing more diversity to the Bank’s management team and having a stronger presence in the field. For the next four-year period, the CRF 2016–2019 set an even more ambitious target of 43 percent for mid- to senior level staff who are women.



# Insights on Effectiveness

## Aligning the Bank's Work to the Needs of its Partners

**C**ountry strategies are the roadmaps that guide the IDB's engagement with each borrowing member country, setting the strategic objectives and expected outcomes that will guide the Bank's operational support as mutually agreed upon between the borrowing member country and the IDB. They are typically designed for a period of four to six years, depending on the political cycle of the country. Whenever a new national government is elected, a comprehensive dialogue with the new authorities, the private sector, civil society, and academia is launched and sustained. The process to prepare country strategies starts with the

	2015 Target	2015 Actual	Status
<b>4.1.1</b> Percent of country strategies with satisfactory scores in evaluability dimensions	85%	<b>100%</b>	✓
Percent of country strategies that have satisfactory results that can be validated at completion for:			
<b>4.1.2</b> Sector outcomes	65%	<b>100%</b>	✓
<b>4.1.3</b> Financial outcomes	75%	<b>100%</b>	✓
<b>4.1.4</b> Progress on building and using country systems	55%	<b>78%</b>	✓
✓ Target met or exceeded in 2015 ⚠ Distance between 2015 value and 2015 target is less than 15% of the 2015 target ✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target			

Figure D.1

Operational Effectiveness and Efficiency Indicators: Country Strategy Effectiveness



diagnostic of the most binding constraints to development and growth, which is used to inform the dialogue with the incoming government and the potential areas that will be prioritized in the country strategy as agreed with the parties involved. This process also contributes to stronger coordination between the IDB and the borrowing member country, as well as with other bilateral and multilateral organizations. This, in turn, allows for the systematic identification of synergies and helps avoid duplication of efforts. From 2012 to 2015, the Board of Directors approved 22 country strategies.

Strategies are carefully tailored to help the countries address the development challenges they face in the areas where the IDB can provide the greatest added value taking into consideration the government's priorities. As shown in Figure D.1, all targets regarding the effectiveness of country strategies were surpassed with respect to the evaluability dimensions established in the Country Strategy Development Effectiveness Framework and the other aspects that are validated at the end of the country strategy design phase before its submission to the Board.

Country strategies also support accountability to stakeholders in the member countries (both borrowing and non-borrowing), and strengthen the vertical logic of a good number of IDB-supported interventions. From 2012 to 2015, 85 percent to 90 percent of sovereign guaranteed loan operations were aligned with at least one strategic objective identified in the corresponding country strategy.

## Development Effectiveness Matrix (DEM) Highlights

As with country strategies, all projects supported by the IDB are also assessed before approval for their potential to be evaluated for development results once completed.

As part of a number of process improvements coming out of IDB-9, the Board of Executive Directors mandated in 2011 that all projects reach a minimum score of five on the Development Effectiveness Matrix (DEM) before being submitted for approval (see [Chapter 2 of the 2014 DEO](#) to learn more about the DEM). This means that beginning in 2011, all projects had to meet this satisfactory evaluability score before Board consideration, and hence, the targets for Indicators 4.2.1 and 4.2.5—regarding the evaluability of SG and NSG loans respectively—have been fully met.

As Figure A.3, “Development Effectiveness Matrix Scores by Evaluability Assessment Category” in appendix A shows, average DEM scores for both the Bank's sovereign guaranteed and non-sovereign guaranteed loan portfolios remained consistently high over the 2012–2015 period. Higher evaluability standards are generating a growing number of project evaluations. These evaluations, in turn, are helping to close knowledge gaps in the Region. On average 44 percent of approved projects included an impact evaluation plan at approval during the 2012–2015 period (see Figure 3.1 in Chapter 3), and an average of 46 sovereign-guaranteed projects had an impact evaluation over the same period.

	2015 Target	2015 Actual	Status
<b>SG Operations: Approvals</b>			
<b>4.2.1</b> Percent of new operations with satisfactory scores on evaluability dimensions	85%	<b>100%</b>	✓
<b>4.2.2</b> Percent of projects with high environmental and social risks rated satisfactory in implementation of mitigation measures	85%	<b>89%</b>	✓
<b>SG Operations: Portfolio Performance (Execution)</b>			
<b>4.2.3</b> Percent of projects that have satisfactory performance	70%	<b>69%</b>	⬆
<b>4.2.4</b> Percent of projects with satisfactory rating on development results at completion	60%	<b>89%</b>	✓
<b>NSG Operations: Approvals</b>			
<b>4.2.5</b> Percent of new operations with satisfactory scores on evaluability dimensions	85%	<b>100%</b>	✓
<b>4.2.6</b> Percent of projects with high environmental and social risks rated satisfactory in implementation of mitigation measures	85%	<b>91%</b>	✓
<b>NSG Operations: Portfolio Performance (Execution)</b>			
<b>4.2.7</b> Percent of projects that have satisfactory performance	70%	<b>90%</b>	✓
<b>4.2.8</b> Percent of projects with satisfactory ratings on development outcomes at completion	65%	<b>n/a<sup>A</sup></b>	n/a

n/a No data available

A The result of the 2012 self-evaluation exercise (the latest exercise which was validated by the Bank's Office of Evaluation and Oversight in 2014) was 86%. In 2015, the new evaluation framework was being piloted and as such, data is not available.

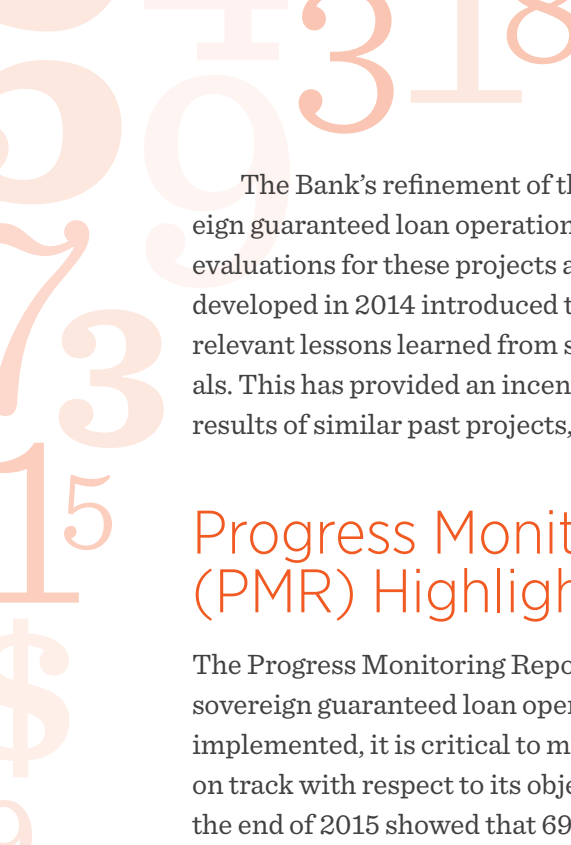
✓ Target met or exceeded in 2015

⬆ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Figure D.2

Operational  
Effectiveness and  
Efficiency Indicators:  
Loan Effectiveness



The Bank's refinement of the development effectiveness toolkit for non-sovereign guaranteed loan operations allowed for an increase in the number of impact evaluations for these projects as well. Furthermore, an NSG evaluability checklist developed in 2014 introduced the question of whether evaluation results and/or relevant lessons learned from similar projects were reflected in new loan proposals. This has provided an incentive for project teams to refer to the self-evaluation results of similar past projects, and consider the lessons they present.

## Progress Monitoring Report (PMR) Highlights

The Progress Monitoring Report (PMR) is used to rate the execution of the Bank's sovereign guaranteed loan operations. Once a project is approved and starts to be implemented, it is critical to monitor its progress to ensure that the project remains on track with respect to its objectives. The Bank's performance classification as of the end of 2015 showed that 69 percent of projects were in satisfactory status, 14 percent were in alert status, and 16 percent were in problem status.<sup>10</sup>

Analysis of the individual factors that influence the classification of projects yields a number of insights. First, the proportion of projects experiencing delays after approval and before implementation is higher before the project goes into effect legally than after that point when the operations are eligible for disbursements.

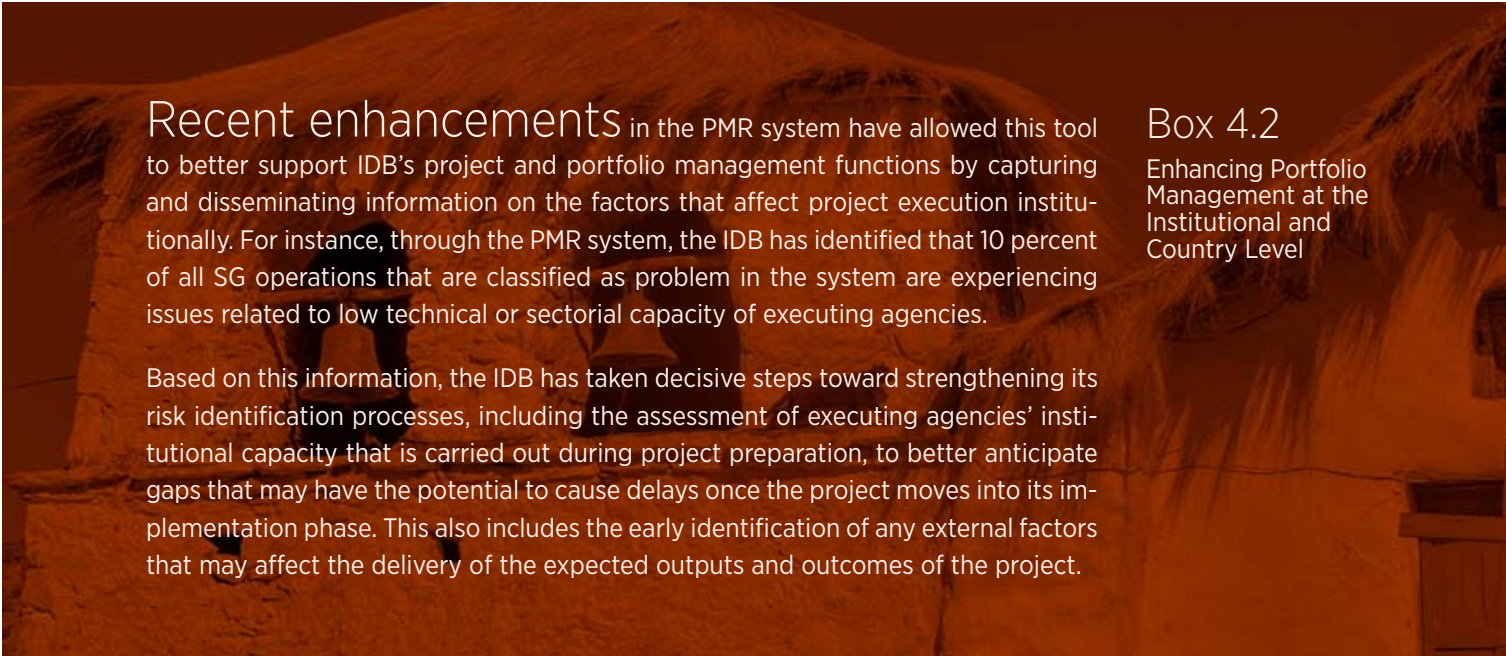
Second, once projects are being implemented, the most common problem relates to delays in delivering outputs as originally planned. The main issues affecting the overall management of projects are changes in administration and/or national priorities, and capacity constraints in implementation.

Third, the percentage of operations in satisfactory status in 2015 (69 percent) was the same as it was in 2014. However, the figure marks a decline from the 75 percent of operations classified as satisfactory in 2013, the first year when operations were evaluated according to the revised PMR methodology. Although the difference can be attributed in part to actual performance factors, it also relates to measurement effects. Because older operations in the portfolio had less data than newer ones, under the new methodology, those operations were classified using only three performance indicators. Newer operations have more available data, and thus are classified using five performance indicators.

Since its conceptualization, the PMR and the system that supports it have undergone several enhancements (see Box 4.2). Methodologically, it has become a more rigorous tool with the inclusion of quantitative variables specific to the stage in the life-cycle of operations. When they are combined with a qualitative analysis, these quantitative variables help provide a more comprehensive assessment of a project's performance.

The current review and validation process of the PMR incorporates all relevant parties in a project's assessment, including specialists, team leaders, division chiefs, chiefs of operations, and country representatives. This makes the PMR a powerful decision-making tool for project teams and management alike.

<sup>10</sup> The remaining 1 percent applies to operations that reached eligibility for disbursement in 2015, but whose implementation plan does not cover 2015.



Recent enhancements in the PMR system have allowed this tool to better support IDB's project and portfolio management functions by capturing and disseminating information on the factors that affect project execution institutionally. For instance, through the PMR system, the IDB has identified that 10 percent of all SG operations that are classified as problem in the system are experiencing issues related to low technical or sectorial capacity of executing agencies.

Based on this information, the IDB has taken decisive steps toward strengthening its risk identification processes, including the assessment of executing agencies' institutional capacity that is carried out during project preparation, to better anticipate gaps that may have the potential to cause delays once the project moves into its implementation phase. This also includes the early identification of any external factors that may affect the delivery of the expected outputs and outcomes of the project.

## Box 4.2

Enhancing Portfolio Management at the Institutional and Country Level

## Project Completion Report (PCR) Highlights

The performance of SG loan projects upon completion can also be assessed through the project completion report (PCR), which is another important component of the Bank's Development Effectiveness Framework (DEF). Historically, an average of 80 PCRs were produced each year that assessed how effective IDB-supported projects were in delivering their expected outputs and reaching their development goals. The 2012–2015 period has seen a sustained improvement in the percentage of projects with a satisfactory rating on development results upon completion, which at 88.7 percent has exceeded the target of 60 percent set for 2015 (Indicator 4.2.4 in Figure D.2).

The methodology to prepare PCRs was modified in 2014, to be more evidence-based, objective, analytical, and more in line with efforts to further improve monitoring and evaluation through the DEF (see [Chapter 4 of the 2014 DEO](#) for details about the new PCR methodology). As shown in Figure 4.1, only seven PCRs were completed under the new methodology in 2015. This decrease in the number of PCRs relative to previous years is explained by the fact that as per the Bank's PCR guidelines, the preparation of the PCR began when a project's disbursements reached 95 percent. This led project teams to request extensions to start preparing PCRs when disbursements reached 100 percent.

Although its application has been slower than expected, the results coming out of the new PCRs appear to be promising. The quality and depth of analysis of these completion reports have improved noticeably. PCRs written under the new methodology provide more robust evidence of the IDB's contributions to development results, and findings and recommendations from project design and implementation. Figure 4.1 provides the list of 2015 PCRs prepared under the new methodology.

Project Number	Project	Score*
<b>AR-L1073</b>	CCLIP: Program of Technological Innovation	Partial achievement
<b>BR-L1171</b>	Catanduva Integrated Urban Development Program	Partial achievement
<b>EC-L1087</b>	Electrification Program for rural and marginal urban areas of Ecuador	High achievement
<b>HA-L1086</b>	Emergency Road Rehabilitation Program in Response to Hurricane Sandy	Partial achievement
<b>HO-L1062</b>	Primary Education and Technology Integration Program	Partial achievement
<b>NI-L1010</b>	Stormwater Drainage and Development Management SubWatersed III Managua	Partial achievement
<b>PE-L1138</b>	Program to Reduce the Vulnerability of the State to Disasters III	High achievement

Figure 4.1

Project Completion Reports (PCRs) Approved

PCR documents included were prepared and sent to the corresponding Government in 2015.

\* Full achievement (score = 1); high achievement (score between 0.75 and 0.99); partial achievement (score between 0.5 and 0.74); low achievement (score between 0.25 and 0.49); no achievement (score below 0.25).

Self-evaluation of IDB-supported private sector operations has been in place since 2005 following the Evaluation Cooperation Group's Good Practice Standards (ECG-GPS) for these types of projects. Since 2005, completion reports for 64 projects have been prepared based on the Expanded Project Supervision Report (XPSR).

The Bank has worked closely with the Office of Evaluation and Oversight (OVE) to redesign the self-evaluation guidelines for NSG projects, to embrace a higher standard and to allow for greater harmonization between NSG and SG methodologies. The new evaluation framework has been applied to the latest evaluation exercise on a pilot basis and is expected to be operational by mid-2016.

## Effective Safeguards: A Vehicle to Ensure the Sustainability of IDB Operations

Thanks to the Bank's enhanced focus on sustainability and on project supervision, 89 percent of SG projects and 91 percent of NSG projects identified at approval as having high environmental and social risks were rated satisfactory in the implementation of mitigation measures during execution, exceeding the corresponding CRF target of 85 percent by 2015 (Indicators 4.2.2 and 4.2.6 in Figure D.2).

This means that projects that were originally deemed highly risky from an environmental or social standpoint have benefited from the Bank's thorough application of safeguards, which have often led to improved sustainability outcomes for the affected populations and/or ecosystems (see Box 4.2).



As part of a new three-year strategic plan for environmental and social safeguards, the Bank will ensure that medium-risk projects are also rated on their implementation of mitigation measures.

In Brazil, the IDB faced some unique environmental and social challenges in supporting the construction of a massive highway project in the megacity of São Paulo. The project linked Brazil's 10 major highways covering 176 km (110 mi) with the country's primary seaport (Santos) and its largest international airport (Guarulhos). This ambitious undertaking involved the resettlement of 4,100 families which was carried out without conflict and with minimal disruption to their livelihoods. Thanks to a variety of social programs supported by the Bank, these families were provided access to better living conditions and were able to maintain or improve income-generating activities.

The project also made it possible to reduce energy consumption in the extraction, processing, manufacture, and transport of materials, as project managers focused on locally-sourced materials which thereby decreased transportation needs. It is expected to reduce greenhouse gas emissions by approximately 12.5 percent by 2024, with projected savings by 2039 of over 100,000 tons of CO<sub>2</sub> annually from cargo and private vehicles using the road. In addition, 75 percent of all excavated materials were kept out of landfills and reused in urban structures.

### Box 4.3

Connecting São Paulo & Protecting the Environment

For more stories on the IDB's work in sustainability, please visit the [2015 Sustainability Report](#).

## Development Results through Technical Cooperation

From 2012 to 2015, significant improvements were made in the evaluability of the Bank's Technical Cooperation (TC) operations, especially after the inclusion of results matrices in the design of TC operations became mandatory in the TC Operational Guidelines in 2011.

The percentage of TC operations with results that can be validated in 2015 reached 91 percent, and that figure increases to 96 percent when considering only those TC operations approved after implementation of the 2011 guidelines.

Improvements in design have also led to better results, with 73 percent of TC operations that were completed in 2015 achieving satisfactory results, well above the 65 percent target established.

However, reporting on TC results has been somewhat of a cumbersome process because the Bank lacks a systematized and automated TC monitoring and reporting platform. The absence of such a systematic reporting methodology has made it

challenging to reach robust and comprehensive conclusions about the effectiveness of the 1,777 TC operations approved during 2012.

To address this, the IDB has finished the development of its first automated Technical Cooperation Monitoring and Reporting System (TCM), which is expected to be fully operational in the second half of 2016. The TCM was originally designed as an independent, stand-alone module. However, once the Bank decided to start implementing the integration of all IDB systems into one platform (i.e. “Convergence”), the TCM’s original design had to be slightly modified. A more comprehensive system is now in place through which the main stages of the technical cooperation operations’ life cycle (identification, preparation, approval and execution) have been integrated more efficiently for users’ benefit.






	2015 Target	2015 Actual	Status
<b>4.3.1 Percent of completed TCs with results that can be validated</b>	100%	<b>91%</b>	
<b>4.3.2 Percent of completed TCs with satisfactory results</b>	65%	<b>73%</b>	
 Target met or exceeded in 2015  Distance between 2015 value and 2015 target is less than 15% of the 2015 target  Distance between 2015 value and 2015 target is more than 15% of the 2015 target			

Figure D.3

Operational  
Effectiveness and  
Efficiency Indicators:  
Technical Cooperation  
Effectiveness

Bank-supported TCs have become increasingly innovative. Here are just a few examples: Soccer is empowering indigenous girls in El Alto, Bolivia by strengthening their leadership skills, their self-esteem, and their capacity to exercise their rights to prevent violence against women. The Bank is also driving innovation at the regional level through the Initiative for the Promotion of Regional Public Goods, which is supporting a TC that will pave the way for the eventual development of interoperable Electronic Medical Records (EMR) in the Latin America and the Caribbean by creating and supporting a network of agencies charged with the implementation of EMR operating models. And in 2015, the Bank deepened its knowledge exchange and dissemination efforts through three Massive Open Online Courses. These courses allowed the Bank to share knowledge with more than 69,000 people on management for development results, urban development and housing, and public-private partnerships. The Bank is currently gathering data on how this knowledge is being used by participants, especially government officials.

## Box 4.4

Innovation in IDB TCs

# Measuring Partner Satisfaction: Listening, Engaging, and Improving

**M**easuring how satisfied partners are with the Bank's work is an important aspect of its performance monitoring and results-oriented culture. The Bank started tracking satisfaction in 2012 through the External Feedback System (EFS). Thanks to feedback from public and private sector counterparts, as well as civil society and academia, the IDB has a better understanding of what they value most in a multilateral development bank, what role it should play in supporting sustainable development in Latin America and the Caribbean, and where it can improve the products and services it offers.

During 2012–2015, the Bank enjoyed high levels of satisfaction from its partners (Figure D.4). Overall results from the EFS show that 88 percent<sup>11</sup> of surveyed partners reported being “satisfied” or “very satisfied” with the delivery of services for SG and NSG loan operations, technical cooperation operations, and country strategies (Indicators 4.4.1 through 4.4.3 in Figure D.4).

IDB partners cite four areas as the Bank's top strengths:

1. Understanding of the countries' priorities and the context in which projects are executed;
2. Pricing and financial conditions offered by the institution for SG operations;
3. Technical expertise and knowledge offered by IDB staff; and
4. Responsiveness in terms of the quality and timeliness of answers to partner inquiries.

Partner feedback also provides insights on where the IDB could do better. The Bank has been actively working on sharing more experiences from other countries that can be applied to other projects throughout their life-cycle. For example, the Bank has ramped up its knowledge sharing efforts by tripling the number of participants in Regional Policy Dialogues, and offering additional training for executing agencies.




The IDB has also been working to enhance its ability to convene other partners, particularly from the private sector; and reducing the time needed to approve a project. It has enhanced its responsiveness by initiating a review of its lending instruments and improving the country strategy processes. The Bank has also been actively working on becoming more flexible by simplifying the processes to modify operations after approval. And its communications and transparency with

<sup>11</sup> This 88 percent corresponds to partners' overall satisfaction covering SG and NSG loans operations, Technical Cooperation operations (for both public and private sector beneficiaries), country strategies, and financial products.

regard to its engagement with civil society has been greatly improved through publications and videos.


The Bank has been increasingly combining perception data from the External Feedback System with other performance information to understand more fully how it can best serve the unique and evolving needs of the Region.


For more information about the EFS, visit [www.iadb.org/EFS](http://www.iadb.org/EFS).

	2015 Target	2015 Actual	Status
<b>4.4.1</b> Percent of external partners satisfied with Bank delivery of services for country strategies <sup>A</sup>	70%	<b>65%</b> <sup>B</sup>	
<b>4.4.2</b> Percent of external partners satisfied with Bank delivery of services for loan operations	70%	<b>91%</b>	
<b>4.4.3</b> Percent of external partners satisfied with Bank delivery of services for TCs	70%	<b>90%</b>	

A The baseline has been updated for consistency with the methodology used in the IDB External Feedback System 2012–2014 Report.

B The 65% covers the three country strategies for which surveys were conducted during 2015 (Barbados, Costa Rica, El Salvador). The average partner satisfaction index for the 2012–2015 period is 73% (covering Brazil, Colombia, Ecuador, Guatemala, Guyana, Nicaragua and Peru (2012); Bahamas, Belize, Dominican Republic, Jamaica and Mexico (2013); and Chile, Honduras, and Paraguay (2014).

 Target met or exceeded in 2015

 Distance between 2015 value and 2015 target is less than 15% of the 2015 target

 Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Figure D.4

Operational  
Effectiveness and  
Efficiency Indicators:

Partner Satisfaction



# Insights on Efficiency

## Competing against Ourselves to Be Better at What We Do

**T**he efficiency with which a multilateral development organization like the IDB works is typically measured through indicators capturing time and cost to deliver products and services.

The efficiency indicators included in the CRF 2012–2015 aim to measure key business processes (such as country strategy approval, project approval, and loan disbursements), which involve a multitude of internal and external actors (and factors). For this reason, caution should be exercised in interpreting final indicator status data, particularly in the case of indicators related to process cycle-time and cost-efficiency (see Box 1.1 in Chapter 1 and Box 4.4).

A closer look at Indicators 4.5.6, 4.5.8 and 4.5.9 (in Figure D5), where the Bank fell short of meeting three of its five cycle-time targets is in order.

The indicator on the time to deliver country strategies (Indicator 4.5.6) ended the period at 14.6 months, significantly above its target of 6 months. However, given the collaborative nature of the country strategy development process (which has an average duration of 10 months), the target of 6 months proved unrealistic.

Similarly, the cycle time of SG loan disbursements (Indicator 4.5.8) provides yet another example of the limitations of these indicators, as performance is dependent not only upon Bank action, but also each project's executing agency. In addition, a number of external factors affect a country's need for loan disbursements, including current economic conditions, or shifting priorities affecting the demand for Bank financing for a given project, or access to counterpart funds.

Finally, although the time to prepare NSG loan operations (Indicator 4.5.9) decreased throughout the period, it ended slightly above 7 months in 2015, which is still above the target of 6 months.

The Bank's private sector windows successfully reduced the time it takes to make first disbursements for NSG loan operations, ending the period at 5 days, well below the target of 10 days (Indicator 4.5.10). Also, the time to prepare SG loans reached 5.8 months in 2015 (Indicator 4.5.7), well below the target of 8 months.

The above cycle-time indicators should be interpreted with caution. Particularly, these indicators capture either loan preparation or loan disbursement cycle times, and as such have failed to measure efficiency more comprehensively in terms of the entire project cycle. In this sense, speeding up the project cycle might mean



	2015 Target	2015 Actual	Status
<b>4.5.1</b> Co-financing (percent of Regular Lending Program)	30%	<b>32%</b>	✓
<b>4.5.2</b> Trust Funds (percent of Regular Lending Program)	3%	<b>2%</b>	✗
<b>4.5.3</b> Total administrative expenses per US\$1 million approved <sup>A</sup>	\$34,000	<b>\$41,336</b>	✗
<b>4.5.4</b> Total administrative expenses per US\$1 million disbursed <sup>A</sup>	\$45,000	<b>\$44,760</b>	✓
<b>4.5.5</b> Percent of administrative expenses in operational programs	68%	<b>66%</b>	▲
<b>4.5.6</b> Cycle time: country strategy (inauguration to delivery of strategy to government)	6 months	<b>14.6 months</b>	✗
<b>4.5.7</b> Cycle time: SG loan preparation time (profile to approval)	8 months	<b>5.8 months</b>	✓
<b>4.5.8</b> Cycle time: SG loan disbursement period (eligibility to first disbursement)	19 days	<b>30 days</b>	✗
<b>4.5.9</b> Cycle time: NSG loan preparation time (profile to approval)	6 months	<b>7.1 months</b>	✗
<b>4.5.10</b> Cycle time: NSG loan disbursement period (eligibility to first disbursement)	10 days	<b>5 days</b>	✓

<sup>A</sup> Target figures for administrative expenses are set in 2009 dollars.

✓ Target met or exceeded in 2015

▲ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Figure D.5

Operational  
Effectiveness and  
Efficiency Indicators:  
Efficiency

in some cases devoting more time to project design, to reduce the probability that problems arise during execution.

Turning to cost efficiency, Indicators 4.5.3 and 4.5.4 should also be interpreted with caution. More specifically, the denominator in both indicators is a function of the demand for IDB lending, which — as with Indicator 4.5.8 — is also determined by a number of factors outside the Bank's control.

The administrative cost per million dollars of loans approved ended the period at US\$41,336 (Indicator 4.5.3), significantly exceeding the target of \$34,000. The Bank's budget (the numerator) remained flat in real terms from 2014 to 2015. The increase in the indicator was driven by the lower volume of approvals (the denominator) in 2015, which went from almost \$14 billion in 2013 and 2014 to \$11.3 billion in 2015.

The administrative costs associated with every million dollars disbursed decreased significantly over this period, achieving the target of below \$45,000 (Indicator 4.5.4). The portion of the Bank's administrative budget spent on activities directly associated with its operational work ended the period at 66 percent in 2015, thus not achieving the target of 68 percent (Indicator 4.5.5) by two percentage points.

Also notably, in line with its commitment to mobilize additional funding to support development efforts, the Bank exceeded its target for co-financing (Indicator 4.5.1). During 2012–2015, the Bank mobilized a total of \$14.8 billion in additional resources. Nevertheless, the Bank did not meet the target for use of trust funds (Indicator 4.5.2). The Bank's Partnership Reports provide detailed information as to the importance these mobilized resources have had in promoting economic and social progress throughout the Region, and may be accessed at [www.iadb.org/Partnerships](http://www.iadb.org/Partnerships).



The Bank has drawn several lessons from the use of these efficiency indicators, which have improved the way efficiency is measured in the Updated CRF 2016–2019.

Indicators 4.5.3 through 4.5.5 have been replaced by two new cost-efficiency indicators. The **cost to income ratio** reflects the level of administrative expenses relative to total revenue. The **cost to development assets** ratio focuses more specifically on administrative costs as a percentage of the assets used to fund our development projects.

Similarly, the cycle-time dimension of efficiency is captured through two new indicators: the percentage of projects meeting the targeted preparation time (IDBG Performance Indicator 3) and the percentage of SG investment loans fully disbursed on time (IDBG Performance Auxiliary Indicator 6).

## Box 4.5

### Learning from Failure:

Refining Efficiency Indicators in the Updated CRF 2016–2019



# Insights on Human Resource Management

## Improving Gender Balance among IDB Staff

**T**he commitment to Diversity and Inclusion is part of the IDB's core values as an institution, and the Bank's vision is to be as diverse as the Region it serves. Being a diverse and inclusive organization improves the Bank's ability to attract and retain talented staff, leverage collective capabilities, create value, and deliver quality work to the benefit of clients and the Region as a whole.

There is a growing body of research pointing to the benefits of having more women in leadership positions in terms of contributing to positive bottom-line performance. The Bank also understands that ensuring a balanced representation of men and women in its own organization is a business imperative.

In 2010, the IDB committed through the IDB-9 to increasing the share of women in mid- to senior- level professional positions (staff in Grades 4 and above<sup>12</sup>) to 40 percent by 2015 (Indicator 4.5.11 in Figure D.6). Targets were also set to increase the number of women as Country Representatives and Executives to 38 percent and to increase the representation of women Vice-Presidents from zero percent to 40–60 percent by the end of 2015 (Indicator 4.5.12 in Figure D.6).

At the end of 2015, the number of women in grades 4 and above increased to 37 percent, while women made up 31 percent of Country Representatives and Executives. Although the targets were not fully met, significant progress was made in moving in the right direction. The growth rate for female employment at grade 4 and above averaged 3.8 percent between 1995 and 2010, and has increased significantly to 6.2 percent following the establishment of these targets. Historical analysis indicates that without these targets, the share of female employment in grades 4 and above would have reached only 32 percent by the end of 2015.

As the adage goes, “What gets measured gets done.” The establishment of the gender target helped shine a light on practices that could be improved to increase the representation of women.

The strategy for increasing the number of women in senior levels focused both on external recruitment and internal growth and development to build the bench of qualified female talent within the IDB. The IDB invested in career development and work-life initiatives to better attract, support, and retain talented women. Efforts

<sup>12</sup> This includes staff grades 4 to 1, Executives, and Country Office Representatives.

	2015 Target	2015 Actual	Status
<b>4.5.11</b> Percentage of professional and executive staff who are women, grade 4 or above	40%	<b>37%</b>	
<b>4.5.12</b> Percentage of upper management staff who are women (Executive staff and Representatives/EVP and Vice-Presidents)	38%/40–60%	<b>31%/25%</b>	
<b>4.5.13</b> Percentage of professional staff based in COF	40%	<b>32%</b>	
 Target met or exceeded in 2015  Distance between 2015 value and 2015 target is less than 15% of the 2015 target  Distance between 2015 value and 2015 target is more than 15% of the 2015 target			

Figure D.6

Operational  
Effectiveness and  
Efficiency Indicators:  
Human Resources

included a focus on women in the Bank-wide mentoring program, the introduction of a flexible work arrangement policy across the organization, the implementation of the Emerging Women Leaders Program and Working Mama Program, the approval of policies to provide pregnant and lactating women with greater flexibility with regard to mission travel, and options for lactating staff members to continue breastfeeding upon their return from maternity leave. Additional efforts were made to source external talent, particularly in sectors where women have been traditionally under-represented and make enhancements to the recruitment process to ensure that more women are being short-listed and interviewed for senior level roles.

The Bank has also learned that these efforts must be underpinned by an organizational culture of inclusion. Toward that end, in 2012 the IDB established the Diversity and Inclusion Advisory Group, a high-level entity led by the Executive Vice-President to guide the organization's diversity and inclusion efforts, conduct periodic surveys to better understand the Bank's demographic diversity and perceptions of inclusion within the organization, and build a common awareness of key issues like unconscious bias and cultural competence.

While the Bank has made important advances in becoming a more diverse and inclusive organization, it has faced major challenges in defining appropriate indicators. Specifically, while the CRF 2012–2015 indicator captured gender, more fully capturing “diversity” presents its own challenges. Lack of data on race, ethnic origin, sexual orientation and religion, for example, continues to be a major obstacle.

Besides these internal efforts, the Bank has been formally promoting gender equality in internal and external procurement to increase the diversity of vendors and service providers contracted with IDB resources. In 2015, the Bank developed language to include in IDB requests for proposals (RFPs) and pre-qualifications



aimed at encouraging women-owned and women-controlled suppliers to apply. The Bank also published RFPs on the [ConnectAmericas](#) platform as another way to reach women-owned businesses with information on the Bank's corporate procurement opportunities.

Another initiative was the Bank-hosted event with Latin American and Caribbean heads of public procurement to share both lessons learned and challenges regarding the participation of women in different sectors, including both traditional sectors such as food and textiles and non-traditional sectors such as construction. As a result, procurement heads of Chile and the Dominican Republic requested support from the IDB Group to link more women-owned businesses to public procurement opportunities, and a technical cooperation to support this effort is currently under preparation.

## Reevaluating Decentralization

Another IDB-9 commitment called for an increase in the number of professional Bank staff physically located in Country Offices to 40 percent in 2015, with the end goal of increasing responsiveness to country needs.

In 2012, the Bank carried out a comprehensive assessment on the state of its decentralization, supported by external consulting services. The assessment concluded that, given the high level of external partner satisfaction and portfolio performance and the high costs of relocating staff, there was no compelling business case to move additional professional staff from headquarters in Washington, DC to the Country Offices (except in the case of some of the private sector windows). Consequently, the percentage of professional staff (from public sector windows) based in Country Offices remained constant at 32 percent throughout the period (Indicator 4.5.13 in Figure D.6).

It was also noted that the CRF indicator (whose denominator takes into account both operational and nonoperational staff and excludes the IDB's complementary workforce) did not fully capture the level of the Bank's direct interaction with, and support to, country counterparts (see Box 1.1 for additional details regarding the definitions of indicators).

Interestingly, when considering both staff and complementary workforce, nearly half (46 percent) of all employees with functions that are strictly operational were located in the Country Offices as of December 31, 2015.

The 2012 assessment also found that additional work was still needed in such areas as staff mobility, career incentives, matrix governance, and operational processes in order to ensure that those employees already in the field could perform at their highest level. The Bank started to implement measures to address these issues in 2013, and although it is still too soon to evaluate the results, evidence from a second assessment carried-out in 2014 points to improved communication and coordination among staff, enhancements in performance management, and clarification of roles and responsibilities of key Country Office staff, among other efforts, all of which have contributed to overall smoother functioning of the Country Offices over the past few years.





## CHAPTER 5

# In Pursuit of Sustainable Economic and Social Development

## In Pursuit of Sustainable Economic and Social Development

Approved in 2010, the IDB-9 Institutional Strategy constitutes an agreed-upon roadmap between the Bank and its shareholders on the most pressing development challenges facing the Region at that time. This roadmap consolidated a shared vision on how to address those challenges by directing IDB support to specific priority areas and objectives. Formal reporting of the Corporate Results Framework (CRF), used to measure progress in implementing this Strategy, began with the 2012 Development Effectiveness Overview (DEO) (published in March 2013) and paved the way for the Bank and its shareholders to systematically take stock of where the Region and the Bank were in addressing these priority areas.

With this in mind, a natural way to conclude this 2015 edition of the DEO edition is by answering the following: To what degree has the IDB met expected results during 2012–2015 as measured by the CRF? How is the IDB planning to incorporate lessons learned into its work with client countries going forward? And what areas will be the focus of the IDB's work with the countries over the next four-year period?

Two-thirds (66.7 percent) of the CRF targets for IDB's Output Contributions to Regional Development Goals (Figure B) have been achieved (see Chapter 2). As Chapter 4 shows, all four Lending Program Targets (Figure C) have been achieved. In the area of Operational Effectiveness and Efficiency, 57 percent of all Figure D targets have been achieved. However, as discussed in Chapter 1, capturing those aspects of IDB performance that are more directly under IDB control has been particularly challenging, and additional context information is required to interpret those results.

Taken together, these results suggest that, although CRF 2012–2015 indicators have been largely achieved, there is still a long way to go, not only in terms of continuing to support development results across the Region, but also in further refining the Bank's performance measurement framework.

As mandated by the Board of Governors as part of IDB-9, the Bank recently updated its Strategy to reflect the emerging challenges of the Region. Although still reflecting the IDB-9 strategic goals of reducing poverty and inequality and fostering sustainable growth, the *Update to the Institutional Strategy 2010–2020 (UIS): Partnering with Latin America and the Caribbean to Improve Lives* recalibrates the Bank's vision through 2019.

The development of the UIS followed an extensive public consultation process involving nearly 300 partners, public sector officials, clients, academics, journalists, civil society representatives, and IDB employees.



Change is the law of life. And those who look only to the past or present are certain to miss the future.



John F. Kennedy



The resulting feedback revealed the Region's three cross-cutting issues and three challenges; and the IDB Group's three comparative advantages that it will leverage through six operational guiding principles: Responsiveness; Multi-Sectoriality; Effectiveness and Efficiency; Leverage and Partnerships; Innovation and Knowledge; and Strategic Alignment. A visual overview of the UIS is provided in Figure 5.1. A detailed summary of the UIS, including how each of these issues, challenges, and operational guiding principles are defined can be found on the IDB website.



Figure 5.1

Main Elements of the Update to the Institutional Strategy (UIS)

\* Changes to the Institutional Strategy as a result of the Update.

# Measuring the IDB Group's Progress during 2016–2019

In order to measure progress in implementing the UIS, the CRF was also updated. The CRF 2016–2019 is structured along three levels: Regional Context; Country Development Results; and Inter-American Development Bank Group (IDBG) Performance.

The Regional Context level highlights the Region's long-term development progress. These high level indicators are not attributable to IDBG-supported interventions because (as with the Regional Development Goals in the first CRF) progress made on each indicator is the result of a combination of actions, policies, and measures implemented or funded by the countries in the Region. The second level, Country Development Results, provides aggregate data on outputs and outcomes supported by IDBG-financed projects. The third level, IDBG Performance, measures how the Bank supports countries and clients in achieving results.

The CRF 2016–2019 comprises 55 main indicators (as opposed to the 84 indicators in the CRF 2012–2015). A set of auxiliary indicators has been included to report on the broader range of IDBG support to its borrowing member countries and clients. A complete list of indicators can be found at [www.iadb.org/CRF](http://www.iadb.org/CRF).

Given the consolidation of the Bank's private sector activities into the Inter-American Investment Corporation (IIC) as of January 1, 2016 (discussed in Chapter 1), the Update to the Institutional Strategy applies to the entire IDBG. The CRF 2016–2019 will be submitted for consideration and subsequent approval by the IIC Board of Executive Directors once the IIC's business plan update is approved (at which point, the CRF 2016–2019 might require some adjustments to reflect said plan).

# Reflecting on Experience

**T**he IDBG understands that stock-taking is crucial in order to identify and internalize lessons from previous experience and avoid past errors. The 2013 edition of the DEO began a practice at the IDB of candidly reflecting on failure, which continues in this year's DEO. Box 5.1 reflects on IDB's experience implementing projects in the Region. Box 5.2 discusses five specific lessons derived from the Bank's experience in designing and applying the CRF 2012–2015.

The IDBG understands that to successfully implement its development mandate, each project it supports must be as effective as possible. The Bank's experience—both successes and failures—in supporting countries in implementing projects under the IDB-9 sector priorities and measuring progress with the CRF Output Indicators has yielded valuable lessons that will help improve the design and execution of future operations.

## Box 5.1

**Learning from Failure:**  
Lessons from Project  
Implementation



### 1. Constructing an institutional-level results framework is a tall order.

Establishing Bank-wide indicators that fully capture the diversity of the IDB's portfolio is much more challenging than designing project-level indicators. As Chapters 1 and 2 highlight, three factors that contribute to making this challenging are: dynamic client demand, delays during project execution, and large-scale or complex projects that require more time to yield results. For example, from 2012 to 2015 the Region's demand for financing for teacher training programs was lower than initially expected. Delays during



execution can relate to bidding processes or sudden fiscal constraints. Finally, large scale projects, such as São Paulo's metro Line 4 (see Story 2.11 in Chapter 2), can take more than the four year CRF period to achieve substantial results: in this case, the benefits to its 198 million passengers per year. As also discussed in Chapters 1 and 2, there were also a number of challenges to target-setting due to the lack of accurate data at the time the CRF was developed. This led to some targets being either significantly lower, or significantly higher than what was ultimately achieved.

## Box 5.1

**Learning from Failure:**  
Lessons from Project  
Implementation  
(continued)



### **2.** The importance of collaboration is not a cliché.

Collaboration and multi-sectoriality are persistent concerns at the IDB. When it comes to project design and execution, collaboration—whether internal or external or between public and private sources of funding—has not yet reached its full potential. Some of the Bank's goals, such as closing gaps in the broadband and certain infrastructure systems, cannot be accomplished without public-private partnerships, or without teaming different areas of the Bank and of our partner countries in designing and executing multi-sectoral projects.



### **3.** To make a big impact, start small.

Before investing in large-scale projects, it is important to implement pilots and evaluate them rigorously. Furthermore, limited resources don't necessarily mean that a project can't have a big impact. Especially in times of fiscal tightening measures in parts of the Region, the careful design of an operation and strategic allocation of resources needs greater prominence.





#### 4. Traceability is the key for successful monitoring.

From the design of a project through its completion, project teams need to identify their contribution to the CRF in a consistent and unambiguous manner. With the implementation of Convergence, a tool to manage operations from beginning to end, project teams have the opportunity to report and track their contribution to the CRF through the progress they report in the Results Matrix. Through the identification of the logic of the intervention and the development of the Results Matrix, project teams should ensure the quality of the data to avoid potential inconsistencies and to ensure that achievements do not go un-reported.



#### 5. Documenting findings and recommendations is powerful.

Gathering findings and recommendations after a project is completed is a fruitful way to learn from the Bank's failures and successes. Nonetheless, they are only useful if they are duly documented and reported in the Bank's monitoring systems. The Bank's newly implemented platform—Convergence—is becoming an important tool to document findings and recommendations, and the Bank continues working to improve its performance and usefulness. Through enhanced data collection and reporting capabilities, Convergence is expected to yield a more efficient and transparent CRF reporting process, whereby it will be possible to see which specific projects contribute to CRF Indicators.

#### Box 5.1

**Learning from Failure:**  
Lessons from Project  
Implementation  
(continued)





## 6. Communicating both positive and negative findings is important.

Highlighting both positive and negative findings is a powerful tool to improve the design of Bank-funded projects. Furthermore, the dissemination of the results from an evaluation is essential to support evidence-based policy decisions and help the Bank understand what works and what does not in development. The Bank has made great strides over the past few years, but there is still further work to do.

### Box 5.1

**Learning from Failure:**  
Lessons from Project  
Implementation  
(continued)



## 7. Flexibility is fundamental.

Being able to make adjustments to a project, whether in regard to a timeline, an indicator or a planned evaluation can often affect whether the operation is determined to be successful or not in reaching its desired development outcome. For example, impacts can go undetected if the timing of the impact evaluation is inadequate. At the same time, it is important to consider that changes made to the project need to be carefully documented to allow others to retrace the decision-making process and learn from the adjustments, and should not be undertaken simply to make the project a “success”.



## 8. Timing of project evaluations is critical.

Project evaluations need to be timed properly in order to be able to assess their full results. Evaluations carried out at very early stages will fail to capture the full outcome that the project sought to achieve.

The following five lessons were key elements for the development of the CRF 2016–2019. (discussed in more detail in Section III of the [CRF 2016–2019 document](#)).

## Box 5.2

**Learning from Failure:**  
Lessons Learned from  
the CRF 2012–2015



### 1. Taking ownership

Ownership across all levels of the Bank is a key ingredient to make the CRF a meaningful tool for managing for development results. Both the Board and IDB staff were actively engaged in the development of the updated CRF and thanks to internal process changes, will continue to be engaged in monitoring progress against CRF targets.



### 2. Defined focus

The CRF should focus on measuring the highest-level strategic priorities identified by the Bank's shareholders—that is, the three key challenges and three cross-cutting issues, as well as the six guiding principles set forth in the Update to the Institutional Strategy (UIS).



### 3. Management Tool

The CRF must be used not only for accountability but also for managerial purposes. By promoting a greater understanding of the factors underlying variations in performance (as captured by under- or over-performance as compared to the CRF target) and encouraging greater transparency with respect to the specific projects or business units that contribute to each of its targets, the CRF can help guide the Bank towards achieving the goals set forth in the UIS.





## 4. Knowledge Management

Improved CRF knowledge management—for example, in terms of documenting indicator definitions, as well as assumptions for baselines and targets, and making widely available, can greatly enhance transparency and data quality, and maintain institutional memory in the face of employee turnover. In addition, having the systems in place to measure and monitor the Bank's output contributions has allowed for more accurate target-setting in the Updated CRF 2016–2019.



## 5. Staying relevant

Striking the right balance between flexibility and stability is crucial to ensuring that the CRF maintains its relevance as a performance measurement instrument. To this end, the IDB Board of Governors delegated the authority to the Board of Executive Directors to approve the CRF 2016–2019 as well as any subsequent updates to it. While major changes are not expected from year to year as the CRF must remain stable enough to truly measure progress, the ability to introduce improvements during the reporting period is expected to enhance the usefulness of this tool.

### Box 5.2

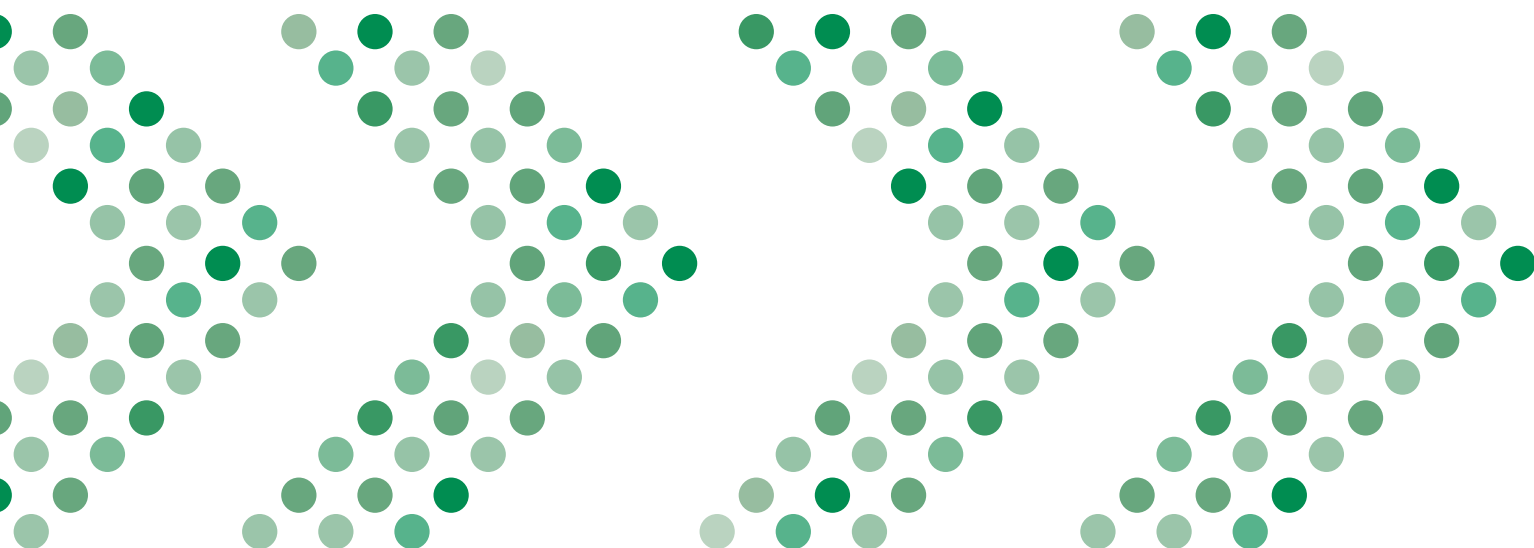
**Learning from Failure:**  
Lessons Learned from  
the CRF 2012–2015  
*(continued)*

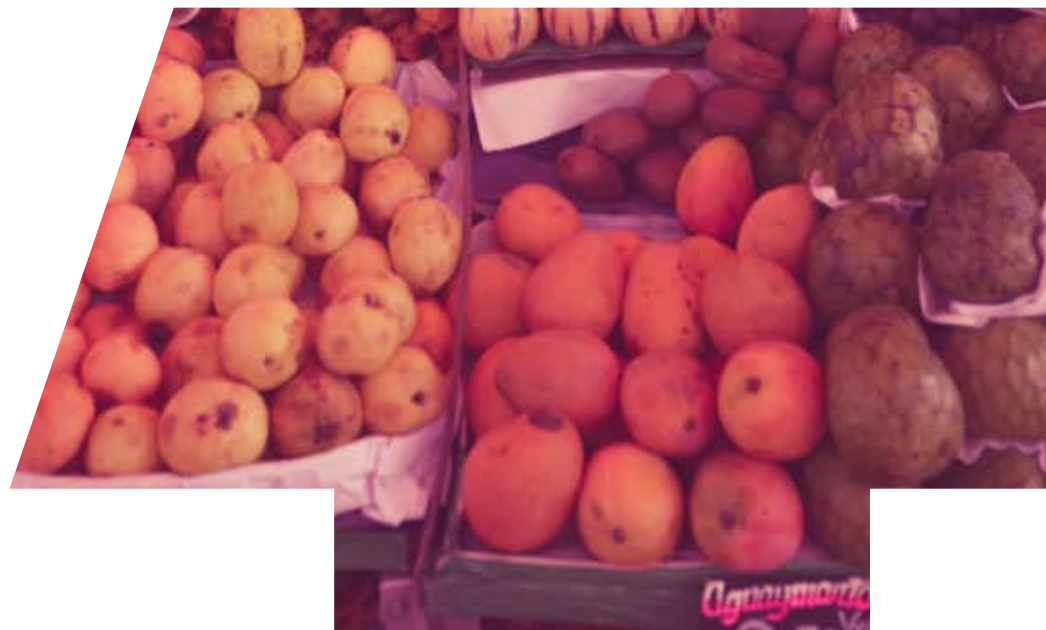


# Looking Forward


Implementing the Bank's overarching objectives of sustainable growth and reduction of poverty and inequality in the Region requires having a clear vision for the future. It also entails constantly monitoring signals, having the willingness and institutional capacity to quickly adapt to changing landscapes, and rethinking strategies as often as needed. It involves listening and engaging with a variety of stakeholders from the public and private sectors, civil society, and academia, among others, to systematically receive feedback on which development issues are most important to them.

Looking ahead to 2016 and beyond, the IDB is well-positioned to make this vision a reality — thanks not only to its institutional mandates through the UIS and the CRF 2016–2019, as well as the corporate and project level performance measurement systems that provide data for it, but also its willingness to continuously learn and improve its processes and operations. As the Region faces an uncertain future, the Bank reaffirms its commitment to work closely with each of its borrowing member countries, providing the needed financial resources, technical assistance, and policy advice to meet their unique and evolving needs and fine-tune its strategic direction when necessary. The work is far from finished. It is just the beginning of a new chapter on improving lives in Latin America and the Caribbean.





APPENDIX I  
2015 Figures



Appendix I provides a snapshot of selected indicators in 2015 for both public (Sovereign Guaranteed) and private (Non-Sovereign Guaranteed) projects financed by the Bank, including total approvals, client satisfaction, evaluability, and evaluation tools used during project preparation.

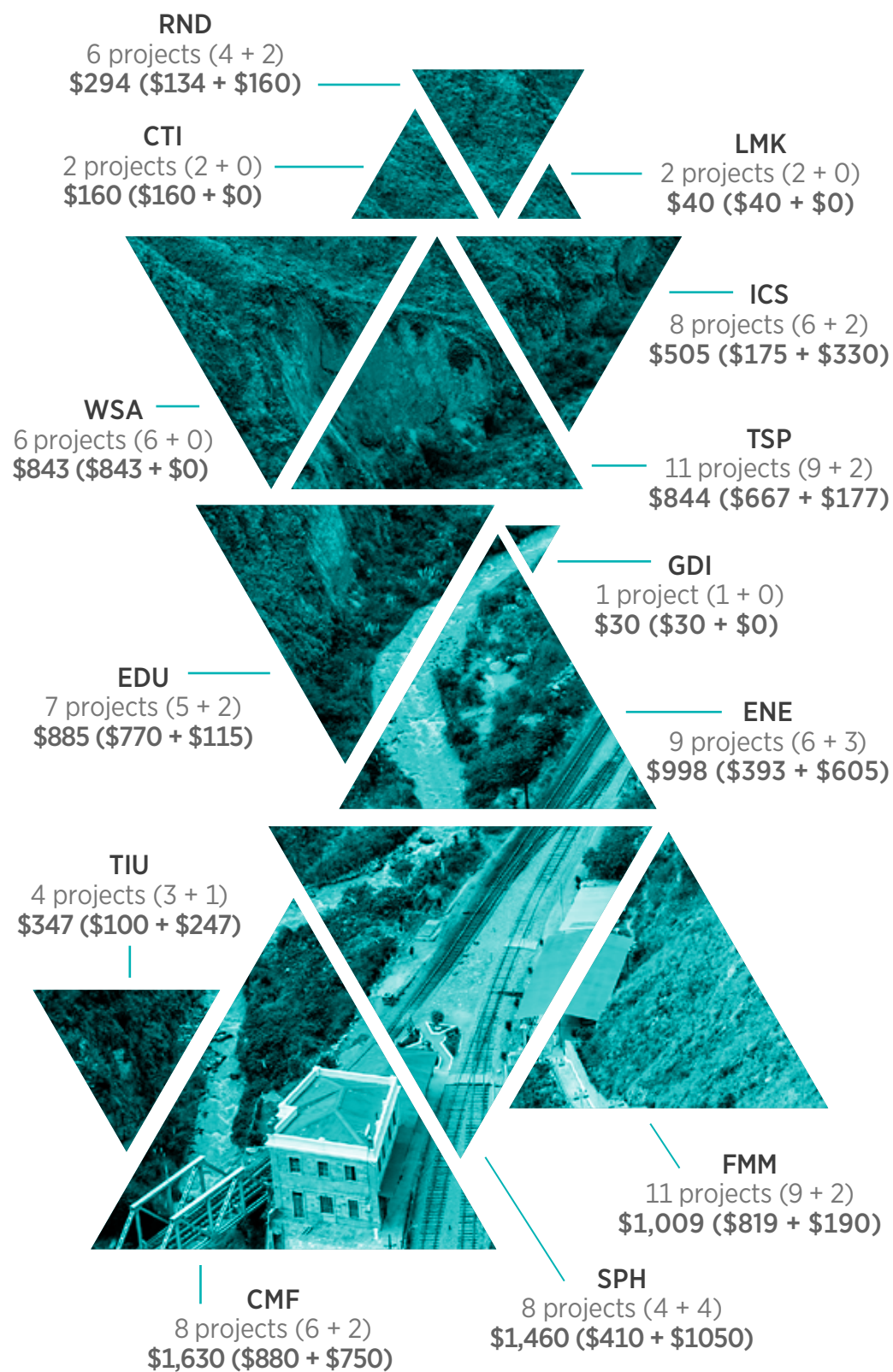


Projects approved: **83**  
Amount in US Billion: **\$9.04**

Investment Loans: **63**  
Amount in US Billion: **\$5.42**  
Policy-Based Loans: **20**  
Amount in US Billion: **\$3.62**

Figure 1  
Sovereign Guaranteed  
Project Approvals by  
Division in 2015  
(in US\$ million)

*Division Total (Investment + Policy-Based Loan)*



**Divisions**  
CMF: Capital Markets and Financial Institutions; CTI: Competitiveness and Innovation; EDU: Education; ENE: Energy; FMM: Fiscal and Municipal Management; GDI: Gender and Diversity Division; ICS: Institutional Capacity of the State; LMK: Labor Markets and Social Security Unit; RND: Rural Development and Natural Disasters; SPH: Social Protection and Health; TIU: Trade and Investment Unit; TSP: Transport; WSA: Water and Sanitation.

2012



2013



2014



2015



■ Program logic   
 ■ Economic analysis  
■ Monitoring and evaluation   
 -- Overall evaluability score

Figure 2

Development Effectiveness Matrix Scores by Evaluability Assessment Category 2012–2015 (0–10 scale)



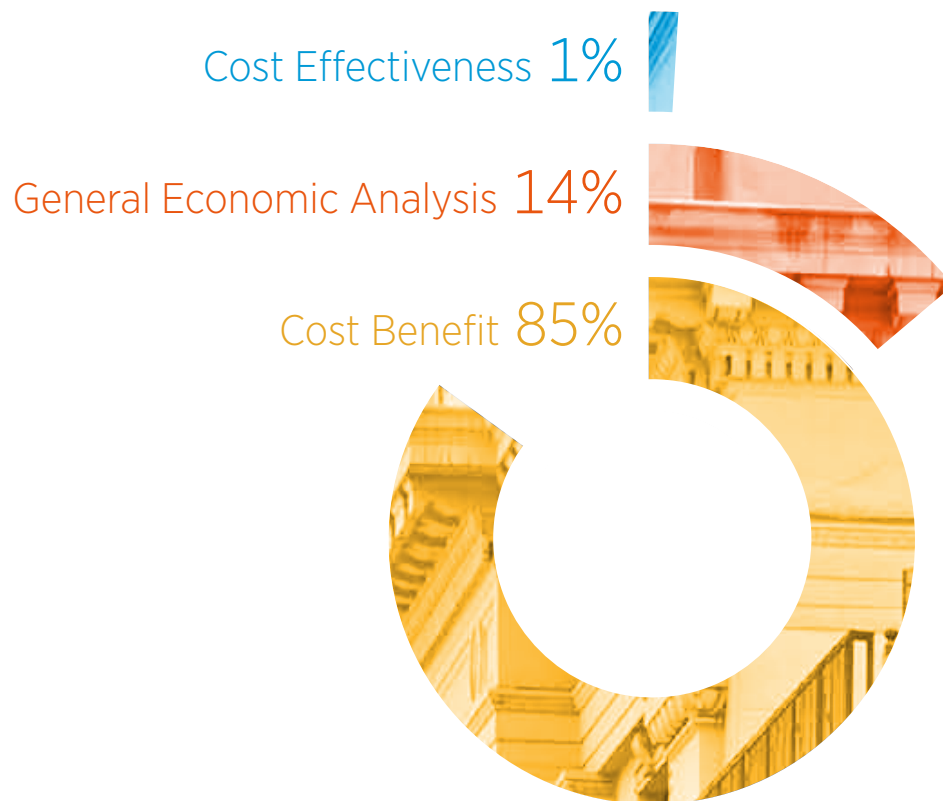


Figure 3  
Economic Analysis  
Methodologies of  
Sovereign Guaranteed  
Projects Approved in  
2015

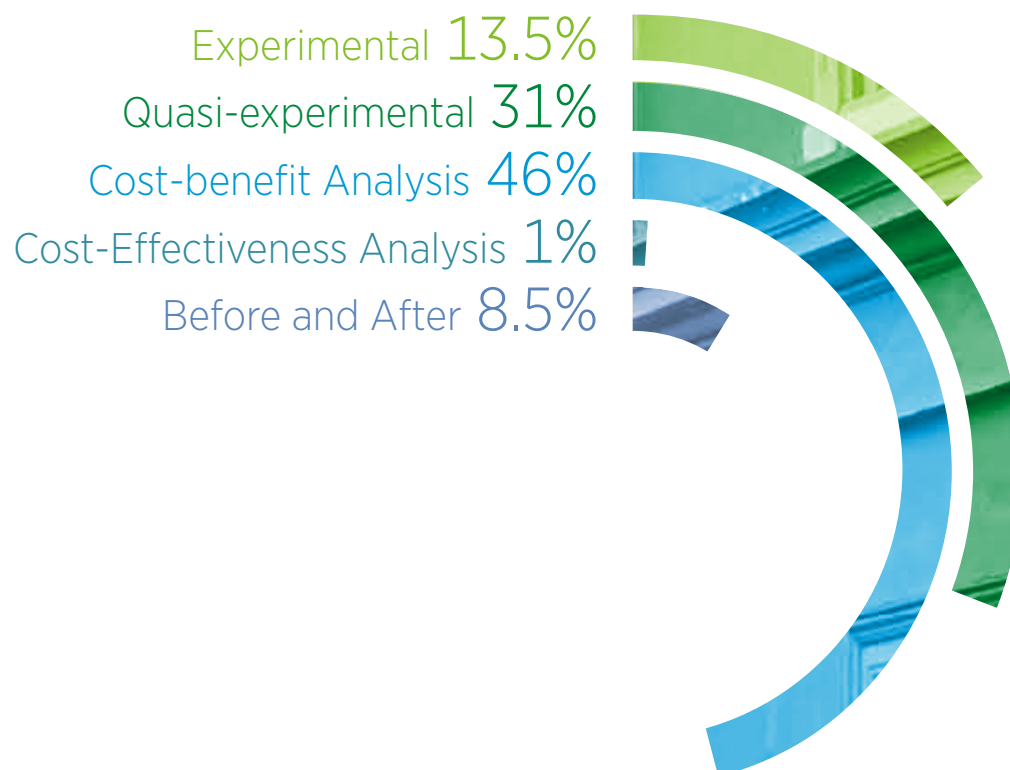
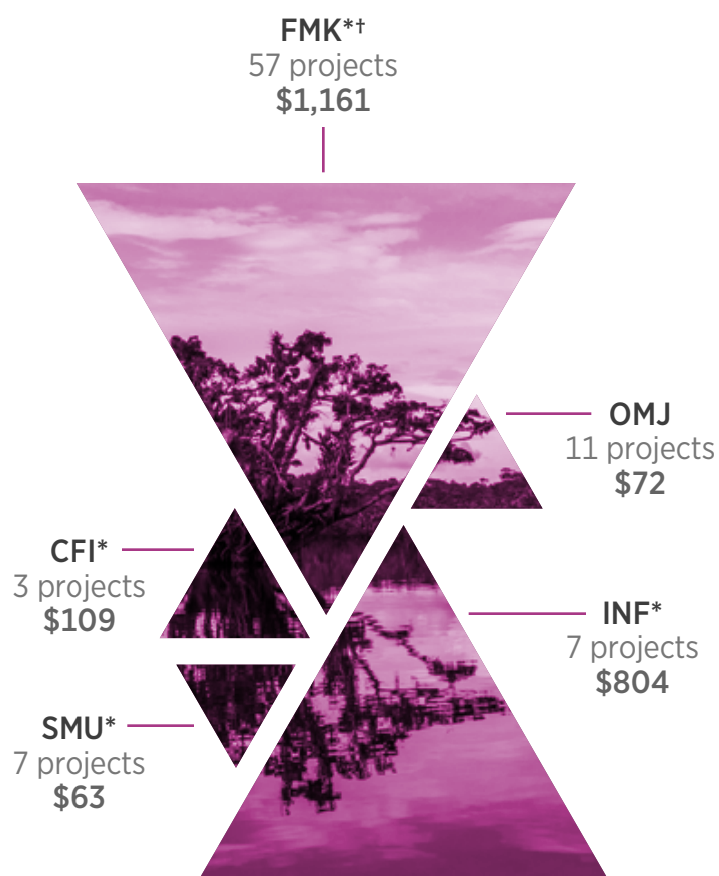


Figure 4  
Ex-post Evaluation  
Methodologies of  
Sovereign Guaranteed  
Projects Approved in  
2015\*

\* Projects with more than one evaluation methodology are counted under the most rigorous methodology only.

Projects approved: **85**  
Amount in US Billion: **\$2.20**

Figure 5  
Non-Sovereign  
Guaranteed Project  
Approvals by Division  
in 2015  
(in US\$ million)



#### Divisions

CFI: Corporate Finance Division; FMK: Financial Markets Division; INF: Infrastructure Division; OMJ: Opportunity for the Majority Sector; SMU: Strategy Management Unit

\* Part of the Structured and Corporate Finance Department (SCF).

† Includes Trade Finance Facilitation Program transactions.

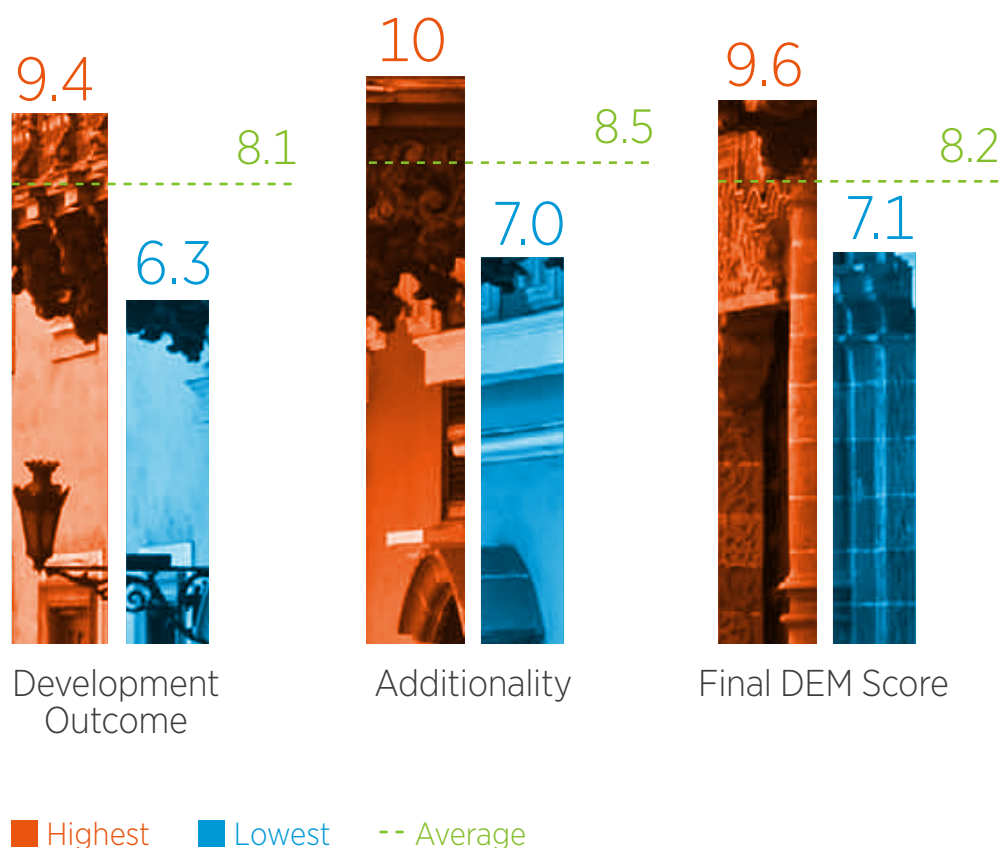


Figure 6  
Project Scores for  
Non-Sovereign  
Guaranteed Projects  
Approved in 2015  
(0-10 scale)

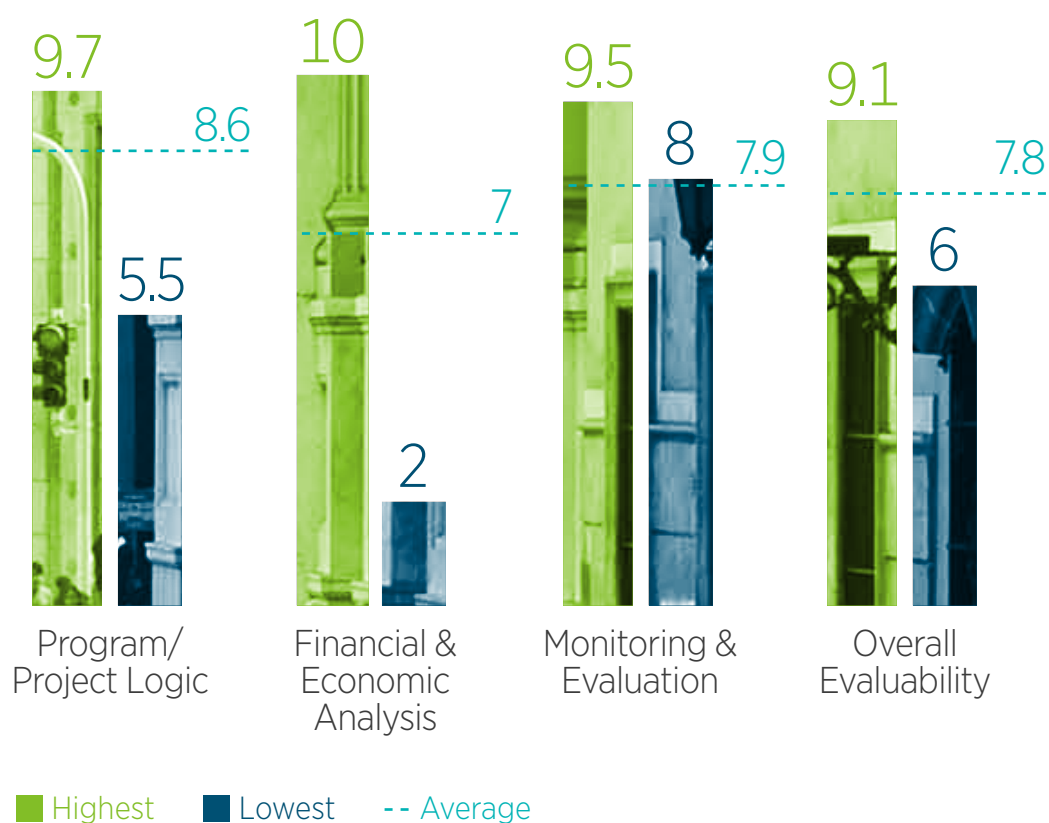


Figure 7  
Evaluability Scores  
for Non-Sovereign  
Guaranteed Projects  
Approved in 2015  
(0-10 scale)

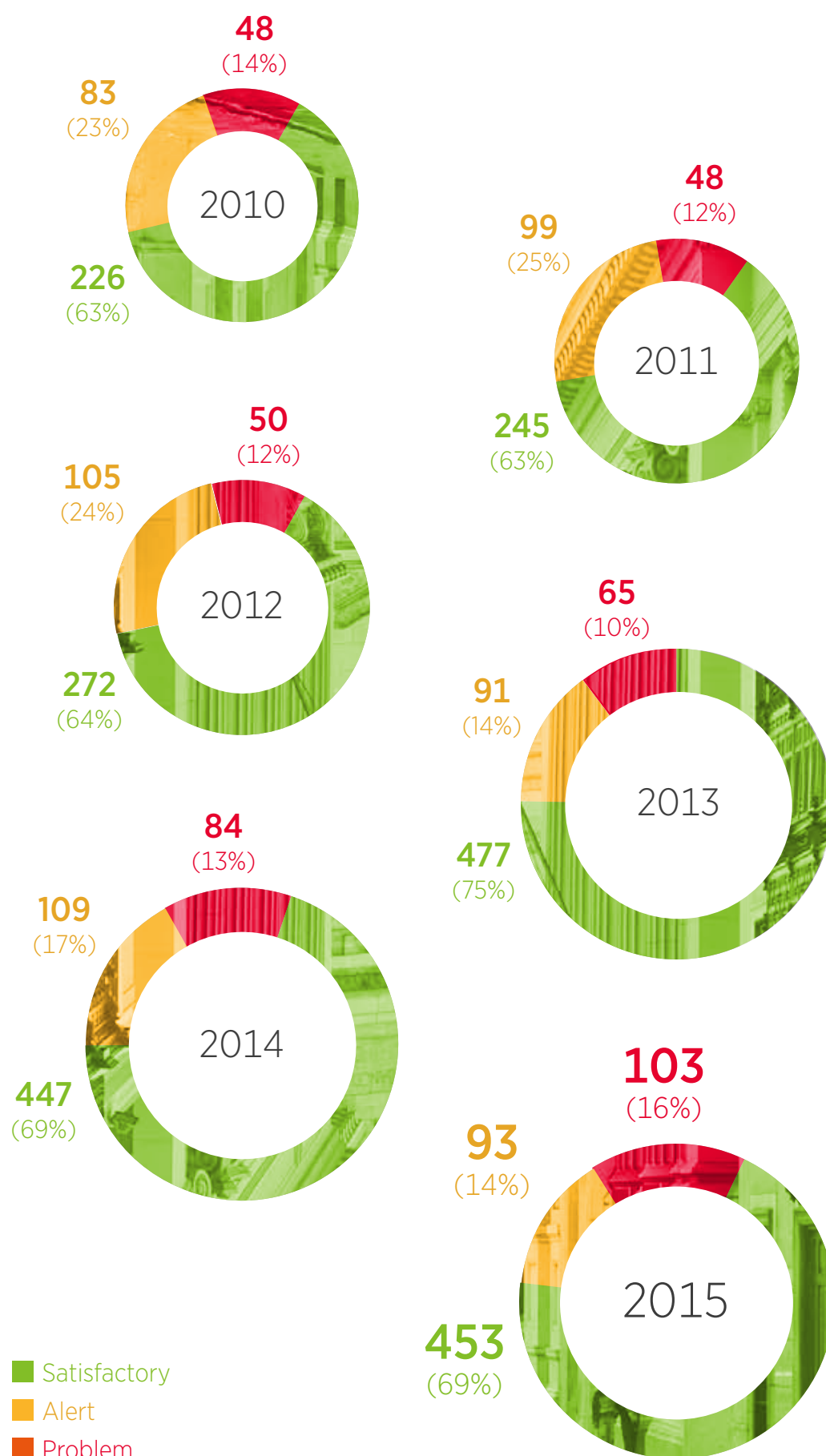


Figure 8

Performance  
Classification of  
Sovereign Guaranteed  
Operations 2010–2015\*

\* The ratings from 2010 to 2012 do not include projects whose performance was rated as “outlier”, a classification that was no longer in use for performance ratings of 2013. For 2013 and on, the projects were rated using a new methodology, which among other changes, expanded the scope of the portfolio being monitored and thus increased the total number of operations with a performance classification. The classification was expanded to include (1) projects already approved but that have not yet reached eligibility, and (2) projects that reached 95% disbursement. This figure only goes up to the end of 2015. Classifications up to the end of 2016 will be reported during the March 2017 cycle.

Project Number	Project	Score*
<b>AR-L1073</b>	CCLIP: Program of Technological Innovation	Partial achievement
<b>BR-L1171</b>	Catanduva Integrated Urban Development Program	Partial achievement
<b>EC-L1087</b>	Electrification Program for rural and marginal urban areas of Ecuador	High achievement
<b>HA-L1086</b>	Emergency Road Rehabilitation Program in Response to Hurricane Sandy	Partial achievement
<b>HO-L1062</b>	Primary Education and Technology Integration Program	Partial achievement
<b>NI-L1010</b>	Stormwater Drainage and Development Management SubWatersed III Managua	Partial achievement
<b>PE-L1138</b>	Program to Reduce the Vulnerability of the State to Disasters III	High achievement

Figure 9

Project Completion Reports (PCRs)  
Approved in 2015 per the New Methodology

PCR documents included were prepared and sent to the corresponding Government in 2015.

\* Full achievement (score = 1); high achievement (score between 0.75 and 0.99); partial achievement (score between 0.5 and 0.74); low achievement (score between 0.25 and 0.49); no achievement (score below 0.25).

#### AR-L1022

Credit Program Production Development and Employment in San Juan Province

Development Objectives	Implementation Progress	Sustainability
Highly Probable	Highly Satisfactory	Highly Satisfactory

#### BO-L1038

Neighborhood Improvement Multiphase Program, Phase I

Development Objectives	Implementation Progress	Sustainability
Probable	Satisfactory	Low Probability

#### BR-L1093

Program Support Fiscal Management Modernization Transparency State Pará – PROGEFAZ

Development Objectives	Implementation Progress	Sustainability
Satisfactory	Satisfactory	Probable

Figure 10

Project Completion Reports (PCRs)  
Approved in 2015 per the Old Methodology



**CO-L1016**

## Roads for Integration and Social Equality

Development Objectives

Probable

Implementation Progress

Satisfactory

Sustainability

Satisfactory

**DR-L1026**

## Electricity Distribution Network Rehabilitation Project

Development Objectives

Probable

Implementation Progress

Satisfactory

Sustainability

Satisfactory

**EC-L1019**

## Potable Water and Sanitation for Cuenca

Development Objectives

Probable

Implementation Progress

Satisfactory

Sustainability

Satisfactory

**GU-L1031**

## Support for Modernization of the Ministry of Public Finance

Development Objectives

Probable

Implementation Progress

Satisfactory

Sustainability

Satisfactory

**PR0126**

## Science and Technology Program

Development Objectives

Probable

Implementation Progress

Satisfactory

Sustainability

Satisfactory

**UR-L1010**

## Microfinance Support to Productive Development

Development Objectives

Probable

Implementation Progress

Highly Satisfactory

Sustainability

Satisfactory

**UR-L1020**

## Clusters Competitiveness and Value Chains

Development Objectives

Highly Probable

Implementation Progress

Highly Satisfactory

Sustainability

Unsatisfactory

## Figure 10

Project Completion  
Reports (PCRs)  
Approved in 2015 per  
the Old Methodology  
(continued)

## Primary Booking Unit

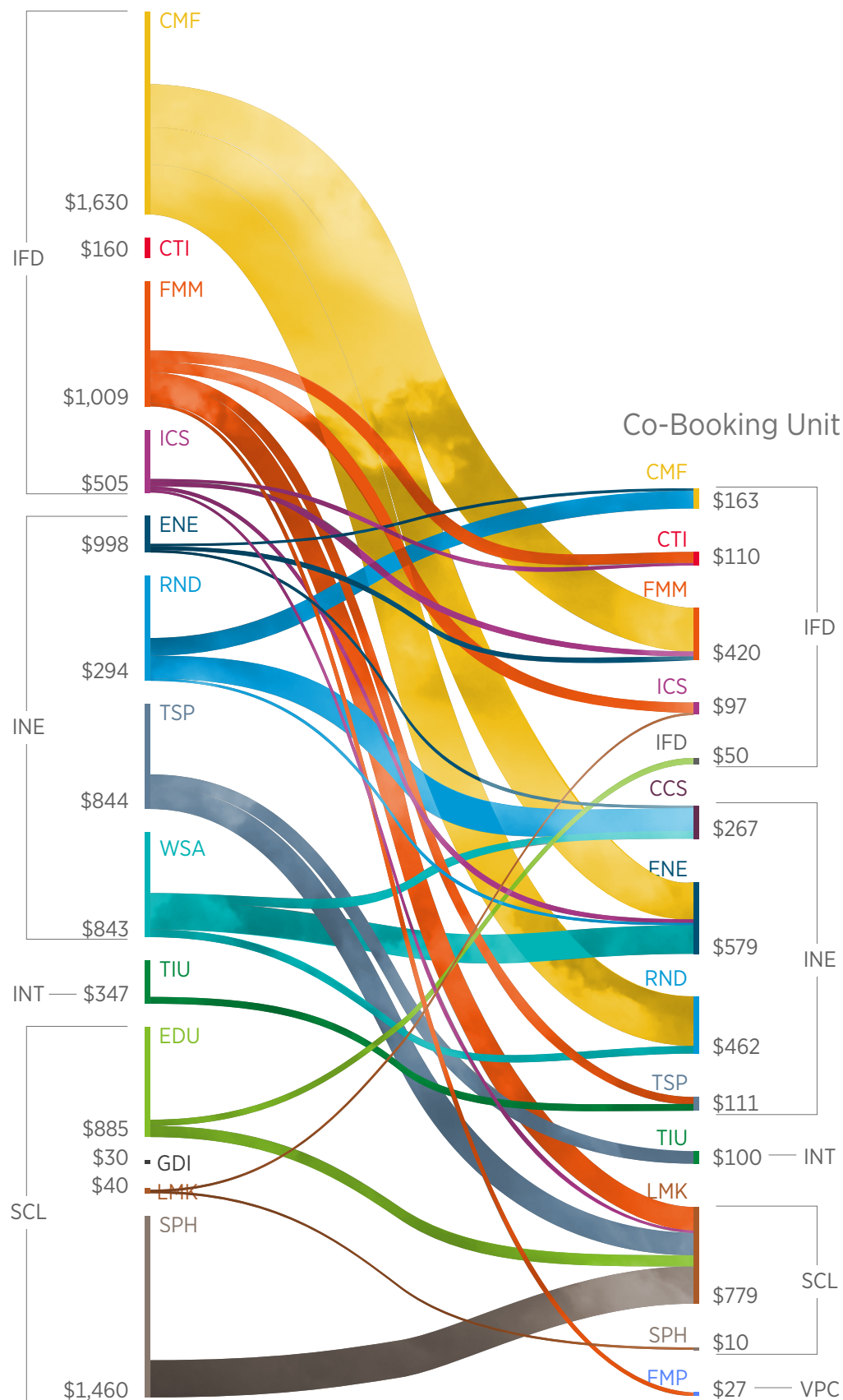


Figure 11

Multi-Booking of Sovereign Guaranteed Operations at the IDB in 2015

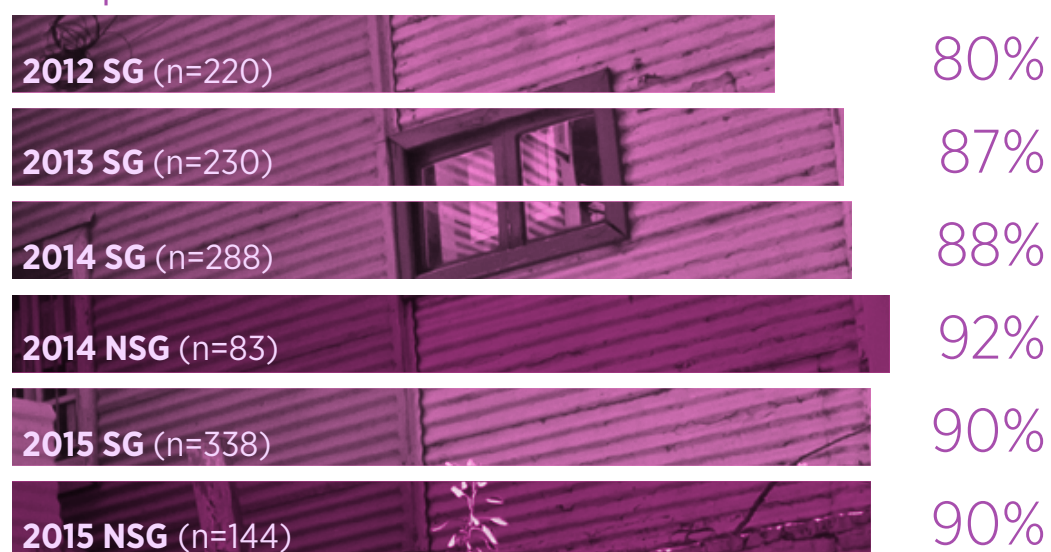
## Loan Operations



Figure 12

Overall Satisfaction for IDB Delivery of Services by Product 2012–2015

## TC Operations



## Country Operations



Satisfaction is measured on a six-point scale. Figure only reflects “satisfied” (5) and “very satisfied” (6) responses.





APPENDIX II  
CRF 2012-2015

# Corporate Results Framework Traffic Light Methodology

**A**s in previous DEO editions, green, yellow, and red light symbols are used to denote the status of the Corporate Results Framework indicators relative to their corresponding 2015 targets. The criteria to assign classification bands in this final traffic light assessment are shown below.

## Output Contributions and Lending Program Indicators

To be assigned green status, the final value of an indicator must be at least 100 percent of the corresponding target. Indicator values achieving at least 85 percent of the target are classified in the yellow category, while those below 85 percent are classified as red.

- ✓ Target met or exceeded in 2015
- ▲ Indicator value is greater than or equal to 85 percent and less than 100 percent of the target
- ✗ Indicator value is less than 85 percent of the target

In the case of the indicators at the **Output Contributions to Regional Goals** level, a given indicator's traffic light is a function of the (cumulative) final value since 2012 relative to the target, as summarized in the following equation:

$$\frac{\text{Actual progress 2012 through 2015}}{\text{Target 2012-2015}}$$



**Lending program targets** were intended to be achieved in 2015. The traffic light status is based on 2015 final values relative to each corresponding target. The following equation summarizes the approach for this level:

$$\frac{\text{Approval volume for specific lending indicator 2015}}{\text{Total approval volume 2015}}$$

## Operational Effectiveness and Efficiency

To be assigned green status, the final value of an indicator must have met or exceeded the corresponding target. Yellow status is given when the distance between the final indicator value and its corresponding target is less than or equal to 15 percent of the target value. The indicator is classified as red in those cases where the distance is greater than 15 percent of the target.

- ✓ Target met or exceeded in 2015
- ▲ Distance between 2015 value and 2015 target is less than 15 percent of the 2015 target
- ✗ Distance between 2015 value and 2015 target is more than 15 percent of the 2015 target

As with the **Lending program targets**, the **Operational Effectiveness and Efficiency indicators** were intended to be achieved in 2015. The traffic light status is based on 2015 final values relative to each corresponding target. The following equation summarizes the approach for this level, where the bars enclosing the equation denote absolute value:

$$\frac{|(2015 \text{ Target}) - (2015 \text{ Final value})|}{2015 \text{ Target}}$$

## 1 Social Policy for Equity and Productivity

Goal	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.1.1 Extreme poverty rate</b>	<b>13%</b>	2007	<b>12%</b>	2013
<b>2.1.2 Gini coefficient of per capita household income inequality</b>	<b>0.55</b>	1999–2004	<b>0.50</b>	2009–2014
<b>2.1.3 Share of youth ages 15 to 19 who complete ninth grade</b>	<b>47%</b>	2000–2007	<b>65%</b>	2007–2015
<b>2.1.4 Maternal mortality ratio (per 100,000 live births)</b>	<b>100</b>	2000	<b>85</b>	2013
<b>2.1.5 Infant mortality rate (per 1,000 live births)</b>	<b>21</b>	2007	<b>16</b>	2015
<b>2.1.6 Share of formal employment in total employment</b>	<b>46%</b>	2007	<b>55%</b>	2013

## 2 Infrastructure for Competitiveness and Social Welfare

Goal	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.2.1 Incidence of waterborne diseases (per 100,000 inhabitants)</b> <i>Proxy<sup>B</sup>: Proportion of population using improved drinking water source<sup>C</sup></i>	<b>93%</b>	2008	<b>95%</b>	2015
<b>2.2.2 Paved road coverage (km/km<sup>2</sup>)</b>	<b>0.038</b>	2001–2006	<b>0.038</b>	2008–2013
<b>2.2.3 Percent of households with electricity</b>	<b>93%</b>	2007	<b>96%</b>	2014
<b>2.2.4 Proportion of urban population living in dwellings with hard floors</b> <i>Proxy<sup>B</sup>: Proportion of urban population living in slums</i>	<b>29%</b>	2000	<b>21%</b>	2014

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: EM-DAT, State of the World's Children Report 2015, ECLAC's Statistical Yearbook for Latin America and the Caribbean 2015, SEDLAC data, UN MDG Report Statistical Annex 2015, UNODC data, WDI Report 2015 (World Bank), WHO data, World Road Statistics 2015, OLADE data, IDB, World Bank and International Finance Corporation (IFC) Enterprise Survey.

B A proxy is reported due to the unavailability of data for the original indicator.

C The value for this indicator has increased during the period indicated; nonetheless, it is important to recognize that an increase in water access does not necessarily imply that the service provided is adequate in terms of continuity, quantity and quality.

Table A Regional  
Development Goals

### 3 Institutions for Growth and Social Welfare

Goal	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.3.1</b> Percent of firms using banks to finance investments	<b>19.6%</b>	2006	<b>32.2%</b>	2010
<b>2.3.2</b> Ratio of actual to potential tax revenues <i>Proxy<sup>B</sup>: Actual tax revenue collected (% of GDP)</i>	<b>17.7%</b>	2007	<b>22.2%</b>	2013
<b>2.3.3</b> Percent of children under five whose birth was registered	<b>89%</b>	2000–2007	<b>92%</b>	2005–2013
<b>2.3.4</b> Public expenditure managed at the decentralized level as percent of total public expenditure	<b>20%</b>	2007	<b>25%</b>	2013
<b>2.3.5</b> Homicides per 100,000 inhabitants	<b>25.1</b>	2008	<b>23.1</b>	2012–2013

### 4 Competitive Regional and Global International Integration

Goal	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.4.1</b> Trade openness (trade as percent of GDP)	<b>84.9%</b>	2004–2007	<b>76.7%</b>	2011–2014
<b>2.4.2</b> Intraregional trade in Latin America and the Caribbean as percent of total merchandise trade	Exports	<b>24.2%</b>	2004–2007	<b>27.3%</b>
	Imports	<b>33.1%</b>		
<b>2.4.3</b> Foreign direct investment net inflows as percent of GDP	<b>4.2%</b>	2004–2007	<b>4.6%</b>	2011–2014

### 5 Protecting the Environment, Responding to Climate Change, Promoting Renewable Energy, and Enhancing Food Security

Goal	Baseline	Year	Progress <sup>A</sup>	Year
<b>2.5.1</b> CO <sub>2</sub> emissions (kilograms) per \$1 GDP (purchasing power parity)	<b>0.29</b>	2006	<b>0.28</b>	2010
<b>2.5.2</b> Countries with planning capacity in mitigation and adaptation of climate change	<b>3</b>	2009	<b>18</b>	2015
<b>2.5.3</b> Annual reported economic damages from natural disasters (billion US dollars)	<b>\$7.7</b>	2007	<b>\$8.2</b>	2014
<b>2.5.4</b> Proportion of terrestrial and marine areas protected to total territorial area (%) <sup>D</sup>	<b>19.3%</b>	2009	<b>13.3%</b>	2014
<b>2.5.5</b> Annual growth rate of agricultural GDP (%)	<b>3.7%</b>	2005–2007	<b>2.1%</b>	2012–2014

A The data for the Regional Development Goals are drawn from external sources. Because these indicators are designed to measure long-term impact, updates are available only periodically. The sources are: EM-DAT, State of the World's Children Report 2015, ECLAC's Statistical Yearbook for Latin America and the Caribbean 2015, SEDLAC data, UN MDG Report Statistical Annex 2015, UNODC data, WDI Report 2015 (World Bank), WHO data, World Road Statistics 2015, OLADE data, IDB, World Bank and International Finance Corporation (IFC) Enterprise Survey.

B A proxy is reported due to the unavailability of data for the original indicator.

D The 2014 value is not comparable with the values reported in previous years (including the baseline) due to methodological revisions to the source indicator – MDG indicator 7.6 Proportion of terrestrial and marine areas protected. This value comes from the UN's MDG statistical annex.

## Table A Regional Development Goals

# 1 Social Policy for Equity and Productivity

Indicator	Baseline 2005–2008	2012	2013	2014	2015	Cumulative Progress 2012–2015	Target 2012–2010*	Progress against Target	Status
<b>3.1.1 Students benefited by education projects</b>	3,200,000	<b>4,015,874</b>	<b>3,925,122</b>	<b>4,079,447</b>	<b>6,541,634</b>	<b>18,562,077</b>	8,500,000	<div><div></div></div>	✓
girls		1,967,778	1,923,310	2,000,942	3,206,764	<b>9,098,794</b>			
boys		2,048,096	2,001,812	2,078,505	3,334,870	<b>9,463,283</b>			
<i>FSO Countries</i>		<i>89,437</i>	<i>106,253</i>	<i>162,544</i>	<i>31,103</i>				
<b>3.1.2 Teachers trained</b>	175,000	<b>66,957</b>	<b>131,859</b>	<b>141,308</b>	<b>47,690</b>	<b>387,814</b>	530,000	<div><div></div></div>	✗
<i>FSO Countries</i>		<i>686</i>	<i>4,980</i>	<i>2,124</i>	<i>0</i>				
<b>3.1.3 Individuals receiving a basic package of health services</b>	2,000,000	<b>9,600,750</b>	<b>6,941,125</b>	<b>6,950,386</b>	<b>5,554,880</b>	<b>29,047,141</b>	23,000,000	<div><div></div></div>	✓
indigenous		3,140	1,307,629	1,186,445	590,962	<b>3,088,176</b>			
Afro-descendants		2,656,412	1,751,573	83,497	78,000	<b>4,569,482</b>			
<i>FSO Countries</i>		<i>664,805</i>	<i>156,715</i>	<i>1,272,757</i>	<i>1,007,279</i>				
<b>3.1.4 Individuals receiving targeted anti-poverty program</b>	n/a	<b>10,895,153</b>	<b>4,152,494</b>	<b>3,092,260</b>	<b>2,861,777</b>	<b>21,001,684</b>	16,000,000	<div><div></div></div>	✓
indigenous		529,715	374,891	243,124	146,811	<b>2,589,082</b>			
Afro-descendants		312,403	310,860	n/a	n/a	<b>n/a</b>			
<i>FSO Countries</i>		<i>818,440</i>	<i>649,186</i>	<i>1,143,386</i>	<i>1,783,792</i>				
<b>3.1.5 Individuals benefited from programs to promote higher labor productivity</b>	n/a	<b>313,302</b>	<b>320,818</b>	<b>386,614</b>	<b>253,994</b>	<b>1,274,728</b>	600,000	<div><div></div></div>	✓
women		190,008	222,884	276,748	182,336	<b>871,976</b>			
men		123,294	97,934	109,866	71,658	<b>402,752</b>			
<i>FSO Countries</i>		<i>732</i>	<i>3,884</i>	<i>4,203</i>	<i>4,465</i>				
<b>3.1.6 Jobs added to formal sector</b>	129,000	<b>14,291</b>	<b>36,373</b>	<b>25,521</b>	<b>17,852</b>	<b>94,037</b>	160,000	<div><div></div></div>	✗
<i>FSO Countries</i>		<i>0</i>	<i>263</i>	<i>195</i>	<i>0</i>				

\* There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras, and Nicaragua).

n/a No data available

- Progress 2012–2015
- Gap to target
- ✓ Target met or exceeded in 2015
- ⚠ Indicator value is greater than or equal to 85% and less than 100% of target
- ✗ Indicator value is less than 85% of target

## Table B Contribution of Outputs to Regional Goals

## 2 Infrastructure for Competitiveness and Social Welfare

Indicator	Baseline 2005–2008	2012	2013	2014	2015	Cumulative Progress 2012–2015	Target 2012–2010*	Progress against Target	Status
<b>3.2.1 Households with new or upgraded water supply</b>	1,500,000	<b>425,722</b>	<b>142,750</b>	<b>175,271</b>	<b>207,155</b>	<b>950,898</b>	2,770,000	<div><div></div></div>	✗
indigenous		26,921	6,074	8,755	34,590	76,340			
Afro-descendants		21,833	14,436	14,573	11,269	62,111			
<i>FSO Countries</i>		28,947	15,536	39,228	39,968				
<b>3.2.2 Households with new or upgraded sanitary connections</b>	680,000	<b>618,853</b>	<b>392,203</b>	<b>290,767</b>	<b>324,226</b>	<b>1,626,049</b>	3,600,000	<div><div></div></div>	✗
indigenous		17,269	2,290	5,446	17,124	42,129			
Afro-descendants		n/a	n/a	11,999	3,900	n/a			
<i>FSO Countries</i>		24,185	7,259	28,984	28,717				
<b>3.2.3 Km of inter-urban roads built or maintained/ upgraded</b>	22,000	<b>9,560</b>	<b>8,102</b>	<b>7,144</b>	<b>3,063</b>	<b>27,869</b>	53,000	<div><div></div></div>	✗
<i>FSO Countries</i>		674	644	895	120				
<b>3.2.4 Km of electricity transmission and distribution lines installed or upgraded</b>	2,000	<b>2,138</b>	<b>6,472</b>	<b>2,522</b>	<b>2,343</b>	<b>13,475</b>	1,000	<div><div></div></div>	✓
<i>FSO Countries</i>		631	894	1,536	1,815				
<b>3.2.5 Households with new or upgraded dwellings</b>	n/a	<b>27,005</b>	<b>303,225</b>	<b>474,229</b>	<b>61,639</b>	<b>866,098</b>	25,000	<div><div></div></div>	✓
indigenous		n/a	n/a	17	n/a	n/a			
Afro-descendants		n/a	76	n/a	n/a	n/a			
<i>FSO Countries</i>		2,090	8,038	7,006	17,757				

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n/a No data available

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- Gap to target
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- ⚠ Indicator value is greater than or equal to 85% and less than 100% of target
- ✗ Indicator value is less than 85% of target

Table B Contribution of Outputs  
to Regional Goals



### 3 Institutions for Growth and Social Welfare

Indicator	Baseline 2005–2008	2012	2013	2014	2015	Cumulative Progress 2012–2015	Target 2012–2010*	Progress against Target	Status
<b>3.3.1 Micro / Small / Medium productive enterprises financed</b>	220,000	<b>584,064</b>	<b>1,505,430</b>	<b>267,605</b>	<b>267,655</b>	<b>2,624,754</b>	120,000	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>2,521</i>	<i>8,680</i>	<i>9,333</i>	<i>2,511</i>				
<b>3.3.2 Public Financial systems implemented or upgraded (budget, treasury, accounting, debt, and revenues)</b>	24	<b>21</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>47</b>	28	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>				
<b>3.3.3 Persons incorporated into a civil or identification registry</b>	n/a	<b>5,003,047</b>	<b>3,303,819</b>	<b>3,050,412</b>	<b>2,736,892</b>	<b>14,094,170</b>	3,000,000	<div><div></div></div>	✓
women		2,501,524	1,593,615	1,458,402	1,313,860	<b>6,867,401</b>			
men		2,501,523	1,710,204	1,592,010	1,423,032	<b>7,226,769</b>			
indigenous		250,152	504,036	146,102	128,290	<b>1,028,580</b>			
Afro-descendants		350,213	145,142	22,876	23,747	<b>541,978</b>			
<i>FSO Countries</i>		<i>3,047</i>	<i>3,228</i>	<i>270</i>	<i>100</i>				
<b>3.3.4 Municipal and other sub-national governments supported</b>	n/a	<b>146</b>	<b>264</b>	<b>270</b>	<b>343</b>	<b>1,023</b>	1,000	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>1</i>	<i>209</i>	<i>133</i>	<i>164</i>				
<b>3.3.5 Cities benefited with citizen security projects</b>	n/a	<b>26</b>	<b>1</b>	<b>2</b>	<b>43</b>	<b>72</b>	32	<div><div></div></div>	✓

\* There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras, and Nicaragua).

n/a No data available

- Progress 2012–2015
- Gap to target
- ✓ Target met or exceeded in 2015
- ⚠ Indicator value is greater than or equal to 85% and less than 100% of target
- ✗ Indicator value is less than 85% of target

Table B Contribution of Outputs  
to Regional Goals

## 4 Competitive Regional and Global International Integration

Indicator	Baseline 2005–2008	2012	2013	2014	2015	Cumulative Progress 2012–2015	Target 2012–2010*	Progress against Target	Status
<i>FSO Countries</i>		1	0	0	15				
<b>3.4.1 Public trade officials and private entrepreneurs trained in trade and investment</b>	n/a	16,829	20,533	18,174	23,997	79,533	65,000	<div><div></div></div>	✓
women		5,049	4,722	4,180	9,343	23,294			
men		11,780	15,811	13,994	14,654	56,239			
<i>FSO Countries</i>		11,111	9,848	2,014	22				
<b>3.4.2 Regional and sub-regional integration agreements and cooperation initiatives supported</b>	n/a	11	4	11	21	47	10	<div><div></div></div>	✓
<i>FSO Countries</i>		0	0	0	0				
<b>3.4.3 Cross-border and transnational projects supported (infrastructure, and customs, etc)</b>	26	18	1	4	4	27	22	<div><div></div></div>	✓
<i>FSO Countries</i>		4	0	1	1				
<b>3.4.4 International trade transactions financed</b>	561	1,127	1,374	553	1,708	4,762	1,000	<div><div></div></div>	✓
<i>FSO Countries</i>		n/a	182	130	94				
<b>3.4.5 Mobilization volume by NSG financed projects/ companies (billion US dollars)</b>	\$25.3	\$9.7	\$3.1	\$11.6	\$2.6	\$26.9	\$31.2	<div><div></div></div>	⬆
<i>FSO Countries</i>		\$0.019	\$0.021	\$0.053	\$0.032				

\* There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras, and Nicaragua).

n/a No data available

- Progress 2012–2015
- Gap to target
- ✓ Target met or exceeded in 2015
- ⬆ Indicator value is greater than or equal to 85% and less than 100% of target
- ✗ Indicator value is less than 85% of target

Table B Contribution of Outputs to Regional Goals

## 5 Protecting the Environment, Responding to Climate Change, Promoting Renewable Energy, and Enhancing Food Security

Indicator	Baseline 2005–2008	2012	2013	2014	2015	Cumulative Progress 2012–2015	Target 2012–2010*	Progress against Target	Status
<b>3.5.1 Power generation capacity from low-carbon sources over total generation capacity funded by IDB</b>	91%	<b>73%</b>	<b>61%</b>	<b>98%</b>	<b>100%</b>	<b>85%</b>	93%	<div><div></div></div>	▲
<i>FSO Countries</i>		<i>n/a</i>	<i>100%</i>	<i>n/a</i>	<i>100%</i>				
<b>3.5.2 People given access to improved public low-carbon transportation systems</b>	n/a	<b>1,599,017</b>	<b>1,039,900</b>	<b>202,110</b>	<b>383,388</b>	<b>3,224,415</b>	8,500,000	<div><div></div></div>	✗
indigenous		n/a	3,250	n/a	n/a	n/a			
Afro-descendants		n/a	7,313	n/a	n/a	n/a			
<i>FSO Countries</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>				
<b>3.5.3 National frameworks for climate change mitigation supported</b>	n/a	<b>2</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>7</b>	5	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>				
<b>3.5.4 Climate change pilot projects in agriculture, energy, health, water and sanitation, transport, and housing</b>	n/a	<b>5</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>12</b>	10	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>				
<b>3.5.5 Projects with components contributing to improved management of terrestrial and marine protected areas</b>	15	<b>5</b>	<b>15</b>	<b>8</b>	<b>7</b>	<b>35</b>	30	<div><div></div></div>	✓
<i>FSO Countries</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>				
<b>3.5.6 Farmers given access to improved agricultural services and investments</b>	n/a	<b>2,381,933</b>	<b>632,944</b>	<b>81,506</b>	<b>70,179</b>	<b>3,166,562</b>	5,000,000	<div><div></div></div>	✗
women		214,374	322,155	38,063	33,086	<b>607,678</b>			
men		2,167,559	310,789	43,443	37,093	<b>2,558,884</b>			
indigenous		690,761	12,743	14,606	2,314	<b>720,424</b>			
Afro-descendants		n/a	3,125	15,593	16,081	n/a			
<i>FSO Countries</i>		<i>5,753</i>	<i>23,198</i>	<i>15,416</i>	<i>4,207</i>				

\* There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras, and Nicaragua).

n/a No data available

- Progress 2012–2015
- Gap to target
- ✓ Target met or exceeded in 2015
- ▲ Indicator value is greater than or equal to 85% and less than 100% of target
- ✗ Indicator value is less than 85% of target

Table B Contribution of Outputs to Regional Goals

## Lending Program Indicators

Indicator	Baseline 2006–2009	2012	2013	2014	2015 <sup>A</sup>	Target 2015 <sup>B</sup>	Status
<b>1.1 Lending to small and vulnerable countries</b>	27%	<b>43%</b>	<b>35%</b>	<b>36%</b>	<b>50%</b>	35%	✓
<i>FSO Countries</i>		100%	100%	100%	100%		
<b>1.2 Lending for poverty reduction and equity enhancement</b>	40%	<b>44%</b>	<b>50%</b>	<b>45%</b>	<b>57%</b>	50%	✓
<i>FSO Countries</i>		58%	47%	59%	47%		
<b>1.3 Lending to support climate change initiatives, sustainable energy (including renewable) and environmental sustainability</b>	5%	<b>33%</b>	<b>20%</b>	<b>33%</b>	<b>35%</b>	25%	✓
<i>FSO Countries</i>		21%	22%	33%	71%		
<b>1.4 Lending to support regional cooperation and integration</b>	10%	<b>16%</b>	<b>33%</b>	<b>30%</b>	<b>26%</b>	15%	✓
<i>FSO Countries</i>		33%	41%	63%	60%		

A Total percentages exceed 100 because loans may qualify for more than one category.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras, and Nicaragua).

✓ Target met or exceeded in 2015

▲ Indicator value is greater than or equal to 85% and less than 100% of target

✗ Indicator value is less than 85% of target

Table C Lending Program Indicators

# 1 Country Strategy Effectiveness

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>4.1.1 Percent of country strategies with satisfactory scores in evaluability dimensions</b>	27%	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	85%	✓
<i>FSO Countries</i>		<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>		
<b>Percent of country strategies that have satisfactory results that can be validated at completion for:</b>							
<b>4.1.2 Sector outcomes</b>	100% <sup>†</sup>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	65%	✓
<i>FSO Countries</i>		<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>		
<b>4.1.3 Financial outcomes</b>	100% <sup>†</sup>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	75%	✓
<i>FSO Countries</i>		<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>		
<b>4.1.4 Progress on building and using country systems</b>	65%	<b>65%</b>	<b>68%</b>	<b>70%</b>	<b>78%</b>	55%	✓
<i>FSO Countries</i>		<i>57%</i>	<i>68%</i>	<i>69%</i>	<i>77%</i>		

A Baselines marked † were established in 2012 and were not available at the time targets were set.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras and Nicaragua).

✓ Target met or exceeded in 2015

▲ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Table D Operational Effectiveness and Efficiency



## 2 Loans Effectiveness

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>SG Operations: Approvals</b>							
<b>4.2.1 Percent of new operations with satisfactory scores on evaluability dimensions</b>	26%	100%	100%	100%	100%	85%	✓
<i>FSO Countries</i>		100%	100%	100%	100%		
<b>4.2.2 Percent of projects with high environmental and social risks rated satisfactory in implementation of mitigation measures</b>	75% <sup>†</sup>	75%	86%	88%	89%	85%	✓
<i>FSO Countries</i>		76%	84%	89%	90%		
<b>SG Operations: Portfolio Performance (Execution)</b>							
<b>4.2.3 Percent of projects that have satisfactory performance</b>	60% <sup>†</sup>	60%	61%	69%	69%	70%	▲
<i>FSO Countries</i>		75%	67%	78%	83%		
<b>4.2.4 Percent of projects with satisfactory rating on development results at completion</b>	70% <sup>†</sup>	70%	88%	78%	89%	60%	✓
<i>FSO Countries</i>		79%	81%	80%	89%		
<b>NSG Operations: Approvals</b>							
<b>4.2.5 Percent of new operations with satisfactory scores on evaluability dimensions</b>	100% <sup>†</sup>	100%	100%	100%	100%	85%	✓
<i>FSO Countries</i>		100%	100%	100%	100%		
<b>4.2.6 Percent of projects with high environmental and social risks rated satisfactory in implementation of mitigation measures</b>	98% <sup>†</sup>	98%	88%	88%	91%	85%	✓
<i>FSO Countries</i>		100%	100%	100%	100%		
<b>NSG Operations: Portfolio Performance (Execution)</b>							
<b>4.2.7 Percent of projects that have satisfactory performance</b>	91% <sup>†</sup>	91%	92%	93%	90%	70%	✓
<i>FSO Countries</i>		100%	100%	90%	78%		
<b>4.2.8 Percent of projects with satisfactory ratings on development outcomes at completion</b>	60%	53%	33%	86%	n/a <sup>C</sup>	65%	n/a
<i>FSO Countries</i>		100%	0%	n/a	n/a		

n/a No data available/not applicable

A Baselines marked † were established in 2012 and were not available at the time targets were set.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras and Nicaragua).

C The result of the 2012 self-evaluation exercise (the latest exercise which was validated by the Bank's Office of Evaluation and Oversight in 2014) was 86 percent. In 2015, the new evaluation framework was being piloted and as such, data is not available.

✓ Target met or exceeded in 2015

▲ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Table D Operational Effectiveness and Efficiency

### 3 Technical Cooperation Effectiveness

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>4.3.1 Percent of completed TCs with results that can be validated</b>	80% <sup>†</sup>	<b>80%</b>	<b>86%</b>	<b>80%</b>	<b>91%</b>	100%	▲
<i>FSO Countries</i>		<i>n/a</i>	88%	78%	90%		
<b>4.3.2 Percent of completed TCs with satisfactory results</b>	60% <sup>†</sup>	<b>60%</b>	<b>71%</b>	<b>72%</b>	<b>73%</b>	65%	✓
<i>FSO Countries</i>		<i>n/a</i>	88%	70%	81%		

### 4 Partner Satisfaction

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>4.4.1 Percent of external partners satisfied with Bank delivery of services for country strategies<sup>D</sup></b>	74% <sup>†</sup>	<b>74%</b>	<b>75%</b>	<b>85%</b>	<b>65%</b> <sup>E</sup>	70%	▲
<i>FSO Countries</i>		75%	<i>n/a</i>	100%	<i>n/a</i>		
<b>4.4.2 Percent of external partners satisfied with Bank delivery of services for loan operations</b>	87% <sup>†</sup>	<b>87%</b>	<b>89%</b>	<b>91%</b>	<b>91%</b>	70%	✓
<i>FSO Countries</i>		74%	85%	88%	93%		
<b>4.4.3 Percent of external partners satisfied with Bank delivery of services for TCs</b>	80% <sup>†</sup>	<b>80%</b>	<b>87%</b>	<b>89%</b>	<b>90%</b>	70%	✓
<i>FSO Countries</i>		85%	89%	93%	92%		

n/a No data available/not applicable

A Baselines marked <sup>†</sup> were established in 2012 and were not available at the time targets were set.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras and Nicaragua).

D The baseline has been updated for consistency with the methodology used in the IDB External Feedback System 2012–2014 Report.

E The 65 percent covers the three country strategies for which surveys were conducted during 2015 (Barbados, Costa Rica, El Salvador). The average partner satisfaction index for the 2012–2015 period is 73 percent (covering Brazil, Colombia, Ecuador, Guatemala, Guyana, Nicaragua and Peru (2012); Bahamas, Belize, Dominican Republic, Jamaica and Mexico (2013); and Chile, Honduras, and Paraguay (2014).

✓ Target met or exceeded in 2015

▲ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Table D Operational Effectiveness and Efficiency

# 5 Efficiency

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>4.5.1 Co-financing (percent of Regular Lending Program)</b>	29%	<b>26%</b>	<b>20%</b>	<b>22%</b>	<b>32%</b>	30%	✓
<i>FSO Countries</i>		0%	1%	1%	3%		
<b>4.5.2 Trust Funds (percent of Regular Lending Program)</b>	2%	<b>1%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	3%	✗
<i>FSO Countries</i>		1%	4%	11%	7%		
<b>4.5.3 Total administrative expenses per US\$1 million approved<sup>F</sup></b>	\$41,900	<b>\$39,684</b>	<b>\$33,447</b>	<b>\$34,708</b>	<b>\$41,336</b>	\$34,000	✗
<b>4.5.4 Total administrative expenses per US\$1 million disbursed<sup>F</sup></b>	\$50,150	<b>\$61,302</b>	<b>\$41,771</b>	<b>\$47,257</b>	<b>\$44,760</b>	\$45,000	✓
<b>4.5.5 Percent of administrative expenses in operational programs</b>	61%	<b>67%</b>	<b>66%</b>	<b>64%</b>	<b>66%</b>	68%	⚠
<b>4.5.6 Cycle time: country strategy (inauguration to delivery of strategy to government)</b>	20 months	<b>11 months</b>	<b>10.4 months</b>	<b>8.3 months</b>	<b>14.6 months</b>	6 months	✗
<i>FSO Countries</i>		11 months	n/a	9.2 months	n/a		
<b>4.5.7 Cycle time: SG loan preparation time (profile to approval)</b>	9.5 months	<b>7 months</b>	<b>5.8 months</b>	<b>6.0 months</b>	<b>5.8 months</b>	8 months	✓
<i>FSO Countries</i>		7 months	4.7 months	6.0 months	6.3 months		
<b>4.5.8 Cycle time: SG loan disbursement period (eligibility to first disbursement)</b>	19 days	<b>21 days</b>	<b>29 days</b>	<b>44 days</b>	<b>30 days</b>	19 days	✗
<i>FSO Countries</i>		8 days	21 days	28 days	27 days		
<b>4.5.9 Cycle time: NSG loan preparation time (Profile to approval)</b>	12 months	<b>11 months</b>	<b>5.2 months</b>	<b>7.5 months</b>	<b>7.1 months</b>	6 months	✗
<i>FSO Countries</i>		11 months	4.9 months	10 months	5.6 months		
<b>4.5.10 Cycle time: NSG loan disbursement period (eligibility to first disbursement)</b>	8 days <sup>†</sup>	<b>8 days</b>	<b>7 days</b>	<b>5 days</b>	<b>5 days</b>	10 days	✓
<i>FSO Countries</i>		5 days	5 days	5 days	5 days		

A Baselines marked † were established in 2012 and were not available at the time targets were set.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras and Nicaragua).

F Target figures for administrative expenses are set in 2009 dollars.

✓ Target met or exceeded in 2015

⚠ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

✗ Distance between 2015 value and 2015 target is more than 15% of the 2015 target

Table D Operational Effectiveness and Efficiency

## 6 Human Resources

Indicator	Baseline 2006–2009 <sup>A</sup>	2012	2013	2014	2015	Target 2015 <sup>B</sup>	Status
<b>4.5.11</b> Percentage of professional and executive staff who are women, grade 4 or above	28%	<b>35%</b>	<b>36%</b>	<b>37%</b>	<b>37%</b>	40%	▲
<b>4.5.12</b> Percentage of upper management staff who are women (Executive staff and Representatives/ EVP and Vice-Presidents)	18%/0%	<b>31%/20%</b>	<b>32%/25%</b>	<b>33%/25%</b>	<b>31%/25%</b>	38%/40–60%	✗
<b>4.5.13</b> Percentage of professional staff based in COF	26%	<b>32%</b>	<b>32%</b>	<b>31%</b>	<b>32%</b>	40%	✗

A Baselines marked † were established in 2012 and were not available at the time targets were set.

B There are no targets specific to the Fund for Special Operations (FSO) countries (Bolivia, Guyana, Honduras and Nicaragua).

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▲ Distance between 2015 value and 2015 target is less than 15% of the 2015 target

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## Table D Operational Effectiveness and Efficiency

# DEO

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## COORDINATION

Andrés Gómez-Peña, Ana Cuesta, Alejandra López, Andrea Schirokauer, and Michaela Wieser  
— Office of Strategic Planning and Development Effectiveness

## ART DIRECTION

Jeremiah Zabal and Cinthya Cuba de Zabal

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