



Comparative Project Evaluation of IDB Support to Low-income Housing Programs in Four Caribbean Countries

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Office of Evaluation and Oversight (OVE)

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ACRONYMS AND ABBREVIATIONS

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REFERENCES

OTHER SOURCES

[Country Case Study: Barbados](#)

[Country Case Study: Guyana](#)

[Country Case Study: Suriname](#)

[Country Case Study: Trinidad and Tobago](#)

CCB	Country Department Caribbean
CH&PA	Central Planning and Housing Authority (Guyana)
CoC	Certificate of Comfort
HDC	Housing Development Corporation (Trinidad and Tobago)
IDB	Inter-American Development Bank (the Bank)
IMF	International Monetary Fund
LAC	Latin American and the Caribbean
LIS II	Low-Income Settlements Program II (Guyana)
LISP II	Low-Income Shelter Program II (Suriname)
LSA	Land Settlement Agency (Trinidad and Tobago)
MHL	Ministry of Housing and Lands (Barbados)
MHUD	Ministry of Housing and Urban Development (Trinidad and Tobago)
MIS	Management information system
NGO	Nongovernmental organization
NHC	National Housing Corporation (Barbados)
NSP	National Settlements Program (Trinidad and Tobago)
NUP	Neighborhood Upgrading Program (Trinidad and Tobago)
OECD-DAC	Organisation for Economic Co-operation and Development - Development Assistance Committee
OVE	Office of Evaluation and Oversight
PCR	Project Completion Report
PIU	Project implementation unit
PMT	Proxy means test
PROPEF	Project Preparation Facility
TC	Technical cooperation
UN	United Nations

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This evaluation presents a comparative analysis of the support provided by the IDB to housing and neighborhood upgrading programs in four countries: Barbados, Guyana, Suriname, and Trinidad and Tobago.

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Executive Summary

Housing continues to be an important challenge in the Caribbean region, with many low-income households living in poor housing conditions or in communities without basic services. A Bank report from 2012 estimated that close to 32% of households in LAC have either qualitative or quantitative housing deficits, of which the most prevalent were lack of access to at least one basic service (16%), lack of security of tenure (11%), deficient structure or construction materials (7%), overcrowding (4%), and dilapidated houses (6%) that are either unsuitable for living or shared with another household.

Although there is consensus on the need for public intervention in housing markets, the appropriate design and potential success of such intervention depends on each country's context and institutional capacity. Most experts agree on the need for policies and regulations that allow the housing market to function properly, including reforms to facilitate the land development and transfer process, expand private housing finance, and streamline the permitting process. There is less agreement on such policies as (i) subsidies, which without proper targeting benefit non-low-income groups; (ii) supply-side strategies that support construction of new homes, which are usually unaffordable for lower-income families; and (iii) demand-side incentives that struggle to reach the extremely poor because they require income stability, savings, or access to credit.

This evaluation presents a comparative analysis of the support provided by the Inter-American Development Bank to housing and neighborhood upgrading programs in four countries: Barbados, Guyana, Suriname, and Trinidad and Tobago. These projects represent the universe of loans approved in the past decade in the Caribbean region. The evaluation reviews the relevance of the mix of approaches taken and analyzes the extent to which they increased access to

improved housing conditions and quality of life for low- and lower-middle-income households. The evaluation uses case studies to identify key challenges to effective implementation, gather lessons, and provide insights for the design of future operations in the region.

The array of Bank-supported activities fell mostly in the middle of the spectrum of government housing policies, which range from direct public intervention to pro-market intervention. All four operations focused more on providing infrastructure and subsidies than on tackling the regulatory and policy frameworks that affect the overall housing market. There was little private-sector appetite for developing low-income housing. The few private developers resident in each country were generally not interested, and even with project subsidies, the private sector's lower-end products—both financing and infrastructure—did not reach a large portion of the intended beneficiary group.

The relevance of the design of all programs was limited by the scarcity and quality of data, which prevented a comprehensive diagnostic analysis of the sector and of actual housing demand. Though accurate data on the extent and characteristics of the housing deficit are critical in designing appropriate policy responses, such data are generally not readily available or updated in the Caribbean. Access to data on household characteristics, including income, is equally important for targeting low-income households.

The achievements of the four housing and neighborhood upgrading programs were mixed. Results were assessed in five broad areas: neighborhood upgrading/settlement regularization (including water, drainage, sanitation/septic, street lighting, electricity, roads, green space); land tenure/legal titling; the development of services; affordable housing and/or home improvement solutions (structure, living space, basic services, developed land); and strengthened institutional arrangements and government systems for social housing. All four programs generally favored improving the quality of the existing housing stock or providing incremental housing construction. Where new home construction was attempted, results fell considerably short of targets because most program beneficiaries were too poor to pay for land and simultaneously take on a mortgage for the house itself. Even when subsidies increased the ability of low-income households to buy a new home, the lack of affordable urban land remained a binding constraint. Given the high cost and low availability of urbanized lots, most beneficiaries opted to improve existing homes, spending the up-front subsidy to purchase materials or hire contractors to fix roofs, install flooring, improve water and sewer connections, or add rooms.

Direct subsidies for self-construction, including home improvement and incremental expansion, were successful in addressing the substantial housing deficit in all four countries, and in enabling limited state funds to reach a relatively large number of

beneficiaries. They were also good at targeting low-income households, especially when a proxy means test was used; were relatively efficient to administer; disbursed quickly; and did not require the procurement of land, which is a cumbersome and lengthy process given the unique complexities of titling state-owned land in the Caribbean.

Neighborhood upgrading and squatter regularization were effective in reaching vulnerable populations and improving well-being, but at significant cost and with limited results with respect to their targets. These operations increased access to basic services but were less successful in delivering titles. Upgrading existing settlements generally cost more than developing new sites with services, in part because of the need to retrofit existing living conditions to current regulatory standards. The installation of basic services to regularize squatter settlements frequently required extensive planning and civil works, sometimes in isolated and hard-to-reach areas, to (i) subdivide and grade existing lots; (ii) provide land access to transport; and (iii) install basic infrastructure and effective drainage. Strong community outreach and participation were required for these investments to be effective and sustainable. The decision to pursue full infrastructure development standards (as required for a marketable title) resulted in significantly higher costs with a corresponding reduction in coverage. This illustrates the tradeoffs that planners face between upgrading a smaller number of communities to full development standards vs. reaching more communities with more limited, albeit critical, upgrades.

Hinterland pilots in both Guyana and Suriname were effective in providing access to improved housing, bringing public health and well-being effects, including important benefits for women and employment generation in the community. These projects employed a participatory planning process to engage the community in designing the units and selecting the beneficiaries. They also stimulated the local economy by requiring that locally available materials and labor be used, to the extent possible, in all housing construction.

While all four programs improved living conditions for beneficiaries, several constraints require further attention. The shortage of well-located and serviced land that can be developed is perhaps the most important obstacle to increasing the supply of affordable housing in the Caribbean. The complexities of divesting state-owned land and the high costs associated with regularizing new sites for occupancy have contributed to the spread of unplanned settlements and sprawl that exacerbates environmental, security, and transport concerns. Developing new urban centers will require the establishment of new economic development hubs and the provision of basic services beyond housing. This points to the need for a revised land policy and for better integration of housing policies with urban development.

Ambiguities over property rights have led to various degrees of tenure insecurity and reflect the inefficiencies in the system for enforcing and adjudicating existing rights or for establishing clear rights in the first place. Registries tend to be incomplete, fragmented, and/or poorly maintained; property disputes account for large caseloads in the courts; and registration processes often involve multiple agencies that take time and are costly. These shortcomings frequently cause delays in land acquisition and infrastructure provision, and failures in land and housing markets.

Low institutional capacity and changes in government priorities were recurring themes in all countries, limiting not only project implementation but also a more strategic dialogue on the regulation and policy reforms needed for better-functioning markets. Executing ministries often lacked adequate implementation capacity, and unclear lines of authority exacerbated inter-agency coordination problems. Many delays might have been avoided had there been a properly staffed project management units, clear operational guidelines, and fully operational MIS and evaluation tools to monitor implementation progress and effectively target and track beneficiaries.

In conclusion, the findings of the evaluation lead to the following suggestions for the Bank in its future support for housing programs in the Caribbean:

- Ground project design in a clear understanding of country conditions and tradeoffs among options for expanding social housing. Options for public provision of housing services should be weighed against the possibility of private provision, whether with or without some public financing (e.g. through subsidies for home improvement and incremental expansion). Any public provision or subsidization should be based on an analysis of housing supply, affordability, and land conditions and should include transparent targeting and beneficiary selection. Improving housing-sector data will be critical to this end.
- Accompany short-term publicly-financed housing interventions with medium-term strategies to strengthen housing markets. The latter may include developing policies for land tenure and titling, modernizing development standards, strengthening planning, improving coordination across government agencies, and reforming financial markets to increase mortgage financing. Where possible, collaborate with IIC to promote private-sector participation in infrastructure development and encourage producers of middle-income housing to enter this market.
- Address institutional constraints to project implementation. Consistent and well-focused technical support for project design, pre-construction planning, ongoing implementation and monitoring (including management information systems), and community participation will be important in this regard.

- Strengthen the long-term sustainability of housing benefits by integrating housing and neighborhood upgrading projects within larger urban and economic development programs. Policy dialogue and program designs should incorporate considerations of public transport, city revitalization, accessibility, carbon footprint, and quality of life.



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The evaluation reviews the relevance of the mix of approaches taken and analyzes the extent to which they increased access to improved housing conditions and quality of life for low- and lowermiddle- income households.

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1 Overview

This evaluation report presents a comparative analysis of the support provided by the Inter-American Development Bank (IDB, or the Bank) to housing and neighborhood upgrading programs in four Caribbean countries: Barbados, Guyana, Suriname, and Trinidad and Tobago. These projects represent the universe of loans approved in the past decade in the region. The evaluation reviews the relevance of the mix of approaches taken and analyzes the extent to which they increased access to improved housing conditions and quality of life for low- and lower-middle-income households. The evaluation uses the case study method to identify key challenges to effective implementation, gather lessons learned, and provide operational insights for the design of future operations in the region. Finally, it builds on earlier research conducted by the Bank, and it will inform a broader evaluation agenda on housing and urban development in Latin America and the Caribbean to be delivered by the Office of Evaluation and Oversight (OVE) in 2018.¹ Box 1.1 presents the key evaluation questions.



The evaluation uses the case study method to identify key challenges to effective implementation, gather lessons learned, and provide operational insights for the design of future operations in the region.
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Box 1.1. KEY EVALUATION QUESTIONS

Relevance of program diagnosis and design


Did the diagnostic work properly identify the challenges to low-income housing in each country? To what degree did the Bank address these challenges in the design of its programs?

To what extent were the Bank's social housing operations effectively targeted? Were the programs' designs and proposed interventions informed by data?

What kind of institutional and risk analysis was done? Was it adequate?

To what extent did the programs incorporate lessons learned from the first generation of housing loans?

Implementation efficiency	What were the main challenges to and opportunities in implementation?
	Were there delays? What were the main sources of the delays? To what extent did the delays affect the execution and sustainability of the programs?
	Were the dwelling units financed by the programs efficient in terms of cost?
Results and sustainability	What were the main results achieved? Did the projects produce any unexpected outcomes (externalities)?
	To what degree did the programs benefit low-income households? Was there leakage to non-poor households?
	Were plans and resources put in place to maintain works?
Lessons learned	What are the main lessons that can be learned from the programs? What works, what doesn't?
	What are the implications for future policy and program design?



Numerous authors have highlighted the lack of focus on Caribbean housing issues, and a recent IDB study found it challenging to determine the qualitative or quantitative housing deficits. In Barbados, for example, there is no official estimate of the housing deficit.

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Context

A. INTRODUCTION

The housing sector, and urban development more broadly, have been central to the Bank’s mission of reducing poverty and improving lives in Latin America and the Caribbean (LAC). The Bank has supported governments by (i) expanding access to low-income housing solutions and financing; (ii) investing in neighborhood upgrading and squatter regularization programs; and (iii) supporting important changes in policy and institutional norms. Per the 2013 Urban Development and Housing Sector Framework,² the Bank has invested more than US\$10.5 billion in the sector, benefiting more than 1.5 million households across LAC and upgrading neighborhoods in over 30 cities.

Housing continues to be an important challenge in the region: many low-income households live in poor housing conditions or in communities without basic services.³ A Bank report from 2012⁴ estimated that close to 32% of households in LAC have either qualitative or quantitative housing deficits,⁵ of which the most prevalent were lack of access to at least one basic service (16%), lack of security of tenure (11%), deficient structure or construction materials (7%), overcrowding (4%), and dilapidated houses (6%) that are either unsuitable for living or shared with another household.

Empirical evidence suggests that housing plays an important role in determining quality of life, including its role as a vehicle for saving and building wealth. On one hand, numerous authors have recognized that a house is more than four walls and a roof, influencing many dimensions of personal well-being—health, education, social relationships, access to basic services, and economic opportunities. Likewise, home

ownership is an asset that safeguards households against short-term financial setbacks and builds wealth through equity. On the other hand, many studies have documented the negative effects of poor housing, overcrowding, and poor neighborhood conditions on human development, environmental degradation, domestic violence, vulnerability to crime and natural disasters, and the transmission of poverty. Since poor families are more likely to live in overcrowded or poor-quality housing, the design of programs and policies that promote access to affordable housing and healthier neighborhoods is of utmost importance.

The housing sector is heavily regulated in most, if not all countries. Governments determine the location, characteristics, and quality of housing produced by the formal sector, and a number of households benefit from government subsidies to rent, build, purchase, and improve a home. Justifications for government intervention in the sector include (i) the existence of market failures (imperfect information, missing or poorly functioning land markets, limited access to credit, location and land-use externalities); (ii) ethical and human development arguments (housing as a basic right; adequate housing as a key input to guarantee good nutritional, health, and education outcomes; redistribution policies to address the intergenerational disadvantage of not owning land); and (iii) housing links to economic activity (housing construction as an important driver of economic growth and employment or its links to financial markets through mortgage credit).

B. CHALLENGES TO SOCIAL HOUSING⁶ IN THE CARIBBEAN: A REGIONAL PERSPECTIVE

Recent Caribbean-specific data on the housing sector are not readily available, and studies of the urbanization process in LAC, and in the housing sector in particular, have mostly neglected the smaller Caribbean countries. Numerous authors have highlighted the lack of focus on Caribbean housing issues,⁷ and a recent IDB study found it challenging to determine the qualitative or quantitative housing deficits.⁸ In Barbados, for example, there is no official estimate of the housing deficit. A 1998 study projected that 900 new housing units would need to be built each year to address the demand for low-income housing; but between 2000 and 2010 only 277 were built on average each year.⁹ In 2008, the Government of Guyana estimated that the quantitative deficit for low-income families¹⁰ was around 20,000 units, with an additional 52,000 houses over 30 years old needing improvement. Although a census was carried out in 2012, no updated figures have been released. The 2012 National Housing Plan of Suriname, using data from the 2004 census, estimated the housing deficit at 31,100 units.¹¹ In Trinidad and Tobago, estimates of the quantitative housing deficit vary from 40,000 to 200,000 units,¹² without an updated estimate for the qualitative deficit. All this uncertainty represents a challenge for developing housing policies, and for the design, targeting, and evaluation of housing programs in the region, including those supported by the IDB.

Because the housing market in the Caribbean is so small, it has little opportunity to create economies of scale. Despite important differences in GDP per capita and levels of poverty, most Caribbean countries are dominated by a primary city with a population of under 500,000 inhabitants.¹³ These cities have not benefitted from the “economies of agglomeration” that lower the cost of providing basic services to large concentrations of residents. On the contrary, they face infrastructure and connectivity challenges that make it difficult to support sustainable and inclusive growth. Many construction materials need to be imported, the pool of developers is limited, and energy costs are among the highest in the world and are vulnerable to oil price shocks.¹⁴

Although population growth has been relatively low in the four countries analyzed, all are experiencing rapid urbanization, sprawl, and increases in the number of households. Between the 2000 and the 2010 census rounds,¹⁵ the population increased by 10% in Suriname, 5% in Trinidad and Tobago, and 3% in Barbados, and decreased by 0.7% in Guyana. For the most part, growth is occurring outside of the capital cities,¹⁶ intensifying other challenges like traffic congestion, time spent on commuting and associated welfare and productivity costs, and the need to expand basic services and infrastructure away from the urban core. Despite slow growth, new household formation is maintaining housing demand. In Trinidad and Tobago and Guyana new households grew by 17% and 15%, respectively, also implying changes in household demographics (e.g. smaller households).¹⁷

Home ownership is unaffordable for many low-income households. A substantial number of families are either priced out of the housing market or are underserved by government programs.¹⁸ Affordability constraints include the low supply of affordable government-subsidized and private-sector housing, insufficient income to qualify for credit, and high house-price-to-wage ratios. For example, in Suriname, a typical 80 m² home on a 300-400 m² lot is beyond the reach of 80% of all households.¹⁹ In Trinidad and Tobago, the gap between housing prices and wages is severe. In 2014, the monthly median household income was about TT\$10,500 (US\$1,600) and the median house price was TT\$1.25 million (US\$192,000);²⁰ however, the Housing Development Corporation (HDC) estimated that more than half of the demand for public housing came from low-income households earning less than TT\$4,000 (US\$615) per month. These households cannot afford a mortgage and must rely on other mechanisms like rent-to-own or squatting.²¹

One of the main challenges to providing housing at affordable prices in the Caribbean is the scarcity of serviced urban land and tight land development regulations. In these countries, the cost of developing land is frequently high enough in itself to price out affordable housing developments. Barbados, the smallest country, has the highest land costs, with serviced lots for low- and middle-income housing costing US\$27-US\$162 per square meter.²² In Suriname, a scarcity of suitable urban land and rigid and outdated land development regulations make land prices vary significantly

across districts, from EUR4 in Commewijne to EUR317 in Paramaribo. While the Government of Guyana owns land, the location of this land outside Georgetown is not ideal given the limited transportation network of the country, and it requires extensive land development work that increases development costs.

The Caribbean has particular systems of governance and land tenure inherited from the colonial era (Crown Land or State land) that keep families from securing land tenure.²³ More than 50% of Trinidad and Tobago, and more than 90% of Suriname, is comprised of state-owned land.²⁴ Because the share of serviced land available for private purposes remains scarce, there are many informal settlements where poor households squat in unplanned, unserviced, and unsafe neighborhoods; access to roads and public transportation is typically irregular; and access to basic services, especially piped water and toilets (linked to sewer or septic tanks) is much lower than in the general population.²⁵ Guyana's Central Housing and Planning Authority (CH&PA) estimates that approximately 40% of the population in the capital are squatters and that there are more than 216 squatter settlements countrywide.²⁶ Available data suggest that about one in every five households in Trinidad and Tobago is squatting; roughly 400 squatter settlements have taken root on state land, and 30,000 additional households are squatting on private land.²⁷

The land development and transfer process is complex and is hindered by inefficient land information management systems, legal complexities over some occupied sites, outdated regulatory frameworks that require multiple approvals and inter-agency coordination, lack of transparency in the allocation of state-owned land, and cumbersome procedures for accessing land-tenure certification. In Suriname, a long-term lease of state-owned land is the most common way of holding title. However, this requires the approval of the Ministry of Spatial Planning, Land, and Forest Management, a transaction that is difficult and can take several years to complete. In rural and indigenous regions, outdated information in the public registry and issues related to collective land, national laws, and the territorial rights of indigenous peoples (including Maroon communities) have created situations of insecurity of tenure in land markets.²⁸ In Trinidad and Tobago, fewer than 50% of households hold title to the land they occupy.²⁹ The illegal occupation of State land led to the State Land (Regularization of Tenure) Act no. 25 of 1998, which recognizes three levels of occupancy, though only the last of these is recognized for accessing mortgages.³⁰ In Barbados, land tenure for former plantation workers living in tenancies and land tenure in urban informal settlements remain a challenge, particularly when the lots do not comply with town and country planning regulations, although the Land Tenancies Act was a significant step forward for low-income property access.

Even when land is not an issue, delays associated with construction permits, the high costs of building materials, and the relative scarcity of skilled labor in small Caribbean markets create barriers for home construction. The fact that many construction

materials need to be imported significantly raises the cost of development. Furthermore, the process for obtaining construction permits is cumbersome, with many procedures and long processing times. In Trinidad and Tobago, it takes 16 procedures and 253 days to obtain all the permits needed. In Barbados, it takes on average 270 days to obtain approval from the Chief Town Planner of the Town and Country Development Planning Office. Long procedures are also found in Suriname (223 days) and Guyana (195 days).³¹

Given numerous barriers and few incentives, the private provision of housing in small Caribbean markets has been limited primarily to medium- and high-income households, and is characterized by few private developers and small homebuilders and contractors. Although housing markets are very active, the private sector is reluctant to enter the lower-income segments. The limited profit margin in affordable housing development is not sufficiently attractive for most homebuilders. In Barbados, the National Housing Corporation (NHC) has successfully developed joint ventures with private developers, but only for middle-high-income housing. Attempts to develop similar partnerships for low-income housing were ineffective. In every country, only a handful of private developers is involved in affordable housing, and most housing construction is being done by homebuilders that require future homeowners to secure a serviced lot and financing.

Caribbean housing infrastructure is highly vulnerable to climate change and natural disasters including rising sea levels, hurricanes, floods, and storm surges. This vulnerability is also associated with fragile ecosystems and coastal erosion, low economic resilience, and in the case of Guyana, low elevation. According to the World Bank, the Caribbean's population and assets are among the most exposed to natural disasters in the world, and it estimated that the region lost about US\$9 billion between 2007 and 2011 due to related events. For these reasons, the technical designs of works must consider geographic issues specific to small coastal states.

On the financing side, while mortgage markets have expanded, they remain tiny compared to housing financing needs overall, and especially to the needs of low-income brackets. The mortgage market has significantly expanded (particularly for middle- and high-income groups) but remains underdeveloped. In Trinidad and Tobago, in 2012, while private sector lending grew by 4%, mortgage credit grew by 11.3%.³² However, according to the Central Bank,³³ among the mortgage institutions there has been limited product innovation to expand the range of options available to low-income groups. The main factors preventing the development of these markets are the informal nature of employment in most low-income families, the lack of marketable land tenure, and, in Suriname, data issues in real-estate asset-pricing models, inadequate accounting of underperforming loans, and not having a centralized credit bureau.³⁴



In 2009, the Bank approved US\$15 million to finance the second phase of the Low-Income Shelter Program in Suriname. This operation aimed to improve the living conditions of low-income households by addressing the quantitative and qualitative housing deficit.

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3 Project selection and summaries

A. PROJECT SELECTION

This evaluation reviews the four most recent housing operations in execution in the Caribbean region. In three of the four countries, the evaluated loans represent the second or third generation of an ongoing housing program financed by the Bank (see Figure 3.1). The case study evaluation method was selected because it allows for the in-depth analysis of individual programs and interventions that are similar in scope, comparable in intervention, and coherent in focus. The method also allows a focus on operational challenges by illustrating how features of loan design and context affect project outcomes.

For each country case, OVE conducted a mission to interview a range of stakeholders: local and national authorities, beneficiaries, project execution units, private sector developers, mortgage institutions, nongovernmental organizations (NGOs), community-based organizations, academics, and Bank staff. During each mission, OVE conducted site visits to validate project activities and results, including to hinterland communities in Guyana and the coastal region of Suriname. The team also examined available data and surveys on the housing sector and conducted an extensive review of the literature and project documents. The findings of the evaluation are assessed against the OECD-DAC criteria of relevance, efficiency, effectiveness, and sustainability.

The four housing operations selected by OVE were fairly similar in design and scope, and they shared most objectives and types of interventions. OVE's evaluation covers the housing programs in Barbados, Guyana, Suriname, and Trinidad and Tobago, all approved after 2008. This cohort of loans shared the objectives of increasing (i) settlement regularization, (ii) access to affordable housing and improved housing conditions, and (iii) neighborhood living standards for low-income households. The loans ranged in size from US\$15 million for Suriname to US\$40 million for Trinidad and Tobago. Table 3.1. compares the different components and the approaches taken in all four operations.



The Bank's support to the sector in Guyana started in 1999 with the approval of a US\$27 million loan for the Low-Income Settlements Program.
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FIGURE 3.1
Execution of housing and neighborhood upgrading loans: time elapsed between approval and closing year (Caribbean region, 1998-2016)

Source: OVE/Oveda.

Note: *Approved in 1989.
**Active operation, disbursement expiration year: 2017.

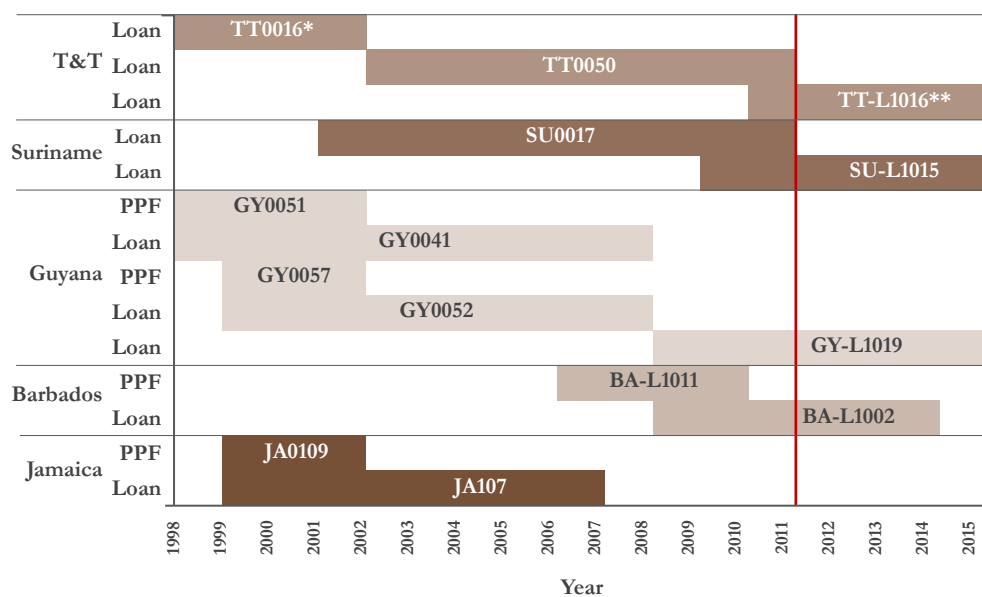


TABLE 3.1. MAIN OBJECTIVES AND INVESTMENT COMPONENTS OF THE SELECTED CASE STUDIES

	Loan number	BA-L1002	GY-L1019	SU-L1015	TT-L1016
	Year approved – closed	2008-2014	2008-2015	2009-2015	2010-2017
	Original amount approved (US\$ million)	30.0	27.9	15.0	40.0
	Current amount approved (US\$ million)	6.6	27.9	15.0	40.0
	Status: % disbursed as share of total approved (as of 10/31/2016)	22% Cancelled	100% Completed	100% Completed	64% Active
Goals	Improved housing/living conditions/quality of life for low- and lower-middle-income families	x	x	x	x
Beneficiaries	• low-income households (deciles 1-2)	x	x	x	x
	• low-middle-income households (deciles 3-4)	x	x	x	x
	• urban/peri-urban	x	x	x	x
	• Hinterland (including rural, indigenous, Maroon communities)		x	x	
Activities	Neighborhood upgrading (water, drainage, sanitation/septic, roads, street lighting, electricity, green space)				
	• improve neighborhood infrastructure	x	x		x
	• upgrade settlements	x	x		x
	• develop new sites with services	x	x		
	• mobilize PPPs for development/construction	x		x	
	Subsidies for affordable housing solutions (structure, living space, basic services)				
	• new core houses		x	x	
	• new fully-built affordable houses	x			x
	Subsidies for home improvement/extension (roof, flooring, latrine, windows, door, security)				
	• government subsidies for incremental home improvements/extensions	x	x	x	x
	Land tenure/legal titling				
	• registered titles/statutory leases	x	x	x	x
	• squatter regularization	x	x		x
	Strengthen institutional arrangements and government system/s for social housing				
	• update housing policy framework		x		x
	• generate/update MIS	x	x	x	x
	• strengthen sector management, monitoring, and evaluation capacity	x	x	x	x
	• improve pro-poor targeting (proxy means test and beneficiary selection)	x	x	x	

B. LOAN SUMMARIES

1. Barbados

In 2008, the Bank approved the first phase of the *Housing and Neighborhood Upgrading Program* for US\$30 million (BA-L1002) after having supported Barbados' efforts to expand social housing through technical cooperation (TC) and technical assistance for 10 years

prior.³⁵ The multi-phase program had the overall goal of “improving the housing and neighborhood conditions of low and lower-middle-income families in Barbados, and to improve and expand government housing systems for households in the first four deciles of income distribution.” The program included a US\$10 million counterpart contribution from the Government of Barbados, and had the following components:³⁶

- (i) *Neighborhood upgrading (US\$23.2 million)*. This component included the start of a national neighborhood upgrading program focusing on improving neighborhood infrastructure and providing basic services to 2,000 families in 30 suburban and rural sites, and rehabilitation and regularization of two inner-city squatter settlements (100 families each) in Bridgetown’s downtown revitalization area.
- (ii) *Support for the production of affordable housing (US\$12 million)*. The component consisted of three subprograms: (a) land acquisition and development to support the Primary Home Program, joint ventures with private sector developers, with a goal of 400 lots and cost recovery to allow an additional 200 lots; (b) US\$5,000 subsidies applied toward the purchase of a new home through the Primary Home Program, with a target of 400 families in the second to fourth deciles; and (c) subsidies of up to US\$5,000 for incremental home construction, with a goal of reaching 600 households. This grant covered both technical assistance and construction materials to help families have a complete house.
- (iii) *Institutional strengthening (US\$1.5 million)*. The component consisted of: (a) the modernization of NHC’s financial administration systems; (b) strengthening of the Ministry of Housing and Lands (MHL) land planning and asset management process; (c) improvement of government’s procedures for beneficiary selection and targeting; (d) the consolidation of two units, to become permanent within the MHL structure, for neighborhood upgrading and for affordable housing; and (e) funds for the preparation of projects for both phases of the program.”

2. Guyana

The Bank’s support to the sector started in 1999 with the approval of a US\$27 million loan for the Low-Income Settlements Program (LIS) (GY0052) and the subsequent approval of a second phase in 2008 for the *Low-Income Settlements Program* (LIS II) (GY-L1019) for US\$ 27.9 million. While LIS I focused on increasing the ownership of land and access to basic services³⁷ in Guyana, LIS II maintained this focus but also added components on core house construction, home improvement subsidies, and a pilot to improve Hinterland housing. LIS II included the following components:

- (i) *Develop new sites with services, consolidate existing housing schemes, and upgrade squatter areas (US\$24.8 million)*. Continue land divestiture efforts by producing 3,766 new land subdivisions with basic infrastructure on 11 sites. Infrastructure

investments included the completion of 4,900 previously subdivided lots. Improve the physical conditions and support for the land titling process of squatter settlements (1,350 lots), and the construction of 400 core houses (312 square feet).

- (ii) *Pilots to address affordability and sustainability issues (US\$1.8 million)*, including: (a) US\$1,000 home improvement subsidies for 400 families, (b) partnerships with professional groups such as teachers and nurses to facilitate home financing, and (c) grants and technical assistance to address housing needs in 8 Hinterland communities.
- (iii) *Strengthening of the Central Housing and Planning Authority (US\$0.7 million)*. This component provided resources to finalize a national housing policy draft and strategic plan, support training and professional development of CH&PA staff, upgrade the management information system (MIS), and create a monitoring and evaluation system within CH&PA.

3. Suriname

In 2009, the Bank approved US\$15 million to finance the second phase of the *Low-Income Shelter Program (LISP II)* (SU-L1015). This operation aimed to improve the living conditions of low-income households by addressing the quantitative and qualitative housing deficit, and it built on the lessons learned from the first operation (SU0017), which was approved in 2001.³⁸ LISP II included the following components and activities:

- (i) *Consolidation of the subsidy model (US\$9.4 million)*. Support 3,000 low-income households with a single up-front subsidy of US\$3,000 to finance either part of a new core house³⁹ (complemented by savings and/or a low-income mortgage) or necessary home improvements/expansion. The component also aimed to improve the targeting strategy and consolidate the subsidy model in coastal and urban areas; expand the subsidy to the interior, reflecting the cultural characteristics of beneficiary communities; and engage NGOs in the program.
- (ii) *Pilots to promote housing supply for low-income households (US\$3.8 million)*. The pilots aimed to explore targeted interventions for improving affordability, but actual details were not clearly defined.⁴⁰ Instead, the program included a menu of options for new serviced lots, densification, financing incremental housing construction, promoting new affordable housing design, and technical assistance programs.
- (iii) *Institutional strengthening of the project implementation unit (US\$1.9 million)*. This component included activities to support project operation, training, and equipment needed by the project implementation unit (PIU). Training for the

PIU covered such areas as use of the MIS that was designed and implemented with TC support, application of social and environmental standards, and planning and management tools related to loan implementation.

Box 3.1. The core house approach

For beneficiaries applying for a new housing solution, the core house approach offers households an affordable basic dwelling at the time of purchase, with the opportunity to expand incrementally as the income of the household permits. In Suriname, for example, the core house was defined as a 40 m² unit built on land with road access and including a sanitary block (septic tank, toilet, shower, and multi-purpose sink), concrete or wood for the outer walls, floor on concrete slab, basic doors, windows, electrical wiring, and water connections. This was an appropriate approach to reach lower income beneficiaries with a maximum cost for eligible dwellings of US\$10,000 originally, later raised to US\$15,000. The program also ensured accurate targeting, since it established a maximum net-income threshold (US\$335 per month), which discouraged higher income households from applying. The total subsidy was US\$3,000 per household, with the balance to be paid by a combination of savings and credit.

The footprint of Guyana's core house was 312 sq. feet, with an average cost of US\$5,500, later raised to US\$11,000. The subsidy financed by the IDB loan was equivalent to 90% of the total cost, with 10% to be provided by the beneficiary. The monthly income threshold was US\$300.

4. Trinidad and Tobago

The Bank has maintained a continued presence in the housing sector since 1989 with the approval of the multiphase *National Settlements Program* (NSP I and II), and most recently with the approval of the *Neighborhood Upgrading Program* (NUP) (TT-L1016) in 2010 for US\$40 million. A strategic partner in the sector, IDB's program of technical and financial support has helped to position squatter regularization and neighborhood upgrading as government priorities. The overall objective of the NUP is to improve the living and housing conditions for low-income groups, particularly those living in squatter settlements. The operation included the following components and activities:

- (i) *Squatter regularization (US\$20 million)*. Improve living conditions and regularize land tenure for families living in squatter settlements. The component was designed to finance basic infrastructure in 25 squatter settlements (5,360 families), implement a community participation strategy, complete land tenure regularization for at least 8,477 tenants (5,360 families benefited from basic infrastructure, and an additional 3,117 from lots upgraded in previous IDB operations), and support the relocation of households when regularization is not feasible.

- (ii) Home improvements and new housing (US\$15.2 million). Provide matching subsidies for eligible families to finance home improvements or build new incremental housing. The component included US\$3,165 in matching subsidies for an estimated 2,000 families undertaking home repairs, expansion, and renovations. The component also included matching subsidies of up to US\$7,911 for 1,530 families seeking to build new incremental housing on their own lots or purchase new public or private housing.
- (iii) Sector and institutional strengthening (US\$2 million). Strengthen the institutional capacity of the Ministry of Housing and Environment and related agencies with the development of a containment strategy to prevent new land occupations and control the expansion of existing squatter settlements. The component also financed a system to monitor squatting activities and the customization of the project MIS.



The programs were affected by increases in construction costs that required reducing project goals, raising subsidy limits, and in some cases changing the beneficiary selection criteria.

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4 Findings

Learning from Bank-supported programs can provide valuable lessons for the design of future operations in the region. Why do countries implement a mix of direct intervention and pro-market programs? How do they choose which mix to apply? Are these approaches mutually exclusive? Where does the Bank fit into the mix? Importantly, how do countries better target the poor? Each housing intervention has trade-offs and cost implications, and its effectiveness depends heavily on good design and implementation.

A. RELEVANCE OF PROJECT DESIGN

Although there is consensus on the need for public intervention in housing markets, the appropriate design and potential success of that intervention depends on each country's context and institutional capacity. Most experts agree on the need for policies and regulations that allow the housing market to function properly, including reforms to facilitate the land development and transfer process, ensure proper titling, expand private housing finance, and streamline the permitting process. There is less agreement on such policies as (i) subsidies, which without proper targeting benefit non-low-income groups; (ii) supply-side strategies that support construction of new homes, which are usually unaffordable for lower-income families; and (iii) demand-side incentives that struggle to reach the extremely poor because they require income stability, savings, or access to credit. Box 4.1 illustrates the spectrum of housing policies in the four countries reviewed, which range from direct government intervention on one end to pro-market programs on the other. It also shows the alignment of the Bank's operations with each country's approaches.

Box 4.1. Alignment of IDB projects with the spectrum of government housing policies in the Caribbean

Program type	State guarantees access to good housing						State facilitates operation of housing markets				
	Direct public intervention						Pro-market interventions				
	Government direct provision of finished houses	Government direct provision of incremental houses (core house)	Government provision of serviced land for residential use	Neighborhood / settlement upgrading and tenure regularization	Subsidies for new home purchase (buyer)	Subsidies for home improvement and incremental expansion	Housing vouchers – rent subsidies	Regulations to facilitate the subdivision of land for residential use	Government incentives to expand the low-income mortgage market	Government incentives to develop affordable housing via PPPs	Inclusionary policies
Barbados			O	X	O	X			O	O	
Guyana		X	X	X		X			X		
Suriname		O	X			X			X	O	
Trinidad & Tobago				X	O	X			X		

X = planned and fully or substantially implemented in loan O = planned in loan but not implemented (fully or substantially)

Definitions:

Government direct provision of finished houses. Government-financed construction of fully serviced, finished homes (generally 3 or 4 rooms) for tenure by private individuals. “Rent-to-own” options may be available.

Government direct provision of incremental houses (core house). Government-financed construction of an affordable housing solution with a minimum living space (generally 2 rooms) that can be expanded incrementally by its occupants. Design criteria are based partly on proof of land tenure, household ability to pay minimal in-kind, cost recovery, and subsidy levels. Core houses are considered a starting point to help jump-start and make the incremental process more efficient.

Government provision of serviced land for residential use (sites and services). Government provision of plots of land, either on ownership or land-lease tenure, along with a bare minimum of essential infrastructure and basic services needed for habitation (water, drainage, sanitation/septic, roads, street lighting, green space).

Neighborhood/settlement upgrading and tenure regularization. Upgrading: Government-financed provision of new or rehabilitated infrastructure and basic services for people living in unplanned or declining settlements. Tenure regularization: increasing the formality of property rights through registration, with the goal of full ownership/ tenure security.

Subsidies for new home purchase (buyer). Direct subsidy from the government to the home buyer in the form of cash or a tax credit.

Housing vouchers - rent subsidies. Program for assisting low-income families with rental payments: participant is free to choose any housing that meets program requirements. Subsidy is paid directly to landlord by program.

Subsidies for home improvement/ incremental expansion. Direct subsidy from the government to the homeowner for owner-managed physical improvements. Often the beneficiary must select from a list of works that are considered key for basic health and well-being (e.g., flooring, roofing, security, sanitary).

Regulations to facilitate the subdivision of land for residential use. Zoning.

Government incentives to expand the low-income mortgage market. Includes subsidized interest rates, tax credits, flexible reserves.

Government incentives to develop affordable housing via PPPs. For example, the allocation of public land to developers to service and construct affordable housing, or subsidized loans to developers who agree to make units affordable.

Inclusionary policies. Municipal and county planning ordinances that require a given share of new construction to be affordable by people with lower incomes.

All four loans focused more on providing infrastructure and subsidies rather than tackling the regulatory and policy frameworks that affect the overall housing market. Although under all four loans a cost-benefit analysis was conducted for each intervention and criteria were identified to match the array of housing solutions with potential beneficiaries, project documents did not justify the selection of the mix of interventions to be financed, nor did they analyze the tradeoffs in term of scope, scale, implementation constraints, or potential impact.

The relevance of the design of all programs was limited by the scarcity and quality of data, which prevented a comprehensive diagnostic analysis of the sector and of actual housing demand. Access to high-quality and current data is needed to estimate housing deficits and characteristics and design realistic and targeted housing strategies. Even countries that have collected some housing data on low-income populations (Guyana and Suriname, through proxy means tests) continue to base estimates of the housing deficit on administrative data and subsidy applications, resulting in less relevant program designs. For example, Suriname prepared a Housing Market Study that identified the main barriers to low-income housing as the availability of land, access to finance, and inadequate credit information. The study was based on data from the 2004 Census, which was relatively incomplete with respect to the sector. The study did not include information on the characteristics of low-income housing or the socioeconomic profile

of low-income households. In Guyana, the design of pilots to address affordability was accompanied by specific studies that identified as barriers access to land and credit, and households' ability to pay. The latest available information was from the 2002 Census, which did not assess the demand for affordable housing. The report relied on assumptions of minimum standards and administrative data from housing applications and lot allocation. In Trinidad and Tobago, the design of the program was supported by consultant reports that suggested focusing the housing subsidies on specific geographic areas and income groups to maximize program results, but that lacked a broader and deeper diagnostic. Barbados lacked an analysis of the characteristics of the housing deficit and relied mostly on administrative data for program design. That said, the loan proposal attempted to include an estimate of the affordability gap.

All second- and third-generation loans benefitted from a prior phase and thus built on tested approaches, with some institutional capacity in place. For example, all three programs identified the need to improve their pro-poor reach and beneficiary selection criteria to improve relevance and targeting efficiency. Nonetheless, only Guyana and Suriname effectively adjusted their targeting systems to use proxy means tests (PMTs); they also modified their housing solution to that of a basic core house, whose lower price enabled reaching a larger number of low-income beneficiaries.⁴¹ Although Trinidad and Tobago did not adopt the proxy means test, which resulted in some discretionary targeting of home improvement subsidies, it adjusted its income threshold to include more poor households. In addition, Trinidad and Tobago reached the largest number of beneficiaries through the neighborhood upgrading component, which by definition was pro poor.

While the Barbados program did not have a previous loan to build on, it did have a project preparation facility to finance the preliminary design of program components and the pre-investment of proposed neighborhood upgrading activities, which should have improved the relevance of program design. Unfortunately, the pre-investment plans developed under the facility were never used because the loan was approved just before government elections. The resulting changes in the Government led to the selection of an entirely new set of communities for intervention, adding two years to the project.

All of the programs identified risks and proposed mitigation measures to improve project relevance and effectiveness; however, some of these issues still caused delays during project implementation. Potential risks included, for example, the continuous increase of squatter settlements in Trinidad and Tobago, or the challenges for upgrading existing settlements in Barbados and Guyana. On the positive side, because of Guyana's solid analysis, the program was able to address some issues remaining after the first loan by incorporating land surveys, satellite imagery, and geographic information tools into project design.

Institutional capacity risks were common to all programs, with the main factors being inter-institutional coordination, political support for housing policy, and the institutional capacity of the implementing agency. The programs also identified fiduciary risks related

to the adequacy of MISs, the need for training in procurement and financial procedures, and weak monitoring and evaluation efforts. Accordingly, each program included institutional strengthening components to update MISs and evaluation systems and to improve targeting, interagency coordination, and community participation. Despite efforts to minimize these risks through appropriate project design, most materialized during implementation and caused significant delays.

B. IMPLEMENTATION

Implementation of housing programs in the Caribbean Country Department (CCB) has historically been slow, with loans requiring an average extension of 23 months. First-phase loans have faced significant implementation challenges, but second-phase operations have tended to perform better (see Figure 4.1). In Suriname and Guyana, although the programs experienced important delays and required extensions,⁴² both loans were completed within 6 years of their approval date, performing relatively well when compared to other IDB housing programs or other investment loans in their respective countries.⁴³ The second- and third-generation loans were more realistic in their scope, benefitted from pre-investment work, and were implemented by executing agencies with experience. In Barbados, after more than US\$1 million had been invested in project preparation and execution, only US\$6.6 million was disbursed.⁴⁴ Project execution was hindered by unrealistic goals and a complex project design that at the time of approval was yet to be fully developed. Ultimately, 78% of the operation was cancelled. In Trinidad and Tobago, the loan had a slow start, with over two years of accumulated delays.

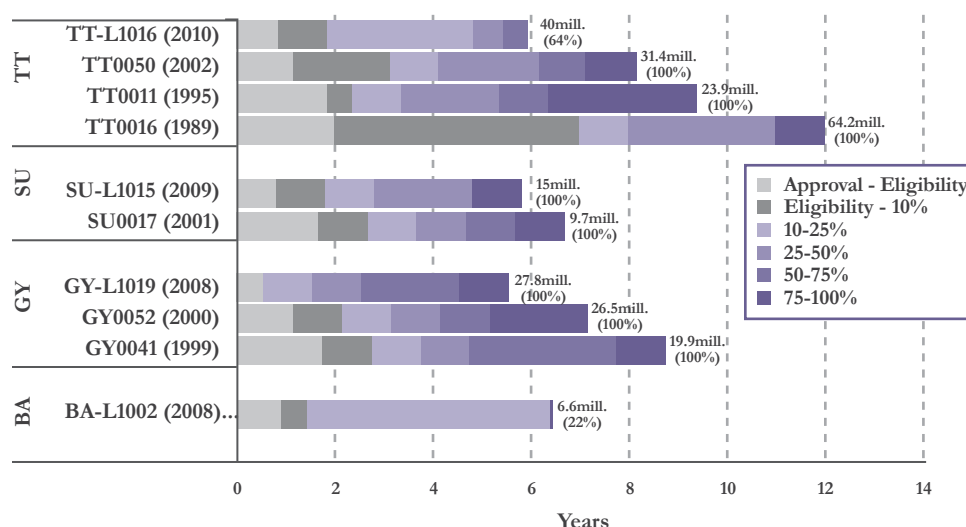


FIGURE 4.1
Time elapsed
between approval
and 100% disbursed
(investment loans-
US\$ million)

All four housing and neighborhood upgrading programs were affected by political changes in government. The timing of program approval had a critical effect on the implementation of the housing program in Barbados. Despite significant

pre-investment work, which was financed by a project preparation facility, prepared and detailed designs were not approved until the fourth year of program execution. This delay resulted from significant changes in the communities selected for upgrading, as requested by the new government,⁴⁵ and ultimately led to the subsequent cancellation of three fourths of total loan amount. In Trinidad and Tobago, the Ministry of Housing was reorganized six times in five years, affecting the decision-making and approvals processes and causing delays and missed deadlines. In Guyana, the draft housing policy has been under review since 2013, a process further delayed by the recent changes in political leadership in the country. In Suriname, electoral cycles and changes at the ministry level also caused staffing and implementation delays.

The mandate and institutional capacity of the project executing agency played a role in the success of project implementation in all countries. In Suriname and Guyana, the program was implemented by statutory agencies with the mandate to increase the supply of affordable housing and sufficient autonomy to make personnel decisions and manage budgetary resources. In Guyana, the CH&PA performed in an organized and diligent manner, and had in-house professional staff to lead all components of the program. This arrangement also facilitated institutional strengthening activities, with all training and systems targeted to building the capacity of the statutory agency. In Barbados and Trinidad and Tobago, the project was implemented by units within the Ministries of Housing. Having a separate project unit manage the IDB loan proved challenging in Barbados, and three of the 12 positions remained vacant throughout the project. The unit was staffed with employees temporarily reallocated from other ministries, who lacked core competences for implementing complex neighborhood upgrading projects. In Trinidad and Tobago, the Ministry of Housing and Urban Development (MHUD)⁴⁶ has been implementing IDB programs since 2002, but changes in ministry priorities and reorganizations affected the management and strategic planning of the program, while the constant rotation of project personnel hindered capacity-building efforts. The Land Settlements Agency (LSA), however, had installed capacity to manage and sustain civil works for neighborhood upgrading (engineers, surveyors, community development officers, legal staff, etc). In part, the continuity that LSA provides stems from the fact that it services a national program and not just the IDB project.

The complexity of interagency coordination, a key requirement for the implementation of all housing programs, was underestimated in all projects. In Trinidad and Tobago, lack of effective communication between the MHUD and the LSA⁴⁷ early-on led to project delays and affected program results.⁴⁸ In Barbados, a lack of clarity about which agency had the mandate for the provision of affordable housing and neighborhood upgrading created additional institutional coordination challenges. The neighborhood upgrading component was aimed at redeveloping deprived inner-city neighborhoods with decades-long problems; however, insufficient coordination with other key agencies such as Town and Country Planning led to pre-investment designs that the Chief Land Surveyor rejected.⁴⁹ In Guyana, the loan was premised on the assumption that the Ministry of Works would provide the necessary services

for electrification; however, following excessive delays, the CH&PA used its statutory autonomy to bypass the works agencies and contract private service providers to complete the job.

All programs faced issues of land availability, occupancy, and land titling procedures. The availability and cost of land were the main factors considered in deciding where to locate the new housing developments. In Suriname, while the board of the LISP Foundation lobbied the national assembly and Cabinet to secure land for the program, the process for acquiring the land needed to implement the program was not resolved by the close of the loan. In Guyana, the Government made available peri-urban land that required extensive site work to provide services; however, given the country's limited transportation infrastructure, sprawl has generated important externalities that need further consideration. The Guyana program also focused on increasing the occupancy of serviced lots developed in the previous operation; although the titling process still took several years, CH&PA was able to provide certificates that allowed households access to mortgages and other financial services while the land titling process continued. A similar measure was adopted in Trinidad and Tobago, where the long process of land titling was affecting project execution. The provision of Certificates of Comfort (CoC) has allowed the program to move forward while the beneficiaries complete the process to acquire deeds; however, unlike Guyana's certificates, the CoCs protect beneficiaries from eviction but do not give them access to mortgages or other formal financial services.

The programs were affected by increases in construction costs that required reducing project goals, raising subsidy limits, and in some cases changing the beneficiary selection criteria. The volatility of construction prices, particularly when countries need to import many of the construction materials, created risks to project goals and implementation. In general, projects were slow to adjust subsidy limits and beneficiary income thresholds, doing this only after months of delay. In Barbados, long delays affected the cost assumptions established at project design, as the cost of new homes increased by 30%. This led to an upward revision of the household income threshold, which increased by 22% to include families that were able to afford the increased cost of housing. In Guyana, the prices of construction materials increased by 30%, directly affecting the costs of the core houses.⁵⁰ In Trinidad and Tobago, the bids for civil works received at approximately 10 sites revealed a 460% cost escalation to satisfy a decision to provide a more comprehensive package of services but to fewer sites.⁵¹ In all four countries, the increase in the costs of materials and works led to reductions in targets.

Difficulties with procurement processes caused delays, particularly for the neighborhood upgrading components. In Barbados, the lack of a project manager and a procurement specialist created technical challenges for a component that required a well-structured procurement strategy to avoid delays in preliminary designs, detailed technical designs, and construction contracts. Similar challenges arose in Trinidad and Tobago, where it took nearly two years for the first selection process for consulting firms. The executing unit considered the proposed timeline for

construction companies (6-8 months) too short. In Guyana, CH&PA identified delays with tender procedures and construction supervision; with IDB support, it hired a consultant to monitor procurement and perform quality control of the civil engineering works. A procurement specialist was ultimately hired in 2012.

Some programs faced difficulties attracting private sector participation in low-income housing development. Barbados and Suriname attempted a market approach to reducing the housing deficit, providing incentives for private developers to invest capital in developing affordable housing. The strategy, based on governments' having access to land for development, assumed that once that barrier was overcome the price of land would be low enough to make affordable housing development attractive to private investors. In Barbados, the program was expected to result in joint ventures; although the strategy had been successful in developing high-middle-income housing, it did not attract interest in the low-income housing segment because of the slim profit margins. Suriname initially had a more successful experience, engaging three developers in affordable housing schemes. However, increases in construction costs and the limited scale of the projects have since affected interest in low-income housing developments.⁵²

C. EFFECTIVENESS

The achievements of the four housing and neighborhood upgrading programs were mixed. Program outcomes focused on results in five broad areas: neighborhood upgrading/settlement regularization (including water, drainage, sanitation/septic, street lighting, electricity, roads, green space); land tenure/legal titling; the development of services lots; affordable housing and/or home improvement solutions (structure, living space, basic services, developed land); and strengthened institutional arrangements and government systems for social housing. All four programs generally favored improving the quality of the existing housing stock or providing incremental housing construction. Where new home construction was attempted, results fell considerably short of targets because most program beneficiaries were too poor to pay for land and simultaneously take on a mortgage for the house itself. Even when subsidies increased the ability of low-income households to buy a new home, the lack of affordable urban land remained a binding constraint. Given the high cost and low availability of urbanized lots, most beneficiaries opted to improve existing homes, spending the up-front subsidy to purchase materials or hire contractors to fix roofs, install flooring, improve water and sewer connections, or add rooms. The main achievements for each area are presented in Table 4.1.

1. Neighborhood upgrading

The Barbados, Guyana, and Trinidad and Tobago programs all had neighborhood upgrading components, and all fell short of their targets. These components included interventions that provided basic core services of electricity, water, latrines, sanitation and sewerage, street lighting, drainage, roads and road paving, which contributed

to improved living standards in deprived areas and households. For example, in Barbados, only one of eight neighborhoods planned for upgrading was completed. Although the program fell significantly short of its target, the single neighborhood that was upgraded contributed to significant improvements in residents' quality of life. Works with important safety and public health effects included construction of a sewage transfer and elevating station so that the neighborhood could connect to the main sewerage system, conversion of propane cooking tanks to buried gas lines, electrification, elimination of pit latrines, drainage, and roads. The works were complemented with incremental home improvement subsidies.

TABLE 4.1. RESULTS AND BENEFIT LEVELS (SUBSIDY) BY COMPONENT (ACTUAL/PLANNED, US\$)

Components	Barbados	Guyana	Suriname	Trinidad & Tobago
Neighborhood upgrading/settlement regularization Number of sites	1/8 neighborhoods upgraded	4/5 regularized squatter settlements (973/1350 lots)	N.A.	5/25 sites under contract, 2 sites in design (1390/5360 lots)
Titles Conveyed	N.A.	3070/4900	N.A.	8/1154 ⁵³
Sites and services Number of serviced lots	N.A.	8,467/9,440 serviced lots	N.A.	N.A.
Increased supply of affordable housing Number of new homes	20/400 new home subsidies (\$5,000)	400/400 new core house subsidies (\$10,000/\$5,000)	161/1,000 new core houses (\$3000)	N.A.
Improved housing stock Home repair and improvement subsidies	450/600 (\$5,000)	400/400 (\$1,000)	3,720/2,000 (\$3000)	2,518/2,000 (\$3,000)
Hinterland/rural homes Indigenous and Maroons	N.A.	122/120 new homes (\$8,000) 86/80 roofs improved 285 septic upgrades	125/110 new homes (\$8,000)	N.A.
Institutional strengthening	Smart stream partially implemented. systems	Draft national housing policy. MIS upgraded. Professional training for CH&PA staff.	MIS designed and functioning. PMT implemented for beneficiary selection.	MIS partially implemented.

Key: Fully achieved Partially achieved Not achieved

Likewise, Guyana's upgrading of four of five planned squatter settlements (973 lots) led to important public health benefits, improvements in family well-being, and benefits for women. Improved, more permanent roofing materials and home expansion allowed outdoor cooking structures to be moved indoors, saving women time in meal preparation and providing shelter from the elements while cooking. Other important benefits included access to transportation and water, and the installation of septic tanks (which have well-documented public health benefits), and electrical connections.

In Trinidad and Tobago, the program is regularizing five sites (of 25 planned), although the design and procurement processes experienced significant delays in the first half of the loan's term. The loan is likely to be extended through the end of 2017 to finish the works in those five neighborhoods (mainly the paving of

roads and installation of systems and connections for potable water, electrification, effective drainage, and sanitation blocks), to complete residual civil works (water reticulation, drainage, and fire hydrant installations) in the sites that were upgraded under the former loan, and to advance tenure regularization activities in all sites. The Government estimates that about 400 neighborhoods need upgrading nationwide; thus, the need is immense compared with the scale of works.

2. Affordable housing and home improvement solutions

Efforts to expand the supply of affordable and incremental housing faced many challenges, particularly given the low interest from private developers. Other factors affecting this component included the increase in construction prices, limited availability of land for development, a low-income eligibility threshold for beneficiaries, and the competing unmet demand for housing in the more profitable middle-income market. Home improvement subsidies were more successful, however. Guyana and Suriname reached lower-income populations by learning from and addressing challenges experienced in the first loan operations. Through smaller, more focused interventions, the programs complemented the work done by other components and other national programs.

In Guyana, the core house pilot provided a new starter home to beneficiaries who had received a lot in the previous program but were unable to afford the construction of the house. This initiative complemented the sites and services component, delivering 400 new homes. For the home improvement subsidy component, the beneficiaries were located in neighborhoods that had been regularized in the first loan, allowing families to receive construction materials to upgrade their dwellings. CH&PA is using land surveys, satellite imagery, and geographic information tools to track the occupancy of serviced lots and design better interventions. As a main outcome, the program reached 74% occupancy, a significant increase from the 50% baseline at the start of the second phase.

Suriname was able to engage with private developers; however, increased construction costs made it impossible to continue delivering homes with the agreed specifications. Only 161 of the 1,000 homes initially planned were built. However, the program reached 4,006 households (original target 3,110) by doubling the home improvement subsidies, with the LISP Foundation engaging in extensive communication efforts to make the program known. Barbados, on the other hand, was not able to provide adequate incentives to attract private developers.

The housing programs in Guyana and Suriname were successful in improving the housing conditions of indigenous populations by including a new home subsidy pilot specially designed specifically for the Hinterlands. The pilot consisted of a participatory planning process that engaged the community in designing the units, selecting beneficiaries, and organizing the construction of the houses (Box 4.2).

Box 4.2. IDB support to housing in the Hinterland

The housing programs in Suriname and Guyana included the goal of improving housing conditions in the Hinterlands, with new home subsidies targeted to indigenous populations. In Guyana, the program also included a roof replacement subsidy for households that were in need but did not receive a new home. Guyana's pilot provided 122 new houses and 86 new roofs for people living in Regions 1 and 9, and Suriname's provided 125 houses in 11 villages.

The success of the pilots has moved both governments to continue targeting indigenous populations. In Guyana, IDB is executing a TC (GY-T1115) for US\$100,000 to expand the Hinterland pilot. In addition, it has allocated US\$3.1 million in undisbursed funds from a basic nutrition loan to provide 306 additional subsidies for new homes and 122 subsidies for new roofs in Regions 1 and 9. In Suriname, the Government decided to use its own funds to extend the pilot to one additional village.

Of the several factors contributing to the success of the pilots, the participatory nature of the process was the most important. In both cases the participatory process included extensive community consultation and input during the design phase, reliance on village councils in the selection of beneficiaries, and significant community involvement during the construction phase. The design of the subsidized houses relied on locally sourced materials as much as possible, and most of the labor was either an in-kind community contribution or locally hired, creating economic opportunities during the process. The pilots also had direct effects on living conditions by reducing overcrowding, and having an aluminum roof created opportunities for rainwater collection and provided relief from the time-consuming repair of thatched roofs. With the support of a different donor, some of the new roofs were even used for installing solar panels. A positive externality of these projects is that the participating communities have adopted the new house as the standard for new construction and is being replicated and built independently by other households in the community.



OVE. Project validation site visit, District 9, Guyana 2016: Core house, local brick factory, traditional and core houses.

Trinidad and Tobago surpassed its target for home improvement subsidies, reaching 2,518 households, which is 25% more than planned (2,000). While verification of the completion of works was initially slow, it improved over time due to tighter project management and increased staffing. Important quality-of-life improvements were made in many cases, however OVE confirmed that the program did not limit works to health,

safety, and basic needs-related improvements. Program targeting and supervision also showed room for improvement. Evidence of discretion in the selection process meant that there was likely leakage in the pro-poor targeting, although there are no aggregate data on beneficiary characteristics. All of this reflects the larger issue of absence of robust monitoring and evaluation mechanisms for the program.

In Barbados, the anticipated joint ventures during project design never generated interest from private developers, reflecting insufficient market analysis and unrealistic expectations. At the end, the program provided only 20 new home subsidies (of 200 planned). With respect to the home improvement component, the program had a slow start because potential beneficiaries had insufficient interest in and knowledge of it; eventually, however, it delivered subsidies to 450 families of 600 planned.

3. Land tenure and legal titling

Security of tenure is important for the functioning of the housing market, ensuring the sustainability of the benefits of low-income housing programs. The Government of Guyana developed and delivered to low-income households 4,084 serviced lots, for which it issued 3,070 Proof of Purchase Certificates as an intermediate step towards legal tenure. These certificates allowed families to access mortgages and other financial services while the land titling process was completed.

In the Trinidad and Tobago project, tenure regularization has been delayed in part by changing policy directives and legal and regulatory complexities. Delivery of statutory leases (per the loan agreement) is currently behind schedule although several hundred beneficiaries have received a CoC. Of the 1,154 “lease-ready” lots developed by the first and second IDB loans, only 365 families expressed interest in titling thus far; of which only 74 paid for the title in full, and just 8 have been executed to date. This may reflect a relatively high level of perceived security of tenure associated with the CoC, and an inability or unwillingness of low-income households to pay for another legal instrument that may not augment that security. The IDB should factor this into how it defines tenure regularization targets going forward, especially if households are not particularly interested in leveraging their property to obtain a mortgage.

4. Institutional arrangements and government systems for social housing

In Guyana and Suriname, strengthening activities built on the existing capacity and commitment of the statutory authorities in charge of low-income housing. In Guyana, the housing program supported a draft national housing policy, improved the MIS system, supported the installation of a wide-area network to facilitate connection between the main network and regional offices, strengthened the monitoring and evaluation unit, provided professional development and specialized training, and created GIS capability within CH&PA. In Suriname, the loan supported the adaptation of a PMT for beneficiary selection, and the design and implementation of a specialized MIS for the LISP Foundation.

In Trinidad and Tobago, the Ministry of Housing and the program lacked a plan to adequately monitor and track activities and targets for some time, which initially affected data availability on progress. More recently, the program has purchased GIS and other IT equipment and is digitizing key records relayed to applications for CoCs. In Barbados, establishing new units in the MHL proved too difficult, and because of weak coordination between the implementing units and other institutions involved, the strengthening activities related to improving beneficiary selection and land management systems were ultimately cancelled.

D. SUSTAINABILITY

An important challenge to sustainability is the maintenance of basic infrastructure and services. For neighborhood upgrading and squatter regularization, having a maintenance plan in place and ensuring that sufficient funds are available for upkeep are major concerns. For example, in Trinidad and Tobago, coordination and community involvement are required to guarantee long-term sustainability. Although LSA attends to urgent issues during the development phase, responsibility for the maintenance of the newly installed infrastructure (roads, electricity, water, sewerage, etc.) is passed to the local government upon the completion and approval of all works. Likewise, in Guyana, once the housing solutions are finished, maintenance of the services moves from CH&PA to local Democratic Councils, and relies heavily on their capacity to assess and levy taxes. However, the amount of local taxes collected may not be sufficient to cover actual needs. Positively, the CH&PA prepared a do-it-yourself Core House Maintenance Manual that was distributed to beneficiaries and non-beneficiaries.

Continuity and institutional capacity are important to sustain ongoing and subsequent phases of housing programs. The Government of Guyana has expressed interest in maintaining and expanding the Hinterland pilot, which was the first State intervention for housing in remote districts and was very well received by beneficiary communities, which participated in all stages of program development from design through implementation. In December 2015, the IDB approved a US\$3.1 million Sustainable Housing for the Hinterland Program loan to expand the pilot. The combination of LIS I and LIS II has created institutional capacity within CH&PA, and its performance is well regarded within the Government; it will continue to implement housing programs financed by IDB and with national resources.

Access to housing credit for low-income households is important to access and sustain the housing benefit. Given the market failure of the private sector to provide affordable mortgages, government policies are required to bridge affordability and supply in low-income housing. Country approaches vary. In Suriname, the Central Bank allows commercial banks to use up to 40% of their reserves to provide mortgages for people in low- to low-middle income brackets. This initiative has had a significant impact on the housing finance system, as it is the largest housing subsidy program in the country in terms of amounts and number of credits per year. In Guyana, indirect subsidies in the form of tax concessions are provided to private-sector lending institutions that provide mortgages to low-income households.



5

Hinterland pilots in both Guyana and Suriname were effective in providing access to improved housing, bringing public health and well-being effects, including important benefits for women and employment generation in the community.

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5 Discussion and conclusion

The array of Bank-supported housing activities in the Caribbean fall mostly in the middle of the spectrum of government housing policies, which range from direct public intervention to pro-market intervention. Guyana's government was strongly interventionist with respect to the housing agency, housing supply, and access to credit. At the other end of the spectrum, Barbados and Suriname attempted to move toward a more enabling market approach, especially in the areas of residential land development, but without much success.

In terms of effectiveness, direct subsidies for self-construction, including home improvement and incremental expansion, were successful in addressing the substantial housing deficit in all four countries, and in enabling limited state funds to reach a relatively large number of beneficiaries. They were also good at targeting low-income households, especially when a proxy means test was used; were relatively efficient to administer; disbursed faster than other approaches; and did not require the procurement of land, which is a cumbersome and lengthy process given the unique complexities of titling state-owned land in the Caribbean. For these reasons, subsidies were a cost-effective option.

Neighborhood upgrading and squatter regularization were effective in reaching vulnerable populations and improving well-being, but at significant cost and with limited results with respect to their targets. These operations helped to improve access to basic services but were less successful in delivering titles. Upgrading existing settlements generally cost more than developing new sites with services, in part because of the need to retrofit existing living conditions to current regulatory standards. The installation of basic services to regularize squatter settlements frequently required extensive planning and civil works in sometimes isolated and hard-to-reach areas to (i) subdivide and grade existing lots; (ii) provide land access



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to transport; and (iii) install basic infrastructure and effective drainage. The decision to pursue full infrastructure development standards (as required for a marketable title) resulted in significantly higher costs with a corresponding reduction in coverage. This illustrates the tradeoffs that planners face between upgrading a smaller number of communities to full development standards vs. reaching more communities with more limited, albeit critical, upgrades.

Hinterland pilots in both Guyana and Suriname were effective in providing access to improved housing, bringing public health and well-being effects, including important benefits for women and employment generation in the community. These projects employed a participatory planning process to engage the community in designing the units and selecting the beneficiaries. They also stimulated the local economy by requiring that locally available materials and labor be used, to the extent possible, in all housing construction (i.e., local brick production).

While all four programs improved living conditions for beneficiaries, several constraints require further attention. The shortage of serviced land that can be developed and is well-located is perhaps the most important obstacle to increasing the

supply of affordable housing in the Caribbean. The complexities of divesting state-owned land and the high costs associated with regularizing new sites for occupancy have contributed to the spread of unplanned settlements and sprawl that exacerbates environmental, security, and transport concerns. In deciding where to locate new housing developments in Bank projects, the main factor considered was the availability and cost of land. Program design did not sufficiently consider urban sustainability issues, such as the effect of sprawl and commuting on the welfare of the poor, on productivity, and on infrastructure costs and the environment. Developing new urban centers will require the establishment of new economic development hubs and the provision of basic services beyond housing. This points to the need for a revised land policy and for better integration of housing policies with urban development.

Ambiguities over property rights have led to various degrees of tenure insecurity and reflect the inefficiencies in the system for enforcing and adjudicating existing rights or for establishing clear rights in the first place. Registries tend to be incomplete, fragmented, and/or poorly maintained; property disputes account for large caseloads in the courts; and registration processes often involve multiple agencies that take time and are costly. These shortcomings frequently cause delays in land acquisition and infrastructure provision, and failures in land and housing markets. Despite the underperformance of project components related to conventional titling (in part due to the high cost of meeting full development standards as well as the legal, fiscal, and institutional constraints for issuing legal title), titles remain integral to a well-functioning market. Trinidad and Tobago has created an incremental path to tenure regularization intended to augment tenure security at various steps along the longer journey to satisfy all development approvals for a marketable title. The Bank should continue its support for an enabling policy environment with respect to titling.

The evaluation found that project designs were not based on comprehensive diagnostic work, in part because available data were scarce and of poor quality. Though accurate data on the extent and characteristics of the housing deficit are critical in designing appropriate policy responses, such data are generally not readily available or updated in the Caribbean. Access to data on household characteristics, including income, is equally important for targeting low-income households. The use of the PMT enabled Guyana and Suriname to effectively reach underserved populations.

Low institutional capacity and changes in government priorities were recurring themes in all countries, limiting not only project implementation but also a more strategic dialogue on the regulation and policy reforms needed for better functioning markets. Executing ministries often lacked adequate implementation capacity, and unclear lines of authority exacerbated intra-agency coordination problems. Many delays might have been avoided had there been a properly staffed project management unit, clear operational guidelines, and a fully operational MIS and evaluation tools to monitor implementation progress and effectively target and track beneficiaries. In addition to the challenges specific to project management, successful implementation also

depends on establishing policy targets up front. These agreements were not always reached prior to project execution, making it very difficult to achieve results when there were changes in political administrations.

Finally, the evaluation found little private sector appetite for developing low-income housing. In the context of regulation and policy failures, government incentives were generally insufficient to overcome the risk threshold of the construction sector in the Caribbean. The few private developers resident in each country were generally not interested in participating in social housing schemes given challenges associated with the absence of well-developed financial markets. Even with project subsidies, the private sector's lower-end products—both financing and infrastructure did not reach a large portion of the intended beneficiary group. Low-income housing competed with a growing demand for higher-cost housing, which also yielded higher profits. Even with government support, the private sector was unwilling to take on the perceived higher risks of working with lower-income clients.

In conclusion, the findings of the evaluation lead to the following suggestions for the Bank in its future support for housing programs in the Caribbean:

- Ground project design in a clear understanding of country conditions and tradeoffs among options for expanding social housing. Options for public provision of housing services should be weighed against the possibility of private provision, whether with or without some public financing (e.g. through subsidies for home improvement and incremental expansion). Any public provision or subsidization should be based on an analysis of housing supply, affordability, and land conditions and should include transparent targeting and beneficiary selection. Improving housing-sector data will be critical to this end.
- Accompany short-term publicly-financed housing interventions with medium-term strategies to strengthen housing markets. The latter may include developing policies for land tenure and titling, modernizing development standards, strengthening planning, improving coordination across government agencies, and reforming financial markets to increase mortgage financing. Where possible, collaborate with IIC to promote private-sector participation in infrastructure development and encourage producers of middle-income housing to enter this market.
- Address institutional constraints to project implementation. Consistent and well-focused technical support for project design, pre-construction planning, ongoing implementation and monitoring (including management information systems), and community participation will be important in this regard.

- Strengthen the long-term sustainability of housing benefits by integrating housing and neighborhood upgrading projects within larger urban and economic development programs. Policy dialogue and program designs should incorporate considerations of public transport, city revitalization, accessibility, carbon footprint, and quality of life.

- ¹ OVE's work program in the sector includes, in addition to this comparative project review, a review of the Emerging Sustainable Cities Initiative (2016) and a sector-wide Evaluation of Housing (2018).
- ² IDB (2013b).
- ³ Basic services include street lighting, drainage, garbage collection, roads and access to public transport, green spaces, and police and security services.
- ⁴ Bouillon, et al. (2012).
- ⁵ Housing gaps are often characterized as qualitative and quantitative deficits. Qualitative deficit: number of households with insecure tenure, deteriorated or unsafe structure (flooring, roof, walls), lack of basic services (water, sanitation, electricity), or overcrowding. Quantitative deficit: Number of households that live in dwelling units that are unsuitable for living and cannot be repaired, and households that share a single dwelling unit with one or more households.
- ⁶ *Social housing* is housing built or financed by the public sector, or in in partnership with the private sector, where the intended beneficiaries are low or lower-middle income households.
- ⁷ Verrest, H. et al. (2011) and UN-Habitat (2012b).
- ⁸ McHardy P. and Donovan, M. (2016). The report relied on estimates based on administrative data from applications to different government housing assistance programs, not necessarily reflecting actual housing needs and with limited disaggregation.
- ⁹ In the same period, Barbados did improve its housing stock, continuing the trend of previous decades of replacing wood homes (reduced by 7,700) with homes made of concrete blocks (increased by 7,000).
- ¹⁰ Central Housing and Planning Authority estimates based on administrative data. Draft PCR (2016).
- ¹¹ More recent estimates indicated that 38% of houses need major repair. UNDP 2014.
- ¹² Official estimates are based on administrative data and indicate a need for between 107,000 units (HDC, based on applications for housing in 2009) and 200,000 (Land Settlement Agency, 2015). This indicator may overestimate the demand. Conservative estimates suggest that Trinidad and Tobago began this decade with a shortage of between 40,000 and 50,000 units (UN Habitat Global Urban Indicators Database, 2003). However, because of the continued growth in housing demand, the current shortage is at least 80,000 units (Ministry of Finance (2014), "Budget Statement 2015," p. 21).
- ¹³ Verrest, H. et al. (2011).
- ¹⁴ ECLAC (2015), WB (2014b), UN-Habitat (2012b), CARICOM (2014).
- ¹⁵ This refers to the 2000 and 2010 census rounds. The census years in each country vary slightly: Barbados (2000 and 2010), Guyana (2002 and 2012), Suriname (2004 and 2012), and Trinidad and Tobago (2000 and 2011).
- ¹⁶ According to census data, two-thirds of growth in Suriname is occurring outside Paramaribo. Likewise, in Barbados the fastest-growing parishes are outside Bridgetown. In Trinidad and Tobago, between the last two censuses, the fastest growing area was Chaguanas which is a distinct urban area not part of the capital city. Port of Spain and San Fernando proper saw significant population declines.
- ¹⁷ In Barbados, average household size declined from 4 in 1970 to 2.8 in 2010, significantly increasing the demand for housing. In Guyana, the decline in average household size from 4.1 to 3.6 reflects the increase of single-person households and population concentration around the greater Georgetown area. In Trinidad and Tobago, single-person households increased from 46,259 in 2000 to 76,689 in 2011. National Population and Housing Census for Barbados (2010), Guyana (2012), and Trinidad and Tobago (2011).
- ¹⁸ Bouillon, C. ed. (2012b).
- ¹⁹ Morris (2008).

- 20 Rajack, R. (2016)
- 21 In Guyana, the cost of a common two-bedroom unit (Government's turnkey "Buttercup") is US\$21,532 for the house and US\$2,196 for the land, and it is highly subsidized; however, this is out of the reach of most low-income households who earn less than GY\$60,000 (US\$300) per month.
- 22 The cost of a 360 m2 lot for affordable and middle-income housing varies between US\$9,720 in suburban locations and US\$58,320 in more desirable locations.
- 23 *Crown Land or royal domain* refers to the land that was under the control or ownership of the Crown (Great Britain or Netherlands); today it also refers to the public land owned by the states.
- 24 Countries with smaller shares of state-owned land include Jamaica (~18%) and Barbados (~0.1%); DaCosta, J. (2003), Rajack, R. and Barhate, S. (2004), and Maynard, T. (2003).
- 25 Jaffe, R., de Bruijne, A., and Schalkwijk, A. (2008), Morris (2008), Rajack, R. and Barhate, S. (2004); and Rojas (1989).
- 26 CH&PA. <https://www.chpa.gov.gy/departments/squatter-regularisation-department>
- 27 Rajack, R. and Frojmovic, M. (2016) and McHardy, P. and Donovan, M. (2016). Since 2000, the Government of Trinidad and Tobago has upgraded a total of 30 settlements.
- 28 Morris (2008), James, R.W. (2001), Belle, R. (1998), Smith, R. (1955), and PCR SU0017 (2009). Also information provided by notaries on the price of real estate transactions.
- 29 Kairi Consultants, 2007.
- 30 Trinidad and Tobago currently recognizes three levels of land tenure: (i) Certificate of Comfort; (ii) a Statutory Lease of 30 years; and (iii) a Deed of Lease for 199 years.
- 31 Doing Business: Time spent on procedures related to "dealing with construction permits." The average for LAC is 178 days.
- 32 IMF (2013).
- 33 Central Bank of TT (2007) (<http://www.central-bank.org.tt>)
- 34 IMF (2014).
- 35 In 2005, IDB staff identified the following as key risks and preconditions: a timely approval of a Project Preparation Facility to improve targeting to lower-income households, clarify the involvement of the private sector, review the institutional strengthening strategy, and address questions on the financial sustainability of the program. To complement loan preparation efforts, the Government and the IDB signed a project preparation facility in August 2007 (BA-L1011, US\$688,000). Although the facility was to finance critical pre-investment activities for neighborhood upgrading, its execution significantly overlapped with that of the approved loan.
- 36 The administration of the program would be covered by the Government of Barbados (US\$1.8 million), while IDB would allocate US\$1.4 million for project preparation and design.
- 37 LIS I benefitted 19,000 families with serviced lots, but among its main weaknesses were a very low occupancy rate (just 20% of the allocated lots), incomplete basic infrastructure in the sites, and limited access to financing for home construction.
- 38 The main adjustments in LISP II were: improving targeting through a proxy means test (PMT); reducing the maximum household income threshold from SRD 1,200 (US\$269) to SRD 900 (US\$277), basing eligibility on total household income rather than that of the head of the household alone, and indexing maximum subsidy guidelines; incorporating an MIS to improve processing of applications and project delivery; and moving from fully-built housing to core houses with plans to be extended by beneficiaries in the future.
- 39 The maximum cost of a core house to which the subsidy could be applied was initially US\$10,000.
- 40 Per the loan proposal, 2-6 pilots were to be developed at the feasibility stage with program funds and a pool of resources reserved for implementation. If the feasibility studies were not favorable, or lacked sufficient support for implementation, the funds were to transfer to component 1.

- ⁴¹ Other relevant lessons were identified and incorporated into the design of the operations include: Suriname: (i) provide incentives for NGOs to generate demand and increase uptake in targeted populations; (ii) contract technical assistance to ensure continuity in the management and maintenance of the MIS system upon project initiation; and (iii) do robust institutional assessments and strengthen institutions to improve implementation and supervision. Guyana: (i) focus on strategies to increase occupancy, given that 50% of the serviced lots developed in the first loan remained unoccupied; (ii) consolidate infrastructure development, especially access to water and electricity and to basic social services (education and health) in sites developed, but not completed, in the first loan; (iii) strengthen community outreach; and (iv) prioritize the development of a comprehensive MIS.
- ⁴² The housing program in Suriname had a slow start, with disbursement starting one year after the approval date. In Guyana, the program was delayed over a year because of issues with procuring electricity infrastructure. CH&PA took over the public works and was able to speed the process.
- ⁴³ In Guyana, the housing operation was the best-performing operation of the portfolio, to the point that it received additional funding from the cancelled amounts of other loan operations.
- ⁴⁴ Project preparation was not only long and delayed, it was also relatively expensive for IDB and the Government. IDB's loan preparation costs alone were close to US\$330,000, in addition to funds obtained by the Government through TC (US\$92,000) and the portion of the project preparation facility that was executed (US\$192,600). In addition, IDB invested close to US\$390,000 during the period the project was in execution, for a combined total of over US\$1 million.
- ⁴⁵ The loan was approved one day before national elections.
- ⁴⁶ Formerly, this ministry existed as the Ministry of Housing, Land and Marine Affairs (2012-2013) and Ministry of Housing and the Environment (2010-2012). The MHUD has two main units, one division, and six affiliated organizations.
- ⁴⁷ According to the midterm evaluation, the agencies disagreed on important definitions of the program like defining the extent of the public works to be completed for each of the selected sites. After the second year of the program it was agreed that neighborhoods with more than 100 lots would include the pavement of roads and a complete drainage and sewage network design.
- ⁴⁸ The neighborhood upgrading component required more preparation, with resettlement plans prepared by LSA, sanitation assessment by WASA, and coordination with agencies providing public utilities.
- ⁴⁹ Internal IDB memo, Loan Results Report, June 2011.
- ⁵⁰ During project implementation, the cost of materials increased approximately 30% (2009-2011), resulting in the need to review original targets. Core houses were particularly affected: (i) approximately a 100% increase in the excavation and earthworks, (ii) up to 93% increase for concrete and blocks, (iii) an average increase of 45% for the carpentry, joinery, and plumbing works, and (iv) an initial increase of 10% for the roof works.
- ⁵¹ Semiannual (2014) and midterm (2015) evaluations. The cost was estimated by the author.
- ⁵² In Suriname, although the construction cap for the core house was adjusted from US\$10,000 to US\$15,000 (to reflect increased construction and materials costs), some developers argued that they could not build a house to the required specifications under that cost (cement is imported and is very expensive). Of the three developers that initially agreed to build LISP's core houses, only two remain.
- ⁵³ Of the 1,154 "lease-ready" lots developed by the first and second IDB loans, only 365 families expressed interest in titling thus far; of which only 74 paid for the title in full, and just eight have been executed to date.

- Aguste, S., Moya, R., and S. Sookram (2011). "Housing finance policy under Dutch disease pressure: The mortgage market in Trinidad and Tobago." Washington, DC: IDB.
- Artana, D., Bour, J., Panadeiros, M. (2006). "Suriname: Supporting the Private Sector." Washington, DC: IDB.
- Artana, D., Auguste, S., Moya, R., Sookram, S., Watson, P. (2007). "Trinidad & Tobago: Economic Growth in a Dual Economy." An IDB Research Project. Washington, DC: IDB.
- Belle, R. (1998). "Commonwealth Caribbean. Law and legal Systems." Port of Spain: University of the West Indies, Trinidad and Tobago.
- Blanco, A., Fretes, V., and Munoz, F. (2014). "Rental Housing Wanted: Policy Options for Latin America and the Caribbean." Washington, DC: IDB.
- Bouillon, C, ed. (2012). "Room for Development: Housing Markets in Latin America and the Caribbean." Washington, DC: IDB.
- Boswell, T. (1992). "Characteristics and Processes of Urbanization in the Caribbean." Department of Geography, University of Miami.
- Caribbean Development Bank (2015). "You are the future: The imperative of youth employment for sustainable development in the Caribbean." St. Michael, Barbados: CDB.
- CARICOM (2014). "Strategic Plan for the Caribbean Community 2015-2019: Repositioning CARICOM." Prepared by Gwendoline Williams and Associates in collaboration with the CARICOM Secretariat and the Change Drivers in Member States. Guyana.
- Central Bank of Trinidad and Tobago (2014). "Summary of Economic Indicators." Central Statistical Office and Central Bank of Trinidad and Tobago.
- Da Costa, J (2003). "Country experience in land issues: Jamaica. Country Experience Report." Madison: Land Tenure Center at the University of Wisconsin.
- Friedman, D (2010). "Social Impact of poor housing." London: Ecotec.
- Gonzales, G (1999). "Access to housing and direct housing subsidies: Some Latin American experiences." Review 69. Santiago, Chile: ECLAC.
- Gove, W. R., and M. Hughes. (1983). "Overcrowding in the Household: An Analysis of Determinants and Effects." Toronto and New York: Academic Press.
- Hood E. (2005). "Dwelling disparities: How poor housing leads to poor health." *Environmental Health Perspectives* 113(5): A310–A317.
- Housing Development Corporation (2009). "Information Memorandum." Trinidad and Tobago.
- Inter-American Development Bank (2013a). "The Private Sector Assessment Report." Prepared in collaboration with the CDB, UK-Aid, and Canada.
- _____ (2013b). "Urban Development and Housing Sector Framework Document."
- International Monetary Fund (2013). Trinidad and Tobago: Staff Report for the 2013

REFERENCES

- Article IV Consultation. Washington, DC: IMF.
- _____ (2014). “2014 Article IV Consultation – Staff report: Press Release and Statement by the authorities of Suriname.” Washington, DC: IMF.
- Jaffe, R., de Bruijne, A., and Schalkwijk, A. (2008). “The Caribbean City.” Kingston, Jamaica: Ian Randle Publishers.
- James, R.W. (2001). “Land tenure: Tradition and change.” 2 Carib LR 163.
- JCHS-Harvard (2005a) “More than a shelter: The Bellagio Housing Declaration.” International Conference, Italy - Harvard Joint Center for Housing Studies and supported by the Rockefeller Foundation.
- JCHS-Harvard (2005b) “Setting the context: Mexico. More than shelter. Housing as an instrument of economic and social development.” International Conference, Italy - Harvard Joint Center for Housing Studies (JCHS) and supported by the Rockefeller Foundation.
- Kairi Consultants (2007) “Analysis of the Trinidad and Tobago 2005 Survey of Living Conditions.” Trinidad and Tobago.
- Leyda, L (2006). “Caribbean Competitiveness.” Paper presented at the 6th Global Conference on Business & Economics, Cambridge, MA.
- Maynard, T (2003). “Country experience in land issues: Barbados.” Ministry of Housing and Lands.
- McHardy, P, and Donovan, M. (2016). “The State of Social Housing in Six Caribbean Countries.” Washington, DC: IDB.
- Morris (2008). “Suriname Housing Market Study.” Report based on Census 2004. Washington, DC: IDB.
- Nagy, G (2015). “Challenges of an Urbanized Caribbean.” Sector note.
- Parra-Torrado, M (2014). “Youth Unemployment in the Caribbean.” Caribbean Knowledge Series. Washington, DC: World Bank.
- Rajack, R, and Barhate, S. (2004). “Urban poverty and habitat precariousness in the Caribbean.” Santiago, Chile: ECLAC.
- Rajack, R. (2016). “Housing and Settlements in Trinidad and Tobago.” Presentation to the 6th Annual Caribbean Urban Forum. Paramaribo, Suriname, April 2016.
- Rajack, R. and Frojmovic, M. (2016). “Housing and Land Markets in Trinidad and Tobago: Inputs to the IDB’s Country Challenges Document for Trinidad and Tobago Draft 2.” Washington, DC: IDB.
- Rambarran, J. (2013). Remarks by Mr Jwala Rambarran, Governor of the Central Bank of Trinidad and Tobago, at the official launch of the Home Ownership Booklet “Opening the door to your own home – a guide to home ownership.” Port of Spain, April 30, 2013.

- Reynolds, L., and Robinson, N. (2005). "Full house? How overcrowded housing affects families." London: Shelter.
- Rojas, E. (1989). "Human settlements in the Eastern Caribbean: Development problems and policy options." *Cities* 6: 243-48.
- Ruprah, I. (2011). "The Welfare Impact of Social Housing Programs in Latin America: A Meta Impact Analysis." Washington, DC: IDB.
- Smith, R. (1955). "Land tenure in three villages in British Guiana." Social and economic Studies 64, Institute of Social and Economic Studies, University of the West Indies, Cavehill.
- Smith, R. (2015). "The Caribbean and the post-2015 development agenda." Santiago, Chile: ECLAC.
- United Nations, Department of Economic and Social Affairs, Population Division (2014). *World Urbanization Prospects: The 2014 Revision, Highlights*. ST/ESA/SER.A/352.
- _____ (2015). "The Millennium Development Goals Report." New York: UN.
- UN-Habitat (2009). "Planning Sustainable Cities: Global Report on Human Settlements 2009." London: Earthscan.
- _____ (2012a) "Going Green. A handbook of sustainable practices in developing countries." Nairobi: United Nations Human Settlements Programme.
- _____ (2012b). "The State of Latin American and Caribbean Cities 2012: Towards a new urban transition." Nairobi: United Nations Human Settlements Programme.
- United Nations Development Programme (2012). "Caribbean Human Development Report 2012: Human development and the shift to better citizen security." New York: UNDP.
- _____ (2014). "MDG Progress Report 2014." Paramaribo: Government of Suriname.
- United Nations and World Bank (2007). "Crime, Violence, and Development: Trends, Costs, and Policy Options in the Caribbean." A Joint Report by the UN Office on Drugs and Crime and the LAC Region of the World Bank.
- Verrest, H., Mohammed, A. and Moorcroft, S. (2011). "Towards a Caribbean urban agenda." Draft paper presented during the meeting "Establishing a Policy and Research Agenda for the Urban Sector in the Caribbean," Georgetown, Guyana, April 6-9, 2011.
- Watson, M., and Potter, R. (2001). "Low-cost housing in Barbados: Evolution or social revolution?" University of the West Indies Press.
- World Bank (2014a). "Resilient coastal cities: The economic, social and environmental dimensions of risk." documents.worldbank.org/curated/en/2013/06/17900011/resilient-coastal-cities-economic-social-environmental-dimensions-risk
- _____ (2014b). "Caribbean Infrastructure PPP Roadmap."

Caribbean Development trends (blog): <http://blogs.iadb.org/caribbean-dev-trends/>

Caricom stats: www.caricomstats.org/CSMDG.html

Caricom Law: www.caricomlaw.org/

Doing Business Indicators. The World Bank Group: <http://www.doingbusiness.org/>

Fifth Caribbean Forum 2015: <http://bluespacecaribbean.com/cuf/cuf5/>

Habitat for Humanity. Country profile Trinidad and Tobago: www.habitat.org and www.habitat-tt.org/

IDB. Urban development by the numbers: <http://www.iadb.org/en/topics/urban-development/by-the-numbers,2858.html>

NHP (2012). “Huisvesting Plan 2012-2017” (Suriname National Housing Plan).

OECD. Better life index: <http://www.oecdbetterlifeindex.org/topics/housing/>

UN-Habitat: <http://unhabitat.org/>