SLUM UPGRADING IN RIO DE JANEIRO: FAVELA BAIRRO
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<u>CONTEXT</u>

Brazilian housing policy is concentrated at the sub-national level without significant participation from the federal government. In a clear break from earlier efforts to eradicate informal settlements, Favela-Bairro's objective was to integrate them into the formal city. In the early 1970s, within a period of two to three years, 100,000 favelados were evicted under several military dictatorships (Pearlman, 2004). Prior to the 1990s, low-income and informal settlements in Rio de Janeiro were served by state-level policies. The 1988 constitution first introduced a decentralization trend. Throughout the 1990s, the city of Rio de Janeiro established the legitimacy of favelas and the need to incorporate them fully into the city's public services. Favelas became "legitimate, bonifide communities" (Soares, 2005). They expanded significantly—approximately 25% of the city's population was living in favelas—but segregation increased. While poverty in Brazil declined overall, income inequality increased and the population living in favelas on urban peripheries grew by 50.7% (IADB, 2004).

The change in slum policies initially began in 1985 with the Programa Quinqüenal, a five-year plan for urban development, and later with the 1992 Plano Diretor, a more comprehensive urban planning framework (Soares, 2005). Since the mid-1980s, the Brazilian welfare state has been expanding with new programs and benefits for the poor, such as day-care centers, schools, clinics and hospitals and skill-training programs. Other Brazilian state programs include the 2003 cheque cidadão ("citizen check"), a monthly stipend to be spent on food and personal hygiene, the Cartão Alimentação (food coupons) to be used in so-called "popular restaurants," soup kitchen-type establishmemts offering subsidized meals, the Bolsa Alimentação (Food Subsidies), the 1995 Bolsa Escola (School Grant) and 2001 Auxílio Gas, a transfer to compensate for the end of federal gas subsidies (IFPRI, 2010). Most of these programs were eventually merged into Bolsa Familia, a conditional cash-transfer program, in 2003, as President Luiz Inácio Lula da Silva came to power.

The Bolsa Familia Program (BFP) leverages Brazil's decentralized government structure to reach 11.1 million Brazilians families (over 46 millions people) with a minimum level of income to the poorest families in additional to financial incentives such as pre-natal visits and school attendance, in an effort to break the cycle of intergenerational poverty (Linder et al. 2007). Since the start of BFP in 2003, it has acted as a unifying force in social policy since it merged four other pre-existing conditional cash transfer programs and united social policy horizontally and vertically across levels (Linder et al. 2007). This program is the cause of one-sixth of the country's poverty reduction, even though it only costs 0.5% of the GDP (The Economist, 2010).

More recently, Morar Carioca, (meaning "to live as a resident in Rio de Janeiro") builds upon the success of Favela Bairro, continuing with strong infrastructure efforts but also expanding on social infrastructure, including schools family clinics, social assistance

reference centers (CRAS) and will enhance access to transportation. In addition, it will expand the Postos de Orientação Urbanística e Social, also known as POUSOs, public offices that oversee the consolidation of areas and connect residents with architects, engineers and social workers to ensure the effort is collaborative and participatory (Gomez, 2013).

Another important contextual piece to the Favela Bairro program and slum upgrading in Rio de Janeiro is the Unidade de Polícia Pacificadora, Units of Pacifying Police (UPP). It was developed as a new security policy in Rio de Janeiro and has been successful in disarming traffickers and re-conquering territories dominated by the latter beforehand. This program facilitates the process and implementation of other slum upgrading programs and policies. Moreover, UPP Social was born out of criticism that officials in Rio have faced from those who feel that the police crackdown on drug dealers and militias in the city's favelas has not been matched by sufficient efforts to improve social services. The program is thus designed to complement greater policing in 'pacified' favelas with an improvement in social services such as education, housing and rubbish collection (The Rio Times, 2012).

Finally, Rio de Janeiro's innovative measures and success is mirrored by the fact that the City of Rio de Janeiro in 2010 was given the largest loan to date that World Bank has awarded to any city municipality in world. The Rio de Janeiro Municipality Fiscal Consolidation for Efficiency and Growth Development Program Lending loan, worth $1.045 billion, supports initiatives aimed at bolstering economic growth and improving the quality and coverage of social services, especially in low income areas (The World Bank, 2010).

ACTORS

The Favela Bairro project grew out of the city's master urbanization plan of 1992, the Plano Diretor, but was undertaken by the municipality of Rio de Janeiro. It was coordinated by the newly created Secretaria Municipal de Habitação (SMH) and also involved other municipal agencies including the labor and social development secretariats, the municipal rubbish collection company, Companhia Municipal de Limpeza Urbana (COMLURB), as well as agencies at the state level—most notably the state water company, Companhia Estadual de Aguas e Esgotos (CEDAE). Moreover, in the first phase, training programs were included with other funds, namely from the Fundo de Amparo ao Trabalhador (FAT).

More specifically, SMH began to implement the programs Favela Bairro (and later Bairrinho and Grandes Favelas), Morar Sem Risco (to resettle in new housing those living in areas unsuitable for occupation), Regularização de Loteamentos (to upgrade and legalize irregular sub-divisions), Novas Alternativas (to renovate deteriorated inner-city slum tenements), and Morar Carioca (to offer financial resources for the construction of new housing or reform of existing stock).

The project involved the community in the selection of projects, although the exact mechanism by which these choices were made, as well as the magnitude of local control, were not made clear during Soares' and Soares' evaluation interviews (Soares 2005). Soares and Soares criticize that the integration of the favelas into the city at the sub-national level was not accompanied by a federal policy of dealing with the future

emergence of additional informal settlements (Soares 2005, 4). Specifically, they suggest that such a policy should not only recognize the needs of favela residents, but also respond to the incentives that led to the establishment of informal settlements in the first place.

One of the components of the Favela Bairro project is the setting up of urban and social advice centers or POUSOs, staffed by various municipal departments. The POUSOs role was to ensure the created or refurbished public spaces are not built on and settled by residents. Moreover, they functioned as a place where residents could seek answers on their entitlement to benefits, services, legal advice; this somewhat duplicates the role of residents' associations. While these centers were intended to only operate temporary in order to provide oversight during the transition period, they became permanent and an anchor point for community participation.

Finally, it is important to note that this project shifted from a development-bank-led project, similar to KISIP, to a government-driven project, completely coordinated and initiated by the Brazilian government.

CONTENT

The Favela Bairro program was financed partly with Inter-American Development (IADB) funds, in the form of three investment loans approved in 1995, 2000 and 2010, partly with the municipality funds, each for 180 million dollars (with 120 million in counterpart). The majority of these costs (60 percent) was covered by the IDB, with the remainder coming from municipal sources. Under the Favela Bairro program, a maximum of US$ 4,000 is spent per household.

The objective of the two programs was to improve the living conditions of the urban poor, and in doing so the program contained a wide mix of different social infrastructure, land tenure, and social development components. Specific objectives included the reduction in the risk of geological and environmental accidents (mostly landslides and floods), increased transit access, reduction in the incidence of vector-borne disease, as well as increases in utilization of public services (Soares, 2005). The basic infrastructure components consisted of installing water, gutter, sewerage and lighting hardware, as well as road improvements. This infrastructure was made operative with municipal and state provision of these public goods, including rubbish collection (Soares 2005, 13-14, and all 89 communities are identified in the loan document's matrix in the Soares paper).

The social component varied over time, and originally included the construction of early child care centers. However, most social programs were delayed until the second phase and absent from the first phase. In phase two of the project, the program expanded: child care centers were constructed, the training and community activities program was expanded, and specific modalities were added, including the creation of agentes comunitarios, members of the favela who were trained in matters of community development, hygiene, as well as in the specifics of the program. Moreover, in the second phase, more irregular settlements outside the favelas were selected for upgrading, and a property titling

program—initially planned for the first phase—began execution in the second phase (Soares 2005).

Based on a Results Matrix developed by the IDB for the 2010 loan proposal, the objective of improving the quality of life of those in low-income favelas over time includes the following: 1. Integrated urbanization via urban infrastructure and social services projects; 2. Social action such as child development centers, support for at-risk youth, social referral centers, and income generation programming; 3. Regularization and control of urban development via expanding the POUSO network to support land regularization and mapping and registration of properties to reinforce inclusion; and 4. Institutional development by enhancing the capacity of staff and departments in the program (IDB, 2010).

The scope of Favela Bairro was medium-sized communities. The Plano Diretor of Rio contemplated a number of different urbanization programs. Favela Bairro was designed to address the needs of communities with between 500 and 2,500 households, although communities with extremely high urbanization costs were excluded. The city also implemented programs to deal with smaller favelas (Bairrinho) as well as programs to urbanize the city's largest favela communities (Grandes Favelas).

In order to fill the gap and address larger favelas, another program that focuses on infrastructure, Programa de Aceleração do Crescimento (PAC), the Growth Acceleration Program, was introduced. Launched by the Lula da Silva administration in 2007, the program is a strategic investment program that combines management initiatives and public works. It focuses on investments in the areas of logistics, energy and social development, organized under six major initiatives ("Better Cities" for urban infrastructure, "Bringing Citizenship to the Community" for safety and social inclusion, "My House, My Life" for housing, "Water and Light for All" for sanitation and access to electricity, "Energy" for renewable energy, oil and gas and "Transportation" for highways, railways and airports). In its first phase, the program had a budget of $503.9 billion reais and ran from 2007 to 2010. In March 2010, the second phase, PAC 2, was introduced and continues to run under the Rousseff administration (World Bank, 2010).

An appropriate description of the Favela Bairro slum upgrading policy's holistic nature can be found in Fiori, et al.: "It is not a programme to meet the housing needs of individual residents but instead addresses the collective needs of the favela as a whole. Upgrading projects for each favela thus build upon the existing layout of houses, roads and walkways, leaving this layout and the basic structure of the settlement in the main unaltered, though upgraded."

PROCESS

The policy was a collaboration between the Inter-American Development Bank (IDB) and the national and municipal governments. At first, the policy was led by the IDB, as slum upgrading was the primary strategy. However, over time and with the election of Luiz Inácio Lula da Silva, the municipality developed more ownership over the project and is the

leader in developing vision for poverty efforts and implementation. Additional research is needed regarding how that shift occurred and what were the triggers that facilitated that movement.

IMPACTS

The first phase of Favela Bairro accomplished most of its goals. 284 public works and other projects, over 90% of activities, were put in place in the target communities. 38 of the targeted 54 favelas were intervened According to Soares and Soares (15), there was an initiative to collect data, hired by the SMH through the firm DATABRASIL. However, due to problems between the SMH and DATABRASIL this data was eventually lost; it had to be recovered as part of this evaluation exercise. The logic framework is as follows: Three main outputs were water access (connection to sewers and access to rubbish collection), paved streets and nurseries. The outcomes included the provision of basic sanitary services (the reduction of incidence of diseases) and a reduction in landslides. The program was also responsible for including the improved communities into the city map through anticipated as well as unanticipated results such as raised property values due to improved infrastructure facilities and increased access to the city by way of better roads. An analysis by income quartile reveals that the poorest quartiles benefitted the most from access to sewage, water, rubbish collection and decrease in illiteracy incidents, while the richest quartiles only did to a lesser extent.

Unfortunately, the only major component of the program not completed was monitoring and evaluation. Though a rigorous experimental design was not feasible, a quasi-experimental design using an ex post assessment. Without a doubt, infrastructure improvements enhanced the access, health and overall quality of communities, but the most rigorous statistical analysis (within the construct of the study design) for the impact evaluation found the following: Sewer access was the only significant finding, with an increase of between 17% - 23.5%; Water access varied from 6.4% to 8.1%; Rubbish collection ranges from -2.9% to 7.3% (Soares, 2005). With regard to longer-term outcomes, the data found water and sanitation improvements did not have an effect on mortality. However, we do not know whether water and lack of sanitation was a cause for increased mortality in favelas before the program was implemented, as data was not available prior to 2000.

Overall, outcome measurements were limited and much of the reviewed evidence here is based on Favela Bairro's outputs. The following table depicts rates of satisfaction concerning key improvements for those favelas participating in the Favela Bairrio program in comparison to those who are not participating:

Table 1: Slum Dweller Satisfaction with Key Services: Comparison between Faveles with and without Favela Bairro Programming

	Sewage	Garbage Collection	Public Lighting	Drainage	Street Network
Favela Bairrio	80%	87%	73%	73%	80%
Non-Participant-ing favela in FB	40%	35%	35%	22%	12%

IMPLEMENTATION

Resident associations are a point of contact for municipal housing departments and architects. Another important community-anchored/anchoring facility are the POUSOs, staffed by various municipal departments (architects, planners, social workers) as a point of engagement for communities. Social programs were delayed until the second phase (initially began with child care centers but expanded to include training, hygiene, community development). The Municipal Employment Department (Secretaria Municipal de Trabalho, SMTb) was established in 1997 to revitalize and co-ordinate programs in the area of income generation, employment and training.

Importantly, implementation is spearheaded by Secretaria Municipal de Habitação (SMH), with participation from various departments, as noted above. It is critical to note that over time the departments involved actually shifted with needs and corresponding priorities. Finally, NGOs are contracted to operate community centers and other social and educational projects. While the private sector was utilized for housing construction and infrastructure, more detailed information is needed from other sources yet to be received.

INDICATORS

Of the major Favelas Bairro components, only the monitoring and evaluation components were not executed: the programmed evaluation activities were delayed, so that information immediately after the completion of works was not collected. In phase two, indicators concerned with child and youth education and health, housing value, and integration with the city were introduced. Soares and Soares find in their analysis using an ex post comparison group a substantial increase in the coverage of water, rubbish collection and illiteracy. The positive impact on sewerage was the most significant one in the aggregate level (40).

The evaluation strategy of both, the first and the second phase of the program, did not explicitly provide for a comparison group that would form the basis for a counterfactual that could represent what the impact on the treatment has been in any impact evaluation. In all cases, the data collected were in communities that were receiving or were scheduled to receive project benefits, leaving out communities that did not receive or were not scheduled to receive any project benefits. The counterfactual needed to be created ex post, which in turn creates uncertainty.

Concerning the property value, as measured by rent, and most of the health outcomes, the data have not produced evidence that the program has significantly improved the quality of life of residents. In terms of earnings, the results do not suggest that the program was able to generate any real economy impacts, although it should be noted that this impact was in fact never anticipated by the project's design.

The change of quality of life has not been quantified and there is a lack of rigorous evaluation. However, based on qualitative data on the ground, one can assume that for those favelas with enhanced access to water, sanitation, electricity and paved roads, residents are more connected to key services integral to living a healthy, dignified life; they certainly are more of a part of the urban fabric than before the program, a key goal of the program. What we cannot say is if this is due to the program, if there were other contextual factors that occurred which would have demonstrated this same result, or if there are other more cost-effective sets of programs that could have achieved the same progress, for example.

Generally, the Favela Bairro project is difficult to evaluate because of the high degree of geographic targeting and simultaneous small number to targeted units or census tracts: the impacted favelas lie within 30 census tracts. These characteristics limit the quality of comparisons over time of the same communities and make comparisons over time between program and non-program communities basically impossible. Therefore, the impacts of Favela Bairro on key development outcomes beyond expansion of public services are unclear.

OUTPUTS

Outputs include a reduction in the risk of geological and environmental accidents, almost universal water access, installation of gutter, sewerage and lighting hardware and road improvements, improved social development and phase 3 led to relevant spin-off projects such as PAC (Growth and Acceleration Program).

KEY STRENGTHS

Favela Bairro was the first policy to engage with all private (not government like in KENSUP) contracting which is a different upgrading model. Moreover, Favela Bairro set higher infrastructure/development standards than the Millennium Development Goals. Finally, Favela Bairro as part of broader set of social policies managed to implement a lot of improvements without tenure ownership which, again, is a different model of slum

upgrading that is usually utilized. It was also used as the foundation for other infrastructure and social programs that leveraged its success to propel additional change across sectors.

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